

Reliable Scalable Cluster Technology



Messages

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Messages

Note

Before using this information and the product it supports, read the information in “Notices” on page 391.

Fourteenth Edition (June 2007)

This edition applies to:

- | • version 5, release 3 of AIX 5L for POWER (product number 5765-G03) with the 5300-06 Technology Level
- | • version 5, release 2 of AIX 5L for POWER (product number 5765-E62) with the 5200-09 Technology Level
- version 1, release 6 of Cluster Systems Management (CSM) for Linux on Multiplatforms (product number 5765-E88)
- version 1, release 6 of CSM for Linux on POWER (product number 5765-G16)
- version 4, release 3 of Parallel Environment for Linux Multiplatform (product number 5724-N05)
- version 4, release 3 of Parallel Environment for Linux on POWER (product number 5765-G70)
- | • version 2, release 2 of Tivoli System Automation for Multiplatforms (product number 5724-M00)

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About this book

This book describes appropriate user responses to messages that are generated by Reliable Scalable Cluster Technology (RSCT).

Who should read this book

This book is designed for system programmers and administrators, but should be used by anyone responsible for diagnosing problems related to RSCT. To use this book, you should be familiar with the AIX® or Linux® operating system, or both, depending on which operating systems are in use at your installation. Where necessary, some background information relating to AIX or Linux is provided. More commonly, you are referred to the appropriate documentation.

For more detailed information about diagnosing problems related to RSCT, see *RSCT: Diagnosis Guide*.

Conventions and terminology used in this book

Conventions

Table 1 describes the typographic conventions used in this book.

Table 1. Typographic conventions

Typographic convention	Usage
bold	Bold words or characters represent system elements that you must use literally, such as: command names, file names, flag names, and path names.
constant width	Examples and information that the system displays appear in constant-width typeface.
<i>italic</i>	<i>Italicized</i> words or characters represent variable values that you must supply. <i>Italics</i> are also used for book titles, for the first use of a glossary term, and for general emphasis in text.
{ <i>item</i> }	Braces indicate required items.
[<i>item</i>]	Brackets indicate optional items.
<i>item...</i>	Ellipses indicate items that can be repeated.
	<ol style="list-style-type: none">1. In the left margin of the book, vertical lines indicate technical changes to the information.2. In synopsis statements, vertical lines are used as <i>pipe</i> characters.
\	In command examples, a backslash indicates that the command continues on the next line. For example: <pre>mkcondition -r IBM.FileSystem -e "PercentTotUsed > 90" \ -E "PercentTotUsed < 85" -m d "FileSystem space used"</pre>

Terminology

This book uses the terminology conventions shown in Table 2:

Table 2. Terminology

Term	Usage
HPS	A shorthand notation for the <i>High Performance Switch</i> , which works in conjunction with a specific family of IBM® System p servers

See the “Glossary” on page 395 for definitions of some of the other terms that are used in this book.

Prerequisite and related information

The Reliable Scalable Cluster Technology (RSCT) library includes the following publications:

- *RSCT: Administration Guide*, SA22-7889, provides an overview of the RSCT components and describes how to:
 - Create and administer RSCT peer domains.
 - Manage and monitor resources using the resource monitoring and control (RMC) subsystem.
 - Administer cluster security services for RSCT peer domains and CSM management domains.
- *RSCT: Diagnosis Guide*, SA23-2202, describes how to diagnose and resolve problems related to the various components of RSCT. This book is a companion volume to *RSCT: Messages*, which lists the error messages that may be generated by each RSCT component. While *RSCT: Messages* describes the appropriate user responses to messages that are generated by RSCT components, this book contains additional and more detailed diagnostic procedures.
- *RSCT: Group Services Programming Guide and Reference*, SA22-7888, contains information for programmers who want to write new clients that use the group services subsystem’s application programming interface (GSAPI) or who want to add the use of group services to existing programs. This book is intended for programmers of system management applications who want to use group services to make their applications highly available.
- *RSCT: LAPI Programming Guide*, SA22-7936, provides conceptual, procedural, and reference information about the low-level application programming interface (LAPI). LAPI, a message-passing API that is based on an “active message style” mechanism, provides a one-sided communication model and optimal performance across various high-performance switches on AIX 5L and Linux systems.
- *RSCT: NRT API Programming Guide*, SC23-6655, contains information for programmers who want to use the network resource table (NRT) API to work with adapter window resources on non-HPS systems.
- *RSCT for AIX 5L: Managing Shared Disks*, SA22-7937, describes the shared disk management facilities of IBM eServer™ Cluster 1600 server processors — the optional virtual shared disk and recoverable virtual shared disk components of RSCT for AIX 5L™. This book describes how you can use these components to manage cluster disks to enable multiple nodes to share the information they hold. The book includes an overview of the components and explains how to plan for them, install them, and use them to add reliability and availability to your data storage.

- *RSCT: Messages*, GA22-7891, lists the error messages that may be generated by each RSCT component. For each message, this manual provides an explanation of the message, and describes how you should respond to it.
- *RSCT: RMC Programming Guide and Reference*, SA23-1346, describes the resource monitoring and control application programming interface (RMC API). This book is intended for programmers who want to create applications that use the RMC API to connect to the RMC subsystem to leverage its resource management and monitoring capabilities.
- *RSCT for AIX 5L: Technical Reference*, SA22-7890, and *RSCT for Linux: Technical Reference*, SA22-7893, provide detailed reference information about all of the RSCT commands, daemons, files, and scripts.

For access to all of the RSCT documentation, refer to the **IBM Cluster information center**. This Web site, which is located at <http://publib.boulder.ibm.com/infocenter/clresctr/vxrx/index.jsp>, contains the most recent RSCT documentation in HTML and PDF formats. The **Cluster information center** also includes an *RSCT Documentation Updates* file, which contains documentation corrections and clarifications, as well as information that was discovered after the RSCT books were published. Check this file for pertinent information (about required software patches, for example).

The current RSCT books and earlier versions of the library are also available in PDF format from the **IBM Publications Center** Web site, which is located at <http://www.ibm.com/shop/publications/order>. It is easiest to locate a manual in the **IBM Publications Center** by supplying the manual's publication number. The publication number for each of the RSCT books is listed after the book title in the preceding list.

Using LookAt to find message explanations

LookAt is an online facility that lets you look up explanations for most of the IBM messages you encounter, as well as for some system abends and codes. You can use LookAt from the following locations to find IBM message explanations:

- The Internet. You can access IBM message explanations directly from the LookAt Web site:

www.ibm.com/eserver/zseries/zos/bkserv/lookat

- Your wireless handheld device. You can use the LookAt Mobile Edition with a handheld device that has wireless access and an Internet browser (for example: Internet Explorer for Pocket PCs, Blazer, Eudora for Palm OS, or Opera for Linux handheld devices). Link to the LookAt Mobile Edition from the LookAt Web site.

How to send your comments

Your feedback is important in helping to provide accurate, high-quality information. If you have any comments about this book or any other RSCT documentation:

- Go to the **IBM Cluster information center** home page at:

<http://publib.boulder.ibm.com/infocenter/clresctr/vxrx/index.jsp>

Click on the **Contact us** link to go to our feedback page, where you can enter and submit your comments.

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Include the book title and order number, and, if applicable, the specific location of the information about which you have comments (for example, a page number, table number, or figure number).

- Fill out one of the forms at the back of this book and return it by mail, by fax, or by giving it to an IBM representative.

Chapter 1. General information about RSCT messages

Error messages indicate that a possible problem has occurred. They often require further explanation to help you understand the cause and recover from the situation. Many error messages are preceded by the name of the entity (such as a command, component, function, interface, library, program, resource manager, or subsystem) that issued the message.

Table 3. Message prefixes, components, and operating systems

This prefix:	Identifies error messages for this RSCT component:	On these systems:
0021	Virtual shared disk commands	AIX
0034	Virtual shared disk	AIX
0513	System resource controller (SRC)	Linux
2506	Recoverable virtual shared disk	AIX
2520	Group services	AIX, Linux
2521	Event management	AIX
2522	Resource monitor	AIX
2523	Topology services	AIX, Linux
2525	High availability services	AIX, Linux
2602	Configuration resource manager commands	AIX, Linux
2610	Resource monitoring and control (RMC)	AIX, Linux
2611	RMC utilities	AIX, Linux
2612	RMC commands	AIX, Linux
2615	First failure data capture (FFDC)	AIX, Linux
2618	ERRM commands	AIX, Linux
2619	Cluster technology commands	AIX, Linux
2632	Configuration resource manager	AIX, Linux
2633	Sensor resource manager	AIX, Linux
2634	Host resource manager	AIX, Linux
2636	Event response resource manager (ERRM)	AIX, Linux
2637	File system resource manager	AIX, Linux
2639	Audit log resource manager	AIX, Linux
2640	Cluster utilities	AIX, Linux
2641	Resource manager utilities	AIX, Linux
2645	Resource manager framework	AIX, Linux
2649	Cluster authentication services	AIX, Linux
2650	Cluster security services	AIX, Linux
2660	Low-level application programming interface (LAPI)	AIX
2664	Common information model (CIM) resource manager	AIX, Linux
2667	Least-privilege (LP) resource manager	AIX, Linux
2668	Storage resource manager	AIX, Linux
2670	Service Availability Forum (SAF) resource manager	AIX, Linux

Chapter 2. 0021: Virtual shared disk commands

When an error occurs, a virtual shared disk command issues one or more messages with a prefix of **0021**.

0021-001 **The initial cache buffer count specified, *init_cache_buffer_count*, is invalid. It must be greater than zero.**

Explanation: The value passed for the initial cache buffer count is not valid. This value must be a decimal number that is greater than zero.

User response: Correct the value and reenter the command.

0021-002 **The maximum cache buffer count (*max_cache_buffer_count*) must be a number greater than or equal to the initial cache buffer count (*init_cache_buffer_count*).**

Explanation: The value passed for the maximum cache buffer count is not valid. This value must be a decimal number that is greater than or equal to the initial cache buffer count you specified.

User response: Correct the value and reenter the command.

0021-003 **The maximum read count specified, *max_read_count*, must be a number greater than zero.**

Explanation: The value passed for the maximum read count is not valid. This value must be a decimal number that is greater than zero.

User response: Correct the value and reenter the command.

0021-004 **The maximum write count specified, *max_write_count*, must be a number greater than zero.**

Explanation: The value passed for the maximum write count is not valid. This value must be a decimal number that is greater than zero.

User response: Correct the value and reenter the command.

0021-005 **You have specified a local volume group name, *local_group_name*, that is not defined on node *node_name* (node number *node_number*).**

Explanation: The name passed for the local volume group is not valid. The local volume group must be defined on the node specified.

User response: Use the **rsh lsvg** command to the node, and choose a defined volume group name. Reenter the command with this name.

0021-006 ***field_name* too long. Length must be less than or equal to 31 characters.**

Explanation: The name passed is not valid. The length of the name must be less than or equal to 31 characters.

User response: Correct the name's length and reenter the command.

0021-007 **There was a nonzero return code from issuing rsh lsvg to node *node_number*.**

Explanation: The routine issued the **lsvg** command to a node through **rsh**, and a nonzero return code was detected.

User response: Make sure that the node is responsive, and that you have permissions to **rsh** to the node.

0021-008 **Global volume group name *global_group_name* is already in use.**

Explanation: The name specified already defines a global volume group in the repository.

User response: Use the **vsdelvg** command to delete the entry in the repository and reenter the **vsdvg** command.

0021-009 **Entry already in the repository.**

Explanation: The information specified for this command is already in the repository.

User response: No action required. You already have this information in the repository.

0021-010 **You have specified a global volume group name, *global_group_name*, that does not exist.**

Explanation: The name specified does not have an entry in the repository.

User response: Use the **vsdvg** command to add the global volume group name to the repository.

0021-011 **There was a nonzero return code from issuing rsh lsiv to node *node_number*.**

Explanation: The routine issued the **lslv** command to a node through **rsh**, and a nonzero return code was detected.

User response: Make sure the node is responsive and that you have permissions to **rsh** to the node.

0021-012 You have specified a logical volume name, *logical_volume_name*, that is not defined on the volume group *volume_group_name*.

Explanation: The name passed as the logical volume name is not valid. The logical volume name must be defined on the volume group specified.

User response: Choose a logical volume name that exists on the volume group specified and reenter the command with this name.

0021-013 VSD_name *vsd_name* is already in use.

Explanation: The name specified already defines a virtual shared disk in the repository.

User response: Use the **undefvsd** command to undefine the virtual shared disk in the repository and reenter the **defvsd** command.

0021-014 You have specified a VSD_name *vsd_name*, that does not exist.

Explanation: The name specified does not have an entry in the repository.

User response: No action required. You do not have a virtual shared disk with this name.

0021-015 The VSD_name, *vsd_name*, cannot be the same as the logical volume name.

Explanation: The virtual shared disk name and the logical volume (LV) name cannot be the same because the IBM Virtual shared disk subsystem would overwrite the LV's special device file, rendering the logical volume inaccessible.

User response: Choose a new name for the virtual shared disk and reissue the command. The suggested naming convention is **vsd.logical_volume_name**

0021-016 No adapter object was found for adapter *adapter_name* on node *node_number*.

Explanation: No adapter of the specified type exists on that node.

User response: Verify that the node number and adapter name are correct. If they are valid, an adapter object must be created for them in the adapter class in the repository.

0021-017 Local volume group name *local_volume_group_name* on node *node_number* already defined in Global volume group *global_volume_group_name*.

Explanation: A *local_volume_group_name* and serving *node_number* can be associated with only one *global_volume_group_name*. You are creating a second association, which will be rejected.

User response: Choose a different *global_volume_group_name* to associate with the *local_volume_group_name* and serving *node_number* pair.

0021-018 Primary server node and secondary server node cannot be the same (*node_number*).

Explanation: If a *global_volume_group_name* has two servers, they must be two different nodes. You might have erroneously specified the same node as both primary and secondary server.

User response: If the *global_volume_group* has only one server, do not specify a secondary server. Otherwise, if you erroneously specified the same node as both primary and secondary server, correct the value and enter the command again.

0021-019 The maximum buddy buffer size *max_buddy_buffer_size* must be a number greater than or equal to the minimum buddy buffer size *min_buddy_buffer_size*.

Explanation: A non-valid value was passed for the maximum buddy buffer size. The value must be a number greater than or equal to the minimum buddy buffer size specified. These are decimal values.

User response: Correct the value and enter the command again.

0021-020 The buddy buffer size specified, *buddy buffer size*, is not valid; it must be a number greater than zero.

Explanation: A non-valid value was passed for the buddy buffer size. The value must be a number greater than zero.

User response: Correct the value and enter the command again.

0021-021 The {minimum|maximum} buddy buffer size specified, *buddy buffer size*, is not valid; it must be a number that is a power of 2 greater than or equal to 4096.

Explanation: A non-valid value was passed for either

the minimum or maximum buddy buffer size. The value must be a number that is a power of 2, and greater than or equal to 4096.

User response: Correct the value and enter the command again.

0021-022 Logical Volume name
logical_volume_name in Global Volume Group *global_volume_group_name* is already defined as VSD name *VSD_name*.

Explanation: The virtual shared disk you are trying to create already exists with another name of *VSD_name*. A *logical_volume_name* and *global_volume_group_name* can be associated with only one VSD name. You are creating a second association, which will be rejected.

User response: Verify that the *logical_volume_name* and the *global_volume_group_name* are correct. If so, you have already defined that pair as a virtual shared disk. Use *VSD_name* for the shared disk, or undefine the old name with the **undefvsd** command. Define the virtual shared disk again with the **defvsd** command to use the new name.

0021-023 VSD *vsd_name* is configured on node *node* and cannot be undefined.

Explanation: A virtual shared disk cannot be undefined if it is configured on any node.

User response: Change the virtual shared disk to the defined state by issuing the proper combination of the **suspendvsd**, **stopvsd**, and **ucfgvsd** methods for *vsd_name* on the host. Enter the **undefvsd** command again.

0021-024 Deletion of VSD *vsd_name* from the IBM.vsdtable in the repository failed with a return code of *return_code*. VSD *vsd_name* and minor number *minor_number* are not undefined.

Explanation: The **rmrsrc** command failed when trying to undefine the virtual shared disk by deleting it from the repository IBM.vsdtable class. The *minor_number* was not deleted from the repository.

User response: Verify that the repository is accessible by issuing **lsrsrc IBM.vsdtable**. Retry the command.

0021-025 Logical volume *lv_name* on volume group *vg_name* on node *node_name* (*node_number*) is bootable. No secondary server is allowed on volume groups with bootable logical volumes.

Explanation: If a *global_volume_group_name* has two servers, the volume group must not contain a logical volume of type boot.

User response: Make sure you are specifying the correct *volume_group*. Remove the bootable logical volume from the volume group, perhaps with **chlv -t bootable logical_volume** name. Do not mix in a bootable volume with your data. If you do, a node might try to boot from that logical volume, and use the volume group as the root volume group, while the other virtual shared disk serving node is trying to be a server for application data. To avoid this situation, your request is being rejected.

0021-026 Node *node_number* cannot be deleted because it is the primary server for global volume group *global_volume_group_name*.

Explanation: Node *node_number* is the primary server for global volume group *global_volume_group_name*. Deleting virtual shared disk information for the node would make the global volume group inaccessible, along with other global volume groups for which this node may be a server.

User response: Undefine *global_volume_group_name* first if you really want to make *node_number* no longer a virtual shared disk node. If you want to change some virtual shared disk parameters for *node_number*, you can reissue the **vsdnode** command, directly or from SMIT, without first issuing **vsdelnode** for *node_number*.

0021-027 Node *node_number* cannot be deleted because it is the secondary server for global volume group *global_volume_group_name*.

Explanation: Node *node_number* is the secondary server for global volume group *global_volume_group_name*. Deleting IBM Virtual Shared Disk information for the node would make the global volume group inaccessible, along with other global volume groups for which this node may be a server.

User response: Undefine *global_volume_group_name* first if you really want to make *node_number* no longer a virtual shared disk node. If you want to change some virtual shared disk parameters for *node_number*, you can reissue the **vsdnode** command, directly or from SMIT, without first issuing **vsdelnode** for *node_number*.

0021-028 You have specified a global volume group name, *global_volume_group_name*, containing a VSD. Use the -f option to force this action.

Explanation: The global volume group contains virtual shared disks.

User response: If you want to remove the global volume group and its virtual shared disks, issue the **vsdelvg** command with the **-f** option.

0021-029 **Failed to generate vsd minor number**
minor_number for vsd vsd_name.

Explanation: The **defvsd** command issues **mkrsrc** to generate a new minor number for a specified virtual shared disk. If the return code from the repository is nonzero, **defvsd** generates this error message.

User response: If the *minor_number* is not a valid integer, the problem is in **defvsd**. If the *minor_number* is a valid integer, the problem is in the repository. Issue **vsdata1st -v** to verify minor numbers.

0021-030 **The maximum buddy buffer size**
multiplied by the number of buffers
must be less than *max_buffer_space*.

Explanation: The allowed specification for the total buddy buffer space was exceeded.

User response: Correct the maximum buddy buffer size or the maximum number of buddy buffers.

0021-031 **The IP packet size specified, IP packet**
size, is not valid. The VSD IP packet
size must be between 512 to 63.5K and
a multiple of 512.

Explanation: A non-valid value was passed for the IBM Virtual Shared Disk IP packet size. The value must be a decimal number between 512 and 63.5K and a multiple of 512.

User response: Correct the value and enter the command again.

0021-032 **The logical volume group which**
contains *logical volume name* **on**
hostname is not varied on.

Explanation: The **defvsd** command failed to run the LVM **lslv** command on the remote node.

User response: Check the logical group on the remote node.

0021-033 **The value of eio_recovery must be**
either 0 or 1.

Explanation: The **vsdv** command was issued with an invalid value for **eio_recovery**.

User response: Reissue the command with a valid value.

0021-034 **The given VSD_Global_Volume_Group**
global volume group name is not defined
in the repository.

Explanation: A failure occurred when attempting to get VSD_Global_Volume_Group information from the repository. The VSD_Global_Volume_Group name passed to the program is incorrect.

User response: Run the **vsdata1st -g** command to find the correct name.

0021-035 **Cannot find minor_number from**
VSD_Table with
VSD_Global_Volume_Group name
global volume group name.

Explanation: A failure occurred attempting to get *minor_number* information from the repository. The VSD_Global_Volume_Group name passed to the program is incorrect.

User response: Run the **vsdata1st -g** command and the **vsdata1st -v** command to find the correct name.

0021-036 **Invalid argument primary=primary**
server number **secondary=secondary**
server number.

Explanation: The primary node and secondary node parameters are not correct.

User response: Run the **vsdata1st -g** command to find the correct values.

0021-037 **Current global_volume_group** *global*
volume group name **is defined as**
primary=primary *server number*
secondary=secondary *server number.*

Explanation: This is the current VSD_Global_Volume_Group information in the repository.

User response: None.

0021-038 **There was a bad return code from**
issuing rsh vsdxlate
logical_volume_name **to node**
node_number

Explanation: The routine issued the **vsdxlate** command to a node through **rsh**, and a nonzero return code was detected.

User response: Make sure the node is responsive and that you have permissions to **rsh** to the node.

0021-039 **There was a bad lv_blk0_pbn value**
returned from issuing rsh vsdxlate
logical_volume_name **to node** *node*
number.

Explanation: The routine issued the **vsdxlate** command to a node through **rsh**, and an incorrect *lv_blk0_pbn* was detected.

User response: Ensure that the node is responsive and that you have permissions to **rsh** to the node.

0021-040 **Deletion of Fencemap for vsd**
vsd_name from VSD_Fence in the
repository failed with return code *return*
code. VSD *vsd_name* is not undefined.

Explanation: The **rmrsrc** call was not successful in removing the fence map before undefining the virtual shared disk.

User response: Check that the repository is accessible and then enter the command again.

0021-041 **Node *node_number* cannot be deleted**
because there are configured vsds on
the node.

Explanation: Node *node_number* is a client virtual shared disk (VSD) node in the system. Deleting IBM Virtual shared disk information for the node could make the number of VSD objects inconsistent.

User response: To make the specified node no longer a virtual shared disk node, first unconfigure virtual shared disks on the node.

0021-042 **Node *node name* is not part of cluster:**
cluster name, use **updatevsdnode** to
make it part of cluster and try again.

Explanation: For each server in a list of servers specified for concurrent virtual shared disks, **vsdv** checks to ensure that the node is part of the same cluster.

User response: Use the **updatevsdnode** command to make the node part of the cluster and try again.

0021-043 **Volume group id on node *node name***
does not match with other nodes in the
list of servers for concurrent volume
group: *local volume group name*.

Explanation: The volume group ID on a node in a list of servers does not match with the rest of the servers for concurrent virtual shared disks.

User response: Make sure that this volume group is indeed concurrent capable on all the nodes in the list of servers for concurrent virtual shared disks.

0021-044 **Volume group on node *node name* is**
not concurrent capable, make it
concurrent capable and try again.

Explanation: Volume group on the specified node is not concurrent capable.

User response: Use the **updatevsdv** command to update the volume group to support concurrent virtual shared disks.

0021-045 **There was a non-zero return code from**
issuing rsh lsattr on node *node name*.

Explanation: The routine issued the **lsattr** command to a node through **rsh**, and a nonzero return code was detected.

User response: Make sure that the node is responsive and that you have permissions to **rsh** to the node.

0021-046 **One or both of the nodes: *primary***
server | *secondary server* **are part of the**
CVSD servers for volume group *local*
***volume group name*.**

Explanation: The primary or secondary server specified for this volume group has been already used as a server for a concurrent virtual shared disk.

User response: A node cannot be a CVSD server for a volume group and, at the same time, a primary or secondary server.

0021-047 **Node *concurrent virtual shared disk***
***server* is already defined as a server for**
volume group *volume group name* with
different set of servers in global
volume group *global volume group*
***name*.**

Explanation: A node in the list of servers for concurrent virtual shared disk is already defined as a server for nonconcurrent virtual shared disks for the same local volume group.

User response: A node cannot be a CVSD server and a VSD server for the same volume group.

0021-048 **Concurrent VSDs and cache are**
mutually exclusive, use *nocache*
option.

Explanation: Concurrent virtual shared disks and cache are mutually exclusive.

User response: Use the **nocache** option for concurrent virtual shared disks.

0021-049 **Global volume group *global volume***
***group name* not updated properly on**
node *node name*.

Explanation: The **updatevsdv** command modified the global volume group information, but the device driver on the specified node is not reflecting those changes.

User response: On the specified node, issue the **ha_vsd reset** command to stop and restart the Recoverable virtual shared disk subsystem.

0021-050 **Maximum of only *number* Nodes allowed in a cluster. Use <vsdata1st -c> to check vsd cluster configuration.**

Explanation: Only a fixed number of nodes are allowed in a cluster.

User response: Specify no more than the maximum number of nodes.

0021-051 **Unable to set persistent reserve registration_key and reservation_policy for volume group name on node *node number*.**

Explanation: The **vsdvg** command was unable to set persistent reserve registration_key and reservation_policy.

User response: Verify that the node is available and retry the command.

0021-052 **There are *number* CVGS defined with node *node number* as the CVSD server, first remove this node as the server to change/remove the node from the cluster.**

Explanation: When concurrent volume groups (CVGs) are defined with a node as a server, the cluster to which the node belongs cannot be changed.

User response: Use the **updatevsdvg** command to undefine the concurrent volume groups from the specified node. Then retry the original command.

0021-053 **The cluster *cluster name* already has *number* nodes.**

Explanation: No more servers can be added to this concurrent virtual shared disk cluster.

User response: This node would have to be defined in a different cluster.

0021-054 **Could not add/change node *node number* to the cluster due to repository failure, continuing with the next node in the list.**

Explanation: A repository error has prevented the successful completion of this command.

User response: Check that the repository is accessible and then enter the command again.

0021-055 **vsdchgserver command is invalid for a concurrent volume group.**

Explanation: The **vsdchgserver** command only works with virtual shared disks that are accessed serially, rather than concurrently.

User response: Use the **updatevsdvg** command to modify global volume group information.

0021-056 **Node *node_number* cannot be deleted because it could not be deleted from the VSD cluster.**

Explanation: Node *node_number* is part of an existing virtual shared disk cluster. The **vsdelnode** command processing tried but failed to remove the node from the cluster.

User response: Make sure that no global volume groups are defined with this node as a concurrent or nonconcurrent virtual shared disk server; then try the delete operation again.

0021-057 **CVSD supports a maximum of *number* servers.**

Explanation: An attempt was made to define more than the maximum number of supported concurrent virtual shared disk (CVSD) servers.

User response: Retry the command with fewer servers.

0021-058 **Invalid configuration: CVSD volume group=*volume group name* must support the same disk architecture on all servers.**

Explanation: An attempt was made to create or change a concurrent virtual shared disk volume group, but the volume group is not the same disk architecture on all the servers. For example, the architecture may be SSA on one server, and Fibre Channel on another server.

User response: Retry the command with a compatible volume group.

0021-060 **Node *node number* is unreachable, node should be up to make it part of CVSD cluster.**

Explanation: The specified node was not accessible when the command was issued.

User response: Check that the node is up and is accessible. Then enter the command again.

0021-061 **HACMP is controlling volume groups on node *node number*, cannot make it part of the CVSD cluster.**

Explanation: HACMP™ and the Recoverable virtual shared disk (RVSD) subsystem cannot both manage concurrent volume groups on the same node.

User response: Determine which product should be managing concurrent volume group access.

0021-063 The Maximum number of defined VSDs is *number*.

Explanation: An attempt was made to define or create more than the maximum number of supported virtual shared disks.

User response: Remove any existing virtual shared disks that are unused, and retry the command.

0021-064 Check that *file_system_name* has space on all VSD nodes.

Explanation: A command failed unexpectedly. This may be due to lack of space in the specified file system on the VSD nodes.

User response: Verify that the file system is not full on the VSD nodes and try the command again.

0021-065 A Remote Peer Domain is not online.

Explanation: The command failed because it requires a remote peer domain to be online.

User response: Start the remote peer domain and run the command again.

0021-066 The IP packet size for ethernet adapters must be 1024 or 8192 so that it is less than the MTU size.

Explanation: The IP packet size must be less than the maximum transmission unit (MTU) size. For Ethernet adapters, this value must be **1024** or **8192**.

User response: Correct the value and run the command again.

0021-067 The maximum *rdrsp* count specified, *max_rdrsp_count*, must be a number greater than zero.

Explanation: You specified a non-valid value for the maximum number of concurrent outstanding read responses. This number must be a decimal value that is greater than zero.

User response: Correct the value and run the command again.

Chapter 3. 0034: Virtual shared disk

When an error occurs, the virtual shared disk component issues one or more messages with a prefix of **0034**.

0034-001 **Cannot open or access file** *file_name*.

Explanation: The file does not exist or does not have the appropriate permissions.

User response: Verify that the file exists with the appropriate permissions.

0034-002 **Error opening vsd** *vsd_name*.

Explanation: The virtual shared disk (VSD) device cannot be opened or does not exist.

User response: Make sure that the VSD device exists.

0034-003 **The *ioctl_string* ioctl() call failed,** **errno=error_number**

Explanation: The **ioctl** call failed for the specified **ioctl**.

User response: See the **errno** to determine the reason for failure.

0034-004 **The call to *odm_initialize()* failed** **(odmerrno = odmerrno_value).**

Explanation: The call to **odm_initialize()** to start the ODM for use by the Virtual shared disk subsystem failed. The **odmerrno** variable has been set to indicate the error.

User response: Use the *odmerrno_value* to determine the reason for failure.

0034-005 **The call to *genmajor()* failed (confererrno** **= confererrno_value).**

Explanation: The call to **genmajor()** to retrieve the virtual shared disk major number failed. The **confererrno** variable has been set to indicate the error.

User response: Use the **confererrno** and the **errno** values to determine the reason for failure.

0034-006 **Error unloading the VSD kernel** **extension.**

Explanation: The **loadext()** call failed.

User response: Check the system **errno** displayed to determine the reason for failure.

0034-007 **The VSD device driver is not loaded.**

Explanation: The Virtual shared disk device driver should already be loaded.

User response: Configure the Virtual shared disk subsystem.

0034-008 **The *command_name* command passed** **to the VSD Device with minor number** **minor_number failed.**

Explanation: The Virtual shared disk device driver encountered an error condition while processing the specified command.

User response: See the **errno** to determine the reason for failure.

0034-009 **With the -a option, additional** **parameters are not allowed.**

Explanation: The user specified the **-a** option on the command line, which means "all virtual shared disks." The user cannot specify additional parameters on the command line.

User response: Issue the command again with no additional parameters.

0034-010 **File *file_name* not found.**

Explanation: The specified file does not exist.

User response: Verify that the VSD resource manager is active by issuing **lssrc -ls IBM.vsd**. Then reissue **cfgvsd -a**.

0034-011 **Definition of VSD *vsd_name* not found** **in file *VSD_Table_pathname*.**

Explanation: The specified virtual shared disk could not be found in the **VSD_Table** file.

User response: Check that the data in the Virtual shared disk subsystem files are correct.

0034-012 **Definition of Global Volume Group** ***global_group_name* not found in file** ***VSD_Global_Volume_Group_file_*** ***pathname*.**

Explanation: The specified global volume group could not be found in the **VSD_Global_Volume_Group_file**.

User response: Check that the data in the Virtual shared disk subsystem files are correct.

0034-013 **Parameters of node *node_number* not found in file *node_file_pathname*.**

Explanation: The local node in the node file could not be found.

User response: Check that the data in the VSD files are correct.

0034-014 **Cannot allocate memory for *item*.**

Explanation: The **malloc** call to allocate temporary storage for the item failed.

User response: This is a system problem.

0034-015 ***vsd_name* cannot be the same as the Logical Volume name.**

Explanation: The virtual shared disk and the underlying logical volume cannot have the same name. If both the virtual shared disk and the logical volume have the same name, the Virtual shared disk subsystem overlays special block and character files in /dev for the logical volume with files for the shared disk. In this case, both the shared disk and the logical volume become unusable.

User response: Use a different name for the virtual shared disk. The recommended convention is **vsd.lv_name**. Retry the operation.

0034-016 ***vsd_name* is in the *current_state* state. The *method* moves VSDs from the *from_state* state to the *to_state*. Use commands to move *vsd_name* from the *current_state* to the *to_state* state.**

Explanation: The method could not operate on the **vsd_name** because the disk was not in the proper state. The method expects virtual shared disks in the **from_state**, not in the **current_state**

User response: Use commands to move the virtual shared disk from the **current_state** to the **to_state**.

0034-017 ***command* failed on *vsd_name*.**

Explanation: The method invoked the specified command for **vsd_name**, and the command failed for that virtual shared disk.

User response: See the previous error message from the command to determine the reason for the error. This message gives you the **vsd_name** that the previous error message did not.

0034-018 ***command* failed on *VSD_ioctl*.**

Explanation: The method invoked the command for **VSD_ioctl** and the command was not successful.

User response: See the previous error message from

the command for details. This message gives you the **ioctl** that the previous error message did not.

0034-019 **Busy: Another *program* is running.**

Explanation: Another instance of this command is running. Only one instance is allowed at a time.

User response: Wait awhile and then retry the command.

0034-020 **Only *number* VSDs can be monitored at the time.**

Explanation: From a given node, Event Management can monitor only the specified number of virtual shared disks at a time.

User response: Disable other virtual shared disk monitoring before enabling this one.

0034-021 **File *filename* not found or empty.**

Explanation: The specified file does not exist or is empty.

User response: Check that the VSD resource manager is accessible by issuing **lssrc -ls IBM.vsd** from the node. Try the command again. Verify that the virtual shared disk was configured properly.

0034-022 **Unknown option *option*.**

Explanation: You specified an option that is not valid.

User response: Fix the invalid option and retry the operation.

0034-031 **Error unlinking *device_name*.**

Explanation: The virtual shared disk special file already exists with a device number different from the specified device number.

User response: Use **rm** to remove the *device_name* from /dev.

0034-032 **Error loading the VSD kernel extension.**

Explanation: The **loadext()** call failed.

User response: See the error number (**errno**) to determine the reason for the failure.

0034-033 **Error configuring the VSD device *vsd_name*.**

Explanation: The **sysconfig()** call failed.

User response: See the error number (**errno**) to determine the reason for failure.

0034-034 Device *vsd_name* already exists.

Explanation: The `sysconfig()` call failed and `errno` is `EALREADY`. The device is already configured.

User response: Do not attempt to configure a device that is already configured.

0034-035 *name* is too long. Length must be less than or equal to 31 characters.

Explanation: The name passed is unacceptable. The length of the name must be less than or equal to 31 characters.

User response: Correct the name's length and reenter the command.

0034-036 Special Device File *file_name* already exists, and does not have the proper VSD major number of *major_number*.

Explanation: Configuring a virtual shared disk results in the creation of block and character (raw) special device files for that shared disk. This message indicates that the file the virtual shared disk is trying to create already exists for a non-VSD device.

User response: Either change the name of the virtual shared disk so that it does not conflict with the existing device, or remove the existing device file and issue the configuration command again.

0034-037 Can't create Special Device File *file_name*.

Explanation: Configuring a virtual shared disk results in the creation of block and character (raw) special device files for that shared disk. This message indicates that the VSD special device file create operation (`mknod`) failed. The reason for the `mknod` failure is also printed.

User response: Refer to the `mknod` failure message to determine and correct the problem.

0034-040 Warning: Bad node number *node_number* in file *file_name*. Ignored.

Explanation: A bad node number was found in the virtual shared disk IP address (`VSD_ipaddr`) file. The node number is ignored.

User response: No action required.

0034-050 Invalid Cache Size, *cache_size*.

Explanation: An invalid cache size was passed on the `ctlvsd` command.

User response: Retry the command with a valid cache size.

0034-051 Warning: Invalid Node Number, *node_number*. Ignored.

Explanation: A node number passed on the `ctlvsd` command was out of the valid range `1,MAX_VSD_NODES`. The node number is ignored.

User response: No action required.

0034-052 Invalid parallelism value, *parallelism_value*.

Explanation: An incorrect parallelism value was passed on the `ctlvsd` command. The value must be between 1 and 9.

User response: Retry the command with a valid parallelism value.

0034-053 Invalid max IP message size value, *max IP message size value*.

Explanation: A maximum IP message size value that was not valid was passed on the `ctlvsd` command. The value must be between 512 and 65024, and also must be a multiple of 512.

User response: Retry the command with a valid maximum IP message size.

0034-054 The GIOKLAPI `ioctl` call failed *invoked_function*.

Explanation: The `ctlvsd -l` command cannot be completed because of a failure in the specified function.

User response: Manually retry the `ctlvsd -l` command.

0034-055 The GIOKLAPI `ioctl` call failed because at least one vsd is not stopped.

Explanation: All virtual shared disks and the Recoverable virtual shared disk (RVSD) subsystem must be stopped before you can issue the `ctlvsd -l` command.

User response: Complete the following procedure:

1. Stop all virtual shared disks.
 2. Issue `ha.vsd stop` to stop the RVSD subsystem.
 3. Reissue the `ctlvsd -l` command.
-

0034-056 The GIOKLAPI `ioctl` call failed because the RVSD subsystem is running.

Explanation: All virtual shared disks and the Recoverable virtual shared disk subsystem must be stopped before you can issue the `ctlvsd -l` command.

User response: Issue `ha.vsd stop` to stop the RVSD subsystem, then reissue the `ctlvsd -l` command.

0034-060 Invalid VSD command *command_name*.

Explanation: The specified command name passed to **dovsd2** was not valid.

User response: Pass a valid command to **dovsd**. Valid commands are: **preparevsd**, **suspendvsd**, **stopvsd**, and **ucfgvsd**.

0034-070 The -s and -l flags are not compatible.

Explanation: The **-s** (usage statistics) and the **-l** (configuration information) flags cannot be used together.

User response: Reissue the **lsvsd** command with only one of these flags.

0034-071 Cannot allocate memory for VSD information. The count of VSDs is *vsd_count*.

Explanation: The **malloc** call to allocate temporary storage for the Virtual shared disk information failed.

User response: Try issuing the **lsvsd** command again, specifying a particular virtual shared disk.

0034-080 Can't access logical volume *logical_volume*.

Explanation: The call to stat the logical volume to retrieve the device number failed.

User response: Make sure the logical volume name is correct for this virtual shared disk. Make sure the logical volume exists. You may need to create it with the **mkiv** command.

0034-081 Duplicate nodes are not allowed in *server_list*.

Explanation: The parameters passed have one or more duplicate nodes.

User response: Correct the parameters passed and retry.

0034-082 The -p and -b flags are invalid with the -l flag, ignoring them.

Explanation: The usage syntax is not valid.

User response: Correct the syntax and retry.

0034-083 The server *server_name* is not defined as a server node for VSD: *VSD_name*.

Explanation: The virtual shared disk (VSD) server node is not a valid one.

User response: Use the **vsdnode** command to make the server node a VSD node.

0034-084 The -l flag is used only for CVSD, ignored for normal VSD.

Explanation: The **-l** flag is used only for concurrent virtual shared disks (CVSDs), and is ignored for nonconcurrent virtual shared disks.

User response: Enter the command again without specifying the **-l** flag.

0034-090 Invalid server specification *server_name*. Specify one of -p or -b.

Explanation: The user must specify either **-p** (primary) or **-b** (backup) for this server.

User response: Reissue the command with either **-p** or **-b**.

0034-091 No server specified. Specify one of -p or -b.

Explanation: The user must specify **-p** (primary) or **-b** (backup).

User response: Reissue the command with either **-p** or **-b**.

0034-092 Server (*server_name*) for VSD (*vsd_name*) is invalid. Ignoring VSD *vsd_name*.

Explanation: An invalid server was found for the specified virtual shared disk. The virtual shared disk is ignored.

User response: Check primary and backup servers you entered for this virtual shared disk and correct them in the repository.

0034-100 The VSD character special device file *character_device_name* was not found. Run the command **cfgvsd *vsd_name* to create *device_name*.**

Explanation: The **/dev/r<vsd_name>** device file does not exist.

User response: Use the **cfgvsd** command to configure the device.

0034-101 The file *file_name* was not found.

Explanation: The file parameter passed was not found.

User response: Correct the file pathname and enter the command again.

0034-102 **Step *step_number* failed. return code is *return_code*.**

Explanation: The write of the vsdd device driver to the specified virtual shared disk failed.

User response: Check that the virtual shared disk exists and has been properly installed and configured.

0034-105 **The file *file_name* is too small; it must be at least 512 bytes.**

Explanation: To use the **vsdvts** command to write to a virtual shared disk, you must specify a file with a minimum block size of 512 bytes or more.

User response: Reissue the **vsdvts** command, specifying a larger file.

0034-108 **Could not change *VSD_name* from the *VSD_state* state to the active state.**

Explanation: The parameter to the **vsdvts** command must be a virtual shared disk in the active state.

User response: Make sure you have defined the virtual shared disk *VSD_name*:

1. Use the **cfgvsd** command to configure the disk;
2. Use the **startvsd** command to activate the disk; and
3. Use the **lsvds -l** command to make sure the disk is in the active state.

Then you can specify the disk on the **vsdvts** command.

0034-109 **Could not determine the state of *VSD_name*. Run the command **cfgvsd *VSD_name*** to configure the VSD device.**

Explanation: The parameter to the **vsdvts** command must be a virtual shared disk in the active state.

User response: Make sure you have defined the virtual shared disk *VSD_name*:

1. Use the **cfgvsd** command to configure the disk;
2. Use the **startvsd** command to activate the disk; and
3. Use the **lsvds -l** command to make sure the disk is in the active state.

Then you can specify the disk on the **vsdvts** command.

0034-112 **The block size must be a multiple of 512 to a raw VSD device.**

Explanation: Virtual shared disks are accessed as raw devices; for example, **dev/*vsd_name***. The **read** and **write** system calls to raw devices fail if the block size is not a multiple of 512.

User response: Change the block size so that it is a multiple of 512 and issue the command again.

0034-116 **Check *VSD_table_name* table in the repository, cannot find the table.**

Explanation: Some fields in the Virtual shared disk subsystem table are incorrect.

User response: Run SMIT to set Virtual shared disk information.

0034-117 **Check *VSD_table_name* table in the repository, it is an empty table.**

Explanation: Some fields in the Virtual shared disk subsystem table are incorrect.

User response: Run SMIT to set Virtual shared disk information.

0034-118 **Check *VSD_table_name* table in the repository, undefined field is found.**

Explanation: Some fields in the Virtual shared disk subsystem table are incorrect.

User response: Run SMIT to set Virtual shared disk information.

0034-119 **Failed to create new VSD files.**

Explanation: At least one of the new Virtual shared disk tables is incorrect.

User response: Run SMIT to set Virtual shared disk information.

0034-120 **Lock file *file_name* held too long; I am taking it. You may want to investigate.**

Explanation: **readSDR** uses a lock file, which is a directory. **readSDR** waits several seconds for the lock, after which it issues this message and continues processing. The message most likely means that the system crashed in the middle of processing **cfgvsd**, and this lock file was not cleaned up. Alternatively, another process is running **cfgvsd**, and that command processing appears to be hung. Usually, the **cfgvsd** command does not take long to read repository information before starting to configure virtual shared disks.

User response: If you see this message on the first **cfgvsd** operation after rebooting to recover from a system crash, you may safely ignore it. Otherwise, check to see whether another process is using **cfgvsd**, or if another **cfgvsd** operation is hung.

0034-121 **Unable to find and create *vsd_flat_file_directory_name*.**

Explanation: The file was not found and the **mkdir** command to create it failed.

User response: Investigate the **mkdir** failure and fix

the problem. If the parent directory is not writable on this node, go to a node where you can write to the directory and make this file a symbolic link to a file system that is writable from the original node.

0034-127 Some IBM Virtual Shared Disks are not at appropriate state before operation. Please use `lsvsd -l` to check the states.

Explanation: To successfully use commands such as `preparevsd`, `startvsd`, `resumevsd`, `suspendvsd`, `stopvsd`, and `ucfgvsd`, you must make sure the virtual shared disks are in the appropriate state.

User response: Use the `lsvsd` command with the `-l` option to verify the current states of the virtual shared disks.

0034-128 IBM Virtual Shared Disk is not configured.

Explanation: To successfully use the `ucfgvsd` command for a virtual shared disk, you must first make sure that the disk is configured.

User response: Use the `cfgvsd` command to configure the virtual shared disk, and try the failed command again.

0034-135 Invalid VSD *VSD_name*.

Explanation: The specified virtual shared disk name is not valid.

User response: Use the `lsvsd` command to list virtual shared disk names.

0034-136 Cannot execute *function_name*.

Explanation: An error occurred during command processing.

User response: Reissue the command. If the problem persists, contact IBM Support.

0034-137 Invalid Node *VSD_name*.

Explanation: The specified virtual shared disk name is not valid.

User response: Use the `lsvsd` command to list virtual shared disk names.

0034-141 Unable to read volume group timestamp for *volume_group_name*.

Explanation: The volume group timestamp could not be read, probably because another node has the volume group varied online.

User response: Check that the volume group is online to this node.

0034-150 The defined VSD communication adapter does not support KLAPI.

Explanation: The node is configured with an adapter that does not support the KLAPI protocol. Currently, m10 is the only KLAPI-supported adapter.

User response: If you need to use KLAPI, change the `vsd_adapter` to m10.

0034-151 Unable to perform: *command*.

Explanation: The Virtual shared disk subsystem was unable to perform the specified command.

User response: Contact IBM Support.

0034-160 Error opening vsd *vsd_name*.

Explanation: The Virtual shared disk subsystem encountered an error when attempting to open the specified VSD device.

User response: Check the error log for more information about this error and then try the operation again. If the problem persists, contact the IBM Support Center.

0034-161 Error on ioctl STAT vsd *vsd_name*.

Explanation: STAT ioctl was not successful.

User response: Check the error log for more information about this error and then try the operation again. If the problem persists, contact the IBM Support Center.

0034-170 *program_name* is an invalid program name.

Explanation: The specified program was called with a name that is not valid.

User response: Call the program using only valid names, such as `fencvg`, `unfencevg`, and `lsfencevg`.

0034-171 No volume group specified with the `-v` flag.

Explanation: Incorrect command syntax.

User response: Correct the syntax and enter the command again.

0034-172 *volume_group_name* is an invalid volume group name.

Explanation: The volume group name passed on the command is not valid.

User response: Correct the command parameters and enter the command again.

0034-173 **No disks found for volume group *volume_group_name*.**

Explanation: No hdisks were found for the specified volume group.

User response: Determine whether the volume group name specified is correct and retry the command.

0034-174 **No nodes were specified.**

Explanation: No nodes were specified as command parameters.

User response: Correct the command parameters and enter the command again.

0034-175 **The node or nodes specified are not in the same cluster.**

Explanation: One or more node parameters passed on the command are not in the same cluster.

User response: Remove from the command parameters any nodes that are not in the same cluster, and enter the command again.

0034-176 **The node parameter *-n* is not allowed with *flag*.**

Explanation: Incorrect command syntax.

User response: Correct the syntax and enter the command again.

0034-180 **You must have root authority to run this command.**

Explanation: You do not have the correct authority to run this command.

User response: Obtain the necessary root authority and enter the command again.

0034-181 **No Operation (*-L*, *-F*, or *-U*) was specified.**

Explanation: Incorrect command syntax.

User response: Correct the syntax and enter the command again.

0034-182 **Options *flag* and *flag* may not be used together.**

Explanation: Incorrect command syntax.

User response: Correct the syntax and enter the command again.

0034-183 **Options *flag*, *flag*, or *flag* may not be used with *-L* parameter.**

Explanation: Incorrect command syntax.

User response: Correct the syntax and enter the command again.

0034-184 **Option *flag* may not be used with the *-L* parameter.**

Explanation: Incorrect command syntax.

User response: Correct the syntax and enter the command again.

0034-185 **Multiple instance of *flag* are not supported.**

Explanation: Incorrect command syntax.

User response: Correct the syntax and enter the command again.

0034-186 **No disks were specified.**

Explanation: Incorrect command parameters.

User response: Correct the parameters and enter the command again.

0034-187 ***hdisk_name* is not in ODM (CuDv) database or is not an SSA disk.**

Explanation: A disk name was passed that is not in CuDv or not an SSA disk.

User response: Ensure the disk is an SSA disk and run **cfgmgr** to try to correct CuDv.

0034-188 **Error opening *hdisk_name*.**

Explanation: Could not open virtual shared disk device.

User response: Check the error log for more information about this error and then try the operation again. If the problem persists, contact the IBM Support Center.

0034-189 **The fence transaction failed on *number* SSA disks.**

Explanation: SSA disk fence was not successful.

User response: Check the error log for more information about this error and then try the operation again. If the problem persists, contact the IBM Support Center.

0034-190 **Fence ioctl transaction failed on *hdisk* name with error.**

Explanation: SSA disk fence ioctl was not successful. The following messages also appear with this message:

- 0034-191 rc = *return_code*; *errno_value*
- 0034-192 Invalid Fence data
- 0034-193 Invalid Mask data
- 0034-194 Node is fenced out
- 0034-195 Reservation conflict
- 0034-196 IOCTL error *return_code* occurred

User response: Check the error log for more information about this error and then try the operation again. If the problem persists, contact the IBM Support Center.

0034-601 ***service_program* failed.**

Explanation: A call to the specified service program failed.

User response: Check that the specified service program is available and working properly.

0034-602 **The repository cannot be accessed. Return code was *return_code*.**

Explanation: The routine could not access the system data repository. The routine terminates.

User response: Use the specified return code to determine and correct the problem with the repository.

0034-604 **Cannot specify both *option1* and *option2* options.**

Explanation: The failing program can work only on one of these options.

User response: Refer to the man page for the failing command, pick one of the options and try again.

0034-605 **Must specify either *option1* or *option2* option.**

Explanation: A required option is missing.

User response: Retry the command with valid operands.

0034-606 **Option *option* is missing.**

Explanation: A required option is missing.

User response: Retry the command with valid operands.

0034-607 **Unknown option *option*.**

Explanation: An invalid option is specified.

User response: Remove the invalid option and try the command again.

0034-608 **Node *node_number* cannot be found in repository.**

Explanation: Node information for the specified node number cannot be found in the repository. You might have specified an incorrect node number.

User response: Use the **vsdata1st -n** command to verify the information.

0034-609 **Cannot find host name in repository for node *node_number*.**

Explanation: Host name information for the specified node number cannot be found in the repository. Either you specified an incorrect node number, or the host name is not defined in the repository.

User response: Run **export CT_MANAGEMENT_SCOPE=2; lsrsrc IBM.PeerNode** to verify the information.

0034-610 **Fails to call *sysctl vsd_sysctl_program*.**

Explanation: You must have *sysctl* privileges to run this command.

User response: Check your *sysctl* authorization.

0034-611 **No valid VSD host specified.**

Explanation: The **vsddiag** command cannot find the host name for a node in the repository.

User response: Use the **vsdata1st -n** command to verify the information, and enter the **vsddiag** command again.

0034-612 **mk1v stripe size must be a power of two, between 4K and 128K, for example 4, 8, 16, 32, 64 or 128K.**

Explanation: You have specified an incorrect LVM stripe size using the **createvsd** command.

User response: Specify a valid stripe size or omit the **-p** option, and enter the **createvsd** command again.

0034-613 **Out of memory in *function name*.**

Explanation: The system does not have enough memory to run the **vsddiag** command.

User response: Try the command again later. If problems persist, record the above information and contact IBM Support.

0034-614 **Server node *node number* for vsd with minor_number *minor number* on node *node number* is not up.**

Explanation: The virtual shared disk on the server node must be in the active state.

User response: Login the server node, run the **cfgvsd -a** command and then run the **startvsd -a** command.

0034-615 **Server_node *node number* has been cast out by node *node number*.**

Explanation: The server node is considered to be DOWN.

User response: Check the node's UP or DOWN status information in the **/var/adm/csd/vsd.log** file.

0034-616 **Node *node number* expect sequence number *sequence number* does not match node *node number* outgoing sequence number *sequence number*.**

Explanation: The expected request sequence number on the client node is not the same as the outgoing sequence number on the server node.

User response: Run the **suspendvsd** command on all nodes. Run the **ctlvsd -R** command on all nodes to reset the outgoing and expected request sequence number.

0034-617 **Cannot find server node *node number* for client node *node number*.**

Explanation: The expected request sequence number on the client node is not the same as the outgoing sequence number on the server node.

User response: Run the **suspendvsd** command on all nodes. Run the **ctlvsd -R** command on all nodes to reset the outgoing and expected request sequence number.

0034-618 **Vsd driver_type on node *node_number* is not the same as other vsd drivers on the SP system or system partition.**

Explanation: The Virtual shared disk driver has 2 types: IP and KCI. It cannot communicate between different types.

User response: Run the **statvsd** command on all nodes to check the device types.

0034-619 **Device driver on node *node_number* is not at the same level as others on this SP system or system partition.**

Explanation: The **/etc/drivers/vsdd** file is not at the same level on all nodes.

User response: Unconfigure any virtual shared disks and install the same Virtual shared disk drivers on all the nodes.

0034-620 **VSD Maximum IP Message Size on node *node_number* is not the same value as the VSD Maximum IP Message Sizes of other nodes on this SP system or system partition.**

Explanation: If the maximum **vsdIPmsgSize** is not the same on all nodes, I/O requests may be truncated into different subrequest sizes.

User response: Check the value of **vsdIPmsgSize** in the repository Node class. Use either the **updatevsdnode** command or the **ctlvsd** command to correct the value.

0034-621 **RVSD state on node *node_number* is not at the same state as other nodes on this SP system or system partition.**

Explanation: The Recoverable virtual shared disk (RVSD) subsystem is running on some nodes but not all the nodes of the SP™ system or system partition.

User response: Use the **ha_vsd reset** command to start the RVSD subsystem on all nodes. If this action fails, disable the RVSD subsystem on all nodes and then retry the **ha_vsd reset** command.

0034-622 **Device *vsd name* not found.**

Explanation: Cannot find the specified device in the repository.

User response: To successfully update a device's option, you must make sure the device is defined in the repository.

0034-623 **Node *node_number* is not a VSD node.**

Explanation: VSD_adapter must be defined for the specified node to run the **createvsd** command.

User response: Use the **vsdnode** or **updatevsdnode** command to update the repository, and try the command again.

0034-624 **The last character of the *name_prefix* option cannot be a digit.**

Explanation: To ensure that the Virtual shared disk subsystem generates unique names for new virtual shared disks, you cannot use a digit as the last character in the name prefix.

User response: Specify a valid name prefix and try the **createvsd -v** command again.

0034-626 **The unit of option t is K (1024 bytes); the value *hsd stripe size* must be a multiple of 4 and not greater than 1048576.**

Explanation: The stripe size on an IBM Hashed Shared Disk must be a multiple of 4K and not greater than 1048576K.

User response: Specify a valid stripe size and try this command again.

0034-627 **The value of mirror count *mirror count* is invalid. It must be in the range of 1 to 3.**

Explanation: IBM AIX LVM requires a mirror count value of 1, 2, or 3.

User response: Specify a valid mirror count and try the command again.

0034-628 **The lock directory *directory name* is held by someone else. try later.**

Explanation: To generate consistent and unique device names, the Virtual shared disk subsystem uses a directory as a lock. If the lock is held by another program and is not released in a short time, the current program will terminate.

User response: Check the time when the lock directory was created. If it was created a long time ago, you can remove it. Otherwise, you should try the command later.

0034-630 **Node *node_number* cannot be specified as both primary and backup node for the given volume group *vg_name*.**

Explanation: The **createvsd** command checks the nodes specified with the **-n** option to ensure that the same node cannot be specified as both the primary node and the backup node for a given LVM logical group.

User response: Modify the *node_list* and reissue the command.

0034-631 **Node *node_number* cannot be specified twice in the -n node list.**

Explanation: The **createvsd** command checks the nodes specified with the **-n** option to ensure that a node cannot be specified twice as the primary or backup node.

User response: Modify the *node_list* and reissue the command.

0034-633 **Vsd with minor number *device minor number* is at ACTIVE state on client node *node number*, but it is NOT active on server node *node number*.**

Explanation: The virtual shared disk on the server node must be in the ACTIVE state.

User response: Login the server node, run the **cfgvsd -a** command and then run the **startvsd -a** command.

0034-634 **chrsrc failed to update *entry_name attribute_name* attribute in the *resource-class*.**

Explanation: The **chrsrc** program failed to update the specified resource attribute.

User response: Use the **lsrsrc** command to verify the class.

0034-635 ***caller_program* : RVSD is not active.**

Explanation: The Recoverable virtual shared disk subsystem is not active on the node.

User response: Run **ha.vsd start** on the node.

0034-645 **Node *node name* is not part of a cluster.**

Explanation: The **createvsd** command was issued to create a concurrent virtual shared disk, but the servers specified are not part of a cluster.

User response: Use the **updatevsdnode** command to define the servers into a cluster.

0034-646 **All nodes specified as part of a CVSD should belong to the same cluster.**

Explanation: The **-k** flag was passed and not all concurrent virtual shared disks (CVSDs) belong to the same cluster.

User response: Ensure that all virtual shared disks belong to the same cluster with the **-k** option.

0034-647 **sysctl sysctl_vsdcheck failed.**

Explanation: This message indicates that you do not have the correct authorization to issue this command.

User response: Check your sysctl authorization.

0034-648 **Not authorized to run *calling program*.**

Explanation: This message indicates that you do not have the correct authorization to issue this command.

User response: Check your sysctl authorization.

0034-649 **Invalid format for -n option.**

Explanation: The **-n** parameter is being used with incorrect syntax.

User response: Correct the syntax and enter the command again.

0034-650 **Invalid -T partition size. Valid values are 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, or 1024.**

Explanation: An incorrect value was used with the **-T** flag.

User response: Correct the syntax and enter the command again.

0034-651 **Can specify at most two servers for a VSD, Use <-k CVSD> for a CVSD.**

Explanation: More than two servers were specified. Only two servers are allowed for nonconcurrent virtual shared disks.

User response: If you are working with nonconcurrent virtual shared disks, reduce the number of servers to two. If you are working with concurrent virtual shared disks (CVSDs), use option **-k CVSD** on the command.

Chapter 4. 0513: System resource controller (SRC)

When an error occurs, the system resource controller (SRC) issues one or more messages with a prefix of **0513**.

0513-001 The System Resource Controller daemon is not active.

Explanation: The system resource controller daemon is not active.

User response: Make sure the SRC daemon is running.

0513-002 The System Resource Controller has received a request that it does not understand and could not service.

Explanation: The system resource controller received a request that it could not process.

User response: Specify a valid SRC request.

0513-003 A possible systems administration problem has been found. The System Resource Controller is not running as superuser.

Explanation: A possible system administration problem has been found. The system resource controller is not running as superuser.

User response: Contact your system administrator.

0513-004 The Subsystem or Group, *name*, is currently inoperative.

Explanation: The subsystem or group specified is currently inoperative.

User response: Contact your system administrator.

0513-005 The Subsystem, *name*, only supports signal communication.

Explanation: The specified subsystem supports signal communication only.

User response: Contact your system administrator.

0513-006 The Subsystem, *name*, is currently stopping its execution.

Explanation: The specified subsystem is stopping.

User response: Contact your system administrator.

0513-007 The options specified are not valid for this command. Please reference your manual for valid options.

Explanation: The options you specified are not valid for this command.

User response: Refer to the command's usage statement for a list of the valid options.

0513-008 The subserver type, *name*, is not on file.

Explanation: The specified subserver type is not on file.

User response: Specify a valid subserver type.

0513-009 You must set the parameter *typerequest* to NEWREQUEST to send a new request and receive your first reply. You will only receive continued replys while *typerequest* is not set to END and an error is not returned. Refer to the *typerequest* parameter to *srcsrqt* or '*srcstat*' in your programmers manual.

Explanation: You need to set the *typerequest* argument to NEWREQUEST to send a new request and receive your first reply. You will only receive continued replies while *typerequest* is not set to END and an error is not returned.

User response: Refer to the *typerequest* argument of *srcsrqt* or *srcstat* in *RSCT: Administration Guide*.

0513-010 The System Resource Controller is experiencing problems with its message queue communications.

Explanation: The system resource controller is experiencing problems with its message queue communications.

User response: Contact your system administrator.

0513-011 The subsystem reply length is invalid. The valid lengths for the reply size must be between the size of a *srchdr* structure and SRCPKTMAX, or the size of a short.

Explanation: The subsystem reply length is not valid. The valid lengths for the reply size must be between the size of a *srchdr* structure and SRCPKTMAX, or the size of a short.

User response: Specify a valid subsystem reply length.

0513-012 **The *name* Subsystem could not be started. The Subsystem's user id could not be established. Please check the Subsystem's user id and try again.**

Explanation: The specified subsystem could not be started. The subsystem's user ID could not be established.

User response: Check the subsystem's user ID and try again.

0513-013 **The *name* Subsystem could not be started. The Subsystem's audit id could not be established. Please check the Subsystem's audit id and try again.**

Explanation: The specified subsystem could not be started. The subsystem's audit ID could not be established.

User response: Check the subsystem's audit ID and try again.

0513-014 **The request could not be passed to the *name* subsystem. The System Resource Controller is experiencing problems with the subsystem's communication socket.**

Explanation: The request could not be passed to the specified subsystem. The system resource controller is experiencing problems with the subsystem's communication socket.

User response: Contact your system administrator.

0513-015 **The *name* Subsystem could not be started. Please check subsystem resources and try again later.**

Explanation: The specified subsystem could not be started.

User response: Check subsystem resources and try again later.

0513-016 **The System Resource Controller is experiencing problems in acquiring the memory that it needs. Please try the command again later.**

Explanation: The system resource controller is experiencing problems in acquiring the memory that it needs.

User response: Try the command again later.

0513-017 **The *name* Subsystem ended abnormally. You must manually restart it.**

Explanation: The specified subsystem ended abnormally.

User response: You need to start the subsystem again manually.

0513-018 **System Resource Controller requires that you be running as root when a remote host is specified for a request.**

Explanation: The system resource controller requires that you run as **root** when a remote host is specified for a request.

User response: Contact your system administrator.

0513-019 **System Resource Controller requires that you be running as root or be part of the group system for local requests.**

Explanation: The system resource controller requires that you run as **root** or that you are a part of the group system for local requests.

User response: Contact your system administrator.

0513-020 **The *name* Subsystem did not end normally. The subsystem respawn limit has been exceeded. Check the Subsystem and restart it manually.**

Explanation: The specified subsystem did not end normally. The subsystem respawn limit has been exceeded.

User response: Check the subsystem and start it again manually.

0513-021 **The subserver is not on file or subserver is not currently active. Check your subserver entries and try again.**

Explanation: The subserver is not on file or subserver is not currently active.

User response: Check your subserver entries and try again.

0513-022 **Subserver currently under command processing. The Subserver you are referencing is currently busy. Wait until the Subserver is finished and try again.**

Explanation: The subserver you are referencing is currently busy.

User response: Wait until the subserver is finished and try again.

0513-023 The Command has already been processed.

Explanation: The command has already been processed.

User response: None.

0513-024 The command cannot be performed because a System resource limit has been exceeded. Contact your System Administrator to correct the problem.

Explanation: The command cannot be performed because a system resource limit has been exceeded.

User response: Contact your system administrator to correct the problem.

0513-025 The Subserver exists under another name. Duplicates are not allowed.

Explanation: The subserver exists under another name. Duplicates are not allowed.

User response: Specify a different subserver name.

0513-026 The remote host cannot determine your host's name. The remote host must be able to determine your host's name for remote System Resource Controller requests.

Explanation: The remote host cannot determine your host's name. The remote host must be able to determine your host's name for remote system resource controller requests.

User response: Contact your system administrator to correct the problem.

0513-027 Your host is not specified in the /etc/hosts.equiv file on the remote host. Your host may only execute remote System Resource Controller requests if your host name appears in the remote host's /etc/hosts.equiv file.

Explanation: Your host is not specified in the /etc/hosts.equiv file on the remote host. Your host may only execute remote system resource controller requests if your host name appears in the remote host's /etc/hosts.equiv file.

User response: Contact your system administrator to correct the problem.

0513-028 A privileged internet port could not be allocated. Remote system Resource Controller requests require a privileged internet port. Try again later when a port become available.

Explanation: A privileged Internet port could not be allocated. Remote system resource controller requests require a privileged Internet port.

User response: Try again later when a port becomes available.

0513-029 The *name* Subsystem is already active. Multiple instances are not supported.

Explanation: The specified subsystem is already active. Multiple instances are not supported.

User response: Specify a different subsystem name.

0513-030 The System Resource Controller daemon has stopped.

Explanation: The system resource controller daemon has stopped.

User response: Contact your system administrator to correct the problem.

0513-031 Multiple instances of the Subsystem exist. Specify the Subsystem Process ID and try your command again.

Explanation: Multiple instances of the subsystem exist.

User response: Specify the subsystem process ID and try your command again.

0513-032 Invalid SRC return AF_UNIX address. You must use the System Resource Controller commands or library calls to use the System Resource Controller.

Explanation: A non-valid SRC return AF_UNIX address was specified.

User response: You must use the SRC commands or library calls to use the system resource controller.

0513-033 The *name* Subsystem could not be started. The Subsystem's communication queue could not be established.

Explanation: The specified subsystem could not be started. The subsystem's communication queue could not be established.

User response: Contact your system administrator to correct the problem.

0513-034 The System Resource Controller was unable to establish a pipe with which to communicate with the *name* Subsystem.

Explanation: The system resource controller was

unable to establish a pipe with which to communicate with the specified subsystem.

User response: Contact your system administrator to correct the problem.

0513-035 **The *name* Subsystem ended abnormally. SRC will try and restart it.**

Explanation: The specified subsystem ended abnormally. The SRC will try to restart it.

User response: None.

0513-036 **The request could not be passed to the *name* subsystem. Start the subsystem and try your command again.**

Explanation: The request could not be passed to the specified subsystem.

User response: Start the subsystem and try the command again.

0513-037 **The System Resource Controller is already active.**

Explanation: The system resource controller is already active.

User response: None.

0513-043 **The stop of the *name* Subsystem failed.**

Explanation: The stopping of the specified subsystem failed.

User response: Contact your system administrator

0513-044 **The *name* Subsystem was requested to stop.**

Explanation: The specified subsystem was requested to stop.

User response: None.

0513-046 **The *name* Subsystem could not be started. The Subsystem's standard in could not be established. Please check the Subsystem's standard in path and try again.**

Explanation: The specified subsystem could not be started. The subsystem's standard input could not be established.

User response: Check the subsystem's standard input path and try again.

0513-047 **The *name* Subsystem could not be started. The Subsystem's standard out could not be established. Please check the Subsystem's standard out path and try again.**

Explanation: The specified subsystem could not be started. The subsystem's standard output could not be established.

User response: Check the subsystem's standard output path and try again.

0513-048 **The *name* Subsystem could not be started. The Subsystem's standard error could not be established. Please check the Subsystem's standard error path and try again.**

Explanation: The specified subsystem could not be started. The subsystem's standard error could not be established.

User response: Check the subsystem's standard error path and try again.

0513-053 **The System Resource Controller is having socket problems. If you specified a foreign host, try configuring Internet sockets and try your command again, otherwise contact System Administration.**

Explanation: The system resource controller is having socket problems.

User response: If you specified a foreign host, try configuring Internet sockets and try your command again, otherwise contact your system administrator.

0513-054 **The host, *name*, that you wish to send this command to is not a known host.**

Explanation: The host that you want to send this command to is not a known host.

User response: Specify a valid host name.

0513-055 **SRC's internet service is not defined. You must define SRC's internet service to be able to use remote SRC.**

Explanation: The SRC's Internet service is not defined.

User response: You must define SRC's Internet service to be able to use remote SRC.

0513-056 **Timeout waiting for command response. If you specified a foreign host, see the `/etc/inittab` file on the foreign host to verify that the SRC daemon (`srcmstr`) was started with the `-r` flag to accept remote requests.**

Explanation: There was a timeout while waiting for a command response.

User response: If you specified a foreign host, see the `/etc/inittab` file on the foreign host to verify that the SRC daemon (`srcmstr`) was started with the `-r` option to accept remote requests.

0513-057 **The *name* Subsystem could not be started. The Subsystem's communication socket could not be established.**

Explanation: The specified subsystem could not be started. The subsystem's communication socket could not be established.

User response: Contact your system administrator.

0513-058 **SRC has received a request with a version identifier that it could not service.**

Explanation: The SRC has received a request with a version identifier that it could not process.

User response: Spcify a valid version identifier.

0513-059 **The *name* Subsystem has been started. Subsystem PID is *value*.**

Explanation: The specified subsystem has been started.

User response: None.

0513-062 **The *name* Subsystem must exist to complete this command.**

Explanation: The specified subsystem must exist to complete this command.

User response: Specify a valid subsystem name.

0513-063 **Subserver type already exists on file.**

Explanation: The subserver type already exists on file.

User response: Specify a different subserver type.

0513-064 **The Subsystem name and Subserver code point are already on file.**

Explanation: The subsystem name and subserver code point are already on file.

User response: Specify a different subsystem name and subserver code point.

0513-065 **The *name* Subserver has been added.**

Explanation: The specified subserver has been added.

User response: None.

0513-067 **Notify method already exists with subsystem or group name.**

Explanation: The notify method already exists with subsystem or group name.

User response: Specify a different subsystem or group name.

0513-068 **The *name* Notify method has been added.**

Explanation: The specified notify method has been added.

User response: None.

0513-070 **Subsystem or synonym_name is already on file.**

Explanation: The subsystem or synonym name is already on file.

User response: Specify a different subsystem or synonym name.

0513-071 **The *name* Subsystem has been added.**

Explanation: The specified subsystem has been added.

User response: None.

0513-073 **The *name* Subserver has been changed.**

Explanation: The specified subserver has been changed.

User response: None.

0513-075 **The new subsystem name is already on file.**

Explanation: The new subsystem name is already on file.

User response: Specify a different subsystem name.

0513-076 The new synonym_name is already on file.

Explanation: The new synonym name is already on file.

User response: Specify a different synonym name.

0513-077 Subsystem has been changed.

Explanation: The subsystem has been changed.

User response: None.

0513-079 Notify method has been removed.

Explanation: The notify method has been removed.

User response: None.

0513-081 Subserver type has been removed.

Explanation: The subserver type has been removed.

User response: None.

0513-083 Subsystem has been Deleted.

Explanation: The subsystem has been deleted.

User response: None.

0513-084 There were no records that matched your request.

Explanation: There were no records that matched your request.

User response: Try making another request.

0513-085 The *name* Subsystem is not on file.

Explanation: The specified subsystem is not on file.

User response: Specify a valid subsystem name.

0513-086 The *name* Group is not on file.

Explanation: The specified group is not on file.

User response: Specify a valid group name.

0513-087 The *name* Subsystem has received a request that it does not understand and could not service. Contact System Administration.

Explanation: The specified subsystem has received a request that it does not understand and could not process.

User response: Contact your system administrator.

0513-088 The stop force signal specified is an invalid signal. Change the signal number to a valid one and try again.

Explanation: The stop force signal specified is not a valid signal.

User response: Change the signal number to a valid one and try again.

0513-089 The stop normal signal specified is an invalid signal. Change the signal number to a valid one and try again.

Explanation: The stop normal signal specified is not a valid signal.

User response: Change the signal number to a valid one and try again.

0513-090 There has been an unexpected database error with ODM. Please record this number '*value*' and contact system administration.

Explanation: There has been an unexpected database error with the object data manager (ODM).

User response: Record the specified number and contact your system administrator.

0513-093 The request to turn off tracing was completed successfully.

Explanation: The request to turn off tracing was completed successfully.

User response: None.

0513-094 The request to turn off tracing failed.

Explanation: The request to turn off tracing failed.

User response: Contact your system administrator.

0513-095 The request for subsystem refresh was completed successfully.

Explanation: The request for subsystem refresh was completed successfully.

User response: None.

0513-096 The request for subsystem refresh failed.

Explanation: The request for subsystem refresh failed.

User response: Contact your system administrator.

0513-097 The System Resource Controller objects have been created.

Explanation: The system resource controller objects have been created.

User response: None.

0513-098 The notify_name must exist as a subsystem name or a group name.

Explanation: The notify name must exist as a subsystem name or a group name.

User response: Specify a valid notify name.

0513-099 The notify_name is too long. Only 29 bytes are allowed.

Explanation: The notify name is too long. Only 29 bytes are allowed.

User response: Specify a valid notify name.

0513-100 The notify_method is too long. Only 255 bytes are allowed.

Explanation: The notify method is too long. Only 255 bytes are allowed.

User response: Specify a valid notify method.

0513-101 The subserver_type is too long. Only 29 bytes are allowed.

Explanation: The subserver type is too long. Only 29 bytes are allowed.

User response: Specify a valid notify name.

0513-102 The subsystem_name is too long. Only 29 bytes are allowed.

Explanation: The subsystem name is too long. Only 29 bytes are allowed.

User response: Specify a valid subsystem name.

0513-103 The synonym_name is too long. Only 29 bytes are allowed.

Explanation: The synonym name is too long. Only 29 bytes are allowed.

User response: Specify a valid synonym name.

0513-104 The argument to the subsystem is too long. Only 199 bytes are allowed.

Explanation: The argument to the subsystem is too long. Only 199 bytes are allowed.

User response: Specify a valid argument.

0513-105 The subsystem_path is too long. Only 199 bytes are allowed.

Explanation: The subsystem path is too long. Only 199 bytes are allowed.

User response: Specify a valid subsystem path.

0513-108 The stdin path is too long. Only 199 bytes are allowed.

Explanation: The standard input path is too long. Only 199 bytes are allowed.

User response: Specify a valid standard input path.

0513-109 The stdout path is too long. Only 199 bytes are allowed.

Explanation: The standard output path is too long. Only 199 bytes are allowed.

User response: Specify a valid standard output path.

0513-110 The stderr path is too long. Only 199 bytes are allowed.

Explanation: The standard error path is too long. Only 199 bytes are allowed.

User response: Specify a valid standard error path.

0513-111 The group_name is too long. Only 29 bytes are allowed.

Explanation: The group name is too long. Only 29 bytes are allowed.

User response: Specify a valid group name.

0513-112 The argument to the subsystem is too long. Only 2400 bytes are allowed.

Explanation: The argument to the subsystem is too long. Only 2400 bytes are allowed.

User response: Specify a valid argument.

0513-113 The environment is too long. Only 2400 bytes are allowed.

Explanation: The environment is too long. Only 2400 bytes are allowed.

User response: Specify a valid environment.

0513-114 The subserver_object is too long. Only 29 bytes are allowed.

Explanation: The subserver object is too long. Only 29 bytes are allowed.

User response: Specify a valid subserver object.

0513-115 The host name is too long. Only 255 bytes are allowed.

Explanation: The host name is too long. Only 255 bytes are allowed.

User response: Specify a valid host name.

0513-117 Invalid Subsystem priority. Priority must be in the range 0-39.

Explanation: You specified a non-valid subsystem priority.

User response: Specify a priority that is in the range 0 through 39.

0513-118 Invalid Subsystem message type. Message type must be greater than zero.

Explanation: The subsystem message type is not valid. The message type must be greater than zero.

User response: Specify a valid message type.

0513-119 You must specify the subsystem name.

Explanation: You did not specify a subsystem name.

User response: Specify a valid subsystem name.

0513-120 You must specify the path to the subsystem executable.

Explanation: You did not specify the path to the subsystem executable.

User response: Specify the path to the subsystem executable.

0513-121 You must specify the subsystem communication method.

Explanation: You did not specify the subsystem communication method.

User response: Specify the subsystem communication method.

0513-122 AF_UNIX Socket family has not been configured. The System Resource Controller is experiencing problems with its local socket communications. Contact Systems Administration.

Explanation: The SRC is experiencing problems with its local socket communications.

User response: Contact your system administrator.

0513-123 You may only pass 2000 bytes of information to the subsystem.

Explanation: You can only pass 2000 bytes of information to the subsystem.

User response: Specify a smaller quantity of bytes.

0513-124 The *name* subserver has been started.

Explanation: The specified subserver has been started.

User response: None.

0513-125 The *name* subserver could not be started.

Explanation: The specified subserver could not be started.

User response: Contact your system administrator.

0513-125 The *name* subserver could not be started.

Explanation: The specified subserver could not be started.

User response: Contact your system administrator.

0513-126 The *name* subserver is already active.

Explanation: The specified subserver is already active.

User response: None.

0513-127 The *name* subserver was stopped successfully.

Explanation: The specified subserver was stopped successfully.

User response: None.

0513-128 The *name* subserver was not stopped successfully.

Explanation: The specified subserver was not stopped successfully.

User response: Contact your system administrator.

0513-129 The *name* subsystem does not support the requested action.

Explanation: The specified subsystem does not support the requested action.

User response: Specify a valid action.

0513-129 **The *name* subsystem does not support the requested action.**

Explanation: The specified subsystem does not support the requested action.

User response: Specify a valid action.

0513-130 **The *name* Subsystem could not be started. The System Resource Controller could not create an internal file in /var/adm/SRC. Please check the /var filesystem and the /var/adm/SRC directory and try again.**

Explanation: The specified subsystem could not be started. The SRC could not create an internal file in /var/adm/SRC.

User response: Check the /var filesystem and the /var/adm/SRC directory and try again.

0513-131 **The System Resource Controller could not create or update an internal file.**

Explanation: The SRC could not create or update an internal file.

User response: Contact your system administrator.

0513-132 **The interface to the System Resource Controller kernel extension failed.**

Explanation: The interface to the SRC kernel extension failed.

User response: Contact your system administrator.

0513-134 **The configuration request was successfully passed to the *name* subsystem.**

Explanation: The configuration request was successfully passed to the specified subsystem.

User response: None.

0513-135 **An authentication error has occurred; user, host, or password incorrect.**

Explanation: An authentication error has occurred: the user, host, or password is incorrect.

User response: Specify a valid user, host, or password.

0513-136 **The System Resource Controller on the remote host refused a TCP connection.**

Explanation: The SRC on the remote host refused a TCP connection.

User response: Contact your system administrator.

0513-137 **A security method error has occurred; invalid or mismatched methods.**

Explanation: A security method error has occurred. The methods are not valid or the are mismatched.

User response: Specify a valid method.

0513-138 **The user_name is too long. Only 29 bytes are allowed.**

Explanation: The user name is too long. Only 29 bytes are allowed.

User response: Specify a valid user name.

0513-139 **The password is too long. Only 29 bytes are allowed.**

Explanation: The password is too long. Only 29 bytes are allowed.

User response: Specify a valid password.

0513-140 **The specified user id or user name does not exist.**

Explanation: The specified user ID or user name does not exist.

User response: Specify a valid user ID or user name.

0513-141 **The System Resource Controller on the remote machine is only accepting extended requests.**

Explanation: The SRC on the remote machine is only accepting extended requests.

User response: Contact your system administrator.

0513-142 **The System Resource Controller method already exists.**

Explanation: The SRC method already exists.

User response: Specify a different method.

0513-143 **The System Resource Controller method not found.**

Explanation: The SRC method is not found.

User response: Specify a valid method.

0513-144 **Missing the subsystem name; Use -S to specify name.**

Explanation: The subsystem name is missing.

User response: Use the -S option to specify the name.

0513-145 Missing the action; Use the -A to specify the action.

Explanation: The action is missing.

User response: Use the **-A** option to specify the action.

0513-146 Missing the method pathname; Use the -m to specify the method.

Explanation: The method's path name is missing.

User response: Use the **-m** option to specify the method.

0513-147 The Subsystem name is too large; Only 29 bytes are allowed.

Explanation: The subsystem name is too large. Only 29 bytes are allowed.

User response: Specify a valid subsystem name.

0513-148 The specified action is invalid.

Explanation: The specified action is not valid.

User response: Specify a valid action.

0513-149 The method pathname is too large; Only 199 bytes are allowed.

Explanation: The method path name is too large. Only 199 bytes are allowed.

User response: Specify a valid path name.

0513-150 The method arguments are too large; Only 8191 bytes are allowed.

Explanation: The method arguments are too large. Only 8191 bytes are allowed.

User response: Specify a valid argument.

0513-151 The user_name is too large; Only 29 bytes are allowed.

Explanation: The user name is too large. Only 29 bytes are allowed.

User response: Specify a valid user name.

0513-152 Unsupported command line option.

Explanation: You specified a command-line option that is not valid.

User response: Refer to the command's usage statement for a list of valid command-line options. Specify a valid option and run the command again.

Chapter 5. 2506: Recoverable virtual shared disk

When an error occurs, the recoverable virtual shared disk component issues one or more messages with a prefix of **2506**.

2506-101 **The *subsystem name* subsystem must be stopped before remaking it.**

Explanation: You are attempting to remake the subsystem using the **mksrc** command.

User response: Run the **ha.vsd stop** command first.

2506-102 **All VSD nodes must use the same type of communication adapter.**

Explanation: The virtual shared disk (VSD) nodes are using different types of communication adapters. Using different types is not permitted.

User response: Remove the VSD nodes that are using different adapter types.

2506-103 ***script name* is not executable; SRC object *SRC object name* not made.**

Explanation: You issued the **ha.vsd start** command.

User response: Run the **ha.vsd mksrc** command first.

2506-104 **The *subsystem name* subsystem must be stopped before removing it.**

Explanation: You issued the **ha.vsd rmsrc** command.

User response: Run the **ha.vsd stop** command first.

2506-105 **Not a VSD node, exiting.**

Explanation: You tried to run the **ha.vsd start** command on a node that is not a virtual shared disk (VSD) node.

User response: Use the **vsdnode** command to make the node a VSD node.

2506-106 **Invalid parameter *invalid parameter*.**

Explanation: You specified an invalid parameter.

User response: Check the command arguments and reissue the command.

2506-107 **Not enough file system space on file *pathname*.**

Explanation: The specified file system is full.

User response: Increase the size of the file system or remove unnecessary files.

2506-108 **Not enough file system space on file *pathname*, waiting.**

Explanation: A virtual shared disk node does not have enough space.

User response: Increase disk space on the node, or remove unnecessary files.

2506-109 ***timestamp* DetermineRVSDversion (): lsrsrc failed. Output=*lsrsrc_output***

Explanation: A problem occurred while accessing the virtual shared disk (VSD) resource manager.

User response: Use the output in the message text to analyze the problem.

2506-110 ***timestamp* RVSD_Restrict_Level has more than one domain.**

Explanation: Multiple levels of the Recoverable virtual shared disk (RVSD) subsystem are installed.

User response: None.

2506-111 ***timestamp* The rvsdrestrict command forces RVSD to reduce its function to *Version.Release.Modification.Fix level*.**

Explanation: Multiple levels of the Recoverable virtual shared disk (RVSD) subsystem are installed, so RVSD functions are limited to those available in the specified version of the subsystem.

User response: None.

2506-112 **RVSD cannot start. The rvsdrestrict level must be set.**

Explanation: Multiple levels of the Recoverable virtual shared disk (RVSD) subsystem are installed.

User response: Issue the **rvsdrestrict** command to correct the situation.

2506-113 **RVSD cannot start. The RVSD code level is lower than the rvsdrestrict level.**

Explanation: Multiple levels of the Recoverable virtual shared disk (RVSD) subsystem are installed.

User response: Issue the **rvsdrestrict** command to correct the situation.

2506-114 *timestamp* **MakeNodeFile(): lsrsrc failed.**
Output=lsrsrc_output.

Explanation: A problem occurred while accessing the virtual shared disk (VSD) resource manager.

User response: Use the output in the message text to analyze the problem.

2506-115 **Usage: ha.vsd quorum n : missing quorum value n.**

Explanation: The quorum value is missing from the command input.

User response: Check the command arguments and reissue the command.

2506-118 **cfgvsd failed: rc=return_code. There may be a problem with the repository. Exiting without starting the RVSD subsystem.**

Explanation: One or more of the following Virtual shared disk (VSD) subsystem files are missing or could not be accessed:

- VSD_Table
- Node
- Node.cast
- VSD_ipaddr

User response: Check that the VSD resource manager is accessible from the node. Try the command again. Check the output from the **cfgvsd** command for more information. Verify that the Virtual shared disk subsystem was configured properly, with emphasis on the VSD subsystem data that is stored in the VSD resource manager.

2506-119 **failed to create new vsdfiles, default will be current /usr/lpp/csd/vsdfiles**

Explanation: At least one of the new VSD tables is incorrect.

User response: Run SMIT to set VSD information.

2506-120 **Lock file *lock_file_name* held too long; I am taking it. You may want to investigate.**

Explanation: **readSDR** uses a lock file, which is a directory. **readSDR** waits several seconds for the lock, after which it issues this message and continues processing. The message most likely means that the system crashed in the middle of processing **cfgvsd**, and this lock file was not cleaned up. Alternatively, another process is running **cfgvsd**, and that command processing appears to be hung. Usually, the **cfgvsd** command does not take long to read repository information before starting to configure virtual shared disks.

User response: If you see this message on the first **cfgvsd** operation after rebooting to recover from a system crash, you may safely ignore it. Otherwise, check to see whether another process is using **cfgvsd**, or if another **cfgvsd** operation is hung.

2506-121 **Unable to find and create**
VSD_flat_file_directory_name

Explanation: cannot find and mkdir

User response: check filesystem

Chapter 6. 2520: Group services

When an error occurs, the group services subsystem issues one or more messages with a prefix of **2520**.

2520-001 The HA_GS interface has already been initialized.

Explanation: This process has already successfully executed `ha_gs_init()`.

User response: Refer to `ha_gs_init()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-002 A responsiveness callback function must be specified.

Explanation: Specify a responsiveness callback function on the `ha_gs_init()` call.

User response: Refer to `ha_gs_init()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-003 A delayed error callback function must be specified.

Explanation: Specify a delayed callback function on the `ha_gs_init()` call.

User response: Refer to `ha_gs_init()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-004 A responsiveness counter of non-zero length must be specified.

Explanation: A counter length which is not valid was specified on the `ha_gs_init()` call.

User response: Refer to `ha_gs_init()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-005 The HA_GS interface has not been initialized.

Explanation: The program attempted to execute a group services interface before it has successfully executed `ha_gs_init()`.

User response: Refer to `ha_gs_init()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-006 Unable to allocate memory for group information.

Explanation: A malloc call was not successful while running within the group services library.

User response: Restart the application. If this continues to happen, increase the amount of memory available to the application.

2520-007 A merge callback function must be specified.

Explanation: A merge callback function must be specified on the `ha_gs_init()` call.

User response: Specify a merge callback function on the `ha_gs_init()` call. For more information, see `ha_gs_init()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-008 Batch Control specified is not valid.

Explanation: A batch control flag that is not valid was specified on an `ha_gs_join()` call.

User response: Specify a valid batch control flag on the `ha_gs_join()` call. For more information, see `ha_gs_join()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-009 Number of Phases specified is not valid.

Explanation: A number of phases which is not valid was specified on a Group Services interface call.

User response: Refer to the interface description in the *RSCT: Group Services Programming Guide and Reference* that the application attempted when it received this error.

2520-010 Source Reflection Number of Phases specified is not valid.

Explanation: A number of phases flag which is not valid was specified on an `ha_gs_join()` call.

User response: Refer to `ha_gs_join()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-011 Group Default Vote specified is not valid.

Explanation: A group default value which is not valid was specified on an `ha_gs_join()` call.

User response: Refer to `ha_gs_join()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-012 Group name *group name* can be no longer than *maximum length* characters.

Explanation: The group name specified for an `ha_gs_join()` call is too long.

User response: Refer to `ha_gs_join()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-013 Unknown Notification Message,
type=notification type, length=notification
length.

Explanation: A notification which was not valid was received by a Group Services application.

User response: Contact the IBM Support Center.

2520-014 Provider token provider token does not
exist.

Explanation: A Group Services interface was called and the given provider token does not represent any current providers.

User response: Refer to the *RSCT: Group Services Programming Guide and Reference* manual.

2520-015 Vote submitted, but this group is not in
a voting protocol.

Explanation: The `ha_gs_vote()` interface was called for a group that is not currently in a voting protocol.

User response: Refer to `ha_gs_vote()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-016 Invalid socket control flag given.

Explanation: A socket control flag which is not valid was specified on a Group Services interface call.

User response: Refer to `ha_gs_init()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-017 Invalid dispatch control flag given.

Explanation: A dispatch control flag which is not valid was specified on a Group Services interface call.

User response: Refer to `ha_gs_init()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-018 Invalid vote value given.

Explanation: A vote value which is not valid was given on a call to `ha_gs_vote()`.

User response: Refer to `ha_gs_vote()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-019 Invalid default vote value given.

Explanation: A default vote value which is not valid was given on a call to `ha_gs_vote()`.

User response: Refer to `ha_gs_vote()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-020 Invalid subscription control flag value
given.

Explanation: A subscription control flag which is not valid was given on a call to `ha_gs_subscribe()`.

User response: Refer to `ha_gs_subscribe()` in the *RSCT: Group Services Programming Guide and Reference*.

2520-021 unsupported interface name is not
currently supported.

Explanation: The specified interface name is not supported.

User response: Modify the application to not call this interface.

2520-022 Client joins to group named group
name are not allowed.

Explanation: The group name specified for an `ha_gs_join()` call is the name of a reserved group to which joins are not allowed.

User response: Refer to `ha_gs_join()` in the *Group Services Programming Guide and Reference* manual.

2520-023 Group named group name may not be
specified as a source group name.

Explanation: The group name specified for an `ha_gs_join()` call is the name of a reserved group which may not be used as a source group name.

User response: Refer to `ha_gs_join()` in the *Group Services Programming Guide and Reference* manual.

2520-024 Source group name, source group
name, can be no longer than maximum
length characters.

Explanation: The source group name specified for an `ha_gs_join()` call is too long.

User response: Refer to `ha_gs_join()` in the *Group Services Programming Guide and Reference* manual.

2520-025 Invalid Deactivation Phase Specified.

Explanation: A deactive phase which is not valid was specified on a Group Services `ha_gs_expel()` call.

User response: Refer to the `ha_gs_expel()` description in the *Group Services Programming Guide and Reference* manual that the application attempted when it received this error.

2520-026 Cannot determine current client working directory.

Explanation: While processing `ha_gs_init()`, the Group Services library could not determine the current client process working directory.

User response: Refer to the interface description in the Group Services Programming Guide and Reference manual that the application attempted when it received this error.

2520-027 Must specify at least one provider for an expel.

Explanation: You did not specify any providers to `expel` on an `ha_gs_expel()` call.

User response: Refer to the `ha_gs_expel()` description in the Group Services Programming Guide and Reference manual that the application attempted when it received this error.

2520-028 Provider *provider instance number, provider node number* appears twice in expel list.

Explanation: A provider was listed twice to be expelled on an `ha_gs_expel()` call.

User response: Refer to the `ha_gs_expel()` description in the Group Services Programming Guide and Reference manual that the application attempted when it received this error.

2520-040 Client compiled against later release library.

Explanation: The client program was compiled and linked against a later version of the Group Services library, and cannot be run on this node.

User response: Install the latest Group Services release on this node, or recompile the client program against the level of the Group Services library on this node.

2520-041 Client cannot issue `ha_gs_goodbye()`.

Explanation: Client was compiled against an earlier level of the Group Services library.

User response: Install the latest Group Services release on this node and recompile the client program against the level of the Group Services library on this node.

2520-042 Group contains back-level providers thus `ha_gs_goodbye()` cannot be called.

Explanation: Other clients in the group were compiled against an earlier level of the Group Services library.

User response: Install the latest Group Services release on all nodes, and recompile the client program against the level of the Group Services library on all nodes.

2520-043 A subscription callback function must be specified.

Explanation: Specify a subscription callback function on the `ha_gs_subscribe()` call.

User response: Refer to `ha_gs_subscribe()` in the Group Services Programming Guide and Reference manual.

2520-044 A protocol `n_phase` callback function must be specified.

Explanation: Specify a protocol `n_phase` callback function on the `ha_gs_join()` call.

User response: Refer to `ha_gs_join()` in the Group Services Programming Guide and Reference manual.

2520-045 A protocol approved callback function must be specified.

Explanation: Specify a protocol approved callback function on the `ha_gs_join()` call.

User response: Refer to `ha_gs_join()` in the Group Services Programming Guide and Reference manual.

2520-046 A protocol rejected callback function must be specified.

Explanation: Specify a protocol rejected callback function on the `ha_gs_join()` call.

User response: Refer to `ha_gs_join()` in the Group Services Programming Guide and Reference manual.

2520-047 An announcement callback function must be specified.

Explanation: Specify an announcement callback function on the `ha_gs_join()` call.

User response: Refer to `ha_gs_join()` in the Group Services Programming Guide and Reference manual.

2520-048 The `cu_get_cluster_info()` returns an error *error number*.

Explanation: Although the program attempted to get the cluster name and ID to connect the group services daemon, the cluster utility API returns an error.

User response: Refer to `cu_get_cluster_info()` and `ha_gs_init()` in the Group Services Programming Guide and Reference manual.

2520-201 **Cannot remove service entry**
service_name from *services_file*.

Explanation: Either the service name *service_name* was not found in the services-file, or the *service_name* could not be removed from the services file. The **/tmp** directory or the file system containing *service_file* could be full.

User response: Add the service name before deleting it, or ensure that the file systems are not full.

2520-202 **Cannot determine node number.**

Explanation: On the SP, every node has its node number stored in the ODM at install time. This node number could not be retrieved.

User response: Install the node again.

2520-203 **Cannot determine syspar name.**

Explanation: The system partition for this node could not be determined. The most likely cause is that the SDR could not be reached.

User response: Validate that the SDR is running and is operating correctly.

2520-204 **Cannot determine the IP address or code version for system partition**
syspar_name.

Explanation: On the SP, every node should be in one system partition. The node on which you ran the command, is in the system partition *syspar_name*, but vital information, such as the IP address or code version, cannot be determined. The **SDRGetObjects -x -G Syspar syspar_name==syspar-name ip_address code_ve** command was not successful.

User response: Validate that the SDR is running and is reachable. Properly configure the system partition, and try the command again.

2520-205 **Port number not found for subsystem**
subsystem_name.

Explanation: The SDRGetObjects Syspar_ports subsystem==subsystem name port command was not successful.

User response: Run this command on the control workstation in the partition to which this node belongs, and try the command again on the node.

2520-206 **Cannot register service** *service_name*,
protocol *protocol*, port *port_number*.

Explanation: The subsystem being installed by the command was not able to install the specified service name *service_name* protocol *protocol* port number *port_number* in the **/etc/services** directory, which is

required for the subsystem to operate.

User response: If there is a port number specified in the error message, verify that this port number is not being used by another subsystem. If a port number is not specified in the error message, all of the port numbers that this command selected were already in use.

2520-207 ***daemon_file_name* is not executable.**

Explanation: The daemon file name *daemon_file_name* must be an executable file to allow the subsystem being installed by the command to operate. The the daemon file name *daemon_file_name* may not exist.

User response: As root, run **chmod +x** *daemon_file_name* and try the command again, or run **installp** again to install the subsystem.

2520-208 **The *subsystem_name* subsystem must be stopped.**

Explanation: Stop the subsystem *subsystem_name* to allow the specified command to operate on it.

User response: As root, run **stopsrc -s** *subsystem_name* and try the command again.

2520-209 **Could not add *subsystem_name* to**
resource_controller.

Explanation: The specified command was not successful defining the subsystem name *subsystem_name* to the resource controller *resource_controller*. If the resource controller is inittab, mkinitd subsystem name was not successful. If resource controller is SRC, mkssys -s subsystem name was not successful.

User response: Fix what caused the resource controller command listed above to not succeed and try the command again.

2520-210 **Cannot create object in**
SDR_object_class_name for
object_attributes.

Explanation: The specified command was not successful creating an object in the SDR class *SDR_object_class_name* with the attributes specified by *object_attributes*.

User response: The command generates an error message, which appears prior to this message. Correct the problem indicated by the prior message and run this command again.

2520-211 Internal error.

Explanation: The specified command encountered an internal error.

User response: Record the above information and contact the IBM Support Center.

2520-212 Cannot verify registration of service name *service name*, protocol *protocol*, port *port number*.

Explanation: The subsystem being installed by *command-name* was unable to verify the installation of the specified service-name protocol port number in */etc/services*, which is required for the subsystem to operate. If the machine is an NIS client, you may have to update the NIS master server's services map to reflect this change.

User response: If the machine is an NIS client, copy the entry with the specified service name, protocol, and port number from the local */etc/services* file into the same file on the NIS master server and do a NIS make on the NIS master server.

2520-213 Cannot get DCE credentials for SDR access.

Explanation: *command-name* was not successful in getting DCE credentials for SDR access.

User response: DCE subsystem may not work correctly. Check */usr/lpp/ssp/bin/dsrvtgt*.

2520-214 Startup parameter line is HACMP/ES 4.2.x style. Assuming HAES domain.

Explanation: Startup parameter line is HAES 4.2.x style.

User response: Group Services daemon will assume its environment as HACMP/ES.

2520-215 cldomain is not found, assuming HAES 4.2, use SP partition name.

Explanation: *cldomain* cmd is not found. Assume HAES 4.2.x style.

User response: Group Services daemon will assume its environment as HACMP/ES.

2520-216 Domain name *domain name* on parameter line will be used.

Explanation: Domain name on command line will be used.

User response: The Group Services daemon will assume its environment as HACMP/ES.

2520-217 Cannot initialize FFDC environment, return code = *code*.

Explanation: An FFDC initialization error occurred.

User response: Make sure the FFDC environment is working correctly.

2520-218 Cannot get system partition name with *spget_syspar -n*.

Explanation: The Group Services daemon could not obtain the system partition name from the *spget_syspar -n* command that was specified.

User response: Check the syntax of the *spget_syspar* command and try the command again.

2520-219 Aggregate IP group on */dev/mi0* under domain *domain_type* is not supported.

Explanation: Aggregate IP group is not supported for the given domain.

User response: Only the PSSP domain is supported for Aggregate IP group.

2520-220 SW_GROUPIE_AGGIP_CFG is not defined by *hagsglsmd*.

Explanation: The environment variable *SW_GROUPIE_AGGIP_CFG* is not defined.

User response: Check the version of the *hagsglsm* script and the *hagsglsmd* daemon.

2520-221 Cannot retrieve Aggregate_IP from SDR.

Explanation: The command failed to retrieve an object *Aggregate_IP* in the SDR class.

User response: An error message is displayed prior to this message by the failing SDR command. Correct the problem indicated by the error message and run the command again.

2520-222 could not create log directory

Explanation: The command could not create a log directory.

User response: Check the disk space. Correct the problem and run the command again.

2520-223 command failed. *rc=return-code*

Explanation: The command failed.

User response: Correct the problem and run the command again.

2520-224 Group Services subsystem
hags-subsystem is down

Explanation: The group services subsystem *hags-subsystem* is down.

User response: Investigate the problem if the group services subsystem is still down.

**2520-225 The command /usr/sbin/rsct/bin/
ct_clusterinfo is not found**

Explanation: The */usr/sbin/rsct/bin/ct_clusterinfo* command cannot be found.

User response: Check to see where the *ct_clusterinfo* command can be found.

2520-226 cluster *cluster_name* does not exist

Explanation: The specified cluster does not exist.

User response: Check to see whether the cluster is defined.

2520-227 Not a recognized flag: *flag or option*

Explanation: The command contains a flag that is not valid.

User response: Correct the command syntax and run the command again.

2520-228 Not fully stopped in *time* seconds.

Explanation: The subsystem did not fully stop within the time limit.

User response: Check to see if the subsystem is on file.

2520-229 Error in writing to the file.

Explanation: An error occurred in writing to the file.

User response: Check to see if the file exists and check the file access mode.

2520-230 Error in reading the file.

Explanation: An error occurred in reading the file.

User response: Check to see if the file exists and check the file access mode.

Chapter 7. 2521: Event management

When an error occurs, the event management component issues one or more messages with a prefix of **2521**.

2521-000 The trace argument *argument* is not valid.

Explanation: A trace argument that is not valid was specified to the named program.

User response: Specify a valid trace argument. See the documentation for the named program.

2521-001 The *flag* flag requires an argument.

Explanation: The specified flag did not have a required argument.

User response: Specify a valid argument with *flag*. See the documentation for the named program.

2521-002 Undefined option flags specified.

Explanation: Undefined option flags were specified to the named program.

User response: See the documentation for the named program for valid option flags.

2521-003 Cannot obtain node number.

Explanation: The named program cannot obtain the number of the node upon which it is processing.

User response: Validate that the node number has been set and that `/usr/lpp/ssp/install/bin/node_number` exists and is executable.

2521-004 System partition IP address argument is missing.

Explanation: When executing on the control workstation, the named program requires that the IP address of a system partition be specified as an argument to the program.

User response: Refer to the documentation for the named program.

2521-005 Reserved error number.

Explanation: The specified program encountered an internal error.

User response: Record the above information and contact the IBM Support Center.

2521-006 System call *system_call* was unsuccessful with error *error_number* - *error_message*.

Explanation: The specified system call *system_call* failed with the specified error number *error_number* and message *error_message* when invoked by the named program.

User response: Record the above information and contact the IBM Support Center.

**2521-007 Internal error
(*additional_error_information*).**

Explanation: The named program encountered an internal error.

User response: Record the above information and contact the IBM Support Center.

2521-008 Internal error (*error_info1*; *error_info2*).

Explanation: The named program encountered an internal error.

User response: Record the above information and contact the IBM Support Center.

2521-009 Cannot make directory *directory_name*, `mkdir()` error is *error_number* - *error_message*.

Explanation: The named program attempted to create the specified directory *directory_name* using the `mkdir()` system call. The system call failed with the named error *error_number*.

User response: If possible, correct the condition that resulted in the error, such as missing directories in the path of the directory to be created, and start the Event Management daemon again. Refer to the Event Management Subsystem information in *PSSP: Administration Guide*. If the problem cannot be corrected, contact the IBM Support Center.

2521-010 Cannot open or create *file_name*, `open()` error is *error_number* - *error_message*.

Explanation: The named program attempted to open or create the specified file *file_name* using the `open()` system call. The system call failed with the named error *error_number*.

User response: If possible, correct the condition that resulted in the error and start the Event Management daemon again (if it has ended). Refer to the Event Management Subsystem information in *PSSP: Administration Guide* for information regarding the

specified file. If the problem cannot be corrected, record the above information and contact the IBM Support Center.

2521-011 Cannot open a session with the SDR, error is *error_message*.

Explanation: The named program attempted to establish a session with the System Data Repository. The attempt failed due to the specified error *error_message*.

User response: If possible, correct the condition that resulted in the error and start the Event Management daemon again. If the problem cannot be corrected, record the above information and contact the IBM Support Center.

2521-012 Cannot get objects from the SDR class *class_name* error is *error_message*.

Explanation: The named program attempted to get objects from the specified SDR class. The attempt failed due to the specified error.

User response: If possible, correct the condition that resulted in the error and start the Event Management daemon again. Refer to the Event Management Subsystem information in *PSSP: Administration Guide*. If the problem cannot be corrected, record the above information and contact the IBM Support Center.

2521-013 Cannot get attribute *attribute_name* from object in SDR class *class_name*, error is *error_message*.

Explanation: The named program attempted to get the named attribute *attribute_name* from an object in the specified SDR class *class_name*. The attempt failed due to the specified error *error_message*.

User response: If possible, correct the condition that resulted in the error and start the Event Management daemon again. Refer to the Event Management Subsystem information in *PSSP: Administration Guide*. If the problem cannot be corrected record the above information and contact the IBM Support Center.

2521-014 Unexpected type for attribute *attribute_name* from object in SDR class *class_name* (*expected_attribute_type*).

Explanation: The type of the named attribute *attribute_name* from an object in the specified SDR class *class_name* does not match the specified expected attribute type *expected_attribute_type*.

User response: If possible, correct the condition that resulted in the error and start the Event Management daemon again. Refer to the Event Management Subsystem information in *PSSP: Administration Guide*. If the problem cannot be corrected record the above information and contact the IBM Support Center.

2521-015 Event Manager configuration database version mismatch (*expected_version_string*; *data_base_version_string*).

Explanation: The version of the Event Manager Configuration Database (EMCDB) read by the Event Manager daemon is not the expected version.

User response: Refer to the Event Management Subsystem information in *PSSP: Administration Guide*.

2521-016 Event Manager configuration database checksum error.

Explanation: The version of the Event Manager Configuration Database (EMCDB) read by the Event Manager daemon produced a checksum error.

User response: The EMCDB has become corrupted. Remove the */etc/ha/cfg/em.domain_name.cdb* file on the node where this error occurred, where *domain_name* is the name of the domain of the node.

If this error occurs on the control workstation, the error message indicates the domain of the daemon that produced this message. After the file is removed, restart the Event Management daemon. For more information about the EMCDB, see the Event Management subsystem chapter in *PSSP: Administration Guide*.

2521-017 Cannot connect to resource monitor *resource_monitor_name* (*resource_monitor_instance_number*) error *error_number* - *error_message*.

Explanation: The Event Manager daemon could not connect to the specified instance of the specified resource monitor.

User response: Record the above information. Contact the IBM Support Center if the specified resource monitor is supplied by IBM. Otherwise, contact the vendor that supplied the resource monitor. Also, examine the error log for any error messages from the resource monitor.

2521-018 Resource monitor *resource_monitor_name* terminated due to signal *signal_number*.

Explanation: The specified resource monitor *resource_monitor_name* terminated as a result of receiving the specified signal *signal_number*.

User response: Record the above information. If the specified resource monitor is supplied by IBM contact the IBM Support Center. Otherwise, contact the vendor that supplied the resource monitor. Also, examine the error log for any error messages from the specified resource monitor.

2521-019 **Resource monitor** *resource monitor name (resource monitor ID) terminated with exit code exit code.*

Explanation: The specified resource monitor terminated with the specified exit code.

User response: If the exit code is 127, the resource monitor could not be executed. Examine the */var/ha/log/em.default.domain_name.RMid* file for further information, where *domain_name* is the name of the Event Management domain and *RMid* is the specified resource monitor ID.

If the exit code is not 127 and the specified resource monitor is supplied by IBM, contact the IBM Support Center. Otherwise, contact the vendor that supplied the resource monitor. Also, examine the error log for any error messages from the specified resource monitor.

2521-020 **Command based resource monitor terminated early.**

Explanation: A command based resource monitor connected to the Event Manager daemon, but terminated without sending data to the daemon.

User response: Record the above information. Contact the IBM Support Center if the specified resource monitor is supplied by IBM. Otherwise, contact the vendor that supplied the resource monitor.

2521-021 **Damaged registration cache file** *(additional_error_information).*

Explanation: A file used to cache event registration requests has become corrupted.

User response: Record the above information and contact the IBM Support Center.

2521-022 **Cannot get port number for** *service_name.*

Explanation: A port number for the specified service name *service_name* cannot be obtained from the */etc/services* file.

User response: Refer to the Event Management Subsystem information in *PSSP: Administration Guide*.

2521-023 **Cannot initialize Group Services** *(error_code).*

Explanation: Event Management could not initialize Group Services, due to the specified error code *error_code* returned from Group Services.

User response: Record the above information and contact the IBM Support Center.

2521-024 **Received** *count_of_unrecognized_message unrecognized messages in the last time minutes.*

Explanation: The Event Management daemon has received the specified number of unrecognized messages *count_of_unrecognized_message* within the specified time *time* interval. These messages were received on the UDP port used for communication among Event Management daemons. The most likely cause of this error is that this port number is being used by another application.

User response: Validate that the port number configured for use by the Event Management daemon is only being used by the Event Management daemon. Refer to the Event Management Subsystem information in *PSSP: Administration Guide*.

2521-025 **Cannot copy file name from CWS,** *return code is error code.*

Explanation: Event Management could not copy the specified EMCDB file from the control workstation to the node. The error code indicates the cause of the failure.

User response: If the return code is 3, the copy process could not obtain a Kerberos ticket-granting ticket using the **rcmdtgt** command. Examine the */var/ha/log/em.default.domain_name* file, where *domain_name* is the name of the domain of the node, for further error information. If this error occurs on the control workstation, the error message indicates the domain of the daemon which produced this message.

If the return code is 4, the copy process failed in the **rcp** command. Again, examine the */var/ha/log/em.default.domain_name* file for further information.

If the return code is greater than 100, the copy process was terminated by the signal number given by (return code minus 100). Refer to the Event Management Subsystem chapter in *PSSP: Administration Guide* for additional information regarding this copy process.

If the return code is anything other than what has been described here, record the above information and contact the IBM Support Center.

2521-026 **Cannot read file_name, read() error is** *error_number - error_message.*

Explanation: The named program attempted to read the specified file *file_name* using the **read()** system call. The system call failed with the named error *error_number*. An error number of 0 indicates that the **read()** call ended with a short count. For example, the named file *file_name* did not contain as much data as was expected.

User response: If possible, correct the condition that resulted in the error and start the Event Management daemon again (if it has ended). Refer to the Event

Management Subsystem information in *PSSP: Administration Guide* for information regarding the specified file. If the problem cannot be corrected, record the above information and contact the IBM Support Center.

2521-027 Socket connection type *socket_type* rejected, too many open descriptors.

Explanation: Event Management rejected a socket connection of the indicated type due to insufficient available file descriptors:

- Type 'C': connection from client
- Type 'R': connection from/to resource monitor
- Type 'H': connection to Host Respond daemon.

User response: End unnecessary Event Management client applications. Refer to the Event Management Subsystem information in *PSSP: Administration Guide*

2521-028 Reserved error number.

Explanation: The program encountered an internal error.

User response: Record the above information and contact the IBM Support Center.

2521-029 Reserved error number.

Explanation: The program encountered an internal error.

User response: Record the above information and contact the IBM Support Center.

2521-030 Resource monitor *resource monitor name (resource monitor instance number)* added unsolicited instance of variable *resource variable name*.

Explanation: The specified instance of a resource monitor attempted to add an instance of the specified resource variable that had not been requested by the Event Management session. This indicates a programming error in the resource monitor.

User response: Event Management clients should refrain from referencing this resource variable until the resource monitor has been corrected. Record the above information. If the specified resource monitor is supplied by IBM contact the IBM Support Center. Otherwise, contact the vendor that supplied the resource monitor.

2521-031 Resource monitor *resource monitor name (resource monitor instance number)* deleted unsolicited instance of variable *resource variable name*.

Explanation: The specified instance of a resource monitor attempted to delete an instance of the specified resource variable that had not been requested by the

Event Management session. This indicates a programming error in the resource monitor.

User response: Event Management clients should refrain from referencing this resource variable until the resource monitor has been corrected. Record the above information. If the specified resource monitor is supplied by IBM contact the IBM Support Center. Otherwise, contact the vendor that supplied the resource monitor.

2521-032 Cannot dispatch group services (*group_services_return_code*).

Explanation: The Event Management daemon could not dispatch the Group Services function: the **ha_gs_dispatch()** function returned a nonzero value.

User response: The Event Management daemon should have ended and then restarted. Check the Group Services Subsystem for errors.

2521-033 Peer daemon on node *node number* is not responding to Group Services.

Explanation: The Event Management daemon on the specified node has not responded to a Group Services **ping** within 120 seconds.

User response: The Event Management daemon on the specified node should eventually terminate and then be restarted. If it does not the administrator must terminate the unresponsive daemon (using the **kill** command) and release shared memory resources used by Event Management on the specified node.

For more information on releasing shared memory resources, see the Resource Monitors and PTX® Shared Memory chapter in *RSCT: Event Management Programming Guide and Reference*. Until the daemon on the specified node is restarted, no other Event Management daemons can join the Event Management peer group and provide Event Management services.

2521-034 Not responding to Group Services - terminating.

Explanation: The Event Management daemon has been informed that it has not responded to a Group Services **ping** within 120 seconds. The daemon is terminating so that it can be restarted automatically.

User response: Record the above information and contact the IBM Support Center.

2521-035 The daemon is executing with user identifier *incorrect user identifier* instead of root.

Explanation: The Event Management daemon is executing with the specified user identifier instead of with the **root** identifier.

User response: The error could be caused by a user

other than **root** executing the Event Management daemon **haemd** or by an incorrect configuration of the Event Management subsystem in the System Resource Controller (SRC). Validate that the **/usr/sbin/rsct/bin/haemd** file is not readable or executable by 'others'.

To correct this problem, reconfigure the daemon in the SRC by executing the **haemctrl -d** command, the **haemctrl -a** command and the **haemctrl -s** command. In a HACMP domain, use the **emsvcsctrl** command in place of **haemctrl** above. Refer to the Event Management Subsystem chapter of *PSSP: Administration Guide* and the man page for the **haemctrl** command for more information.

2521-036 The Event Management group 'haemrm' cannot be found.

Explanation: The Event Management daemon could not find the group name **haemrm**. This group must exist for resource monitors other than **root** to connect properly to the Event Management daemon.

User response: Correct this problem by executing the **haemctrl -c** command, the **haemctrl -a** command and the **haemctrl -s** command. In an HACMP domain use the **emsvcsctrl** command in place of **haemctrl** above.

Note that if the **haemctrl** command is executed on the control workstation, the **-a** and **-s** invocations of **haemctrl** must be performed for each system partition. See the Event Management Subsystem chapter of *PSSP: Administration Guide* and the man page for the **haemctrl** command for more information.

2521-037 Internal error (additional error information).

Explanation: The program encountered an internal error.

User response: Record the above information and contact the IBM Support Center.

2521-038 Resource monitor *resource monitor name (resource monitor instance number)* added duplicate instance of variable *resource variable name*.

Explanation: The specified instance of a resource monitor attempted to register an instance of the specified resource variable that has already been registered by another instance of the same resource monitor. This indicates a programming error in the resource monitor.

User response: Event Management clients should refrain from referencing this resource variable until the resource monitor has been corrected. If the specified resource monitor is supplied by IBM, contact the IBM Support Center. Otherwise, contact the vendor that supplied the resource monitor.

2521-039 Shared memory (*shared memory ID*) has been damaged, dump file is *dump file name*.

Explanation: The Event Management daemon has detected a corrupted shared memory segment with the specified shared memory ID. A copy of the first page of the segment has been placed in the named dump file in the **/var/ha/run/haem.*domain_name*** directory, where *domain_name* is the name of the Event Management domain.

The dump file name includes the name and instance number of the resource monitor instance that was using the shared memory segment, and also includes a time stamp value.

User response: The most probable cause of this error is a defect in the specified resource monitor. Record the above information. If the specified resource monitor is supplied by IBM, contact the IBM Support Center. Otherwise, contact the vendor that supplied the resource monitor.

A less probable cause is that some other application has attached to the specified shared memory segment and corrupted it.

2521-040 Cannot execute *command name* to obtain node number or domain name (*error code*).

Explanation: The program cannot execute the specified command. The **clnodenum** command obtains the number of the node on which the program is executing. The **cldomain** command obtains the name of the domain that contains the node on which the program is executing.

User response: Verify that the specified command exists and is executable.

2521-041 *command name* exited with error code *error code*.

Explanation: The program executed the specified command, which then returned the specified error code.

User response: To determine the appropriate action for the returned error code. See the Event Management Subsystem chapter of *PSSP: Administration Guide* and the man page for the specified command for more information.

2521-042 *command name* had no output.

Explanation: The program executed the specified command but the command did not provide any output. The **clnodenum** command returns the number of the node on which the named program is executing. The **cldomain** command returns the name of the domain that contains the node on which the program is executing.

User response: Record the above information and contact the IBM Support Center.

2521-043 *command name* **terminated due to signal number** *signal number*.

Explanation: The program executed the specified command, which then terminated as a result of the specified signal number.

User response: Record the above information and contact the IBM Support Center.

2521-044 **The system call name system call was unsuccessful, see error 2521-045 in error file name.**

Explanation: The specified system call was unsuccessful. You can find additional information in the specified error file.

User response: Record the above information and contact the IBM Support Center. Provide this message and message 2521-045 from the default log file.

2521-045 **The system call name system call was unsuccessful with error** *error number - error message* **when loading load module name. Additional error information:** *additional error information*.

Explanation: The specified system call was unsuccessful when loading the specified load module. Additional error information may follow.

User response: Record the above information and contact the IBM Support Center.

2521-046 **The security function name security function was unsuccessful, see error 2521-047 in error file name.**

Explanation: The indicated security function was not successful. Additional information can be found in the specified error file for Event Management.

User response: Examine 2521-047 and correct the error, then restart the Event Management daemon (if it has terminated).

2521-047 **The security function name security function was unsuccessful.**

Explanation: The indicated security function was not successful. Additional error information follows.

- Security Services error code: *security services error code*
- DCE error code: *DCE error code*
- GSSAPI major error code: *GSSAPI major error code*
- GSSAPI minor error code: *GSSAPI minor error code*
- System call error code: *System call error code*

- Failing DCE function: *name of failing DCE function*
- Message: *error message*

User response: Using the specified error information, refer to the Security documentation and attempt to correct the error. If you cannot correct the error, record the previous information and contact the IBM Support Center.

2521-048 **Internal error:** *additional error information*.

Explanation: The program encountered an internal error.

User response: Record the above information and contact the IBM Support Center.

2521-049 **Received proposal to change group security state to new group security state from provider EM daemon provider ID but local methods do not match. The local methods are local methods.**

Explanation: The named program received a proposal that the group security state should be changed to the new group security state. However, either security is not supported on this node or the trusted services authentication methods configured on this node do not match the proposed group security state. The request originated with the specified Event Management daemon (the provider ID consists of two numbers, a,b, where 'a' is for internal use and 'b' is the number of the node where the Event Management daemon is executing).

User response: Ensure that this node has the correct level of the Parallel System Support Program (PSSP) that supports DCE security installed and/or that the trusted services authentication methods are configured on this node to match the proposed group security state. Refer to the Event Management Subsystem chapter in the *PSSP: Administration Guide* for information regarding security in Event Management.

2521-050 **Request to change security state to new group security state is rejected (current security state is current group security state).**

Explanation: The named program proposed a new security state but it was rejected by one or more other members of the Event Management daemon peer group.

User response: Ensure that all nodes in the Event Management domain have the level of the Parallel System Support Programs (PSSP) that supports DCE security. Refer to the Event Management Subsystem chapter in the *PSSP: Administration Guide* for information regarding security in Event Management.

2521-051 Security state mismatch at join
(daemon security state , group security state.

Explanation: The Event Management daemon joined the daemon peer group, but the security state of the daemon does not match the security state of the peer group. The most likely cause of this error is that the trusted services authentication methods configured on this node have changed since the daemon peer group formed.

User response: Refer to the Event Management Subsystem chapter in the *PSSP: Administration Guide* for information regarding security in Event Management.

2521-052 Event Management DCE security should not be enabled.

Explanation: The Event Management daemon has DCE security enabled, and Compatibility security is not enabled, but other daemons in the peer group have been detected that are down level. DCE security, without Compatibility security, cannot be enabled for Event Management unless all nodes in the Event Management domain contain Event Management security support .

User response: Either disable the DCE trusted service authentication method on this node, or enable the Compatibility trusted service authentication method on this node, until the down level nodes are upgraded. Refer to the Event Management Subsystem chapter in the *PSSP: Administration Guide* for more information regarding security in Event Management.

2521-053 Security state mismatch after approve
daemon security state, group security state.

Explanation: A proposal to change the security state of the Event Management peer group has been accepted by all EM daemons, including this daemon, but this daemon can no longer conform to the new state. The most likely cause of this error is that the trusted services authentication methods configured on this node have changed since this daemon agreed to the new group security state.

User response: Refer to the Event Management Subsystem chapter in the *PSSP Administration Guide* for information regarding security in Event Management.

2521-054 The Event Management daemon did not initiate a refresh, because the daemon was not yet in a peer group.

Explanation: The Event Management daemon cannot initiate a refresh until it has joined the Event Management peer group.

User response: Wait for the Event Management daemon to join its peer group before running the refresh

command against the daemon.

2521-055 The Event Management daemon did not initiate a refresh, because a prior refresh was in progress.

Explanation: The Event Management daemon cannot initiate a refresh until it has finished the prior refresh that was in progress.

User response: Wait for the Event Management daemon to finish the prior refresh before running the refresh command against the daemon.

2521-056 The resource monitor *resource monitor name* was not found.

Explanation: The Event Management daemon did not recognize the specified resource monitor.

User response: Verify the name of the resource monitor. Perhaps the wrong resource monitor name was specified.

2521-057 The resource monitor *resource monitor name* was not locked.

Explanation: The specified resource monitor was not locked. It did not need to be unlocked.

User response: Verify the name of the resource monitor. Perhaps the wrong resource monitor name was specified.

2521-058 The -a flag must be specified with this command.

Explanation: The specified command requires that the -a flag be used.

User response: Issue the command again using the -a flag.

2521-059 Damaged registration cache file *file name (error_info)*.

Explanation: A file that is used to cache event registration requests has become corrupted.

User response: Contact the IBM Support Center.

2521-200 The *incorrect flag* flag is not valid.

Explanation: The specified incorrect flag was passed to the command.

User response: Enter the command using the appropriate flags.

2521-201 You must specify a load list file name.

Explanation: The name of a load list file was not specified to the command.

User response: Enter the command with the name of a load list file.

2521-202 You may specify only one of the -r or -d flags.

Explanation: Both the -r and the -d flag were specified to the command.

User response: Enter the command with either the -r flag or the -d flag, but not both.

2521-203 Unable to open an SDR session. SDR function returned error SDR error number.

Explanation: The command was unable to open a session with the SDR. The failing SDR function and return code are displayed.

User response: Correct the condition that resulted in the error and rerun the command. If the problem cannot be corrected contact the IBM Support Center.

2521-204 Unable to lock the SDR class *class name*. SDR function returned error *error number*.

Explanation: The command was unable to lock the specified class. The failing SDR function and return code are displayed.

User response: Correct the condition that resulted in the error and rerun the command. If the problem cannot be corrected contact the IBM Support Center.

2521-205 Cannot sort objects for SDR class *class name*. SDR function returned error *error number*.

Explanation: The command was unable to lock the specified class. The failing SDR function and return code are displayed.

User response: Correct the condition that resulted in the error and rerun the command. If the problem cannot be corrected contact the IBM Support Center.

2521-206 Unable to get *class name* class object or objects from the SDR. SDR function returned error *error number*.

Explanation: The command was unable to get an object from the named SDR class. The failing SDR function and return code are displayed.

User response: Correct the condition that resulted in the error and rerun the command. If the problem cannot

be corrected contact the IBM Support Center.

2521-207 Unable to create object in the SDR class *class name*. SDR function returned error SDR error number.

Explanation: The command was unable to create an object in the named SDR class. The failing SDR function and return code are displayed.

User response: Correct the condition that resulted in the error and rerun the command. If the problem cannot be corrected contact the IBM Support Center.

2521-208 Cannot unlock the SDR class *class name*. SDR function returned error SDR error number.

Explanation: The command was unable to unlock the specified class. The failing SDR function and return code are displayed.

User response: Correct the condition that resulted in the error and rerun the command. If the problem cannot be corrected contact the IBM Support Center.

2521-209 WARNING: Cannot delete objects from SDR class *class name*. SDR function returned error SDR error number.

Explanation: The command was unable to delete objects from the specified class. The unsuccessful SDR function and return code are displayed. If no additional error messages are displayed, the command completed successfully.

User response: Before this command can be run again, all objects from the specified SDR class must be removed using the SDR command line interface. If the problem cannot be corrected, contact the IBM Support Center. This command is normally executed by invoking the **haemctrl -a** command. This command is normally invoked by **syspar_ctrl -a** or **syspar_ctrl -A**.

2521-210 Cannot execute the program *program_name* (*system_call_error_number*).

Explanation: The command was unable to re-execute a copy of itself, as specified by the program name, during a migration of SDR data. The error code returned by the **exec()** system call is also displayed.

User response: Contact the IBM Support Center.

2521-211 Cannot open input file *file name* **fopen() error is *error number* — *error message*.**

Explanation: The named program could not open the specified input file.

User response: Retry the command after correcting the problem indicated by the **fopen()** error message.

2521-212 **The class name *class name* on line *line number* is not valid.**

Explanation: The command detected an incorrect class name on the specified line number.

User response: Correct the input file and try the command again. See the description of the **haemloadlist** file in the *PSSP Command and Technical Reference* for more information.

2521-213 **An attribute was found on line *line_number* but no class has yet been specified.**

Explanation: Within a load list file, attribute lines must follow a line containing a class name. The program has detected an attribute on the specified line before any line containing a class name.

User response: Correct the input file and try the command again. See the description of the **haemloadlist** file in the *PSSP Command and Technical Reference* for more information.

2521-214 **Missing '=' after attribute name on line *line_number*.**

Explanation: Within a load list file, the attribute name must be followed by an equal sign. The program has detected that an equal sign is missing on the specified line.

User response: Correct the input file and try the command again. See the description of the **haemloadlist** file in the *PSSP Command and Technical Reference* for more information.

2521-215 **Duplicate attribute value on line *line number* for attribute name *attribute name*.**

Explanation: A duplicate value has been found on the specified line for the specified attribute.

User response: Correct the input file and try the command again. See the description of the **haemloadlist** file in the *PSSP Command and Technical Reference* for more information.

2521-216 **Missing attribute value on line *line number* for attribute name *attribute name*.**

Explanation: An attribute value is missing on the specified line for the specified attribute.

User response: Correct the input file and try the command again. See the description of the **haemloadlist** file in the *PSSP Command and Technical Reference* for more information.

2521-217 **Syntax error *syntax error number* in character position *position number* on line *line number*.**

Explanation: A syntax error was detected in the specified position of the specified line. Possible error numbers are:

- 1 - An attribute value consists of only a double quote delimiter
- 2 - An unescaped double quote is found within an attribute value
- 3 - Incorrect escape sequence
- 4 - Unquoted attribute value contains embedded white space
- 5 - A quoted attribute value is missing the final double quote delimiter

User response: Correct the input file and try the command again. See the description of the **haemloadlist** file in the *PSSP Command and Technical Reference* for more information.

2521-218 **Attribute name *attribute name* on line *line number* not defined in class *class name*.**

Explanation: An attribute was detected on the specified line but it is not defined in the specified class.

User response: Correct the input file and try the command again. See the description of the **haemloadlist** file in the *PSSP Command and Technical Reference* for more information.

2521-219 **Required attribute *attribute name* missing from class *class name* prior to line *line number*.**

Explanation: In the last stanza prior to the specified line, the specified attribute of the specified class is missing.

User response: Correct the input file and try the command again. See the description of the **haemloadlist** file in the *PSSP Command and Technical Reference* for more information.

2521-220 **Internal program error detected *error number*.**

Explanation: The named program detected an internal error.

User response: Contact the IBM Support Center.

2521-221 **Cannot find attribute *attribute name* in the SDR class *class name* . SDR function returned error *error number*.**

Explanation: The command could not find the specified attribute in the specified class. The

unsuccessful SDR function and return code are displayed.

User response: Correct the condition that resulted in the error and enter the command again. If the problem persists, contact the IBM Support Center.

2521-222 Unexpected attribute type for attribute *attribute name* in class *class name*.

Explanation: The type of the specified attribute in the specified SDR class is not what is expected by the named program. This indicates a corrupted SDR.

User response: Correct the condition that resulted in the error and rerun the command. Refer to the RSCT Event Management Programming Guide and Reference for information regarding the definition of the specified SDR class. If the problem cannot be corrected contact the IBM Support Center.

2521-223 Cannot delete objects from the SDR class *class name*. SDR function returned error *SDR error number*.

Explanation: The command was unable to delete objects from the specified class. The unsuccessful SDR function and return code are displayed.

User response: Correct the condition that resulted in the error and rerun the command. If the problem cannot be corrected contact the IBM Support Center.

2521-224 Cannot open migration file *file name* fopen() error is *error number* — *error message*.

Explanation: The named program could not open the specified output file.

User response: Retry the command after correcting the problem indicated by the fopen() error message.

2521-300 The *-option flag* flag requires an argument.

Explanation: The specified option flag did not have a required option argument.

User response: Specify a valid option argument. See the documentation for the program.

2521-301 Internal error (*additional error information, additional error information*).

Explanation: The program encountered an internal error.

User response: Record the above information and contact the IBM Support Center.

2521-302 The EMAPI function *function name* was unsuccessful (*error number*) with the error message: *error message*

Explanation: The program invoked the specified function, which returned the specified error number and error message.

User response: If possible, perform the corrective action for the specified error message. If not, retry the command. If the error is repeated, record the above information and contact the IBM Support Center.

2521-303 Cannot obtain information for domain *domain name* (*domain type*).

Explanation: The program could not obtain information about the specified domain.

User response: The most likely cause of this error is that the specified domain name does not match any existing domains of the specified type. Provide a valid domain name and retry the command.

2521-304 Cannot connect to the *domain name* Event Management subsystem.

Explanation: The program could not establish a connection with the Event Management subsystem in the specified domain.

User response: The most likely cause of this error is that the Event Management subsystem in the specified domain is not running. Start the Event Management subsystem, if necessary, and retry the command.

2521-305 Lost connection to the *domain name* Event Management subsystem.

Explanation: The named program lost its connection with the Event Management subsystem in the specified domain.

User response: The most likely cause of this error is that the Event Management subsystem in the specified domain has stopped running. Start the Event Management subsystem, if necessary, and retry the command.

2521-306 Incorrect number of command line arguments (*number of arguments*).

Explanation: The named program requires that the number of command line arguments be a multiple of three.

User response: Specify either no command line arguments or three arguments for each resource variable to be queried: the class name, resource variable name and the resource ID. Refer to the manual page for the named program for more information.

2521-307 **Cannot open input file** *file name*.
fopen() error is *error number - error message* .

Explanation: The named program could not open the specified input file.

User response: Retry the command after correcting the problem indicated by the **fopen()** error message.

2521-308 **Error in input file at line** *line number*,
position *line position*.

Explanation: The named program detected an error in the input file on the indicated line number at the indicated position.

User response: Refer to the manual page for the named program for more information.

2521-400 **Error obtaining the node number.**

Explanation: The program was unable to determine the node number it was running on.

User response: Validate that the node number has been set and that **/usr/lpp/ssp/install/bin/node_number** exists and is executable.

2521-401 **This utility must be executed on the Control Workstation if the -n flag is not used.**

Explanation: You must run this command on the control workstation to generate a production EMCDB. To create a EMCDB on a node, use the **-n** flag.

User response: Run the command again on the control workstation or use the **-n** flag.

2521-402 **Unable to open an SDR session. SDR function returned error** *SDR error number*.

Explanation: The command was unable to open a session with the SDR. The unsuccessful SDR function and return code are displayed.

User response: Correct the condition that resulted in the error and run the command again. If the problem cannot be corrected, record the above information and contact the IBM Support Center.

2521-403 **Unable to get SDR object class name class object or objects from the SDR. SDR function returned error** *SDR error number*.

Explanation: The command was unable to get an object from the named SDR class. The unsuccessful SDR function and return code are displayed.

User response: If the named object class is **Syspar**,

refer to *PSSP: Administration Guide* for information about this class. If the named object class is **EM_Resource_Monitor**, then refer to *RSCT: Event Management Programming Guide and Reference* for information regarding the use of objects from this SDR class. Also refer to the Event Management Subsystem chapter in *PSSP: Administration Guide* for information regarding the loading of this object class.

2521-404 **The syspar_name attribute is not defined as an sdrString.**

Explanation: The **syspar_name** attribute of the **Syspar** object for the current partition was not stored as a string value.

User response: Record the above information and contact the IBM Support Center.

2521-405 **The rmPath attribute value** *monitor_path* **of the EM_Resource_Monitor object**
monitor_name is not an absolute path.

Explanation: The **rmPath** attribute of the resource monitor object must be an absolute path to the monitor.

User response: Change the attribute in the SDR to be an absolute path.

2521-406 **Undefined rmConnect_type attribute value** *attribute_value* **for the EM_Resource_Monitor object**
monitor_name.

Explanation: The **rmConnect_type** attribute of the resource monitor object is not valid.

User response: Change the attribute in the SDR to an allowable value.

2521-407 **Unable to get object class name class object or objects for Monitor** *monitor name* **from the SDR.**

Explanation: The command was not able to get a required object from the named class for the resource monitor.

User response: Check that the required data is in the SDR for the resource monitor. For information regarding this object class, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-408 **Unable to get object class name class object or objects for Resource Class**
resource class name **from the SDR.**

Explanation: The command was unable to get a required SDR object for the resource class.

User response: Check that the required data is in the

SDR for the class. For information regarding this object class, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-409 **Unable to get object class name class object or objects for Variable** *variable name from the SDR. SDR function returned error SDR return code .*

Explanation: The command was unable to get a required SDR object for the resource variable.

User response: Check that the required data is in the SDR for the variable. For information regarding this object class, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-410 **Non-unique crc identifier value generated from variable name** *variable name.*

Explanation: A collision occurred when generating a unique internal id for the variable.

User response: Change the name of the variable. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-411 **Duplicate variable name** *variable name.*

Explanation: Two variables were found to have the same name. Variable names must be unique.

User response: Change the name of the variable. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-412 **Undefined attribute name attribute value (value) for the EM_Resource_Variable object** *variable name.*

Explanation: The value found in the SDR for the resource variable attribute was not valid.

User response: Change the value of the variable attribute to an allowable value. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-413 **Unable to convert initial value for variable** *variable name.*

Explanation: The initial value found in the SDR for the

resource variable could not be converted to a float or long.

User response: Correct the value in the SDR. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-414 **The rvLocator and rvIndex_element attributes cannot be identical for variable** *variable name.*

Explanation: The **rvLocator** and **rvIndex_element** attributes of the variable cannot be the same value.

User response: Correct the values in the SDR. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-415 **Insufficient number of EM_Resource_ID objects defined for variable** *variable name.*

Explanation: There were not enough **EM_Resource_ID** objects found for this variable to satisfy its requirements.

User response: Add or change the resource ID or variable object(s) as needed. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-416 **Error parsing expression at position** *position for variable variable name.*

Explanation: An error occurred while parsing the expression for the variable.

User response: Review the expression's syntax and correct it in the SDR. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-417 **Incorrect structure of resource variable name** *resource variable name.*

Explanation: The specified resource variable name does not conform to the structure *resource_name.resource_attribute*.

User response: Specify a valid resource variable name. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-418 **No match for PTX component name (PTX component name) in resource identifier for variable variable name.**

Explanation: There was no resource ID object found for the instantiable component of the variable's PTX name. Each portion of the PTX name that begins with a \$ must have a corresponding **EM_Resource_ID** object defined.

User response: Add or change the resource ID or variable object as needed. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-419 **Reserved message ID.**

Explanation: A reserved message ID was displayed.

User response: Record the above information and contact the IBM Support Center.

2521-420 **The attribute name (rvLocator or rvIndex_element) attribute value (value) of variable variable name does not match any resource ID element.**

Explanation: The attribute value of either **rvLocator** or **rvIndex_element** must match an **EM_Resource_ID** object defined for this variable.

User response: Correct the attribute value. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-421 **The SBS serial number must be in the range 0-upper limit for variable variable name.**

Explanation: Structured byte string (SBS) serial numbers must be in the range stated. An SBS serial number for the variable was found to be outside of the required range.

User response: Correct the definition of the SBS. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-422 **Duplicate SBS serial number (SBS serial number) found for variable variable name.**

Explanation: Structured Byte String (SBS) serial numbers must start at 0 and be contiguous and unique for each variable. A duplicate value was found for the variable.

User response: Correct the definition of the SBS. For

more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-423 **Undefined field type (field type in SDR) for SBS field SBS field name of variable variable name.**

Explanation: The Structured Byte String (SBS) field type for the SBS field of the specified variable was not an allowable value.

User response: Update the SBS field definition for this field with an allowable value. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-424 **The SBS serial numbers for variable variable name must start with 0.**

Explanation: Structured Byte String (SBS) serial numbers must start at 0 and be contiguous and unique for each variable. A 0 serial number was not found for this variable.

User response: Update the SBS field definitions for this variable so that the serial numbers start at 0 and are contiguous. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-425 **The realloc() call was unsuccessful for number_of_bytes bytes.**

Explanation: The **realloc()** system call was not successful when trying to reallocate the number of bytes.

User response: Record the above information and contact the IBM Support Center.

2521-426 **The malloc() call was unsuccessful for number_of_bytes bytes.**

Explanation: The **malloc()** system call was not successful when trying to allocate the number of bytes.

User response: Record the above information and contact the IBM Support Center.

2521-427 **Incorrect initial long value for the SBS field SBS field name of variable variable name.**

Explanation: The initial long value in the SDR for the Structured Byte String (SBS) field of the variable was not valid and could not be converted to a long value.

User response: Correct the value in the SDR. For more information, see *RSCT: Event Management*

Programming Guide and Reference and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-428 Error converting the initial float value (value) for the SBS field SBS field name of variable variable name.

Explanation: The initial float value in the SDR for the Structured Byte String (SBS) field of the variable could not be converted to a float value.

User response: Correct the value in the SDR. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-429 Incorrect initial float value for SBS field value of variable SBS field name.

Explanation: The initial float value in the SDR for the Structured Byte String (SBS) field of the variable was not valid and could not be converted to a float value.

User response: Correct the value in the SDR. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-430 Incorrect octal constant in value for SBS field SBS field name of variable variable name.

Explanation: An octal constant in the initial value in the SDR for the Structured Byte String (SBS) field of the variable was not valid.

User response: Correct the initial SBS value in the SDR. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-431 Octal constant too large in value for SBS field SBS field name of variable variable name.

Explanation: An octal constant in the initial value in the SDR for the Structured Byte String (SBS) field of the variable was greater than the maximum value allowed

User response: Correct the initial SBS value in the SDR. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-432 Cannot find attribute attribute name.

Explanation: The required attribute was not found in the SDR.

User response: Check that all objects in the SDR that require the attribute have correct values in the SDR. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-433 Attribute attribute_name must be of type type.

Explanation: The attribute was not stored as the correct type in the SDR.

User response: Record the above information and contact the IBM Support Center.

2521-434 Unable to read header information from current EMCDB file EMCDB_file_name.

Explanation: An error occurred while trying to read the current EMCDB database file.

User response: The EMCDB has become corrupted. Remove the named file from the node where this error occurred. After the file is removed, run the named command again. Refer to the Event Management Subsystem information in *PSSP: Administration Guide* for more information about the EMCDB.

2521-435 Unable to open current EMCDB file EMCDB_file_name: open()_error_string(errno).

Explanation: An error occurred while trying to open the current EMCDB file.

User response: If the error indicated by the error information cannot be corrected, remove the named file from the node where this error occurred. After the file is removed, run the named command again. Refer to the Event Management Subsystem information in *PSSP: Administration Guide* for more information about the EMCDB.

2521-436 Unable to create EMCDB file EMCDB_file_name: open()_error_string(errno).

Explanation: An error occurred while trying to create the new EMCDB file.

User response: Attempt to correct the error specified by the error information and run the named command again. Refer to the Event Management Subsystem information in *PSSP: Administration Guide* for more information about the EMCDB. If the error cannot be

corrected, record the above information and contact the IBM Support Center.

2521-437 Unable to map EMCDB file
EMCDB_file_name: shmat()_error_string (errno).

Explanation: An error occurred while trying to memory map the new EMCDB file.

User response: Record the above information and contact the IBM Support Center.

2521-438 No data found for EMCDB section
EMCDB section name.

Explanation: No data was found in the SDR for the required EMCDB file section.

User response: Check that all required Event Management objects have been entered into the SDR for the current system partition. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-439 Unable to rename EMCDB file
old_EMCDB_file_name to new_EMCDB_file_name.

Explanation: The command was unable to rename the EMCDB file.

User response: Attempt to correct the error specified by the error information and run the named command again. Refer to the Event Management Subsystem information in *PSSP: Administration Guide* for information about the EMCDB. If the problem cannot be corrected, record the above information and contact the IBM Support Center.

2521-440 Cannot change the attribute_name attribute in the Syspar class for partition partition_name. SDR_function returned error SDR_return_code.

Explanation: The command was not able to update the attribute value of the Syspar object. The unsuccessful SDR function and return code are displayed.

User response: If the specified error cannot be corrected, record the above information and contact the IBM Support Center.

2521-441 Incorrect description message ID string message ID string.

Explanation: The message ID string in the SDR is not valid.

User response: Correct the message ID string in the SDR. For more information, see *RSCT: Event*

Management Programming Guide and Reference and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-442 The number of message IDs is incorrect for the number of PTX components for variable variable_name.

Explanation: There are too many or too few message IDs to describe the PTX contexts of the variable.

User response: Correct the message ID string in the SDR for the specified variable. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-443 Internal overflow of table table_name.

Explanation: An internal storage table overflowed.

User response: Record the above information and contact the IBM Support Center.

2521-444 Unable to create dump table
table_name.

Explanation: An error occurred when creating an internal storage table.

User response: Record the above information and contact the IBM Support Center.

2521-445 No last context found for statistic
variable_name.

Explanation: No last context was found for the named statistic.

User response: Record the above information and contact the IBM Support Center.

2521-446 No variable found for statistic
variable_name.

Explanation: An internal variable representation was not found for the statistic.

User response: Record the above information and contact the IBM Support Center.

2521-447 Context path too long: context path.

Explanation: The context path length of a variable is greater than the allowed maximum.

User response: Correct the PTX path for the variable to the allowable limit. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-448 The serial numbers for SBS variable *variable name* are not contiguous.

Explanation: Structured Byte String (SBS) serial numbers must start at 0 and be contiguous and unique for each variable.

User response: Update the SBS field definitions for this variable so that the serial numbers are contiguous. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-449 Non-unique crc value generated from path *variable_path_name*.

Explanation: An internal collision occurred when generating an internal id value for the variable path.

User response: Record the above information and contact the IBM Support Center.

2521-450 No variable found for wild card path *variable_path_name*.

Explanation: An internal error occurred when trying to locate a variable associated with the path name.

User response: Record the above information and contact the IBM Support Center.

2521-451 The value of attribute *attribute name* must be a non-NULL string.

Explanation: The specified attribute had a NULL string value. It must be non-NULL.

User response: Check that all objects in the SDR that require the attribute have correct values in the SDR. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-452 Not all resource ID elements defined for the variable *variable name* are specified in the PTX name.

Explanation: For a variable that is of value type Counter or Quantity, each resource ID element name (except an element name specified in the **rvLocator** attribute of the variable definition) must be specified as a component of the PTX name defined by the **rvPTX_name** attribute of the variable definition.

User response: Check the value of the **rvPTX_name** attribute for the specified variable. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-453 The resource monitor *resource monitor name* is specified with a connection type of 'client'; its variable *variable name* must be of value type 'State', not 'value type'.

Explanation: A variable defined for a resource monitor of type 'client' must be of value type 'State'.

User response: Correct the value type for the specified variable. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-454 The PTX name specified for the variable *variable name 1* is a duplicate of the PTX name specified for the variable *variable name 2*.

Explanation: The PTX name specified for *variable name 1* is a duplicate of the PTX name specified for *variable name 2*. PTX names must be unique. In this context, "duplicate" means that the two PTX names are exactly the same or one is a subset of the other, as in **a/b** and **a/b/c**. If *variable name 2* is displayed as "Unknown", then the PTX path name of *variable name 1* is a subset of the PTX path names of one or more other variables belonging to the same resource monitor as *variable name 1*.

User response: Check the value of the **rvPTX_name** attribute for the specified variables. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-455 The value of the **rmNum_instances attribute must be greater than 0 and less than *attribute value limit* for the resource monitor *resource monitor name*.**

Explanation: The value of the **rmNum_instances** attribute must be within the specified range for the specified resource monitor.

User response: Check the value of the **rmNum_instances** attribute for the specified resource monitor. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-456 The value of the **rmNum_instances attribute must be 1 for the resource monitor *resource monitor name*.**

Explanation: The value of the **rmNum_instances** attribute must be 1 for the specified resource monitor.

User response: Check the value of the

rmNum_instances attribute for the specified resource monitor. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-457 **The variable *resource variable name* cannot be dynamically instantiable since its resource monitor *resource monitor name* is defined to support number of RM instances *instances*.**

Explanation: The specified resource variable has its **rvDynamic_instance** attribute set to a nonzero value and the associated resource monitor has its **rmNum_instances** attribute set to a value greater than one. Resource monitors that supply dynamically instantiable resource variables can have only one resource monitor instance.

User response: Either set the **rvDynamic_instance** attribute to 0 or change the **rmNum_instances** attribute of the associated resource monitor to 1. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-458 **The resource monitor *resource monitor name* must have the **rmPTX_prefix** attribute defined since its variable *resource variable name* has the **rvPTX_name** attribute defined.**

Explanation: If a resource variable is defined to have a PTX name, as specified by the **rvPTX_name** attribute, then its resource monitor must define a PTX name prefix using the **rmPTX_prefix** attribute.

User response: Check the value of the **rmPTX_prefix** attribute for the specified resource monitor. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-459 **The resource variable *resource variable name* must have the **rvPTX_name** attribute defined since its resource monitor *resource monitor name* has the **rmPTX_prefix** attribute defined.**

Explanation: If a resource monitor is defined to have a PTX name prefix, as specified by the **rmPTX_prefix** attribute, its resource variables must define a PTX name using the **rvPTX_name** attribute.

User response: Check the value of the **rvPTX_name** attribute for the specified resource variable. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event

Management Subsystem chapter in *PSSP: Administration Guide*.

2521-460 **The PTX context specified for the variable *variable name* has also been specified for the resource *resource name*.**

Explanation: The PTX context specified for a variable has also been specified for one or more other variables with the specified resource name, which is different than the resource name of the indicated variable. (A PTX context name is a PTX path name without the final component.) A PTX context name cannot be used by more than one resource variable if those resource variables do not have a common resource name.

User response: Check the value of the **rvPTX_name** attribute for the specified variables. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-461 **The **rcObservation_interval** attribute of the **EM_Resource_Class** object *class name (variable name)* must be greater than 0.**

Explanation: The specified variable name is either of Value type Counter or Quantity. Therefore, the observation interval of the associated Resource Class must be greater than zero.

User response: Change the value of the **rcObservation_interval** attribute. For more information, see *RSCT: Event Management Programming Guide and Reference* and the Event Management Subsystem chapter in *PSSP: Administration Guide*.

2521-501 **Cannot remove service entry *service_name* from *services_file*.**

Explanation: Either the service name was not found in the services file, or the service name could not be removed from the services file. The **/tmp** directory or the file system containing the services file could be full.

User response: Add the service name before deleting it, or ensure that the file systems are not full.

2521-502 **Cannot determine node number.**

Explanation: On the SP, every node has its node number stored in the ODM at installation. This node number could not be retrieved.

User response: Validate that the node number has been set and that **/usr/lpp/ssp/install/bin/node_number** exists and is executable.

2521-503 Cannot determine syspar name.

Explanation: The system partition for this node could not be determined. The most likely cause is that the SDR could not be reached.

User response: Validate that the SDR is running and is reachable.

2521-504 Cannot determine the IP address for system partition *syspar_name*.

Explanation: The system partition IP address for this node could not be determined. The most likely cause is that the SDR could not be reached.

User response: Validate that the SDR is running and is reachable.

2521-505 Port number not found for subsystem *subsystem_name*.

Explanation: The port number required by this subsystem could not be found in the SDR object class **Syspar_ports**. The most likely cause is that this command has not yet been run on the control workstation.

User response: Run this command on the control workstation in the partition that this node belongs in. For more information, see the Event Management Subsystem information in *PSSP: Administration Guide* and the man page for this command.

2521-506 Cannot register service name *service_name*, protocol *protocol*, port *port_number*.

Explanation: The subsystem being installed by the command was not able to install the specified service name, protocol, port number in **/etc/services**, which is required for the subsystem to operate.

User response: If there is a port number specified in the error message, verify that this port number is not being used by another subsystem. If a port number is not specified in the error message, all of the port numbers that this command selected were already in use. For more information, see the Event Management Subsystem information in *PSSP: Administration Guide* and the man page for this command.

2521-507 *daemon_file_name* is not executable.

Explanation: The *daemon_file_name* must be an executable file to allow the subsystem being installed by the command to operate. The problem could also be that the *daemon_file_name* does not exist.

User response: As root, run **chmod +x *daemon_file_name*** and try the command again. Or run **installp** again using the **ssp.ha** option of the PSSP package to install the subsystem again.

2521-508 The *subsystem_name* subsystem must be stopped.

Explanation: The subsystem must be stopped to allow the command to operate on it.

User response: As root, run **stopsrc -s *subsystem_name*** and try the command again.

2521-509 Could not add *subsystem_name* to *resource_controller*.

Explanation: The command was not successful when defining the subsystem to the resource controller. If the resource controller is **inittab**, **mkstab *subsystem_name*** failed. If the resource controller is SRC, **mkssys -s *subsystem_name*** failed.

User response: Fix whatever caused the resource controller command listed previously to experience the error and try the command again.

2521-510 Cannot create object in *SDR_object_class_name* for *Object_attributes*.

Explanation: The command was not successful when creating an object in the SDR class with the attributes specified.

User response: An error message is displayed prior to this message by the unsuccessful SDR command. Correct the problem indicated by the prior message and then run this command again.

2521-511 Internal error.

Explanation: The command encountered an internal error.

User response: Record the above information and contact the IBM Support Center.

2521-512 Cannot load SDR with configuration data.

Explanation: The command was not successful in loading the SDR with Event Management configuration data.

User response: The file **/var/ha/log/em.loadcfg.SYSPAR** (where SYSPAR is the name of the system partition in which Event Management is being added) contains **loadsdr** command error messages. The last message in this file corresponds to the error that caused this command to fail. Correct the problem indicated by this last error message. For more information, see the Event Management Subsystem information in *PSSP: Administration Guide* and the man page for this command.

2521-513 Cannot create database.

Explanation: The command was not successful in creating the Event Management configuration database from data contained in the SDR. One or more error message from the **haemcfg** command are displayed prior to this message.

User response: Correct the problem indicated by the messages displayed by the **haemcfg** command. Refer to the Event Management Subsystem information in *PSSP: Administration Guide* and the man page for this command for more information.

2521-514 Cannot verify registration of service name *service name*, protocol *protocol*, port *port number*.

Explanation: The subsystem being installed by *command-name* was unable to verify the installation of the specified *service-name* protocol *port-number* in **/etc/services**, which is required for the subsystem to operate. If the machine is a NIS client, you may have to update the NIS master server's services map to reflect this change.

User response: If the machine is a NIS client, copy the entry with the specified service-name, protocol, and port-number from the local **/etc/services** file into the **/etc/services** file on the NIS master server, and do a NIS make on the NIS master server.

2521-515 Cannot create the Event Management group *EM-group-name*.

Explanation: The command was not successful in creating the specified Event Management group.

User response: The **/var/ha/log/em.mkgroup** file contains the error message from the **mkgroup** command. Correct the problem indicated by this message and rerun this command. For more information, see the Event Management Subsystem chapter of *PSSP: Administration Guide* and the man page for this command.

2521-516 Cannot create the Event Management directory *EM-directory-name*.

Explanation: The command was not successful in creating the specified Event Management directory.

User response: The **/var/ha/log/em.mkdir** file contains the error message from the **mkdir** command. Correct the problem indicated by this message and rerun this command. For more information, see the Event Management Subsystem chapter of *PSSP: Administration Guide* and the man page for this command.

2521-550 The *subsystem-name* subsystem must be stopped.

Explanation: The specified subsystem must be stopped to allow the command to operate on it.

User response: As **root**, run **stopsrc -s *subsystem-name***, and retry the command.

2521-551 *daemon-file-name* is not executable.

Explanation: To allow the subsystem being installed to operate, *daemon-file-name* must be an executable file. The problem could also be that *daemon-file-name* does not exist.

User response: As **root**, run **chmod +x *daemon-file-name***, and retry the command. If *daemon-file-name* does not exist, rerun **installp** of the RS/6000® Cluster Technology package to reinstall the subsystem.

2521-552 Could not add *subsystem-name* to *resource-controller*.

Explanation: The previous command was not successful in defining the subsystem to the resource controller. If the resource controller is **initab**, the **mktab *subsystem-name*** command did not succeed. If the resource controller is SRC, **mkssys -s *subsystem-name*** did not succeed.

User response: Correct the problem that caused the resource controller command to not succeed, and retry the command.

2521-553 Cannot create the Event Management group *EM-group-name*.

Explanation: The command was not successful in creating the specified Event Management group.

User response: The **/var/ha/log/em.mkgroup** file contains the error message from the **mkgroup** command. Correct the problem indicated by this message and rerun this command. For more information, see the Event Management Subsystem chapter of *PSSP: Administration Guide* and the man page for this command.

2521-554 Cannot create the Event Management directory *EM-directory-name*.

Explanation: The command was not successful creating the specified Event Management directory.

User response: The **/var/ha/log/em.mkdir** file contains the error message from the **mkdir** command. Correct the problem indicated by this message and rerun the command. For more information, see the Event Management Subsystem chapter of *PSSP: Administration Guide* and the man page for this command.

2521-555 Cannot copy the Configuration Database.

Explanation: The command was not successful in copying the Event Management Configuration Database (EMCDB).

User response: The `/var/ha/log/em.cp` file contains a **cp** command error message. Correct the problem indicated by this error message. For more information, see the Event Management Subsystem chapter of *PSSP: Administration Guide* and the man page for this command.

2521-601 An error occurred in *function name* while getting domain information from command: *standard error message*.

Explanation: While the Event Management subsystem was preparing to run, attempted to run, or ran the specified command to obtain information about a domain, a call to the specified function was not successful. *Standard error message* indicates the error returned by the function.

User response: Record the above information and contact the IBM Support Center.

2521-602 Unexpected end-of-file detected while getting domain information from command.

Explanation: The Event Manager API ran the specified command to obtain information about a domain. The Event Manager API did not receive all the expected information from the command.

User response: Record the above information and contact the IBM Support Center.

2521-603 A data format error was detected while getting domain information from command.

Explanation: The Event Manager API ran the specified command to obtain information about a domain. The Event Manager API received information from the command that was not of the expected format.

User response: Record the above information and contact the IBM Support Center.

2521-604 An unexpected ODM error occurred while determining the node number: *function_name*: *ODM_error_message*

Explanation: The Event Manager API attempted to determine the node number of the host machine, and the ODM function *function_name* returned an error. Note that *ODM_error_message* indicates the error returned by *function_name*.

User response: Record the above information and

contact the IBM Support Center.

2521-605 The format of the node number found in the ODM is not valid; value was: *value*.

Explanation: The Event Manager API attempted to determine the node number of the host machine. It found an object in the **CuAt** object class with the name attribute set to **sp** and attribute attribute set to **node_number**. However, the format of the value attribute was not valid. The value of the value attribute was *value*.

User response: Record the above information and contact the IBM Support Center.

2521-606 Too many objects providing the node number were found in the ODM.

Explanation: The Event Manager API attempted to determine the node number of the host machine. It found more than one object in the **CuAt** object class with the name attribute set to **sp** and attribute attribute set to **node_number**. Therefore, the node number cannot be determined.

User response: Record the above information and contact the IBM Support Center.

2521-607 *function name (domain name) : SDR error message*

Explanation: The Event Manager API attempted to get information from the SDR. A session with the specified domain name could not be opened. The above function name returned the above SDR error message.

User response: Record the above information and contact the IBM Support Center.

2521-608 An error occurred in *function_name* while processing SDR class *SDR_class*: *SDR_error_message*.

Explanation: The Event Manager API attempted to get information from the SDR class *SDR_class*; the routine *function_name* returned the error message *SDR_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-609 Object not found in SDR class *SDR_class*.

Explanation: The Event Manager API attempted to find an object in the SDR class *SDR_class*, but was not successful.

User response: Record the above information and contact the IBM Support Center.

2521-610 **Host name *host_name* found in SDR class *SDR_class* is too long to handle.**

Explanation: The Event Manager API found *host_name* in the SDR class *SDR_class*. This host name is too long to handle.

User response: Record the above information and contact the IBM Support Center.

2521-611 **Host address *host_address* found in SDR class *SDR_class* is too long to handle.**

Explanation: The Event Manager API found *host_address* in the SDR class *SDR_class*. This host address is too long to handle.

User response: Record the above information and contact the IBM Support Center.

2521-612 **Too many objects found in SDR class *SDR_class*.**

Explanation: The Event Manager API attempted to find a specific object in the SDR class *SDR_class*, but more than one was found.

User response: Record the above information and contact the IBM Support Center.

2521-613 **Port number *port_number* found in SDR class *SDR_class* is too long to handle.**

Explanation: The Event Manager API found *port_number* in the SDR class *SDR_class*. This port number is too long to handle.

User response: Record the above information and contact the IBM Support Center.

2521-614 **An attempt to allocate *number_of_bytes* bytes with a call to *function_name* was unsuccessful: *standard_error_message*.**

Explanation: The Event Manager API attempted to allocate *number_of_bytes* bytes with the *function_name* function. The allocation was not successful. Note that *standard_error_message* indicates the error returned by *function_name*.

User response: Record the above information and contact the IBM Support Center.

2521-615 **Conversion of domain address *domain address* to network form unsuccessful.**

Explanation: The Event Manager API could not convert the above domain address to network form. The address is not valid.

User response: Record the above information and contact the IBM Support Center.

2521-616 **Conversion of domain port *domain port* to network form unsuccessful.**

Explanation: The Event Manager API could not convert the above domain port to network form. The address is not valid.

User response: Record the above information and contact the IBM Support Center.

2521-617 **An attempt to create a UNIX domain socket with *function_name* was unsuccessful: *standard_error_message*.**

Explanation: The Event Manager API attempted to create a UNIX® domain socket with the *function_name* function. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-618 **An attempt to create an Internet domain socket with *function_name* was unsuccessful: *standard_error_message*.**

Explanation: The Event Manager API attempted to create a Internet domain socket with the *function_name* function, but did not succeed. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-619 **An attempt to get file descriptor flags with *function_name* was unsuccessful: *standard_error_message*.**

Explanation: The Event Manager API attempted to get file descriptor flags with the *function_name* function, but did not succeed. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-620 **An attempt to set file descriptor flags with *function_name* was unsuccessful: *standard_error_message*.**

Explanation: The Event Manager API attempted to set file descriptor flags with the *function_name* function, but did not succeed. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-621 **An attempt to initialize a lock with *function_name* was unsuccessful:**
standard_error_message.

Explanation: The Event Manager API attempted to initialize a lock with the *function_name* function, but did not succeed. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-622 **An attempt to lock a lock with *function_name* was unsuccessful:**
standard_error_message.

Explanation: The Event Manager API attempted to lock a lock with the *function_name* function, but did not succeed. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-623 **An attempt to unlock a lock with *function_name* was unsuccessful:**
standard_error_message.

Explanation: The Event Manager API attempted to unlock a lock with the *function_name* function, but was unsuccessful. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-624 **An attempt to initialize a mutex with *function_name* was unsuccessful:**
standard_error_message.

Explanation: The Event Manager API attempted to initialize a mutex with the *function_name* function, but did not succeed. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-625 **An attempt to lock a mutex with *function_name* was unsuccessful:**
standard_error_message.

Explanation: The Event Manager API attempted to lock a mutex with the *function_name* function, but did not succeed. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-626 **An attempt to unlock a mutex with *function_name* was unsuccessful:**
standard_error_message.

Explanation: The Event Manager API attempted to unlock a mutex with the *function_name* function, but did not succeed. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-627 **A session file descriptor was apparently closed without calling *ha_em_end_session()*.**

Explanation: A file descriptor was created for a new Event Manager API session, but the file descriptor was already associated with an existing Event Manager API session. The program may have closed the session file descriptor without calling *ha_em_end_session()*.

User response: Record the above information and contact the IBM Support Center.

2521-628 **An attempt to close the session file descriptor with a call to *function_name* was unsuccessful:**
standard_error_message.

Explanation: The Event Manager API attempted to close a file descriptor with the *function_name* function, but was not successful. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-629 **The UNIX domain socket file name generated from *file_name* is too long.**

Explanation: The name of the UNIX domain socket file used to communicate with the Event Manager daemon is too long to fit in an address structure.

User response: Record the above information and contact the IBM Support Center.

2521-630 **An attempt to connect to an Event Manager daemon with a UNIX domain socket was unsuccessful:**
function_name: standard_error_message

Explanation: The Event Manager API attempted to connect to an Event Manager daemon through a UNIX domain socket, but did not succeed. The *function_name* function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-631 **An attempt to connect to the Event Manager daemon with an Internet domain socket was unsuccessful:**
function_name: standard_error_message.

Explanation: The Event Manager API attempted to connect to an Event Manager daemon through an Internet domain socket, but did not succeed. The *function_name* function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-632 **An attempt to get current time with function_name was unsuccessful:**
standard_error_message.

Explanation: The Event Manager API attempted to obtain the current time with the *function_name* function, but did not succeed. The function returned *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

2521-633 **A session with file descriptor file_descriptor was not found.**

Explanation: The Event Manager API could not find a session with file descriptor *file_descriptor*. An Event Manager API routine must have been called specifying a session file descriptor that was not valid.

User response: Record the above information and contact the IBM Support Center.

2521-635 **Undefined command specified:**
command.

Explanation: An undefined command value was specified on a call to **ha_em_send_command()**. The value was *command*.

User response: Record the above information and contact the IBM Support Center.

2521-636 **Undefined subcommand specified for event registration request:**
subcommand.

Explanation: An undefined subcommand value was specified on a call to **ha_em_send_command()**. The undefined value was *subcommand*.

User response: Record the above information and contact the IBM Support Center.

2521-637 **Unexpected number of elements specified for event registration request:** *number_of_elements.*

Explanation: An unexpected number of elements was specified in a call to **ha_em_send_command()**. The unexpected number of elements was *number_of_elements*.

User response: Record the above information and contact the IBM Support Center.

2521-638 **Undefined subcommand specified for event unregistration request:**
subcommand.

Explanation: An undefined subcommand value was specified on a call to **ha_em_send_command()**. The undefined value was *subcommand*.

User response: Record the above information and contact the IBM Support Center.

2521-639 **Unexpected number of elements specified for event unregistration request:** *number_of_elements*

Explanation: An unexpected number of elements was specified in a call to **ha_em_send_command()**. The unexpected number of elements was *number_of_elements*.

User response: Record the above information and contact the IBM Support Center.

2521-640 **Undefined subcommand specified for query request:** *subcommand.*

Explanation: An undefined subcommand value was specified on a call to **ha_em_send_command()**. The undefined value was *subcommand*.

User response: Record the above information and contact the IBM Support Center.

2521-641 **Unexpected number of elements specified for query request:**
number_of_elements.

Explanation: An unexpected number of elements was specified in a call to **ha_em_send_command()**. The unexpected number of elements was *number_of_elements*.

User response: Record the above information and contact the IBM Support Center.

2521-642 **The session's connection to the Event Manager daemon has been previously lost.**

Explanation: An Event Manager session's connection has been lost, and an improper attempt was made to

perform some action within the session. Once a session's connection has been lost, the only proper action within the session is to restart or end the session.

User response: Record the above information and contact the IBM Support Center.

2521-643 This process does not own the specified session.

Explanation: A process made an improper attempt to perform some action within an Event Manager session that was not started by the process. Once a process inherits an Event Manager session from its parent, the only proper action on that session within the child process is to end the session.

User response: Record the above information and contact the IBM Support Center.

2521-644 An event registration array element could not be allocated.

Explanation: Internally, the Event Manager API keeps track of event registration requests. The Event Manager API could not find a free array element to use to keep track of a new event registration request.

User response: Record the above information and contact the IBM Support Center.

2521-645 A query control array element could not be allocated.

Explanation: Internally, the Event Manager API keeps track of query requests. The Event Manager API could not find a free array element to use to keep track of a new query request.

User response: Record the above information and contact the IBM Support Center.

**2521-646 An attempt to send a command message was unsuccessful;
function_name was unsuccessful;
standard_error_message.**

Explanation: The Event Manager API attempted to send a command message to an Event Manager daemon but did not succeed. The function which did not succeed was *function_name*. The error message returned by the function was *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

**2521-647 An attempt to send a command message was unsuccessful;
function_name sent no bytes.**

Explanation: The Event Manager API attempted to send a command message to an Event Manager daemon but did not succeed. The function which did not

succeed was *function_name*. No bytes were sent.

User response: Record the above information and contact the IBM Support Center.

**2521-648 An attempt to receive a command response was unsuccessful;
function_name was unsuccessful;
standard_error_message.**

Explanation: The Event Manager API attempted to receive a command response from an Event Manager daemon but did not succeed. The function which did not succeed was *function_name*. The error message returned by the function was *standard_error_message*.

User response: Record the above information and contact the IBM Support Center.

**2521-649 An attempt to receive a command response was unsuccessful;
function_name detected end-of-file;
connection with Event Manager lost.**

Explanation: The Event Manager API attempted to receive a command response from an Event Manager daemon but did not succeed. The function which did not succeed was *function_name*, which reported that it detected end-of-file. The Event Manager API connection with the Event Manager daemon has been lost.

User response: Use the `ha_em_restart_session()` function to reconnect the session with the Event Manager daemon.

2521-650 No resource variable name was specified for an event that was to be registered.

Explanation: The Event Manager API was called to register one or more events. One of the events did not specify a resource variable name.

User response: Record the above information and contact the IBM Support Center.

2521-651 No rearm expression was specified for an event that was to be registered.

Explanation: The Event Manager API was called to register one or more events with rearm expressions. One of the events did not specify a rearm expression.

User response: Record the above information and contact the IBM Support Center.

2521-652 Could not find *environment_variable* in the environment.

Explanation: The Event Manager was looking for a specific environment variable, *environment_variable*, but did not find it. This message should only occur when using debugging versions of the Event Manager API.

User response: If you are intentionally using a debugging version of the Event Manager API, set the specified environment variable to a value. Otherwise, record the above information and contact the IBM Support Center.

2521-653 The format of the value found in the *environment_variable* environment variable was not valid; value was: *value*.

Explanation: The Event Manager obtained the value, *value*, of an environment variable, *environment_variable*, and its format is not valid. This message should only occur when using debugging versions of the Event Manager API.

User response: If you are intentionally using a debugging version of the Event Manager API, set the specified environment variable to a valid value. Otherwise, record the above information and contact the IBM Support Center.

2521-654 The value found in the *environment_variable* environment variable was too long; value was: *value*.

Explanation: The Event Manager obtained the value, *value* of an environment variable, *environment_variable*, and its value is too long. This message should only occur when using debugging versions of the Event Manager API.

User response: If you are intentionally using a debugging version of the Event Manager API, set the specified environment variable to a valid value. Otherwise, record the above information and contact the IBM Support Center.

2521-656 Unexpected event ID specified in event unregistration request: *event_ID*.

Explanation: The event ID *event_ID* was specified in an event unregistration request, but the event ID does not identify a registered event.

User response: Determine if the event ID is still valid.

2521-657 Duplicate event ID specified in event unregistration request: *event_ID*.

Explanation: The event ID *event_ID* was specified more than once in an event unregistration request, or it was specified in a previous event unregistration request.

User response: Determine if the event ID has already been specified for unregistration.

2521-658 Lost track of an event ID specified in an event unregistration request: *event_ID*.

Explanation: The event ID *event_ID* was specified in an event unregistration request, and the EMAPI has lost track of it.

User response: Record the above information and contact the IBM Support Center.

2521-659 Could not duplicate a file descriptor while getting domain information from *command*.

Explanation: The Event Manager API was preparing to run the specified command to obtain information about a domain. The Event Manager API could not associate the **write** end of a pipe with the standard output file descriptor.

User response: Record the above information and contact the IBM Support Center.

2521-660 After getting domain information from *command*, a call to *routine()* returned an unexpected value: *value*.

Explanation: The Event Manager API had run the specified command to obtain information about a domain. The Event Manager API called the specified routine to wait for the command to finish. The routine returned an unexpected value.

User response: Record the above information and contact the IBM Support Center.

2521-661 The command *command* returned unexpected status: *status*.

Explanation: The Event Manager API had run the specified command to obtain information about a domain. The command unexpectedly terminated with the specified status.

User response: Record the above information and contact the IBM Support Center.

2521-662 The session has become unusable.

Explanation: An Event Manager session has become unusable. The session may have become unusable as a result of a previously reported error. If the thread safe version of the EMAPI is being used, the session may have become unusable because a thread using the session was canceled.

User response: Record the above information and contact the IBM Support Center.

2521-663 **The session cannot be restarted, because the session's connection has not been lost.**

Explanation: The `ha_em_restart_session()` routine was called for a session that has not lost its connection to the Event Manager daemon.

User response: Record the above information and contact the IBM Support Center.

2521-664 **An attempt to send a command message was unsuccessful; *function_name* was unsuccessful: Connection with Event Manager lost.**

Explanation: The Event Manager API attempted to send a command message to an Event Manager daemon but did not succeed. The function which did not succeed was *function_name*. The send was not successful because the Event Manager API connection with the Event Manager daemon may have been lost.

User response: The `ha_em_restart_session()` function can be used to reconnect the session with the Event Manager daemon.

2521-665 **Undefined domain type specified: *domain type*.**

Explanation: An undefined domain type value was specified on a call to `ha_em_start_session()`. The undefined value was *domain type*.

User response: Specify a defined domain type. See the `HA_EM_DOMAIN_*` definitions in the `ha_emapi.h` file.

2521-666 **The command *command* terminated with the exit value *exit value*.**

Explanation: The Event Manager API had run the specified command to obtain information about the HACMP domain. The exit value of the command indicates an error occurred.

User response: Record the above information and contact the IBM Support Center.

2521-667 **The command *command* was unsuccessful returning a domain name.**

Explanation: The Event Manager API had run the specified command to obtain information about the HACMP domain. It did not return a domain name.

User response: Record the above information and contact the IBM Support Center.

2521-668 **The specified domain, *specified domain*, does not match the HACMP domain, *actual domain*, returned by command *command*.**

Explanation: The specified domain does not match the actual HACMP domain.

User response: Specify the correct HACMP domain on the call to `ha_em_start_session()`, or specify a null string.

2521-669 **The session connected to an Event Manager daemon that does not support authentication and authorization.**

Explanation: The Event Manager daemon connected to by the session did not return a response to the start session response as expected. This probably means the daemon is down level and does not support authentication and authorization.

User response: Contact your customer support organization.

2521-670 **The session received an unexpected start session response.**

Explanation: The Event Manager daemon connected to by the session sent more than one start session response. This is unexpected.

User response: Contact your customer support organization.

2521-671 **The session received an improperly formatted start session response.**

Explanation: The Event Manager daemon connected to by the session sent a start session response that was improperly formatted.

User response: Contact your customer support organization.

2521-672 **Conversion of domain node number *domain node number* to an integer was unsuccessful.**

Explanation: The Event Manager API could not convert *domain node number*, in character format, to an integer.

User response: Contact your customer support organization.

2521-673 **Session should have security information, but does not.**

Explanation: The Event Manager API should have security information about a session, but it does not. This indicates a logic error in the EMAPI.

User response: Contact your customer support organization.

2521-674 **An attempt to load the security library with *function name* was unsuccessful: *error message*.**

Explanation: The Event Manager API attempted to load the security library code found in `/usr/lib/libspsec.a(shr.o)` into the process address space. The *function name* function was not successful in loading the code. The function returned standard *error message*.

User response: Contact your customer support organization.

2521-675 **A call to the security library function *function name* was unsuccessful: *error message*.**

Explanation: The Event Manager API attempted to call the security library function *function name*. The function returned the message *error message*.

User response: Contact your customer support organization.

2521-676 **Session should not have a security context, but it does.**

Explanation: The Event Manager API should not have a security context about a session, but it does. This indicates a logic error in the EMAPI.

User response: Contact your customer support organization.

2521-677 ***function name* was unsuccessful getting the principal for service *service name* on host *target host*.**

Explanation: The Event Manager API attempted to call the security library function *function name* to get the principal for service *service name* on host *target host*. The function returned the message *security error message*.

User response: Contact your customer support organization.

2521-678 ***function name* was unsuccessful getting the principal for service *service name* on host *target host*.**

Explanation: The Event Manager API attempted to call the security library function *function name* to get the principal for service *service name* on host *target host*. The function returned a null principal.

User response: Contact your customer support organization.

2521-679 ***function name* was unsuccessful getting the client credentials for principal *service principal*. *error message*.**

Explanation: The Event Manager API attempted to call the security library function *function name* to get the client credentials for service principal *service principal*. The function returned the message *security error message*.

User response: Contact your customer support organization.

2521-680 ***function name* was unsuccessful getting the client credentials for principal *service principal*.**

Explanation: The Event Manager API attempted to call the security library function *function name* to get the client credentials for service principal *service principal*. The function could not obtain client credentials.

User response: Contact your customer support organization.

2521-681 **A call to *function name* to authenticate the server was unsuccessful: *error message*.**

Explanation: The Event Manager API attempted to call the security library function *function name* to authenticate the server. The function returned the message *error message*.

User response: Contact your customer support organization.

2521-682 **An attempt to get authentication methods with *function name* was unsuccessful: *error message*.**

Explanation: The Event Manager API attempted to get the trusted services authentication methods configured on the system by calling function *function name*, but did not succeed. *error message* indicates the error returned by *function name*.

User response: Contact your customer support organization.

2521-683 **DCE is not configured as a security method in the client but it is required by the daemon.**

Explanation: The system on which the Event Manager client is running does not have DCE security configured, but the Event Manager daemon with which the client connected requires the use of DCE security.

User response: Configure DCE security on the client's system.

2521-684 **DCE is not configured as a security method in the daemon but it is required by the client.**

Explanation: The system on which the Event Manager client is running has DCE security configured, but the system on which the Event Manager daemon is running does not have DCE security configured.

User response: Configure DCE security on the daemon's system.

2521-685 **The client cannot be authenticated.**

Explanation: The Event Manager client cannot be authenticated by the Event Manager daemon.

User response: The user of the Event Manager client library must obtain credentials.

2521-686 **The client is not authorized to use Event Management.**

Explanation: The Event Manager client is not authorized to use Event Management.

User response: The user of the Event Manager client library must be a member of the Event Management DCE security group.

2521-687 **The Event Manager daemon encountered an error in a security function.**

Explanation: The Event Manager daemon could not authenticate or authorize the client because it encountered an error in a security function.

User response: Configure DCE security on the daemon's system.

2521-688 **An attempt to get partition *partition name* authentication methods with function name was unsuccessful: error message.**

Explanation: The Event Manager API attempted to get the trusted services authentication methods configured for *SP partition* by calling function *function name*, but did not succeed. *Security error message* indicates the error returned by *function name*.

User response: Contact your customer support organization.

2521-689 **Address of routine *routine name()* could not be found.**

Explanation: The Event Manager API attempted to get the address of the security library routine *routine name*. The address could not be obtained, even though */usr/lib/libspsec.a(shr.o)* has been loaded into the process address space.

User response: Contact your customer support organization.

2521-690 **Incorrect version of routine *routine name()* was called.**

Explanation: While operating in an SP domain, the Event Manager API called the non-SP version of the named routine.

User response: Contact your customer support organization.

2521-691 **Incorrect call to routine *routine name()*.**

Explanation: The specified routine was erroneously called by the Event Manager API.

User response: Contact your customer support organization.

2521-692 **Incorrect request for domain information made to routine *routine name()*.**

Explanation: The Event Manager API tried to request SP domain information while running in a non-SP environment.

User response: Contact your customer support organization.

2521-801 **The RMAPI has already been initialized.**

Explanation: The *ha_rr_init()* routine has already been called successfully.

User response: The *ha_rr_init()* should only be called once to initialize the RMAPI.

2521-802 **The system call *system call* was unsuccessful while attempting to allocate number of bytes *bytes*: standard error message**

Explanation: The specified system call did not succeed when trying to allocate space.

User response: Record the above information and contact the IBM Support Center.

2521-803 **The system call *system call* was unsuccessful while attempting to open file *file name* : *errno* -standard error message.**

Explanation: An error occurred when trying to open the specified file.

User response: Record the above information and contact the IBM Support Center.

2521-804 **Unable to obtain a lock in the file *name*. Attempted to lock a monitor instance identifier in the range *lower* -*upper*.**

Explanation: An error occurred when the RMAPI tried to lock the specified file. The lock file is used to limit the number of monitor copies that may execute at the same time. This limit is set to the number of monitor copies that the monitor is configured to allow. The range of IDs for which locking was attempted is provided.

User response: Make sure that only the number of copies the resource monitor is configured to allow are executing on the node.

2521-805 **Checksum was unsuccessful on EMCDB file: *name*.**

Explanation: The version of the EMCDB file read by the RMAPI produced a checksum error.

User response: Record the above information and contact the IBM Support Center.

2521-806 **Resource monitor *rname* not found in EMCDB file: *cname*.**

Explanation: The specified resource monitor was not found in the EMCDB file for this domain.

User response: Check that the resource monitor has been defined in the SDR for the domain and that the EMCDB has been updated.

2521-807 **Spmi function *function_name* was unsuccessful with error *error_number.msg*.**

Explanation: The specified Spmi routine was not successful.

User response: Record the above information and contact the IBM Support Center.

2521-808 **The RMAPI has not been initialized.**

Explanation: The **ha_rr_init()** routine has not been called to initialize the RMAPI.

User response: The RMAPI must be initialized by calling the **ha_rr_init()** routine before calling any other RMAPI routines.

2521-809 **There was a problem with a variable vector argument.**

Explanation: A **ha_rr_variable** argument to an RMAPI routine was NULL or the number of variables specified to the routine was 0.

User response: Check that both the vector and vector size arguments are being passed correctly.

2521-810 **The resource class *class name* was not found in the EMCDB for resource monitor *monitor name*.**

Explanation: The specified class name was not found in the EMCDB for the resource monitor.

User response: Check that the class has been defined for the resource monitor in the SDR and that the EMCDB has been updated.

2521-812 **There was a problem with a variable value vector argument.**

Explanation: An **ha_rr_val** argument to an RMAPI routine was NULL or the number of variables specified to the routine was 0.

User response: Check that the vector and vector size arguments are being passed correctly.

2521-813 **Resource monitor server socket does not exist.**

Explanation: A request was made to start a session before the resource monitor server socket was created. This message applies only to server type resource monitors (the **rmConnect_type** attribute of the EM_Resource_Monitor SDR Class object is set to "server").

User response: Check that the resource monitor is defined properly and that **ha_rr_makserv()** is being called before calling **ha_rr_start_session()**.

2521-814 **Notification protocol argument does not match.**

Explanation: The **ha_rr_notify_proto** argument has been passed differently between functions calls.

User response: Check that the **ha_rr_notify_proto** arguments to the **ha_rr_makserv()** routine and the **ha_rr_start_session()** routine are the same.

2521-815 **No connection pending to accept.**

Explanation: A request was made to accept a connection on the resource monitor's server socket, but no connection request was found.

User response: This message is returned only to server type resource monitors and does not represent an error condition. Refer to the **ha_rr_start_session** man page details for action to be taken for the **HA_RR_EAGAIN** error.

2521-816 **Additional Event Manager client session request rejected.**

Explanation: An additional request was made to create a client session with the Event Manger daemon.

User response: `ha_rr_start_session()` should only be called once to create a session with the Event Manager daemon for resource monitors defined as type client (the `rmConnect_type` of the `EM_Resource_Monitor` SDR Class object is "client").

2521-817 **System call *system call (args)* was unsuccessful with error: *error number -error message*.**

Explanation: The specified system call was not successful.

User response: Record the above information and contact the IBM Support Center.

2521-818 **No SIGIO signal handler found.**

Explanation: No signal handler was defined for SIGIO.

User response: If the resource monitor's notification protocol is `HA_RR_SIGIO`, a SIGIO handler must be defined before calling the function.

2521-819 **A server resource monitor can have a maximum of *maximum_number_of_sessions* active sessions.**

Explanation: The RMAPI can serve up to the maximum number of sessions.

User response: Record the above information and contact the IBM Support Center.

2521-820 **No session found matching the session file descriptor: *file_descriptor*.**

Explanation: No sessions were found matching the session file descriptor argument passed to the RMAPI routine.

User response: Check that the descriptor argument passed to the function was the one returned by a previous call to `ha_rr_start_session()`.

2521-821 **Connection closed by the resource monitor manager.**

Explanation: A session socket was found to be closed by the resource monitor manager.

User response: Review the actions to be taken for the type of resource monitor. If this is a server monitor that is started by the Event Manager daemon, and this was the last manager connection active, the monitor should exit. If the monitor will continue processing, all registered variables should be deleted for this session by calling `ha_rr_del_var()`. The session should then be ended by calling `ha_rr_end_session()`.

2521-822 **Resource monitor *name* is not defined to be a server in the EMCDB file.**

Explanation: `ha_rr_makserv()` did not succeed because the specified resource monitor is not defined as a server.

User response: Check that the resource monitor is defined as type server in the SDR and that the EMCDB has been updated to include this definition.

2521-823 **Resource monitor server socket already exists.**

Explanation: The `ha_rr_makserv()` routine did not succeed because it has already been successfully called.

User response: Check for multiple calls to the `ha_rr_makserv()` routine.

2521-824 **Unknown notification protocol argument.**

Explanation: The value of a notification protocol argument passed to a RMAPI routine was not valid.

User response: Ensure that only the `HA_RR_NOTIFY_SELECT` or `HA_RR_NOTIFY_SIGIO` values are used as the notification protocol argument to the `ha_rr_makserv` and `ha_rr_start_session` subroutines.

2521-825 **PTX context or contexts not found in the EMCDB for variable: *variable_name*.**

Explanation: A PTX context was not found in the EMCDB file for the variable.

User response: Record the above information and contact the IBM Support Center.

2521-827 **SDR function *function_name* was unsuccessful with return code *return_code*.**

Explanation: The specified SDR function was unsuccessful.

User response: Record the above information and contact the IBM Support Center.

2521-828 **SDR class *object_class* has a missing or unexpected data type for attribute *object_attribute*.**

Explanation: The SDR class attribute is missing or the data type for the attribute was not what was expected.

User response: Record the above information and contact the IBM Support Center.

2521-829 **EMCDB version does not match the version in use by the Event Manager daemon.**

Explanation: The timestamp or sequence number in the EMCDB file does not match the EMCDB used by the Event Manager daemon.

User response: Call `ha_rr_terminate()` then start the RMAPI session again to access the correct EMCDB.

2521-830 **The system call `system call` was unsuccessful while attempting to send a response message to the manager session with socket descriptor `socket descriptor` : `errno` - standard error message.**

Explanation: The specified system call was unsuccessful sending a response message to the resource monitor manager.

User response: Record the above information and contact the IBM Support Center.

2521-831 **The RMAPI received an unknown manager identifier from session with socket descriptor `socket descriptor`.**

Explanation: The RMAPI received an unknown resource monitor manager id message on the specified socket.

User response: Record the above information and contact the IBM Support Center.

2521-832 **The RMAPI was called with effective user identifier of (*effective user id of caller*). Effective identifier of 0 (*root*) is required.**

Explanation: The resource monitor was not running with an effective resource ID of 0 (**root**) when the RMAPI was called and the monitor has a monitor instance id of 0, and is configured to supply Counter/Quantity variables to PTX shared memory.

Root authority is required by the **Spmi** library. Only monitors with an instance id of 0, and which are configured to supply PTX variables are required to have **root** authority due to the **Spmi** restriction.

User response: Check that the resource monitor executes with the required effective user ID to use the RMAPI for supplying variables to PTX shared memory.

2521-833 **An ODM error occurred while determining the *ODM_function*. *ODM_error_string*: node number**

Explanation: While trying to determine the node number of the host machine, the ODM routine returned an error to the RMAPI.

User response: Record the above information and contact the IBM Support Center.

2521-834 **The format of the node number found in ODM is not valid; value was: *value*.**

Explanation: The RMAPI attempted to determine the node number of the host machine. It found an object in the CuAt object class with the name attribute set to **sp** and attribute attribute set to **node_number**. However, the format of the value attribute was not valid. The value of the value attribute was *value*.

User response: Record the above information and contact the IBM Support Center.

2521-835 **Too many objects providing node number found in the ODM.**

Explanation: The RMAPI API attempted to determine the node number of the host machine. It found more than one object in the CuAt object class with the name attribute set to **sp** and attribute attribute set to **node_number**. Therefore, the node number cannot be determined.

User response: Record the above information and contact the IBM Support Center.

2521-836 **Unable to determine system partition name. SDR function `SDRGetSyspar()` was unsuccessful.**

Explanation: While trying to determine the local system partition name, the `SDRGetSyspar()` function experienced an error, returning a NULL value.

User response: Record the above information and contact the IBM Support Center.

2521-837 **The `load()` system call was unsuccessful attempting to load module *module name* used for determining the domain name. The `load()` error is *errno* - *err string*. *additional error strings*.**

Explanation: The `load()` system call did not succeed in loading an RMAPI module that is used to determine the domain name.

User response: Record the above information and contact the IBM Support Center.

2521-838 **The value *value* of environment variable *name_envvar*, does not match the *environment* domain name value *name_value* determined by the RMAPI.**

Explanation: If the domain name environment variable is set, the RMAPI loads a module specific to the environment that is used to determine the domain

name. The value returned by the load module is compared to the value set in the environment variable as a validation check. This message indicates the values did not match.

User response: Make sure the environment variables are set correctly. If the resource monitor is started by the Event Management daemon, record the above information and contact the IBM Support Center.

2521-839 The domain name environment variable, *name_envvar*, was set to *value*, but the domain type environment variable, *type_envvar*, was not set.

Explanation: The specified domain name environment variable, was set to specify the domain name to be used by the RMAPI. However, the specified domain type variable, was not set. If the name variable is set, the type variable must also be set so that the RMAPI can perform validation checking.

User response: Ensure that the process starting the resource monitor sets the domain environment variables correctly. If the monitor is started by the Event Management daemon, record the above information and contact the IBM Support Center.

2521-840 Unknown value *value* found in domain type environment variable *envvar*.

Explanation: The specified RMAPI was set to an unknown value. Valid values are "SP", and "HACMP".

User response: Ensure that the process starting the resource monitor sets the domain type environment variable correctly. If the monitor is started by the Event Management daemon, record the above information and contact the IBM Support Center.

2521-841 The command *command*, used to obtain the domain name, was not found.

Explanation: The specified command, which is used by the RMAPI to determine the domain name, was not found on the local system.

User response: Record the above information and contact the IBM Support Center.

2521-842 Unable to execute or determine the exit status of command *command*, used to obtain the domain name.

Explanation: The RMAPI was unable to determine the exit status of the specified command, which is used to determine the domain name.

User response: Record the above information and contact the IBM Support Center.

2521-843 The command, *command*, used to obtain the domain name, terminated with an exit value of *value*.

Explanation: The RMAPI executed the specified command to determine the domain name. The command terminated with the indicated exit value.

User response: Record the above information and contact the IBM Support Center.

2521-844 The command, *command*, did not return a domain name.

Explanation: The RMAPI executed the specified command to determine the domain name. The command terminated normally (with an exit code of zero), but did not return a domain name to the RMAPI.

User response: Record the above information and contact the IBM Support Center.

2521-845 Cannot add variables to an unidentified resource monitor manager session.

Explanation: The resource monitor attempted to add variables to a session that has not yet been identified as being managed by **haemd**.

User response: If the monitor is a server, call **ha_rr_add_var()** only in response to receiving a **HA_RR_CMD_ADDV** or **HA_RR_CMD_ADDALL** command.

2521-846 Cannot add State variable *resource variable name*, with resource ID *resource ID*, to the specified resource monitor manager session.

Explanation: The resource monitor attempted to add variables with a value type of State to a Performance Monitor client session. This condition could occur if the resource monitor attempts to add State variables in response to receiving a **HA_RR_CMD_ADDALL** command.

User response: The resource monitor should only add variables of value type **Counter** or **Quantity** in response to the **HA_RR_CMD_ADDALL** command.

2521-847 Internal RMAPI error: *internal error message*

Explanation: An error internal to the RMAPI has occurred. The error message contains details of the error.

User response: Record the above information and contact the IBM Support Center.

2521-848 **The RMAPI subroutines have been locked following a previously returned error: lock condition**

Explanation: Following a severe error detected by the RMAPI, API routines were locked from executing. The purpose of locking is to keep the RMAPI resources in a consistent state from which it can successfully process **ha_rr_terminate()** to free its resources.

User response: Review the error that was returned by the RMAPI before receiving this error. Call **ha_rr_terminate()** to terminate the RMAPI session before continuing. Once the RMAPI has been terminated, **ha_rr_init()** may again be called.

2521-849 **No data was available to be read from the resource monitor manager session socket socket file descriptor.**

Explanation: The RMAPI attempted to read data from the specified socket descriptor. The **read()** system call returned with an **errno** of **EAGAIN** indicating that there was no data available to be read.

User response: If the notify protocol of the monitor is **HA_NOTIFY_SIGIO** then this does not represent an error because whenever the **SIGIO** signal is received, an attempt to read each socket must be made. If the protocol is **HA_NOTIFY_SELECT** the message also does not represent an error, but it is recommended for efficiency that the monitor only call **ha_rr_get_ctrlmsg()** for sockets that are ready to be read.

2521-850 **An error was found in the value of the resource variable variable name with resource ID variable resource ID. RMAPI errno - details.**

Explanation: The RMAPI detected an error in the value of the specified variable. Additional details regarding the nature of the error follow.

User response: Correct the problem with the value before supplying it to RMAPI routines.

2521-851 **A pointer parameter passed to the RMAPI was NULL.**

Explanation: The RMAPI was expecting a valid pointer as one of its parameters, but was passed a **NULL** pointer value.

User response: Make sure that valid parameters are being passed to the RMAPI routine.

2521-852 **The command parameter passed to the RMAPI was not a valid value.**

Explanation: The command parameter passed to the **ha_rr_rm_ctl()** RMAPI routine is not a valid value.

User response: Ensure that the command parameter

is a value specified in the **ha_rmap.h** header file and *RSCT: Event Management Programming Guide and Reference*.

2521-853 **The command to set values cannot be called after the RMAPI has been initialized.**

Explanation: The command parameter passed to the **ha_rr_rm_ctl()** RMAPI routine specified that the routine should set one or more RMAPI values. Values may only be set by this routine prior to calling **ha_rr_init()**.

User response: Call **ha_rr_rm_ctl()** to set values before calling **ha_rr_init()** to initialize the RMAPI.

2521-854 **The resource monitor instance identifier specified, instance-id is not a valid value. Resource monitor identifiers must be in the range legal range - legal range.**

Explanation: The **ha_rr_rm_ctl()** routine was called to set the instance ID of the resource monitor. The value passed to the RMAPI was outside the range of legal values.

User response: Call **ha_rr_rm_ctl()** with an instance ID in the specified range. For details, see the **ha_rmap.h** header file and *RSCT: Event Management Programming Guide and Reference*.

2521-855 **The resource monitor requested a nonzero resource monitor instance ID, but is configured to allow only a single instance of the monitor to execute at a time.**

Explanation: The **ha_rr_rm_ctl()** routine was called prior to **ha_rr_init()** to set the resource monitor ID. The ID that was specified was either a nonzero value, or the value of the **HA_RR_RM_INSTID_NOPERF** constant. When **ha_rr_init()** was called, the RMAPI detected that the resource monitor was configured to allow only one instance to execute at a time. Such monitors must execute with an instance ID of 0.

User response: If the **ha_rr_rm_ctl()** routine is not called to set the resource ID, the default resource ID value will allow the resource monitor to initialize. If multiple copies of the monitor are intended, reconfigure the monitor's SDR data and generate a new EMCDB file.

2521-856 **The resource monitor requested the instance identifier requested identifier, but is configured to only allow monitor instances in the range legal range - legal range.**

Explanation: The **ha_rr_rm_ctl()** routine was called prior to **ha_rr_init()** to set the resource monitor ID.

Resource monitors that are configured to allow multiple copies to execute, must specify instance IDs in the range 0 to (number of instances the resource monitor is configured for minus one). The value specified by the resource monitor was not within this range.

User response: Specify a value for the resource monitor instance ID that is valid for the configuration of the monitor.

2521-857 The UNIX domain socket file name, path name , is too long.

Explanation: The name of the UNIX domain socket file to use to communicate with a resource monitor manager is too long to fit in an address structure.

User response: Record the above information and contact the IBM Support Center.

2521-858 The calling process must have an effective user identifier of 0 (root), or have the name of haem rm group group in its group list.

Explanation: In order to use the RMAPI, resource monitors must either have an effective ID of 0 (root) or have the **haemrm** group in their group list

User response: Check that the resource monitor executes with the required effective user ID or has the **haemrm** group in its group list.

2521-859 A session with the Event Management daemon already exists.

Explanation: The resource monitor accepted a connection with a resource monitor manager using the **ha_rr_start_session()** routine. The RMAPI determined that the session was with the Event Management daemon (**haemd**), and that there was an existing session already established.

Because only 1 session with **haemd** is permitted, the error probably occurred when the **ha_rr_end_session()** was not called to end the existing **haemd** session, before calling **ha_rr_start_session()**.

User response: When an RMAPI routine returns the **HA_RR_EDISCONNECT** error, be sure to call the **ha_rr_del_var()** and **ha_rr_end_session()** routines to end the closed manager session.

2521-860 The system call system was unsuccessful attempting to invoke a function on file: file name. errno - standard message.

Explanation: The specified system call was not successful in performing a function on the specified file name.

User response: Record the above information and

contact the IBM Support Center.

2521-861 The haem shared memory segment segment id was found to be damaged at page page number cell offset cell offset.

Explanation: The RMAPI detected that the shared memory page had been corrupted. The shared memory may have been overwritten by the resource monitor process or another process.

User response: Record the above information and contact the IBM Support Center.

2521-862 The load() system call was unsuccessful attempting to load the Spmi library (libSpmi.a). The load() error is errno - err string. additional error strings (if any).

Explanation: The **load** system call was not successful loading the **Spmi** library used to supply resource variable values to PTX shared memory for performance monitoring.

User response: Make sure that the **perfagent.server** file set is correctly installed. Record the above information and contact the IBM Support Center.

2521-863 The size, file size, of the EMCDB file file name, is not a valid EMCDB file size.

Explanation: Either the actual size of the EMCDB file, or the file size as reported within the EMCDB file, is not a valid size for a EMCDB file. This may indicate that the file was not copied correctly or has been corrupted.

User response: Record the above information and contact the IBM Support Center.

2521-864 The internal reported size, reported file size, of the EMCDB file file name is larger than the actual file size of actual file size.

Explanation: The EMCDB file size reported within the EMCDB file was found to be larger than the actual file. This may indicate a corrupted or truncated EMCDB file.

User response: Record the above information and contact the IBM Support Center.

2521-865 The Event Management daemon detected an error in the resource monitor: error number - details.

Explanation: The Event Management daemon sent the **HA_RR_CMD_ERROR** command to the RMAPI, indicating it detected an error in the operations of the resource monitor or the RMAPI. The error number is a value defined in **ha_rmap.h** following the form, **HA_RR_CMD_ERR_***. The error number indicates the

suspected source and cause of the error.

User response: For details regarding the specific error number, see *RSCT: Event Management Programming Guide and Reference*. If the cause indicates a problem in the implementation of the resource monitor, correct the problem as described in the guide and retry the monitor. If the error indicates the problem is caused by the RMAPI, record the above information and contact the IBM Support Center.

2521-866 The RMAPI was passed a resource variable handle value which was not valid.

Explanation: On a call to the RMAPI routine, the resource monitor passed a variable handle value used to identify a resource variable instance that has been added to one or more sessions. The value passed to the RMAPI was not a valid handle.

The value may have been NULL or did not reference a variable instance. This error can occur if the monitor passes a handle which was no longer valid due to a previous call to **ha_rr_del_var()** or **ha_rr_unreg_var()**.

User response: Correct the resource monitor so that it passes only valid handles returned by the **ha_rr_add_var()** routine. See the **ha_rr_del_var()** and **ha_rr_unreg_var()** man pages for information about conditions that cause a handle to no longer be usable.

2521-867 An attempt to connect to an Event Manager daemon with a UNIX domain socket was unsuccessful: *function name : errno - standard error message.*

Explanation: The RMAPI attempted to connect to an Event Manager daemon through a UNIX domain socket. The specified function name returned the specified standard error message.

User response: Record the above information and contact the IBM Support Center.

Chapter 8. 2522: Resource monitor

When an error occurs, the resource monitor issues one or more messages with a prefix of **2522**.

2522-000 Could not start signal pipe for process poll signal.

Explanation: A Program Resource Monitor routine could not perform the initialization needed to handle a signal used to determine when the state of system processes should be polled.

User response: Record the above information and contact the IBM Support Center.

2522-001 Could not start signal pipe for process reap signal.

Explanation: A Program Resource Monitor routine could not perform the initialization needed to handle a signal used to determine when a monitored process has ended.

User response: Record the above information and contact the IBM Support Center.

2522-002 Could not start signal pipe for terminate signal.

Explanation: A Program Resource Monitor routine could not perform the initialization needed to handle a signal used to end the program.

User response: Record the above information and contact the IBM Support Center.

2522-003 Error from kernel extension routine *KE_routine*: *error_message*.

Explanation: A Program Resource Monitor routine called the Program Resource Monitor Kernel Extension routine *KE_routine*, which returned an error. The error message returned was *error_message*.

User response: Record the above information and contact the IBM Support Center.

2522-004 The RMAPI routine *RMAPI_routine* returned error value *error_number*: *error_message*.

Explanation: A Program Resource Monitor routine called the RMAPI routine *RMAPI_routine*, which returned an error. The error number returned was *error_number*; the error message returned was *error_message*.

User response: Record the above information and contact the IBM Support Center.

2522-005 *flag* argument *flag_argument* not two comma separated numbers.

Explanation: A Program Resource Monitor routine found a problem with the specified argument, *flag_argument*, for the *flag* flag. The argument is expected to be two comma separated numbers.

User response: Record the above information and contact the IBM Support Center.

2522-006 *flag* polling frequency argument *specified_polling_frequency* not positive.

Explanation: A Program Resource Monitor routine found a problem with the *flag* flag's argument. The first number of the argument, the polling frequency, is expected to be a positive number; *specified_polling_frequency* was specified instead.

User response: Record the above information and contact the IBM Support Center.

2522-007 *flag* re-polling frequency argument *specified_re-polling_frequency* not positive.

Explanation: A Program Resource Monitor routine found a problem with the *flag* flag's argument. The second number of the argument, the re-polling frequency, is expected to be a positive number; *specified_re-polling_frequency* was specified instead.

User response: Record the above information and contact the IBM Support Center.

2522-008 *flag* re-polling frequency argument *specified_re-polling_frequency* greater than polling frequency argument *specified_polling_frequency*.

Explanation: A Program Resource Monitor routine found a problem with the *flag* flag's argument. The second number of the argument, the re-polling frequency, is expected to be less than or equal to the first number of the argument, the polling frequency, however, it was not. The specified numbers were *specified_polling_frequency* and *specified_re-polling_frequency*.

User response: Record the above information and contact the IBM Support Center.

2522-009 *flag* flag requires an argument.

Explanation: A Program Resource Monitor routine

found a problem with the *flag* flag. The flag is expected to have an argument, however, none was specified.

User response: Record the above information and contact the IBM Support Center.

2522-010 *flag* flag not recognized.

Explanation: A Program Resource Monitor routine found a problem with the program arguments. The flag **flag** was specified, but is not valid.

User response: Record the above information and contact the IBM Support Center.

2522-011 *system_routine* was unsuccessful changing signal *signal* disposition: *error_message*.

Explanation: A Program Resource Monitor routine called *system_routine* to change the disposition of signal *signal*. However, *system_routine* returned an error described by *error_message*.

User response: Record the above information and contact the IBM Support Center.

2522-012 system routine *system_routine* returned error: *error_message*

Explanation: A Program Resource Monitor routine called the system routine *system_routine*. However, the system routine returned an error described by *error_message*.

User response: Record the above information and contact the IBM Support Center.

2522-013 Could not add a new session to the list of active sessions.

Explanation: A Program Resource Monitor routine could not get a new session structure added to the list of active sessions. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center. .

2522-014 *RMAPI_routine* was unsuccessful returning a control message.

Explanation: A Program Resource Monitor routine called the RMAPI routine *RMAPI_routine* to get a control message. The RMAPI routine did not return a control message.

User response: Record the above information and contact the IBM Support Center.

2522-015 Lengths returned by *RMAPI_routine* do not agree.

Explanation: A Program Resource Monitor routine called the RMAPI routine *RMAPI_routine* to get a control message. The RMAPI routine returns the length of the control message returned, and the control message itself includes its length. These two lengths do not agree.

User response: Record the above information and contact the IBM Support Center.

2522-016 A command (*command*) solely meant for Counter or Quantity resource variables has been received from the RMAPI.

Explanation: A Program Resource Monitor routine received a command, *command*, from a Resource Monitor Manager solely meant for Counter or Quantity resource variables. Since the Program Resource Monitor provides only State resource variables, this command was not expected.

User response: Record the above information and contact the IBM Support Center.

2522-017 An unrecognized command (*command*) was received from the RMAPI.

Explanation: A Program Resource Monitor routine received an unrecognized command, *command*, from a Resource Monitor Manager.

User response: Record the above information and contact the IBM Support Center.

2522-018 The number of variables (*number_of_variables*) in a control message from the RMAPI API was not positive.

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that did not contain a positive number of variables. The number of variables specified was *number_of_variables*.

User response: Record the above information and contact the IBM Support Center.

2522-019 Error encountered converting user name to user identifier for *resource* variable (*resource ID*).

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested the instantiation of the specified resource variable. The user name in the resource ID could not be converted to a user ID. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-020 Could not start signal pipe for debug signal.

Explanation: A Program Resource Monitor routine could not perform the initialization needed to handle a signal used for debugging.

User response: Record the above information and contact the IBM Support Center.

2522-021 Could not create new variable structure for resource variable (resource ID).

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested the instantiation of the specified resource variable. A variable structure could not be created to describe the new resource variable. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-022 Could not add new variable structure for resource variable (resource ID) to instantiated resource variable list.

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested the instantiation of the specified resource variable. The variable structure describing the resource variable could not be added to the list of instantiated resource variables. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-023 RMAPI routine could not register resource variable (resource ID).

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested the instantiation of the specified resource variable. The specified RMAPI routine did not register the instantiated resource variable.

User response: Record the above information and contact the IBM Support Center.

2522-024 The RMAPI routine *RMAPI_routine* reported a registration error *registration_error_number*.

Explanation: A Program Resource Monitor routine called the RMAPI routine *RMAPI_routine* to register an instantiated resource variable. The RMAPI routine

returned the registration error *registration_error_number*.

User response: Record the above information and contact the IBM Support Center.

2522-025 Received a request to add a resource variable (*instance_identifier*), which is not instantiated.

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager, that requested that a resource variable be added (monitored). However, the resource variable is not instantiated. The instance identifier specified was *instance_identifier*.

User response: Record the above information and contact the IBM Support Center.

2522-026 Could not create new program structure for resource variable (*instance_identifier*).

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested that a resource variable be added (monitored). However, a program structure could not be created to describe the program to be monitored on behalf of the resource variable. A previous error message may describe the cause of the problem. The instance identifier of the resource variable that was to be added was *instance_identifier*.

User response: Record the above information and contact the IBM Support Center.

2522-027 Could not add program (*program_name;user_ID*) to monitored programs list.

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested that a resource variable be added (monitored). However, the program structure describing the program to be monitored on behalf of the resource variable could not be added to the list of monitored programs. A previous error message may describe the cause of the problem. The program name specified was *program_name*, and the user identifier specified was *user_ID*.

User response: Record the above information and contact the IBM Support Center.

2522-028 Could not add variable (*instance_identifier*) to program (*program_name,user_ID*) variable list.

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager, that requested that a resource variable be added (monitored). However, the variable structure describing the resource variable could not be added to

a list anchored by the program structure describing the program to be monitored on behalf of the resource variable.

A previous error message may describe the cause of the problem. The instance identifier of the resource variable was *instance_identifier*. The program name was *program_name*, and the user ID was *user_ID*.

User response: Record the above information and contact the IBM Support Center.

2522-029 *RMAPI routine could not add resource variable (resource ID).*

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested that the specified resource variable be added (monitored). The RMAPI routine did not add the monitored resource variable.

User response: Record the above information and contact the IBM Support Center.

2522-030 **The RMAPI routine *RMAPI_routine* reported an add error *add_error_number*.**

Explanation: A Program Resource Monitor routine called the specified RMAPI routine to add a monitored resource variable. The RMAPI routine returned the specified add error.

User response: Record the above information and contact the IBM Support Center.

2522-031 **The RMAPI routine *RMAPI routine* did not return a non-NULL handle for resource variable (*resource ID*).**

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested that the specified resource variable be added (monitored). The RMAPI routine was called to add the monitored resource variable. However, the RMAPI returned a NULL handle.

User response: Record the above information and contact the IBM Support Center.

2522-032 **The RMAPI routine *RMAPI routine* changed a handle for resource variable (*resource ID*).**

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested that the specified resource variable be added (monitored). The RMAPI routine was called to add the monitored resource variable. However, the RMAPI returned a handle that differed from the resource variable's previous handle.

User response: Record the above information and

contact the IBM Support Center.

2522-033 **Could not create new deferred add structure.**

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested that a resource variable be added (monitored). However, a deferred add structure could not be created to describe the add request. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-034 **Could not add new deferred add structure to list of deferred add requests.**

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested that a resource variable be added (monitored). However, the deferred add structure describing the add request could not be added to the list of deferred add requests. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-035 **Could not add instance identifier to deferred add structure.**

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager, that requested that a resource variable be added (monitored). However, the instance identifier of the resource variable to be monitored could not be added to a list anchored by a deferred add request structure. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-036 **Received a request to delete resource variable (*instance_identifier*), which is not instantiated.**

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested that a resource variable be deleted (not monitored). However, the resource variable is not instantiated. The instance identifier specified was *instance_identifier*.

User response: Record the above information and contact the IBM Support Center.

2522-037 **Received a request to delete a resource variable (*instance_identifier*), which is not being monitored.**

Explanation: There are two possibilities:

- A Program Resource Monitor received a control message from a Resource Monitor Manager, that requested that a resource variable be deleted (not monitored). However, the routine determined that the resource variable was not being monitored. The instance identifier specified was *instance_identifier*.
- A Program Resource Monitor was ending a RMAPI session because a disconnect had been detected. While ending the session, the routine was told to delete a resource variable that was not being monitored. The instance identifier specified was *instance_identifier*.

User response: Record the above information and contact the IBM Support Center.

2522-038 **Unexpected return value from RMAPI_routine: *return_value*.**

Explanation: A Program Resource Monitor routine called the RMAPI routine *RMAPI_routine*, which returned an unexpected return value, *return_value*.

User response: Record the above information and contact the IBM Support Center.

2522-039 **The RMAPI routine *RMAPI_routine* did not return a NULL handle, as expected.**

Explanation: A Program Resource Monitor routine called the RMAPI routine *RMAPI_routine* to delete a resource variable. The RMAPI routine returned a value indicating that the resource variable should no longer be monitored. However, the RMAPI routine also returned a handle that was not NULL.

User response: Record the above information and contact the IBM Support Center.

2522-040 **Could not remove variable (*instance_identifier*) from program's variable list.**

Explanation: The variable structure describing a resource variable could not be removed from a list anchored by the program structure describing the program being monitored on behalf of the resource variable. A previous error message may describe the cause of the problem. The instance identifier of the resource variable was *instance_identifier*.

User response: Record the above information and contact the IBM Support Center.

2522-041 **Could not remove program (*program_name*; *user_ID*) from monitored programs list.**

Explanation: The program structure describing the program that was monitored on behalf of a resource variable could not be removed from the list of monitored programs. A previous error message may describe the cause of the problem. The program name was *program_name*, and the user identifier was *user_ID*.

User response: Record the above information and contact the IBM Support Center.

2522-042 **Could not remove program (*program_name*; *user_ID*) from changed programs list.**

Explanation: The program structure describing a program that is being monitored on behalf of a resource variable could not be removed from the list of changed programs. A previous error message may describe the cause of the problem. The program name was *program_name*, and the user identifier was *user_ID*.

User response: Record the above information and contact the IBM Support Center.

2522-043 **Could not delete unnecessary program structure (*program_name*; *user_ID*).**

Explanation: The program structure describing a program that was being monitored on behalf of a resource variable could not be destroyed. A previous error message may describe the cause of the problem. The program name was *program_name*, and the user identifier was *user_ID*.

User response: Record the above information and contact the IBM Support Center.

2522-044 **Could not remove process (*process_ID*) from program (*program_name*; *user_ID*) process list.**

Explanation: The process structure describing a process being monitored on behalf of a program could not be removed from a list anchored by the program structure describing the program. A previous error message may describe the cause of the problem. The process identifier was *process_ID*. The program name was *program_name*, and the user identifier was *user_ID*.

User response: Record the above information and contact the IBM Support Center.

2522-045 **Could not remove process (*process_ID*) from monitored process list.**

Explanation: The process structure describing a process being monitored on behalf of a program could not be removed from the list of monitored processes. A

previous error message may describe the cause of the problem. The process identifier was *process_ID*.

User response: Record the above information and contact the IBM Support Center.

2522-046 Could not delete unnecessar process structure (*process_ID*).

Explanation: The process structure that had described a process being monitored on behalf of a program could not be destroyed. A previous error message may describe the cause of the problem. The process identifier was *process_ID*.

User response: Record the above information and contact the IBM Support Center.

2522-047 Found instance identifier (*instance_identifier*) with no resource variable.

Explanation: A Program Resource Monitor routine encountered what was believed to be a valid instance identifier, *instance_identifier*, which had no resource variable associated with it.

User response: Record the above information and contact the IBM Support Center.

2522-048 Could not remove session (*session_file_descriptor*) from active session list.

Explanation: The session structure describing a RMAPI session could not be removed from the list of active sessions. A previous error message may describe the cause of the problem. The session file descriptor was *session_file_descriptor*.

User response: Record the above information and contact the IBM Support Center.

2522-049 Kernel extension reported the death of a process (*process_ID*) that is not being monitored.

Explanation: A Program Resource Monitor Kernel Extension reported to a Program Resource Monitor routine the end of a process, whose PID was *process_ID*, which the Program Resource Monitor was not monitoring.

User response: Record the above information and contact the IBM Support Center.

2522-050 Monitored process (*process_ID*) does not have an associated monitored program.

Explanation: A Program Resource Monitor routine encountered a monitored process that did not have an

associated monitored program. The PID of the process was *process_ID*.

User response: Record the above information and contact the IBM Support Center.

2522-051 Could not put program (*program_name*;*user_ID*) on changed program list.

Explanation: A Program Resource Monitor routine could not place a program structure on the changed program list. The program name was *program_name*, and the user identifier was *user_ID*. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-052 Could not access system process table entry.

Explanation: A Program Resource Monitor routine could not access the system's process table. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-053 Could not create new process structure for *process_ID*.

Explanation: A Program Resource Monitor routine could not create a process structure to describe the process with PID *process_ID*. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-054 Could not add process (*process_ID*) to program (*program_name*;*user_ID*) process list.

Explanation: A Program Resource Monitor routine could not add the process structure describing the process with PID *process_ID* to a list anchored by the program structure describing the program for which the process is to be monitored. A previous error message may describe the cause of the problem. The program name was *program_name*, and the user ID was *user_ID*.

User response: Record the above information and contact the IBM Support Center.

2522-055 Process (*process_ID*) was to be reused, but it is in an unexpected state.

Explanation: A Program Resource Monitor routine discovered a process with PID *process_ID* already associated with a program, but with an unexpected state.

User response: Record the above information and contact the IBM Support Center.

2522-056 Could not add process (*process_ID*) to monitored process list.

Explanation: A Program Resource Monitor routine could not add the process structure describing the process with PID *process_ID* to the list of monitored processes. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-057 Could not remove new deferred add structure from list of deferred add requests.

Explanation: A deferred add structure could not be removed from the list of deferred add requests. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-058 Could not delete unnecessary deferred add structure.

Explanation: A deferred add structure could not be destroyed. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-059 Cannot do deferred add of resource variable (*instance_identifier*); it is not instantiated.

Explanation: A Program Resource Monitor routine encountered what was believed to be a valid instance identifier, *instance_identifier*, that had no resource variable associated with it. The resource variable was supposed to be added (monitored).

User response: Record the above information and contact the IBM Support Center.

2522-060 Cannot do deferred add of resource variable (*instance_identifier*); no associated program found.

Explanation: A Program Resource Monitor routine encountered a resource variable, with instance identifier *instance_identifier*, for which deferred add processing was needed, however, it had no program associated with it.

User response: Record the above information and contact the IBM Support Center.

2522-061 Could not initialize process lists for program (*program_name*; *user_ID*).

Explanation: A Program Resource Monitor routine could not initialize some process lists. The program name was *program_name*, and the user identifier was *user_ID*. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-062 For report phase *report_phase*, an unexpected process state (*process_state*) for process (*process_ID*) associated with program (*program_name*; *user_ID*) was found.

Explanation: A Program Resource Monitor routine was running in report phase *report_phase*, and found a process with PID *process_ID* that had an unexpected state: *process_state*. The process was associated with a program with the name *program_name* and the user identifier *user_ID*.

User response: Record the above information and contact the IBM Support Center.

2522-063 Could not create new structured byte string for program (*program_name*; *user_ID*).

Explanation: A Program Resource Monitor routine could not create a new structured byte string for a program. The program name was *program_name*, and the user identifier was *user_ID*. A previous error message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

2522-064 User name in resource variable (*resource_ID*) is unknown.

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested the instantiation of the specified resource variable. The user name in the resource ID could not be converted to a user ID, because the user name is unknown.

User response: Record the above information and contact the IBM Support Center.

2522-065 Program Resource Monitor cannot monitor itself: resource variable (*resource_ID*).

Explanation: A Program Resource Monitor routine received a control message from a Resource Monitor Manager that requested the instantiation of the specified resource variable. The resource ID describes the Program Resource Monitor, which cannot monitor itself.

User response: Record the above information and contact the IBM Support Center.

**2522-066 Could not remove variable
(*instance_identifier*) from instantiated
resource variable list.**

Explanation: A Program Resource Monitor routine could not remove the resource variable with the specified instance identifier from the instantiated resource variable list. A previous message may describe the cause of the problem.

User response: Record the above information and contact the IBM Support Center.

**2522-067 Could not delete unnecessary variable
structure (*instance_identifier*).**

Explanation: A Program Resource Monitor routine could not delete the variable structure representing the resource variable with the specified instance identifier.

User response: Record the above information and contact the IBM Support Center.

**2522-068 Cannot delete *object_type* object
because *object_field_name* field is not
free.**

Explanation: A Program Resource Monitor routine could not delete an object of type *object_type* because the memory associated with the object's *object_field_name* field has not been freed.

User response: Record the above information and contact the IBM Support Center.

**2522-069 Number of elements used is greater
than number allocated.**

Explanation: A Program Resource Monitor routine found an array where the number of elements used is greater than the number of elements allocated.

User response: Record the above information and contact the IBM Support Center.

2522-070 Null resource variable name received.

Explanation: A Program Resource Monitor routine received an empty resource variable name.

User response: Record the above information and contact the IBM Support Center.

**2522-071 Unknown resource variable name
received: *resource_variable_name*.**

Explanation: A Program Resource Monitor routine received an unknown resource variable name, *resource_variable_name*.

User response: Record the above information and contact the IBM Support Center.

2522-072 Null resource ID received.

Explanation: A Program Resource Monitor routine received an empty resource ID.

User response: Record the above information and contact the IBM Support Center.

**2522-073 Resource ID *resource ID* contains one
of these improper characters *illegal*
characters.**

Explanation: A Program Resource Monitor routine received the specified resource ID, that includes one or more of the specified illegal characters.

User response: Record the above information and contact the IBM Support Center.

**2522-074 Resource ID *resource ID* does not
contain *number* name and value pairs.**

Explanation: A Program Resource Monitor routine received the specified resource ID, which does not include the specified number of name/value pairs.

User response: Record the above information and contact the IBM Support Center.

**2522-075 Resource ID *resource ID* contains more
than *number* name and value pairs.**

Explanation: A Program Resource Monitor routine received the specified resource ID, which includes more than the specified number of name/value pairs.

User response: Record the above information and contact the IBM Support Center.

**2522-076 Resource ID *resource ID* does not
contain the *name* name and value pair.**

Explanation: A Program Resource Monitor routine received the specified resource ID, which does not include a name/value pair for the specified name.

User response: Record the above information and contact the IBM Support Center.

**2522-077 Resource ID *resource ID* : value for
name exceeds *size limit* characters.**

Explanation: A Program Resource Monitor routine received the specified resource ID, which includes a name/value pair for the specified name. The value for this name exceeds the indicated size limit .

User response: Record the above information and contact the IBM Support Center.

2522-078 Name and value pair *name/value* pair is missing name.

Explanation: A Program Resource Monitor routine received the specified resource ID name/value pair without a name.

User response: Record the above information and contact the IBM Support Center.

2522-079 Name and value pair *name/value* pair is missing value.

Explanation: A Program Resource Monitor routine received the specified resource ID name/value pair without a value.

User response: Record the above information and contact the IBM Support Center.

2522-080 Name and value pair *name/value* pair has extra character.

Explanation: A Program Resource Monitor routine received the specified resource ID name/value pair with an extra character.

User response: Record the above information and contact the IBM Support Center.

2522-081 Cannot support new session. Can only support *limit* sessions.

Explanation: A Program Resource Monitor routine detected a new RMAPI session established with the resource monitor, and the number of sessions established exceeds the specified maximum number of RMAPI sessions supported by the resource monitor.

User response: Record the above information and contact the IBM Support Center.

2522-082 Cannot remove unknown session *session_descriptor*.

Explanation: A Program Resource Monitor routine was requested to remove the specified unknown RMAPI session.

User response: Record the above information and contact the IBM Support Center.

2522-083 The process table has not been obtained.

Explanation: A Program Resource Monitor routine was called to provide a process table entry, but it was called at an improper time.

User response: Record the above information and contact the IBM Support Center.

2522-084 Specification as to where to start scanning the process table is not valid.

Explanation: A Program Resource Monitor routine was called to provide a process table entry, but the specification as to where to start scanning the process table was not valid.

User response: Record the above information and contact the IBM Support Center.

2522-085 Instance identifier (*instance_identifier*) is out of range.

Explanation: A Program Resource Monitor routine received an instance identifier, *instance_identifier*, which is outside the range of currently valid instance identifiers.

User response: Record the above information and contact the IBM Support Center.

2522-086 Instance identifier (*instance_identifier*) is not in use.

Explanation: A Program Resource Monitor routine received an instance identifier, *instance_identifier*, which is not currently in use.

User response: Record the above information and contact the IBM Support Center.

2522-087 Instance identifiers are mismatched (*instance_ID_1/instance_ID_2*).

Explanation: A Program Resource Monitor routine found a resource variable structure that should have represented an instantiated resource variable whose instance identifier was *instance_ID_1*. However, the resource variable structure indicated that the resource variable's instance identifier was *instance_ID_2*.

User response: Record the above information and contact the IBM Support Center.

2522-088 No instance identifiers are in use.

Explanation: A Program Resource Monitor routine unexpectedly found that no instance identifiers are currently in use.

User response: Record the above information and contact the IBM Support Center.

2522-089 The object is already linked to some list.

Explanation: A Program Resource Monitor routine was requested to link an object into a list using a certain field of the object. However, the object appears to be already linked into a list with the specified field.

User response: Record the above information and

contact the IBM Support Center.

2522-090 Duplicate object found on the list.

Explanation: A Program Resource Monitor routine was requested to link an object into a list. However, an object was found to already be on the list with the same key as the object to be placed into the list.

User response: Record the above information and contact the IBM Support Center.

2522-091 The object is not on the list.

Explanation: A Program Resource Monitor routine was requested to remove an object from a list. However, the field specified through which the object should be linked into the list indicates that the object is not linked into the list.

User response: Record the above information and contact the IBM Support Center.

2522-092 Could not trim structured byte string to *number_of_bytes* bytes.

Explanation: A Program Resource Monitor routine could not trim the length of a structured byte string to *number_of_bytes* bytes.

User response: Record the above information and contact the IBM Support Center.

2522-300 No monitor modules available.

Explanation: The **harml**d daemon is about to exit because it does not have any monitor modules loaded. If the options/lpps which **harml**d can monitor are not installed, this is not an error.

User response: Review prior messages. If any of the options/lpps that **harml**d monitors are installed, record the above information and contact the IBM Support Center.

**2522-301 RM API *RMAPI_routine* failed:
Fn=*RMAPI_filename*,
SID=*RMAPI_file_version*,
RMAPI_line_number,
Err=*RMAPI_err_number*
-*RMAPI_err_string*,
Msg=*RMAPI_err_msg*.**

Explanation: The **harml**d monitor received a severe error from the RMAPI routine.

User response: Review the actions for the RMAPI error.

**2522-302 RMAPI *RMAPI_routine* variable
error(*variable name*): Var=*variable*
resource ID ResID=*RMAPI_err_number***

Explanation: An error was detected while trying to add/delete or register the specified variable with the RMAPI. This error will not cause the **harml**d daemon to terminate.

User response: If system degradation or unexpected results occur, save message data and contact the IBM Support Center.

2522-303 System call *system call (useful parameters (if any))* was unsuccessful with errno *errno*.

Explanation: The specified system call *system_call* was not successful, which may result in the daemon terminating.

User response: Contact the IBM Support Center.

**2522-304 Bad return code from module during
action_(INIT/UPDAT/CLEANUP):
Module=*module_name*
Class=*variable_class*
Error=*error_number*.**

Explanation: The **harml**d received a bad return code from a load module when called to initialize, update values, or end.

User response: Record the above information and contact the IBM Support Center.

**2522-305 Maximum number of manager sessions
exceeded. Closing session number
session_number, socket descriptor
socket_file_descriptor.**

Explanation: The number of manager sessions exceeded the maximum allowed by the RMAPI. The last connection accepted will be closed.

User response: Record the above information and contact the IBM Support Center.

2522-306 Internal program error: *error_text*.

Explanation: A **harml**d internal program error occurred.

User response: Record the above information and contact the IBM Support Center.

2522-308 Module *module_name* is not a regular file.

Explanation: The monitor module was not found to be a regular file.

User response: Record the above information and

contact the IBM Support Center.

**2522-309 Unknown control message
(*control_msg_ID*) received -n- from
socket descriptor *socket_fd*.**

Explanation: The **harmlid** received an unknown control message type from the specified socket *socket_fd*.

User response: Record the above information and contact the IBM Support Center.

**2522-310 A control message requested an
unknown instance:**

Explanation: *Socket=descriptor*

Cmd=control_cmd_number

InstId=instance_module—instance_variable_id

The **harmlid** daemon received a control message which requested an unknown variable instance.

User response: Contact the IBM Support Center. **harmlid** will ignore the control command and continue processing.

**2522-311 A control message requested an
unregistered or unadded variable:
*Socket=descriptor Cmd=control cmd
number Class=variable class
Var=variable name (variable resource ID).***

Explanation: **harmlid** received either an **HA_RR_CMD_ADDV** request to add an unregistered variable, or a **HA_RR_CMD_DELV** request to delete a variable that has not been previously added by **ha_rr_add_var()**. **harmlid** will ignore the control command and continue execution.

User response: Record the above information and contact the IBM Support Center.

**2522-312 Unable to determine syspar name.
SDRGetSyspar() failed.**

Explanation: While trying to determine the local system partition name, the **SDR SDRGetSyspar()** function was not successful, returning a NULL value.

User response: Record the above information and contact the IBM Support Center.

**2522-313 ODM error: *ODM_function*,
*ODM_error_string***

Explanation: While trying to determine the node number of the host machine, the ODM routine returned an error to **harmlid**.

User response: Record the above information and contact the IBM Support Center.

**2522-314 The node number format in the ODM is
not valid; value was: *value*..**

Explanation: **harmlid** attempted to determine the node number of the host machine. It found an object in the CuAt object class with the name attribute set to **sp** and attribute attribute set to **node_number**. However, the format of the value attribute was not valid. The value of the value attribute was *value*.

User response: Contact the IBM Support Center.

**2522-315 Too many objects providing the node
number were found in the ODM.**

Explanation: **harmlid** attempted to determine the node number of the host machine. It found more than one object in the CuAt object class with the name attribute set to **sp** and attribute attribute set to *node_number*. Therefore, the node number cannot be determined.

User response: Contact the IBM Support Center.

**2522-316 The node number was not found in the
ODM.**

Explanation: **harmlid** attempted to determine the node number of the host machine. No objects were found in the CuAt object class with the name attribute set to **sp** and attribute attribute set to *node_number*.

User response: Contact the IBM Support Center.

2522-601 *daemon support routine : error message.*

Explanation: An AIXOS Resource Monitor routine called the specified daemon support routine. However, the support routine returned the specified error.

User response: Record the above information and contact the IBM Support Center.

**2522-602 Could not start signal pipe for
terminate signal.**

Explanation: An AIXOS Resource Monitor routine could not perform the initialization needed to handle a signal used to terminate the program.

User response: Record the above information and contact the IBM Support Center.

**2522-603 Could not start signal pipe for alarm
signal.**

Explanation: An AIXOS Resource Monitor routine could not perform the initialization needed to handle a signal used to receive alarms.

User response: Record the above information and contact the IBM Support Center.

2522-604 **RMAPI routine** *RMAPI routine error error number : error message.*

Explanation: An AIXOS Resource Monitor routine called the specified RMAPI routine, that returned the specified error.

User response: Record the above information and contact the IBM Support Center.

2522-605 *flag argument* **flag argument not a number.**

Explanation: An AIXOS Resource Monitor routine found a problem with the specified argument for the specified flag. The argument must be a number.

User response: Record the above information and contact the IBM Support Center.

2522-606 *flag instantiation interval argument* **specified instantiation interval is negative.**

Explanation: An AIXOS Resource Monitor routine found a problem with the argument of the specified flag. The argument is the instantiation interval and it must be 0 or a positive number. The value specified is negative.

User response: Record the above information and contact the IBM Support Center.

2522-607 *flag domain type argument* **specified domain type not valid.**

Explanation: An AIXOS Resource Monitor routine found a problem with the argument of the specified flag. The argument, the domain type, must be SP or HACMP.

User response: Record the above information and contact the IBM Support Center.

2522-608 *flag domain name argument* **specified domain name not valid.**

Explanation: An AIXOS Resource Monitor routine found a problem with the argument of the specified flag. The argument is the domain name and it must not be a null string.

User response: Record the above information and contact the IBM Support Center.

2522-609 **-flag flag requires an argument.**

Explanation: An AIXOS Resource Monitor routine found a problem with the specified flag. The flag must have an argument, but none was specified.

User response: Record the above information and contact the IBM Support Center.

2522-610 **-flag flag not recognized.**

Explanation: An AIXOS Resource Monitor routine found a problem with the program arguments. The specified flag is not valid.

User response: Record the above information and contact the IBM Support Center.

2522-611 *flag* **flag not specified.**

Explanation: An AIXOS Resource Monitor routine found a problem with the program arguments. The indicated flag was not specified, but it is required.

User response: Record the above information and contact the IBM Support Center.

2522-612 **system routine** *system routine returned error: error message.*

Explanation: An AIXOS Resource Monitor routine called the specified system routine. However, the system routine returned the specified error.

User response: Record the above information and contact the IBM Support Center.

2522-613 **An assertion has stopped program execution: (failed assertion).**

Explanation: An AIXOS Resource Monitor routine found that the specified assertion was not true. The assertion must always be true. This error indicates a logic error in the resource monitor.

User response: Record the above information and contact the IBM Support Center.

2522-614 **An assertion has stopped program execution: (value 1 string operator value 2 string) value1: value 1 value2: value 2.**

Explanation: An AIXOS Resource Monitor routine found that an assertion was not true. The assertion must always be true. This error indicates a logic error in the resource monitor.

User response: Record the above information and contact the IBM Support Center.

2522-615 **An assertion has stopped program execution: (value 1 string operator value 2 string) value1: value 1 value2: value 2.**

Explanation: An AIXOS Resource Monitor routine found that an assertion was not true. The assertion must always be true. This error indicates a logic error in the resource monitor.

User response: Record the above information and contact the IBM Support Center.

2522-616 **An assertion has stopped program execution:** (*value 1 string operator value 2 string*) **value1:** *value 1* **value2:** *value 2*.

Explanation: An AIXOS Resource Monitor routine found that an assertion was not true. The assertion must always be true. This error indicates a logic error in the resource monitor.

User response: Record the above information and contact the IBM Support Center.

2522-617 **An unrecognized command (*command*) was received from the RMAPI.**

Explanation: An AIXOS Resource Monitor routine received an unrecognized command from a Resource Monitor Manager.

User response: Record the above information and contact the IBM Support Center.

2522-618 **The number of variables (*number of variables*) in a control message from the RMAPI was not positive.**

Explanation: An AIXOS Resource Monitor routine received a control message from a Resource Monitor Manager that did not contain a positive number of variables.

User response: Record the above information and contact the IBM Support Center.

2522-619 **The EMCDB has a statistic *statistic name* unexpectedly at the top of the SPMI context tree.**

Explanation: An AIXOS Resource Monitor routine found a statistic named in the Event Management Configuration Database at the top of the SPMI context tree. This is unexpected.

User response: If the statistic was defined locally, correct the configuration. Otherwise, record the above information and contact the IBM Support Center.

2522-620 **The EMCDB has a context *statistic name* not in the SPMI context tree.**

Explanation: An AIXOS Resource Monitor routine found a statistic named in the Event Management Configuration Database that is not in the SPMI context tree.

User response: If the statistic was defined locally, correct the configuration. Otherwise, record the above information and contact the IBM Support Center.

2522-621 **SPMI routine *SPMI routine* returned error (*error code*): *error message*.**

Explanation: An AIXOS Resource Monitor routine called the specified SPMI routine. However, the SPMI routine returned the specified error.

User response: Record the above information and contact the IBM Support Center.

2522-622 **SPMI-like routine *routine* was unsuccessful.**

Explanation: An AIXOS Resource Monitor routine called the specified SPMI-like routine, which was not successful. The details of the error are given in a previously issued message.

User response: Record the above information and contact the IBM Support Center.

2522-623 **RMAPI routine *ha_rr_reg_var()* registered *actually-registered* of *attempted-to-register* variables.**

Explanation: An AIXOS Resource Monitor routine attempted to register resource variable instances with the RMAPI. The number of actually registered instances was less than the number of instance registration attempts.

User response: Record the above information and contact the IBM Support Center.

2522-624 **RMAPI routine *ha_rr_reg_var()* reported registration error *error number* for *name*, *resource ID*, *instance ID*.**

Explanation: An AIXOS Resource Monitor routine called *ha_rr_reg_var()* to register the specified resource variable instance. The RMAPI routine returned the specified registration error number.

User response: Record the above information and contact the IBM Support Center.

2522-625 **RMAPI routine *ha_rr_add_var()* added *actually added* of *attempted to add* variables.**

Explanation: An AIXOS Resource Monitor routine attempted to add resource variable instances with the RMAPI. The number of actually registered instances was less than the number of instance registration attempts.

User response: Record the above information and contact the IBM Support Center.

2522-626 **RMAPI routine `ha_rr_add_var()` reported add error** *error number for name, resource ID.*

Explanation: An AIXOS Resource Monitor routine called `ha_rr_add_var()` to add the specified resource variable instance. The RMAPI routine returned the specified add error.

User response: Record the above information and contact the IBM Support Center.

2522-627 **RMAPI routine `ha_rr_unreg_var()` unregistered** *actually unregistered of attempted to unregister variables.*

Explanation: An AIXOS Resource Monitor routine attempted to unregister resource variable instances with the RMAPI. The number of actually registered instances was less than the number of instance registration attempts.

User response: Record the above information and contact the IBM Support Center.

2522-628 **RMAPI routine `ha_rr_unreg_var()` reported unregistration error** *error number for name, resource ID.*

Explanation: An AIXOS Resource Monitor routine called `ha_rr_unreg_var()` to unregister the specified resource variable instance. The RMAPI routine returned the specified unregistration error.

User response: Record the above information and contact the IBM Support Center.

2522-629 **SPMI routine `SPMI routine` returned error** *error number : error message.*

Explanation: An AIXOS Resource Monitor routine called the specified SPMI routine. However, the SPMI routine returned the specified error.

User response: Record the above information and contact the IBM Support Center.

2522-630 **SPMI statistic returned error code** *error number.*

Explanation: An AIXOS Resource Monitor routine encountered a statistic with the specified error code.

User response: Record the above information and contact the IBM Support Center.

2522-631 **Cannot support new session. Can only support** *limit sessions.*

Explanation: An AIXOS Resource Monitor routine detected that a new RMAPI session has been established with the resource monitor, and that the number of sessions established exceeds the maximum

number of RMAPI sessions supported by the resource monitor.

User response: Record the above information and contact the IBM Support Center.

2522-632 **Cannot remove unknown session** *session descriptor.*

Explanation: An AIXOS Resource Monitor routine was requested to remove the specified RMAPI session, but the session was unknown.

User response: Record the above information and contact the IBM Support Center.

2522-633 **ODM routine `ODM routine` returned an error:** *ODM error message.*

Explanation: An AIXOS Resource Monitor routine called the specified ODM routine. It returned the specified error.

User response: Record the above information and contact the IBM Support Center.

2522-634 **LVM routine `LVM routine` returned an error:** *LVM error number.*

Explanation: An AIXOS Resource Monitor routine called the specified LVM routine, which returned the specified LVM error number.

User response: Record the above information and contact the IBM Support Center.

2522-635 **The command `command` terminated with the exit value** *exit value.*

Explanation: An AIXOS Resource Monitor routine had run the command identified above to obtain information about the HACMP domain. The exit value of the command, *exit value*, indicates an error occurred.

User response: Record the above information and contact the IBM Support Center.

2522-636 **The command `command` returned unexpected status:** *0x status.*

Explanation: An AIXOS Resource Monitor routine ran the specified command to obtain information about the HACMP domain. The command terminated with unexpected status.

User response: Record the above information and contact the IBM Support Center.

2522-637 The command *command* did not return a domain name.

Explanation: An AIXOS Resource Monitor routine ran the specified command to obtain information about the HACMP domain. The command did not return a domain name.

User response: Record the above information and contact the IBM Support Center.

2522-900 Hardware Monitor API error.

Explanation:

Module=*api interface*
Errno=*error code*
Msg=Unable to start a session with the Hardware Monitor.

The Hardmon Resource Monitor was unable to connect to the Hardware Monitor via the specified API interface.

User response: Ensure that the Hardware Monitor is active. If the problem persists, record the above information and contact the IBM Support Center.

2522-901 Hardware Monitor API error.

Explanation:

Module=*api interface*
Errno=*error code*
Msg=Unable to obtain system partition information.

The Hardmon Resource Monitor was unable to obtain system partition configuration information from the System Data Repository (SDR).

User response: Verify that the SDR has been properly configured and that the Hardware Monitor configuration information is present in the SDR. For a description of this configuration information, see the man page for the **hardmon** command.

2522-902 Hardware Monitor API error.

Explanation:

Module=*api interface*
Errno=*error code*
Msg=Unable to obtain query information.

The specified API interface could not obtain state information from the Hardware Monitor daemon.

User response: If the problem persists, record the above information and contact the IBM Support Center.

2522-903 Hardware Monitor API error

Explanation:

Module=*api interface*
Errno=*error code*
Msg=Unable to monitor state information.

The specified API interface could not obtain state information from the Hardware Monitor daemon.

User response: If the problem persists, save the message data and contact the IBM Support Center.

2522-904 Hardware Monitor API error.

Explanation:

Module=*api interface*
Errno=*error code*
Msg=Unable to obtain state information.

The specified API interface could not obtain state information from the Hardware Monitor daemon.

User response: If the problem persists, record the above information and contact the IBM Support Center.

2522-905 Hardware Monitor API error.

Explanation:

Module=*api interface*
Variable Index=*variable index*
Msg=Internal error, unknown variable id detected.

The Hardmon Resource Monitor has detected an unknown variable ID returned by the specified Hardware Monitor API interface. This message indicates an internal program problem.

User response: Record the above information and contact the IBM Support Center.

2522-906 Hardware Monitor API error.

Explanation:

Module=*api interface*
Data Type=*data type code*
Msg=Internal error, unknown variable data type detected.

The Hardmon Resource Monitor detected an unknown data type returned by the specified Hardware Monitor API interface. This message indicates an internal program problem.

User response: Record the above information and contact the IBM Support Center.

2522-907 Hardware Monitor API error.

Explanation:

Module=*api interface*
Frame=*frame_id*
Slot=*slot_id*
Msg=Internal error, unexpected slot occupation detected.

This is a reserved message that is currently not used.

User response: None.

2522-908 SDR error.**Explanation:**

Module=*api interface*

Errno=*error code*

Msg=Unable to start a session with the SDR.

The Hardmon Resource Monitor was unable to connect to the SDR.

User response: Ensure that the SDR is active in the currently defined system partition. If problem persists, record the above information and contact the IBM Support Center.

2522-909 SDR error.**Explanation:**

Module=*api interface*

Errno=*error code*

Msg=Unable to obtain objects from the SDR *sdr class* class.

The Hardmon Resource Monitor could not obtain objects from the specified SDR class.

User response: Ensure that the specified class is properly configured. If problem persists, record the above information and contact the IBM Support Center.

2522-910 SDR error.**Explanation:**

Module=*api interface*

Errno=*error code*

Msg=Unable to obtain *sdr object* from the SDR *sdr class* class.

The Hardmon Resource Monitor could not find the specified attribute.

User response: Ensure that the specified class is properly configured. If the problem persists, record the above information and contact the IBM Support Center.

2522-911 SDR error.**Explanation:**

Module=*api interface*

Errno=*error code*

Msg=Undetermined data type for *sdr object* from the SDR *sdr class* class.

The Hardmon Resource Monitor found an unexpected data type for the specified attribute.

User response: Ensure that the specified class is properly configured. If the problem persists, record the above information and contact the IBM Support Center.

2522-912 SDR error.**Explanation:**

Module=*api interface*

Msg=There are no frames defined in the SDR *sdr class* class.

Although the Hardmon Resource Monitor has successfully obtained configuration information from the SDR, the information in the specified class is incomplete.

User response: Ensure that the specified class is properly configured. If the problem persists, record the above information and contact the IBM Support Center.

2522-913 Resource Monitor API error.**Explanation:**

Errno=*rm_api_error_code*

Msg=*rm_api_error_message*

The Event Manager, through the Resource Monitor API, has returned an unexpected error condition. The Resource Monitor API error code *errno* and error message *msg* returned by the Resource Monitor API are included in this message.

User response: Correct the problem indicated by the Resource Monitor API error code *errno* and message *msg*. If the problem persists, record the above information and contact the IBM Support Center.

2522-914 Resource Monitor API warning.**Explanation:**

Module=*api interface*

Msg=Internal error, unknown control message *control message code* received.

The Hardmon Resource Monitor has received an unknown control message from the Resource Monitor API. This message indicates an internal program problem, but this error does not cause the Hardmon Resource Monitor to terminate.

User response: If system degradation or unexpected results occur, record the above information and contact the IBM Support Center.

2522-915 Resource Monitor API warning.**Explanation:**

Module=*api interface*

Msg=Internal error, incorrect instance ID *instance id code* received.

The Hardmon Resource Monitor has received an unknown control id named by *instance id code* in response from the Resource Monitor API. This message

indicates an internal program problem, however this error does not cause the Hardmon Resource Monitor to terminate.

User response: If system degradation or unexpected results occur, record the above information and contact the IBM Support Center.

2522-916 Resource Monitor API warning.**Explanation:**

Erno=*error code*
Variable=*resource name*
RsrcID=*resource ID*
Msg= *api request* not complete.

The Hardmon Resource Monitor received an "add", "delete", or "register" error from the Resource Monitor API. This message indicates an internal program problem, but this error does not cause the Hardmon Resource Monitor to terminate.

User response: If system degradation or unexpected results occur, record the above information and contact the IBM Support Center.

2522-917 Could not allocate memory.**Explanation:**

Request=*requesting_data_structure*
Current=*bytes_currently_allocated* bytes
Attempted=*bytes_to_be_allocated* bytes

Memory could not be allocated for the named data structure.

User response: Record the above information and contact the IBM Support Center.

2522-918 Internal error, select mask too small.

Explanation: This message indicates an internal program problem.

User response: Record the above information and contact the IBM Support Center.

2522-919 System call error.**Explanation:**

Module= *system_call*
Erno=*system_error_code*
Msg= *system_error_message*.

This message indicates a problem with the kernel system interface named by *system_call*. The *system_error_code* and *system_error_message* are included.

User response: Correct the problem indicated by the system error message. If the problem persists, record the above information and contact the IBM Support Center.

2522-920 Could not obtain kerberos ticket-granting-ticket. Logfile=*log file name*.

Explanation: The Hardmon Resource Monitor was unable to connect to the Hardware Monitor.

User response: Check the security-related environment variables and authorization mechanisms as described in *PSSP: Administration Guide*. Check the specified log file for trace information. Use the information provided in the log file, which includes Kerberos error codes and messages, to correct the problem.

Chapter 9. 2523: Topology services

When an error occurs, the topology services subsystem issues one or more messages with a prefix of **2523**.

2523-001 **Address for local adapter missing from the adapter information.**

Explanation: There is no local adapter with the address expected for this offset. It is possible that the adapter is not configured or is configured with a different address than the one in the **machines.lst** file.

User response: Verify that the adapter is configured with the correct address by issuing the **netstat -in** command. In the PSSP environment, the address for the adapter must match the address in the **machines.lst** file for the local node and given adapter offset. Verify that the adapter information is correctly entered in the SDR.

2523-002 **GROUP_PROCLAIM** message from
outside the configuration,
ID=adapter ID, ignored.

Explanation: The daemon received a **GROUP_PROCLAIM** message from a node that is outside of the current configuration. One or more daemons may have outdated configurations.

User response: Perform a daemon refresh with the **hatsctrl -r** command on the control workstation and on every node in the affected partition.

2523-003 Got a heartbeat from someone that is not my neighbor, ID=*adapter_ID* GID=*group_ID*.

Explanation: A node did not respond to committing of new groups. This problem should be transient.

User response: If the problem persists, reset the daemon on the offending node.

2523-004 Got a message in a different endian with Interoperability off.

Explanation: This error message is issued when a cluster consists of a mixture of big- and little-endian processors that are not all running the level of RSCT that supports interoperability.

User response: To correct this error condition, perform one or more of the following actions:

- Upgrade RSCT on all processors in the cluster to a level that supports interoperability.
- Reconfigure the cluster so that it consists of processors that are either all big-endian, or all little-endian. In other words, do not use a mixture of big- and little-endian processors in the same cluster.

2523-005 Failed to send heartbeat to *adapter ID*.

Explanation: The heartbeat message was not sent, possibly due to network problems.

User response: Fix any network problems.

2523-006 Unable to fork child process.

Explanation: Attempt to fork was not successful, possibly due to too many running processes.

User response: Determine and correct the resource problem.

2523-007	<i>argument_value</i> : Not a valid <i>argument_flag</i> flag; positive integer expected.
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Explanation: The daemon was invoked with an incorrect value for the indicated argument.

User response: Correct the argument value to a positive integer value.

2523-008 *argument_value*: **Not a valid *argument_flag* flag; non-negative integer less than *upper_bound* expected.**

Explanation: The daemon was invoked with an incorrect value for the indicated argument.

User response: Correct the argument value to a non-negative number less than the upper bound.

2523-009 *argument_value: Not a valid argument flag flag.*

Explanation: The daemon was invoked with an incorrect flag.

User response: Specify a flag with the correct value.

2523-010 *argument_value*: **Not a valid**
argument_flag **flag; integer expected.**

Explanation: The daemon was invoked with an incorrect flag.

User response: Specify a flag with an integer value.

2523-011 **Unrecognized parameter** *parameter*.

Explanation: The daemon was invoked with an unrecognized parameter.

User response: Specify the parameter correctly.

2523-012 Unable to obtain socket port number from /etc/services. FFDC id
FFDC_error_code.

Explanation: The **hats.partition name** entry is missing in the **/etc/services** file.

User response: Run the **syspar_ctrl -d hats** and **syspar_ctrl -a hats** commands in the affected partition.

2523-013 adapter_offset: Not a valid HB_SOCKET port number: expecting lower_bound - upper_bound.

Explanation: The specified port number is not in the range **lower_bound - upper_bound**.

User response: Specify **HB_SOCKET** port number in the indicated range.

2523-014 My node number is not defined. FFDC id
FFDC_error_code.

Explanation: This node was not specified in the configuration.

User response: Correct the configuration error.

2523-015 Do not know how to broadcast message_type messages.

Explanation: The daemon is not capable of broadcasting a message of the indicated type.

User response: Record the above information and contact the IBM Support Center.

2523-016 Unable to send message, remote socket is not ready for writing.

Explanation: The attempt to write to the Remote Socket was not successful.

User response: Verify that the network is working correctly.

2523-017 Received a message_type message for an unknown address address.

Explanation: Received a message that is not destined for any node in the configuration.

User response: Record the above information and contact the IBM Support Center.

2523-018 Could not obtain HB_SHARED_MEM_KEY shared_memory_ID. FFDC id
FFDC_error_code.

Explanation: Unable to obtain an interprocess

communication key for shared memory.

User response: Use the **ipcrm** command to clean up shared memory.

2523-019 Could not obtain HB_SHARED_SEM_KEY. FFDC id
FFDC_error_code.

Explanation: Unable to obtain an interprocess communication key for semaphore.

User response: Use the **ipcrm** command to clean up semaphore.

2523-020 Could not create shared memory segment shared_memory_segment_number. FFDC id
FFDC_error_code.

Explanation: Unable to create a shared memory segment.

User response: Use the **ipcrm** command to clean up shared memory.

2523-021 Could not attach shared memory segment shared_memory_segment_number. FFDC id
FFDC_error_code.

Explanation: Unable to attach to a shared memory segment.

User response: Use the **ipcrm** command to clean up shared memory.

2523-022 Could not create semaphore. FFDC id
FFDC_error_code.

Explanation: Unable to create a semaphore.

User response: Use the **ipcrm** command to clean up semaphores.

2523-023 Could not initialize semaphore. FFDC id
FFDC_error_code

Explanation: Unable to initialize a semaphore.

User response: Use the **ipcrm** command to clean up semaphores.

2523-024 key_number: Not a valid HB_SHARED_MEM_KEY number: expecting lower_bound - upper_bound.

Explanation: The shared memory key number is not in the valid range.

User response: Specify a correct shared memory key number.

2523-025 *key_number: Not a valid
HB_SHARED_SEM_KEY number:
expecting lower_bound - upper_bound.*

Explanation: Shared memory key number is not in the valid range.

User response: Specify a correct shared memory key number.

2523-026 **Could not open Local Socket. FFDC id**
FFDC_error_code.

Explanation: An attempt to open the connection socket was not successful, possibly because of incorrect permissions.

User response: Remove the local socket file.

2523-027 *option: setsockopt on socket class
Socket failed. FFDC id*
FFDC_error_code.

Explanation: Unable to set the socket option on the socket class (Remote, Listening, Client).

User response: Try to set the socket option again.

2523-028 **Could not bind Local Socket =**
file-descriptor to socket-name. FFDC id
FFDC_error_code.

Explanation: Unable to bind the local socket with the indicated file descriptor.

User response: Remove the socket file and try again.

2523-029 **Unable to send message on Remote
Socket, message too long.**

Explanation: The **sendto** command returned a value of **EMSGSIZE** due to the size of the message.

User response: None.

2523-030 **Client message from pid=(PID) on an
unregistered socket, message ignored.**

Explanation: Received a client message from the indicated PID. This PID is no longer a registered client, or possibly registered with a different PID.

User response: This process must register to have access.

2523-031 **Incomplete client message sent,
bytes_sent out of msg_size bytes sent.**

Explanation: Unable to send the entire message.

User response: None.

2523-033 **Unable to send Client message, the
message pointer is not valid.**

Explanation: The message pointer is not valid.

User response: Start the topology services daemon again in this partition.

2523-034 **Function listen() failed. Errno = value.**
FFDC id [FFDC_error_code].

Explanation: The call to function listen() was not successful.

User response: None.

2523-035 **Listening Socket Error ID =**
enumerated-Lsock-error-ID, not
recognized.

Explanation: An error was generated that was not recognized.

User response: None.

2523-036 **Error Accepting Client Connection,**
errno=value.

Explanation: The accept of a connection request was not successful.

User response: None.

2523-037 **Error sending data to pid=client-PID, rc**
= return-code, errno = value.

Explanation: An error occurred while sending data to the specified process ID.

User response: None.

2523-038 **Error receiving data from**
pid=client-PID, rc = return-code, errno =
value.

Explanation: An error occurred while receiving data from the specified process ID.

User response: None.

2523-039 **Could not open Remote Socket. FFDC**
id FFDC_error_code.

Explanation: Unable to open remote socket. This may indicate lack of resources.

User response: Identify and correct the problem and try again.

2523-040 *option: setsockopt on socket-class*
Socket failed. FFDC id
FFDC_error_code.

Explanation: Unable to set the socket option on the socket class (Remote, Local, Client).

User response: Try to set the socket option again.

2523-041 **Could not bind Remote Socket to**
address = address, port = port-number.
FFDC id *FFDC_error_code.*

Explanation: Unable to bind the remote socket to the indicated port number.

User response: Check to see if the port number is already in use.

2523-042 **Getsockname on Remote Socket failed.**
FFDC id *FFDC_error_code.*

Explanation: An internal daemon error may be the cause of the problem.

User response: None.

2523-043 **Unmatching From ID.**

Explanation: The address of the sender and the address listed in the message do not match.

User response: None.

2523-044 **Received message_size bytes from**
sender_address **with unmatching from**
ID.

Explanation: The address of the sender and address listed in the message do not match.

User response: Verify the source of the message.

2523-045 **Bad Socket Descriptor.**

Explanation: The socket descriptor is corrupted.

User response: Start the topology services daemon again.

2523-046 **Internal Data Error.**

Explanation: An internal data error was detected.

User response: None.

2523-047 **Caught Signal.**

Explanation: The **select** call ended due to a signal.

User response: None.

2523-048 **Select data value not valid.**

Explanation: A parameter to a **select** call was not valid.

User response: Start the daemon again.

2523-049 **Select data pointer not valid.**

Explanation: The data pointer to the **select** call is not valid.

User response: Start the daemon again.

2523-050 **Unexpected error from select.**

Explanation: The **select** call returned an unexpected error.

User response: Start the daemon again.

2523-051 **Could not open machine file** *file-name.*
FFDC id *FFDC_error_code.*

Explanation: Unable to open the **machines.lst** file indicated.

User response: Check to see if the file exists and has the appropriate permissions.

2523-054 **Node number invalid: string. FFDC id**
[FFDC_error_code].

Explanation: An incorrect node number has been specified for a network interface in the **machines.lst** file. This may be due to a problem in the formation of the RSCT peer domain. *string* is the line in the **machines.lst** file that contains the non-valid node number.

User response: Make sure all node numbers in the cluster are positive. Make sure the node numbers corresponding to the network interfaces are positive. Inform the IBM Support Center if the problem cannot be corrected.

2523-055 **Node number duplicated: string. FFDC**
id *FFDC_error_code.*

Explanation: The string is the line in the **machines.lst** file that duplicates the node number.

User response: Fix the inconsistency in the configuration.

2523-056 **Gethostbyname** *host_name* **Failed,**
errno = value.

Explanation: Unable to convert the host name to an IP address.

User response: Verify that the host name is known to the network server and name server.

2523-057 **IP address duplicated: node**
node_number address IP_address.
FFDC id *FFDC_error_code.*

Explanation: The indicated IP address was already encountered in the configuration.

User response: Fix the inconsistency in the configuration.

2523-058 **Ignoring Adapter** *adapter_name* **at**
offset *adapter_offset* **on node**
node_number. **FFDC id**
FFDC_error_code.

Explanation: Unable to convert the adapter name *adapter_name* of the adapter at the adapter offset *adapter_offset* on node indicated to an IP address.

User response: Verify that adapter is known to the network and name server.

2523-059 **Network** *network-name* **exceeds limit of**
offsets-allowed networks, will be
ignored. **FFDC id** *FFDC_error_code.*

Explanation: The number of offsets in the **machines.lst** file exceeds the maximum allowed.

User response: Reduce number of networks or adapters in system.

2523-060 **Configuration error - no nodes defined.**

Explanation: No nodes or adapters defined in the **machines.lst** file file.

User response: Check to see if the configuration has nodes defined.

2523-061 **Refresh: deleted myself!**

Explanation: An interface on this node is missing from the configuration.

User response: Verify if you intended to omit the interface.

2523-062 *Operation: ioctl failed.* **FFDC id**
FFDC_error_code.

Explanation: The **ioctl** operation was not successful.

User response: Determine the reason for the problem.

2523-063 **Node is not in my group, ignoring**
Node Connectivity message!

Explanation: Received a node connectivity message from a node that is not in my group.

User response: If the problem persists, restart the daemon that issued the message.

2523-064 **Node number for** *adapter_offset* **is not**
valid, ignoring message!

Explanation: The indicated adapter ID does not correspond to a valid node number.

User response: Verify the source of the message.

2523-065 **NCT unable to compute node**
reachability!

Explanation: NCT was not able to compute node reachability.

User response: Start the daemon again.

2523-066 **Node number of** *adapter_offset* **in my**
group not found.

Explanation: Unable to map an adapter in my group to a node number.

User response: If the problem persists, stop and then start the **hats** daemon by issuing the **hatsctrl -k** and **hatsctrl -s** commands.

2523-067 **Adapter** (*IP-address*) **at offset**
adapter_offset **not found.**

Explanation: Unable to find this group member in NCT.

User response: If the problem persists, obtain a core dump of the daemon by issuing the command **kill - 6** *daemon process id* and contact the IBM Support Center.

2523-068 **Node number** *node number* **is not valid.**

Explanation: Unable to convert from adapter ID to node number.

User response: If the problem persists, obtain a core dump of the daemon by issuing the command **kill - 6** *daemon process id* and contact the IBM Support Center.

2523-069 **No members in current group.**

Explanation: No members exist in the current group.

User response: None.

2523-070 **My adapter not in current group.**

Explanation: The adapter is not a member of my own group.

User response: None.

2523-071 **Adapter** *adapter_offset* **is already in the**
current group.

Explanation: Attempted to merge groups that had a member in common.

User response: None.

2523-072 Missing adapter not found in my group.

Explanation: Members to be removed from the group were already missing.

User response: None.

2523-073 My node number is not defined.

Explanation: The node number is not defined.

User response: Check for the node definition in */var/ha/run/hats.partition name/machines.lst*.

2523-074 Adapter offset *adapter_offset* is not valid.

Explanation: Adapter offset indicated is out of range.

User response: Specify a valid adapter offset.

2523-075 Old subscription entry *old_subscription_entry* still exists.

Explanation: An old subscription entry already exists.

User response: Remove the old subscription entry before creating a new one.

2523-076 Unknown subscription type.

Explanation: Not a valid subscription type.

User response: Specify a valid subscription type.

2523-077 Cannot send *Hb_No_Event* to clients.

Explanation: Not a valid event.

User response: Specify a valid subscription event.

2523-078 Cannot send *Hb_All_Events* to clients.

Explanation: Not a valid event.

User response: Specify a valid subscription event.

2523-079 Cannot send Unknown event to clients.

Explanation: Not a valid event.

User response: Specify a valid subscription event.

2523-080 Cannot delete a NULL entry.

Explanation: Attempted to delete a null interest entry.

User response: None.

2523-081 Cannot delete entry from an empty list.

Explanation: Attempted to delete a subscription entry from an empty list.

User response: None.

2523-082 ACK retry count exhausted, no ACK sent.

Explanation: Already sent maximum number of retry ACKs.

User response: None.

2523-083 Leader died and originator is not the successor.

Explanation: The group leader died, and the PTC message was not from the successor of the group leader.

User response: None.

2523-084 From Id = *sender_ID* From Group ID = *sender_GID*.

Explanation: Display sender's ID and Group ID.

User response: None.

2523-085 Group Leader Successor Id = *ID*.

Explanation: Display the group leader successor's ID.

User response: None.

2523-086 PTC NAK ignored, I am not the group leader.

Explanation: Received a PTC negative acknowledgment, but I am not the group leader.

User response: None.

2523-087 PTC NAK ignored, I am not committing.

Explanation: Received a PTC negative acknowledgment, but I am not processing a group change.

User response: None.

2523-088 PTC NAK ignored, no longer in PTC mode.

Explanation: Receive a PTC negative acknowledgment, but no longer accepting them.

User response: None.

2523-089 **PTC ACK ignored, I am not the group leader.**

Explanation: Received a PTC acknowledgment, but I am not the group leader.

User response: None.

2523-090 **PTC ACK ignored, I am not committing.**

Explanation: Received a PTC acknowledgment, but I am not processing a group change.

User response: None.

2523-091 **PTC ACK ignored, no longer in PTC mode.**

Explanation: Received a PTC acknowledgment, but I am no longer accepting them.

User response: None.

2523-092 **JOIN request rejected, I am not the group leader.**

Explanation: Received a JOIN request, but I am not the group leader.

User response: None.

2523-093 **JOIN request rejected, I am currently busy.**

Explanation: Received a JOIN request, but I am currently busy handling group changes.

User response: None.

2523-094 **DEATH_IN_FAMILY ignored, not from a group member.**

Explanation: Received a DEATH_IN_FAMILY message, but it was not from a group member.

User response: None.

2523-095 **DEATH_IN_FAMILY ignored, I am not the group leader.**

Explanation: Received a DEATH_IN_FAMILY message, but I am not the group leader.

User response: None.

2523-096 **DISSOLVE GROUP ignored, not from a group member.**

Explanation: Received a DISSOLVE GROUP message from outside our group.

User response: None.

2523-097 **JOIN time has expired. PROCLAIM message was sent by *proclaimer*.**

Explanation: Time has expired for waiting for a reply to our JOIN request. Wait for another proclaim message. If this problem occurs repeatedly, it may indicate that this node and the proclaimer are having problems communicating in both directions.

User response: None.

2523-098 **PTC ACK time has expired, committing group.**

Explanation: Time has expired for waiting for PTC acknowledgments, commit the group with the members that did acknowledge.

User response: None.

2523-099 **COMMIT BROADCAST ACK time has expired, ACKS missing.**

Explanation: Not everyone acknowledged the commit broadcast message.

User response: None.

2523-100 **COMMIT ACK time has expired, not everyone ACKed.**

Explanation: Not everyone in the new group responded.

User response: None.

2523-101 **PTC ACK retry count exhausted.**

Explanation: A Commit was never received.

User response: None.

2523-102 **COMMIT time has expired, reinitializing.**

Explanation: The node has lost communication with the leader. The node assumes a "singleton" role.

User response: None.

2523-103 **Received an unknown message type, message = *message_type*.**

Explanation: The message received is not recognized.

User response: None.

2523-104 **Malloc failed, size = *size*.**

Explanation: Not able to satisfy the memory request. This is indicative of a memory leak.

User response: Start the daemon again.

2523-105 **Group Connectivity Message from outside the configuration, ID=*adapter_ID*, ignored.**

Explanation: Received a group connectivity message from outside the configuration.

User response: None.

2523-106 **Network for Subscription *subscription* Not Found.**

Explanation: No networks were found for this subscription.

User response: None.

2523-107 **DEATH_IN_FAMILY ignored, for my local adapter**

Explanation: Command processing received a DEATH_IN_FAMILY message for the local adapter. The command and the adapter offset appear before the message identifier (2523-107).

User response: None.

2523-111 **Sending data to pid=*PID* would block, complete message not sent.**

Explanation: Client socket not ready for sending.

User response: None.

2523-112 **Sending data to pid=*PID* interrupted and not restarted.**

Explanation: Interrupted system call.

User response: None.

2523-113 **Sending data to pid=*PID* caused an IO ERROR.**

Explanation: The client socket class caused an IO error.

User response: None.

2523-114 **Receiving data from pid=*PID* would block, complete message not received.**

Explanation: The client socket is not read for reading.

User response: None.

2523-115 **Receiving data from pid=*PID* interrupted and not restarted.**

Explanation: Interrupted system call.

User response: None.

2523-116 **Sending data to pid=*PID* caused an IO ERROR.**

Explanation: The client socket class caused an IO error.

User response: None.

2523-117 **Client Socket Error ID = *error_ID*, not recognized.**

Explanation: Unrecognized error from the client socket class.

User response: None.

2523-118 **sendto would block.**

Explanation: The socket is not ready for sending.

User response: None.

2523-119 **recvfrom would block.**

Explanation: There is nothing to receive at this point.

User response: None.

2523-120 **recvfrom failure.**

Explanation: Receive error from the remote socket.

User response: None.

2523-121 **Late in sending Heartbeat by *seconds.microseconds* seconds.**

Explanation: Heartbeats are sent out based on the time specified by the TS_Frequency tunable values with a default of one second. The daemon checks how much time has elapsed since the last heartbeat was sent. If the difference is greater than two times the TS_Frequency tunable value, this message displays by how many seconds it was late.

User response: None.

2523-122 ***tunable_value*, Not a valid value for TS_Frequency; positive integer expected.**

Explanation: The tunable value is encoded as part of the configuration and is specified in the TS_Config object in the SDR.

User response: Specify a correct value.

2523-123 ***tunable_value*, Not a valid value for TS_Sensitivity; positive integer expected.**

Explanation: The tunable value is encoded as part of the configuration and is specified in the TS_Config object in the SDR.

User response: Specify a correct value.

2523-124 *tunable-value does not specify a valid value for TS_FixedPriority. Valid values are between lowest-valid-value and highest-valid-value. Default fixed priority default_value used.*

Explanation: The tunable value is encoded as part of the configuration. For PSSP, the tunable value is specified in the TS_Config class in the SDR. In the HACMP environment, the tunable value is in the HACMPtopsvcs ODM class.

User response: Specify a valid fixed priority value.

2523-125 *tunable-value, Not a valid value for TS_LogLength; positive integer expected.*

Explanation: The tunable value is encoded as part of the configuration and is specified in the TS_Config object in the SDR.

User response: Specify a correct value.

2523-126 **Unable to read CSSK key file: error code** *function-return-code*

Explanation: The function that was called was not able to read the cluster shared secret key (CSSK) file.

User response: Make sure the CSSK file is present, is valid, and has the correct file permissions. Bring the corresponding node offline and then back online.

2523-127 **Unable to retrieve a key value from CSSK file**

Explanation: The function to read the cluster shared secret key (CSSK) file did not return a key or report an error.

User response: Make sure the CSSK file is present, is valid, and has the correct file permissions.

2523-128 **Unable to unmarshal key: error code** *function-return-code*

Explanation: The function to unmarshal the cluster shared secret key (CSSK) (`cu_unmarshall_ext_key()`) returned an error.

User response: Make sure the CSSK file is valid.

2523-129 **Unable to sign message: error code** *function-return-code*

Explanation: The function to sign a message failed.

User response: Make sure the CSSK file is valid.

2523-145 **Unable to lock queue.**

Explanation: This message indicates an internal program error.

User response: Record the above information and contact the IBM Support Center.

2523-146 **Unable to unlock queue.**

Explanation: This message indicates an internal program error.

User response: Record the above information and contact the IBM Support Center.

2523-147 **Unable to increment count of items of queue.**

Explanation: This message indicates an internal program error.

User response: Record the above information and contact the IBM Support Center.

2523-148 **Unable to decrement count of items of queue.**

Explanation: This message indicates an internal program error.

User response: Record the above information and contact the IBM Support Center.

2523-149 **Unable to initialize thread attributes.** *FFDC id FFDC_error_code.*

Explanation: The program could not initialize thread attributes. Therefore, the program could not create a new thread to send or receive messages, or to handle client requests.

User response: Record the above information and contact the IBM Support Center.

2523-150 **Unable to create the send thread for adapter.** *FFDC id FFDC_error_code.*

Explanation: The program could not create the thread responsible for sending messages.

User response: Record the above information and contact the IBM Support Center.

2523-151 **Unable to create the receive thread for adapter.**

Explanation: The program could not create the thread responsible for receiving messages.

User response: Record the above information and contact the IBM Support Center.

2523-152 Incorrect machines list file, Instance Number header not found.

Explanation: The **machines.lst** file has an incorrect format. The instance number header was not found at the top of the file.

User response: Verify the contents of the **machines.lst** file. Stop and then start the **hats** daemon again, using the **hatsctrl -k** and **hatsctrl -s** commands.

2523-153 Incorrect machines list file. Configuration ID header not found.

Explanation: The **machines.lst** file has an incorrect format. The configuration ID header is missing from the top of the file.

User response: Verify the contents of the **machines.lst** file. Stop and then start the **hats** daemon again. Issue the **hatsctrl -k** and **hatsctrl -s** commands.

2523-154 Incorrect machines list file, new ID=new-config-id current ID=current-config-id. FFDC id FFDC_error_code.

Explanation: The configuration ID in the new **machines.lst** file generated during a refresh operation is different from the previous version of the file.

User response: Record the above information and contact the IBM Support Center.

2523-155 Refresh dispatcher process pid hatsctrl/topsvcsctrl-process-pid has not finished.

Explanation: The refresh dispatcher process has not finished yet. The refresh dispatcher process is used to rebuild the **machines.lst** file and refresh the configuration,

User response: If the problem persists, record the above information and contact the IBM Support Center.

2523-156 Error *errno-value* in waitpid() system call.

Explanation: The **waitpid()** call issued by the daemon to obtain the exit status of the refresh dispatcher process returned with an error value.

User response: Record the above information and contact the IBM Support Center.

2523-157 Refresh dispatcher process terminated with signal *signal-number*.

Explanation: The refresh dispatcher process terminated using the specified signal.

User response: Record the above information and

contact the IBM Support Center.

2523-200 Function not implemented yet.

Explanation: This message indicates an internal program error.

User response: Record the above information and contact the IBM Support Center.

2523-201 TMIOSTAT ioctl failed

Explanation: The **TMIOSTAT** IOCTL call that was issued for a Target-mode device was unsuccessful. The daemon cannot use the Target-mode device for heartbeating.

User response: Record the above information and contact the IBM Support Center.

2523-202 SCSI Adapter Error.

Explanation: An attempt to obtain the operational status of the of the Target-mode device returned an error.

User response: Record the above information and contact the IBM Support Center.

2523-203 General error in SCSI Card Status.

Explanation: An attempt to obtain the operational status of the Target-mode device returned an error.

User response: Record the above information and contact the IBM Support Center.

2523-204 Failed to obtain SCSI device sense.

Explanation: An attempt to obtain Target-mode device sense data was unsuccessful.

User response: Record the above information and contact the IBM Support Center.

2523-205 Sleeping too long without getting data.

Explanation: An attempt to obtain data from a Target-mode device is timing out.

User response: If the problem persists, record the above information and contact the IBM Support Center.

2523-206 Connection lost.

Explanation: An error occurred while reading data from a non-IP device.

User response: If the problem persists, record the above information and contact the IBM Support Center.

**2523-207 Failed to open serial port on
 device-name.**

Explanation: An attempt to open a serial port device for heartbeating was not successful. The daemon cannot use that device for heartbeating.

User response: Check to see if the device exists and is of the correct type.

2523-208 Could not get the flags - fcntl error

Explanation: The program could not get the flags associated with a serial device.

User response: Check to see if the serial device is of the correct type.

**2523-209 fcntl failure - could not set to
 non-blocking and no delay.**

Explanation: The program could not configure a serial device for non-blocking and no delay mode.

User response: Check to see if the serial device is of the correct type. If it is and the problem still occurs, record the above information and contact the IBM Support Center.

2523-210 Terminal device is not OK.

Explanation: The program could not set the current serial device state information

User response: Check to see if the serial device is of the correct type. If it is and the problem still occurs, record the above information and contact the IBM Support Center.

2523-211 Failed to set attributes for device.

Explanation: The program could not set serial device characteristics.

User response: Check to see if the serial device is of the correct type. If it is and the problem still occurs, record the above information and contact the IBM Support Center.

2523-212 Could not add rts to stream stack.

Explanation: The program could not set the serial device to add rts to the stream stack.

User response: Check to see if the serial device is of the correct type. If it is and the problem still occurs, record the above information and contact the IBM Support Center.

2523-213 Failed to flush input and output.

Explanation: The program could not flush input and output in a serial device.

User response: Check to see if the serial device is of the correct type. If it is and the problem still occurs, record the above information and contact the IBM Support Center.

2523-214 No data read from device *device-name*.

Explanation: The program could not read any data from the specified device. The connection may be broken or the remote node may not be alive, or the daemon may not be running on the remote node.

User response: Check to see if the serial connection is operating correctly and if the daemon is running on the remote node.

2523-215 SCSI port *device-name* open failed.

Explanation: The program could not open a Target-mode device for heartbeating. The daemon cannot use the device for heartbeating.

User response: Check to see if the device actually exists and is of the correct type.

2523-216 Trying to send to a device not opened.

Explanation: The program was not successful sending a message to a Target-mode device that is not opened.

User response: Record the above information and contact the IBM Support Center.

2523-217 No elements in the queue.

Explanation: There are no elements in the queue for a Target-mode device.

User response: Record the above information and contact the IBM Support Center.

2523-218 Packet size less than zero.

Explanation: An error occurred while passing a packet from the Target-mode receive thread to the main thread.

User response: If the problem persists, record the above information and contact the IBM Support Center.

**2523-219 Did not write all the bytes. Packet size
 =*packet-size*. Bytes sent=*bytes-sent*,
 device *device-name*.**

Explanation: An error occurred while writing to a serial or Target-mode device. The remote daemon may not be running, or the connection may be broken.

User response: Check to see if the remote daemon is running and device connection is operating correctly.

2523-220 **Did not write all the bytes. Packet type**
 = *packet-type*, **device** *device-name*.

Explanation: An error occurred while writing to a serial or Target-mode device. The remote daemon may not be running, or the connection may be broken.

User response: Check to see if the remote daemon is running and the device connection is operating correctly.

2523-221 **Packet size too long!! Packet size =**
 packet-size.

Explanation: The program tried to write a packet that is larger than the maximum allowed into a serial or Target-mode device

User response: Record the above information and contact the IBM Support Center.

2523-222 **Packet check sum incorrect, device**
 device-name.

Explanation: The program received a packet with an incorrect checksum through the serial device. A noisy connection or another process trying to use the same serial device may cause this error.

User response: Check the serial connection. Also, check to see if there are other processes trying to write to the same serial device.

2523-223 **Errno *errno* when writing packet on**
 device-name.

Explanation: The program received the specified error code when trying to write a packet to specified device. The connection may be broken or the daemon on the remote node may not be running.

User response: Check the device connection. Also check to see if the daemon is running on the remote node.

2523-224 **Received a Grace request from**
 Adapter-ID **with incorrect or missing**
 data: 4 words of data from the auxiliary
 header.

Explanation: The details contained in the auxiliary header were not present. The second line contains the data that was found.

User response: This message indicates corrupted message data. Record the above information and contact the IBM Support Center.

2523-225 **Cannot find network offset in**
 ADAPTER_CONFIGURATION message.
 Gid *group-id*, **address** *0xaddress*.

Explanation: The program could not find the network offset that contains the specified address in an

ADAPTER_CONFIGURATION message.

User response: If the message persists, record the above information and contact the IBM Support Center.

2523-226 **Cannot force boot-to-service transition**
 for *boot-addr1*. **Service** *serv-addr* **is**
 being used in offset *offset*, **boot** *addr*
 boot-addr2.

Explanation: The program cannot force a boot-to-service transition for the specified boot address because the specified service address is already being used by the second specified boot address.

User response: There is a problem in the configuration, either before or after migration. Force a dump of the topology services daemon by using the **kill -6** *pid of hatsd* in HACMP/ES command. Record the above information and contact the IBM Support Center.

2523-227 **Cannot find adapter number for**
 address *boot-addr* **when trying to force**
 a boot-to-service transition. FFDC id
 FFDC_error_code.

Explanation: The adapter number for the adapter with the specified address is missing. The adapter number is needed in the process of forcing a boot-to-service transition after a migration refresh.

User response: There is a problem in the configuration, either before or after migration. Force a dump of the topology services daemon by using the **kill -6** *pid of hatsd* in HACMP/ES command. Record the above information and contact the IBM Support Center.

2523-228 **Address** *serv-addr* **is already in use**
 when trying to force a boot-to-service
 transition for address *boot-addr*. **FFDC**
 id *FFDC_error_code*.

Explanation: The specified address is already in use by another adapter when trying to force a boot-to-service transition after a migration refresh.

User response: There is a problem in the configuration, either before or after migration. Force a dump of the topology services daemon by using the command **kill -6** *pid of hatsd* in HACMP/ES. Record the above information and contact the IBM Support Center.

2523-229 **Cannot find service address for**
 boot-addr when trying to force a
 boot-to-service transition. FFDC id
 FFDC_error_code.

Explanation: After a migration refresh, the current address configured on the adapter does not match any of the possible service addresses for this network.

User response: There is a problem in the configuration, either before or after migration. Force a

dump of the topology services daemon by using the command **kill -6 pid of hatsd in HACMP/ES**. Record the above information and contact the IBM Support Center.

2523-230 **Interface name for *addr* missing in *machines.lst* file. Discarding adapter. FFDC id *FFDC_error_code*.**

Explanation: The interface name for the adapter was missing from the **machines.lst** file that was produced in a refresh operation.

User response: There may be a problem with either the HACMP/ES cluster manager or the topology services script. Record the above information and contact the IBM Support Center.

2523-231 **Invalid slide of adapter *interface node* node into network *network-name*: migration refresh.**

Explanation: The **machines.lst** file produced for a migration refresh has caused the topology services daemon to attempt an adapter slide. Adapter slides are adapters moving into a different topology services network. They are not allowed in a migration refresh, since adapters cannot be added or removed in a migration refresh.

User response: There may be a problem with either the HACMP/ES cluster manager or the topology services script. Record the above information and contact the IBM Support Center.

2523-233 **Received a *message-type* message from *sender-address* that cannot be authenticated. Message was late by *delay time* seconds.**

Explanation: The daemon received a daemon-to-daemon message with one of these problems:

- The message contains an encrypted checksum that cannot be authenticated.
- The message contains timestamp indicating that the message is a replay of a previous message.

User response: Either there is a security breach attempt, or some delay in network transmission. Inform you system administrator of this message immediately.

2523-238 **During the past *interval in seconds* seconds, daemon has received *number* of failures messages that cannot be authenticated.**

Explanation: During a certain time interval, the daemon received several daemon-to-daemon messages, each of which had one of these problems:

- The message contained an encrypted checksum that could not be authenticated.

- The message contained a timestamp that indicated that the message is a replay of a previous message.

User response: Either there is a security breach attempt, or some delay in network transmission. Inform the system administrator immediately.

2523-239 **Hats script on CWS could not determine the security state. Daemon exiting. FFDC id *FFDC_error_code*.**

Explanation: The hats script on the control workstation either could not determine the security mode of the partition, or could not convert the DCE keyfile to cluster format.

User response: There are installation problems or configuration problems with DCE or PSSP security services, or **spk2ck** was unable to perform the keyfile conversion. Inform the system administrator immediately.

2523-240 **Time-to-Live expired for Daemon Routing message. Port *port-number*, first destination *first-destination-node*.**

Explanation: There is a routing loop in the Daemon Routing messages. Different nodes have inconsistent views of the network topology. The present daemon routing message is discarded.

User response: If the problem persists, record the above information and contact the IBM Support Center.

2523-241 **No route to send Daemon Routing message to node *node-number* (port *port-number*).**

Explanation: No route was found when trying to send a Daemon Routing message to the specified node. It may be due to a temporary route outage. Usually Group Services does not pass a Daemon Routing request to topology services if there is no route to the destination node.

User response: If the problem persists, record the above information and contact the IBM Support Center.

2523-242 **Low priority queue is full. Discarding packet *packet-type*, device *device-name* (total *total-count-dropped* dropped).**

Explanation: The queue for low priority packets is full, forcing a low priority packet to be discarded. Low priority packets should correspond to PRM packets. The PRM client will retry these packets. This message generally indicates a burst of Daemon Routing messages.

Keeping too many of these messages in the queue is not useful, since after some point, the time it takes for the message to be transmitted to the destination is

more than enough time for the client to consider the message lost.

User response: If the problem persists, record the above information and contact the IBM Support Center.

2523-243 Cannot find adapter offset to send Daemon Routing message.
Destination: *destination-adapter*.

Explanation: The Daemon Routing logic was unable to find an adapter offset that corresponds to a given destination address (which is the first hop of the message route). A changing network topology could cause the problem.

User response: If the problem persists, record the above information and contact the IBM Support Center.

2523-244 Invalid number of destination nodes in Daemon Routing message:
number-of-nodes.

Explanation: The topology services daemon received a request to send a Daemon Routing message to a number of nodes which was not valid. The request is likely to contain data which is not valid.

User response: If the problem persists, record the above information and contact the IBM Support Center.

2523-245 Invalid node number in Daemon Routing message: *node-number*.

Explanation: The topology services daemon received a request to send a Daemon Routing message to an incorrect node number. The request is likely to contain data which is not valid.

User response: If the problem persists, record the above information and contact the IBM Support Center.

2523-246 Invalid size of PRM message in Daemon Routing message:
size-of-PRM-message.

Explanation: The topology services daemon received a request to send a Daemon Routing message with an incorrect number of bytes. The number of bytes is specified above. The request is likely to contain data which is not valid.

User response: If the problem persists, record the above information and contact the IBM Support Center.

2523-250 Duplicated network name in machines.lst *network name*. **FFDC id** *FFDC_error_code*.

Explanation: The **machines.lst** file was generated with a duplicated network in the Topology Services startup script.

User response: Contact the IBM Support Center.

2523-251 Internal error: *source-file, line-number*.
Value 1: *value-1*. **Value 2:** *value-2*.

Explanation: An internal error has occurred.

User response: Record the above information and contact the IBM Support Center.

2523-252 Topology Services is using almost all CPU cycles available
(milliseconds-CPU-time msec of CPU in the last milliseconds-elapsed msec):
exiting. FFDC id [*FFDC_error_code*].

Explanation: The daemon or the child processes are using almost all CPU cycles available, probably not accomplishing its goals and also preventing other processes from running. The daemon will exit with a core dump to clean up the situation and allow debugging.

User response: Record the above information and contact the IBM Support Center.

2523-253 Main thread has not made progress for
seconds-blocked seconds (number of
major page faults in the last
milliseconds-elapsed msec:
major-page-faults): exiting. FFDC id
[FFDC_error_code].

Explanation: The main thread was unable to make progress for the given amount of time. It is very likely that some resource shortage or deadlock is preventing the main thread from running. The daemon will exit, since the main thread needs to make progress to give correct notifications to clients.

User response: Examine the memory and disk I/O load to locate the cause of the resource shortage. If a cause is not found and the problem cannot be corrected, record the above information and contact the IBM Support Center.

2523-254 Name missing for interface with
address *interface-address*. **FFDC id**
[FFDC_error_code].

Explanation: The **machines.lst** file was generated with a missing interface name. This may be caused by a network configuration error.

User response: Run **smitty**
cm_update_hacmp_interface_with_aix_settings and then synchronize the HACMP cluster. If the problem persists, contact the IBM Support Center.

2523-255 Unable to open a pipe to command
command-path.

Explanation: The hats daemon could not open a pipe to the specified command.

User response: Verify that the command exists and is executable. If problem persists, record the above information and contact the IBM Support Center.

2523-256 All NIMs have died, so the Topology Services daemon must exit. FFDC id
[FFDC-error-identifier].

Explanation: All of the Network Interface Module (NIM) child processes of the topology services daemon have ended too many times and will no longer be respawned. The topology services daemon cannot run in this condition, so it must exit.

User response: Refer to the error message that precedes this message (2523-270) for explanations of why each NIM process terminated, and watch for signals being sent to other processes in the system. If it is not clear why all of the NIM processes terminated, contact the IBM Support Center.

2523-257 Illegal alias detected on interface
interface-name (Base address =
base-address; Alias = alias): Topology
Services must exit. FFDC id
[FFDC-error-identifier].

Explanation: A known service address was detected on a known boot address for the same network. This indicates a misconfiguration that could cause the adapter configuration to be misinterpreted during startup, so the topology services daemon must exit.

User response: Remove the alias that is specified in the error message.

2523-260 Incorrect or missing address for
interface-name. Address: actual-address.
Boot-time address: boot-time-address.
FFDC id [FFDC_error_code].

Explanation: The address on adapter *interface-name* is either missing or incorrect (outside the cluster configuration). Topology services cannot monitor the adapter.

User response: Verify and correct the adapter configuration.

2523-261 Interface name missing in machines.lst
for address. Interface name assigned:
interface-name. FFDC id
[FFDC_error_code].

Explanation: The interface name for the given address is missing from the **machines.lst** file. In HACMP, the interface name is read from the

HACMPadapter class. The interface name is added to HACMPadapter at Topology Synchronization time. A missing interface name in HACMPadapter indicates some failure to either obtain or update the interface name.

A possible cause is the adapter boot-time address not matching the HACMP configuration. Topology services will attempt to recover from the problem by assigning an available interface name to the adapter. However, even if the operation succeeds, subsequent refresh operations (Topology DARE) may fail.

User response: Verify that the adapter boot-time addresses match the HACMP configuration and then synchronize the cluster topology. If problem persists, record the above information and contact the IBM Support Center.

2523-262 Internal Force Down error. Address:
address. File: source-file-name. Line line
number. Version code version.

Explanation: Internal error in Force Down procedure.

User response: Record the above information and contact the IBM Support Center.

2523-263 Error in parsing a line in machines.lst
file: input-line.

Explanation: An error happened when parsing a line in the **machines.lst** configuration file. This is likely to be an internal error in either the topology services startup script or in HACMP.

User response: Record the above information and contact the IBM Support Center.

2523-264 Duplicated keyword in machines.lst
file: input-line.

Explanation: A duplicated keyword is found when parsing a line in the **machines.lst** configuration file. This is likely to be an internal error in either the topology services startup script or in HACMP.

User response: Record the above information and contact the IBM Support Center.

2523-265 Cannot open memory map file name file.
Memory locking functions may not
work properly without access to
memory map file name.

Explanation: Linux memory map file (**/proc/self/maps**) provides the information needed by the memory locking (pinning) functions. These functions may not work properly if the memory map file is not accessible.

The memory map file is not a real file, but a communication mechanism between applications and

the kernel. It is a kernel option and can be turned off if customers recompile the kernel. This mechanism uses a file system-like form. Therefore, the **/proc** virtual file system may not work properly if the **/proc** mount point does not exist, or its entry is not added into **/etc/fstab**.

User response: Check that:

1. The **/proc** mount point exists.
2. The file **/etc/fstab** contains a correct entry for **/proc**.
3. The CONFIG_PROC_FS option is turned on when recompiling the kernel.

2523-270 **NIM (interface-name) process pid pid terminated. Signal number: signal-number. Exit value (if not signal): exit-value. FFDC id [FFDC_error_code].**

Explanation: The NIM process died. The problem could be an internal error, a or a signal may have terminated a process.

User response: The NIM should be restarted automatically by the daemon. If the new instances also terminate, the corresponding adapter will be considered down. Record the above information and contact the IBM Support Center.

2523-271 **Error in netmon library (interface-name). Errno: value. Error code: error-code. Function name: function-name. FFDC id [FFDC_error_code].**

Explanation: There is an error in the netmon library, which is used by NIM to determine the status of a local adapter. This error will prevent the adapter state from being correctly determined.

User response: Record the above information and contact the IBM Support Center.

2523-272 **Error preparing packet for NIM process. Status: status. Errno: errno.**

Explanation: Error when preparing a packet that is being sent to NIM process. The daemon may have run out of memory, or this is an internal error.

User response: Record the above information and contact the IBM Support Center.

2523-273 **Error sending message to NIM process. Status: status. Errno: errno.**

Explanation: Error when sending a packet to NIM process via the UNIX-domain socket.

User response: Record the above information and contact the IBM Support Center.

2523-274 **Unexpected response from NIM (interface-name). Message nim-message-number.**

Explanation: Received an unexpected response from the NIM process. Problem may exist is in the implementation of the NIM.

User response: If the NIM was created by IBM, record the above information and contact the IBM Support Center.

2523-275 **Failed to open NIM (interface-name). Reason: reason-string - description. value-1, value-2.**

Explanation: Failed to open NIM connection to local adapter. Possible reasons: NIM process was blocked while responding to NIM open command, NIM failed to open a non-IP device, NIM received an unexpected error code from a system call, or the topology services daemon failed to create a UNIX-domain socket.

User response: The open operation will be retried. If the problem persists, record the above information and contact the IBM Support Center.

2523-276 **NIM (interface-name) process PID pid taking too long to terminate.**

Explanation: The NIM process is taking too long to terminate. The process might be blocked. topology services will declare the corresponding adapter down.

User response: Investigate why the process is blocked. Record the above information and contact the IBM Support Center.

2523-277 **NIM (interface-name) error code error-code. Error string: error-string. Values value-1, value-2. FFDC id [FFDC_error_code].**

Explanation: This is either an informational message from the NIM or an error occurred. Possible causes for receiving this message are:

- A NIM process was blocked
- NIM had an internal error
- NIM had an I/O error
- There is an excessive amount of I/O traffic

The error report should contain a detailed description of the error.

User response: Examine **nim_interface.h** for an explanation of the error code. If the corresponding adapter seems to be going down, contact the IBM Support Center.

2523-278 **NIM (*interface-name*) sent unexpected messages. Status *status*. Message type *message-type*. Number of messages: *number-of-messages*. Message version *version*. FFDC id [*FFDC-ID*].**

Explanation: The daemon received unexpected messages from the NIM. This error is either caused by problems in the NIM, or the NIM using a version of the protocol that the daemon cannot process.

User response: Make sure an appropriate version of the NIM is being used. Contact the IBM Support Center if the problem persists.

2523-279 **Inconsistent broadcast address. *interface-name*: Address *address*. Computed broadcast address *broadcast-address*.**

Explanation: The adapter's broadcast address is inconsistent with its IP address and subnet mask.

User response: Correct the broadcast address or the subnet mask.

2523-280 **Unexpected adapter response from NIM: Address: *address*. Interface: *interface-name*. Response: *NIM-response*.**

Explanation: A response from the NIM to the topology services daemon was unexpected, given the daemon's records of the current adapter state. This may result in an adapter being considered down incorrectly.

User response: Terminate the corresponding NIM process (kill -9). If the problem is not resolved, shut down the cluster in the node and restart it. Contact IBM Service.

2523-281 **Critical client failure. Client *client-name*. Failure Code: *code*. Action: *action*.**

Explanation: The client (most likely Group Services) exited or got blocked. The node is going to be brought down if it is holding critical resources.

User response: Diagnose what caused the client to fail.

2523-282 **Daemon not started by the SRC subsystem: exiting.**

Explanation: The system resource controller (SRC) subsystem did not start the daemon. The daemon will terminate because it is only allowed to be run under SRC control. It is possible that one of the topology services startup scripts was run manually.

User response: None.

2523-300 **Refresh operation failed because of errors in machines.lst file.**

Explanation: The refresh operation failed because there is a problem with the new configuration. More details are in the topology services log file. One possible cause for the problem is an IP address that appears to belong to two different adapters.

User response: Correct the configuration problem and invoke the refresh again.

2523-301 **Call to dead_man_sw in kernel extension failed, return code =DMS *return code*, errno = *errno*.**

Explanation: Unable to initialize Dead Man Switch kernel extension. The Dead Man Switch timer will remain inactive.

User response: See the topology services log file for more information and contact the IBM Support Center.

2523-380 **Approximately *lines* lost write attempts failed on file *log file name* previously.**

Explanation: A problem writing to the log file caused some lines to be lost.

User response: Check if the disk is full or if the log file permissions have changed or if there is a lack of system resources.

2523-500 **No extension specified.**

Explanation: No parameter used in haDMS_load.

User response: Routine haDMS_load is called internally by the startup script. Inform the IBM Support Center.

2523-501 **Error *error code* from sysconfig QUERY.**

Explanation: Error in the system call to check whether the kernel extension is loaded.

User response: Inform the IBM Support Center if the topology services daemon fails to start.

2523-502 **sysconfig QUERYLOAD.**

Explanation: Error in the system call to check whether the kernel extension is loaded.

User response: Inform the IBM Support Center if the topology services daemon fails to start.

2523-503 **Could not find a loaded *module name*.**

Explanation: The kernel extension is not currently loaded. This is not an indication of a problem, as the kernel extension will be loaded.

User response: None.

2523-504 Error *error code* from sysconfig LOAD.

Explanation: Error in the system call to load the kernel extension.

User response: Inform the IBM Support Center if the topology services daemon fails to start.

2523-505 sysconfig KULOAD

Explanation: Error in the system call to unload the kernel extension.

User response: Inform the IBM Support Center if the topology services daemon fails to start.

2523-506 Unloaded kernel extension kmid = *module id*.

Explanation: The kernel extension has been unloaded.

User response: None.

2523-507 sysconfig SINGLELOAD.

Explanation: Error in the system call to load the kernel extension.

User response: Inform the IBM Support Center if the topology services daemon fails to start.

2523-510 No kernel module id specified.

Explanation: A parameter is missing in the call to haDMS_unload.

User response: Provide the kernel module id to haDMS_unload.

2523-511 Error *error number* from sysconfig.

Explanation: Error in the system call to unload the kernel extension.

User response: Inform the IBM Support Center if the topology services daemon will not start.

2523-512 Usage: haDMS_stop *DMS timer id*.

Explanation: Program haDMS_stop is used incorrectly. An argument *DMS timer id* is expected. This program is called by the **topsvcs_down_script** and should not be invoked manually.

User response: Inform the IBM Support Center.

2523-513 haDMS_stop: timer id incorrect: *timer id*.

Explanation: Program haDMS_stop is used incorrectly. The timer id passed to haDMS_stop must be between zero and NumTimers. This program is called

by the **topscvc_down_script** and should not be invoked manually.

User response: Inform the IBM Support Center.

2523-514 haDMS_stop: Dead Man Switch timer *timer id* disabled.

Explanation: The given timer has been disabled by the haDMS_stop program. This is the expected behavior.

User response: None.

2523-515 haDMS_stop: must be root.

Explanation: Program haDMS_stop is used incorrectly. This program is called by the **topsvcs_down_script** and should not be invoked manually. This program must be run under root authority.

User response: Inform the IBM Support Center.

2523-516 haDMS_stop: timer was inactive.

Explanation: The Dead Man Switch timer was not enabled when haDMS_stop was invoked. This is the expected behavior if HACMP was started without the Dead Man Switch option.

User response: Inform the IBM Support Center if the Dead Man Switch option was enabled.

2523-517 DMS timer not active for *realm* (PSSP or HACMP/ES)

Explanation: The Dead Man Switch timer is not active. This is the expected behavior if topology services for this realm was not started, or if the Dead Man Switch timer is not enabled.

User response: None.

2523-518 Incorrect data passed to **dms_get_trigger_info() *realm* (PSSP or HACMP/ES)**

Explanation: This is an internal error. Incorrect data was passed to the kernel extension function **dms_get_trigger_info()**.

User response: Contact the IBM Support Center.

2523-519 No memory available for kernel buffers *realm* (PSSP or HACMP/ES)

Explanation: No memory is available to allocate the kernel buffers needed to store the time-to-trigger information of the Dead Man Switch timer.

User response: Contact the IBM Support Center.

2523-520 **Incorrect address passed to `dms_get_trigger_info()` realm (PSSP or HACMP/ES)**

Explanation: This is an internal error. An incorrect pointer address was passed to the `dms_get_trigger_info()` kernel extension function.

User response: Contact the IBM Support Center.

2523-600 **Exit with return code: *Error code*.**

Explanation: The error code that caused HATS to exit. HATS uses it as the exit code.

User response: See the HATS script log for additional information.

2523-601 **Cannot initialize FFDC environment.**

Explanation: FFDC initialization error.

User response: Check if FFDC environment is working.

2523-602 **Cannot find or validate the active partition name using `spget_syspar`.**

Explanation: The `spget_syspar` command cannot find an SP partition name.

User response: Check that you are running on an SP system, and `spget_syspar` is working correctly.

2523-603 **Cannot create directory *directory*.**

Explanation: Cannot create specified directory.

User response: Check if the specified directory is missing or is missing write permissions.

2523-604 **Unable to retrieve node number, exiting.**

Explanation: The program `node_number` returned an error code.

User response: Tool `/usr/lpp/ssp/install/bin/node_number` cannot find the node number. Check to see if the `node_number` program works correctly.

2523-605 **Cannot find the address of the control workstation. `SAVED_CW_IPADDRS:` *saved control workstation IP addresses* `netstat -in`**

Explanation: Cannot find the control workstation IP address to place in the `machines.lst` file. The IP address must correspond to one Ethernet adapter on the control workstation that is on the same subnet as one of the nodes. Use the AIX command, `netstat -in` to verify the problem.

User response: Verify if there is one Ethernet adapter

on the control workstation that is on the same subnet as one of the nodes. Verify the output of the `ifconfig enX` command for all the Ethernet adapters on the control workstation. Verify that the subnet masks are consistent.

2523-606 **Execution of `spk2ck` command failed to generate cluster key file.**

Explanation: There was an error when issuing the `spk2ck` command.

User response: Verify that DCE is installed, configured, and running correctly. Verify that the CtSec:MSS library (`libct_mss.a`) is present. Contact the IBM Support Center if the problem persists.

2523-607 **Partition is not in DCE-only mode.**

Explanation: The active trusted services authentication method in the SP partition is not DCE-only.

User response: Verify that this is desirable.

2523-608 **Command `lsauthpts` failed.**

Explanation: The exit value of the command `lsauthpts` indicates that the command was unsuccessful.

User response: Verify that PSSP is installed. If the problem persists, contact the IBM Support Center.

2523-609 **Unable to start the daemon after *number* retries. Quitting.**

Explanation: Maximum retry count exceeded and still cannot start topology services.

User response: There may be an SDR problem. Look at the error log and the topology services script log for details.

2523-610 **Sleeping for *sleep time in seconds* seconds.**

Explanation: This message is used with message 2523-623. This message (2523-610) informs users of the action that the topology services script takes when message 2523-623 is issued.

User response: Wait the amount of time specified. Topology services will continue as soon as the condition specified in message 2523-623 has been resolved.

2523-611 **Unable to retrieve *machine list* file. Quitting.**

Explanation: Unable to retrieve the `machines.lst` file.

User response: There may be an SDR problem. Look at the error log and the HATS script log for details.

2523-612 **Output from ifconfig *network interface name* has no netmask information.**

Explanation: AIX command **ifconfig** does not give netmask information.

User response: Check the Ethernet adapter configuration on the control workstation.

2523-613 **Cannot find SP system administration network.**

Explanation: The SP system administration network, which is required for SP system operation, must be defined using the SPLAN attribute in the SDR Adapter class. For systems that do not have the SPLAN attribute in the SDR Adapter class, the **en0** network interface is used for the SP system administration network. This message appears when there is no SPLAN attribute in the SDR Adapter class and no **en0** network interface on any node.

This message can also appear if there is no node in the SP system. An SP system administration network is not required in an SP system with no node. In this case, this message is a warning and can be ignored.

User response: Contact the IBM Support Center if the SP system is not nodeless.

2523-620 **Unable to retrieve SDR *SDR class name class log file count*.**

Explanation: It is possible that the SDR server is busy.

User response: If the problem persists, check to see if there is an SDR problem.

2523-621 **Unable to retrieve *name to retrieve from SDR SDR class name class [log file count]*.**

Explanation: It is possible that the SDR server is busy.

User response: If the problem persists, check to see if there is an SDR problem.

2523-622 **Unable to retrieve SDR Adapter subnet attribute *[log file count]***

Explanation: It is possible that the SDR server is busy.

User response: If the problem persists, check to see if there is an SDR problem.

2523-623 **Unable to retrieve SDR file *SDR file name [log file count]***

Explanation: It is possible that the SDR server is busy.

User response: If the problem persists, check to see if there is an SDR problem.

2523-624 **Unable to create SDR file *SDR file name*.**

Explanation: It is possible that the SDR server is busy.

User response: If the problem persists, check to see if there is an SDR problem.

2523-625 **Unable to replace SDR file *SDR file name*.**

Explanation: It is possible that the SDR server is busy.

User response: If the problem persists, check to see if there is an SDR problem.

2523-626 **DMS kernel extension not loaded or has an older version. Loading DMS kernel extension.**

Explanation: Kernel extension is either not currently loaded or has a version that is older than the version required by the topology services daemon. The kernel extension is being reloaded.

User response: None.

2523-627 **Special network *network-name* contains subnets-detected in SDR Subnet class. Should be *subnets-in-SDR-Subnet-class*.**

Explanation: **SPether** is a reserved network name for SP Ethernet networks. **SPswitch** and **SPswitch_1** are reserved network names for SP Switch networks. **SPswitch_2** is a reserved network name for SP Switch2 networks. Topology services detects these network names automatically. You do not need to specify them in the SDR Subnet class. If you specify the subnets for these networks in the SDR Subnet class, the subnets must match the subnets that topology services detects. A subnets mismatch for the reserved networks is a configuration error.

User response: If the reserved networks are configured in SDR Subnet intentionally, use the correct subnets shown in this message. Otherwise, to avoid conflicting with reserved networks, do not use these reserved network names for other networks.

2523-628 **Subnet *subnet* of network *network-name* has been defined in SDR Subnet class.**

Explanation: The subnet of the network *network-name* has been defined as a part of other networks in the SDR Subnet class.

User response: Verify the SDR Subnet class and remove the duplicate subnet definition.

2523-629 **SDR command exits with exit code=*exit-code-of-SDR-command*. Exiting.**

Explanation: The SDR access command exited with an error.

User response: Contact the IBM Support Center.

2523-630 **Cannot remove service entry from */etc/services*.**

Explanation: Error removing entry from */etc/services*.

User response: Check if the file permission of */etc/services* permit write access.

2523-631 **Cannot get system partition name.**

Explanation: Command */usr/lpp/ssp/bin/spget_syspar -n* does not return a valid SP partition name.

User response: Make sure PSSP is installed correctly.

2523-632 **Cannot get system partition IP address.**

Explanation: The */usr/lpp/ssp/bin/spget_syspar -n* command did not return a valid IP address.

User response: Make sure PSSP is installed correctly.

2523-633 **Cannot get node number.**

Explanation: The */usr/lpp/ssp/bin/node_number* command did not return a valid node number.

User response: Make sure PSSP is installed correctly.

2523-634 **Missing command flag.**

Explanation: You must specify one or more flags with this command, but you did not specify any flags on the command line.

User response: Check the command's usage statement for a list of valid flags and then run the command again.

2523-635 **Only one command flag permitted.**

Explanation: You can only specify one flag with this command, but you specified more than one.

User response: Remove the extra flags from the command line and then run the command again.

2523-636 **The *subsystem-name* subsystem must be stopped before removing or remaking it.**

Explanation: The daemon is running. You must stop it before removing or remaking it.

User response: Stop the HATS daemon by issuing the command **hatsctrl -k**.

2523-637 **Port number not in SDR.**

Explanation: The port number used by the HATS daemon must be registered in the SDR.

User response: Issue the command **hatsctrl -a**.

2523-638 **Cannot set port number into */etc/services*.**

Explanation: Error setting port number in */etc/services*.

User response: Check to see if the permissions in */etc/services* allow you to write to the file. Check to see if the given port number may be used by another service.

2523-639 **Unable to retrieve *retrieve data* from SDR.**

Explanation: SDR is busy and cannot supply the requested information.

User response: Try again later.

2523-640 ***daemon path/daemon file name* is not executable.**

Explanation: The daemon must be an executable.

User response: Check if the file permission of the HATS daemon is executable.

2523-641 **Could not add *subsystem name* subsystem to SRC.**

Explanation: The SDR did not allow the subsystem to be written.

User response: Check if the SDR is busy and try again.

2523-642 Could not obtain HACWS status.

Explanation: The command `/bin/lshacws` does not return a valid HACWS status.

User response: Check that PSSP is correctly configured.

2523-643 Could not add *subsystem name* to `/etc/inittab`.

Explanation: Error adding an entry in `/etc/inittab`.

User response: Check to see if the file permissions of `/etc/inittab` allow write access.

2523-644 Cannot verify registration of service name *service name* protocol UDP, port *port number*.

Explanation: Error when verifying the service name that was added previously in `/etc/services` file.

User response: Check if `/etc/services` can be read.

2523-645 Cannot get DCE credentials to update SDR.

Explanation: The command `dsrvtgt` failed to get DCE credential for principal `ssp/spbgroot`. The credential cache file is in `/opt/dcelocal/var/security/creds`.

User response: Check that DCE is properly installed and configured.

2523-646 Refresh operation failed. Details are in the AIX error log and in the hats script log (`/var/ha/log/hats.partition name`).

Explanation: Command `hatsctrl -r` was not successful because of a problem while running the hats script.

User response: You can find more information about the problem in the AIX error log and in the hats script log at `/var/ha/log/hats.partition name`.

2523-647 Halt Callback kernel extension not loaded or has an older version. Loading Halt Callback kernel extension.

Explanation: The kernel extension is either not currently loaded or has a version that is older than the topology services daemon requires. The kernel extension is being reloaded.

User response: None.

2523-650 Unknown parameter *parameter*.

Explanation: An unsupported option is specified.

User response: Type `topsvcs -h` to find out the correct syntax.

2523-651 Cluster designator not valid : *designator*.

Explanation: A valid designator is required for option `-cluster`.

User response: Type `topsvcs -h` to find out the correct syntax.

2523-655 Unable to execute the `odmget HACMPtopsvcs` command.

Explanation: Cannot execute command `odmget HACMPtopsvcs`.

User response: Check if `/bin/odmget` exists and is executable. Check if the HACMPtopsvcs class is present in the ODM.

2523-656 Unable to get the ODM *class class*.

Explanation: Cannot get ODM class.

User response: Check if `/bin/odmget` exists and is executable. Check if the HACMPtopsvcs class is present in the ODM.

2523-657 ERROR: Not enough disk space in *directory-name* (*available-space Kbytes*).

Explanation: There is not enough disk space available to run the topology services startup script.

User response: Clean up space in *directory-name* and if necessary, increase the size of the file system.

2523-658 Command '*command-name*' produced unexpected output: '*output*'.

Explanation: *command-name* has produced unexpected output.

User response: Examine the same log file for other error messages that might be a consequence of this error. Depending on the operating system in use, you might also find such additional messages in the AIX error log or the Linux syslog.

2523-659 ERROR: Unable to create the machine list file, probably because the file system is full.

Explanation: The machine list file could not be created. This message is printed at the end of the machine file creation procedure if a problem occurs when writing the machine list file. Often, this happens

because the file system does not enough space for the machine list file to be written to it.

User response: Make sure the file system has enough space.

2523-660 Unable to execute HACMP utility *utility-name*.

Explanation: The HACMP utility *utility-name* is missing or is not executable.

User response: Check `/usr/sbin/cluster/utilities/` and `/usr/es/sbin/cluster/utilities/` to see if the utility program is there and is executable.

2523-661 File *utility name* does not exist or is not executable.

Explanation: Utility *utility name* is missing or is not executable.

User response: Check `/usr/sbin/cluster/utilities/` and `/usr/es/sbin/cluster/utilities/` to see if the utility program is there and is executable.

2523-662 Error occurred while creating the machine list file.

Explanation: An error occurred when creating the `machines.lst` file.

User response: This message is issued at the end of the creation of the `machines.lst` file, if there is an error. This message is used in conjunction with other detailed messages. See the message issued before this message to find the root cause of the problem.

2523-663 Unable to open file *filename*.

Explanation: Cannot open a file.

User response: Make sure the file to be opened exists and can be read.

2523-664 Node is not in HACMP Mode.

Explanation: The HACMP command `cllsif` is missing or is not executable.

User response: Make sure HACMP is installed correctly.

2523-665 ERROR: Number of networks exceeds limit of *maximum*. Network *network_name* ignored.

Explanation: The number of offsets in the `machines.lst` exceeds the maximum allowed.

User response: Reduce the number of networks in the system.

2523-666 socket port number in `/etc/services` (*port_number*) does not match that in SDR `Syspar_ports` class (*port_number*).

Explanation: The topology services port specified in `/etc/services` does not match the port specified in the SDR `Syspar_ports` class.

User response: If the port number in `Syspar_ports` is incorrect, correct it and restart topology services using `hatsctrl -s`.

If the port number in `/etc/services` is incorrect, restore topology services using `syspar_ctrl -R hats`.

2523-667 Keyfile *security key file name* present but corrupt.

Explanation: Security is supposed to be on, but the key file is somehow corrupted.

User response: Check the security setting of the cluster. Create a new key and refresh the topology services subsystem. If the problem persists, record the above information and contact the IBM Support Center.

2523-670 The installed SP_Switch2 has no `css1` interfaces.

Explanation: The installed SP Switch2 has a two-plane configuration, but it has no `css1` interfaces.

User response: Make sure the switch is configured correctly.

2523-671 There are *number-of-different-switch-types* types of switches installed on the system.

Explanation: More than one type of switch is present in the system.

User response: Make sure the switch is configured correctly.

2523-675 Required network options are not set correctly. Source routing may not work properly.

Explanation: For source routing to work, some network options must be set correctly. There were errors detected when setting these network options.

User response: This message serves as a warning about source routing not set correctly. The network options that could not be set are printed in a separate message. Check the network options and set them to correct values, so that source routing will work properly.

2523-676 **Cannot access system option** *option name*.

Explanation: Some network options need to be turned on when compiling the kernel. Others are implemented as kernel modules and need to be loaded. The network option did not exist or cannot be accessed if it is not turned on at kernel compile time, or loaded at run time.

User response: Check the operating system for the specified network options.

2523-677 **Cannot set system option** *option name* **to** *option value*.

Explanation: The network option exists, but cannot be changed to the specified value.

User response: Check the operating system for the specified network options. Check that the user has permission to change the network option.

2523-678 **System** *operating system/processor* **is not supported.**

Explanation: The operating system or processor architecture specified is not supported.

User response: None.

2523-680 **Unknown command line option** *command line option*.

Explanation: An unsupported option was provided.

User response: Check the command's usage statement for the correct syntax of this program.

2523-681 **At least one command line option is needed.**

Explanation: The user did not specify any command line option. One option is needed.

User response: Check the command's usage statement for supported options.

2523-682 **Only one command line option is permitted.**

Explanation: More than one command line option has been specified. Only one is needed.

User response: Check the command's usage statement for supported options.

2523-683 **Option** *option* **needs an argument.**

Explanation: The option expects an argument but did not get one.

User response: Check the command's usage statement for the correct syntax of this program.

2523-684 **Unrecognized command line options:** *option list* **were given.**

Explanation: A list of unrecognized command line options were given.

User response: Check the command's usage statement for the correct syntax of this program.

2523-685 **Option** *option* **cannot coexist with** *option list*.

Explanation: The listed options are mutually exclusive.

User response: Check the command's usage statement for the correct syntax of this program.

2523-686 **Option** *option* **must be used with** *option_list*.

Explanation: The option can only be used in conjunction with one of the options from the option list given.

User response: Check the command's usage statement for the correct syntax of this program.

2523-687 **Use:** **-V variable:value or -V variable**

Explanation: The use of the **-V** command line option was incorrect.

User response: Check the command's usage statement for the correct syntax of the option.

2523-689 **There are other** *program name* **running. Multiple instances are not supported.**

Explanation: The program has detected other instances of this program that are running.

User response: Wait a few seconds and then run the program again.

2523-690 **Could not get cluster information from** *ct_clusterinfo_path*.

Explanation: Cluster-vital information: cluster name, cluster ID, and node number are provided by the **ct_clusterinfo** command. The operation cannot continue if **ct_clusterinfo** exited with an error.

User response: Check **ct_clusterinfo** to find out why it exited with an error.

2523-691 **Topology Services port number not found by** *ct_hats_info path*.

Explanation: The **ct_hats_info** command did not provide the port number required by the topology services daemon.

User response: Check the **ct_hats_info** command to

find out why the port number is missing.

2523-692 **Extra value** *extra parameter found in the key value of keyword* *key word*.

Explanation: The number of given key values is more than that needed by the key word.

User response: Check the syntax of the key word and give correct key values.

2523-693 **Key word** *key word requires number of key values* **parameters**.

Explanation: The number of key values did not match that required by the key word.

User response: Check the syntax of the key word and give correct key values.

2523-694 **Invalid IP address or interface name** *IP address or network interface*.

Explanation: The IP address of an IP network or the network interface name of a non-IP network is not in correct format.

User response: Check the format of the IP address or interface name.

2523-695 **NETWORK_NAME must be the first line of a network configuration.**

Explanation: A network configuration must start with the NETWORK_NAME key word.

User response: Check the order of network configuration and put the NETWORK_NAME key word in the beginning of the network configuration.

2523-696 **Network** *network name* **redefined**.

Explanation: Each network has a unique network name. The same network name cannot be used for two different networks.

User response: Change one of the networks to a different name.

2523-700 **Cannot discard stale messages:** *error-string*.

Explanation: Cannot instruct topology services daemon to discard incoming stale messages.

User response: Verify if topology services daemon is running.

2523-701 **Cannot accept stale messages:** *error-string*.

Explanation: Cannot instruct topology services daemon to accept incoming stale messages.

User response: Verify that topology services is running.

2523-720 **The Topology Services tunables cannot be queried or changed before the cluster is defined.**

Explanation: The tunable values for topology services are not available until the cluster is defined.

User response: Define the cluster before querying or updating topology services tunables.

2523-721 **Option** *option* **is not a valid option**.

Explanation: An invalid option was entered.

User response: Check the man page or online help for the correct syntax.

2523-722 **Option** *option* **cannot be reused**.

Explanation: The same option appears more than once.

User response: The same option can only be used once. Check the man page or online help for the correct syntax.

2523-723 **Option** *option* **cannot coexist with options -d and -h**.

Explanation: Some options are mutually exclusive.

User response: Check the man page or online help for the correct command syntax.

2523-724 **Option -d cannot coexist with options -f, -s, -p, -l, -m, and -h**.

Explanation: Some options are mutually exclusive.

User response: Check the man page or online help for the correct command syntax.

2523-725 **Option -h cannot coexist with options -f, -s, -p, -l, -m and -d**.

Explanation: Some options are mutually exclusive.

User response: Check the man page or the online help for the correct command syntax.

2523-726 **Options -f, -s, -p, -l, and -m need an extra option.**

Explanation: Some options require a suboption.

User response: Check the man page or the online help for the correct command syntax.

2523-727 ***invalid option is not a valid object. Valid objects are None, Text, Data, Proc, and default.***

Explanation: Only some valid suboptions are allowed.

User response: Valid suboptions are shown in the message itself. For more information, check the man page or online help for the correct syntax of option -m.

2523-728 ***invalid number is not a valid decimal number.***

Explanation: A decimal number is expected for some suboptions.

User response: Check to see if the number contains non-numeric characters.

2523-729 **A valid decimal number is expected.**

Explanation: A decimal number is expected for some suboptions.

User response: Check to see if the number contains non-numeric characters.

2523-730 **Default frequency value is redefined.**

Explanation: Default frequency value cannot be set twice in one **hatstune** command.

User response: Check the man page or the online help for the correct syntax for option -f.

2523-731 **Default sensitivity value is redefined.**

Explanation: Default sensitivity value cannot be set twice in one **hatstune** command.

User response: Check the man page or the online help for correct syntax of option -s.

2523-732 **Frequency value of network *network name* is redefined.**

Explanation: The frequency value of individual network cannot be set twice in one **hatstune** command.

User response: Check the man page or the online help for the correct syntax of option -f.

2523-733 **Sensitivity value of network *network name* is redefined.**

Explanation: The sensitivity value of an individual network cannot be set twice in one **hatstune** command.

User response: Check the man page or the online help for the correct command syntax of option -s.

2523-734 **-r option requires root privilege.**

Explanation: Refresh (-r option) calls **hatsctrl -r**. It requires root authority.

User response: Login as root to use the -r option.

2523-740 **Frequency value *frequency value* is too small. Valid range is [*lower bound/upper bound*].**

Explanation: The given frequency is too small.

User response: The message itself shows the valid range. For more information, check the man page or the online help for the correct syntax of option -f.

2523-741 **Frequency value *frequency value* is too large. Valid range is [*upper bound/lower bound*].**

Explanation: The given frequency is too large.

User response: The message itself shows the valid range. For more information, check the man page or the online help for the correct syntax for option -f.

2523-742 **Sensitivity value *sensitivity value* is too small. Valid range is [*upper bound/lower bound*].**

Explanation: The given sensitivity value is too small.

User response: The message itself shows the valid range. For more information, check the man page or the online help for the correct syntax of option -s.

2523-743 **Sensitivity value *sensitivity value* is too large. Valid range is [*upper bound/lower bound*].**

Explanation: The given sensitivity value is too small.

User response: The message itself shows the valid range. For more information, check the man page or the online help for the correct syntax of option -s.

2523-744 **Priority value *priority value* is too small. Valid range is [*upper bound/lower bound*].**

Explanation: The given priority value is too small.

User response: The message itself shows the valid range. For more information, check the man page or the

online help for the correct syntax for option **-p**.

2523-745 **Priority value** *priority value is too large. Valid range is [upper bound/lower bound].*

Explanation: The given priority value is too large.

User response: The message itself shows the valid range. For more information, check the man page or the online help for correct syntax of option **-p**.

2523-746 **Maximum number of lines in the log files** *maximum number of lines in the log file value is too small. Valid range is [lower bound/upper bound].*

Explanation: The given number of lines in the log file is too small.

User response: The message itself shows valid range. For more information, check the man page or the online help for the correct syntax for option **-l**.

2523-747 **Maximum number of lines in the log files** *maximum number lines in the log files value is too large. Valid range is [lower bound/upper bound].*

Explanation: The given maximum number of lines in the log files is too large.

User response: The message itself shows the valid range. For more information, see the man page or the online help for the correct syntax for option **-l**.

2523-748 **Network name** *network name is not defined.*

Explanation: User tried to tune a HATS tunable value of an unknown network.

User response: Type **hatstune -v** to show all the HATS tunable values.

2523-749 **Cannot get DCE credentials to update SDR.** *rc=return code from dsrvtgt.*

Explanation: The command, **dsrvtgt**, was not successful in getting DCE credential for principal **ssp/spbgroot**. The credential cache file is in **/opt/dcelocal/var/security/creds/**.

User response: Check if DCE is properly installed and configured.

2523-750 **PSSP command** *missing PSSP command is missing. Check if PSSP is installed properly.*

Explanation: PSSP is required for HATS to run in the SP realm.

User response: Make sure that PSSP is installed correctly.

2523-751 **SDR subsystem is not working properly.**

Explanation: PSSP SDR subsystem is required for HATS to run in the SP realm.

User response: Make sure that PSSP is installed correctly.

2523-752 **Error changing attribute values of SDR class TS_Config.**

Explanation: SDR access problem.

User response: Check if the SDR is running by issuing **lssrc -g sdr**. Check if the user has root privilege. The SDR may also be busy. If so, wait a few minutes and retry.

2523-753 **Error changing attribute values of SDR class Network for** *network name.*

Explanation: SDR access problem.

User response: Check if the SDR is running by issuing the **lssrc -g sdr** command. Check if the user has root authority. The SDR may also be busy. If so, wait a few minutes and retry.

2523-754 **Error retrieving SDR class TS_Config.**

Explanation: SDR access problem.

User response: Check if the SDR is running by issuing **lssrc -g sdr**. The SDR or network may be busy. If so, wait for a few minutes and retry.

2523-755 **HATS tunable values can only be changed on the control workstation.**

Explanation: HATS tunable values can be changed only on the control workstation.

User response: Use the control workstation to change the HATS tunable values.

2523-760 **File** *file name does not exist.*

Explanation: The named file is missing.

User response: Check that the file exists.

2523-761 **File** *file name is not readable.*

Explanation: The named file is not readable.

User response: Check that the file is readable.

2523-762 **File** *file name* **is not writable.**

Explanation: The named file is not writable.

User response: Check that the file is writable.

2523-763 **Command** *command name* **is not executable.**

Explanation: The named command is not executable.

User response: Check that the file is executable.

2523-764 *command* **command exited with exit code=***exit code of command***.**

Explanation: The command exited with an error.

User response: Check the command exit code to determine the problem.

2523-765 **Cannot open file** *file name* **for writing.**

Explanation: The **cthatstune** command needs to write data to a file. The file could not be opened successfully.

User response: Check for write access to the file system. Check the file permissions.

2523-766 **Cannot write data to** *file name***.**

Explanation: The **cthatstune** command needs to write data to a file. The file could not be written successfully.

User response: Check that the file system is full.

2523-767 **Cannot open pipe to** *file name***.**

Explanation: The **cthatstune** command needs to transfer data through a pipe. The pipe could not be opened successfully.

User response: If the destination is a file, check that the file can be written. If the destination is a command, see if the number of opened files exceeds the maximum number of opened file allowed in the system.

2523-768 **Cannot pipe data to** *file name***.**

Explanation: The **cthatstune** command needs to transfer data through a pipe. The pipe cannot be written successfully.

User response: If the destination is a file, check that the file can be written and that the file system is not full. If the destination is a command, check that the command is executable.

2523-769 **Cannot close file** *file name***.**

Explanation: The **cthatstune** command needs to close a file after use. The file cannot be closed successfully.

User response: An I/O error occurred. Check that the file system works correctly.

2523-770 **Cannot rename file** *original file name* **to** *new file name***.**

Explanation: The original file name cannot be changed to the new file name.

User response: Check for write access to the file system and directory.

2523-771 *"command_name"* **command exited with exit code=***code***. Ensure cluster is online before trying command again.**

Explanation: Command processing ended with the indicated exit code.

User response: Check the command exit code to determine the reason for failure. Also make sure that the cluster is online before you reissue the command.

2523-775 **Command line option** *command line option* **needs an argument.**

Explanation: None.

User response: Type **cthatstune -h** for the correct syntax for the option.

2523-776 **Unrecognized command line options:** *command line option***.**

Explanation: None.

User response: Type **cthatstune -h** for the correct syntax.

2523-777 **Command line option** *command line option* **is mutually exclusive with all other options.**

Explanation: None.

User response: Type **cthatstune -h** for the correct syntax.

2523-778 **Command line option** *command line option* **cannot be used with** *command line option list***.**

Explanation: None.

User response: Type **cthatstune -h** for the correct syntax.

2523-779 *invalid character cannot be used with command line option `command line option`.*

Explanation: Some special characters have special meanings and cannot be used with some command line options. For example, ':' (colon) is used as the delimiter between a command line option and its value. It should not be used with command line options that do not have a value.

User response: Type `ctthatstune -h` for the correct syntax.

2523-780 **Extra parameter** *extra parameter in tunable `tunable`.*

Explanation: The tunable was given more parameters than it needs.

User response: Type `ctthatstune -h` for the correct syntax.

2523-781 *key value is not a valid value for tunable `key word`.*

Explanation: The value is not valid for the tunable parameter.

User response: Check the `ctthatstune` man page for the valid values for the tunable.

2523-782 **Global tunable** *tunable name redefined.*

Explanation: The topology services global tunable can only be defined once. It is an error to define a tunable multiple times.

User response: Remove the redefined tunable setting.

2523-783 **Per-network tunable** *tunable name redefined for network `network name`.*

Explanation: The topology services per-network tunable can only be defined once. It is an error to define a tunable multiple times.

User response: Remove the redefined tunable setting for the network.

2523-784 **Network name must be specified before per-network tunable** *tunable name can be set.*

Explanation: Per-network tunables are associated with specific networks. The network name must be specified before per-network tunables can be set.

User response: The `NETWORK_NAME` key word must be specified before a per-network tunable in the topology services configuration.

2523-785 **Could not get cluster information from** *`ct_clusterinfo` path.*

Explanation: Cluster-vital information: cluster name, cluster ID, and node number are provided by the `ct_clusterinfo` command. The operation cannot continue if `ct_clusterinfo` exits with an error.

User response: Check `ct_clusterinfo` to determine why it exited with an error.

2523-786 **Refresh failed. New tunable values did not take effect on all nodes.**

Explanation: Tunable changes did not take effect because either the topology services daemon was not active, or there was a problem with the new configuration file.

User response: Examine the contents of the startup script log for more details.

2523-801 **Cannot load kernel extension** *kernel-extension-path. Error `errno-value` in `sysconfig()`.*

Explanation: An error occurred when loading the kernel extension to pin the shared libraries and shared memory into memory. The daemon will not be able to pin these areas, but should otherwise run properly.

User response: Contact the IBM Support Center.

2523-850 **Unable to store Topology Services configuration file** *file name to repository using `command`. Exit code=`exit code`.*

Explanation: The repository is not accessible, perhaps because it is busy.

User response: In a PSSP environment: if the problem persists, check for an SDR problem. In an RSCT peer domain: check for a problem with the configuration resource manager.

2523-851 **Unable to retrieve Topology Services configuration file** *file name from repository using `command`. Exit code=`exit code`.*

Explanation: The repository is not accessible. Maybe the repository is busy.

User response: In a PSSP environment: if the problem persists, check for an SDR problem. In an RSCT peer domain: check for a problem with the configuration resource manager.

2523-852 **Refresh operation failed. Details are in *hats script log file name*.**

Explanation: Command **hatsctrl -r** failed because of a problem while running the hats script.

User response: More information about the problem can be found in the hats script log file, whose pathname is shown in the message.

2523-855 **Cannot have a trailing , in key value *key value*.**

Explanation: Multiple key values can be separated by ',' (comma). Comma ',' should not be the last character of a list of key values. An extra ',' (comma) usually appears when the last key value is missing.

User response: Check that the last key value is missing.

2523-856 **Numeric value *key value* contains non-numeric characters.**

Explanation: A numeric value must consist of only numeric characters.

User response: Remove the non-numeric characters from the key value.

2523-857 **The key value of key word *key word* is missing.**

Explanation: A value must be given to the key word.

User response: Give a key value for the key word.

2523-858 ***key value* is not a valid value for variable *key word*.**

Explanation: The key value is not valid for the key word.

User response: Check the man page of the command for valid values of the key word.

2523-859 **Key word *key word* was redefined.**

Explanation: The topology services configuration key words can be defined only once. It is an error to define a key word multiple times.

User response: Remove the redefined key word.

2523-860 **Unknown key word *key word*.**

Explanation: The given key word is not a known key word.

User response: Check the man page for correct syntax.

2523-865 **Cannot access directory *directory name*.**

Explanation: The named directory is not accessible.

User response: Check that the directory exists. If it exists, check that the access permission is opened for the user.

2523-866 **File *file name* does not exist.**

Explanation: The named file is missing.

User response: Check that the file exists.

2523-867 **File *file name* is not readable.**

Explanation: The named file is not readable.

User response: Check that the file is readable.

2523-868 **File *file name* is not writable.**

Explanation: The named file is not writable.

User response: Check that the file is writable.

2523-869 **Command *command name* is not executable.**

Explanation: The named command is not executable.

User response: Check that the file is executable.

2523-870 **Command *command-name* not found in paths *path-names*.**

Explanation: A command must be in the search paths to be invoked. The specified command does not exist in the path, and therefore cannot be run.

User response: Check that the command is correctly installed.

2523-871 ***command-name* command exited with exit code=*code*.**

Explanation: The command exited with an error.

User response: Check the command exit code to determine the cause of the problem.

2523-890 **ERROR: Network type: *network_type*
The value *heartbeat_rate* for the
heartbeat rate is out of range. The
value should be at least
min_allowed_rate and no more than
max_allowed_rate.**

Explanation: The heartbeat rate does not fall in the correct range.

User response: Change the heartbeat rate of the network to within the valid range.

2523-891 **ERROR: Network type:** *network_type*
The value *failure_cycle_value* for the failure cycle is out of range. The value should be at least *min_allowed_cycle* and no more than *max_allowed_cycle*.

Explanation: The failure cycle does not fall in the correct range.

User response: Change the failure cycle of the network to within the valid range.

2523-892 **ERROR: Network type:** *network_type*
The baud value *value* in the NIM parameters is incorrect. The value should be 9600, 19200, or 38400.

Explanation: The NIM baud parameter is not one of the valid choices for rs232.

User response: Change the rs232 baud rate to a valid value.

2523-893 **ERROR: Network type:** *network_type*
The value *grace_period_value* for the grace period is out of range. The value should be at least *min_allowed_value* and no more than *max_allowed_value*.

Explanation: The grace period does not fall in the correct range.

User response: Change the grace period of the network to a value that is within the valid range.

2523-894 **ERROR: Network name:** *network_name*
An interface with address *interface_address* has no name. Topology Services requires interfaces to be named.

Explanation: The *machines.lst* file was generated with a missing interface name. This could be caused by a network configuration error.

User response: Run *smitty cm_update_hacmp_interface_with_aix_settings* and then synchronize the cluster so HACMP can re-harvest the interfaces. If the problem persists, contact the IBM Support Center.

2523-895 **ERROR: Network type:** *network_type*
The string entered in the parameters field of the rs232 NIM module is incomplete or contains errors. Acceptable format is the following:

[*-l* <*debug_level*>] [<*baudrate*>[*'a'*]]

Explanation: The NIM parameters field does not match the accepted form of input.

User response: Check the values and re-enter them correctly.

2523-896 **ERROR: Network type:** *network_type*
The debug level *debug_level* specified after the *-l* flag in the NIM parameters field is outside the normal range of 3-20, and matches one of the accepted baud rates for the rs232 NIM:

9600, 19200, 38400

The debug level must be the first numeric value after the *-l* flag (*-l 10*), even when a baud rate is specified as well (*-l 10 9600*).

Explanation: The NIM debugging level is outside of the valid range and matches a known baud rate, so it is probable that a baud rate was entered incorrectly.

User response: On the command line, specify the baud rate with no *-l* flag preceding it, or, enter the *-l* flag followed by a valid value for the debugging level, and then specify the baud rate.

Chapter 10. 2525: High availability services

When an error occurs, the high availability services component issues one or more messages with a prefix of **2525**.

**2525-000 Cannot display message from script:
missing arguments (*argument count*).**

Explanation: The specified program is used by scripts to display informational or error messages. A script has called the program with too few arguments. This indicates an error in the script.

User response: Record the information in this message and the name of the program you were running at the time this error was displayed. Contact the IBM Support Center.

**2525-001 Cannot display message from script:
set name too long (*set name*).**

Explanation: Scripts use this program to display informational or error messages. A script has called the program with a set name that was too long. This indicates an error in the script.

User response: Record the information in this message and the name of the program you were running at the time this error was displayed. Contact the IBM Support Center.

**2525-002 Cannot display message from script:
catalog name too long (*catalog name*).**

Explanation: Scripts use this program to display informational or error messages. A script has called the program with a catalog name that was too long. This indicates an error in the script.

User response: Record the information in this message and the name of the program you were running at the time this error was displayed. Contact the IBM Support Center.

**2525-003 Cannot display message from script:
message name too long (*message name*).**

Explanation: Scripts use this program to display informational or error messages. A script has called the program with a message name that was too long. This indicates an error in the script.

User response: Record the information in this message and the name of the program you were running at the time this error was displayed. Contact the IBM Support Center.

**2525-004 Cannot display message from script:
improperly formed catalog name
(*catalog name*).**

Explanation: Scripts use this program to display informational or error messages. A script has called the program with a catalog name that was not in correct format. This indicates an error in the script.

User response: Record the information in this message and the name of the program you were executing at the time this error was displayed. Contact the IBM Support Center.

**2525-005 Cannot display message from script:
cannot open message map file
message map file name.**

Explanation: Scripts use this program to display informational or error messages. The program could not open the specified message map file.

User response: Verify that the message map file is present and readable. If the file is not present, reinstall the LP that contains the program you were running at the time this error was displayed. If this does not resolve the problem, reinstall prerequisite LPs.

If the message map file is present but not readable, use the **chmod** command to make it readable. If the problem persists, Record the information in this message and contact the IBM Support Center.

**2525-006 Cannot display message from script:
error in message map file *file-name* at
line *number*.**

Explanation: Scripts use this program to display informational or error messages. The program found an error in the specified message map file.

User response: Record the name of the program you were executing at the time this error was displayed, the name of the message map file and the line number in error. Contact the IBM Support Center.

**2525-007 Cannot display message from script:
cannot find message name *message name*.**

Explanation: The specified program is used by scripts to display informational or error messages. A script has called the program with a message name that does not exist in the associated map file. This indicates an error in the script.

User response: Record the information in this message and the name of the program that you were running at the time this error was displayed. Contact the IBM Support Center.

**2525-100 Unknown or incorrect parameter
 parameter is specified.**

Explanation: The parameter specified is unknown or incorrect.

User response: Correct the parameter and run the command again.

2525-101 No argument is specified.

Explanation: No argument is specified.

User response: Specify an argument.

2525-102 More than one argument is specified.

Explanation: More than one argument is specified.

User response: Specify only one argument.

**2525-103 The cluster environment name *name* is
 not properly established**

Explanation: The cluster environment (**cfgmgr**, for example) is not established.

User response: Check the specified cluster environment variable.

**2525-104 A current cluster or node definition file
 name not found.**

Explanation: The current cluster or node definition file (**nodedef.cfg**, for example) was not found.

User response: Check to see if the specified file exists.

2525-105 cluster *name* does not exist.

Explanation: The specified cluster does not exist.

User response: Check to see whether the cluster is defined.

2525-106 Unknown fields *field1 field2*.

Explanation: Unknown fields are specified.

User response: Specify the correct fields.

2525-107 There is no output from repository.

Explanation: There is no output from the repository.

User response: Check the cluster data repository.

2525-108 Cannot open the file *file-name*.

Explanation: The specified file cannot be opened.

User response: Check to see if the file exists.

**2525-109 This node is already defined to a peer
 domain cluster.**

Explanation: This error occurs when an attempt is made to include the specified node in a peer domain that is not compatible with a GPFS cluster on Linux.

User response: Remove the node from the peer domain and try this operation again.

Chapter 11. 2602: Configuration resource manager commands

When an error occurs, a configuration resource manager command issues one or more messages with a prefix of **2602**.

2602-001 Not a recognized flag: *flag*.

Explanation: An unsupported flag or an incorrect combination of flags was specified.

User response: Refer to the usage statement, which lists the valid flags. Correct the command and run it again.

2602-002 Not a recognized operand: *operand*.

Explanation: An unsupported operand or an incorrect combination of operands was specified.

User response: Refer to the usage statement, which lists the valid operands. Correct the command and run it again.

2602-003 The combination of *flag* and *flag-or-operand* is not allowed.

Explanation: The combination of the specified flags or flag and operand is not allowed.

User response: Either choose a different flag or do not enter the operand. Refer to the usage statement, which lists the valid flags, operands, and flag-operand combinations. Correct the command and run it again.

2602-004 Invalid number of operands.

Explanation: A non-valid number of operands were specified.

User response: Refer to the usage statement for the command, which lists the valid operands. Correct the command and run it again.

2602-005 The *flag* flag is required.

Explanation: The indicated flag must be specified when using this command.

User response: Correct the command and run it again.

2602-006 The *flag* flag requires an operand.

Explanation: You need to specify an operand with *flag* when you use this command.

User response: Correct the command and run it again.

2602-007 The *flag* flag does not use an operand.

Explanation: The indicated flag must be specified without an operand.

User response: Correct the command and run it again.

2602-008 An unexpected RMC error occurred. The RMC return code was *code*.

Explanation: A call to a Resource Monitoring and Control command-line interface (RMC CLI) script returned an unexpected error.

User response: Check to see if RMC is operational and run the command again.

2602-013 *error_exit* received an unexpected return code *return_code*.

Explanation: All Configuration Resource Manager return codes should be converted to an appropriate Configuration Resource Manager command-line interface return code.

User response: This is an internal script error and should not occur. If this message is issued, an error did occur. The actual API return code or other internal subroutine return code is displayed. This is a severe error, and processing of the command stops. Report the command name, and this message, to the IBM Support Center.

2602-021 There are no nodes in the peer domain or an online peer domain does not exist.

Explanation: There are no nodes in the peer domain or an online peer domain does not exist. The command cannot be run on this node.

User response: Check that the command is being run on a node that is online to the target peer domain and run the command again.

2602-022 Unable to read the input file *file_name*: *file_error*

Explanation: The file name specified to use for node names cannot be read. The error reason is contained in the message.

User response: Take corrective steps to resolve the error reason.

2602-023 The number of node names does not

match the number of node numbers.

Explanation: The number of node names in the file does not match the number of node numbers.

User response: Check that there are the same number of node names as there are node numbers.

2602-024 The quorum type specified, *quorum_type*, is not correct or not allowed.

Explanation: The quorum type specified is not a valid quorum type or is not allowed for the configuration.

User response: Check the quorum type value and run the command again.

2602-025 An unexpected return code of *code* was received by the command.

Explanation: The command received an unexpected return code from a process.

User response: Report this problem to your software service organization.

2602-026 The *flag_1* flag cannot be used unless the *flag_2* flag is specified.

Explanation: *flag_1* can only be used if *flag_2* is also specified.

User response: See the command's man page or usage statement and run the command again with the correct flags.

2602-027 The peer domain operation did not complete within the time specified.

Explanation: A peer domain operation was requested to complete within a specified amount of time, but it did not.

User response: None. The operation continues.

2602-041 The peer domain *peer_domain_name* already exists.

Explanation: The peer domain specified already exists.

User response: Check the peer domain name and run the command again.

2602-042 The peer domain name cannot be IW.

Explanation: The peer domain name cannot be IW.

User response: Use a different name for the peer domain name and run the command again.

2602-043 The peer domain name *peer_domain_name* cannot contain spaces.

Explanation: The peer domain name cannot contain spaces.

User response: Use a different name for the peer domain name and run the command again.

2602-044 The node name *node_name* cannot be resolved.

Explanation: The node name could not be resolved to a DNS host name. The peer domain cannot be defined.

User response: Check the node name in error and run the **mkrpdomain** command again.

2602-045 The peer domain shared secret key refresh interval is not valid.

Explanation: The peer domain shared secret key refresh interval specified for the **-r** flag is not valid. The values must be integers.

User response: Check the refresh interval and run the **mkrpdomain** command again.

2602-046 Unable to read the input file *file_name*: *file_error*

Explanation: The file name specified to use for node names cannot be read. The error reason is contained in the message.

User response: Take corrective steps to resolve the error reason.

2602-047 The peer domain name can only contain the following characters: A-Z, a-z, 0-9, . (period), and _ (underscore).

Explanation: The peer domain name contains one or more characters that are not allowed. The name can contain only the following characters:

- A-Z
- a-z
- 0-9
- . (period)
- _ (underscore)

User response: Correct the name and reissue the command.

2602-048 A temporary file needed to process the input data could not be created. *file_error*.

Explanation: A temporary file is required to process the input to this **mkrpdomain** command. While attempting an operation to the temporary file, an error occurred. The file error is included in the error message.

User response: Resolve the reason for the file error and run the command again.

2602-049 **The -k flag must be specified when the -r flag is used.**

Explanation: The -r flag was used, but the -k flag was not specified. The -r flag requires that the -k flag is also specified.

User response: See the **mkrpdomain** man page for information about valid flags and operands and run the command again.

2602-061 **The peer domain *peer_domain_name* was not found and cannot be removed.**

Explanation: The peer domain name specified in the **rmrpdomain** command was not found. It cannot be removed.

User response: Check the peer domain name and run the command again.

2602-101 **The peer domain *peer_domain_name* was not found.**

Explanation: The peer domain name specified in the **lsrpdomain** command was not found.

User response: Check the peer domain name and run the command again.

2602-121 **The peer domain *peer_domain_name* was not found and cannot be started.**

Explanation: The peer domain name specified in the **startrpdomain** command was not found. It cannot be started.

User response: Check the peer domain name and run the command again.

2602-122 **The peer domain *peer_domain_name1* cannot be started because *node_name* is online to the peer domain *peer_domain_name2*.**

Explanation: The peer domain name specified in the **startrpdomain** command cannot be started because the node is online to a different peer domain. A node can be online to only one peer domain.

User response: Check the peer domain name and determine if a **stoprpdomain** or **rmrpdnode** command is required.

2602-123 **The timeout value *timeout* is not valid.**

Explanation: The **startrpdomain** timeout value specified using the -t flag is not valid. The value must be a positive integer.

User response: Correct the timeout value and run the command again.

2602-124 ***value* is not a valid timeout value.**

Explanation: The timeout value specified for the -s option is not valid. The timeout value is the number of seconds for the command to wait for the operation to complete. It is an integer greater than or equal to 0.

User response: Check the value and run the command again.

2602-141 **The peer domain *peer_domain_name* was not found and cannot be stopped.**

Explanation: The peer domain name specified in the **stoprpdomain** command was not found. It cannot be stopped.

User response: Check the peer domain name and run the command again.

2602-142 ***value* is not a valid timeout value.**

Explanation: The timeout value specified for the -s option is not valid. The timeout value is the number of seconds for the command to wait for the operation to complete. It is an integer greater than or equal to 0.

User response: Check the value and run the command again.

2602-161 **The node name *node_name* cannot be resolved.**

Explanation: The node name could not be resolved to a DNS host name.

User response: Check the node name in error and run the **addrpdnode** command again.

2602-162 ***node_name* is already defined in the online peer domain.**

Explanation: The node specified is already defined to the online peer domain and cannot be added again.

User response: Check the node name and run the **addrpdnode** command again if the node is not in the online peer domain.

2602-181 ***node_name* is not in the online peer domain.**

Explanation: The node that is to be removed from the online peer domain is not defined to the online peer domain, so it cannot be removed.

node_name must be entered in exactly the same format as it was previously specified as a parameter of the **addrpdnode** command or the **mkrpdomain** command.

User response: Specify *node_name* in the correct

format and run the command again.

2602-182 *node_name* is not offline to the peer domain.

Explanation: The node specified to be removed from the online peer domain is not offline to the peer domain. It cannot be removed while it is online.

User response: Run the **stoprpnod** command to take the node offline and then rerun the **rmrpnod** command to remove it from the peer domain.

2602-201 The node *node_name* was not found in the online peer domain.

Explanation: The node specified was not found in the online peer domain.

User response: Check the name of the node and run the command again.

2602-221 *node_name* cannot be started because it is already online.

Explanation: The node specified in the **startrpnod** command cannot be started because it is already online.

User response: None.

2602-222 *node_name* is not in the online peer domain.

Explanation: The node that is to be started is not defined to the online peer domain, so it cannot be started.

node_name must be entered in exactly the same format as it was previously specified as a parameter of the **addrpnod** command or the **mkrpdomain** command.

User response: Specify *node_name* in the correct format and run the command again.

2602-223 *value* is not a valid timeout value.

Explanation: The timeout value specified for the **-s** option is not valid. The timeout value is the number of seconds for the command to wait for the operation to complete. It is an integer greater than or equal to 0.

User response: Check the value and run the command again.

2602-241 *node_name* is not in the online peer domain.

Explanation: The node that is to be stopped is not defined to the online peer domain, so it cannot be stopped.

node_name must be entered in exactly the same format as it was previously specified as a parameter of the

addrpnod command or the **mkrpdomain** command.

User response: Specify *node_name* in the correct format and run the command again.

2602-242 *node_name* is not online in the peer domain.

Explanation: The node specified to be stopped is not online in the peer domain. It cannot be stopped.

User response: Check the name of the node and run the command again.

2602-243 *value* is not a valid timeout value.

Explanation: The timeout value specified for the **-s** option is not valid. The timeout value is the number of seconds for the command to wait for the operation to complete. It is an integer greater than or equal to 0.

User response: Check the value and run the command again.

2602-261 A communication group with the name *communication_group* already exists.

Explanation: A communication group with the name specified already exists.

User response: Check the communication group name and run the command again.

2602-262 *sensitivity* is not a valid sensitivity value.

Explanation: The sensitivity value specified for the **-s** option is not valid. The sensitivity value is an integer value greater than or equal to 2.

User response: Check the value and run the command again.

2602-263 *period* is not a valid period value.

Explanation: The period value specified for the **-p** option is not valid. The period value is an integer value greater than or equal to 1.

User response: Check the value and run the command again.

2602-264 *priority* is not a valid priority value.

Explanation: The priority value specified for the **-t** option is not valid. The priority value is an integer value greater than or equal to 1.

User response: Check the value and run the command again.

2602-265 *exclude is not a valid exclude communication feature value.*

Explanation: The exclude communication feature value specified for the **-x** option is not valid. Any combination of **b** to exclude broadcast and **r** to exclude source routing is valid.

User response: Check the value and run the command again.

2602-266 *interface is not a valid interface specification for the flag flag.*

Explanation: The interface specification in the interface name specification does not correspond to a valid interface. A valid interface specification is **n**.

User response: Use the **chcomg** command to set an interface resource to use a communication group.

2602-267 *interface is not a valid interface specification for the selection string.*

Explanation: The interface specification at the beginning of the select string does not correspond to a valid interface. A valid interface specification is **n**.

User response: Use the **chcomg** command to set an interface resource to use a communication group.

2602-268 **No interface resource was found.**

Explanation: The communication group was created but the interface resource specified for the communication group could not be found.

User response: Use the **chcomg** command to set an interface resource to use a communication group.

2602-281 **The communication group *group_name* was not found and cannot be removed.**

Explanation: The communication group name specified in the **rmcomg** command was not found. It cannot be removed.

User response: Check the communication group name and rerun the command.

2602-282 **The communication group cannot be removed. It is referenced in the *resource_class* class.**

Explanation: The communication group name specified in the **rmcomg** command is referred to in the resource class indicated. The communication group cannot be removed.

User response: Remove the reference to the communication group name and run the command again.

2602-301 **The communication group *group_name* was not found and cannot be changed.**

Explanation: The communication group name specified in the **chcomg** command was not found. It cannot be changed.

User response: Check the communication group name and run the command again.

2602-302 *sensitivity is not a valid sensitivity value.*

Explanation: The sensitivity value specified for the **-s** option is not valid. The sensitivity value is an integer value greater than or equal to 2.

User response: Check the value and rerun the command.

2602-303 *period is not a valid period value.*

Explanation: The period value specified for the **-p** option is not valid. The period value is an integer value greater than or equal to 1.

User response: Check the value and rerun the command.

2602-304 *priority is not a valid priority value.*

Explanation: The priority value specified for the **-t** option is not valid. The priority value is an integer value greater than or equal to 1.

User response: Check the value and rerun the command.

2602-305 *exclude is not a valid exclude communication feature value.*

Explanation: The exclude communication feature value specified for the **-x** option is not valid. Any combination of **b** to exclude broadcast and **r** to exclude source routing is valid.

User response: Check the value and rerun the command.

2602-306 *interface is not a valid interface specification for the flag flag.*

Explanation: The interface specification in the interface name specification does not correspond to a valid interface. A valid interface specification is **n**.

User response: Use the **chcomg** command to set an interface resource to use a communication group.

2602-307 *interface* is not a valid interface specification for the selection string.

Explanation: The interface specification at the beginning of the select string does not correspond to a valid interface. A valid interface specification is **n**.

User response: Use the **chcomg** command to set an interface resource to use a communication group.

2602-308 **No interface resource was found.**

Explanation: The communication group was created but the interface resource specified for the communication group could not be found.

User response: Use the **chcomg** command to set an interface resource to use a communication group.

2602-321 **The communication group name is required when *flag* is specified.**

Explanation: The communication group name is required when the **-i** flag is specified.

User response: Run the command again with the communication group name.

2602-322 **The communication group *communication_group* was not found in the online peer domain.**

Explanation: The communication group specified was not found in the online peer domain.

User response: Check the name of the communication group and run the command again.

2602-323 **The communication group *communication_group* does not belong to a network interface.**

Explanation: The communication group specified does not belong to a network interface.

User response: Check the name of the communication group and run the command again.

2602-341 **The node name *node_name* cannot be resolved.**

Explanation: The node name could not be resolved to a DNS host name. It will not be prepared to join the peer domain.

User response: Run the command again with a valid node name.

2602-342 **Trusted host list file update for *node_name* failed with return code *code*.**

Explanation: The trusted host list file could not be updated with the public key for *node_name*.

User response: Fix the error indicated by *code* and run the command again.

2602-343 **Enabling RMC remote connections failed with return code *code*.**

Explanation: The RMC remote sessions were not enabled.

User response: Fix the error indicated by *code* and run the command again.

2602-344 **Unable to obtain the public key from *node_name*.**

Explanation: The command was unable to obtain the public key for *node_name*.

User response: Fix the error indicated by *code* and run the command again.

2602-345 **The RMC access control file update was not successful.**

Explanation: The update to the RMC access control file (**/var/ct/cfg/ctrmc.acls**) was not successful.

User response: Check the file for errors and run the command again.

2602-346 **RMC could not be refreshed.**

Explanation: The RMC refresh to configure the latest access control changes was not successful. The updates are not in effect.

User response: Fix the error indicated by *code* and run the command again.

2602-347 **Unable to process the access control file *file_name*: *file_error***

Explanation: The RMC access control file (**/var/ct/cfg/ctrmc.acls**) could not be processed.

User response: Check *file_error* for the reason the error occurred and take corrective steps to resolve the error.

2602-348 **The access control file could not be modified.**

Explanation: An error occurred when attempting to update the RMC access control file (**/var/ct/cfg/ctrmc.acls**). The file could not be modified. Additional error messages may be displayed.

User response: Take corrective steps to resolve the error.

2602-349 Public key obtained from *node_name* is not valid.

Explanation: The **PublicKey** attribute value retrieved from *node_name* is not valid. Check the **HostPublic** class on *node_name*.

User response: Specify a valid **PublicKey** attribute value and run the **preprnode** command again.

2602-362 The command line flag *flag_name* is not recognized.

Explanation: Either the specified flag is not supported or an incorrect domain name was specified.

User response: Run the command with **-h** flag to view the correct syntax and then run it again with a valid flag, or run it again with a valid domain name.

2602-363 The domain named *domain_name* is not configured to be online.

Explanation: The specified domain name is not configured to be online.

User response: Configure the domain and run the command again, or run it again with a valid domain name.

2602-364 The configuration file *file_name* was not updated correctly.

Explanation: The file does not contain the expected contents.

User response: Make sure there is enough space available on the **/var** file system.

2602-365 The domain named *domain_name* is invalid.

Explanation: The specified peer domain does not exist.

User response: Specify a valid peer domain name and run the command again.

2602-366 The cluster configuration file was not found.

Explanation: The cluster configuration file does not exist.

User response: Take corrective steps to resolve the error.

2602-367 Underlying RMC error. The "IW" identifier was not found.

Explanation: The independent workstation identifier (IW) is missing from the clusters file.

User response: Take corrective steps to resolve the error.

Chapter 12. 2610: Resource monitoring and control (RMC)

When an error occurs, the resource monitoring and control (RMC) subsystem issues one or more messages with a prefix of **2610**.

2610-201 **The peer daemon on node *node_number* is not responding to Group Services.**

Explanation: The Resource Monitoring and Control daemon on the specified node has not answered a Group Services responsiveness request within 120 seconds.

User response: The Resource Monitoring and Control daemon on the specified node should eventually terminate and then be restarted. If it does not, the administrator must terminate the unresponsive daemon using the **kill** command. The process ID of the daemon can be determined by issuing the command **lssrc -s ctrmc**.

Until the daemon on the specified node is stopped or restarted, no other Resource Monitoring and Control daemon can join the RMC peer group and provide services.

2610-202 **The system call *system_call_name* returned the error (*error_number*) *error_string*.**

Explanation: The specified system call failed with the specified error. The RMC continues to run.

User response: Record the above information and contact your software service organization.

2610-203 **The socket connection type *socket_type* rejected. There are too many open descriptors.**

Explanation: The Resource Monitoring and Control daemon rejected a socket connection of the indicated type due to insufficient available file descriptors:

- Type 'C': connection from client
- Type 'R': connection from or to a resource manager

User response: Terminate unnecessary Resource Monitoring and Control client applications.

2610-204 **The client connection is closed due to incorrect message (*message_code*).**

Explanation: As a result of receiving an incorrect message, the resource monitoring and control daemon closed a client connection. This error:

- most likely occurred because a process tried to connect to the resource monitoring and control subsystem without using the RMC API properly

- could indicate an attempt to breach the security of the system
- could be the result of unusually long network delays

User response: Make sure that there are no applications trying to connect to the RMC daemon without using the RMC API properly and that connections to the RMC daemon are issued from trusted or permitted hosts. See the *RSCT: Diagnosis Guide* for more information.

2610-205 **Cannot get the user ID for the user name *user_name* that is specified for the resource manager *resource_manager_name*, the error is (*error_number*) *error_string*.**

Explanation: The Resource Monitoring and Control daemon could not obtain the user ID for the indicated user name that is associated with the specified resource manager. The error number and error string indicate the error, which was returned by the **getpwnam()** subroutine.

As a result of this error, the RMC daemon could not issue the **start** command for the specified resource manager.

User response: Attempt to correct the problem indicated by the error number. If it cannot be corrected, record the above information and contact your software service organization.

2610-206 **Cannot get the group name associated with the user name *user_name* that is specified for the resource manager *resource_manager_name*, the error is (*error_number*) *error_string*.**

Explanation: This is an obsolete message.

User response: Record the above information and contact your software service organization.

2610-207 **Cannot get the group ID for the group name *group_name* that is associated with the resource manager *resource_manager_name*, the error is (*error_number*) *error_string*.**

Explanation: This is an obsolete message.

User response: Record the above information and contact your software service organization.

2610-208 **The *system_call_name* system call is unsuccessful when operating on the *directory_path* directory, the error is (*error_number*) *error_string*.**

Explanation: The Resource Monitoring and Control daemon could not successfully run the indicated system call using the specified directory. The error number and error string indicate the error.

User response: Attempt to correct the problem indicated by the error number. If it cannot be corrected, record the above information and contact your software service organization.

2610-209 **The *system_call_name* system call is unsuccessful with error *error_number* - *error_message* when loading *load_module_name*. Additional error information: *additional error information*.**

Explanation: The indicated system call failed when attempting to load the specified load module. Additional error information may follow.

User response: Attempt to correct the problem indicated by the error number. If it cannot be corrected, record the above information and contact your software service organization.

2610-210 **Output from the Resource Manager *resource_manager_name* start command: *command_output*.**

Explanation: The specified resource manager's **start** command returned the listed output.

User response: If the **start** command output indicates an error, correct it. Otherwise, this output is informational only.

2610-211 **Incomplete Resource Manager ID notification is detected.**

Explanation: A resource manager connected to the Resource Monitoring and Control daemon but did not send a complete Resource Manager ID notification before disconnecting.

User response: Check all configured resource managers for errors. If no errors are found, record the above information and contact your software service organization.

2610-212 **Incorrect Resource Manager ID notification is detected (*additional error information*).**

Explanation: A resource manager connected to the Resource Monitoring and Control daemon and sent an incorrect Resource Manager ID notification.

User response: Check all configured resource

managers for errors. If no errors are found, record the above information and contact your software service organization.

2610-213 **Cannot connect to resource manager *resource_manager_name*, error is (*error_number*) *error_message*.**

Explanation: The Resource Monitor and Control daemon could not connect to the specified resource manager.

User response: Contact the IBM Support Center if the named resource manager is supplied by IBM. Otherwise, contact the vendor that supplied the resource manager. Also, examine the error log for any error messages from the named resource manager.

2610-214 **An incorrect message was received from the resource manager *resource_manager_name*. Error is (*error_index*) *error_code*. Message dump file is *message_dump_file_name*.**

Explanation: The specified resource manager sent a message to the Resource Monitoring and Control daemon that contained incorrect data. A dump of the message was placed in the named file.

User response: Check the named resource manager for errors. If no errors are found, record the above information and contact the IBM Support Center if the named resource manager is supplied by IBM. Otherwise, contact the supplier of the resource manager.

2610-215 **The error 0x*error_code* was received when getting the resource persistent attribute specified by the ID *resource_attribute_ID*, class *class_name*, resource manager *resource_manager_name*.**

Explanation: The Resource Monitor and Control daemon received the specified error code when attempting to get the persistent resource attribute value from the named resource manager for the indicated attribute of the specified class.

User response: Examine the documentation for the named resource manager for the returned error code. Also, examine the error log for any error messages from the named resource manager.

2610-216 **The error 0x*error_code* was received when getting the class persistent attribute specified by the ID *class_attribute_ID*, class *class_name*, resource manager *resource_manager_name*.**

Explanation: The Resource Monitor and Control

daemon received the specified error code when attempting to get the persistent class attribute value from the named resource manager for the indicated attribute of the specified class.

User response: Examine the documentation for the named resource manager for the returned error code. Also, examine the error log for any error messages from the named resource manager.

2610-217 **Received** *count of unrecognized messages unrecognized messages in the last time minutes. Service is service_name.*

Explanation: The RMC daemon has received the specified number of unrecognized messages within the specified time interval. These messages were received on the UDP port, indicated by the specified service name, used for communication among RMC daemons. The most likely cause of this error is that this port number is being used by another application.

User response: Validate that the port number configured for use by the Resource Monitoring and Control daemon is only being used by the RMC daemon.

2610-218 **Internal error. Error data**
error_data_value error_data_value error_data_value.

Explanation: The RMC daemon has detected an internal error but continues processing.

User response: Record the above information and contact your software support organization.

2610-219 **The peer daemon on node** *node_name* **is not responding to Group Services.**

Explanation: The Resource Monitoring & Control daemon on the specified node has not answered a Group Services responsiveness request within 120 seconds.

User response: The Resource Monitoring and Control daemon on the specified node should eventually terminate and then be restarted. If it does not then the administrator must terminate the unresponsive daemon using the kill command. The process ID of the daemon can be determined by executing the command **lssrc -s ctrmc**. Until the daemon on the specified node is stopped or restarted, no other RMC daemon can join the RMC peer group and provide services.

2610-220 **The error** *code* **was received when getting the resource dynamic attribute**
attribute_name, class class_name,
resource manager *rm_name.*

Explanation: The RMC daemon received the specified error code while trying to get the dynamic resource

attribute value from resource manager *rm_name* for attribute *attribute_name* of class *class_name*. The error message returned by the resource manager follows this message.

User response: Examine the documentation for the specified resource manager for the returned error code and message. Also, examine the error log for any error messages from the specified resource manager.

2610-221 **The error** *code* **was received when getting the class dynamic attribute**
attribute_name, class class_name,
resource manager *rm_name.*

Explanation: The RMC daemon received the specified error code while trying to get the dynamic class attribute value from resource manager *rm_name* for attribute *attribute_name* of class *class_name*. The error message returned by the resource manager follows this message.

User response: Examine the documentation for the specified resource manager for the returned error code and message. Also, examine the error log for any error messages from the specified resource manager.

2610-222 **The** *system_call_name* **is unsuccessful when operating on the** *file_name* **file,**
the error is (*error_number*) *error_string*

Explanation: The Resource Monitoring and Control (RMC) daemon could not successfully execute the indicated system call using the specified file. The error number and error string indicate the error.

User response: Attempt to correct the problem indicated by the error number and error string. If you cannot correct the problem, contact the IBM Support Center and provide this information.

2610-223 **Cannot bind to the port specified by service name** *service-name*, **using the**
protocol-name **protocol.**

Explanation: The resource monitoring and control (RMC) daemon cannot bind to the port specified by the indicated service name using the specified protocol. This port is used for communication among RMC daemons. The most likely cause of this error is that another application is using this port.

User response: Make sure that the port number configured for use by the RMC daemon is being used by only the RMC daemon.

2610-224 **Communication is suspended with the node associated with IP address**
IP-address.

Explanation: The RMC daemon can no longer communicate with the node associated with the specified IP address. Small data packets can be sent, but large data packets cannot be sent. There is

probably a network configuration error. For example, the MTU size may not be consistent.

User response: Once the network configuration error has been corrected, run the **refresh -s ctrmc** command.

2610-225 **Communication is suspended with the node associated with IP address *IP_address* and node ID *node_ID*. Reason code is *reason_code*.**

Explanation: The RMC daemon can no longer communicate with the node that is associated with the specified IP address and node ID. If the reason code is 1, small data packets can be sent. Large data packets cannot be sent. There is probably a network configuration error. For example, the MTU size may not be consistent. If the reason code is 2, the node is transitioning from up to down state too frequently. The specified node ID is probably configured on more than one node.

User response: Once the configuration error has been corrected, run the **refresh -s ctrmc** command. See the *RSCT: Diagnosis Guide* for more information.

2610-226 **Cannot open the ACL file *file_name*, error returned by *fopen()* is (*error_number*) *error_string*.**

Explanation: The RMC daemon cannot open the specified ACL file.

User response: Resolve the error that was returned by **fopen()**. Once the error has been corrected, run the following commands to restart the RMC subsystem:

```
rmcctrl -k
rmcctrl -s
```

If the problem cannot be corrected, contact the IBM Support Center and provide this information.

2610-227 **In the ACL file *file_name* the entry on line *line_number* is not within a stanza.**

Explanation: The specified ACL file has an ACL entry at line *line_number*, but the entry is not preceded by a stanza (class) name.

User response: Review the "Managing user access to resources using RMC ACL files" topic in the *RSCT: Administration Guide* and correct the problem. If the problem did not result from the actions of the system administrator, contact the IBM Support Center and provide this information.

2610-228 **In the ACL file *file_name* the entry on line *line_number* must have at least a user identifier and object type specifier.**

Explanation: The specified ACL file has an ACL entry at line *line_number* that is missing a user identifier and an object type specifier.

User response: Review the "Managing user access to resources using RMC ACL files" topic in the *RSCT: Administration Guide* and correct the problem. If the problem did not result from the actions of the system administrator, contact the IBM Support Center and provide this information.

2610-229 **In the ACL file *file_name* a duplicate class name was detected on line *line_number*.**

Explanation: The specified ACL file has a stanza name at line *line_number* that is a duplicate resource class name.

User response: Review the "Managing user access to resources using RMC ACL files" topic in the *RSCT: Administration Guide* and correct the problem. If the problem did not result from the actions of the system administrator, contact the IBM Support Center and provide this information.

2610-230 **In the ACL file *file_name* an invalid object type is specified on line *line_number*.**

Explanation: The specified ACL file has an ACL entry at line *line_number* that contains a non-valid object type specifier.

User response: Review the "Managing user access to resources using RMC ACL files" topic in the *RSCT: Administration Guide* and correct the problem. If the problem did not result from the actions of the system administrator, contact the IBM Support Center and provide this information.

2610-231 **In the ACL file *file_name* an invalid permission is specified on line *line_number*.**

Explanation: The specified ACL file has an ACL entry at line *line_number* that contains a non-valid permission.

User response: Review the "Managing user access to resources using RMC ACL files" topic in the *RSCT: Administration Guide* and correct the problem. If the problem did not result from the actions of the system administrator, contact the IBM Support Center and provide this information.

2610-232 **The ACL file *file_name* contains no ACLs.**

Explanation: The specified ACL file does not contain any ACLs.

User response: Review the "Managing user access to resources using RMC ACL files" topic in the *RSCT: Administration Guide* and correct the problem. If the problem did not result from the actions of the system administrator, contact the IBM Support Center and provide this information.

2610-233 **In the ACL file *file_name* an invalid user type is specified on line *line_number*.**

Explanation: The specified ACL file has an ACL entry at line *line_number* that contains a non-valid user type.

User response: Review the "Managing user access to resources using RMC ACL files" topic in the *RSCT: Administration Guide* and correct the problem. If the problem did not result from the actions of the system administrator, contact the IBM Support Center and provide this information.

2610-300 **This command is correctly specified, but another command in the ordered command group is not.**

Explanation: The command is correctly specified, but it is part of an ordered command group and another command in the group is incorrectly specified. If any command in an ordered command group is not correctly specified, no commands in the group can be run.

User response: Correct the command in error and invoke the command group again.

2610-301 **The resource class name *resource_class_name* is not defined.**

Explanation: The specified resource class name is not defined.

User response: Issue the RMC API command again, with a defined resource class name.

2610-302 **The ACL specified in the command is not valid.**

Explanation: The ACL specified by the command arguments is not valid.

User response: Run the RMCAPI command again with a valid ACL.

2610-315 **The following select string does not contain any node numbers within the range 1-4096: *select_string*.**

Explanation: The specified select string implies the values of node numbers for which the select string may

be true, but none of these values are within the range 1 through 4096, inclusive.

User response: Invoke the RMC API command again, with a valid node number value.

2610-318 **The following select string contains a node number that is not an integral value: *select_string*.**

Explanation: The specified select string contains a persistent attribute that is a locator and is being compared to a constant that is not an integer value. Locator persistent attributes may only be compared to integer values, since these values are interpreted as node numbers.

User response: Invoke the RMC API command again, with node number values that are integer constants.

2610-330 **The resource class name is not specified in the command.**

Explanation: The resource class name is not specified in the command. The resource class name is a required command parameter.

User response: Invoke the RMC API command again, with a valid resource class name.

2610-336 **The class *class_name* does not support the specified command.**

Explanation: The named class does not support this command.

User response: To determine and fix the problem, examine the application that issued the command.

2610-337 **The attribute array contains a duplicate attribute name at index *array_index*: *duplicate_attribute_name*.**

Explanation: The attribute array specified in the command contains a duplicate attribute name at the indicated index into the array.

User response: Invoke the RMC API command again, with a valid attribute array.

2610-338 **The following expression does not contain a dynamic attribute name: *expression*.**

Explanation: The expression or rearm expression specified in the register event command does not contain a dynamic attribute name.

User response: Invoke the RMC API command again, with a valid expression.

2610-339 The register event command does not specify an expression.

Explanation: An expression has not been specified in the register event command or the expression is a NULL string.

User response: Invoke the RMC API command again, with a valid expression.

2610-340 The register event command has specified a NULL rearm expression.

Explanation: The rearm expression specified in the register event command is a NULL string.

User response: Invoke the RMC API command again, with a valid rearm expression.

**2610-341 An expression and its associated rearm expression specify different dynamic attribute names:
attribute_name from expression and
attribute_name from rearm expression.**

Explanation: The expression in the register event command and its associated rearm expression specify different dynamic attribute names.

User response: Invoke the RMC API command again, with an expression and rearm expression that specify the same dynamic attribute names.

2610-342 The attribute array contains either a NULL pointer or a NULL attribute name at index *array_index*.

Explanation: The attribute array specified in the command contains either a NULL pointer or a NULL attribute name at the indicated index into the array.

User response: Invoke the RMC API command again, with a valid attribute array.

2610-343 The attribute array contains an undefined attribute name at index *array_index*: *undefined attribute_name*.

Explanation: The attribute array specified in the command contains an undefined attribute name at the indicated index into the array.

User response: Invoke the RMC API command again, with a valid attribute array.

2610-344 The event was not registered since only a validity check was requested.

Explanation: The application requested that an event not be registered. Instead, a validity check on the command input was successfully performed.

User response: None.

2610-345 The specified registration ID does not match a registered event.

Explanation: The application requested that an event be unregistered, but the specified registration ID did not match that of any events registered in the session specified in the command.

User response: Specify a registration ID for an event that is registered.

**2610-346 There are no persistent attributes defined for the resource class
resource_class_name.**

Explanation: The application requested the definitions of the persistent attributes of the specified resource class, but the class has no persistent attributes defined.

User response: None.

**2610-347 There are no dynamic attributes defined for the resource class
resource_class_name.**

Explanation: The application requested the definitions of the dynamic attributes of the specified resource class, but the class has no dynamic attributes defined.

User response: None.

**2610-348 There are no class persistent attributes defined for the resource class
resource_class_name.**

Explanation: The application requested the definitions of the persistent attributes of the specified resource class itself, but the class itself has no persistent attributes defined.

User response: None.

**2610-349 There are no class dynamic attributes defined for the resource class
resource_class_name.**

Explanation: The application requested the definitions of the dynamic attributes of the specified resource class itself, but the class itself has no dynamic attributes defined.

User response: None.

2610-350 The specified resource handle is incorrect.

Explanation: The resource handle specified in the command is incorrect. Either the entire resource handle is incorrect, it is an out-of-date resource handle, or it is a resource handle from another cluster.

User response: Invoke the RMC API command again, with a valid resource handle for this cluster.

2610-351 **The locator attribute *attribute_name* was not included in the Define Resource command for the class *class_name*.**

Explanation: When defining a resource of the named resource class, the specified locator attribute must be included in the command.

User response: Invoke the RMC API command again, and include the locator attribute.

2610-352 **The attribute array contains an incorrect type for the attribute *attribute_name* at index *array_index*.**

Explanation: The attribute array specified in the command contains an incorrect type for the attribute name at the indicated index into the array.

User response: Invoke the RMC API command again, with a valid attribute array.

2610-353 **The command specified one or more resources but the class *class_name* does not support resources.**

Explanation: Since the named class does not support resources, this command cannot be run.

User response: To determine and fix the problem, examine the application that issued the command.

2610-354 **The following expression contains more than a single attribute name: *expression*.**

Explanation: The specified expression contains a dynamic attribute that is a Quantum variable type, but the expression has more tokens than just a single name. When a dynamic attribute is a Quantum variable type, the expression must consist of only one token: the attribute name.

User response: Invoke the RMC API command again, with an expression that contains only a dynamic attribute name.

2610-355 **The following rearm expression is specified with a Quantum variable: *expression*.**

Explanation: The specified rearm expression contains a dynamic attribute that is a Quantum variable type. A register event command that specifies a dynamic attribute that is a Quantum variable cannot also specify a rearm expression.

User response: Invoke the RMC API command again, without a rearm expression.

2610-356 **A query dynamic attribute command specified a quantum dynamic attribute name at index *array_index*: *quantum_attribute_name*.**

Explanation: The attribute array specified in the command names a dynamic attribute, at the indicated index into the array. The attribute array is of Quantum variable type. Since Quantum variable types have no data value, a query dynamic attribute command may not specify a dynamic attribute that is a Quantum.

User response: Invoke the RMC API command again without specifying a Quantum dynamic attribute.

2610-357 **A query dynamic attribute command requested all dynamic attributes but all are Quantum. The class is *class_name*.**

Explanation: A query dynamic attribute command, specifying either one or more resources or the resource class itself, requested that all dynamic attributes be returned. However, all dynamic attributes, for either a resource or the class, are of Quantum variable type. Since Quantum variable types have no data value, a query dynamic attribute command is not permitted in this particular case.

User response: To determine and fix the problem, examine the application that issued the command.

2610-358 **No attributes are specified in the command. The class is *class_name*.**

Explanation: The command did not specify any attributes, but this command requires that at least one attribute be specified.

User response: Issue the RMC API command again, with at least one attribute.

2610-359 **The persistent attributes of the class *class_name* cannot be set since the class is *MtypDivided*.**

Explanation: The specified class uses the Subdivided management style, which prohibits the setting of persistent attribute values on the class itself.

User response: To determine and fix the problem, examine the application that issued the command.

2610-360 **This command could not be validated since a previous command in the ordered command group was incorrectly specified.**

Explanation: The command is part of an ordered command group but its specification could not be validated since a previous command in the group is incorrectly specified. If a command in an ordered command group is not correctly specified, any

commands that follow it in the group cannot be validated.

User response: Correct the command in error and run the command group again.

2610-361 An incorrect `sd_use` argument was specified.

Explanation: The `sd_use` command parameter specifies an incorrect value.

User response: Invoke the RMC API command again with a valid parameter.

2610-362 An incorrect name count was specified in the command.

Explanation: A nonzero name count was specified in the command, but the remaining command parameters require that the count be zero.

User response: Invoke the RMC API command again, with a name count of zero.

2610-363 No Structured Data for the specified use are defined for class `class_name`.

Explanation: No Structured Data formats for the use specified in the command are defined for the indicated class.

User response: To determine and fix the problem, examine the application that issued the command.

2610-364 The attribute array contains an attribute name at index `array_index` that is not a Structured Data type: `attribute_name`.

Explanation: The attribute array specified in the command contains an attribute name at the indicated index into the array that is not an SD data type.

User response: Invoke the RMC API command again, with a valid attribute array.

2610-365 The action array contains either a NULL pointer or a NULL action name at index `array_index`.

Explanation: The action array specified in the command contains either a NULL pointer, or a NULL action name at the indicated index into the array.

User response: Invoke the RMC API command again, with a valid action array.

2610-366 The action array contains an undefined action name at index `array_index`: `undefined_action_name`.

Explanation: The action array specified in the command contains an undefined action name at the indicated index into the array.

User response: Invoke the RMC API command again with a valid action array.

2610-367 The action array contains an action name at index `array_index` that does not have a defined Structured Data input: `action_name`.

Explanation: The action array specified in the command contains an action name at the indicated index into the array that does not have a defined SD input.

User response: Invoke the RMC API command again, with a valid action array.

2610-368 The action array contains an action name at index `array_index` that does not have a defined Structured Data response: `action_name`.

Explanation: The action array specified in the command contains an action name at the indicated index into the array that does not have a defined SD response.

User response: Invoke the RMC API command again, with a valid action array.

2610-369 An incorrect `vv_use` argument was specified.

Explanation: The `vv_use` command parameter specifies an incorrect value.

User response: Invoke the RMC API command again, with a valid parameter.

2610-370 No attributes, action inputs or command arguments for the specified use are defined for class `class_name`.

Explanation: No attributes, actions with defined inputs, or commands with defined parameters for the use specified in the command, are defined for the indicated class.

User response: To determine and fix the problem, examine the application that issued the command.

2610-371 **The security function**
security_function_name returned the
error value *error_value*.

Explanation: The specified security function returned the indicated error value.

User response: To determine and fix the problem, examine the application that issued the command.

2610-374 **The value of the locator attribute**
attribute_name must be an array with
one element.

Explanation: When defining a resource with the specified locator attribute, the attribute value must be an array with exactly one element.

User response: Invoke the RMC API command again with the proper attribute value.

2610-375 **The following select string contains**
attributes that cannot select any
resources: *select_string*.

Explanation: Each resource specifies an attribute with the name Variety. The value of this attribute is the variety of the resource. Other attributes of the resource are defined in the resource only if Variety has a particular value. The specified select string contains attributes that are not all defined for the same value of Variety.

User response: Invoke the RMC API command again with a select string that contains attributes that are all defined for at least one value of Variety.

2610-376 **The following select string contains a**
node name that is not a string value:
string

Explanation: The specified select string contains the NodeNameList persistent attribute that is a locator and is being compared to a constant that is not a string value. The NodeNameList persistent attributes can only be compared to string values because these values are interpreted as node names.

User response: Run the RMC API command again with node name values that are string constants.

2610-377 **A command argument specified the**
node name *node-name*, but this is not a
configured node name.

Explanation: A command specified a node name in a command argument, but the name is not a configured node name.

User response: Run the RMC API command again with a node name value that is a configured node name.

2610-378 **There are no cluster nodes configured**
that support the specified command.

Explanation: Either a command specified a resource class that is not supported by any of the currently-configured cluster nodes or there are no configured cluster nodes.

User response: To determine and fix the problem, examine the application that issued the command.

2610-379 **An invoke class action command**
argument specified the node name
node-name, but this is not a configured
node name.

Explanation: The invoke class action command specified a name in a node name list argument that is not a configured node name.

User response: Run the RMC API command again with a node name that is a configured node name.

2610-380 **An invoke class action command**
specified a resource class that is not
the Subdivided Management style.

Explanation: The invoke class action command specified a node name list argument but the indicated resource class is not managed using the Subdivided Management style. The node name list argument may only be used with a resource class that is managed using the Subdivided Management style.

User response: Run the RMC API command again without a node name list or specify a resource class that is managed using the Subdivided Management style.

2610-381 **The following select string does not**
contain any node numbers within the
range 1 through *number*, **where** *number*
is the highest configured node number
in the cluster: *string*

Explanation: The specified select string implies the values of node numbers for which the select string may be true, but none of these values are within the range of configured node numbers, inclusive.

User response: Run the RMC API command again with a valid node number value.

2610-382 **The following select string does not**
contain any configured node IDs: *string*

Explanation: The specified select string implies the values of node IDs for which the select string may be true, but none of these values are configured node IDs.

User response: Run the RMC API command again with a valid node number value.

2610-383 **The value of the locator attribute *attribute-name* is invalid.**

Explanation: When defining a resource with the specified locator attribute, the value must be a configured node ID.

User response: Run the RMC API command again with the proper attribute value.

2610-384 **The resource class *resource-class-name* cannot be accessed while in DM session scope.**

Explanation: The specified class is not accessible from a session that is in distributed management session scope.

User response: To determine and fix the problem, examine the application that issued the command.

2610-385 **The *attribute-name* attribute was not included in the Define Resource command for the class *class-name*.**

Explanation: When you define a resource of the specified class, you must include the specified attribute in the RMCAPi command, when the command is run within management domain scope.

User response: Run the RMCAPi command again, including the specified attribute.

2610-386 **The *attribute-value* value of the *attribute-name* attribute is not a configured peer domain name.**

Explanation: When you run the RMCAPi command, you must use the name of a configured peer domain as the value of the specified attribute.

User response: Run the RMCAPi command again, using the name of a configured peer domain as the value of the specified attribute.

2610-387 **A command specified a resource class that is not the globalized management style.**

Explanation: The RMCAPi command syntax contained a peer domain name list argument for a resource that is not managed using the globalized management style. You may use a peer domain name list only for resources that are managed using the globalized management style.

User response: Correct the RMCAPi command syntax either by removing the peer domain name list argument, or by specifying a resource that is managed using the globalized management style. Then run the RMCAPi command again.

2610-388 **A command argument specified the peer domain name *name*, but this is not an active peer domain name.**

Explanation: The RMCAPi command contained a peer domain name list argument that included the specified name, which is not the name of an active peer domain.

User response: Correct the RMCAPi command by removing the specified name or by replacing the specified name with the name of an active peer domain name. Then, run the RMCAPi command again.

2610-389 **The command must be executed while in DM session scope.**

Explanation: The RMCAPi command syntax, issued from a session in distributed management session scope, contained a peer domain name list argument. You may use a peer domain name list only from a session in distributed management session scope.

User response: Either reissue the RMCAPi command without a peer domain name list, or reissue the command from a session in distributed management session scope.

2610-390 **The following expression does not contain an attribute name: *expression***

Explanation: The expression or re-arm expression specified in the register event command did not contain an attribute name.

User response: Correct the expression and reissue the RMCAPi command.

2610-391 **An expression and its associated re-arm expression specify different attribute names: *name1* and *name2*.**

Explanation: In the register event command, an expression and its associated re-arm expression specified different attribute names. The attribute names in both expressions must match.

User response: Correct the attribute name in either the expression or its associated re-arm expression, and reissue the RMCAPi command.

2610-392 **The following expression contains a persistent attribute name not supported in expressions: *expression***

Explanation: The specified expression contains a persistent attribute name that is not supported within expressions.

User response: Correct the expression and reissue the RMCAPi command.

2610-393 **The following expression contains a persistent attribute of type resource handle, which is not supported in expressions:** *expression*

Explanation: The specified expression contains a persistent attribute of type resource handle, which is not supported within expressions.

User response: Correct the expression and reissue the RMCAPi command.

2610-394 **The permissions argument *permissions* contains no valid permission bits.**

Explanation: The specified permissions argument does not contain any valid permission bits. At least one valid permission bit must be specified, as defined by the RMCAPi variable **mc_acl_permission_set**.

User response: Run the RMCAPi command again with a valid argument.

2610-395 **The list usage argument *list_usage* is not valid.**

Explanation: The specified list usage argument does not contain a valid value.

User response: Run the RMCAPi command again with a valid argument.

2610-396 **The ACL type argument *ACL_type* is not valid for the target of the command.**

Explanation: The specified ACL type argument contains a value not valid for the command target.

User response: Run the RMCAPi command again with a valid argument. Specify a Resource ACL type if the command target is a resource or a set of resources. Specify a Resource Initial ACL type, Resource Shared ACL type, or Class ACL type if the command target is a resource class.

2610-397 **The ACL type argument *ACL_type* is not valid.**

Explanation: The specified ACL type argument does not contain a valid value.

User response: Run the RMCAPi command again with a valid argument.

2610-398 **The ACL flag argument indicates to use the Resource Shared ACL, but the ACL type is not Resource nor Resource Initial.**

Explanation: The ACL flag indicating that the Resource Shared ACL is to be used can only be

specified for the Resource type ACL or Resource Initial type ACL.

User response: Run the RMCAPi command again with valid arguments.

2610-399 **The ACL flag argument indicates to use the Resource Shared ACL, but an ACL was also specified.**

Explanation: If the ACL flag indicating that the Resource Shared ACL is to be used is specified, an ACL cannot also be specified.

User response: Run the RMCAPi command again with valid arguments.

2610-400 **Resource not defined.**

Explanation: The resource handle specified in the response does not represent a defined resource.

User response: To determine and fix the problem, examine the application that issued the command.

2610-401 **Resource has been undefined.**

Explanation: The resource indicated by the resource handle specified in the response has been undefined.

User response: To determine and fix the problem, examine the application that issued the command.

2610-402 **Shared memory is damaged.**

Explanation: The shared memory used to monitor the resource indicated by the resource handle specified in the response has become damaged.

User response: Record the above information and contact your software service organization.

2610-403 **The resource is stale.**

Explanation: The resource indicated by the resource handle in the response is stale; the resource manager supplying the resource has terminated. The remaining data in the response represents the last known values of the resource that was specified in the command for which this is a response.

User response: To determine and fix the problem, examine the application that issued the command.

2610-404 **Error number *evaluation_error_number* was detected while evaluating an expression using the *dynamic_attribute_program_name* attribute.**

Explanation: The evaluation of the named dynamic attribute of the resource specified by the resource handle resulted in an error. The possible error numbers

and their explanations are:

Evaluation Error	
Number	Explanation
1	Divide by zero
2	Incorrect SD array index
3	Array index is out of bounds
4	SD element ID is greater than the number of elements present
5	The ".." operator is used with a left operand that is greater than the right operand
Greater than 100	Unexpected evaluation error

User response: To determine and fix the problem, examine the application that issued the command.

2610-405 Cannot obtain values for *attribute_count* persistent attributes.

Explanation: The specified number of persistent attribute values could not be obtained from either the resource indicated by the resource handle in the response, or from the resource class indicated by the class name in the response. The count in the response indicates how many attribute values are actually returned.

User response: The FFDC ID in the response can be used to find the error information for each attribute value that could not be returned.

2610-407 No resources found.

Explanation: No resource were found that matched the select string in the command.

User response: To determine and fix the problem, examine the application that issued the command.

2610-408 Resource selection could not be performed.

Explanation: Resource selection could not be performed using the select string in the command. Either no resource managers that support the resource class specified in the command are currently running in the cluster, or the select string implicitly specified nodes that are not currently in the cluster.

User response: To determine and fix the problem, examine the application that issued the command.

2610-409 Cannot execute the command on node *node_number*. The resource manager *resource_manager_name* is not available.

Explanation: The command for the resource or resource class specified in the response could not be issued on the indicated node because the named resource manager is not available. If the command specified a resource class, additional responses may be returned, with or without error.

User response: Depending on the operating system in use, examine the AIX error log or Linux syslog, and the resource-manager-specific logs, to determine why the named resource manager is not available.

2610-410 Cannot complete the command on node *node_number*. The resource manager *resource_manager_name* has terminated.

Explanation: The command for the resource or resource class specified in the response could not be completed on the indicated node because the named resource manager terminated. A partial response for this command was previously returned. If the command specified a resource class, additional responses may be returned, with or without error.

User response: Depending on the operating system in use, examine the AIX error log or Linux syslog, and the resource-manager-specific logs, to determine why the named resource manager has terminated.

2610-411 No response from the resource manager *resource_manager_name* on node *node_number*. The resource manager has terminated.

Explanation: The command for the resource or resource class specified in the response could not be completed on *node_number*, because *resource_manager_name* terminated. While no response was returned from the resource manager, the command may have run prior to resource manager termination. If the command specified a resource class, additional responses may be returned, with or without error.

User response: Depending on the operating system in use, examine the AIX error log or Linux syslog, and the resource-manager-specific logs, to determine why the named resource manager has terminated.

2610-412 A Resource Manager terminated while attempting to enumerate resources for this command.

Explanation: While attempting to enumerate resources for this command, a resource manager terminated. This command may still complete normally,

with additional responses, for resources obtained from other resource managers that support the resource class specified in the command.

User response: To determine and fix the problem, examine the application that issued the command.

2610-413 While attempting to enumerate resources for this command, an enumerate error was detected.

Explanation: While attempting to enumerate resources for this command, an enumerate command error was detected. This command may still complete normally, with additional responses, for resources obtained from other Resource Managers that support the resource class specified in the command.

User response: To determine and fix the problem, examine the application that issued the command.

2610-414 Descriptions are not available for the resource class *resource_class_name*.

Explanation: When attempting to query definitions for the specified resource class, no descriptions could be found. All other requested information is returned in the response.

User response: To determine and fix the problem, examine the application that issued the command.

2610-415 Cannot execute the command. The resource manager *resource_manager_name* is not available.

Explanation: The command for the resource or resource class specified in the response could not be run because the named resource manager is not available.

User response: Depending on the operating system in use, examine the AIX error log or Linux syslog, and the resource-manager-specific logs, to determine why the named resource manager is not available.

2610-416 Cannot complete the command. The resource manager *resource_manager_name* has terminated.

Explanation: The command for the resource or resource class specified in the response could not be completed because the named resource manager terminated. A partial response for this command was previously returned.

User response: Depending on the operating system in use, examine the AIX error log or Linux syslog, and the resource-manager-specific logs, to determine why the named resource manager has terminated.

2610-417 No response from the resource manager *resource_manager_name*. The resource manager has terminated.

Explanation: The command for the resource or resource class specified in the response could not be completed because the named resource manager terminated. While no response was returned from the resource manager, the command may have been run by the resource manager prior to its termination.

User response: Depending on the operating system in use, examine the AIX error log or Linux syslog, and the resource-manager-specific logs, to determine why the named resource manager has terminated.

2610-418 Permission is denied to access the resources or resource class specified in this command.

Explanation: The user of the command that produced this error does not have an entry in the RMC subsystem's access control list (ACL) file.

User response: Add an appropriate entry for the user in the ACL file. To correctly add an entry, use the instructions in *RSCT: Administration Guide* for managing user access to resources using RMC ACL files.

2610-419 The resource or resource class on node *node_number* is no longer available. The node has left the cluster.

Explanation: The resource or resource class specified in the response is no longer available on the indicated node since the node has left the cluster.

User response: To determine and fix the problem, examine the application that issued the command.

2610-420 The dynamic attribute is not supported.

Explanation: The dynamic attribute specified in the expression supplied in the event registration command is not supported either in the resource indicated by the resource handle in the response, or in the resource class indicated by the class name in the response.

User response: To determine and fix the problem, examine the application that issued the command.

2610-421 Cannot obtain values for *attribute_count* dynamic attributes.

Explanation: The specified number of dynamic attribute values could not be obtained from either the resource indicated by the resource handle in the response, or from the resource class indicated by the class name in the response. The missing attributes are not supported in the resource or class. The count in the response indicates how many attribute values are actually returned.

User response: To determine and fix the problem, examine the application that issued the command.

2610-422 Cannot execute the command on node *node_name*. The resource manager *resource_manager_name* is not available.

Explanation: The command for the resource or resource class specified in the response could not be run on *node_name* because *resource_manager_name* is not available. If the command specified a resource class, additional responses might be returned, with or without errors.

User response: Depending on the operating system in use, examine the AIX error log or Linux syslog, and the resource-manager-specific logs, to determine why the named resource manager is not available.

2610-423 Cannot complete the command on node *node_name*. The resource manager *resource_manager_name* has terminated.

Explanation: The command for the resource or resource class specified in the response could not be completed on *node_name* because *resource_manager_name* terminated. A partial response for this command was previously returned. If the command specified a resource class, additional responses might be returned, with or without errors.

User response: Depending on the operating system in use, examine the AIX error log or Linux syslog, and the resource-manager-specific logs, to determine why the named resource manager has terminated.

2610-424 No response from the resource manager *resource_manager_name* on node *node_name*. The resource manager has terminated.

Explanation: The command for the resource or resource class specified in the response could not be completed on *node_name* because *resource_manager_name* terminated. While no response was returned from the resource manager, the command might have run before the resource manager terminated. If the command specified a resource class, additional responses might be returned, with or without errors.

User response: Depending on the operating system in use, examine the AIX error log or Linux syslog, and the resource-manager-specific logs, to determine why the named resource manager has terminated.

2610-425 Cannot execute the command on node *node_name*. The node is not currently in the cluster.

Explanation: The command for the resource or resource class specified in the response could not be run on *node_name*, which is not currently in the cluster. Either the command specified a resource on the node, explicitly or implicitly, or the command specified a resource class that required the command to be sent to the node. If the command specified a resource class, additional responses might be returned, with or without errors.

User response: Make sure *node_name* is a defined cluster node. If it is, retry the command after the node has rejoined the cluster.

2610-426 The specified resource or resource class is not currently available on node *node_name*. The node is not currently in the cluster.

Explanation: The resource or resource class specified in the response is not currently available on *node_name*. Either the command specified a resource on the node, explicitly or implicitly, or the command specified a resource class that required the command to be sent to the node. If the command specified a resource class, additional responses might be returned, with or without errors.

User response: To determine and fix the problem, examine the application that issued the command.

2610-427 Monitoring of the resource is temporarily suspended.

Explanation: Monitoring of the resource indicated by the resource handle in the response is temporarily suspended; the monitoring location is changing.

User response: To determine and fix the problem, examine the application that issued the command.

2610-428 Monitoring of the resource has not yet started.

Explanation: Monitoring of the resource indicated by the resource handle in the response has not yet started; a response is pending from the resource manager that supplies the resource.

User response: To determine and fix the problem, examine the application that issued the command.

2610-429 The specified resource class is not installed on node *node_name*.

Explanation: The resource class specified in the response, or the class of the resource specified in the response, is not installed on *node_name*. Either the command specified a resource on the node, explicitly or

implicitly, or the command specified a resource class that required the command to be sent to the node. If the command specified a resource class, additional responses might be returned, with or without errors.

User response: To determine and fix the problem, examine the application that issued the command.

2610-430 The resource or resource class on node *node_name* is no longer available. The node has left the cluster.

Explanation: The resource or resource class specified in the response is no longer available on the indicated node since the node has left the cluster.

User response: To determine and fix the problem, examine the application that issued the command.

2610-431 Cannot enumerate resources for this command on node *node_name*. The node is not currently in the cluster.

Explanation: An attempt was made to enumerate resources for this command on the specified node but the node is not currently in the cluster. This command may still complete normally, with additional responses, for resources obtained from other nodes that support the resource class specified in the command.

User response: To determine and fix the problem, examine the application that issued the command.

2610-432 Cannot obtain values for *n* dynamic attributes.

Explanation: The specified number of dynamic attribute values could not be obtained from either the resource indicated by the resource handle in the response or from the resource class indicated by the class name in the response. The count in the response indicates how many attribute values are actually returned.

User response: Refer to the error message numbered 2610-220 or 2610-221 in the RMC daemon log file **/var/ct/IW/log/mc/default** for more information.

2610-433 Monitoring of the resource has started but no data is available

Explanation: Monitoring of the resource indicated by the resource handle in the response has started but data is not yet available from the resource manager that supplies the resource.

User response: Refer to the error message numbered 2610-220 or 2610-221 in the RMC daemon log file **/var/ct/IW/log/mc/default** for more information. If the problem specified by the message numbered 2610-220 or 2610-221 is corrected, data should become available.

2610-434 The attribute is not supported.

Explanation: The attribute specified within one or more expressions in the event registration command is not supported by:

- The resource indicated through the resource handle in the response.
- The resource class indicated through the class name in the response.

User response: To determine and fix the problem, examine the application that issued the command.

2610-435 The resource or resource class on node *node_name* cannot be accessed. The node is not operating at the necessary functional level for this command.

Explanation: The resource or resource class cannot be accessed on the specified node because the node is not operating at the necessary functional level for this command.

User response: To determine and fix the problem, examine the application that issued the command.

2610-436 The resource or resource class cannot be accessed in peer domain *domain_name*. The domain is not operating at the necessary functional level for this command.

Explanation: The resource or resource class cannot be accessed in the specified domain because the domain is not operating at the necessary functional level for this command.

User response: To determine and fix the problem, examine the application that issued the command.

2610-437 The resource was successfully defined but the Resource Initial ACL could not be set.

Explanation: The resource was defined successfully, but the Resource Initial ACL could not be set on the resource that is specified by the resource handle in the response.

User response: The caller must undefine the new resource *immediately*.

2610-438 Cannot obtain the specified ACL.

Explanation: The ACL specified by the command arguments could not be obtained from the resource indicated by the resource handle in the response or from the resource class indicated by the class name in the response.

User response: Provide the information in this message and the contents of the RMC daemon log file

`/var/ct/IW/log/mc/default` to the IBM Support Center.

2610-439 Cannot set the specified ACL.

Explanation: The ACL specified by the command arguments could not be set into either the resource indicated by the resource handle in the response or into the resource class indicated by the class name in the response.

User response: Provide the information in this message and the contents of the RMC daemon log file `/var/ct/IW/log/mc/default` to the IBM Support Center.

2610-440 Permission is denied to access a resource specified in this command. Network Identity *identity* requires '*permission*' permission for the resource '*resource_handle*' of class *class_name* on node *node_name*.

Explanation: In order to run the command for this resource, *identity* must have the specified permission on *resource_handle* for *class_name* on *node_name*.

User response: To determine and fix the problem, examine the application that issued the command.

2610-441 Permission is denied to access the resource class specified in this command. Network Identity *identity* requires '*permission*' permission for the resource class *class_name* on node *node_name*.

Explanation: In order to run the command for this resource, *identity* must have the specified permission for *class_name* on *node_name*.

User response: To determine and fix the problem, examine the application that issued the command.

2610-442 A resource action for class *class_name* is not defined on node *node_name*.

Explanation: The resource action specified with the command is not defined on *node_name*. This means a down-level class definition file is installed on *node_name*.

User response: To determine and fix the problem, examine the application that issued the command.

2610-443 A class action for class *class_name* is not defined on node *node_name*.

Explanation: The class action specified with the command is not defined on *node_name*. This means a down-level class definition file is installed on *node_name*.

User response: To determine and fix the problem, examine the application that issued the command.

2610-500 *daemon_file_name* is not executable.

Explanation: The specified daemon must be an executable file to allow the subsystem that is being installed by the specified command name to operate. It is possible that *daemon_file_name* may also not exist.

User response: As **root**, run **chmod +x *daemon_file_name***, and retry the command. Or, rerun **installp** of the RSCT package to reinstall the subsystem.

2610-501 The *subsystem_name* subsystem must be stopped.

Explanation: The *subsystem_name* must be stopped to allow the specified command name to operate on it.

User response: As **root**, run **stopsrc -s *subsystem_name***, and retry the command.

2610-502 Could not add *subsystem_name* to *resource_controller*.

Explanation: The specified command name failed in defining *subsystem_name* to *resource_controller*. If *resource_controller* is **SRC**, the command **mkssys -s *subsystem_name*** failed. If *resource_controller* is **inittab**, the command **mkitab *subsystem_name*** failed.

User response: Correct whatever caused the resource controller command listed above to fail, and retry the command.

2610-503 Cannot copy the Configuration Database.

Explanation: The specified command name failed in copying the Resource Monitoring and Control Configuration Database.

User response: The file `/var/ct/IW/rmc.cp` contains a **cp** command error message. Correct the problem indicated by this error message. Refer to the man page for this command for more information.

2610-601 A severe library or system error occurred in *source_file_name*, *version_string*, at line *line_number*.

Explanation: An unexpected severe error occurred in the RMC API.

User response: Record the above information and contact your software service organization.

2610-602 A session could not be established with the RMC subsystem.

Explanation: A session could not be established with the RMC subsystem.

User response: The application should try again later.

2610-603 The session with the RMC subsystem has been interrupted.

Explanation: The session with the RMC subsystem has been interrupted.

User response: The application should try again later.

2610-604 The session with the RMC subsystem has been ended.

Explanation: The session with the RMC subsystem has been ended.

User response: The application could try to establish another session with the RMC subsystem.

2610-605 The specified session handle is not valid.

Explanation: The specified session handle is not valid.

User response: The application specified a session handle that is not valid. A session handle remains valid once returned by a successful call to **mc_start_session()**, until after a successful call to **mc_end_session()** for that session. Check the program logic of the RMC API client.

2610-606 The RMC API could not obtain a session descriptor.

Explanation: The RMC API could not obtain a session descriptor. Either the system does not currently have the resources required to create another file descriptor, or the number of open file descriptors for the process has been exceeded.

User response: Change the client program to open fewer file descriptors, or try again later.

2610-607 The specified file descriptor, *session_file_descriptor*, is not the session descriptor.

Explanation: The specified file descriptor is not the session descriptor. The RMC API client specified a descriptor that is not valid on a call to **mc_free_descriptor()**.

User response: Change the client program.

2610-608 The specified command group handle is not valid.

Explanation: The specified command group handle is not valid.

User response: The application specified a command group handle that is not valid. A command group handle remains valid once returned by a successful call to **mc_start_cmd_grp()**, until after a successful call to

mc_cancel_cmd_grp(), **mc_send_cmd_grp()**, or **mc_send_cmd_grp_wait()** for that command group. Check the program logic of the RMC API client.

2610-609 The command group contains no commands.

Explanation: An attempt was made to send a command group with no commands.

User response: Check the program logic of the RMC API client.

2610-610 The command group has been sent, but the session ended before all responses could be received.

Explanation: The command group has been sent, but the session ended before all responses could be received.

User response: If pointer response was selected for any commands in the command group, check the appropriate array count for any responses. If callback response was selected for any commands in the command group, the callbacks were invoked for any responses received.

2610-611 The command group has been sent, but the session was interrupted before all responses could be received.

Explanation: The command group has been sent, but the session was interrupted before any responses could be received.

User response: If pointer response was selected for any commands in the command group, check the appropriate array count for any responses. If callback response was selected for any commands in the command group, the callbacks were invoked for any responses received.

2610-612 The specified pointer does not point to a response or event notification.

Explanation: The pointer specified on a call to **mc_free_response()** does not point to a response or event notification.

User response: Check the program logic of the RMC API client.

2610-613 The session already contains the maximum number, *maximum_number*, of active command groups.

Explanation: The session already contains the maximum number of active command groups.

User response: Check the program logic of the RMC API client.

2610-614 **The command group already contains the maximum number, *maximum_number*, of commands.**

Explanation: The command group already contains the maximum number of commands.

User response: Check the program logic of the RMC API client.

2610-615 **The specified event registration ID is not valid.**

Explanation: The specified event registration ID is not valid.

User response: The application specified an event registration ID that is not valid. Check the program logic of the RMC API client.

2610-616 **The specified option is not valid.**

Explanation: The specified option is not valid.

User response: The application specified an option that is not valid. Check the program logic of the RMC API client.

2610-617 **A descriptor has already been allocated to the specified session.**

Explanation: A descriptor has already been allocated to the specified session. Only one session descriptor can be allocated for a session at a time.

User response: Check the program logic of the RMC API client. Check for multiple calls to **mc_get_descriptor()** for the same session, without an intervening call to **mc_free_descriptor()**.

2610-618 **The RMC API could not allocate required memory to satisfy the request.**

Explanation: The RMC API could not allocate required memory to satisfy the request.

User response: Check the program logic of the RMC API client. Check for memory leaks.

2610-619 **The RMC API could not allocate some required system resource.**

Explanation: The RMC API could not allocate some required resource.

User response: The application should try again later.

2610-620 **The specified callback routine is not valid.**

Explanation: The specified callback routine is not valid.

User response: Check the program logic of the RMC API client.

2610-621 **The specified response pointer is not valid.**

Explanation: The specified response pointer is not valid.

User response: Check the program logic of the RMC API client.

2610-622 **The specified response count pointer is not valid.**

Explanation: The specified response count pointer is not valid.

User response: Check the program logic of the RMC API client.

2610-623 **The specified resource handle count is not greater than zero.**

Explanation: The specified resource handle count is not greater than zero.

User response: Check the program logic of the RMC API client.

2610-624 **A command group has become too large.**

Explanation: A command group has become too large.

User response: Check the program logic of the RMC API client.

2610-625 **The RMC API could not allocate required memory; the session is unusable.**

Explanation: The RMC API could not allocate required memory; the session is unusable.

User response: Check the program logic of the RMC API client. Check for memory leaks.

2610-626 **An attempt was made to add a command to an ordered command group.**

Explanation: An attempt was made to add a command to an ordered command group that is not permitted in an ordered command group.

User response: Check the program logic of the RMC API client.

2610-627 **An attempt was made to add a command to an ordered command group targeted to a different resource, or set of resources.**

Explanation: An attempt was made to add a command to an ordered command group. However, this command was targeted to a resource or set of resources that was not targeted by the ordered command group.

User response: Check the program logic of the RMC API client.

2610-628 **The data type specified for *value_name*, *data_type*, is not valid.**

Explanation: The data type specified for the named value was not valid.

User response: Check the program logic of the RMC API client.

2610-629 **The pointer specified for *value_name*, *data_type*, is not valid.**

Explanation: The pointer to the specified data type for the specified value was not valid.

User response: Check the program logic of the RMC API client.

2610-630 **The value for *value_name* is a structured byte string whose length is not valid.**

Explanation: The length of the specified SBS is not valid.

User response: Check the program logic of the RMC API client.

2610-631 ***value_name* is structured data that includes a subtype that is not allowed.**

Explanation: The specified value is structured data that includes a subtype that is not allowed. Structured data may not include structured byte strings or other structured data.

User response: Check the program logic of the RMC API client.

2610-632 **The specified contact type is not valid.**

Explanation: The specified contact type is not valid.

User response: Check the program logic of the RMC API client.

2610-633 ***name_of_routine* is not a supported routine.**

Explanation: The specified routine is not supported by the RMC API.

User response: Change your program to not call the specified routine.

2610-634 **Possible deadlock detected.**

Explanation: The `mc_send_cmd_grp_wait()`, `mc_unreg_event_bp()`, or `mc_unreg_event_bc()` routine was called to unregister an event and wait for completion. The thread on which this routine was called is running an event notification callback. This is not allowed, because a deadlock could occur.

User response: Change your program to not call the specified routine to unregister an event and wait for its completion, while an event notification callback routine is running on the same thread.

2610-635 **The specified contact point name is not valid.**

Explanation: A contact name specified in a call to `mc_start_session()` was a NULL pointer or null string.

User response: Change your program to specify non-null contact names.

2610-636 **A string was provided that is not valid in the current locale.**

Explanation: The string is not valid in the current locale of the process.

User response: Check the source of the string.

2610-637 **The security library routine *security_routine_name* returned error *security_error_number*: *security_error_message*.**

Explanation: An unexpected error occurred in a call to the security library.

User response: Record the above information and contact your software service organization.

2610-638 **The security library routine *security_routine_name* returned error *security_error_number* to the RMC daemon.**

Explanation: An unexpected error occurred in a call to the security library.

User response: Record the above information and contact your software service organization.

2610-639 The user could not be authenticated by the RMC subsystem.

Explanation: The user could not be authenticated by the RMC subsystem.

User response: Record the above information and contact your software service organization.

2610-640 The user is not authorized to use the RMC subsystem.

Explanation: The user is not authorized to use the RMC subsystem.

User response: Record the above information and contact your software service organization.

2610-641 The RMC subsystem could not be authenticated by the RMC API.

Explanation: The RMC subsystem could not be authenticated by the RMC API.

User response: Record the above information and contact your software service organization.

2610-642 The version of the called RMC API routine is not compatible with the session.

Explanation: RMC API routines are versioned to support source and binary compatibility. Each RMC API session has a version assigned to it based on the version of **mc_start_session()** that was called to start the session. The version of a routine called for a session is not compatible with the version of the session.

User response: All source modules making up a program using the RMC API should do the same thing with regard to the **MC_VERSION** macro before including **ct_mc.h**. Either the macro should not be defined or it should be defined to the same value in all source modules making up a program. The current version of the RMC API is 5.

2610-643 The specified session scope is not currently supported.

Explanation: The session scope specified on the call to **mc_start_session()** is not currently supported by the RMC daemon to which the RMC API connected.

User response: Contact your software service organization.

2610-644 More than one session scope was specified.

Explanation: More than one session scope was specified on the call to **mc_start_session()**.

User response: Change the program to only specify one of the session scope options.

2610-645 The specified session scope does not support the private option.

Explanation: The session scope specified on the call to **mc_start_session()** does not support the private option, but the private option was specified.

User response: Change the program to specify **MC_SESSION_OPTS_LOCAL_SCOPE** if **MC_SESSION_OPTS_PRIVATE** is also to be specified.

2610-646 A query event command is active for the registration.

Explanation: A query event or event unregistration command was specified for an event registration, but a query event command is active for the registration.

User response: Wait for the active query event command to complete.

2610-647 *routine-name()* is not a supported routine for protocol version *version-used*: protocol version *version* needed.

Explanation: The routine specified cannot be executed because the RMC daemon to which the RMC API is connected does not support the routine.

User response: Contact your software service organization.

2610-648 *routine-name()* is not a supported routine as called for protocol version *version-used*.

Explanation: The routine specified cannot be executed because the RMC daemon to which the RMC API is connected does not support the routine with the arguments specified.

User response: Contact your software service organization.

2610-649 The event registration ID specified a class event.

Explanation: The event registration ID for a query event command specified a class event. The application specified an event registration ID for a class event for a query event command. The query event command cannot be applied to a class event.

User response: Check the program logic of the RMC API client.

2610-650 **IP authentication was requested, but an IP address was not specified as the contact point.**

Explanation: IP authentication was requested in the `mc_start_session()` options argument, but an IP address was not specified as the contact point.

User response: Check the program logic of the RMC API client.

2610-651 **IP authentication is not supported by the target node (*protocol_version_used*, *protocol_version_needed*).**

Explanation: IP authentication was requested in the `mc_start_session()` options argument, but it cannot be done because the RMC daemon to which the RMC API is connected does not support it.

User response: Contact your customer support organization.

2610-652 **The specified time limit has been exceeded.**

Explanation: The time limit specified for the operation has been exceeded.

User response: Contact your customer support organization.

2610-800 **The requested service is not available.**

Explanation: The requested operation is not supported or is currently unavailable.

User response: Refer to the documentation of the resource manager for information regarding support of the requested operation.

2610-801 **An attempt to allocate memory was unsuccessful.**

Explanation: The resource manager was unable to allocate enough memory to process the requested operation.

User response: Make sure that there are enough system resources available. If the problem persists, record the error message and contact your software service organization.

2610-802 **The RCP the request was directed to does not control the specified resource.**

Explanation: The RCP the request was directed to does not control the specified resource.

User response: None.

2610-803 **Abort the requested join operation.**

Explanation: Abort the requested join operation.

User response: None.

2610-804 **The limit on the number of resources allowed would be exceeded.**

Explanation: An attempt to define a new resource failed because a limit on the number of resources allowed for the specified resource class would be exceeded.

User response: Refer to documentation of the resource manager and resource class for information regarding limits on the number of resources allowed.

2610-805 **The value of the specified attribute is read-only, and cannot be set.**

Explanation: An attempt was made to modify an attribute value that cannot be changed.

User response: Do not attempt to modify this attribute.

2610-806 **The specified attribute identifier is not a valid value.**

Explanation: The attribute identifier number does not represent an attribute of the resource or resource class.

User response: Change the attribute identifier to a number which is valid for the resource or resource class. If you are attempting to represent an attribute of a resource, make sure that the attribute number is valid for the variety of the resource.

2610-807 **The resource class identifier was not a valid value.**

Explanation: The resource class identifier number does not represent a defined resource class.

User response: Change the identifier number to match a defined resource class.

2610-808 **The specified resource class or resource handle was not valid.**

Explanation: The resource class or resource handle specified does not match a defined class or resource.

User response: Change the value to match a defined resource class or resource.

2610-809 **The resource class name specified is not a valid class name.**

Explanation: The resource class name specified does not match any defined classes for this resource manager.

User response: Change the value to match a defined resource class name.

2610-810 The specified resource handle does not correspond to an existing resource.

Explanation: The resource handle specified does not match a currently defined resource. The value may have been improperly specified, or may specify a resource that no longer exists.

User response: Change the resource handle value to match a defined resource.

2610-811 The location of the controlling RCP for the specified resource is not known.

Explanation: The location of the controlling RCP for the specified resource is not known.

User response: None.

2610-812 The resource class does not support creation of new resources.

Explanation: The define resource operation is not supported by the resource class.

User response: Do not attempt to define new instances of this resource class.

2610-813 The resource class does not support the undefine operation.

Explanation: The undefine resource operation is not supported by the resource class.

User response: Do not attempt to undefine instances of this resource class.

2610-814 The requested action is not supported.

Explanation: The specified action is not supported by the resource or resource class.

User response: Do not invoke this action on the resource or resource class.

2610-815 The data provided is not correct for the requested operation.

Explanation: The data provided for processing the operation was not correct.

User response: Refer to the documentation of the resource manager and resource class for information regarding the correct data and format required for the requested operation.

2610-816 Control operations are not supported for the specified resource.

Explanation: The requested control operation is not supported for the resource.

User response: Do not request this control operation for the specified resource.

2610-817 A constraint identifier was not valid.

Explanation: A constraint identifier was not valid.

User response: None.

2610-818 The resource targeted for the operation has been undefined.

Explanation: The operation could not be performed because the target resource has been undefined.

User response: Do not invoke operations on undefined resources.

2610-819 The command was not processed because a prior command in the group was unsuccessful.

Explanation: The command was not processed because it was a member of a command group in which a prior command had failed.

User response: This error can occur if the command group is specified to stop processing if a command in the group fails. Following the failure, subsequent commands in the group are not processed and instead they return this error.

2610-820 The data type of a value was not valid or not the expected type.

Explanation: A data type provided to perform an operation was unknown or not the required type.

User response: Correct the data type required for the operation and resubmit the request.

2610-821 An error occurred while processing a command batch.

Explanation: While processing a set of commands, the resource manager encountered an error that caused the entire batch of commands to fail. Typically, this message is returned when an error occurs during command replication. The commands will be individually re-dispatched to the resource manager so that the underlying error can be detected without causing all of the commands in the batch job to fail.

User response: Correct the underlying error and re-run the command that failed.

2610-900 The Resource Manager Library has already been initialized by the calling process.

Explanation: The `rm_init()` routine was already successfully invoked by the process.

User response: Check the program logic of the resource manager. The `rm_init()` routine should be called only once to initialize the library.

2610-901 The Resource Manager Library has not been initialized by the calling process.

Explanation: The `rm_init()` routine was not called by the process.

User response: Check the program logic of the resource manager. The `rm_init()` routine must be called before invoking other library routines.

2610-902 The calling process does not have the required authority to use the Resource Manager Library.

Explanation: The calling process did not pass an authorization check.

User response: Correct the calling process.

2610-903 Another process has initialized the Resource Manager Library for resource manager, *resource_manager_name*.

Explanation: The Resource Manager Library was unable to obtain an exclusive lock on the local node for *resource_manager_name*.

User response: Check the program logic of the resource manager. Only one instance of a resource manager may initialize the library at a given time.

2610-904 The Resource Manager Library has been quiesced.

Explanation: The library has completed clean-up processing initiated by a call to `rm_quiesce()`.

User response: Check the program logic of the resource manager. The `rm_quiesce()` routine should be called only once. When all threads invoking `DispatchRequests()` have returned the `RM_EQUIESCED` value, the `rm_term()` routine should be called.

2610-905 The Resource Manager Library has not completed quiesce.

Explanation: The library has not completed quiesce processing initiated by a call to `rm_quiesce()`. This message is issued if the resource manager attempts to call `rm_term()` before the library has completed quiescing.

User response: The resource manager must not call `rm_term()` until all threads invoking the `DispatchRequests()` method return with the error number, `RM_EQUIESCED`.

2610-906 The Resource Manager Library encountered an internal error at line *line_number* in file *file_name*, version *file_version*.

Explanation: An unexpected internal error occurred in the library at the specified location.

User response: Record the above information and contact your software service organization.

2610-907 The version of the Configuration Database in use by the Resource Manager Library does not match the version in use by the RMC subsystem.

Explanation: The version of the Configuration Database (CDB) loaded by the library when `rm_init()` was called, does not match the version being used by the RMC subsystem.

User response: Quiesce and terminate use of the library, then reinitialize the library to obtain the correct CDB version.

2610-908 The resource class name requested is too long for the buffer provided.

Explanation: The resource manager requested the library to copy the name of a resource class to a buffer, but the buffer was not large enough to accommodate the name.

User response: Increase the size of the name buffer.

2610-909 An error was detected while attempting to load the local Configuration Database.

Explanation: The library encountered an unexpected error and was unable to load the Configuration Database (CDB). This error implies the problem was with the CDB itself, such as a checksum error or unexpected value in the file.

User response: Record the above information and contact your software service organization.

2610-910 A parameter passed to a Resource Manager Library routine was not a valid value.

Explanation: The value of a option or pointer parameter passed to a library routine was not a valid value.

User response: Check the program logic of the resource manager. Ensure that all option parameters to

the library routine are correct and valid values, and that all required pointer parameters are non-NULL and reference valid objects.

2610-911 The library token passed to the Resource Manager Library routine was not a valid token.

Explanation: A library token passed to the library was not valid. The token was either expired due to an unbind operation, or was not a value supplied to the resource manager by the library.

User response: Check the program logic of the resource manager. Ensure all library tokens are valid values supplied by the library, and are tokens representing bound objects.

2610-912 The resource manager name, *resource_manager_name*, was not found in the local Configuration Database.

Explanation: The resource manager name specified on the call to **rm_init()**, was not found in the Configuration Database (CDB).

User response: Check that the resource manager is configured, and is passing the name correctly on the call to **rm_init()**.

2610-913 The response object passed to the Resource Manager Library routine was not a valid object.

Explanation: A pointer to a response object passed to a library response routine was not valid. The pointer did not reference a response object supplied by the library.

User response: Check the program logic of the resource manager. Ensure that when invoking a library response routine, only the response object supplied by the library is passed as the response object parameter.

2610-914 A file descriptor has already been provided by a previous call to the **GetDescriptor() routine.**

Explanation: A duplicate call was made to the **GetDescriptor()** routine.

User response: Check the program logic of the resource manager. The **GetDescriptor()** routine should be called only once per library initialization to obtain a descriptor.

2610-915 The file descriptor parameter, *file_descriptor*, was not a valid value.

Explanation: The *file_descriptor* passed to the Resource Manager Library routine was not the descriptor value given to the resource manager by a previous call to **GetDescriptor()**.

User response: Check the program logic of the resource manager. Ensure the file descriptor value passed to library routines matches the value returned by the library by **GetDescriptor()**.

2610-916 The Resource Manager Library does not currently have an active connection to the RMC subsystem.

Explanation: The library does not currently have an active connection to the RMC subsystem for passing peer messages.

User response: Retry the command after the **ConnectionChanged()** method indicates that RMC is connected.

2610-917 The system call, *system_call_name*, returned the error: (*error_number*) *error_string*.

Explanation: The indicated system call returned an error. Additional error information may follow.

User response: Attempt to correct the problem indicated by the error number. If it cannot be corrected, record the above information and contact your software service organization.

2610-918 The object or attribute specified to a response method was not requested in the originating method call.

Explanation: The object handle or attribute identifier passed to a response routine was not an object or attribute which was requested.

User response: Check the program logic of the resource manager. Methods which target specific objects or attributes (such as Bind/Unbind/Monitor/...) must only be responded to with the objects or attributes which were requested.

2610-919 The response object contains more data than was requested.

Explanation: A method was invoked by the library which implied a specific amount of response data. The resource manager overflowed the response object by calling the response method too many times.

User response: Check the program logic of the resource manager. Methods which request a specific number of sub-responses (such as Bind/Unbind/Monitor/...) must not invoke the response method more times than requested before completing the response.

2610-920 The response method(s) were not called before attempting to complete or send the response.

Explanation: The resource manager attempted to send or complete an empty response.

User response: Check the program logic of the resource manager. Methods which require the resource manager to respond before completing the response object (such as Bind/Unbind/Monitor/...) must not attempt to complete an empty response.

2610-921 The response method called is not valid for the type of response object provided.

Explanation: The response object passed to a library response routine was not a valid object for that routine.

User response: Check the program logic of the resource manager. Only the response routines passed to the resource manager when the library invokes a method, may be used to complete the response. The routines in a response object provided by the library are only valid for the method they are passed to, and only until that response is completed.

2610-922 The object handle passed to a method did not match the value previously given to the Resource Manager Library.

Explanation: When an object is bound, the library provides a token which it associates to the object handle supplied by the resource manager. On a call to a library routine which requires both the object handle and library token, the handle value was not correct for the given token. A possible cause would be using an old library token for an object that was unbound, but later bound again.

User response: Check the program logic of the resource manager.

2610-923 The routine is not valid for dynamic attributes which are not being monitored.

Explanation: The resource manager attempted to call a library routine which takes as an input parameter dynamic attributes which are being monitored. However, one or more of the attributes were not being monitored.

User response: Check the program logic of the resource manager. Ensure that the routine is only called with attributes which are being monitored.

2610-924 The routine is not valid for persistent attributes which are not enabled for notification.

Explanation: The resource manager attempted to call a library routine which takes as an input parameter

persistent attributes which are enabled for notification. However, one or more of the attributes have not been enabled.

User response: Check the program logic of the resource manager. Ensure that the routine is only called with attributes which have been enabled for notification.

2610-925 Only one of a matched pair of methods was overridden.

Explanation: Certain object methods are paired such that if the resource manager overrides one default, the other must also be overridden. This error is returned when the resource manager provides a set of methods to the library which contain one or more unmatched overrides.

User response: Check that for all matched method pairs, either both or neither method in the pair are the default method. Methods which must be matched are: Bind/Unbind (RCCP and RCP), Start/Stop monitor of dynamic attributes, Enable/Disable persistent attribute notification, and Start/Stop match set monitoring.

2610-926 A pointer in the specified attribute value was not valid.

Explanation: A pointer field in the attribute value was not a valid pointer.

User response: Check the program logic of the resource manager.

2610-927 The structured data value includes a subtype which is not allowed.

Explanation: The specified attribute value is structured data that includes a subtype that is not allowed. Structured data may not include structured byte strings or other structured data.

User response: Check the program logic of the resource manager.

2610-928 The response was not complete.

Explanation: Certain methods (such as Bind/Unbind/Monitor/...) require a set number of calls to the response method before it can be completed. For example, the start monitor method requests the resource manager to begin monitoring -N- dynamic attributes. The resource manager must respond for each of the attributes in the requested before it can complete the response.

User response: Check the program logic of the resource manager. Ensure that the requirements of the response are satisfied as documented.

2610-929 **The specified locale category,
category_value, is not a valid value.**

Explanation: A value passed to the library for specifying a locale category was not valid.

User response: Check the program logic of the resource manager. Make sure that when specifying a locale category to the library, the value is one defined in **locale.h** (for example, LC_COLLATE, LC_CTYPE, LC_MONETARY, ...).

2610-999 **The Resource Manager Library
encountered an unknown internal
error.**

Explanation: Default message for an unknown internal error condition.

User response: Record the above information and contact your software service organization.

Chapter 13. 2611: RMC utilities

When an error occurs, a resource monitoring and control (RMC) utility issues one or more messages with a prefix of **2611**.

2611-000 **Line *line_number* in *file_name* is longer than *byte_count* bytes.**

Explanation: The specified line in standard input or in *file_name* contains more bytes than the program can read. This is most likely because of a lengthy comment at the end of the line.

User response: Reduce the length of the line and run the command again.

2611-001 **Error reading *file_name*: *error_message*.**

Explanation: The command encountered an error while reading the specified file.

User response: Correct the problem that is indicated in *error_message* and run the command again.

2611-002 **Cannot allocate memory.**

Explanation: The program could not allocate memory.

User response: Contact your customer support organization.

2611-003 **Line *line_number* in *file_name* contains a duplicate *stanza_name* stanza name.**

Explanation: The specified line in standard input or in *file_name* contains a stanza name that has already been specified.

User response: Remove the duplicate stanza and run the command again.

2611-004 **Missing user identifier at line *line_number* in *file_name*.**

Explanation: The user identifier token is missing from the specified line in standard input or in *file_name*.

User response: Format a valid stanza line and run the command again.

2611-005 **Missing type at line *line_number* in *file_name*.**

Explanation: The type token is missing from the specified line in standard input or in *file_name*.

User response: Format a valid stanza line and run the command again.

2611-006 **Invalid type at line *line_number* in *file_name*.**

Explanation: The specified line in standard input or in *file_name* contains a type token that is not valid.

User response: Format a valid stanza line and run the command again.

2611-007 **Invalid permissions at line *line_number* in *file_name*.**

Explanation: The specified line in standard input or in *file_name* contains a permissions token that is not valid.

User response: Format a valid stanza line and run the command again.

2611-008 **Invalid token at line *line_number* in *file_name*.**

Explanation: The specified line in standard input or in *file_name* contains a token that is not valid.

User response: Format a valid stanza line and run the command again.

2611-009 **Invalid user type keyword at *line_number* in *file_name*.**

Explanation: The specified line in standard input or in *file_name* contains a user type keyword.

User response: Format a valid stanza line using the **host** or **none** keyword and run the command again.

2611-010 **Stanza line found outside of stanza at line *line_number* in *file_name*.**

Explanation: The specified line in standard input or in *file_name* is a stanza line, but it is not contained within a prior stanza. One or more stanza lines must immediately follow a stanza name, with no intervening blank lines or comment lines. A stanza is terminated by a blank line or a comment line.

User response: Correct the problem and run the command again.

2611-011 **More than *max_input_stanzas* stanzas found in *file_name*.**

Explanation: Standard input or *file_name* contains more than the specified number of stanzas.

User response: Reduce the number of stanzas and run the command again.

2611-012 **Command option requires non-empty**

stanza at line *line_number* in *file_name*.

Explanation: The stanza that is defined at the specified line in standard input or in *file_name* must contain at least one stanza line.

User response: Format a valid stanza and run the command again.

2611-013 Cannot write to the file *file_name*:
error_message.

Explanation: The command encountered an error while writing to the specified file.

User response: Correct the problem that is indicated in *error_message* and run the command again.

2611-014 Cannot open the file *file_name*:
error_message.

Explanation: The command cannot open the specified file.

User response: Correct the problem that is indicated in *error_message* and run the command again.

2611-015 Cannot lock the file *file_name*:
error_message.

Explanation: The command cannot lock the specified file.

User response: Correct the problem that is indicated in *error_message* and run the command again.

2611-016 ACL file is busy.

Explanation: Another program is currently updating the access control list (ACL) file.

User response: Wait for a short time and then run the command again.

2611-017 Cannot link the file *file_name1* to *file_name2*: *error_message*.

Explanation: The command cannot link *file_name1* to *file_name2*.

User response: Correct the problem that is indicated in *error_message* and run the command again.

2611-018 Cannot rename the file *file_name1* to *file_name2*: *error_message*.

Explanation: The command cannot rename *file_name1* to *file_name2*.

User response: Correct the problem that is indicated in *error_message* and run the command again.

2611-019 'option' is not a valid option.

Explanation: You specified a command option that is not valid.

User response: Specify a valid option and run the command again.

2611-020 Only one option is permitted.

Explanation: You specified more than one command option.

User response: Specify a single option and run the command again.

2611-021 No stanzas read from standard input.

Explanation: The command found no stanzas when reading standard input.

User response: Correct the problem and run the command again.

2611-022 Cannot synchronize the file *file_name*:
error_message

Explanation: The command cannot synchronize the specified file.

User response: Correct the problem that is indicated in *error_message* and run the command again.

Chapter 14. 2612: RMC commands

When an error occurs, a resource monitoring and control (RMC) command issues one or more messages with a prefix of **2612**.

2612-001 Not a recognized flag: *option*.

Explanation: An unsupported option or an incorrect combination of options was specified.

User response: See the command's usage statement for a list of the valid options. Correct the command and run it again.

2612-002 Not a recognized operand: *parameter*.

Explanation: An unsupported parameter or an incorrect combination of parameters was specified.

User response: See the command's usage statement for a list of the valid parameters. Correct the command and run it again.

2612-003 The combination of *option* and *option-or-parameter* is not allowed.

Explanation: The combination of the specified options or the specified option and parameter combination is not allowed.

User response: See the command's usage statement for a list of the valid options, parameters, and option-parameter combinations. Choose a different options or do not use the parameter. Correct the command and run it again.

2612-004 A resource handle must be entered using the following format: "0x0000 0x0000 0x00000000 0x00000000 0x00000000 0x00000000" instead of: "*value*".

Explanation: The command expected a resource handle as a parameter. You entered a value that was not in the required format for a resource handle. A resource handle must be entered in this format (enclosed in double quotation marks as shown):

```
"0xnnnn 0xnnnn 0xnnnnnnnn 0xnnnnnnnn 0xnnnnnnnn\
0xnnnnnnnn"
```

where *n* is any valid hexadecimal character: **a, b, c, d, e, f, or 0** through **9**.

User response: Re-enter the command with the correct option or with a resource handle that is formatted correctly.

2612-005 A resource class name must be entered.

Explanation: This command requires a resource class name to be entered as a parameter.

User response: Re-enter the command and specify a resource class name, or use the correct option and parameter combination as specified in the command's usage statement.

2612-006 A resource handle must be entered.

Explanation: This command requires a resource handle to be entered as a parameter.

User response: Re-enter the command and specify a resource handle, or use the correct option and parameter combination as specified in the command's usage statement. A resource handle must be entered in this format (enclosed in double quotation marks as shown):

```
"0xnnnn 0xnnnn 0xnnnnnnnn 0xnnnnnnnn 0xnnnnnnnn\
0xnnnnnnnn"
```

where *n* is any valid hexadecimal character: **a, b, c, d, e, f, or 0** through **9**.

2612-007 Invalid command format-too many operands were entered.

Explanation: Too many parameters were specified.

User response: See the command's usage statement. Correct the command and run it again.

2612-008 The -s "*Selection_string*" flag is required.

Explanation: This command requires a -s "*selection_string*" option.

User response: See the command's usage statement. Correct the command and run it again.

2612-009 Unexpected error when the underlying RMC function *function* was issued and produced a return code of *decimal-value* (*hexadecimal-value*).

Explanation: This command called an underlying RMC function that returned a non-zero return code.

User response: See the *RSCT: Diagnosis Guide* for diagnostic information.

2612-010 Resource class *class_name* is not defined.

Explanation: The resource class name specified with this command is not valid.

User response: Run **lsrsrc** to get a list of valid resource class names. Specify a valid resource class name and run this command again.

2612-011 Was not able to get a list of resource handles for Resource class *class_name*.

Explanation: The resource class name specified with this command is not valid.

User response: Run **lsrsrc** to get a list of valid resource class names. Specify a valid resource class name and run this command again.

2612-012 Was not able to query the definition of the structured data for resource *class_name*.

Explanation: An unexpected failure occurred while calling **mc_qdef_sd_bp**.

User response: Make sure that RMC is working and that the resource class name is valid. Run **lsrsrc** to get a list of valid resource class names. Then, run this command again.

2612-013 error_exit received an unexpected return code *return_code*.

Explanation: All RMC return codes should be converted to an appropriate RMC command-line interface return codes.

User response: This is an internal script error and should not occur. If this message is issued, an error did occur. The actual return code for the underlying RMC function or other internal subroutine is displayed. This is a severe error, and processing of the command stops. Report the command name and this message to your software service organization.

2612-014 Error processing attribute *attribute_name* value *value*.

Explanation: The value for this particular attribute is not valid. See the preceding error message for additional details.

User response: Verify the data type for this particular attribute using the **lsrsrcdef** command. Verify and correctly specify the value so that it is appropriate for this data type. For example, if the data type is an array, the values must be enclosed within braces: {*value1 value2 ...*}. See the appropriate command man page and the **resource_data_input** man page for valid syntax values.

2612-015 Error processing SD element *element_name* value *value*

Explanation: The value for this particular element is not valid. See the preceding error message for additional details.

User response: Verify the data type for this particular attribute using the **lsrsrcdef** or **lsactdef** command. Verify and correctly specify the value so that it is appropriate for this data type. For example, if the data type is an array, the values must be enclosed within braces: {*value1 value2 ...*}. See the appropriate command man page and the **resource_data_input** man page for valid syntax values.

2612-016 An action name must be entered.

Explanation: This command requires an action name to be entered as an operand.

User response: Re-enter the command and specify an action name. Run the **lsactdef** command for a list of action names that are associated with the specified resource class.

2612-017 An internal program error occurred while attempting to display the invalid attribute *name* in *title*.

Explanation: An internal program error has been detected by the **MC_cli_display_utils set_print_array** function. This function should not be called if there are incorrect attribute names.

User response: Run this command again with the -V (verbose) option specified, and report the error to your software service organization.

2612-018 Attribute name *name* is not a valid attribute name.

Explanation: The specified attribute name is not valid. It has not been defined as either a persistent or a dynamic attribute for the specified resource class.

User response: Run the **lsrsrcdef** command to determine which attribute names are defined for a specific resource class. Then run this command again, specifying a correct attribute name.

2612-019 The selection string specified with the -s flag contains invalid syntax.

Explanation: The specified selection string contains syntax that is not valid. Only persistent attribute names can be specified in the selection string. The error message that follows immediately after this message contains more information about the incorrect syntax. See *RSCT: Administration Guide* for details on correct selection string syntax.

User response: Correct the selection string and run this command again.

2612-020 An Attr=value must be entered.

Explanation: This command requires an **attribute=value** parameter with the combination of options that was specified.

User response: Specify an **attribute=value** parameter or use the correct option and parameter combination as specified in the command's Usage statement and run the command again.

2612-021 Resource handle *resource_handle* is invalid. No resource corresponds to this resource handle.

Explanation: The resource handle is not valid. The format of the resource handle is correct, but there is no resource defined for the specified resource handle. Possibly, the resource that use to correspond to this resource handle was removed (undefined).

User response: Specify a valid resource handle and run the command again.

To find a list of valid resource handles, run the **lsrsrc** command with the **-r** and **-s** options and a resource class parameter.

2612-022 A session could not be established with the RMC daemon on *contact_name*.

Explanation: A session could not be established with the RMC daemon on *contact_name*. When the CT_CONTACT environment variable is not set, a session is established with the RMC daemon running on the same host where the command is run. This is also called the local node. When the CT_CONTACT environment variable is set to a valid host name or IP address, a session is established with the RMC daemon on the host specified by the CT_CONTACT environment variable.

User response: Run the command again after verifying that the RMC daemon is operational on the appropriate system. If the CT_CONTACT environment variable is not set, verify that the RMC daemon is operational on the local node (the system where the command is being run). If the CT_CONTACT environment variable is set, verify that it is set to a valid host name or IP address and that the RMC daemon is operational on the corresponding system.

2612-023 No resources found.

Explanation: No resources were found to match the specified selection criteria. For example, if the **rmrsrc -s "selection_string"** command was entered and no resources were found that matched the specified selection string, no resources will be removed.

User response: Use the **lsrsrc** command to see what resources exist. Re-enter the command specifying a corrected selection string.

2612-024 Could not authenticate user.

Explanation: The user could not be authenticated.

User response: See the *RSCT: Administration Guide* for security information. Verify that the mechanism to provide authentication has been set up properly. Correct any authentication problems and then run this command again.

2612-025 User not authorized to access the resource or resource class.

Explanation: The user's user ID is not authorized to access, read or write, resources or resource classes using the RMC subsystem.

User response: See the *RSCT: Administration Guide* for information about access control lists (ACLs). The administrator may need to add this user's user ID to the RMC ACL file or change this user's permissions in the RMC ACL file. After any updates to the ACL file have been made and the RMC subsystem has been refreshed, run this command again.

2612-031 Error processing file *file_name* for input.

Explanation: The file that was specified as input to the command using the **-f resource_data_input_file** option could not be processed.

User response: See the message that preceded this one for more information about why this file could not be processed. Possibilities are: the file name as specified could not be found, the file could not be read, or the format of the data inside the file is not correct. Take corrective action based on the previous error message and re-enter the command.

2612-033 Required memory could not be allocated.

Explanation: A memory allocation failed that was needed to complete the command.

User response: Try to run the command again and if it fails, contact your software support organization.

2612-034 Syntax of wildcard (*wild-card-specification*) in attribute list is not valid.

Explanation: A wild card specification in an attribute list does not use a recognized syntax.

User response: Correct the wild card syntax and run the command again.

2612-035 **A zero length attribute name was detected in operand**
"parameter-containing-error".

Explanation: The specified parameter contains a zero-length attribute name, which is not allowed.

User response: Correct the parameter and run the command again.

2612-036 **An attribute name was specified without a value in operand**
"parameter-containing-error".

Explanation: The specified parameter contains an attribute name with no matching value.

User response: Correct the parameter and run the command again.

2612-037 **A zero length option name was detected in operand**
"parameter-containing-error".

Explanation: The specified parameter contains a zero-length option name, which is not allowed.

User response: Correct the parameter and run the command again.

2612-038 **An option name was specified without a value in operand** *"parameter-containing-error".*

Explanation: The specified parameter contains an option name with no matching value.

User response: Correct the parameter and run the command again.

2612-039 **The string "string-constant-containing-error" is missing a closing quote character.**

Explanation: The specified string constant is missing a closing quotation mark.

User response: Add a closing quotation mark after the specified string constant and run the command again.

2612-040 **The binary value "binary-constant-containing-error" is not valid.**

Explanation: A binary value must begin with **0x** or **0X**, followed by a even number of hexadecimal characters (0 through 9, a through f, A through F).

User response: Correct the operand and run the command again.

2612-041 **Resource class *class_name* could not be displayed.**

Explanation: An unexpected problem occurred that prevented the displaying of the specified resource definition.

User response: Examine the return code, make certain that RMC is running, or take other appropriate diagnostic action based on the return code.

2612-061 **Resource class *class_name* could not be displayed.**

Explanation: An unexpected problem occurred with that prevented the displaying of the specified resource.

User response: Examine the return code, make certain that RMC is running, or take other appropriate diagnostic action based on the return code.

2612-081 **Do not specify attribute *name* when you define the resource *resource_class resource_def*.**

Explanation: When defining a resource, the user must supply only valid Attr=value pairs. The Attr must match a persistent resource attribute that is already defined and has a property that requires it to be set on define, or is optional for the define. The specified attribute name is either not defined as being a persistent attribute for this resource, or the properties of this attribute do not allow it to be set on a define.

User response: Re-enter a valid persistent resource attribute name. Issue the command **mkrsrc -e 2 Resource** to see which attributes can be set on a define.

2612-082 **Attribute *attribute* is required when defining resource *resource*.**

Explanation: When a resource is defined, all attributes with the property MC_RSRC_PATTR_REQD_FOR_DEFINE must be defined.

User response: Re-enter the command with the missing attribute and a proper value.

2612-083 **Error processing file *file_name* for input.**

Explanation: The file that was specified as input to the **mkrsrc** command using the **-f *resource_data_input_file*** option could not be processed.

User response: The previous message should contain more information regarding why this file could not be processed. Possibilities are: the file name as specified could not be found, the file could not be read, or the format of the data inside the file is not correct. Take

corrective action based on previous error message and re-enter the command.

2612-084 **Error processing the command line operand2... for Attr=value pairs.**

Explanation: The operands listed in this message are expected to be *attr=value* pairs. *attr* is a valid attribute name for the resource class that was specified as *operand1*. *value* is a valid value for the datatype of this attribute. For example, if the datatype of this *attr* is **ct_char_ptr**, *value* should be a valid string. If the string includes spaces or tabs or is null, it must be enclosed within double quotation marks.

User response: The previous message should contain more information regarding why this command line could not be processed. Run the command again using the correct syntax for the *attr=value* pairs.

2612-085 **Resource *resource* could not be defined.**

Explanation: An unexpected problem occurred with RMC, which prevented the defining of the specified resource.

User response: Examine the return code, make sure RMC is running, or take other appropriate diagnostic action based on the return code.

2612-086 **The required NLSTranslation Stanza keyword *keyword*: is missing from file *file*.**

Explanation: The **NLSTranslation** stanza in the *resource_data_input_file* requires three keywords and respective data. See the *resource_data_input* man page for details on the required keywords.

User response: The **NLSTranslation** stanza is optional and only needs to be specified in your *resource_data_input_file* if you require certain attribute values to be translated. Add the required *keyword = value* or remove the **NLSTranslation** stanza from this file and run the command again.

2612-087 **The keyword *keyword* which appears in the NLSTranslation Stanza in file *file* is not a valid keyword.**

Explanation: The **NLSTranslation** stanza in the *resource_data_input_file* requires three keywords and respective data. See the *resource_data_input* man page for details on the required keywords. The keyword appearing in this stanza was not one of the required keywords.

User response: The **NLSTranslation** stanza is optional and only needs to be specified in your *resource_data_input_file* if you require certain attribute values to be translated. Remove the keyword that is not required and make sure all of the required keywords are

specified before you run this command again.

2612-088 **Attribute *attribute* specified in the NLSTranslation Stanza in file *file_name* is not a defined persistent resource attribute for this resource class or does not have a data type of **ct_char_ptr**.**

Explanation: The persistent attributes listed in the **NLSTranslation** stanza with the **PersistentResourceAttributes** keyword must have a datatype of **ct_char_ptr**. Only persistent attributes that are of datatype **ct_char_ptr** can be translated using this mechanism.

User response: The **NLSTranslation** stanza is optional and needs to be specified in your *resource_data_input_file* only if you require certain attribute values to be translated. Only persistent attributes with a **ct_char_ptr** datatype can be translated using this mechanism. Use the *lsrsrcdef* command to get a list of defined persistent resource attributes and their data types. Correct the **PersistentResourceAttributes** value in the **NLSTranslation Stanza** and rerun this command.

2612-089 **Error translating attribute *attribute_name* = *value*, message map *MessageMap*, message catalogue *MessageCat*.**

Explanation: An attempt was made to translate the persistent resource attribute specified using the message mnemonic that should have been specified as its value using the *MessageMapPath* and *MessageCat* as specified in the **NLSTranslation stanza**.

User response: The **NLSTranslation** stanza is optional and only needs to be specified in your *resource_data_input_file* if you require certain attribute values to be translated. Correct the attribute value using a mnemonic that is specified in the *Message Map* and translated in the *Message Catalogue*.

2612-090 **When command arguments are specified, the number of sets of arguments must match the number of sets of attributes.**

Explanation: **mkrsrc** can be used to define more than one resource at a time. Command arguments are optional, but if any command arguments are specified, a set of command arguments must be specified to correspond with each set of resource attributes.

User response: Specify one set of command arguments for each set of attributes. Even if there are no command arguments for a particular set of resource attributes a placeholder for the corresponding command arguments must be made. For example, if there are no corresponding command arguments for resource 2,

make an entry for resource 2 under PersistentResourceArguments that has no arguments listed.

PersistentResourceAttributes::

```
resource 1:
  attr1 = value
  attr2 = value
resource 2:
  attr1 = value
  attr2 = value
resource 3:
  attr1 = value
  attr2 = value
```

PersistentResourceArguments::

```
resource 1:
  arg1 = value
resource 2:
resource 3:
  arg1 = value
```

2612-091 **A temporary file needed to process the input data could not be created.**
reason_for_error.

Explanation: A temporary file is required to process the input to this **mkrsrc** command. While attempting an operation to the temporary file, an error occurred.

User response: Resolve the reason for the file error and run the command again.

2612-092 **Attribute *attribute_name* is not valid for defining a resource in class *resource_class*.**

Explanation: Either *attribute_name* is not defined as a persistent attribute for this resource or the properties of *attribute_name* do not allow it to be set when a resource is being defined.

When defining a resource, the user must supply only valid *attr=value* pairs. The *attr* must match a persistent resource attribute that is already defined and has a property that is either **reqd_for_define** (required) or **option_for_define** (optional).

User response: Run **mkrsrc -e 2 *resource_class*** to see which attributes can be set when a resource is being defined.

Specify a valid persistent resource attribute name and run the **mkrsrc *resource_class attr=value*** command again.

2612-093 **Attribute *attribute_name* is not valid for defining a resource in class *resource_class* for *resource_def*.**

Explanation: Either *attribute_name* is not defined as a persistent attribute for this resource or the properties of *attribute_name* do not allow it to be set when a resource is being defined.

When defining a resource, the user must supply only

valid *attr=value* pairs. The *attr* must match a persistent resource attribute that is already defined and has a property that is either **reqd_for_define** (required) or **option_for_define** (optional).

User response: Run **mkrsrc -e 2 *resource_class*** to see which attributes can be set when a resource is being defined.

Specify a valid persistent resource attribute name in the input file and run the **mkrsrc -f *input_file resource_class*** command again.

2612-101 **Failure removing resource, bad resource handle: *resource_handle*.**

Explanation: To remove a resource, a valid resource handle must be supplied.

User response: Re-run this command, specifying a valid resource handle. Run **lsrsrc** with the **-r, -ap**, and other flags as appropriate to get a list of valid resource handles.

2612-102 **Failure removing resource *resource*.**

Explanation: An error occurred when running the **rmrsrc** command.

User response: The preceding error message should contain more information regarding why the **rmrsrc** command failed. Resolve that error and re-enter this command.

2612-121 **Resource class *resource* could not be refreshed.**

Explanation: An unexpected problem occurred, which prevented the refreshing of the specified resource class.

User response: Examine the return code, make certain that RMC is running, or take other appropriate RMC diagnostic action based on the return code.

2612-141 **Error processing file *file_name* for input.**

Explanation: The file that was specified as input to the **chrsrc** command using the **-f *resource_data_input_file*** option could not be processed.

User response: The previous message should contain more information regarding why this file could not be processed. Possibilities are: the file name as specified could not be found, the file could not be read, or the format of the data inside the file is not correct. Take corrective action based on previous error message and re-enter the command.

2612-142 **Error processing the command line operand2... for Attr=value pairs.**

Explanation: Operand 2, operand 3, and so forth are expected to be Attr=value pairs. An Attr is a valid attribute name for the resource class that was specified as Operand 1. The value should be a valid value for the data type of this attribute. For example, if this Attr data type is a char_ptr, the value should be a valid string. If the string includes spaces or tabs or is null, it must be enclosed within double quotation marks.

User response: The previous message should contain more information regarding why this command line could not be processed. Re-enter the command using correct syntax for the Attr=value pairs.

2612-143 **Do not specify attribute *attribute* when changing resource *resource_class* *resource_def*.**

Explanation: When changing a resource, the user must supply only valid Attr=value pairs. The Attr must match a persistent resource attribute that is already defined, and has a property that allows it to be set. It cannot have a property of "Read Only". The specified attribute name is either not defined as being a persistent attribute for this resource, or the properties of the attribute do not allow it to be set.

User response: Re-enter a valid persistent resource attribute name. Run: **lsrsrcdef -ap *Resource_class*** to see a list of persistent attributes with their properties for the specified resource.

2612-144 **Resource *resource* could not be changed.**

Explanation: An unexpected problem occurred that prevented the changing of the specified resource attributes.

User response: Examine the return code, make certain RMC is running, or take other appropriate diagnostic action based on the return code.

2612-145 **Resource *resource* attribute *attribute* could not be changed.**

Explanation: The resource manager that controls the specified resource class would not allow you to change the specified attribute.

User response: Examine the message following this one for more details about why this attribute could not be changed. It is possible that the value is not acceptable or that the underlying resource manager does not allow you to modify this attribute.

2612-146 **Failure changing resource, bad resource handle.**

Explanation: To change a resource a valid resource handle must be supplied.

User response: Re-run this command, specifying a valid resource handle. Run lsrsrc with the **-r, -ap**, and other flags as appropriate to get a list of valid resource handles.

2612-147 **Attribute *attribute_name* is not valid for changing a resource in class *resource_class*.**

Explanation: The specified attribute name is not defined as a persistent attribute for this resource or the properties of the attribute do not allow it to be set.

User response: When changing a resource, you need to use valid *attr=value* pairs. The *attr* must match a persistent resource attribute that is already defined and has a property that allows it to be set. It cannot have a property of "Read Only".

Run:

```
lsrsrcdef -ap resource_class
```

to see a list of persistent attributes with their properties for the specified resource. Specify a valid persistent resource attribute name and run the command again.

2612-148 **Attribute *attribute_name* is not valid for changing a resource in class *resource_class* for *resource_def*.**

Explanation: The specified attribute name is not defined as a persistent attribute for this resource or the properties of the attribute do not allow it to be set.

User response: When changing a resource, you need to use valid *attr=value* pairs. The *attr* must match a persistent resource attribute that is already defined and has a property that allows it to be set. It cannot have a property of "Read Only".

Run:

```
lsrsrcdef -ap resource_class
```

to see a list of persistent attributes with their properties for the specified resource. Specify a valid persistent resource attribute name and run the command again.

2612-161 **Resource *class_name* action definition could not be displayed.**

Explanation: An unexpected problem occurred that prevented the display of the specified resource action definition.

User response: Examine the return code, make certain that RMC is running, or take other appropriate diagnostic action based on the return code.

2612-361 The structured data value "*value*" does not have valid syntax.

Explanation: A structured data value must start with a left bracket ([]) and end with a right bracket (]). Elements are separated by commas (,).

User response: Correct the operand and run the command again.

2612-362 The array value "*value*" does not have valid syntax.

Explanation: An array value must start with a left brace ({} and end with a right brace (}). Elements are separated by commas (,).

User response: Correct the operand and run the command again.

2612-363 The command argument name "*name*" is not valid for resource class *class_name*.

Explanation: A command argument name was specified that is not valid for the specified resource class. Command argument names are optional parameters on some operations such as when creating a new resource.

User response: Correct the command argument name and run the command again.

2612-364 The action name specified is not defined for class *class_name*.

Explanation: An action name specified is not available in the named resource class.

User response: Correct the action name and run the command again.

2612-365 The action input argument name "*argument_name*" is not valid for action "*action_name*" of resource class *class_name*.

Explanation: An action input argument name was specified that is not valid for the specified resource class. Action input argument names are optional parameters and are resource class and action specific.

User response: Correct the action input argument name and run the command again.

2612-366 The specified string "*string*" is not a recognized data type.

Explanation: A data type name was specified that is not valid.

User response: Correct the data type name and run the command again.

2612-367 An attribute name is required.

Explanation: The command was entered without an attribute name but one is required.

User response: Add the attribute name to the command parameters and run the command again.

2612-368 More than the maximum number of permitted resources was found on *node_name*.

Explanation: The command specified a maximum number of permitted resources. More than the maximum number of resources were found on a node.

User response: Check the resource permissions on the specified node.

2612-369 The security mechanism specified in the ACL ID "*ACL_ID*" is not correct.

Explanation: The security mechanism specified is not "host" or "none".

User response: Refer to the ACL descriptions on how to specify the security mechanism. Verify that the input was entered correctly and run the command again.

2612-370 An access was specified without an ID in "*operand*".

Explanation: The specified operand contained a permission without an ID.

User response: Correct the operand and run the command again.

2612-371 An access was specified without a permission in "*operand*".

Explanation: The specified operand contained an access ID without a matching permission.

User response: Correct the operand and run the command again.

2612-372 The specified permission "*permission*" is not a valid permission.

Explanation: The command input specified a permission that is not valid.

User response: Correct the permission and run the command again.

2612-373 A security routine returned an error code of *return_code* processing an ACL.

Explanation: A security routine returned an error while processing an ACL.

User response: Report this problem to your system administrator.

2612-374 The resource was not created because a Resource ACL could not be created for the resource.

Explanation: An error occurred while creating a resource ACL for the new resource. The resource could not be created.

User response: Report this error to your software service organization.

2612-375 The resource was created but there was an error creating the Resource ACL. The resource does not have an ACL.

Explanation: An error occurred while creating a resource ACL for the new resource. The resource was created, but it does not have an ACL.

User response: Report this error to your software service organization.

2612-376 No permitted resources found.

Explanation: No permitted resources were found for the specified action. Either the resource does not exist or execution access to the resource is denied.

User response: Check the access controls for the resources to make sure the proper access is defined.

2612-377 The identity "*identity*" was not found in the ACL.

Explanation: The specified identity was not found in the ACL.

User response: Check the identity and run the command again.

2612-378 The input file "*file_name*" could not be opened. The error number is "*error_number*". The reason is "*reason_for_error*".

Explanation: The specified input file could not be opened.

User response: Make sure the file name is correct and run the command again.

2612-379 An error occurred processing the input file "*file_name*". The error number is "*error_number*". The reason is "*reason_for_error*".

Explanation: The specified input file could not be processed.

User response: Investigate the file error information returned.

2612-380 There are no nodes listed in the input file *file_name*.

Explanation: The specified input file did not contain any node names.

User response: Check the contents of the file.

2612-541 The -X flag cannot be used when specifying access.

Explanation: Both the -X flag and an access list were specified.

User response: Remove the -X flag or the access list and run the command again.

Chapter 15. 2615: First failure data capture (FFDC)

When an error occurs, the first failure data capture (FFDC) library issues one or more messages with a prefix of **2615**.

2615-001 **libct_ffdc.a Error: The parameter passed to the library routine `fc_init_stack` is not valid. The valid values are: `FC_STACK`, `FC_TRACE`, `FC_CREAT`, `FC_INHERIT`. This process cannot make recordings to the FFDC Error Stack.**

Explanation: The caller provided a value that was not valid as the parameter to the `fc_init_stack` routine.

User response: Correct the source code to use the proper option, recompile the source code, and retry the call to this routine.

2615-002 **libct_ffdc.a Error: *library option* is not supported by this version of the *library routine name* routine.**

Explanation: The caller specified an option to the named routine which this version does not support at this time.

User response: Upgrade the `libct_ffdc.a` library to a version that supports the specified option and recompile the application. If no upgrade is available, remove use of this option from the source code module, recompile the source code, and attempt the function again.

2615-003 **libct_ffdc.a Error: Options *symbolic name for option provided* and *libct_ffdc.a* cannot be combined as options to the *library routine name* routine. This process cannot make recordings to the FFDC Error Stack.**

Explanation: The caller used mutually exclusive options to the named library routine.

User response: Correct the source code to use the proper combination of options, recompile the source code, and retry the call to this routine.

2615-004 **libct_ffdc.a Error: Cannot inherit an FFDC Environment because an FFDC Environment has not been previously established. This process cannot make recordings to the FFDC Error Stack.**

Explanation: The `fc_init_stack()` routine was used to inherit an FFDC Environment, but no ancestor of this process has previously established an FFDC Environment. Because of this, the attempt to inherit was not successful.

User response: Do not attempt to record information

to the FFDC Error Stack within this process. If the client wishes to have an FFDC Environment exist, modify the source code to create an FFDC Environment instead of inheriting it. If the client only wishes to use an FFDC Environment if an ancestor has established an FFDC Environment, this failure can be ignored.

2615-005 **libct_ffdc.a Error: Cannot create or inherit an FFDC Environment because an FFDC Environment already exists for this process. `fc_init_stack` may have been attempted several times by this process. Examine the source code for errors.**

Explanation: The `fc_init_stack()` routine was used to create or inherit an FFDC Environment when the process already has an FFDC Environment established for itself. This session was established earlier in the process' execution, or earlier by another thread of this process.

User response: Examine the source code for this process to ensure that multiple attempts to establish the FFDC Environment have not been made by accident. Correct the source code. The process can safely ignore this failure condition for now, but the source code should be corrected.

2615-006 **libct_ffdc.a Error: The FFDC Environment for this process appears to be corrupted. The FFDC Environment is not usable. This process cannot make recordings to the FFDC Error Stack.**

Explanation: The FFDC Environment is composed of four process environment variables: `FFDCSTACK`, `FFDCTRACE`, `FFDCORIG`, and `FFDCPID`. At least one of these variables have been removed or set to a null value. The FFDC Environment is not usable in this condition, meaning that the process cannot establish an FFDC Environment or record information to the FFDC Error Stack.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Check the system for users or processes that may be setting one or more of these process environment variables. Check the application source code for instructions that set the process environment, and ensure that they are not setting one or more of these process environment variables. Consult the FFDC documentation for further problem determination procedures.

2615-007 **libct_ffdc.a Error: Failure in allocating memory. An FFDC Environment cannot be established. This process cannot make recordings to the FFDC Error Stack. Check this process for memory leak problems, and check the system for processes hoarding memory.**

Explanation: Attempts to allocate memory for expanding the process environment were unsuccessful. This implies that either the process is allocating too much memory, or a process elsewhere in the system is allocating too much memory.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Examine the process for memory leaks and for overuse of memory. Examine the system for processes hoarding system memory, and request that the system administrator terminate these processes.

2615-008 **libct_ffdc.a Error: An FFDC Environment cannot be established for this process. Either the process execution environment could not be modified by the library, or temporary work space could not be obtained in the /tmp file system. This process cannot make recordings to the FFDC Error Stack. This process will also be unable to obtain FFDC Failure Identifiers for reports it makes to the AIX Error Log. Verify that space is available in the /tmp file system on this node, and notify the system administrator if /tmp appears to be near its capacity.**

Explanation: The `fc_init_stack` routine cannot modify the process environment. An FFDC Environment cannot be established.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Follow the instructions listed in the previous message.

2615-009 **libct_ffdc.a Error: The FFDC Environment could not be established. An FFDC Error Stack File appears to exist already for this process in the *directory name where FFDC Error Stacks reside on system* directory. This process cannot make recordings to the FFDC Error Stack.**

Explanation: The `fc_init_stack` routine attempted to reserve an FFDC Error Stack file for this process in the named directory, but a file already exists in that directory using the name that `fc_init_stack` tried to reserve. The file name reserved by `fc_init_stack` has the format of:
command_name.process_identifier.today's_date.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Use the `fcclear` command to remove any unneeded FFDC Error Stack files from this system. Run the application again after the unneeded FFDC Error Stack files are removed.

2615-010 **libct_ffdc.a Error: The FFDC Error Stack directory *directory name where FFDC Error Stacks reside on system* cannot be accessed. The directory may be missing, unmounted, or permissions may have been changed on the directory. Contact the system administrator and report this problem. This process cannot make recordings to the FFDC Error Stack at this time.**

Explanation: The named directory cannot be accessed. Either the directory has been removed, unmounted, or its permissions have been changed from the values created when the FFDC software was installed.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Contact the system administrator and report the problem. The system administrator should mount the directory if it is unmounted, create the directory if it has been removed, or change the permissions on the directory to permit access. Instructions for performing these repairs are given in the FFDC problem determination documentation.

2615-011 **libct_ffdc.a Error: An unexpected failure occurred in the *internal routine name* routine. This process cannot make recordings to the FFDC Error Stack at this time. Contact the IBM Customer Support Center for assistance in resolving this error.**

Explanation: An error occurred within the FFDC software that was not expected. This failure implies that a coding mistake was made in the FFDC software.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Report this problem to your system administrator, and have the system administrator contact the IBM Support Center. System administrators should consult the FFDC problem determination documentation prior to contacting the IBM Customer Support Center.

2615-012 **libct_ffdc.a Error: An FFDC Environment does not exist for this process. This process cannot record failure information to the FFDC Error Stack.**

Explanation: An FFDC Error Stack was not established by this process. The process is not able to record information to an FFDC Error Stack.

User response: If this process wishes to record failure information to an FFDC Error Stack file, create or inherit an FFDC Environment using the `fc_init_stack` library routine. If this error is returned from the `fc_test_stack` routine, it is to be treated as an indication that the FFDC Environment does not exist, and the process should proceed accordingly; it is not an actual failure in this case, but status information.

2615-013 **libct_ffdc.a Error: The FFDC library routine name routine could not record information on this incident to the System Log. No incident report was filed by this routine.**

Explanation: This routine could not record information about this incident to the System Log. The System Log could not be accessed, or attempts to write to the System Log were unsuccessful. No other logging mechanism is available to record this information on this system.

User response: Ask the system administrator to verify the operation of the System Log. System administrators should consult the appropriate operating system documentation to diagnose the status of the System Log.

2615-014 **libct_ffdc.a Error: The FFDC Error Stack file FFDC Error Stack file cannot be accessed. The file may be missing, corrupted, or, permissions may have been changed on the file to prohibit access. Contact the system administrator and report this problem. This process cannot make recordings to the FFDC Error Stack at this time.**

Explanation: The named file cannot be accessed. Either the file has been removed, unmounted, or its permissions have been changed from the values that were used by the FFDC library when the file was created.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Contact the system administrator and report the problem. The system administrator should verify the permissions on the file and correct them if necessary. Instructions for performing these repairs are given in the FFDC problem determination documentation.

2615-015 **libct_ffdc.a Error: The name reserved for the FFDC Error Stack file: FFDC Error Stack File is the name of an existing directory. Ask the system administrator to ensure that system users are not creating subdirectories in the directory: directory where FFDC Error Stacks reside. If this problem occurs in multiple applications, contact the system administrator to have the problem reported to the IBM Customer Support Center.**

Explanation: The file name reserved for the FFDC Error Stack file for this application is actually the name of a directory. Either a system user has created a directory of the same name on the system, or there is a problem with the `fc_init_stack()` routine that must be addressed by the IBM Customer Support Center.

User response: Contact the system administrator and report the problem. System administrators should verify that the file name is indeed a directory, and was not created by a system user accidentally. Remove any subdirectories in the named directory to prevent the problem from happening again. If the problem is reported for multiple applications, the problem indicates an error in the `fc_init_stack()` or `fc_push_stack` library routines, and the IBM Customer Support Center should be contacted to resolve the problem.

2615-016 **libct_ffdc.a Error: The FFDC Error Stack file name of FFDC Error Stack File cannot be created. Permissions on the directory have been changed to prohibit creating files in this directory. Contact the system administrator and report this problem. This process cannot make recordings to the FFDC Error Stack at this time.**

Explanation: The named file cannot be created. The permissions on the directory have been changed from the permissions set when the FFDC software was installed.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Contact the system administrator and report the problem. The system administrator should change the permissions on the directory to permit processes to create files in this directory. Instructions for performing this repair are given in the FFDC problem determination documentation.

2615-017 **libct_ffdc.a Error: Insufficient space exists in the file system containing the directory: *directory name* to create an FFDC Error Stack file.** This routine attempted to reserve an FFDC Error Stack file of a minimum size of *minimum size of FFDC Error Stack File* bytes while leaving at least five percent of the file system capacity available. The FFDC Error Stack file could not be reserved under these constraints. This application cannot record information to the FFDC Error Stack until more space becomes available in the file system.

Explanation: An FFDC Error Stack cannot be created in the named directory within the safety precautions used by First Failure Data Capture. This application will be unable to record information to the FFDC Error Stack until more space becomes available in the file system containing this directory.

User response: Report this problem to the system administrator. System administrators should remove any FFDC Error Stack files from this system that are no longer needed, using the `fcstkclear` command to remove them, or add more space to the file system containing this directory. System administrators should also check other directories in the same file system for other obsolete files that can be removed to make more space available.

2615-018 **libct_ffdc.a Error: Unable to lock the file: *FFDC Error Stack filename* for exclusive use.** The file may have been removed by another application, or another application may have locked this file for use and become hung. This process is unable to record incident information to the FFDC Error Stack at this time.

Explanation: Attempts to lock this file for exclusive use were not successful. The file may have been removed by another user or application, or another application also using this FFDC Error Stack file may have become hung while attempting to record information to the FFDC Error Stack. This report cannot be made to the FFDC Error Stack at this time. The application can attempt to make this report again at a later time.

User response: Pause the application for a short period of time, and attempt to record the incident information again. If this condition persists, verify that the file exists and was not removed by another user or application. Check any ancestor or descendent processes of this application to determine if any of them have become hung. Terminate any ancestor or descendent process that have hung.

2615-019 **libct_ffdc.a Error: Unable to open the FFDC Error Stack file: *FFDC Error Stack filename*.** The file may have been removed by another application, or the file permissions may have been altered on the file to prohibit this application from opening the file. Permissions on the directory containing this file may have changed to prohibit files within it to be modified. This application cannot record information to the FFDC Error Stack at this time. Error code from `open()` system call: *errno* from `open()` routine.

Explanation: An attempt to open this file for modification were unsuccessful. The file may have been removed, or the permissions on the file may have been changed by another user or application to prohibit other applications from altering this file. Permissions on one or more of the directories within the file path name may have been altered by other users or applications to prohibit applications from modifying files. As a result, this application cannot record information to the FFDC Error Stack at this time.

User response: Report the problem to the system administrator. System administrators should verify that the file exists, and that the file and the directories in the file path name permit applications to modify the file contents.

2615-020 **libct_ffdc.a Error: Unable to update the control information within the FFDC Error Stack file: *FFDC Error Stack filename*.** The file may be corrupted or this problem can indicate an internal error in the FFDC library software. This process should consider the FFDC Error Stack unusable. Verify that the file exists and can be viewed using the `fcstkprpt` command. If `fcstkprpt` fails to indicate an error with the FFDC Error Stack file, contact the system administrator to have this problem reported to the IBM Customer Service Center. Error code from the `write()` library call: *errno* from `write()` routine.

Explanation: The FFDC Error Stack internal control information could not be modified. The file may be corrupt, the file system may be experiencing problems, or an internal problem may exist in the FFDC library that requires the attention of the IBM Customer Support Center to rectify. The application should consider the FFDC Error Stack unusable.

User response: Do not attempt to record further information to the FFDC Error Stack from this application. Contact the system administrator and report this problem. System administrators should verify that the file system containing this file is not experiencing

problems, and should also verify that the hardware supporting this file system is also not experiencing problems. If the file system and the hardware appear to be functioning properly, contact the IBM Customer Support Center to report this problem.

2615-021 **libct_ffdc.a Error: Unable to relinquish exclusive access to the FFDC Error Stack file: *FFDC Error Stack filename*. This process should consider the FFDC Error Stack unusable. Other ancestor and descendent processes may find it impossible to use the FFDC Error Stack if they also have FFDC Environments established. Report this problem to the system administrator. Do not attempt to use the FFDC Error Stack from this process. Error code from the lockf() library call: *errno* from *write()* routine.**

Explanation: The FFDC library could not release the lock it obtained for the named FFDC Error Stack file. This is most likely an indication of an internal error within the FFDC library that must be reported to the IBM Customer Support Center.

User response: Do not attempt to use the FFDC Error Stack from this application. Expect ancestor or descendent processes that also use this FFDC Error Stack to report FC_STACK_LOCK failures while this application runs. Report this problem to the system administrator. System administrators should verify that the file system containing this file is not experiencing problems, and that the hardware supporting the file system is not experiencing problems. Once these have been verified, contact the IBM Customer Support Center to report this problem.

2615-022 **libct_ffdc.a Error: The FFDC Error Stack file: *FFDC Error Stack filename* appears to have been corrupted. The internal routine that detected this condition is: *internal routine*. This application should consider the FFDC Error Stack unusable, and should not attempt to make any more recordings to the FFDC Error Stack.**

Explanation: The contents of the FFDC Error Stack appear to be corrupted. File control information may contain values outside of the expected ranges, or previously recorded information may appear to be not valid. An application may have modified this file using an interface other than *fc_push_stack* to modify the contents of this file (such as an editor).

User response: Do not attempt to use this FFDC Error Stack file from this application or any other. Examine the FFDC Error Stack file ownership values and permissions to determine if the file appears to have been modified by some outside source.

2615-023 **libct_ffdc.a Error: Unable to record incident information to the FFDC Error Stack file: *FFDC Error Stack filename*. The file may be corrupted, or this problem can indicate an internal error in the FFDC library software. This process should consider the FFDC Error Stack unusable. Verify that the file exists and can be viewed using the *fcstkprpt* command. If *fcstkprpt* fails to indicate an error with the FFDC Error Stack file, contact the system administrator to have this problem reported to the IBM Customer Service Center. Error code from the *write()* library call: *errno* *write()* routine.**

Explanation: This routine could not record information on the incident reported by the caller to the FFDC Error Stack file named in this message. The file may be corrupt, the file system may be experiencing problems, or an internal problem may exist in the FFDC library that requires the attention of the IBM Customer Support Center to rectify. The application should consider the FFDC Error Stack unusable.

User response: Do not attempt to record further information to the FFDC Error Stack from this application. Contact the system administrator and report this problem. System administrators should verify that the file system containing this file is not experiencing problems, and should also verify that the hardware supporting this file system is also not experiencing problems. If the file system and the hardware appear to be functioning properly, contact the IBM Customer Support Center to report this problem.

2615-024 **libct_ffdc.a Error: Unable to set the read-write file pointer within the FFDC Error Stack file: *FFDC Error Stack filename* to offset position *file read-write offset position*. The file may be corrupted, or this problem can indicate an internal error in the FFDC library software. This process should consider the FFDC Error Stack unusable. Verify that the file exists and can be viewed using the *fcstkprpt* command. If *fcstkprpt* fails to indicate an error with the FFDC Error Stack file, contact the system administrator to have this problem reported to the IBM Customer Service Center. Error code from the *write()* library call: *errno* from *write()* routine.**

Explanation: The routine could not set the read-write pointer to the position within the named FFDC Error Stack file where information is to be recorded. The file may be corrupt, the file system may be experiencing problems, or an internal problem may exist in the FFDC

library that requires the attention of the IBM Customer Support Center to rectify. The application should consider the FFDC Error Stack unusable.

User response: Do not attempt to record further information to the FFDC Error Stack from this application. Contact the system administrator and report this problem. System administrators should verify that the file system containing this file is not experiencing problems, and should also verify that the hardware supporting this file system is also not experiencing problems. If the file system and the hardware appear to be functioning properly, contact the IBM Customer Support Center to report this problem.

2615-025 libct_ffdc.a Error: Unable to create or inherit an FFDC Environment. This process environment has been set to prevent the creation or inheritance of FFDC Error Stacks. The system administrator or other privileged user has set this control. While this process remains capable of recording information to the AIX Error Log and the BSD System Log through the FFDC interfaces, this process is not capable of using an FFDC Error Stack. Contact the system administrator if an FFDC Error Stack is required by this process, and ask to have this FFDC function restored to the process environment.

Explanation: This routine was not able to inherit or create an FFDC Environment to use FFDC Error Stacks, because the system administrator activated a control that disabled the use of FFDC Error Stacks in this process environment. The process remains capable of recording information to the AIX Error Log and the BSD System Log.

User response: Contact the system administrator to request that this restriction be lifted for this process environment. System administrators should consult the First Failure Data Capture administration documentation for instructions on restriction and selected enablement of the FFDC Error Stacks in various process environments.

2615-501 fcinit Error: The *option* option was specified more than once.

Explanation: The user specified the same option more than once to this command. An FFDC Environment was not established for this process.

User response: This message is accompanied by a syntax message for the fcinit command. Select the appropriate option and attempt the command again. Use the -h option to learn more about this command.

2615-502 fcinit Error: Unknown option specified
- option specified-argument provided for the option.

Explanation: The user specified an option that was not valid for this command. An FFDC Environment was not established for this process.

User response: This message is accompanied by a syntax message for the fcinit command. Select the appropriate option and attempt the command again. Use the -h option to learn more about this command.

2615-503 fcinit Error: Cannot specify both the *option* and the *option* options to this command.

Explanation: The user specified mutually exclusive options to this command. An FFDC Environment was not established for this process.

User response: This message is accompanied by a syntax message for the fcinit command. Select the appropriate option and attempt the command again. Use the -h option to learn more about this command.

2615-504 fcinit Error: Cannot obtain information about this process from the operating system. This indicates an internal problem with this command. Error code from getprocs() is *error code* returned from getprocs C library routine. Contact the IBM Customer Support Center to report this problem.

Explanation: The command was not successful in obtaining information about its own process from the operating system. The getprocs() routine was not successful within the command. This should not occur unless the command was written incorrectly, or unless the operating system is experiencing serious problems. An FFDC Environment was not established for this process.

User response: Contact the system administrator to have the problem reported to the IBM Customer Support Center. System administrators should contact the IBM Customer Support center for assistance on resolving this problem.

2615-505 fcinit Error: This command is being executed in its own shell. This command should be executed within the current shell, so that the command can alter the current shell's process environment. To do this in Korn or Bourne Shells, use this command as follows: *fcinitoption* To do this from a C Shell, use the command as follows: *source fcinit option*.

Explanation: The command detected that it was being

executed in its own sub-shell, and not in the user's shell. The command cannot modify the user's shell to establish an FFDC Environment when used in this manner. An FFDC Environment was not established for this process.

User response: Execute this command in the user's shell as described by the error message.

2615-506 fcinit Error: Cannot inherit an FFDC Environment because an FFDC Environment has not been previously established. This process cannot make recordings to the FFDC Error Stack.

Explanation: The fcinit command was used to inherit an FFDC Environment, but no ancestor of this process has previously established an FFDC Environment. Because of this, the attempt to inherit was not successful.

User response: Do not attempt to record information to the FFDC Error Stack within this process. If the client wishes to have an FFDC Environment exist, modify the use of fcinit to create an FFDC Environment instead of inheriting it. If the client only wishes to use an FFDC Environment if an ancestor has established an FFDC Environment, this failure can be ignored.

2615-507 fcinit Error: Cannot create or inherit an FFDC Environment, because an FFDC Environment already exists for this process. fcinit may have been attempted several times by this process. Examine the use of this command for possible repititious use.

Explanation: The fcinit command was used to create or inherit an FFDC Environment when the process already has an FFDC Environment established for itself. This session was established earlier in the process's execution.

User response: Examine the source code for this process to ensure that multiple attempts to establish the FFDC Environment have not been made by accident. Correct the source code. The process can safely ignore this failure condition for now, but the source code should be corrected.

2615-508 fcinit Error: The FFDC Environment for this process appears to be corrupted. The FFDC Environment is not usable. This process cannot make recordings to the FFDC Error Stack.

Explanation: The FFDC Environment is composed of four process environment variables: FFDCSTACK, FFDCTRACE, FFDCCORIG, and FFDCCPID. At least one of these variables have been removed or set to a null value. The FFDC Environment is not usable in this condition, meaning that the process cannot establish an

FFDC Environment or record information to the FFDC Error Stack.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Check the system for users or processes that may be setting one or more of these process environment variables. Check the application source code for instructions that set the process environment, and ensure that they are not setting one or more of these process environment variables. Consult the FFDC documentation for further problem determination procedures.

2615-509 fcinit Error: Failure in allocating memory. An FFDC Environment cannot be established. This process cannot make recordings to the FFDC Error Stack. Check this process for memory leak problems, and check the system for processes hoarding memory.

Explanation: Attempts to allocate memory for expanding the process environment were not successful. This implies that either the process is allocating too much memory, or a process elsewhere in the system is allocating too much memory.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Examine the process for memory leaks and for overuse of memory. Examine the system for processes hoarding system memory, and request that the system administrator terminate these processes.

2615-510 fcinit Error: An FFDC Environment cannot be established for this process. Either the process execution environment could not be modified by the library, or temporary work space could not be obtained in the /tmp file system. This process cannot make recordings to the FFDC Error Stack. This process will also be unable to obtain FFDC Failure Identifiers for reports it makes to the AIX Error Log. Verify that space is available in the /tmp file system on this node, and notify the system administrator if /tmp appears to be near its capacity.

Explanation: The fcinit command cannot modify the process environment. An FFDC Environment cannot be established.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Follow the instructions given in the above message.

2615-511 **fcinit Error: The FFDC Environment could not be established. An FFDC Error Stack File appears to exist already for this process in the *directory* where FFDC Error Stacks reside directory. This process cannot make recordings to the FFDC Error Stack.**

Explanation: The fcinit command attempted to reserve an FFDC Error Stack file for this process in the named directory, but a file already exists in that directory using the name that fc_init_stack tried to reserve. The file name reserved by fc_init_stack has the format of: *command name.process identifier.today's date*.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Use the fcclear command to remove any unneeded FFDC Error Stack files from this system. Run the application again after the unneeded FFDC Error Stack files are removed.

2615-512 **fcinit Error: The FFDC Error Stack directory *directory name* cannot be accessed. The directory may be missing, unmounted, or permissions may have been changed on the directory. Contact the system administrator and report this problem. This process cannot make recordings to the FFDC Error Stack at this time.**

Explanation: The named directory cannot be accessed. Either the directory has been removed, unmounted, or its permissions have been changed from the values created when the FFDC software was installed.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Contact the system administrator and report the problem. The system administrator should mount the directory if it is unmounted, create the directory if it has been removed, or change the permissions on the directory to permit access. Instructions for performing these repairs are given in the FFDC problem determination documentation.

2615-513 **fcinit Error: An unexpected failure occurred in the routine *routine name*. This process cannot make recordings to the FFDC Error Stack at this time. Contact the IBM Customer Support Center for assistance in resolving this failure.**

Explanation: An error occurred within the FFDC software that was not expected. This failure implies that a coding mistake was made in the FFDC software.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Report this problem to your system administrator, and have the

system administrator contact the IBM Support Center. System administrators should consult the FFDC problem determination documentation prior to contacting the IBM Customer Support Center.

2615-514 **fcinit Error: Unable to create or inherit an FFDC Environment. This process environment has been set to prevent the creation or inheritance of FFDC Error Stacks. The system administrator or other privileged user has set this control. While this process remains capable of recording information to the AIX Error Log and the BSD System Log through the FFDC interfaces, this process is not capable of using an FFDC Error Stack. Contact the system administrator if an FFDC Error Stack is required by this process, and ask to have this FFDC function restored to the process environment.**

Explanation: This command was not able to inherit or create an FFDC Environment to use FFDC Error Stacks, because the system administrator activated a control that disabled the use of FFDC Error Stacks in this process environment. The process remains capable of recording information to the AIX Error Log and the BSD System Log.

User response: Contact the system administrator to request that this restriction be lifted for this process environment. System administrators should consult the First Failure Data Capture administration documentation for instructions on restriction and selected enablement of the FFDC Error Stacks in various process environments.

2615-551 **fciteststk Error: Too many options specified.**

Explanation: The user specified too many options to the fciteststk command. The user is not told whether an FFDC Environment exists for this process or not, so the user cannot assume that the FFDC Environment is established.

User response: Check the usage information for the command, and issue the command again using the appropriate options.

2615-552 **fciteststk Error: Unknown option specified - *option*.**

Explanation: The user specified an option that was not valid to this command. This command could not test if an FFDC Environment was established by this process.

User response: This message is accompanied by a syntax message for the fciteststk command. Select the appropriate option and attempt the command again.

2615-553 **fccteststk Error: The FFDC Environment for this process appears to be corrupted. The FFDC Environment is not usable. This process cannot make recordings to the FFDC Error Stack.**

Explanation: The FFDC Environment is composed of four process environment variables: FFDCSTACK, FFDCTRACE, FFDCORIG, and FFDCPID. At least one of these variables have been removed or set to a null value. The FFDC Environment is not usable in this condition, meaning that the process cannot establish an FFDC Environment or record information to the FFDC Error Stack.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Check the system for users or processes that may be setting one or more of these process environment variables. Check the application source code for instructions that set the process environment, and ensure that they are not setting one or more of these process environment variables. Consult the FFDC documentation for further problem determination procedures.

2615-554 **fccteststk Error: An unexpected failure occurred in the routine *routine name*. This process should assume that the FFDC Environment has not been established for this process, and that the process may be unable to establish an FFDC Environment. Contact the IBM Customer Support Center for assistance in resolving this failure.**

Explanation: An error occurred within the FFDC software that was not expected. This failure implies that a coding mistake was made in the FFDC software.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Report this problem to your system administrator, and have the system administrator contact the IBM Support Center. System administrators should consult the FFDC problem determination documentation prior to contacting the IBM Customer Support Center.

2615-601 **fclogerr Error: Unknown option specified - *option*.**

Explanation: The user specified an option that was not valid to this command. This command did not attempt to record information to the AIX Error Log or the BSD System Log.

User response: This message is accompanied by a syntax message for the fclogerr command. Select the appropriate option and attempt the command again.

2615-602 **fclogerr Error: The *option* option has been specified more than once. The option can only be specified once to this command. Information will not be recorded to the System Log or to the AIX Error Log.**

Explanation: The user provided multiple instances of the same option to this command. This command permits options to be used only once. Information will not be recorded to the System Log and the AIX Error Log.

User response: The caller must correct the usage of this command in order for the command to successfully record information to the System Log and the AIX Error Log. Correct the command to specify options only once. Reissue the command after correcting its usage.

2615-603 **fclogerr Warning: The '*i*' option was not provided to this command, or the file name provided as an argument to the '*i*' option is not a valid file name. fclogerr cannot obtain the code number of the AIX Error Log template to be used in this recording. The fclogerr command will use its own AIX Error Log template to record this information: AIX Error Log Template Label: *AIX Error Logging Template used by First failure Data Capture, Identifier of this template:code number or identifier for the AIX Error Logging template.***

Explanation: The fclogerr command has to be provided with the name of a header file that defines both the symbolic and numeric codes for the AIX Error Logging Template used to record information to the AIX Error Log. Without this header file, fclogerr cannot obtain the numeric code to use for the template. Without this code, the command can only record a generic entry to the AIX Error Log using its own AIX Error Logging template.

User response: Provide the name of the header file to the fclogerr command using the -i option, and issue the command again.

2615-604 **fclogerr Warning: Unable to open the file: *name of header file specified as an argument to the —i option*. Because the file cannot be opened, fclogerr will use the errlogger command to record information to the AIX Error Log. Error from fopen() system call. A description of the error encountered by the fopen() system call follows this message.**

Explanation: fclogerr could not access the file indicated in the -i option. Because this header file cannot be opened, fclogerr cannot obtain the numeric code to use for the template. Without this code, the

command can only record a generic operator information message to the AIX Error Log using the `errlogger` command.

User response: Ensure that the correct file name was used as an argument to the `-i` option, and ensure that the file exists. Examine the error message following this message, and perform the appropriate corrective action to grant this command access to the `fclogerr` command. Issue the `fclogerr` command again after the corrective action has been taken.

2615-605 **fclogerr Warning: Unable to locate the symbolic name:** *Symbolic name of the AIX Error Log Template provided as an argument to the `-t` option in the file: name of the file that was supposed to have defined this name, provided as an argument to the `-i` option.* **fclogerr cannot obtain the code number of the AIX Error Log template to be used in this recording. The `errlogger` command will be used to record information to the AIX Error Log.**

Explanation: `fclogerr` could not locate the symbolic name of the AIX Error Logging Template in the header file specified by the user. As a result, the command can only record a generic operator information message to the AIX Error Log using the `errlogger` command.

User response: Ensure that the correct file name was used as an argument to the `-i` option. Ensure that the correct symbolic name was provided to the command as an argument to the `-t` option. Verify that the header file has not been modified or corrupted.

2615-606 **fclogerr Warning: A detail data item in the '`-d`' argument list does not have a corresponding data type listed in the '`-x`' argument list. The remaining detail data items will be treated as ALPHA data.**

Explanation: Each item in the `-d` argument list is to have a matching data type indicator in the `-x` argument list. The `-d` option specifies at least one additional detail data item that does not have a corresponding data type indicator in the `-x` argument list. `fclogerr` cannot determine what data type should be used to represent this information in the Detail Data section of the AIX Error Log entry, so the information will not be interpreted at all. The extra items of detail data are recorded as ALPHA formatted information to the AIX Error Log entry. This can lead to a confusing entry in the AIX Error Log, if the corresponding detail data item is not meant to be ALPHA formatted data.

User response: Ensure that the number of detail data items and the number of detail data types agree. If the `-d` argument list contains imbedded white space, enclose the `-d` argument list in quotes to prevent the

shell from interpreting the argument list as two separate argument lists.

2615-607 **fclogerr Warning: A detail data item in the '`-d`' argument list does not have a corresponding length listed in the '`-y`' argument list. The remaining detail data items will be treated as ALPHA data.**

Explanation: Each item in the `-d` argument list is to have a matching data length indicator in the `-y` argument list. The `-d` option specifies at least one additional detail data item that does not have a corresponding data length indicator in the `-y` argument list. `fclogerr` cannot determine how much space this item uses in the Detail Data section of the AIX Error Log entry, so the command will record the information unformatted. The extra items of detail data are recorded as ALPHA formatted information to the AIX Error Log entry. This can lead to a confusing entry in the AIX Error Log, if the corresponding detail data item is not meant to be ALPHA formatted data.

User response: Ensure that the number of detail data items and the number of detail data lengths agree. If the `-d` argument list contains imbedded white space, enclose the `-d` argument list in quotes to prevent the shell from interpreting the argument list as two separate argument lists.

2615-608 **fclogerr Warning: The data type indicator value used as detail data type indicator is not a supported data type for this command. The supported data type indicators are: DEC HEX ALPHA. The detail data item for this data type will be recorded as ALPHA formatted information.**

Explanation: The `-x` argument list contains an unsupported data type indicator. `fclogerr` cannot determine how the corresponding detail data item should be interpreted, so the command interprets it as ALPHA formatted data. This can lead to a confusing entry in the AIX Error Log, if the corresponding detail data item is not meant to be ALPHA formatted data.

User response: Correct the usage of the `fclogerr` command to specify the correct data type.

2615-609 **fclogerr Warning: An unknown Log Event Type was provided to this command: *Log event type specifeid as the argument to the '-e' option.* Valid Log Event Types are: FFDC_EMERG FFDC_ERROR FFDC_STATE FFDC_PERF FFDC_TRACE FFDC_RECOV FFDC_DEBUG** The value **FFDC_DEBUG** was substituted for this value in the report generated by this routine, giving this record the lowest severity indication available.

Explanation: A value that is not valid or is unknown was provided as the Log Event Type to this routine. As a result, this command assigned the lowest severity it supports, FFDC_DEBUG, to the record. This may result in high severity indicents receiving a low severity indicator, and can result in high severity indicents being overlooked in a casual analysis of the System Log.

User response: Correct this command to provide a valid log event type to this routine, to ensure that the System Log entry is labelled with a severity suited to the incident being reported.

2615-610 **fclogerr Warning: The caller provided both a detail data field using the '-d' option, and a detail data file using the '-f' option. This command only accepts either a detail data field or a detail data file. The detail data file will be ignored in the record generated by this routine, and the detail data field will be used instead.**

Explanation: The caller specified both the -d and the -f options to this command. One or the other must be specified.

User response: Repair the use of this command to provide either a detail data field or a detail data file, not both.

2615-611 **fclogerr Warning: No System Log message was provided to this command. No message was recorded in the System Log report generated by this routine, but a record was made in the System Log.**

Explanation: The user did not provide a message as an argument to the -b option of this command, or the -b option was omitted. As a result, no message was recorded in the System Log record, but the record was made to the System Log. The record contains the information on the detecting file only.

User response: Repair the command to provide a meaningful System Log message to this command, for assisting future problem determination efforts.

2615-612 **fclogerr Warning: This command could not record information on this incident to the System Log.**

Explanation: This routine could not record information about this incident to the System Log. The System Log could not be accessed, or attempts to write to the System Log failed.

User response: The system administrator should verify the operation of the System Log and should consult the appropriate operating system documentation to diagnose the status of the System Log.

2615-613 **fclogerr Warning: This command was unable to copy the contents of the following file: *Name of detail data file provided to this routine* to this directory: *Directory where this routine intended to copy the file.* Do not discard the original copy of this file.**

Explanation: The command could not make a copy of the file. The directory may not be available or accessible, space may be insufficient to store the file in the directory, or the routine may not be able to access the original.

User response: Retain the original copy of the file for later use in resolving the incident being reported. In the future, ensure that the detail data file can be read by processes of this user. If conditions persist, contact the system administrator and report the problem. System administrators should consult the FFDC problem determination documentation for assistance in resolving this problem.

2615-614 **fclogerr Error: An unexpected failure occurred in the routine *internal routine name*. Error code value is *return code*. Contact the IBM Customer Support Center for assistance in resolving this problem.**

Explanation: An error occurred within the FFDC software that was not expected. This failure implies that a coding mistake was made in the FFDC software.

User response: Report this problem to your system administrator, and have the system administrator contact the IBM Support Center. System administrators should consult the FFDC problem determination documentation prior to contacting the IBM Customer Support Center.

2615-615 **fclogerr Warning: Incomplete information was provided for the source code file reporting this incident. Default information was provided by this command on behalf of the user.**

Explanation: This command accepts a licensed

program product name, a source code file name, a line of code position, and a file version number as input parameters. At least one of these items was not provided, or was not a valid value. This command provided default information in place of the missing information, but that information is of little use to potential problem investigators.

User response: Fix the usage of this command to provide more complete detecting file information, for assisting future problem determination efforts.

2615-616 fclogerr Warning: No resource name was provided to this command, or the command user failed to provide the 'r' option to this command. No resource name was recorded in the report generated by this routine, but the record was made.

Explanation: The command user provided an empty string as the "resource" name to this command. As a result, no resource name was recorded in the BSD System Log record as a prefix or in the AIX Error Log record, but the record was made.

User response: Repair the use of this command to provide a meaningful resource name to this command, for assisting future problem determination efforts.

2615-617 fclogerr Warning: The command user provided a value for detail data size that appears invalid. As a result, this routine used the maximum length permitted for detail data. This may result in some extraneous and unrelated information being recorded in the record generated by this routine.

Explanation: This command was provided with detailed information about an incident, but the caller either failed to provide the size of this information, or the size appears to be incorrect. In order to record part of the incident details, this command assumed that the detail data size was the maximum allowed. This may have caused some unrelated information for unrelated memory areas to be copied into the report generated by this routine.

User response: Repair the usage of this command to provide a valid detail data size to this command, to ensure that correct and pertinent information is recorded to the report.

2615-618 fclogerr Warning: No details on the incident were provided to this command. The detailed data section of the report made by this routine has been omitted, but the report was recorded.

Explanation: The user failed to provide any "detail

data" to this routine. As a result, no details about the incident were recorded in the report generated by this routine, although a report was recorded.

User response: Revise the command to provide meaningful details on the incident to this command, for assisting future problem determination efforts.

2615-619 fclogerr Warning: An unique FFDC Failure Identifier could not be generated for the report filed by this command. fclogerr created the incident report anyway.

Explanation: This command was unable to generate a valid FFDC Error Identifier for this incident report. No FFDC Error Identifier was recorded as part of the report, and the caller does not have an FFDC Error Identifier to provided to its client to indicate where the report was made.

User response: If this problem occurs more than once, it may indicate a possible problem within the FFDC software itself. Report multiple instances of this warning to the system administrator. System administrators should contact the IBM Customer Support Center for assistance on resolving this potential problem.

2615-651 fcdispfid Error: An option or an FFDC Error Identifier argument is required.

Explanation: This command requires either an option or an FFDC Error Identifier as an argument. The user did not specify either of these on the command line.

User response: This message is accompanied by a syntax message for the fcdispfid command. Correct usage of this command and attempt the command again. Use the -h option to learn more about this command.

2615-652 fcdispfid Error: Unknown option specified -option :

Explanation: The user specified an option that was not valid to this command. The command did not display an FFDC Error Identifier to standard output.

User response: This message is accompanied by a syntax message for the fcdispfid command. Correct usage of this command and attempt the command again. Use the -h option to learn more about this command.

2615-653 fcdispfid Error: An invalid FFDC Error Identifier was provided to this command. No FFDC Error Identifier is displayed to standard output.

Explanation: An FFDC Error Identifier value that was not valid, or pointer to an FFDC Error Identifier, was provided to this command.

User response: Ensure that an FFDC Error Identifier exists before attempting to use this command. Verify that the application is passing a valid FFDC Error Identifier to this command.

2615-654 fcdispfid Error: An unexpected failure occurred in the routine *internal routine name*. Contact the IBM Customer Support Center for assistance in resolving this failure.

Explanation: An error occurred within the FFDC software that was not expected. This failure implies that a coding mistake was made in the FFDC software.

User response: Report this problem to your system administrator, and have the system administrator contact the IBM Support Center. System administrators should consult the FFDC problem determination documentation prior to contacting the IBM Customer Support Center.

2615-701 fcstkprpt Error: Memory allocation failure. Exiting.

Explanation: An error occurred while the command was allocating memory to store incident information. The command assumes that the information is vital to understanding the contents of the FFDC Error Stack, and without this information, the FFDC Error Stack contents cannot be correctly understood. Processing of the FFDC Error Stack ceases at this point, and the command terminates. The memory allocation failure is most likely the result of a process on the system hoarding virtual memory.

User response: Issue the command again. If the command fails again with the same message, contact the system administrator. System administrators should check the system for processes hoarding memory and possibly remove these processes.

2615-702 fcstkprpt Error: Unexpected failure detected in the *internal routine name* routine. Error code is *error code*. Note the full text of this message, and contact the IBM Customer Support Center to report the problem.

Explanation: An unexpected failure occurred, and this failure may indicate a problem in the fcstkprpt command itself. Report this problem to the IBM Customer Support Center.

User response: Report the problem to the system administrator, providing the full text of this error message. System administrators should report this error to the IBM Customer Support Center to resolve the problem.

2615-703 fcstkprpt Error: At least one command option must be specified.

Explanation: This command requires at least one option. The user did not specify an option to the command. The command has terminated.

User response: This message is accompanied by a syntax message for the fcstkprpt command. Correct usage of this command and attempt the command again. Use the -h option to learn more about this command.

2615-704 fcstkprpt Error: The *option* option has been specified more than once. This option can only be specified once, and accepts only one argument. Processing of this command has ceased. Please correct the usage of this command and reissue the command with the proper options.

Explanation: The caller specified an option to this command multiple times. This specific option can only be specified once to the command, and takes only a single argument. The command has terminated.

User response: Correct the command to specify options only once. Reissue the command after correcting its usage.

2615-705 fcstkprpt Error: Unknown option specified - *option*. Processing of this command has ceased. Please correct the usage of this command and reissue the command with the proper options.

Explanation: The user specified an option that was not valid to this command.

User response: This message is accompanied by a syntax message for the fcstkprpt command. Select the appropriate option and attempt the command again.

2615-706 fcstkprpt Error: Both the *option* and *option* options have been specified to this command. These options cannot be used together. Processing of this command has ceased. Please correct the usage of this command to specify only one of these two options, and reissue the command with the proper option.

Explanation: The user specified mutually exclusive options to this command. Processing of the command has terminated.

User response: This message is accompanied by a syntax message for the fcstkprpt command. Select the appropriate option and attempt the command again. Use the -h option to learn more about this command.

2615-707 **fcstkrpt Error: The *option* option was specified to this command, but the *option* option was not specified. Both options must be provided when using the *option* option. Processing of this command has ceased. Please correct the usage of this command to provide both options, and reissue this command.**

Explanation: The user did not provide an option required with another option specified by the user. Processing of the command has terminated.

User response: This message is accompanied by a syntax message for the fcstkrpt command. Select the appropriate option and attempt the command again. Use the -h option to learn more about this command.

2615-708 **fcstkrpt Error: The FFDC Error Identifier *FFDC Error Identifier* as created by a later version of the FFDC software. To examine the information stored for this identifier, use an 'fcstkrpt' command of the same or later version.**

Explanation:

User response:

2615-709 **fcstkrpt Error: The FFDC Error Identifier *FFDC Error Identifier* specifies an entry stored in the following node's AIX Error Log: Cluster Name: *cluster name where the FFDC Error Identifier was originally generated* Node Number: *node number where the FFDC Error Identifier was originally generated*.**

Explanation: The caller provided an FFDC Error Identifier to this command that was generated for an AIX Error Log entry, not an FFDC Error Stack entry. The fcstkrpt command only examines the FFDC Error Stacks on this node, and therefore cannot obtain any information for this FFDC Error Identifier.

User response: Go to the cluster name and the node indicated, and issue the appropriate command to obtain the incident information from the AIX Error Log on that node.

2615-710 **fcstkrpt Error: The FFDC Error Identifier *FFDC Error Identifier* provided to this command does not reference an FFDC Error Stack entry. Please verify that the data item above is indeed an FFDC Failure Identifier and has been entered correctly. To obtain more information about the FFDC Failure Identifier, issue the following command: fcdecode**

Explanation: The caller provided an FFDC Error Identifier to this command that was not generated from an FFDC Error Stack entry. The fcstkrpt command only examines the FFDC Error Stacks on this node, and therefore cannot obtain any information for this FFDC Error Identifier.

User response:

2615-711 **fcstkrpt Error: The FFDC Error Identifier *FFDC Error Identifier* provided to this command specifies an FFDC Error Stack in the following location: Cluster Name: *cluster name where the FFDC Error Identifier was originally generated* Node Number: *node number where the FFDC Error Identifier was originally generated*.**

Explanation: The caller provided an FFDC Error Identifier to this command that was generated for an FFDC Error Stack entry on a remote node. The fcstkrpt command only examines the FFDC Error Stacks on this node, and therefore cannot obtain any information for this FFDC Error Identifier.

User response: Go to the cluster name and the node indicated, and issue the appropriate command to obtain the incident information from the AIX Error Log on that node.

2615-712 **fcstkrpt Error: Unable to locate or open FFDC Error Stack file *FFDC Error Stack file name*.**

Explanation:

User response:

2615-713 **fcstkrpt Error: The command experienced an unexpected failure in the *Name of the internal routine that detected a failure condition* routine. Failure code from this routine was *error code from the internal routine*. Note the conditions present when this command was executed, and contact the system administrator. System administrators should contact the IBM Customer Support Center to report this failure.**

Explanation: An internal routine of the fcstkrpt command experienced an unexpected failure condition, one that should not exist if the command is working properly. This condition requires the attention of the IBM Customer Support Center to be resolved.

User response: Note the conditions that were present at the time the command was executed, and contact the system administrator. System administrators should contact the IBM Customer Support Center for assistance on resolving this failure.

2615-714 **fcstkrpt Error: The FFDC Error Identifier** *FFDC Error Identifier value provided by the user.* **did not provide a valid name for an FFDC Error Stack. Please verify that the FFDC Error Identifier was specified correctly. Correct any error in the specification of the FFDC Error Identifier, and attempt this command again.**

Explanation: The FFDC Error Identifier, when decoded by the command, did not provide a valid FFDC Error Stack reference. The most likely cause of this failure is that the user made a mistake in typing or specifying the FFDC Error Identifier to the command.

User response: Verify that the FFDC Error Identifier is typed correctly.

2615-715 **fcstkrpt Error: The FFDC Error Identifier** *FFDC Error Identifier value provided by the user.* **references an FFDC Error Stack that does not exist on this node. The FFDC Error Stack may have existed at one time, but the stack may have been removed since the time that the FFDC Error Identifier was created. fcstkrpt cannot provide any information on the incident associated with this FFDC Error Identifier.**

Explanation: The FFDC Error Identifier does not reference an FFDC Error Stack that is currently present on the node. The associated FFDC Error Stack was most likely removed by the fcstkclear command.

User response: Contact the system administrator to determine if a backup exists of the FFDC Error Stack directory, ask for the backup to be restored, and retry the command once the backup is restored. If no backup exists, nothing can be done to obtain incident information for this FFDC Error Identifier. In the future, obtain the incident information as soon as an FFDC Error Identifier is reported, and preserve this information for later problem determination efforts.

2615-716 **fcstkrpt Error: This command requires that either the** *The set of required options to the fcstkrpt command* **option or the** *The set of required options to the fcstkrpt command* **option be specified. Please correct the usage of this command and execute the command again with the proper options.**

Explanation: The caller did not provide one of the required options to this command. This message is followed by a usage statement for the **fcstkrpt** command.

User response: Provide one of the required options

for the command and retry the fcstkrpt command. For assistance on using the fcstkrpt command, use the '-h' option to obtain assistance information for the command.

2615-717 **fcstkrpt Error: The FFDC Error Identifier** *FFDC Error Identifier value* **references an FFDC Error Stack that was created on a remote system. fcstkrpt cannot provide any information on the incident associated with this FFDC Error Identifier. Use the 'fcdecode' command to determine where the FFDC Error Stack for this identifier was created.**

Explanation: The FFDC Error Identifier references an FFDC Error Stack that was created on a remote system. The FFDC Error Stack for this identifier does not exist on this node, therefore 'fcstkrpt' cannot obtain the FFDC Error Stack information for this identifier. The user must go to the remote system where the FFDC Error Identifier was generated to obtain the report associated with this identifier.

User response: Use the 'fcdecode' command to determine on which remote system this FFDC Error Identifier was generated. Go to that system and issue the 'fcstkrpt' command on that node to obtain the report associated with this identifier.

2615-718 **fcstkrpt Error: Unable to lock the FFDC Error Stack file for exclusive use. The file may have been removed by another application, or another application may have locked this file for use and become hung. Unable to generate a report for this FFDC Error Stack file at this time.**

Explanation: Attempts to lock this file for exclusive use were not successful. The file may have been removed by another user or application, or another application also using this FFDC Error Stack file may have become hung while attempting to record information to the FFDC Error Stack.

User response: Attempt to issue this report command again at a later time. If this condition persists, verify that the file exists and was not removed by another user or application.

2615-719 **fcstkrpt Error: The FFDC Error Stack file appears to be corrupted. Ending the report of the FFDC Error Stack file contents at this point.**

Explanation: The 'fcstkrpt' command detected at least one corrupted record within the FFDC Error Stack file, or found the file control information to be corrupted. Consider the FFDC Error Stack file unusable for recording further incident information.

User response: Do not attempt to use this FFDC Error Stack in future incident recordings.

2615-720 **fcstkpr Error: The FFDC Error Identifier** *FFDC Error Identifier value* references an FFDC Error Stack that cannot be accessed by this user. The FFDC Error Stack file may have been created by another system user, and the user running the fcstkpr command does not have sufficient system privileges to access files created by that user. To obtain information for this FFDC Failure Identifier, have a more privileged system user attempt this command. fcstkpr cannot provide any information on the incident associated with this FFDC Error Identifier.

Explanation: The user has specified an FFDC Failure Identifier that is stored in an FFDC Error Stack file created by another user. The fcstkpr user does not have sufficient privilege to access this file, probably because the user that created the FFDC Error Stack file has greater system authority than the user that issued the command.

User response: Have a more privileged system user attempt this command.

2615-721 **fcstkpr Error: The FFDC Error Stack file** *FFDC Error Stack file name value* cannot be accessed by this user. The FFDC Error Stack file may have been created by another system user, and the user running the fcstkpr command does not have sufficient system privileges to access files created by that user. To obtain information for this FFDC Failure Identifier, have a more privileged system user attempt this command. fcstkpr cannot provide any information on the incident associated with this FFDC Error Identifier.

Explanation: The user has specified an FFDC Error Stack file created by another system user. The user that issued fcstkpr does not have sufficient privilege to access this file, most likely because the user that created the FFDC Error Stack file has greater system authority than the user issuing the command.

User response: Have a more privileged system user attempt this command.

2615-751 **fcdecode Error: Unknown option** specified *-option*.

Explanation: The user specified an option that was not valid to this command. The command did not attempt to obtain information from any FFDC Error

Identifiers that were specified by the user of the command.

User response: This message is accompanied by a syntax message for the fcdecode command. Select the appropriate option and attempt the command again.

2615-752 **fcdecode Error: No options or First Failure Data Capture failure identifiers** were provided as arguments to this command.

Explanation: This command expects one or more FFDC Error Identifiers to be provided as arguments, or for the **-h** option to be specified as an option. The command was issued without either item of information. fcdecode ceased functioning and exited.

User response: This message is accompanied by a syntax message for the **fcdecode** command. Select the appropriate option and attempt the command again.

2615-753 **fcdecode Error: More than one list of First Failure Data Capture failure identifiers was detected. This command accepts a single list of FFDC failure identifiers only. The initial list of FFDC failure identifiers detected was:** *The initial list of FFDC Error Identifiers detected by fcdecode in the command's argument list. The next list of failure identifiers detected was: the next list of FFDC Error Identifiers detected by the command..* **The most common reason for this failure is that white space is accidentally inserted by the command user between the FFDC failure identifiers. When specifying more than one FFDC failure identifier to fcdecode, these identifiers must be presented in a single list, separated by commas with no white space between the failure identifiers and the commas. Please correct the usage of this command and issue the command again.**

Explanation: Multiple lists of FFDC Error Identifiers were provided as arguments to this command, or multiple FFDC Error Identifiers were not correctly specified by the user. The message explains the most common reasons for why the command fails in this fashion.

User response: Repair the usage of the command and issue the command again.

2615-754 **fcdecode Error: The following identifier is not in the proper format for a First Failure Data Capture failure Identifier: *identifier*. Verify that the identifier was entered correctly, and includes all characters from the First Failure Data Capture failure identifier. Issue this command again with the correct identifier.**

Explanation: fcdecode determined that the identifier provided by the user was not a valid First Failure Data Capture failure identifier. The command ensures that the identifier is of a specific length, and this identifier is not of the proper length. The user probably entered the identifier incorrectly, or did not provide all characters of the identifier.

User response: Verify that the failure identifier was entered correctly, and reissue the command with the correct failure identifier.

2615-755 **fcdecode Error: The following First Failure Data Capture failure identifier cannot be interpreted: *identifier that cannot be interpreted*. This identifier was generated by an application using a later version of the First Failure Data Capture utilities, which has revised the format used within First Failure Data Capture failure identifiers. This fcdecode command is part of an earlier version of the First Failure Data Capture utilities, and cannot interpret the revised format of the identifier. Contact the system administrator to ensure that all systems within this operational cluster are executing the same version of the RSCT Cluster Utilities software.**

Explanation: fcdecode discovered that the identifier was generated by a more recent version of First Failure Data Capture than the version containing this fcdecode command. The identifier contained information which the fcdecode command could not interpret. If this failure identifier was generated from a different operational cluster than the one containing the local system, it is impossible to determine where the failure report resides.

User response: Contact the system administrator and ask the administrator to investigate whether all nodes in the local node's operational cluster are all using the same level of RSCT Cluster Utilities software. If all nodes are executing at the same level, then the only conclusion to make is that the identifier was generated on a system outside the current operational cluster, and the failure cannot be traced to its location.

2615-756 **fcdecode Error: An unexpected failure occurred within the routine: *internal routine name*. Failure code from this routine: *failure code*. This error indicates a problem with the First Failure Data software. IBM Customer Support should be informed of this failure, and the IBM Customer Support Center should be contacted to resolve this problem. Make a note of the command that was issued, including all options and arguments, and save a copy of this command's output. Contact the system administrator to report this problem to the IBM Customer Support Center. System administrators should consult the problem determination information for First Failure Data Capture for assistance on reporting this failure.**

Explanation: fcdecode encountered an unexpected error which indicates a problem within the FFDC source code itself, and must be reported to the IBM Customer Support Center for resolution.

User response: Follow the instructions listed in the message.

2615-757 **fcdecode Error: The following First Failure Data Capture Failure Identifier is invalid: *identifier* This identifier cannot be properly decoded. A portion of the identifier may have been entered incorrectly, or the identifier may have become corrupted. Verify that the identifier was entered correctly.**

Explanation: fcdecode was unable to decode a specific component of the First Failure Data Capture Failure Identifier, or the information that was obtained from one of these components was not valid. The identifier may have been entered incorrectly, or the identifier may have been modified or corrupted by the software reporting it.

User response: Verify that the First Failure Data Capture Failure Identifier was entered correctly.

2615-801 **fcpushstk Error: Unknown option specified -*option*.**

Explanation: The user specified an option that was not valid to this command. This command did not attempt to record information to the FFDC Error Stack System Log.

User response: This message is accompanied by a syntax message for the fcpushstk command. Select the appropriate option and enter the command again.

2615-802 **fcpushstk Error: The *option* option has been specified more than once. The option can only be specified once to this command. Information will not be recorded to the FFED Error Stack.**

Explanation: The user provided multiple instances of the same option to this command. This command permits options to be used only once. Information will not be recorded to the FFDC Error Stack.

User response: Correct the usage of this command in order for it to successfully record information to the FFDC Error Stack. Correct the command to specify options only once. Reissue the command after correcting its usage.

2615-803 **fcpushstk Warning: The caller provided both a detail data field using the -d option, and a detail data file using the -f option. This command only accepts either a detail data field or a detail data file. The detail data file will be ignored in the record generated by this routine, and the detail data field will be used instead.**

Explanation: The caller specified both the -d and the -f options to this command. One or the other must be specified.

User response: Revise the command to provide either a detail data field or a detail data file, not both.

2615-804 **fcpushstk Warning: Incomplete information was provided for the source code file reporting this incident. Default information was provided by this command on behalf of the user.**

Explanation: This command accepts a licensed program product name, a source code file name, a line of code position, and a file version number as input parameters. At least one of these items was not provided, or was not a valid value. This command provided default information in place of the missing information, but that information is of little use to potential problem investigators.

User response: Revise the command to provide more complete detecting file information, for assisting future problem determination efforts.

2615-805 **fcpushstk Error: An FFDC Environment does not exist for this process. This process cannot record failure information to the FFDC Error Stack.**

Explanation: An FFDC Error Stack was not established by this process. The process is not able to record information to an FFDC Error Stack.

User response: If the process wishes to make use of

an FFDC Error Stack for recording information about potential problems it detects, the process must establish an FFDC Environment using the fcinitstk command. All uses of the fcpushstk command will not succeed until an FFDC Environment is established.

2615-806 **fcpushstk Error: The FFDC Environment for this process appears to be corrupted. The FFDC Environment is not usable. This process cannot make recordings to the FFDC Error Stack.**

Explanation: The FFDC Environment is composed of four process environment variables: FFDCSTACK, FFDCTRACE, FFDCORIG, and FFDCPID. At least one of these variables have been removed or set to a null value. The FFDC Environment is not usable in this condition, meaning that the process cannot establish an FFDC Environment or record information to the FFDC Error Stack.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Check the system for users or processes that may be setting one or more of these process environment variables. Check the application source code for instructions that set the process environment, and ensure that they are not setting one or more of these process environment variables. Consult the FFDC documentation for further problem determination procedures.

2615-807 **fcpushstk Error: The FFDC Error Stack directory *directory name* where FFDC Error Stacks reside on this system cannot be accessed. The directory may be missing, unmounted, or permissions may have been changed on the directory. Contact the system administrator and report this problem. This process cannot make recordings to the FFDC Error Stack at this time.**

Explanation: The named directory cannot be accessed. Either the directory has been removed, unmounted, or its permissions have been changed from the values created when the FFDC software was installed.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Contact the system administrator and report the problem. The system administrator should mount the directory if it is unmounted, create the directory if it has been removed, or change the permissions on the directory to permit access. Instructions for performing these repairs are given in the FFDC problem determination documentation.

2615-808 **fcpushstk Error: The FFDC Error Stack file *filename of the FFDC Error Stack file* cannot be accessed. The file may be missing, corrupted, or, permissions may have been changed on the file to prohibit access. Contact the system administrator and report this problem. This process cannot make recordings to the FFDC Error Stack at this time.**

Explanation: The named file cannot be accessed. Either the file has been removed, unmounted, or its permissions have been changed from the values that were used by the FFDC utilities when the file was created.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Contact the system administrator and report the problem. The system administrator should verify the permissions on the file and correct them if necessary. Instructions for performing these repairs are given in the FFDC problem determination documentation.

2615-809 **fcpushstk Error: The name reserved for the FFDC Error Stack file: *filename of the FFDC Error Stack file* is the name of an existing directory. Ask the system administrator to ensure that system users are not creating subdirectories in the directory: *name of the directory where FFDC Error Stacks reside on this system*. If this problem occurs in multiple applications, contact the system administrator to have the problem reported to the IBM Customer Support Center.**

Explanation: The file name reserved for the FFDC Error Stack file for this application is actually the name of a directory. Either a system user has created a directory of the same name on the system, or there is a problem with the fcpushstk command that must be addressed by the IBM Customer Support Center.

User response: Contact the system administrator and report the problem. System administrators should verify that the file name is indeed a directory, and was not created by a system user accidentally. Remove any subdirectories in the named directory to prevent the problem from reoccurring. If the problem is reported for multiple applications, the problem indicates a flaw in the fcpushstk command or the FFDC library routines, and the IBM Customer Support Center should be contacted to resolve the problem.

2615-810 **fcpushstk Error: An unexpected failure occurred in the routine *routine name*. This process cannot make recordings to the FFDC Error Stack at this time. Contact the IBM Customer Support Center for assistance in resolving this failure.**

Explanation: An error occurred within the FFDC software that was not expected. This error implies that a coding mistake was made in the FFDC software.

User response: Do not attempt to record information to the FFDC Error Stack within this process. Report this problem to your system administrator, and have the system administrator contact the IBM Support Center. System administrators should consult the FFDC problem determination documentation prior to contacting the IBM Customer Support Center.

2615-811 **fcpushstk Error: Insufficient space exists in the file system containing the directory: *name of the directory where FFDC Error Stacks reside on this system* to create an FFDC Error Stack file. This routine attempted to reserve and FFDC Error Stack file of a minimum size of *minimum size of an FFDC Error Stack file* bytes while leaving at least five percent of the file system capacity available. The FFDC Error Stack file could not be reserved under these constraints. This application cannot record information to the FFDC Error Stack until more space becomes available in the file system.**

Explanation: An FFDC Error Stack cannot be created in the named directory within the safety precautions used by First Failure Data Capture. This application will be unable to record information to the FFDC Error Stack until more space becomes available in the file system containing this directory.

User response: Report this problem to the system administrator. System administrators should remove any FFDC Error Stack files from this system that are no longer needed, using the fcstkclear command to remove them, or add more space to the file system containing this directory. System administrators should also check other directories in the same file system for other obsolete files that can be removed to make more space available.

2615-812 **fcpushstk Error: Unable to lock the file:** *name of the FFDC Error Stack file for exclusive use. The file may have been removed by another application, or another application may have locked this file for use and become hung. This process is unable to record incident information to the FFDC Error Stack at this time.*

Explanation: Attempts to lock this file for exclusive use were not successful. The file may have been removed by another user or application, or another application also using this FFDC Error Stack file may have become hung while attempting to record information to the FFDC Error Stack. This report cannot be made to the FFDC Error Stack at this time. The application can attempt to make this report again at a later time.

User response: Attempt to record the same information to the FFDC Error Stack again. If this condition persists, verify that the file exists and was not removed by another user or application. Check any ancestor or descendent processes of this application to determine if any of them have become hung. Terminate any ancestor or descendent process that have hung.

2615-813 **fcpushstk Error: Unable to update the control information within the FFDC Error Stack file:** *name of the FFDC Error Stack file. The file may be corrupted, or this problem can indicate an internal error in the FFDC software. This process should consider the FFDC Error Stack unusable. Verify that the file exists and can be viewed using the fcstkrpt command. If fcstkrpt fails to indicate an error with the FFDC Error Stack file, contact the system administrator to have this problem reported to the IBM Customer Service Center. Error code from the write() library call: errno from write() routine .*

Explanation: The FFDC Error Stack internal control information could not be modified. The file may be corrupt, the file system may be experiencing problems, or an internal problem may exist in the FFDC library that requires the attention of the IBM Customer Support Center to rectify. The application should consider the FFDC Error Stack unusable.

User response: Do not attempt to record further information to the FFDC Error Stack from this application. Contact the system administrator and report this problem. System administrators should verify that the file system containing this file is not experiencing problems, and should also verify that the hardware supporting this file system is also not experiencing problems. If the file system and the hardware appear to be functioning properly, contact the IBM Customer

Support Center to report this problem.

2615-814 **fcpushstk Warning: No resource name was provided to this command through the***Option to the fcpushstk command* **option. No resource name was recorded to the FFDC Error Stack report generated by this routine, but the incident was recorded.**

Explanation: The caller did not provide the option to indicate a resource name to this command. As a result, no resource name was recorded in the FFDC Error Stack entry, but the entry was made.

User response: Repair the source code to pass a meaningful resource name to this routine, for assisting future problem determination efforts.

2615-815 **fcpushstk Warning: This command was not provided with a default message to use as a description for this incident in cases where the cataloged message description cannot be obtained. If the FFDC Error Stack contents are viewed on a node where the message does not exist, or if the FFDC Error Stack contents are viewed when the message catalog is missing, no description information will be presented for this entry. Users may not be able to understand the nature of the incident without a description, which limits the usefulness of the entry to the system administrator.**

Explanation: A default message to describe this incident was not provided to this command, or the message that was provided is not valid. However, a cataloged message was provided to this command. Without the default message information, no description information will be presented when viewing the FFDC Error Stack when the message catalog cannot be located or used. This can make the report unusable in these cases to any user that does not understand the internal implementation of the software, making the report a generic incident report of little value.

User response: Supply description information, otherwise the information becomes useless to users who do not understand the implementation of the software. Verify that the default message text was provided as a parameter to this routine. Correct the application to provide this information.

2615-816 **fcpushstk Warning: This command was not provided with complete information to identify a cataloged message that describes the nature of the incident being recorded to the FFDC Error Stack. As a result, this description will be presented using the default message text. Users viewing the FFDC Error Stack contents in other locales will not be able to translate this message into the language used for that locale, meaning that the user may not be able to understand the information recorded by this application.**

Explanation: The information provided for the message catalog, message set within the catalog, and message number within the set, are either missing or are incomplete. This routine could not record message catalog information to the FFDC Error Stack. As a result, end-users using languages other than that used by the application programmer may not be able to understand the information being recorded in the FFDC Error Stack for this incident.

User response: Supply message catalog information, otherwise the information becomes useless to users who do not understand the application programmer's language. Verify that the message catalog name, the message set number, and the message number were provided as parameters to this routine. Correct the application to provide this information.

2615-817 **fcpushstk Warning: The caller provided both a detail data field and a detail data file to this command. This command only accepts either a detail data field or a detail data file. The detail data file was ignored in the record generated by this command, and the detail data field was used instead.**

Explanation: The caller specified both a detail data string on the incident being reported, and a file containing details on the incident. fcpushstk could not determine if the file of information was more important to the report than the detail data string. Since fcpushstk would record a file name in the place of a detail data string, the command decided that the detail data string should not be lost and used the detail data string in the FFDC Error Stack instead of the file.

User response: Repair the source code to provide either a detail data field or a detail data file this routine, not both.

2615-818 **fcpushstk Warning: The command was not able to generate a unique FFDC Error Identifier for the report it filed. The report has been made successfully.**

Explanation: The FFDC software was unable to generate a valid FFDC Error Identifier for this incident report. An FFDC Error Identifier was not recorded as part of the report, and the caller does not have an FFDC Error Identifier to provide to its client to indicate where the report was made. However, a report of the incident was made to the FFDC Error Stack, and can be observed later using the fcastkrpt command on the FFDC Error Stack.

User response: If this problem occurs more than once, it may indicate a possible problem within the FFDC software itself. Report multiple instances of this warning to the system administrator. System administrators should contact the IBM Customer Support Center for assistance on resolving this potential problem.

2615-819 **fcpushstk Warning: The command was unable to copy the contents of the file: *name of detail data file provided in the -f option to the directory*: directory where this routine intended to copy the file. Do not discard the original copy of this file. The name of the original copy of has been recorded to the FFDC Error Stack, and future problem determination efforts may require access to this file.**

Explanation: The command could not make a copy of the file. The directory may not be available or accessible, space may be insufficient to store the file in the directory, or the command may not be able to access the original.

User response: Retain the original copy of the file for later use in resolving the incident being reported. In the future, ensure that the detail data file can be read by processes of this user. If conditions persist, contact the system administrator and report the problem. System administrators should consult the FFDC problem determination documentation for assistance in resolving this problem.

2615-820 **fcpushstk Warning: The information submitted for recording to the FFDC Error Stack exceeds the record length of FFDC Error Stack record size maximum length bytes. The information has been truncated to fit the record size limit. Some important diagnostic information may have been lost in the process. Errors may occur when this information is displayed later with the fcstkprt command. This record size limit includes the detecting file information, the message catalog information, the description message, substitutional parameters to the description message, as well as the details of the condition. In the future, record less information, or make use of the detail data file option.**

Explanation: The FFDC client attempted to record too much information to a single record in the FFDC Error Stack. The FFDC code truncated this information to fit the record size length.

User response: Modify the use of fcpushstk routine to use less information, or to make use of the detail data file option to move information out of the error stack entry and into another location.

2615-821 **fcpushstk Warning: No details about the incident were provided to this command, either in the form of a detail data string or in the form of a detail data file. The detailed data section of this report was omitted, but the report was successfully recorded. Records that do not contain details can be difficult to understand or use effectively in problem analysis efforts. Ensure that the command was used correctly, and that the '-d' or '-f' options were not accidentally omitted.**

Explanation: The fcstkprt command was issued without the -d and -f options. No details about the incident were provided to the command. fcstkprt successfully recorded an FFDC Error Stack record for the incident, but the detailed data section of this record will be blank when examined later. Without details, the incident report can only indicate that a specific incident occurred, and cannot provide any reasons why the incident occurred, limiting the usefulness of the entry.

User response: Ensure that the fcstkprt command was used correctly. Correct the command to include details about the failure with either the -d or the -f options.

2615-851 **fcreport Error: Unknown option specified - option.**

Explanation: The user specified an option that was not valid to this command. The command did not attempt to build a report.

User response: This message is accompanied by a syntax message for the fcreport command. Select the appropriate option and enter the command again.

2615-852 **fcreport Error: The following identifier is not in the the proper format for a First Failure Data Capture failure Identifier: *identifier*. Verify that the identifier was entered correctly, and includes all characters from the First Failure Data Capture failure identifier. Issue this command once again with the correct identifier.**

Explanation: fcdecode determined that the identifier provided by the user of the command was not a valid First Failure Data Capture failure identifier. The command ensures that the identifier is of a specific length, and this identifier is not of the proper length. The user probably entered the identifier incorrectly, or did not provide all characters of the identifier.

User response: Verify that the failure identifier was entered correctly, and reissue the command with the correct failure identifier.

2615-853 **fcreport Error: The following First Failure Data Capture failure identifier cannot be interpreted: *identifier that cannot be interpreted*. This identifier was generated by an application using a later version of the First Failure Data Capture utilities, which has revised the format used within First Failure Data Capture failure identifiers. This fcdecode command is part of an earlier version of the First Failure Data Capture utilities, and cannot interpret the revised format of the identifier. Contact the system administrator to ensure that all systems within this operational cluster are executing the same version of the RSCT Cluster Utilities software.**

Explanation: fcdecode discovered that the identifier was generated by a more recent version of First Failure Data Capture than the version containing this fcdecode command. The identifier contained information which the fcdecode command could not interpret. If this failure identifier was generated from a different operational cluster than the one containing the local system, it is impossible to determine where the failure report resides.

User response: Contact the system administrator and

ask the administrator to investigate whether all nodes in the local node's operational cluster are all using the same level of RSCT Cluster Utilities software. If all nodes are executing at the same level, then the only conclusion to make is that the identifier was generated on a system outside the current operational cluster, and the failure cannot be traced to its location.

2615-854 **fcreport Error: The First Failure Data Capture failure identifier: FFDC Failure Identifier name was recorded to an FFDC Error Stack file which no longer exists on this system. This command is unable to generate a report for this FFDC Failure Identifier. The FFDC Error Stack file was most likely removed as part of normal system maintenance. In the future, try to obtain information on FFDC Failure Identifiers in a more timely fashion.**

Explanation: The FFDC Error Stack file containing this FFDC Failure Identifier no longer exists on the local system. The file was most likely removed as part of routine system maintenance, which includes the removal of old files and old FFDC Error Stacks using the 'fcclear' command.

User response: In the future, obtain information about FFDC Failure Identifiers in a more timely fashion, and ensure that needed FFDC Error Stacks are retained on the system.

2615-855 **fcreport Error: An unexpected failure occurred in the routine *internal routine name*. Unexpected return code: *return code*. This process cannot make recordings to the FFDC Error Stack at this time. Contact the IBM Customer Support Center for assistance in resolving this failure.**

Explanation: An error occurred within the FFDC software that was not expected. This error implies that a coding mistake was made in the FFDC software.

User response: Report this problem to your system administrator, and have the system administrator contact the IBM Support Center. System administrators should consult the FFDC problem determination documentation prior to contacting the IBM Customer Support Center.

2615-856 **fcreport Status: The following First Failure Data Capture Failure Identifier: *First Failure Data Capture Failure Identifier provided to the fcreport command* was generated on a node using the following Internet address: *internet address obtained from the FFDC Failure Identifier*. This node cannot be contacted to obtain the information recorded for the specified identifier. The node may not be active at this moment, or the Internet address may no longer be valid. Another possible reason for this condition is that the First Failure Data Capture Failure Identifier may not have been stated correctly to this command. A typographical error in specifying this value may cause the fcreport command to incorrectly interpret the identifier, causing it to yield an erroneous Internet address. Verify that the First Failure Data Capture Failure Identifier was specified correctly.**

Explanation: The Internet address obtained from the FFDC Failure Identifier cannot be reached by the 'fcreport' command. Because the node cannot be reached, information for this FFDC Failure Identifier cannot be obtained for this report. The 'fcreport' command ends its processing at this point.

User response: Follow the instructions listed in this message.

2615-857 **fcreport Error: Failure in allocating memory. This command cannot obtain further information on incidents related to the First Failure Data Capture Failure Identifier: *First Failure Data Capture Failure Identifier provided to the fcreport command*. If this command is being invoked from a script, check the script source code for possible memory leaks. Also check the system for processes hoarding memory, and report this problem to the system administrator.**

Explanation: Attempts to allocate memory for expanding the process environment were unsuccessful. This implies that either the process is allocating too much memory, or a process elsewhere in the system is allocating too much memory.

User response: Consult the message text for instructions.

2615-901 fcccheck Error: Unknown command option *option*.

Explanation: The listed option is not an option recognized by the **fcccheck** command. This message is followed by a usage statement for the command, which lists the valid command options.

User response: Enter the command again using the correct options.

2615-902 fcccheck Error: An unexpected internal failure was detected within the 'fcccheck' command while it was executing its tests. This failure must be reported to the IBM Customer Support Center for resolution. Please make a note of the conditions present on the local system at the time this failure occurred, make a permanent record of the output generated by this command, and contact the system administrator to have the problem reported to the IBM Customer Support Center. System administrator should consult the FFDC problem determination documentation for assistance on reporting this problem to the IBM Customer Support Center. Name of internal routine: *fcccheck* internal routine Return code from internal routine: *return code*.

Explanation: 'fcccheck' encountered an unexpected error while performing its tests. This error indicates a problem in the actual implementation of the 'fcccheck' command, and must be reported to the IBM Customer Support Center to be resolved.

User response: Follow the instructions listed in this message.

2615-903 fcccheck Error: This command is not able to query the operating system for information about the file system containing the following directory: *directory* . This information should be available for a local file system through the operating system. If this directory resides on a local file system, this may indicate a problem with the operating system. Contact the system administrator and report this problem.

Explanation: 'fcccheck' is unable to query the operating system for information on the file system containing this directory. The 'statfs()' C library routine did not return any information on this file system. This error may indicate a problem with the operating system.

User response: Report the problem to the system administrator. System administrators should perform

problem determination procedures on the operating system to check for any errors. Contact the IBM Customer Support Center if the situation cannot be resolved.

2615-951 fccclear Error: At least one option is required to execute this command.

Explanation: The user did not specify at least one of the required options for this command. This message is followed by the usage statement for the **fccclear** command.

User response: Enter the command again using the required options.

2615-952 fccclear Error: Unknown command option *option*.

Explanation: The fccclear command does not recognize the listed option. This message is followed by a usage statement for the command, which lists the valid command options.

User response: Enter the command again using the correct options.

2615-953 fccclear Error: The *option* option has been specified more than once.

Explanation: The user specified the same option more than once to this command. The command considers this a fatal error and has ceased its processing. This message is followed by the usage for the fccclear command.

User response: Enter the command again using the correct options.

2615-954 fccclear Error: A numeric value is required as an argument to the *option* option

Explanation: A numeric value is required as an argument to this option. The user specified a value that was not numeric. The command has terminated without removing any files from the system. This message is followed by a usage statement for the command, which lists the valid command options.

User response: Enter the command again using the correct options.

2615-955 **fcclear Error:** The options provided to this command have specified that the same file should be retained and removed from the system. To avoid taking the wrong action, 'fcclear' will terminate without removing any files from the local system. The most common source of this failure is that the command user provided an FFDC Failure Identifier that is stored in an FFDC Error Stack file that was specified by another FFDC Failure Identifier, or referenced by name to another command option. Test all FFDC Failure Identifiers with the 'fcdecode' command. Ensure that none of the FFDC Failure Identifiers to be removed are stored in FFDC Error Stack files that are to be retained, and vice versa. Also ensure that all of the file names or FFDC Failure Identifiers provided as command arguments are entered correctly.

Explanation: Options to the **fcclear** command specified the same file name to be removed and retained. To avoid taking the wrong action, the command terminated without removing any files.

User response: Follow the instructions listed in this message.

2615-956 **fcclear Error:** An unexpected internal failure was detected within the 'fcclear' command. This failure must be reported to the IBM Customer Support Center for resolution. Please make a note of the conditions present on the local system at the time this failure occurred, make a permanent record of the output generated by this command, and contact the system administrator to have the problem reported to the IBM Customer Support Center. System administrator should consult the FFDC problem determination documentation for assistance on reporting this problem to the IBM Customer Support Center. Name of internal routine: *routine-name*. Return code from internal routine: *return-code*.

Explanation: The **fcclear** command encountered an unexpected error.

User response: Follow the instructions listed in this message.

2615-957 **fcclear Error:** The following directory has been detected to be in error: *directory-name*. The directory either does not have the correct access permissions, been removed, or references a file instead of a directory. This command is unable to remove any files from this directory. Contact the system administrator to report this problem. System administrators should verify that the file system containing this directory is mounted and that the directory does exist. If the directory does exist, ensure that the permissions on the directory are set to permission code 1777, and any further security on this directory permits access to the directory for normal users. Normal users should have sufficient permissions granted to allow them to remove First Failure Data Capture Error Stacks and detail data files that they have created in this directory.

Explanation: The **fcclear** command cannot access *directory-name*. This directory may be unmounted, or it may have been removed, or permissions may have been changed to prohibit access to it. The **fcclear** command cannot remove any files from this directory.

User response: General users: report this problem to the system administrator.

System administrators: verify that the file system containing this directory is mounted and that the directory exists. If the directory exists, make sure that the permissions on the directory are set to permission code 1777 and that any further security on this directory permits access to the directory for general users. General users should have sufficient permissions granted so they can remove first failure data capture error stacks and detail data files that they have created in this directory.

Chapter 16. 2618: ERRM commands

When an error occurs, an event response resource manager (ERRM) command issues one or more messages with a prefix of **2618**.

2618-001 **Not a recognized flag:** *option*.

Explanation: An unsupported option or an incorrect combination of options was specified.

User response: Refer to the usage statement, which lists the valid options. Correct the command and run it again.

2618-002 **Not a recognized operand:** *operand*.

Explanation: An unsupported operand or an incorrect combination of operands was specified.

User response: Refer to the usage statement, which lists the valid operands. Correct the command and run it again.

2618-003 **The combination of *option* and *option-or-operand* is not allowed.**

Explanation: The combination of the specified options, or option and operand, is not allowed.

User response: Either choose a different option or do not enter the operand. Refer to the usage statement, which lists the valid options, operands, and option-operand combinations. Correct the command and run it again.

2618-004 **Invalid number of operands.**

Explanation: A non-valid number of operands were specified.

User response: Refer to the usage statement for the command, which lists the valid operands. Correct the command and run it again.

2618-005 **The *option* flag is required.**

Explanation: The indicated option must be specified when using this command.

User response: Correct the command and run it again.

2618-006 **The *option* flag requires an operand.**

Explanation: You need to include an operand with the specified option when you use this command.

User response: Correct the command and run it again.

2618-007 **The *option* flag does not use an operand.**

Explanation: The indicated option must be specified without an operand.

User response: Correct the command and run it again.

2618-008 **An unexpected RMC error occurred.
The RMC return code was *code*.**

Explanation: A call to a Resource Monitoring and Control command-line interface (RMC CLI) script returned an unexpected error.

User response: Check to see if RMC is operational and run the command again.

2618-009 **You must specify *op1* when using *op2*.**

Explanation: When running this command with the *op2* parameter, you must also specify the *op1* parameter.

User response: Add *op1* to the command and run it again.

2618-010 **You cannot specify both *flag-name* and response(s)**

Explanation: You cannot specify any responses when running this command with the *flag-name* flag.

User response: Run the command again using either the *flag-name* flag or one or more responses.

2618-013 ***error_exit* received an unexpected return code *ERRM_return_code*.**

Explanation: All ERRM return codes should be converted to an appropriate ERRM command-line interface return code.

User response: This is an internal script error and should not occur. If this message is issued, an error did occur. The actual API return code or other internal subroutine return code is displayed. This is a severe error, and processing of the command stops. Report the command name, and this message, to the IBM Support Center.

2618-019 **The flag *option* is not yet supported.**

Explanation: The option specified is not supported.

User response: Use a different option or command.

2618-020 The command is not yet supported.

Explanation: The command is not yet supported.

User response: Use a different command.

2618-021 The condition "*condition_name*" was not found.

Explanation: The condition specified was not found.

User response: Check the condition name and issue the command again.

2618-041 The condition "*condition_name*" already exists.

Explanation: The condition specified already exists.

User response: Check the condition name and issue the command again.

2618-042 The severity *severity_value* for the option flag is invalid.

Explanation: The severity specified with the **-S** option is not valid. *severity_value* must be **c** (critical), **w** (warning), or **i** (informational).

User response: Check the severity and issue the command again.

2618-043 The existing condition "*condition_name*" was not found.

Explanation: The existing condition specified to be copied was not found.

User response: Check the existing condition name and issue the command again.

2618-045 The scope *management_scope* for the option flag is not valid.

Explanation: The management scope specified with the **-m** option is not valid. *management_scope* must be **l** (local), **m** (management domain), or **p** (peer domain).

User response: Check the management scope and run the command again.

2618-046 Colons (:) are not allowed in Condition names.

Explanation: Colons (:) are used in ERRM commands to indicate the name of the node where the condition is located.

User response: Remove any colons from the condition name specified and run the command again.

2618-061 The condition "*condition_name*" was not found and cannot be removed.

Explanation: The condition name specified in the **rmcondition** command was not found. It cannot be removed from the list of conditions.

User response: Check the condition name and issue the command again.

2618-062 The condition "*condition_name*" is linked to one or more responses and cannot be removed.

Explanation: The condition name specified in the **rmcondition** command is linked to one or more responses and cannot be removed.

User response: Use the **-f** option to force the removal of the condition and the links to all of its responses. The **rmcondresp** command can also be used to remove the link between a condition and a response.

2618-081 The condition "*condition_name*" was not found and cannot be changed.

Explanation: The condition name specified in the **chcondition** command was not found. It cannot be changed.

User response: Check the condition name and issue the command again.

2618-082 The option flag specified an invalid severity *severity_value*.

Explanation: The severity specified with the **-S** option is not valid. *severity_value* must be **c** (critical), **w** (warning), or **i** (informational).

User response: Check the severity and issue the command again.

2618-083 The condition "*condition_name*" specified by **-c already exists.**

Explanation: The condition name specified by the **-c** option in the **chcondition** command already exists. It cannot be the new condition name.

User response: Check the condition name and issue the command again.

2618-085 The scope *management_scope* for the option flag is not valid.

Explanation: The management scope specified with the **-m** option is not valid. *management_scope* must be **l** (local), **m** (management domain), or **p** (peer domain).

User response: Check the management scope and issue the command again.

2618-101 **The response "*response_name*" was not found.**

Explanation: The response specified was not found.

User response: Check the response name and issue the command again.

2618-121 **The response "*response_name*" already exists.**

Explanation: The response specified already exists.

User response: Check the response name and issue the command again.

2618-122 **The existing response "*response_name*" was not found.**

Explanation: The existing response specified to be copied was not found.

User response: Check the existing response name and issue the command again.

2618-123 **The *flag* flag specified an invalid event type *event_type*.**

Explanation: The event type specified with the **-e** option is not valid. *event_type* must be **a** (arm), **r** (rearm), or **b** (both).

User response: Check the event type and issue the command again.

2618-124 **The number of days specified and the number of times specified do not match.**

Explanation: The number of days specified by the **-d** option does not match the number of times specified by the **-t** option. There must be a time range for each day range.

User response: Check the days and times specified and issue the command again.

2618-046 **Colons (:) are not allowed in Response names.**

Explanation: Colons (:) are used in ERRM commands to indicate the name of the node where the response is located.

User response: Remove any colons from the response name specified and run the command again.

2618-141 **The response "*response_name*" was not found.**

Explanation: The response specified was not found.

User response: Check the response name and issue the command again.

2618-142 **The response "*response_name*" is linked to one or more conditions and cannot be removed.**

Explanation: The response name specified in the **rmresponse** command is linked to one or more conditions and cannot be removed.

User response: Use the **-f** option to force the removal of the condition and the links to all of its responses. The **rmcondresp** command can also be used to remove the link between a condition and a response.

2618-161 **The response "*response_name*" was not found and cannot be changed.**

Explanation: The response name specified in the **chresponse** command was not found. It cannot be changed.

User response: Check the response name and issue the command again.

2618-162 **The *flag* flag specified an invalid event type *event_type*.**

Explanation: The event type specified with the **-e** option is not valid. *event_type* must be **a** (arm), **r** (rearm), or **b** (both).

User response: Check the event type and issue the command again.

2618-163 **The action "*action_name*" is the only action defined in the response "*response_name*" and can not be deleted.**

Explanation: The response name specified contains only one action. The action cannot be deleted.

User response: Check the response name and issue the command again or delete the entire response using the **rmresponse** command.

2618-164 **The action "*action_name*" was not found in the response "*response_name*" and can not be deleted.**

Explanation: The response name specified did not contain the action requested to be deleted.

User response: Check the response name and action name and issue the command again.

2618-165 **The number of days specified and the number of times specified do not match.**

Explanation: The number of days specified by the **-d** option does not match the number of times specified by the **-t** option. There must be a time range for each day range.

User response: Check the days and times specified and issue the command again.

2618-166 **The response "*response_name*" specified by -c already exists.**

Explanation: The response name specified by the **-c** option in the **chresponse** command already exists. It cannot be the new response name.

User response: Check the response name and issue the command again.

2618-167 **One of the following flags is required: -a, -p, or -c.**

Explanation: You did not specify the **-a**, **-p**, or **-c** option with the **chresponse** command.

User response: Check that **-a**, **-p**, or **-c** is specified and run the command again.

2618-181 **The response "*response_name*" was not found.**

Explanation: The response specified was not found.

User response: Check the response name and issue the command again.

2618-182 **The condition "*condition_name*" was not found.**

Explanation: The condition specified was not found.

User response: Check the condition name and issue the command again.

2618-183 **The condition "*condition_name*" with the response "*response_name*" was not found.**

Explanation: The condition specified with the response specified was not found.

User response: Check the condition and response names and issue the command again.

2618-184 **At least one response must be provided when the -r flag is used.**

Explanation: When the **-r** option is used, at least one response name must be given as input.

User response: Reissue the command with the correct parameters.

2618-185 **No defined conditions were found.**

Explanation: The **Iscondresp** command was issued before any conditions were defined in the system.

User response: Set up one or more conditions with the **mkcondition** command before issuing the

Iscondresp command again.

2618-186 **None of the responses given as input was found.**

Explanation: None of the response names provided as input to the **Iscondresp** command could be found.

User response: Verify the correct spelling of the desired response names and reissue the command.

2618-187 **No defined responses were found.**

Explanation: The **Iscondresp** command was issued before any responses were defined in the system.

User response: Set up one or more conditions with the **mkresponse** command before issuing the **Iscondresp** command again.

2618-188 **No defined condition-response links were found.**

Explanation: The **Iscondresp** command was issued before any condition-response links were defined in the system.

User response: Set up one or more condition-response links with the **mkcondresp** command before issuing the **Iscondresp** command again.

2618-189 **No condition-response links matching the input criteria were found.**

Explanation: While condition-response links were found, none matched the input criteria provided when the **Iscondresp** command was issued. Any of the following input criteria may not have been met:

- No condition-response links' state value matched the setting of the **Iscondresp -a** or **-n** option
- The specified condition name was not found in the defined condition-response links
- None of the specified response names was found in the defined condition-response links
- The specified condition name was not linked with any of the specified response names in the defined condition-response links

User response: Issue the **Iscondresp** command with no option or parameters to get a list of all defined condition-response links and their states.

2618-201 **The condition "*condition_name*" with response "*response_name*" already exists.**

Explanation: The condition specified is already defined with the response specified.

User response: Check the condition and response names and issue the command again.

2618-202 The condition "*condition_name*" was not found.

Explanation: The condition specified was not found.

User response: Check the condition name and issue the command again.

2618-203 The response "*response_name*" was not found.

Explanation: The response specified was not found.

User response: Check the response name and issue the command again.

2618-221 The condition "*condition_name*" with the response "*response_name*" was not found.

Explanation: The condition specified with the response specified was not found.

User response: Check the condition and response names and issue the command again.

2618-222 The condition "*condition_name*" was not found.

Explanation: The condition specified was not found.

User response: Check the condition name and issue the command again.

2618-223 The response "*response_name*" was not found.

Explanation: The response specified was not found.

User response: Check the response name and issue the command again.

2618-227 The condition *condition_name* with the response *response_name* is locked. It cannot be removed.

Explanation: The condition with the linked response is locked. The link between them cannot be removed.

User response: If the condition and response names are correct and you need to remove the link between them, refer to *RSCT: Administration Guide* for information about working with locked resources.

2618-241 The condition "*condition_name*" with the response "*response_name*" was not found.

Explanation: The condition specified with the response specified was not found.

User response: Check the condition and response names and issue the command again.

2618-242 The condition "*condition_name*" was not found.

Explanation: The condition specified was not found.

User response: Check the condition name and issue the command again.

2618-243 The response "*response_name*" was not found.

Explanation: The response specified was not found.

User response: Check the response name and issue the command again.

2618-244 The condition "*condition_name*" with the response "*response_name*" is already being monitored.

Explanation: The condition and response specified are already being monitored.

User response: Check the condition and response names and issue the command again.

2618-245 The condition "*condition_name*" is not linked to any responses.

Explanation: The condition specified is not linked to any responses. Monitoring cannot be started for this condition.

User response: Check the condition and issue the command again. You may need to specify a response as well.

2618-246 The monitoring state for the condition *condition_name* with the response *response_name* is locked.

Explanation: The condition with the linked response is locked. Monitoring cannot be started for this condition and response.

User response: If the condition and response names are correct and you need to start monitoring, either create a new condition and response to monitor or refer to *RSCT: Administration Guide* for information about working with locked resources.

2618-261 The condition "*condition_name*" with the response "*response_name*" was not found.

Explanation: The condition specified with the response specified was not found.

User response: Check the condition and response names and issue the command again.

2618-262 **The condition "*condition_name*" was not found.**

Explanation: The condition specified was not found.

User response: Check the condition name and issue the command again.

2618-263 **The response "*response_name*" was not found.**

Explanation: The response specified was not found.

User response: Check the response name and issue the command again.

2618-264 **The condition "*condition_name*" with the response "*response_name*" is not being monitored.**

Explanation: The condition and response specified are not being monitored.

User response: Check the condition and response names and issue the command again.

2618-265 **The condition "*condition_name*" is not linked to any responses.**

Explanation: The condition specified is not linked to a response. It is not monitored.

User response: Check the condition name and rerun the command.

2618-266 **The monitoring state for the condition *condition_name* with the response *response_name* is locked.**

Explanation: The condition with the linked response is locked. Monitoring cannot be stopped for this condition and response.

User response: If the condition and response names are correct and you need to stop monitoring, refer to *RSCT: Administration Guide* for information about working with locked resources.

2618-401 **Invalid operand *operand***

Explanation: An unexpected problem occurred with RMC that prevented the displaying of the specified resource.

User response: Examine the RMC return code, make certain RMC is running or take other appropriate RMC diagnostic action based on the return code.

2618-402 **ldpdef command invoked with invalid arguments.**

Explanation: The **ldpdef** command was invoked with non-valid arguments.

User response: Issue the **ldpdef** command again with valid arguments.

2618-403 **Input file could not be found or is not readable.**

Explanation: The input file specified could not be found or is not readable.

User response: Check the input file name, the attributes, or both (name and attributes) and run the command again.

2618-404 **Specify either **-c** or **-r** but not both.**

Explanation: The **-c** and **-r** options cannot be specified at the same time.

User response: Use only one of the options and run the command again.

2618-405 **Missing **-c** or **-r** option.**

Explanation: The **-c** option or the **-r** option must be specified.

User response: Use one of the options and run the command again.

2618-406 **The combination of options specified is not allowed.**

Explanation: The combination of the specified flags is not allowed.

User response: Refer to the usage statement for a list of valid flag combinations.

2618-407 **A required option is missing.**

Explanation: One of the required flags was not specified.

User response: Use one of the options and reissue command.

2618-421 **Invalid Time Format.**

Explanation: An incorrect time format was specified with this command.

User response: Specify the time using the correct format and run the command again.

2618-422 **The -O value must be greater than 0.**

Explanation: A negative value was passed with the **-O** flag.

User response: Specify a positive value with the **-O** flag and run the command again.

Chapter 17. 2619: Cluster technology commands

When an error occurs, a cluster technology command issues one or more messages with a prefix of **2619**.

2619-001 Invalid format for resource handle.

Explanation: Resource handles are composed of up to five groups of eight bits each. One or more segments of an input resource handle had more than eight characters or more than five sets of bits.

User response: Check the syntax of the resource handle. A resource handle is enclosed in double quotation marks and has this format:

```
"0xn timer 0xn timer 0xn timer 0xn timer\n0xn timer"
```

where *n* is any valid hexadecimal character (**0** to **9**, or **a**, **b**, **c**, **d**, **e**, or **f**). For example:

```
"0x4018 0x0001 0x00000000 0x069684c 0x00519686\n0xaf7060fc"
```

2619-002 Invalid hexadecimal number: *value*.

Explanation: One or more hexadecimal or binary input values contained non-hexadecimal characters.

User response: In general, for the RSCT components, binary data is entered using hexadecimal characters. See *RSCT: Administration Guide* for more information.

Enter a valid hexadecimal value and run the command again.

2619-003 Input file *input_file_name* not found.

Explanation: The input file name that was specified to supply data to the command-line interface could not be opened because it was not found.

User response: Verify the path name that was used for the input file. Use an absolute path name rather than a relative path name. Refer to the man page of the calling command for the correct syntax before you run the command again.

2619-004 *target not found in input file input_file_name*.

Explanation: The target line given to locate in the input file was not found.

User response: Verify the spelling of the target specified on the command line. Also, verify that the target exists in the input file. Refer to the man page of the calling command for the correct syntax before you run the command again.

2619-005 Error in input line *input_file_name input_file_line*.

Explanation: The line listed in the error description has an incorrect format.

User response: Refer to the man page of the calling program for the correct syntax for file input.

2619-006 Invalid display type *display_type*.

Explanation: The display type that was supplied to the subroutine was not valid for the command-line interface print facility.

User response: Refer to the man page of the calling program for a list of valid display types.

2619-007 No data found on command line.

Explanation: The command line given to be parsed contained no data. Data is required for the calling command.

User response: Verify the syntax for the command being run by consulting the man page. Verify the command-line syntax for input of data to the components by referring to their individual man page sections.

2619-008 Invalid data type *data_type*.

Explanation: The data type that was specified on the command line was not valid.

User response: Verify the current list of valid data types by checking the man page of the calling command.

2619-009 Invalid signed or unsigned 64-bit integer: *value*.

Explanation: A 64-bit number was expected. The value that was specified on the command line or in the input file contained characters other than digits.

User response: Verify the format of the 64-bit signed or unsigned integers in the input data before you run the command again.

2619-010 Invalid unsigned number found: *value*.

Explanation: A value passed in to the calling program was expected to be an unsigned number, but it was found to be negative. This could be a typographical error on the command line.

User response: Verify the format for entering data for the calling command by referring to the man page for that command.

2619-011 No data found in input file
input_file_name.

Explanation: No valid input data was found in the input file that was supplied. This could be a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page.

2619-012 Nested arrays not allowed in input:
string.

Explanation: Nested arrays are not allowed in the input. This could be a typographical error in the input file or on the command line.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page.

2619-013 Structured data cannot contain structured data: *string.*

Explanation: Structured data cannot contain structured data. This could be a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page. Verify the rules for structured data by referring to *RSCT: Administration Guide*.

2619-014 Missing closing brace (}) for array:
string.

Explanation: An array in the input file is not valid, perhaps because there was no closing brace found for a given array. This might be a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page. Verify the rules for structured data by referring to *RSCT: Administration Guide*.

2619-015 Missing closing bracket] for structured data: *string.*

Explanation: Structured data in the input file has a format that is not valid, perhaps because there was no closing bracket for a given structured data set. This is probably due to a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the

resource_data_input man page. Verify the rules for structured data by referring to *RSCT: Administration Guide*.

2619-016 Missing closing quote:

Explanation: A quoted string was not valid, perhaps because there was no closing quotation mark. This could be a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page. Verify the rules for structured data by referring to *RSCT: Administration Guide*.

2619-017 Empty data stanza prior to line next stanza heading.

Explanation: Two stanza headers in a row were found in the input file, indicating that data is missing the first stanza. This could be a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page.

2619-018 Incorrect stanza header bad stanza heading found in input file.

Explanation: A stanza header was found in the input file where one should not exist. This happens when the initial data in a section has no stanza header, but a stanza header is used before the end of the data in the file. This could be a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page.

2619-019 Data missing.

Explanation: A stanza header was found in the input file with no associated data. This could be a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page.

2619-020 Possible missing open brace {:

Explanation: An input line may have a missing opening brace. This occurs if a closing brace is discovered with no matching opening brace. This could be a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page.

2619-021 Possible missing open bracket [:

Explanation: An input line might have a missing opening bracket. This message occurs when a closing bracket is discovered without a matching opening bracket. This could be a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page.

2619-022 Possible missing structured data entry:

Explanation: The last entry in a structured data segment is a comma. This might imply that a value is missing from the structured data, or it could be a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page.

2619-023 Possible missing array entry:

Explanation: The last entry in an array is a comma. This might imply that a value is missing from the array, or it could be a typographical error in the input file.

User response: Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page.

2619-024 Unescaped brace or bracket in quote:

Explanation: An "unescaped" brace or bracket was found inside a quotation mark. Braces and brackets inside quotation marks must be "escaped". This could be a typographical error in the input file.

User response: Braces and brackets must be "escaped", which means they must be preceded by the backslash (\) character. Verify the format for the input file by referring to the appropriate command man page and the **resource_data_input** man page.

2619-025 Input file *file_name* cannot be opened.

Explanation: The input file that was specified to provide data to the command-line interface cannot be opened.

User response: Make sure the correct file name is specified. Verify the input file's permissions. Use an absolute path name instead of a relative path name. Refer to the calling command's usage statement or man page for the correct syntax and run the command again.

Chapter 18. 2632: Configuration resource manager

When an error occurs, the configuration resource manager issues one or more messages with a prefix of **2632**.

2632-001 **Attribute "*attribute_name*" cannot be specified when defining a new resource.**

Explanation: When defining a new resource, the user specified an attribute whose value is automatically generated and therefore is not valid.

User response: The user must remove this attribute from the define resource call.

2632-002 **Attribute *attribute_name* appears in request more than once.**

Explanation: The user has supplied the same attribute for a single request more than once.

User response: The user should remove multiple copies of the same attribute within a single request.

2632-003 **Class name *class_name* is not recognized by this resource manager.**

Explanation: The configuration resource manager does not recognize the named resource class as belonging to it. This is either an internal error or indicates a corrupted RMC configuration.

User response: Record the above information and contact your software service organization.

2632-004 **Could not initialize control point for class *class_name*.**

Explanation: The configuration resource manager was unable to create and initialize RCCP for the named resource class.

User response: Make sure the system has plenty of resources (paging space, available */var* file system space, and so on). If this does not resolve the problem, record the above information and contact your software service organization

2632-005 **Attribute "*attribute_name*" must be specified when defining a new resource.**

Explanation: A required attribute was not specified when the user attempted to define a new resource.

User response: The user must add the missing attribute and try the define operation again.

2632-006 **Domain name "*domain_name*" is already defined.**

Explanation: The name of the domain to be created already exists.

User response: Specify another domain name and try the operation again.

2632-007 **The specified domain name is not valid. The name cannot be the word 'IW' or contain the character '/'.**

Explanation: The name of the domain to be created is not valid. The name cannot be **IW**, which is used to identify an offline domain. In addition, the name cannot contain the slash character (**/**), which is used when specifying paths and directories.

User response: Specify another domain name that follows the restrictions.

2632-008 **The specified domain name *name* is too long.**

Explanation: The indicated name for the peer domain to be created is too long.

User response: Specify a shorter domain name.

2632-009 **Internal error, buffer too small to hold */var/ct/cfg/clusters*.**

Explanation: An internal error occurred in the peer domain's configuration resource manager.

User response: Record the above information and contact your software service organization.

2632-010 **Input to a class action is not valid.**

Explanation: An internal error occurred in the configuration resource manager. The input data to invoke a class action is not valid.

User response: Record the above information and contact your software service organization.

2632-011 **Port *port* is in use.**

Explanation: The UDP port number specified for Topology Services or Group Services has already been used by other services.

User response: Check **/etc/services** and specify another port number that is not used by other services.

2632-012 **Operation is not available since node is not online in a domain.**

Explanation: An operation required to be executed in an online peer domain is issued on a node that is not online in any peer domain.

User response: Bring the node online or retry the operation on an online node.

2632-014 **The value specified for *port_number* is not valid. Valid range is between 1024 and 65000.**

Explanation: You specified a port number that is not valid.

User response: Specify a port number for topology services or group services that is within the valid range (1024 to 65000).

2632-015 **The following error was returned from the RMC subsystem while attempting to initialize a new domain configuration on node *node*: error**

Explanation: An error occurred on the specified remote node while attempting to initialize a domain definition on it.

User response: Resolve the specified error on the remote node.

2632-016 **The following error was returned from the RMC subsystem while attempting to remove a domain definition from node *node*: error**

Explanation: The specified error occurred on the remote node while attempting to remove a domain definition on it.

User response: Resolve the specified error condition.

2632-017 **The domain definition cannot be removed from node *node* by the RemoveConfig action while the domain is not offline.**

Explanation: The specified error occurred on the remote node while attempting to remove a domain definition on it.

User response: Take the node offline prior to removing the domain definition.

2632-018 **Error *error_code* was returned from node while attempting to commit a domain configuration change.**

Explanation: The specified error occurred while attempting to commit changes to the domain configuration.

User response: Try to resolve the problem indicated by the specified error code.

2632-019 **The following error was returned from the RMC subsystem while attempting to put the domain configuration on node *node*: error**

Explanation: The specified error occurred while attempting to commit changes to the domain configuration on the target node.

User response: Attempt to resolve the problem indicated by the specified error code.

2632-020 **The online operation cannot be performed because the node is already online in domain *domain_name***

Explanation: The specified error occurred while attempting to bring a node online into a domain.

User response: Take the node offline in the specified domain prior to attempting to bring it online.

2632-021 **The online or offline operation cannot be performed because a state change is already in progress.**

Explanation: The specified error occurred while attempting to bring a node online into or offline from a domain. The request was rejected because there is already an online or offline change in progress. Only one is allowed at a time.

User response: Wait for the current online or offline operation to complete and the retry the operation again.

2632-022 **Input to action "PropagateConfig" is not valid.**

Explanation: The specified error occurred while attempting to propagate the domain configuration during the process of bringing a domain online. This is an internal error because all parameters to this action are generated internally.

User response: Contact your software service organization.

2632-023 **The specified domain does not exist.**

Explanation: The specified error occurred while attempting to propagate the domain configuration during the process of bringing a domain online. As nodes were contacted to bring them online and synchronize their configuration, a node was encountered that is not part of the latest configuration. This error is handled internally.

User response: None.

2632-024 **The following error was returned from the RMC subsystem while attempting to contact node *node* during a start domain operation.: *error***

Explanation: *node* is the name or IP address of the node being processed at the time of the error. *error* is the error message returned from the RMC subsystem.

The specified error occurred while attempting to propagate the domain configuration during the process of bringing a domain online. As nodes were contacted to bring them online and synchronize their configuration, the specified error was encountered. Depending on the RMC subsystem error, this could be an internal error or indicates a situation that the customer should correct.

User response: Try to correct the problem identified by *error*. If it cannot be corrected, contact your software service organization.

2632-025 **A response was received from a "PropagateConfig" action for node *node* that does not have a valid format.**

Explanation: *node* is the name or IP address of the node being processed at the time of the error.

This is an internal error that indicates a software component generated the wrong format data.

User response: Contact your software service organization.

2632-026 **Operation is not available since the node *node* is not offline.**

Explanation: The specified error occurred while attempting to remove a node from a domain.

User response: Take the node offline before trying to remove it from a domain.

2632-027 **The request to bring the node online in domain *domain_name* cannot be completed due to its configuration being down level and attempts to synchronize it with other nodes have failed.**

Explanation: *domain_name* is the name of the domain in which the node was attempting to go online.

A request was received to bring the node online in the specified domain, but its configuration is down level and all attempts to synchronize it with other nodes have failed.

User response: Check the error log for more information about why the configuration could not be synchronized. Try the operation again on the same node or from a different node that is online in the domain. If the problem persists, contact the IBM Support Center.

2632-028 **The communication group cannot be defined because there is an existing communication group with name "*group_name*".**

Explanation: During the process of attempting to create a new communication group, it was discovered that a communication group with the specified name already exists.

User response: Either choose a different name for the new communication group or delete the existing communication group of that name and retry the operation.

2632-029 **The communication group "*group_name*" cannot be removed since it is still referenced by one or more network or serial interfaces.**

Explanation: During the process of attempting to remove a communication group, it was discovered that either a network interface or serial interface still refers to *group_name*. A communication group can only be removed if there are no references to it.

User response: Determine the list of network interfaces or serial interfaces that refer to the target communication group, assign them to a different communication group, and then retry this request. For example, resources that refer to this communication group can be determined by using the command **lsrsrc -s"CommGroup=="*group_name*" IBM.NetworkInterface**, where *group_name* is the name of the target communication group.

2632-030 **Attribute "*attribute_name*" has invalid or out of range data value.**

Explanation: During the process of attempting to add or change a communication group, it was discovered that the attribute value is not valid or is out of range.

User response: Check the acceptable value for the attribute.

2632-031 **The communication group "*group_name*" is undefined.**

Explanation: *group_name* is the name of the communication group in the change command.

During the process of assigning a communication group to a network interface, it was discovered that the communication group is undefined.

User response: Find the list communication group by using the command **lsrsrc IBM.CommunicationGroup**.

2632-032 The communication group "*group_name*" can not be assigned to the network interface, because another network interface from the same node already belongs to "*group_name*".

Explanation: *group_name* is the name of the communication group in the change command.

During the process of assigning a communication group to a network interface, it was discovered that the communication group already has a network interface from the same node. The topology services subsystem does not allow a communication group to have more than one network interface from the same node.

User response: Find another communication group that does not have a network interface from the same node.

2632-033 The node is offline in the domain *domain_name*. Force option must be specified to remove the domain definition from the offline node.

Explanation: *domain_name* is the name of the domain to be removed.

The specified error occurred on a node that is offline in the domain to be removed. A domain definition cannot be removed unless the originator node is online in the target domain or the force option is specified.

User response: Specify the force option to remove the domain definition from the node or bring the domain online first and then issue the **rmrpdomain** command.

2632-034 The communication group "*group_name*" can not be assigned to the point to point network or serial interface because there are already two or more members in the communication group.

Explanation: An attempt was made to set the CommGroup attribute of a network or serial interface to the name of a communication group that already has two or more members. The target interface is a point to point interface that can only exist in a communication group with one other member.

User response: Correct the request so that the target communication group is appropriate for the target network or serial interface and is consistent with the existing members of the communication group.

2632-035 The communication group "*group_name*" can not be assigned to the point to point network or serial interface because the existing members of the communication group are not point to point interfaces or are incompatible.

Explanation: An attempt was made to set the CommGroup attribute of a network interface or a serial interface to the name of a communication group that already has members that either aren't point-to-point interfaces or that don't match the type of interface. For example, an attempt could have been made to either add a serial interface to a communication group that has IP network interfaces, or to add IP network interfaces to a communication group that has a serial interface.

User response: Correct the request so that the target communication group is appropriate for the target network or serial interface and is consistent with the existing members of the communication group.

2632-036 The communication group "*group_name*" can not be assigned to the point to point network interface because the IP address and Destination Address do not match the existing member of the communication group.

Explanation: An attempt was made to set the CommGroup attribute of a network interface to the name of a communication group that already has a member, but the IP address and the destination address of the target interface do not match the IP address and the destination address of the existing communication group member.

User response: Correct the request so that the target communication group is appropriate for the target network interface and is consistent with the existing member of the communication group.

2632-037 The NIM path "*path_name*" is undefined or not accessible.

Explanation: *path_name* is the name of the NIM path in the change command.

During the process of changing the NIM path attribute of a communication group, it was discovered that the NIM path is undefined.

User response: Find the validity of the path by using the command **ls NIMpath**.

2632-038 The NIM path "*path_name*" is not executable by the user.

Explanation: *path_name* is the name of the NIM path in the change command.

During the process of changing the NIM path attribute of a communication group, it was discovered that the NIM path does not allow user execute permission.

User response: Find out if the user has execute permission by using the command **ls -l NIMpath**.

2632-039 **The domain *domain_name* cannot be removed. The domain may be in a transition pending state, or was just removed by another command.**

Explanation: This error occurred on a node attempting to remove a domain, but the node may be in a pending state because a domain command was issued earlier and is being run on the node. A domain can be removed only when the node that originated the removal request is in an online or offline state.

User response: Use the **lsrpnnode** command to view the state of the node. If the node is in a pending state, another domain command may be in progress. Wait for this command to complete. When the node is in an online or offline state, you can run the **rmrpdomain** command again to remove the domain.

2632-040 **Node *node_name* cannot be pinged and is therefore not reachable.**

Explanation: *node_name* is the name of the node where the error occurred.

While attempting to contact a node in order to harvest information, obtain its configuration version, or to tell it to start, none of its network interfaces could be pinged, indicating that either the node is down or the network is not configured correctly.

User response: If the node should be up, verify that its network configuration is correct.

2632-041 **One or more node names must be specified when defining a new domain.**

Explanation: A request was received to create a new domain definition but no node names were specified. At least one node name is required.

User response: Reissue the operation to create the domain, specifying the name of at least one node.

2632-042 **The file *file_name* does not have a valid format.**

Explanation: During the parsing of a required file, it was detected that the file does not have a valid format. The file has most likely been corrupted either by an editing error or by a file system error.

User response: Repair the file and try to restart the configuration resource manager.

2632-043 **The name *name* could not be resolved into an ip address, error *error_string* returned from *gethostbyname()*.**

Explanation: The specified name could not be resolved into an IP address. *name* could be a non-valid or nonexistent name, or the name server or network may be down.

User response: Correct the name and retry the operation.

2632-044 **The domain cannot be created due to the following errors that were detected while harvesting information from the target nodes:**

Explanation: The operation to create a new domain could not be completed due to the errors that follow this message, which were detected while harvesting information from the specified nodes.

User response: Correct the problems identified and retry the operation.

2632-045 **The domain cannot be created due to the following errors that were detected while placing the domain configuration on the target nodes:**

Explanation: The operation to create a new domain could not be completed due to the errors follow this message, which were detected while placing the domain configuration on the target nodes.

User response: Correct the problems identified and retry the operation.

2632-046 **The following errors were detected while attempting to find the latest configuration for the domain. The domain cannot be brought online.**

Explanation: The operation to bring a domain online could not be completed due to the errors that follow this message, which were encountered while trying to find the appropriate version of the domain configuration to use.

User response: Correct the problems identified and retry the operation.

2632-047 **The following errors were detected while attempting to find the latest configuration for the domain. However, these errors do not prevent the domain from being brought online.**

Explanation: The operation to bring a domain online was successful even though the errors that follow this message were encountered while trying to determine the appropriate version of the domain configuration to use.

User response: Correct the problems identified and retry the operation.

2632-048 **The following errors were detected while attempting to send the start node operation to each node defined to the domain.**

Explanation: The operation to bring a domain online was successful even though the errors that follow this message were encountered while trying to send the start node operation to each node defined to the domain.

User response: Correct the problems identified and retry the operation.

2632-049 **Invalid Online Criteria *value*.**

Explanation: The input value for the Online Criteria option is not valid.

User response: Specify a valid value.

2632-050 **The target node cannot be brought online because it is online in another domain.**

Explanation: A request was sent to the target node for it to be brought online in the active domain of the originator node. However, the target node is already online in another domain so it cannot be brought online as requested.

User response: You can either ignore this message, or you can take the target node offline and then retry the operation.

2632-051 *error_message_from_another_subsystem*

Explanation: This message returns an error from another subsystem.

User response: Try to resolve the problem indicated by the error message.

2632-052 **The following error occurred on the resource class *resource_class* when the originator node attempted to get agreement from all online nodes on the requested operation. One or more nodes might be just taken offline or not functioning properly at the time. Error message: *error***

Explanation: *error* is the error message from the peer node.

The specified error occurred in the callback of the **configCoordination** action invoked on the specified resource class.

User response: Check to see if the node is already offline. If it is offline, the node might have been stopped by another command that was issued at the same time. If the node is not offline, check to see if the resource

manager that supports the resource classes is functioning properly.

2632-053 **The requested operation failed due to the rejection from a subsystem.**

Explanation: The specified error occurred because a subsystem on a domain node rejected the request.

User response: None.

2632-054 **The requested operation failed due to the rejection from the resource class *resource_class*. Message returned from the resource class: *message*.**

Explanation: *message* is the message returned from the subsystem that rejected the requested operation.

The specified error occurred because a subsystem that supports the **configCoordination** action rejected the requested operation.

User response: Resolve the reason for the rejection and try the operation again or use the force option when calling the operation.

2632-055 **The requested operation failed because a subsystem that required configuration coordination returned an invalid response code *code*.**

Explanation: The specified error occurred because a subsystem that supports the **configCoordination** action returned a non-valid response code. This response code did not indicate whether the requested operation should continue. The default — to discontinue the operation — was used.

User response: Contact your software service organization.

2632-056 **The following error was returned from the RMC subsystem while attempting to retrieve a list of classes that require configuration coordination: *error_message***

Explanation: The specified error occurred while attempting to retrieve a list of classes that support the **configCoordination** action.

User response: Try to resolve the problem indicated by the specified error code.

2632-057 **The requested configuration change is not allowed since it will result in network partition(s) that will prevent some nodes from being brought online.**

Explanation: The specified error occurred while attempting to apply a configuration change to the

topology of the domain (nodes and network interfaces). The requested change will result in a network partition and will result in some nodes not being able to be brought online into the domain or some nodes that are already online to fail or go offline.

User response: Try to choose a change that will not result in a network partition and retry the operation.

2632-058 **An exit code of *code* was returned from the command that builds the configuration file for topology services. The error output from this command is: *output***

Explanation: *code* is the exit code from running the **cthats** command. *output* is the standard error output from the **cthats** command.

The specified error occurred while attempting to build the configuration file for the topology services subsystem.

User response: Try to correct the error indicated in the output from the command and retry the operation.

2632-059 **The following problems were detected while successfully creating the domain. Nodes that could not be harvested will not be included in the new domain.**

Explanation: The errors that follow this message were encountered while attempting to create a new domain. The nodes that could not be harvested will not be included in the domain definition. Nodes that were harvested but failed to initialize the configuration have been added to the domain. However, domain operations such as **starttrpdomain** cannot be invoked on those nodes until they are first brought online through another node.

User response: Try to resolve the problems listed. Then, for nodes that could not be harvested and thus were not added to the domain, invoke the **addrpnode** command from an online node to add them to the domain. For nodes that failed to plant the configuration, no action is necessary beyond correcting the problem that prevented the configuration from being initialized on the node.

2632-060 **The requested operation failed due to the rejection from the resource class *error_message*.**

Explanation: The specified error occurred because a subsystem that supports the **configCoordination** action rejected the requested operation.

User response: Correct the reason for the rejection and try the operation again.

2632-061 **Invalid configuration coordination response *code* was returned the resource class *error_message*.**

Explanation: The specified error occurred because a subsystem that supports the **configCoordination** action rejects the requested operation.

User response: Contact your software service organization.

2632-062 **The input to the internal action *action_name* is not valid.**

Explanation: The specified error occurred while attempting to perform an operation on a remote node through the RMC action identified in the message. This action is only used internally so the input should always be valid. This error probably indicates that there is a problem in the implementation.

User response: Contact your software service organization.

2632-063 **An exit code of *code* was returned from the command that builds the configuration file for the Resource Monitoring and Control subsystem. The error output from this command is: *output***

Explanation: *code* is the exit code from running the **mcassemble** command. *output* is the standard error output from the **mcassemble** command.

The specified error occurred while attempting to build the configuration file for the resource monitoring and control subsystem.

User response: Try to correct the error indicated in the output from the command and try the operation again.

2632-064 **The specified value of the force option is not valid or has the wrong data type.**

Explanation: This error occurred while attempting to define a new domain resource, add a new node to the domain, or remove a node from the domain. The value of the force option is not valid or has the wrong data type.

User response: Correct the value specified for the force option and try the operation again.

2632-065 **The specified list of node numbers is not valid.**

Explanation: This error was detected while attempting to define a new domain resource. The list of node numbers provided either has the wrong data type or the wrong number of values.

User response: Correct the list of node numbers and retry the operation.

2632-066 The specified list of node numbers contains out of range values or duplicate values.

Explanation: This error was detected while attempting to define a new domain resource. The list of node numbers provided either has duplicate values, which are not permitted, or values greater than 2047 or less than 0.

User response: Correct the list of node numbers and retry the operation.

2632-067 This node is a duplicate of node *node_name* and will not be included in the domain definition.

Explanation: This error was detected while attempting to define a new domain resource. The name of a node was specified that refers to the same node as another name in the input list. A node cannot be added to a domain more than once.

User response: Correct the list of node names and retry the operation.

2632-068 This node has the same internal identifier as *node_name* and cannot be included in the domain definition.

Explanation: This error was detected while attempting to define a new domain resource. Two or more nodes have the same internal node identifier that is supposed to be unique. Some problem must have occurred during installation of the nodes such that the nodes were assigned the same unique identifier. The node identifier is assigned to the node when RSCT is installed on the node.

User response: Refer to *RSCT: Administration Guide* for information about how to correct this problem or re-install RSCT on the specified node.

2632-069 The operation cannot be completed because the node is going offline or is already offline.

Explanation: This error was detected while attempting to perform an operation on the domain. The operation cannot be completed because the originator node is no longer online in the domain.

User response: If the operation is still needed, retry the operation on a node that is online in the domain.

2632-070 The operation cannot be completed because an error *error* occurred when the node was joining to the domain.

Explanation: This error was detected while attempting to join the node to the domain. The operation cannot be completed because group services returns a synchronous error on join group request.

User response: Retry the operation if the error is HA_GS_NO_MEMORY. For other errors, contact the IBM Support Center.

2632-071 The node cannot be added to the domain because the version of RSCT on the node is earlier than the version that is active in the domain.

Explanation: This error was detected while attempting to add a node to the domain. The operation cannot be completed because the version of RSCT on the new node is an earlier version than the active version in the domain.

User response: Upgrade the target node to at least the version that is active in the domain and retry the operation. The active version cannot be obtained from the output of the **lsrpdomain** command.

2632-072 The operation cannot be performed because a majority of nodes or configuration daemons is not currently active in the domain, or because the quorum of the domain is not currently satisfied.

Explanation: This error was detected while attempting to update the domain configuration. The operation cannot be completed because some nodes are offline or some daemons that manage the domain configuration are not active. In order to ensure the integrity of the domain configuration through various types of failures, changes are only allowed when there are a majority of nodes online in the domain. Majority is defined to be one more than the number of nodes defined in the domain divided by two.

User response: Make sure a majority of nodes are online and retry the operation. If this is true, one or more of the configuration daemons must be inactive. Verify that this daemon is running on each node by invoking the command **lssrc -s IBM.ConfigRM**. If the output indicates that the daemon is inoperative, contact your software service organization.

2632-073 The specified node number is not valid or is in use.

Explanation: This error was detected while attempting to add a node to the domain. The specified value must be a single integer in the range 1 to 2047.

User response: Correct the value specified for the

node number and retry the operation.

2632-074 **The following problems were detected while successfully adding nodes to the domain. Nodes that could not be harvested were not added to the domain.**

Explanation: The specified errors were encountered while attempting to add one or more nodes to the domain. The nodes that could not be harvested will not be included in the domain definition. Nodes that were harvested but failed to initialize the configuration have been added to the domain. However, domain operations such as **startdomain** cannot be invoked on those nodes until they are first brought online through another node.

User response: Attempt to resolve the problems listed. Then for nodes that could not be harvested and thus were not added to the domain, invoke the **addrnode** command from an online node to add them to the domain. For nodes that failed to plant the configuration, no action is necessary beyond correcting the problem that prevented the configuration from being initialized on the node.

2632-075 **This node has a duplicate IP address (address) with node node. The duplicate address will not be used. Correct the network configuration on one of the nodes or use -c option to perform the operation.**

Explanation: This error was detected while attempting to create a new peer domain or when attempting to add a node to the domain. The specified IP address is configured on two different nodes.

User response: Either 1) Correct the network configuration on one of the nodes and retry the operation; or 2) Retry the operation with the **-c** option. This option will enable the operation to continue even when duplicate IP addresses and other errors are encountered. A node will be added as long as it has at least one valid IP address that is unique within the set of nodes to be added to the domain.

2632-076 **This node has a duplicate IP address (address) which will not be used. The duplicate address will not be used. Correct the network configuration on one of the nodes or use -c option to perform the operation.**

Explanation: This error was detected while attempting to create a new peer domain or when attempting to add a node to the domain. The specified IP address is configured on more than one network interface in the node.

User response: Either 1) Correct the network

configuration on the specified node and retry the operation; or 2) Retry the operation with the **-c** option. This option will enable the operation to continue even when duplicate IP addresses and other errors are encountered. the node will be added as long as it has at least one valid IP address that is unique on the node and within the set of nodes to be added to the domain.

2632-077 **The following problems were detected while adding nodes to the domain. As a result, no nodes will be added to the domain.**

Explanation: The specified errors were encountered while attempting to add one or more nodes to the domain. Because the "continueOnError" option was not specified, processing terminates and no nodes will be added to the domain.

User response: Attempt to resolve the problems listed and then retry the operation.

2632-078 **The following error was returned from the RMC subsystem while attempting update the IP configuration: error**

Explanation: An error occurred on the remote node while attempting to apply an IP configuration change on the local node.

User response: Resolve the specified error on the remote node.

2632-079 **This node is already defined to a cluster that is not compatible with a Peer Domain so it will not be included in the cluster definition.**

Explanation: This error occurs when an attempt is made to include the specified node in an RSCT peer domain using the **mkrpdomain** command or the **addrnode** command. When harvesting the configuration of the new node, it was discovered that the node is already defined to a cluster that is not compatible with the RSCT peer domain. This usually indicates that the node is already defined and active in a GPFS cluster on Linux.

User response: Either remove the node from the conflicting cluster and retry this operation or choose a different node to include in the peer domain.

2632-080 **A new critical resource owner cannot be accepted because the sub-domain does not have operational quorum.**

Explanation: A resource manager tried to inform the quorum manager that it was about to activate a critical resource. This request is rejected because the **OpQuorumState** indicates that a quorum does not exist.

User response: Resolve any problems that are preventing a quorum of nodes from being active in a

single domain. This should involve making sure that some nodes have not explicitly been taken offline and checking to make sure that there are no network partitions. In the case of a two-node domain, make sure that a tie breaker has been configured and is operational.

2632-081 The installed version of RSCT on the node is older than the active version in the cluster.

Explanation: While trying to bring a node online, the system detected that the version of RSCT installed on the node is older than the version of RSCT that is active in the peer domain. Once a new version of RSCT is committed for the peer domain, older versions of RSCT are not permitted. This can only occur if a PTF is rejected or if an older version is force-installed after the administrator has run the command to commit a new RSCT version for the peer domain.

User response: Either install a later version of RSCT on the problem node or remove the peer domain and redefine it on all nodes (including the one with the older version of RSCT).

2632-082 An operation to complete the migration to a new version of RSCT is already running.

Explanation: A request to complete the migration to a new version of RSCT was received but cannot be processed because the operation is already running.

User response: Wait for the migration completion operation to finish.

2632-083 The minimum version in the cluster is the same as the active version so there is no migration to complete.

Explanation: A request to complete the migration to a new version of RSCT was received but cannot be processed because at least one node has the same version as is active in the domain.

User response: Make sure that the later version of RSCT has been installed on all nodes before using this action.

2632-084 The request to bring the domain online using the local configuration cannot be completed since the indicated node is already online with a different configuration version.

Explanation: While processing a request to bring the domain online, the indicated node was discovered to already be online with a different configuration version. A domain cannot be online with two different configuration versions.

User response: Stop the node that is indicated in this

message, or take it offline, and then try the request again. Alternatively, if the configuration of the online node is appropriate, try to bring the domain online from it by using the **starttrpdomain** command.

2632-085 The ownership of tie breaker must be set to either 0(Deny ownership) or 1(Grant ownership).

Explanation: While processing the action to specify ownership of the **Operator** tie-breaker device, a non-valid input parameter was detected. The input parameter must be either **0** (deny ownership) or **1** (grant ownership).

User response: Correct the ownership parameter and try the operation again.

2632-086 The operation to specify ownership of the tie breaker device cannot be performed since the current tie breaker is not of type "Operator".

Explanation: The action to specify ownership of the **Operator** tie breaker cannot be processed when the tie breaker is not of type **Operator**.

User response: Do not try to set the ownership when the tie breaker is not **Operator** or change the current tie breaker to be **Operator** by changing the persistent **PeerNode** class attribute named **OpQuorumTieBreaker**.

2632-087 The operation to specify ownership of the tie breaker device cannot be performed when the domain is not in a tie situation.

Explanation: The action to specify ownership of the **Operator** tie breaker cannot be processed when the number of online nodes is not exactly half the number of nodes defined to the domain.

User response: Retry the operation when the domain is in a tie situation.

2632-088 The specified tie breaker *name* is not valid or is unavailable.

Explanation: The value specified for the name of the tie breaker to be made active does not exist or is unavailable.

User response: Specify the name of an available tie breaker and try the operation again.

2632-089 The value specified for the OpQuorumOverride attribute is not valid.

Explanation: The value specified for the

OpQuorumOverride class attribute is not **0** (no override) or **1** (override).

User response: Specify either **0** or **1** for the **OpQuorumOverride** class attribute and then try the operation again.

2632-090 The value specified for the CritRsrcProtMethod attribute is not valid.

Explanation: The value specified for the **CritRsrcProtMethod** class or resource attribute is either not valid or is not available.

User response: Correct the value specified to be one of those supported and try the operation again.

2632-091 The predefined tie breaker *name* cannot be removed.

Explanation: You tried to delete one of the predefined tie-breaker definitions, which is not allowed.

User response: Choose a different tie breaker to remove and try the operation again.

2632-092 The active tie breaker cannot be removed.

Explanation: You tried to delete the tie-breaker definition that is currently active in the domain.

User response: Activate a different tie breaker and then try the operation again.

2632-093 The tie breaker type *type* does not exist.

Explanation: You tried to create a new tie breaker but the type you specified is not recognized.

User response: Specify a valid for the tie-breaker type and then try the operation again.

2632-094 The type of tie breaker specified does not support heartbeating so the non-zero value specified for the heartbeat period is not valid.

Explanation: You tried to create a new tie breaker with a non-zero value for the **HeartbeatPeriod** attribute, but the type of tie breaker you specified does not support heartbeating. Therefore, the definition you requested is not consistent.

User response: Either choose a different tie-breaker type that supports heartbeating or use a value of **0** for the **HeartbeatPeriod** attribute.

2632-095 The time value specified for attribute *name* is larger than the maximum period allowed of *n* seconds.

Explanation: You tried to create a new tie breaker with a value for one of the time period attributes that is too long.

User response: Specify a valid time value and try the operation again.

2632-096 A tie breaker may not be modified while it is active.

Explanation: You tried to modify the attributes of a tie breaker while it is selected as the active tie breaker for the domain.

User response: Activate another tie breaker so this one is inactive and then try the operation again.

2632-097 The tie breaker cannot be defined because there is an existing tie breaker with name *duplicate_tie_breaker_name*.

Explanation: During the process of attempting to create a new tie breaker, it was discovered that a tie breaker with the specified name already exists.

User response: Either choose a different name for the new tie breaker or delete the existing tie breaker of that name and retry the operation.

2632-098 The node name *name* that is specified in the value for the NodeInfo attribute does not exist.

Explanation: While attempting to create a new tie breaker or while changing the value of the **NodeInfo** attribute, an unrecognized node name was encountered.

User response: Use the **lsrpnnode** command to list the existing node names. Specify a valid node name specified and then try the operation again.

2632-099 The node is not network accessible.

Explanation: While attempting to contact a node in order to harvest information, obtain its configuration version or to tell it to start, none of its network interfaces could be pinged indicating that either the node is down or the network is improperly configured.

User response: If the node should be up, verify that its network configuration is correct.

2632-100 The node is network accessible but the subsystems on it cannot be reached.

Explanation: While attempting to contact a node in order to harvest information, obtain its configuration version or to tell it to start, the RMC subsystem on the

target did not accept or complete the request. However, the node could be pinged so the node must be connected to the network.

User response: Make sure the RMC subsystem is operational on the target node.

2632-101 The communication group cannot be defined because the name specified is reserved for internal use.

Explanation: During the process of attempting to create a new communication group, it was discovered that the name provided is reserved for implicitly-defined communication groups. All names that begin with **CG** followed by a sequence of digits are reserved for internally-generated communication group names.

User response: Choose a different name for the new communication group and then try the operation again.

2632-102 The following error was returned from the RMC subsystem while attempting to retrieve the state from node *node_name* of another domain during the process of merging two sub-domains: *error*

Explanation: The error indicated in the output occurred when attempting to contact the remote node specified.

User response: Resolve the specified error and retry the operation.

2632-103 The operation cannot be completed because it requires at least RSCT version *required_version_number* but only version *active_version_number* is active in the domain.

Explanation: An operation was requested that requires a later version of RSCT than is active in the domain.

User response: Make sure that all nodes have been upgraded to the required level and then update the active version by running the **CompleteMigration** action.

2632-104 An exit code of *code* was returned from the command that defines or undefines the topology services subsystem. The error output from this command is: *output*

Explanation: The specified error occurred while attempting to define or undefine the topology services subsystem using the **cthatsctrl** command.

User response: Try to correct the error indicated in the output from the command and then try the operation again.

2632-105 An exit code of *code* was returned from the command that defines or undefines the group services subsystem. The error output from this command is: *output*

Explanation: The specified error occurred while attempting to define or undefine the topology services subsystem using the **cthagsctrl** command.

User response: Try to correct the error indicated in the output from the command and then try the operation again.

2632-106 The fields *DeviceInfo(%1\$s)* or *NodeInfo(%2\$s)* of IBM.TieBreaker are not configured correctly.

Explanation: The **DeviceInfo** and **NodeInfo** fields of **IBM.TieBreaker** are empty or not configured correctly.

User response: Make sure the **DeviceInfo** and **NodeInfo** fields contain the valid device information for the tie breaker.

2632-107 Required memory could not be allocated during the tie-breaker operation.

Explanation: There was not enough memory available to process the tie breaker.

User response: Make sure there are enough system resources available. If the problem persists, record the error message and contact your software service organization.

2632-108 Tie-Breaker device *device_name* is not found or unable to access (status *status_number*).

Explanation: The tie breaker is not accessible or is not found in the system.

User response: Check the tie breaker's status.

2632-109 Unable to create the RSCT tie-breaker device file *device_name* (error *error_number*)

Explanation: The RSCT tie-breaker device file cannot be created.

User response: Check the RSCT tie-breaker file.

2632-110 The operation was rejected by one or more nodes, probably because one or more resources are online or there was an error encountered in determining if any resources are online.

Explanation: One or more nodes could not complete the requested operation, probably because one or more

resources are still online on the target nodes.

User response: Stop any resources that are online and then retry the operation.

2632-111 The operation was rejected by one or more nodes because the updates could not be applied.

Explanation: One or more nodes could not complete the requested update, probably because of errors occurring when the updates were applied.

User response: Make sure that the online nodes are functioning properly and retry the operation.

2632-112 An error code of *code* was returned from the topology services while enabling or disabling deadman switch for critical resources activation or deactivation.

Explanation: The specified error occurred while attempting to enable or disable the deadman switch by the topology services subsystem.

User response: Check the deadman switch (DMS) configuration and status.

2632-113 The target node *node* is not defined in domain *domain*

Explanation: While attempting to synchronize the identified node in the identified domain, the configuration resource manager discovered that the node is not defined in that domain. The configuration resource manager could not complete the operation to synchronize the configuration.

User response: Define the identified node in the identified domain to synchronize its configuration.

2632-114 The operation cannot be performed because a majority of nodes or configuration daemons is not currently contacted.

Explanation: While attempting to synchronize the domain configuration, the configuration resource manager discovered one or both of the following conditions:

- Some nodes are offline.
- Some daemons that manage the domain configuration have not been contacted.

Therefore, the operation cannot be completed. To ensure the integrity of the domain configuration, synchronization is only allowed when a majority of nodes is online or contacted in the domain. Majority is defined to be the sum of:

$((\text{Number of nodes defined in the domain}) + 1) \div 2$

User response: Before attempting to synchronize the

domain, make sure a majority of nodes are online or contacted for the synchronize operation. Also verify that the total number of online nodes and target nodes is a majority.

2632-115 The following errors were detected while attempting to synchronize the latest configuration for the domain. The domain cannot be synchronized.

Explanation: The operation to synchronize a domain could not be completed because of the errors listed following this message. The configuration resource manager encountered these errors while trying to find the appropriate the domain configuration to use.

User response: Correct the problems identified and retry the operation.

2632-116 The specified QuorumType is not valid.

Explanation: The quorum type you specified is not valid.

User response: Specify a valid quorum type.

2632-117 The specified QuorumType cannot be supported because the version of RSCT on a node is earlier than *version*.

Explanation: A node is running an earlier version of RSCT than is required for the quorum type you specified.

User response: Check the RSCT version of the node.

2632-118 A mkcrpdomain operation is already executing on node *node*.

Explanation: The specified node was running an **mkcrpdomain** operation when a remote configuration request for an **mkcrpdomain** operation running on another node arrived.

User response: Try the operation again.

2632-119 The target node *node* cannot be brought online because it is not defined in the domain.

Explanation: A request was sent to the target node for it to be brought online.

User response: You can either ignore this message or take the target node offline.

2632-120 The target node id (*requested_node_ID*) is not same as the defined node id (*defined_node_ID*) in peer domain.

Explanation: A request was sent to the target node for it to be brought online. However, the target node ID (*requested_node_ID*) is not the same as the node ID

that is defined in the domain (*defined_node_ID*), so it cannot be brought online as requested.

User response: You can either ignore this message or take the target node offline.

2632-121 The action "SetQuorumState" is not available for the given domain.

Explanation: The **SetQuorumState** action is only available for a domain with a quorum type of **override**.

User response: Do not use this action for this domain.

2632-122 *command_name*: The following error was returned from the TieBreaker subsystem: *error_message_from_RMC*

Explanation: While the tie-breaker subsystem was processing a request, it encountered the specified error.

User response: For information about tie-breakers, see the *RSCT: Administration Guide*. For trouble-shooting information, see the *RSCT: Diagnosis Guide*.

2632-123 The fanout value must be in the range *min_fanout* to *max_fanout*.

Explanation: The specified *fanout* value for parallel operations was not valid.

User response: Make sure the *fanout* value that is specified with the **-m** option of the **mkcrpdomain** command or the **startcrpdomain** command is an integer in the range **16** to **2048**.

2632-124 Node "*node_name*" is not defined to domain "*domain_name*".

Explanation: The specified node is not part of the domain, so the operation failed.

User response: Make sure the node is part of the domain.

2632-125 Node "*node_name*" is not online in domain "*domain_name*".

Explanation: The specified node is not online in the domain, so the operation failed.

User response: Make sure the node is online in the domain.

2632-126 Node "*node_name*" is not offline in domain "*domain_name*".

Explanation: The specified node is not online in the domain, so the operation failed.

User response: Make sure the node is offline in the domain.

2632-127 Node "*node_name*" duplicated in the node list.

Explanation: The specified node appears more than once in the list of nodes, so the operation failed.

User response: Make sure each node appears only once in the list.

2632-128 The specified domain name is not valid. The name cannot be the words **IW, **.** or **..** or contain the character **'/** or whitespace.**

Explanation: The name of the domain that you want to create is not valid. The domain name cannot:

- be **IW**, which is used to identify an offline domain
- be one period (**.**) or two periods (**..**), which are reserved names in the file system
- contain the character **/**, which is the file system path component delimiter
- contain blank characters, which serve as token delimiters for various subsystems

User response: Specify a domain name that follows these rules.

2632-129 Batch operation failed replicating attribute changes.

Explanation: An attempt to replicate a batch of IBM.NetworkInterface attribute changes failed.

User response: The changes will be reattempted individually.

2632-130 The value for HeartbeatActive must be 0 or 1

Explanation: You specified a non-valid value for the HeartbeatActive attribute.

User response: Specify a value of 0 or 1.

2632-131 An unknown error was detected while attempting to find the latest configuration for the domain. The domain cannot be brought online.

Explanation: The operation to bring a domain online could not be completed while trying to find the appropriate version of the domain configuration to use.

User response: Correct the problems identified and try the operation again.

2632-132 An internal error occurred during the current operation.

Explanation: An unknown exception or other internal error occurred during a user-initiated operation.

User response: Contact the IBM Support Center.

2632-133 **The value for CSSKRefreshInterval must be 0 for no refresh or between 30 seconds and 30 days.**

Explanation: A non-valid value was specified for CSSKRefreshInterval.

User response: To have no refresh interval, specify a value of 00:00:00:00. Otherwise, specify a value from 00:00:00:30 to 30:00:00:00.

2632-134 **The value for CSSKType must be one of CSSKTYPE_None, CSSKTYPE_DES_MD5, CSSKTYPE_3DES_MD5 or CSSKTYPE_AES256_MD5.**

Explanation: A non-valid value was specified for CSSKType.

User response: Specify a value of CSSKTYPE_None, CSSKTYPE_DES_MD5, CSSKTYPE_3DES_MD5, or CSSKTYPE_AES256_MD5.

2632-135 **Cluster shared secret key refresh interval was specified but not key type.**

Explanation: A refresh interval for the cluster shared secret key (CSSK) was specified, but a key type was not specified.

User response: Specify a key type to avoid defaulting to an inactive CSSK facility for the RSCT peer domain that is being created.

2632-136 **The installed RSCT version *version* on node "*node_name*" does not support cluster shared secret keys.**

Explanation: RSCT version 2.4.7.1 or later must be installed on all nodes in order to activate cluster shared secret keys.

User response: Install RSCT version 2.4.7.1 or later on all nodes to activate cluster shared secret keys.

2632-137 **Node "*node_name*" does not support the current domain's cluster shared secret key type "*key_type*".**

Explanation: A node to be added to the peer domain does not support the cluster shared secret key type that is currently selected for the peer domain.

User response: Change the key type selected for the peer domain or add the selected type to the specified node's security configuration.

2632-138 **The nodes specified do not share a common security configuration.**

Explanation: The nodes specified do not share a common security configuration.

User response: Enable at least one common security mechanism across all nodes.

2632-139 **Node "*node_name*" does not support a security configuration common with the nodes currently in the domain.**

Explanation: A node that is to be added to the peer domain does not have a security mechanism in common with the nodes that are currently in the peer domain.

User response: Enable the same security mechanism on the node that is to be added as exists on the other nodes in the peer domain.

2632-140 **A domain must be online to update its shared secret key.**

Explanation: The UpdateKey action was attempted when no peer domain was online.

User response: Bring a peer domain online before trying to update its cluster shared secret key.

2632-141 **The cluster shared secret key type *key_type* specified by the domain configuration is not supported on this node.**

Explanation: The local node cannot come online in the peer domain because it does not support the cluster shared secret key type currently in use in the peer domain.

User response: Install security support for the key type in use in the domain or change the key type to one this node supports.

2632-142 **The cluster shared secret key file *file_name* is invalid.**

Explanation: The specified cluster shared secret key file could not be read successfully.

User response: Contact the IBM Support Center.

2632-143 **Round *round_number* of attempts to synchronize the cluster shared secret key for domain *domain_name* produced the following errors.**

Explanation: Failures identified by subsequent errors were returned from remote nodes during the specified round of cluster shared secret key synchronization for the specified peer domain.

| **User response:** Contact the IBM Support Center.

| **2632-144** **The cluster shared secret key configuration (type *key_type*, refresh interval *interval*) in class IBM.RSCTParameters for the domain being brought online is invalid.**

| **Explanation:** The cluster shared secret key configuration information stored in the IBM.RSCTParameters class for the peer domain that is coming online is not valid.

| **User response:** The class information in the registry could have been corrupted. Contact the IBM Support Center.

| **2632-145** **Attempting to verify a cluster shared secret key signed by node *node_name* failed.**

| **Explanation:** The signature on a cluster shared secret key value sent by *node_name* could not be verified.

| **User response:** Check the public key for *node_name* in the local trusted host list.

| **2632-146** **Cluster shared secret key update cannot be run because no key is enabled.**

| **Explanation:** The cluster shared secret key update action could not be run for the online peer domain because no key is enabled for the domain.

| **User response:** Enable a key for the domain by changing the CSSKType attribute of IBM.RSCTParameters class and run the action again.

| **2632-147** **The active version of the peer domain does not support shared secret keys.**

| **Explanation:** The peer domain is running at an active version level that does not support shared secret keys.

| **User response:** Migrate the peer domain to RSCT 2.4.7.1 or later to use cluster shared secret keys.

2632-200 **The specified domain *domain_name* does not exist.**

Explanation: The specified domain name does not exist.

User response: Determine the list of defined domains and try the command again.

2632-201 **The following error was detected when issuing the RMC API function *function*: *error***

Explanation: *function* is the name of the API function

that returned the error. *error* is an error message from the RMC subsystem.

The RMC subsystem encountered a problem in processing a call from the start or stop domain commands.

User response: See *RSCT: Administration Guide* for more information.

2632-202 **The following error was returned from the RMC subsystem: *error***

Explanation: The RMC subsystem encountered *error* while processing a request.

User response: See *RSCT: Administration Guide* for more information.

2632-203 **Required memory could not be allocated.**

Explanation: Insufficient memory was available to process the request.

User response: Make sure there are enough system resources available. If the problem persists, record the error message and contact the IBM Support Center.

Chapter 19. 2633: Sensor resource manager

When an error occurs, the sensor resource manager issues one or more messages with a prefix of **2633**.

2633-000 **Attribute identifier is not valid.**

Explanation: The number you specified as an attribute identifier does not represent an attribute for this class.

User response: Change the attribute identifier to a valid attribute number for this class.

2633-001 **Attribute *attribute_name* cannot be specified when defining a new resource.**

Explanation: When defining a new resource, you specified an attribute value that is generated automatically and therefore is not valid.

User response: Remove this attribute from the define resource call.

2633-002 **The Resource Handle specified does not exist.**

Explanation: The resource handle you specified does not match a resource that is currently defined.

User response: Specify a resource handle that matches a defined resource.

2633-003 **Attribute *attribute_name* is read-only and cannot be set.**

Explanation: You tried to modify an attribute value that cannot be changed.

User response: Do not try to modify this attribute.

2633-004 **Attribute *attribute_name* appears in request more than once.**

Explanation: You specified the same attribute for a single request more than once.

User response: Remove multiple copies of the same attribute within a single request.

2633-005 **The value specified for attribute *attribute_name* has the wrong data type.**

Explanation: You specified an attribute value with a data type that does not match the definition of the attribute. For example: the attribute is defined as a string, but you supplied an integer instead.

User response: Correct the data type you specified for *attribute_name* and submit the request again.

2633-006 **Resource class name *class_name* is not recognized by this resource manager.**

Explanation: The sensor resource manager does not recognize the named resource class as belonging to it. This is either an internal error or indicates a damaged resource monitoring and control (RMC) configuration.

User response: Report the information in this message to your software service organization.

2633-007 **The control point for resource class *class_name* cannot be initialized.**

Explanation: The sensor resource manager was unable to initialize itself for the specified resource class.

User response: Make sure the system has plenty of resources (paging space, available /var file system space, and so on). If this does not resolve the problem, report the information in this message to your software service organization.

2633-008 **Attribute Resource *attribute_name* must be specified when a new resource is defined.**

Explanation: A required attribute was not specified when you tried to define a new resource.

User response: Add the missing attribute and try the define operation again.

2633-009 **Command for sensor *sensor_name* returned exit code *code*.**

Explanation: The sensor resource manager attempted to run the command associated with the specified sensor, but the command returned the specified exit code. It indicates that an error was detected. None of the dynamic attributes for the specified sensor were updated.

User response: Inspect the command for errors that are associated with the specified sensor. Run the command directly from the command line to diagnose and debug the problem. Refer to the documentation pertaining to the command, which is not part of RSCT.

2633-010 **Sensor name cannot contain control characters.**

Explanation: You tried to define a sensor resource using a value for the Name attribute that contains control characters, which are not allowed.

User response: Choose a name for the new sensor resource that does not contain control characters and submit the request again.

2633-011 Sensor name must contain at least one printable character.

Explanation: You tried to define a new sensor resource but the value of the Name attribute contains blank characters or no characters.

User response: Choose a name for the new sensor resource that does not contain blank characters and submit the request again.

2633-012 Sensor name *sensor_name* is already defined.

Explanation: You tried to define a new sensor resource using the name of an existing sensor resource. Sensor names must be unique.

User response: Choose a different name for the new sensor and submit the request again.

2633-013 The sensor command is empty or contains control characters.

Explanation: You tried to define a new sensor resource, but the command string provided is empty or contains control characters, which are not allowed.

User response: Change the command string to a valid command with input parameters, and submit the request again.

2633-016 The user name specified for running the sensor command is not valid, errno=*error_code* encountered when looking up a user name in the user database.

Explanation: You tried to define a new sensor resource but the value specified for the UserName attribute does not correspond to a known user name on the system.

User response: Correct the UserName attribute value and submit the request again.

2633-017 Dynamic attribute name *name* does not exist.

Explanation: You tried to update the value of a dynamic attribute using the UpdateValues action, but one of the dynamic attribute names specified is not valid.

User response: Correct the parameters to the UpdateValues action so that only valid dynamic attribute names are used.

2633-018 The value specified for dynamic attribute *name* does not have the correct data type.

Explanation: You tried to update the value of a dynamic attribute using the UpdateValues action, but the specified data type for one or more dynamic attributes is not valid.

User response: Correct the parameters to the UpdateValues action so that the correct data type is used for each dynamic attribute value.

2633-019 A value for dynamic attribute name *name* is missing.

Explanation: You tried to update the value of a dynamic attribute using the UpdateValues action, but the input parameters to the action do not include a value for the specified attribute.

User response: Correct the parameters to the UpdateValues action so that a value is included for each dynamic attribute that is referenced.

2633-020 The options parameter must be specified for the UpdateValues action.

Explanation: You tried to update the value of a dynamic attribute using the UpdateValues action, but the "options" field is missing in the input parameter list for the action.

User response: Correct the parameters to the UpdateValues action so that the options parameter is included.

2633-021 The ErrorExitValue attribute must be 0(NONE), 1(Non-Zero) or 2(Zero).

Explanation: You tried to define a new sensor resource but the value for the ErrorExitValue attribute is not one of the valid values.

User response: Correct the value specified for the ErrorExitValue attribute and resubmit the request.

2633-022 Action identifier *action-identifier* is not valid for class "*resource-class-name*".

Explanation: The specified resource class does not support the specified action. You cannot invoke this action on this resource class.

User response: None.

2633-023 Input to the "*action-name*" action is NULL, while this action requires input.

Explanation: The specified action is required action input data.

User response: Specify valid input data for this action, and resubmit the request.

2633-024 **Input to the "action-name" action has input-number elements, while this action requires required-number elements.**

Explanation: The action input has an incorrect element count.

User response: Specify a valid number of elements as action input data, and resubmit the request.

2633-025 **Data type of *element-ID* element("element-name") of input to the "action-name" action does not match the required type(*data-type*).**

Explanation: The specified data type for the element is not correct.

User response: Specify the correct data type for each action, and resubmit the request.

2633-026 **Data type of *element-ID* element("element-name") of input to the "action-name" action is pointer, but input is NULL.**

Explanation: When you use a data type of pointer for the specified element, you cannot provide null data for that element.

User response: Specify non-null data for the element, and resubmit the request.

2633-027 **The empty string is not allowed for "String" field in action "SetValue" when "FieldIndicator" specifies to update value of "String".**

Explanation: The value of the string field for the **SetValue** action is an empty string.

User response: Specify a value for the string field and resubmit the request.

2633-028 **The sensor refresh interval must be at least 10 seconds or 0.**

Explanation: You tried to define a new sensor resource, but the value specified for the **RefreshInterval** attribute was less than the minimum allowed.

User response: Correct the value for the **RefreshInterval** attribute and resubmit the request.

2633-029 **The value for ControlFlags must be between 0 and *value*.**

Explanation: You tried to define a new sensor resource, but the value specified for the **ControlFlags** attribute was outside of the range allowed.

User response: Correct the value for the **ControlFlags** attribute and resubmit the request.

2633-030 **Either attribute **UserName** must be specified or username **guest** must exist.**

Explanation: You tried to define a new sensor resource, but you did not specify the **UserName** attribute with a valid value. In this case, **guest** is used, but **guest** does not exist.

User response: Specify the **UserName** attribute with a valid value or add **guest** as a user.

2633-031 **The user name "*user_name*" specified for running the sensor command is not valid, *errno*=*error_code*.**

Explanation: You tried to define a new sensor resource, but the value specified for the **UserName** attribute does not correspond to a known user name on the system.

User response: Correct the **UserName** attribute value and resubmit the request.

2633-820 **The refresh interval value *interval* is not valid.**

Explanation: You specified a non-valid value for the refresh interval.

User response: Check the command's usage statement, specify a valid value for the refresh interval, and then run the command again.

2633-821 *program has been terminated with signal *signal-number*.*

Explanation: The specified program was terminated with the signal that is shown in the message.

User response: Check the signal and issue the command again.

2633-822 *program has been terminated, *rc*=*return_code*.*

Explanation: The specified program was terminated with a non-api error.

User response: Check the return code that is shown in the message and issue the command again.

2633-830 *program has been terminated with
signal signal-number.*

Explanation: The specified program was terminated with the signal that is shown in the message.

User response: Check the signal and issue the command again.

2633-831 *program has been terminated, rc=
return_code.*

Explanation: The specified program was terminated with a non-api error.

User response: Check the return code that is shown in the message and issue the command again.

2633-840 **The sensor attribute for *attr=value* is not valid.**

Explanation: The sensor attribute specified is not valid.

User response: Specify a valid attribute name and run the command again.

2633-841 **The sensor is not monitored and cannot be refreshed.**

Explanation: The **refsensor** command is valid for monitored sensors only.

User response: See *RSCT: Administration Guide* to find out how to create event sensor commands correctly.

2633-842 **The sensor attribute *attribute-name* was not updated because either it is not monitored or the value is the same as its current value.**

Explanation: The refresh of the specified attribute was not successful. This outcome can occur when the attribute is not being monitored, or when the new value is the same as the current value.

User response: Make sure the attribute is monitored or verify the value and run the command again.

2633-843 **The event for sensor attribute *attribute-name* was not generated because either it is not monitored or the value is the same as its current value.**

Explanation: The event generation of the specified attribute was not successful. This can happen when the attribute is not being monitored or if the new value is the same as the current value.

User response: Make sure that the attribute is monitored or verify the value and then run the command

again.

Chapter 20. 2634: Host resource manager

When an error occurs, the host resource manager issues one or more messages with a prefix of **2634**.

2634-000 **Attribute identifier is not valid.**

Explanation: The number submitted as an attribute identifier does not represent an attribute for this class.

User response: Change the attribute identifier to a valid attribute number for this class.

2634-002 **Attribute *attribute_name* cannot be specified when defining a new resource.**

Explanation: When defining a new resource, the user specified an attribute whose value is automatically generated and therefore is not valid.

User response: Remove this attribute from the define resource call.

2634-003 **The Resource Handle specified does not exist.**

Explanation: The user supplied a ResourceHandle that does not match a resource that is currently defined.

User response: Change the specified ResourceHandle to match a resource that is defined.

2634-004 **Error *error_code* returned from registry function *function_name*.**

Explanation: The registry is unable to successfully complete the specified request due to the indicated error.

User response: Locate the RSCT registry documentation and follow the corrective actions described for the function and return code displayed in this message.

2634-005 **Attribute *attribute_name* is read-only and cannot be set.**

Explanation: The user attempted to modify an attribute value that cannot be changed.

User response: Do not attempt to modify this attribute.

2634-006 **Attribute *attribute_name* appears in request more than once.**

Explanation: The user has supplied the same attribute for a single request more than one time.

User response: Remove multiple copies of the same

attribute within a single request.

2634-007 **The value specified for attribute *attribute_name* has the wrong data type.**

Explanation: The user has specified an attribute value with a data type that does not match the definition of the attribute. For example, the attribute is defined as a string but the user supplied an integer instead.

User response: Correct the data type specified for the attribute named in the error message and resubmit the request.

2634-008 **Resource class name *Resource_class_name* is not recognized by this resource manager.**

Explanation: The Host Resource Manager does not recognize the named resource class as belonging to it. This is either an internal error or indicates a damaged RMC configuration.

User response: Record the above information and contact your software service organization.

2634-009 **The control point for resource class *Resource_class_name* cannot be initialized.**

Explanation: The Host Resource Manager was unable to initialize itself for the named resource class.

User response: Make sure the system has plenty of resources (paging space, available */var* file system space, and so on). If this does not resolve the problem, record the above information and contact your software service organization.

2634-010 **The control point for the target resource cannot be initialized.**

Explanation: The Host Resource Manager was unable to initialize itself for handling a resource.

User response: Make sure the system has plenty of resources (paging space, available file system space, and so on). If this does not resolve the problem, record the above information and contact your software service organization.

2634-011 **An unexpected exception *exception_name* was caught with error code *error_code*.**

Explanation: A C++ exception was caught that indicates an internal error situation.

User response: Record this error message and contact your software service organization.

2634-012 **An unexpected exception**
exception_name **was caught.**

Explanation: A C++ exception was caught that indicates an internal error situation.

User response: Record this error message and contact your software service organization.

2634-013 **Attribute *Resource_attribute_name* must**
be specified when a new resource is
defined.

Explanation: A required attribute was not specified when the user attempted to define a new resource.

User response: The user must add the missing attribute and try the define operation again.

Chapter 21. 2636: Event response resource manager (ERRM)

When an error occurs, the event response resource manager (ERRM) issues one or more messages with a prefix of **2636**.

2636-000 Attribute identifier is not valid.

Explanation: The number submitted as an attribute identifier does not represent an attribute for this class.

User response: Change the attribute identifier to a valid attribute number for this class.

**2636-001 Error from registry call
registry_function_called, rc=
error_return_code.**

Explanation: The registry is unable to complete a request from ERRM.

User response: Locate the RSCT registry documentation and follow the corrective actions described for the function and return code displayed in this message.

**2636-002 The attribute *resource_attribute_name*
cannot be specified as part of the
definition of a new resource but is
otherwise valid.**

Explanation: The user attempted to define a resource attribute that is not under the control of the user when resources are defined.

User response: The user must remove this attribute from the define resource call.

**2636-003 The ResourceHandle specified as an
attribute does not exist.**

Explanation: The user supplied a ResourceHandle attribute that does not match a resource that is currently defined.

User response: Change the specified ResourceHandle to match a resource that is defined.

**2636-005 Attribute *attribute_name* is read-only
and cannot be set.**

Explanation: The user is attempting to modify an attribute that cannot be modified by this user.

User response: Do not attempt to modify this attribute.

**2636-006 Attribute *attribute_name* appears in
request more than once.**

Explanation: The user has supplied the same attribute for a single request more than one time.

User response: Remove multiple copies of the same attribute within a single request.

**2636-007 Value specified for attribute
attribute_name is wrong data type.**

Explanation: The user has specified an attribute with a data type that does not match the data type of the definition of the attribute. For example, the attribute is defined as a string but the user supplied an integer instead.

User response: Correct the data type specified for the attribute named in the error message and resubmit the request.

**2636-008 Class name *resource_class_name* is not
recognized by this resource manager.**

Explanation: The Event Response Resource Manager does not recognize the named resource class as belonging to this resource manager.

User response: Locate the RSCT documentation on the RMC and try rebuilding the CBD. If that does not fix the problem, record the above information and contact your software service organization.

**2636-009 Control point for class
resource_class_name cannot be
initialized.**

Explanation: The Event Response Resource Manager was unable to create a RCCP object.

User response: Make sure the system has plenty of resources (paging space, available file system space, and so on). If the problem persists, record the above information and contact your software service organization.

**2636-010 Control point for resource cannot be
initialized.**

Explanation: The Event Response Resource Manager was unable to create a RCP object.

User response: Make sure the system has plenty of resources (paging space, available file system space, and so on). If the problem persists, record the above information and contact your software service organization.

2636-013 **Attribute** *resource_attribute_name* **must be specified when defining a new resource.**

Explanation: A required attribute was not specified when the user attempted to define a new resource.

User response: The user must add the missing attribute and try the define function again.

2636-017 **The EventResponse resource name** *value_of_the_attribute_Name* **already exists.**

Explanation: There is a resource already defined with the same value for the attribute Name supplied by the user for this request.

User response: Select another value for Name that is unique.

2636-018 **There must be at least one Structured Data within the Actions attribute for the EventResponse class.**

Explanation: Within the Actions attribute, there is no data.

User response: Add at least one Structured Data within the SDarray for attribute Actions.

2636-019 **Structured Data number** *starting with 0, the element_number of the structured data within the array of SDs* **within the Actions attribute for the EventResponse class has too many fields.**

Explanation: The structured data element number displayed has too many fields within that structured data.

User response: Remove the fields that are not supported for the displayed structured data element.

2636-020 **Structured Data number** *starting with 0, the element number of the structured data within the array of SDs* **within the Actions attribute for the EventResponse class does not have enough fields.**

Explanation: The structured data element number displayed has too few fields within that structured data.

User response: Add the missing fields that are supported for the displayed structured data element.

2636-021 **Structured Data number** *starting with 0, the element number of the structured data within the array of SDs* **within the Actions attribute has the wrong data type for field name of structured data field.**

Explanation: Within the structured data element number displayed, the field displayed has the wrong data type supplied by the user.

User response: Correct the data type for the field and SD displayed and resubmit the request.

2636-022 **Internal EventResponse Error: Actions attribute has** *number of fields supplied by the user* **fields and number of fields that ERRM expects and therefore were checked for correctness fields were validated.**

Explanation: The definition of the Actions SD must have changed, however all of the code within the ERRM was not changed to check for all of the new fields within the SD.

User response: Record the above information and contact your software service organization.

2636-023 **The ActionName** *name supplied by the user to describe this SD for Structured Data number starting with 0, the element number of the structured data within the array of SDs* **is not unique within this Actions attribute.**

Explanation: The name supplied by the user to describe this SD is the same name used by the user to describe another SD within this Actions SD array.

User response: Select a unique name within this Actions SD array to describe the displayed SD element number.

2636-024 **Structured Data number** *starting with 0, the element number of the structured data within the array of SDs* **does not have the same number of elements within the WeekDay and StartTime arrays.**

Explanation: Within a the same SD, the number of elements for array WeekDay and array StartTime must be the same.

User response: Make both of the fields WeekDay and StartTime have the same number of elements within the displayed SD.

2636-025 **Structured Data number** *starting with 0, the element number of the structured data within the array of SDs* **does not have the same number of elements within the StartTime and EndTime arrays.**

Explanation: Within a the same SD, the number of elements for array StartTime and array EndTime must be the same.

User response: Make both of the fields StartTime and EndTime have the same number of elements within the displayed SD.

2636-026 **Structured Data number** *starting with 0, the element number of the structured data within the array of SDs* **for array field name of the SD field within the Actions attribute, element number** *element number of the field* **has an out-of-range value of** *value that is out-of-range.*

Explanation: The user has supplied a value for an array element that is not in the valid range.

User response: Change the value of the array field element and submit the request again.

2636-027 **Structured Data number** *starting with 0, the element number of the structured data within the array of SDs* **for field name of the SD field within the Actions attribute has an out-of-range value of** *value that is out-of-range.*

Explanation: The user has supplied a value for a field that is not in the valid range.

User response: Change the value of the displayed field and submit the request again.

2636-028 **Structured Data number** *starting with 0, the element number of the structured data within the array of SDs* **for array field StartTime element number** *starting with 0, the element number of the StartTime array* **is greater than the array field EndTime element number** *starting with 0, the element number of the EndTime array.*

Explanation: Within the same SD, the value of each StartTime element must be less than or equal to each corresponding EndTime element.

User response: Make the StartTime element less than or equal to the corresponding EndTime element.

2636-050 **The Condition resource name** *condition_resource_name* **already exists.**

Explanation: When defining or changing a Condition resource, the user supplies a resource name that is the same within an existing Condition resource.

User response: Supply a different Condition resource name.

2636-051 **The Condition resource handle is not valid.**

Explanation: When defining or changing an Association resource, the user supplied a value for the ConditionHandle attribute that is not associated with an existing Condition resource.

User response: Supply a Condition resource handle value for an existing Condition resource.

2636-052 **The EventResponse resource handle is invalid.**

Explanation: When defining or changing an Association resource, the user supplied a value for the EventResponseHandle attribute that is not associated with an existing EventResponse resource.

User response: Supply an EventResponse resource handle value for an existing EventResponse resource.

2636-053 **The ConditionRccp control point cannot be obtained.**

Explanation: The Event Response Resource Manager cannot obtain the ConditionRccp control point to perform functions within the ConditionRccp.

User response: Make sure the system has plenty of resources (paging space, available file system space, and so on). If the problem persists, record the above information and contact your software service organization.

2636-054 **The AssociationRccp control point cannot be obtained.**

Explanation: The Event Response Resource Manager cannot obtain the AssociationRccp control point to perform functions within the AssociationRccp.

User response: Make sure the system has plenty of resources (paging space, available file system space, and so on). If the problem persists, record the above information and contact your software service organization.

2636-055 Error from RMC
RMCAPI_function_name, rc=value returned by the RMCAPI function, mc_errnum = 0x error number generated from the RMCAPI function., mc_error_msg is error message generated from the RMCAPI function.

Explanation: The Event Response Resource Manager invokes a RMCAPI function. If this RMCAPI function cannot be successfully completed, the error number and error message are generated and returned to the user.

User response: Locate the RSCT documentation on the RMC and follow the recovery actions described for the error. If you cannot resolve the problem, record the above information and contact your software service organization.

2636-056 Value for Condition ImmediateEvaluate attribute must be 0 or 1.

Explanation: When defining or changing a Condition resource, the user supplied a value for Condition ImmediateEvaluate attribute that is not 0 or 1.

User response: Change the value of the ImmediateEvaluate attribute to either a 0 or 1 and resubmit the request.

2636-057 Value for Condition Severity attribute must be 0, 1 or 2.

Explanation: When defining or changing a Condition resource, the user supplied a value for Condition Severity attribute that is not 0, 1, or 2.

User response: Change the value of the Severity attribute to either a 0, 1 or 2 and resubmit the request.

2636-058 Value for Association ActiveFlag attribute must be 0 or 1.

Explanation: When defining or changing an Association resource, the user supplied a value for ActiveFlag attribute that is not 0 or 1.

User response: Change the value of the ActiveFlag attribute to either a 0 or 1, and resubmit the request.

2636-059 A Condition resource handle and an EventResponse resource handle with the same values already exist in an Association resource.

Explanation: When defining or changing an Association resource, the user supplied values for the ConditionHandle attribute and EventResponseHandle attribute that are the same within an existing Association resource.

User response: Select a different combination of an EventResponse resource handle and a Condition

resource handle and resubmit the request.

2636-060 The DynamicAttribute value does not match the value in the EventExpression.

Explanation: When defining or changing a Condition resource, the user supplied a value for DynamicAttribute attribute that does not match the dynamic attribute value that is specified in EventExpression attribute.

User response: Modify either the DynamicAttribute or the EventExpression so that they agree, and resubmit the request.

2636-061 This attribute was not changed because of an error in another attribute in the group to be changed.

Explanation: When changing multiple attributes with a single RMCAPI call, all of the attributes must be valid for the attributes to be changed. If there is an error with any of the attributes in the group to be changed, none of the attributes specified in the group are changed. A valid attribute value cannot be changed because an error in another attribute was detected.

User response: Correct the error and resubmit the request.

2636-062 The EventResponseRCCP control point cannot be obtained.

Explanation: The Event Response Resource Manager cannot obtain the EventResponseRCCP control point to perform functions within the EventResponseRCCP.

User response: Make sure the system has plenty of resources (paging space, available file system space, and so on). If the problem persists, record the above information and contact your software service organization.

2636-063 RMC Error: error message generated from RMC..

Explanation: The Event Response Resource Manager invokes a RMC function. If this RMC function cannot be successfully completed, the error message is generated and returned to the user.

User response: Locate the RSCT documentation on the RMC and follow the recovery actions described for the error. If you cannot resolve the problem, record the above information and contact your software service organization.

2636-064 Action identifier action_identifier is not valid for class resource_class_name.

Explanation: The specified action is not supported by the resource class.

User response: The user must not invoke the action on this resource class.

2636-065 The number of parameters passed to the action is not valid.

Explanation: A client program attempted to invoke an action, but the number of parameters specified is not valid.

User response: The client program must provide the correct number of parameters and resubmit.

2636-066 The data type of one or more parameters passed to the action is not valid.

Explanation: A client program attempted to invoke an action but specified the wrong type of parameters.

User response: The client must provide the correct type of parameters and resubmit.

2636-067 A Condition name cannot be a NULL string or contain all spaces.

Explanation: A client program provided a Condition name that is a NULL string or that contains only spaces when the client attempted to define a Condition or set a Condition name.

User response: The client program must provide a non-NULL string that contains at least one character other than a space for the Condition name and resubmit.

2636-068 An EventResponse name cannot be a NULL string or contain all spaces.

Explanation: A client program provided an EventResponse name that is a NULL string or that contains all spaces when the client attempted to define an EventResponse or set an EventResponse name attribute.

User response: The client program must provide a non-NULL string that contains at least one character other than a space for the EventResponse name and resubmit.

2636-069 value is invalid.

Explanation: A client program provided a non-valid attribute value when the client tried to define a resource.

User response: The client program must provide a valid attribute value and resubmit.

2636-070 Invalid value for Condition ManagementScope attribute.

Explanation: When defining or changing a Condition resource, you supplied a value for Condition ManagementScope attribute that is not MC_SESSION_OPTS_LOCAL_SCOPE, MC_SESSION_OPTS_SR_SCOPE, or MC_SESSION_DM_SCOPE.

User response: Change the value of the ManagementScope attribute to a valid value, then resubmit the request.

2636-071 Invalid value for NodeNameList.

Explanation: When defining a resource, you supplied a non-valid value for NodeNameList.

User response: Change the value of the NodeNameList attribute to a valid value, then resubmit the request.

2636-072 Value for Locked attribute must be 0 or 1.

Explanation: When defining or changing a Condition/Association/EventResponse resource, the supplied value for the Locked attribute is not 0 or 1.

User response: Change the value of the Locked attribute to either a 0 or 1 and resubmit the request.

2636-073 The resource is locked, attribute values cannot be changed.

Explanation: The user is trying to change a Condition/Association/EventResponse resource for which the Locked attribute value is currently set to 1.

User response: Reset the Locked attribute value to 0 and resubmit the request.

2636-074 The resource is locked and cannot be undefined.

Explanation: The user is trying to undefine a Condition/Association/EventResponse resource for which the Locked attribute value is currently set to 1.

User response: Reset the Locked attribute value to 0 and resubmit the request.

2636-075 The resource is locked, the requested operation cannot be performed.

Explanation: The user is trying to start/stop activating an Association resource for which the Locked attribute value is currently set to 1.

User response: Reset the Locked attribute value to 0 and resubmit the request.

| **2636-076** **Value for NoToggleExprFlag attribute**
| **must be 0 or 1.**

| **Explanation:** When defining or changing a Condition
| resource, the supplied value for the NoToggleExprFlag
| attribute was not **0** or **1**.

| **User response:** Change the value of the
| NoToggleExprFlag attribute to **0** or **1** and resubmit the
| request.

Chapter 22. 2637: File system resource manager

When an error occurs, the file system resource manager issues one or more messages with a prefix of **2637**.

2637-000 **Attribute identifier is not valid.**

Explanation: The number submitted as an attribute identifier does not represent an attribute for this class.

User response: Change the attribute identifier to a valid attribute number for this class.

2637-001 **Error from registry call**
registry_function_called, rc=
error_return_code.

Explanation: The registry is unable to complete a request from FSRM.

User response: Locate the RSCT registry documentation and follow the corrective actions described for the function and return code displayed in this message.

2637-002 **Attribute *resource_attribute_name***
cannot be specified as part of the
definition of a new resource, but is
otherwise valid.

Explanation: The user attempted to define a resource attribute that is not under the control of the user when resources are defined.

User response: Remove this attribute from the define resource call.

2637-003 **Resource handle specified does not exist.**

Explanation: The user supplied a ResourceHandle attribute that does not match a resource that is currently defined.

User response: Change the specified ResourceHandle to match a resource that is defined.

2637-004 **Error *error_code* returned from registry**
function *function_name*.

Explanation: The registry function failed.

User response: Record the above information and contact your software service organization.

2637-005 **Attribute *read-only_attribute_name* is**
read-only and cannot be set.

Explanation: The user is attempting to modify an attribute that cannot be modified by this user.

User response: Do not attempt to modify this attribute.

2637-006 **Attribute *attribute_name* appears in**
request more than once.

Explanation: The user has supplied the same attribute for a single request more than one time.

User response: Remove multiple copies of the same attribute within a single request.

2637-007 **The value specified for attribute**
***attribute_name* has the wrong data type.**

Explanation: The user has specified an attribute with a data type that does not match the data type of the definition of the attribute. For example, the attribute is defined as a string but the user supplied an integer instead.

User response: Correct the data type specified for the attribute named in the error message and resubmit the request.

2637-008 **Resource class name**
***resource_class_name* is not recognized**
by this resource manager.

Explanation: The File System Resource Manager does not recognize the named resource class as belonging to this resource manager.

User response: Locate the RSCT documentation on the RMC and try rebuilding the CBD. If that does not correct the problem, record the above information and contact your software service organization.

2637-009 **The control point for resource class**
***resource_class_name* cannot be**
initialized.

Explanation: The File System Resource Manager was unable to create an RCP object.

User response: Make sure that the system has plenty of resources (paging space, available file system space, and so on). If the problem persists, record the above information and contact your software service organization.

2637-010 **The control point for the target**
resource cannot not be initialized.

Explanation: The File System Resource Manager was

unable to create an RCP object.

User response: Make sure that the system has plenty of resources (paging space, available file system space, and so on). If the problem persists, record the above information and contact your software service organization.

2637-011 **An unexpected exception**
exception_name **was caught with error**
code *error_code*.

Explanation: An internal error has occurred.

User response: Record the above information and contact your software service organization.

2637-012 **An unexpected exception**
exception_name **was caught.**

Explanation: An internal error has occurred.

User response: Record the above information and contact your software service organization.

2637-013 **Attribute** *attribute_name* **must be**
specified when a new resource is
defined.

Explanation: The user forgot to include this attribute when defining a new resource.

User response: Specify this attribute on the resource definition.

2637-014 **The values for the NodeList attribute**
must be less than or equal to 4096.

Explanation: The user specified a NodeList attribute greater than 4096.

User response: Check with the System Administrator and choose a NodeList attribute less than or equal to 4096.

2637-015 **The value for the ManualMode attribute**
must be 0 or 1.

Explanation: The user specified a ManualMode attribute other than 0 or 1. This attribute is currently ignored.

User response: Specify a ManualMode attribute of 0 or 1.

2637-016 **Action identifier** *action_identifier* **is**
invalid for class *resource_class_name*.

Explanation: The user specified an action identifier that is not valid for *resource_class_name*.

User response: Specify another action identifier.

2637-017 **No such file or directory.**

Explanation: The mount point specified cannot be found.

User response: Specify another valid mount point.

2637-018 **Resource busy.**

Explanation: The resource is busy and cannot be mounted or unmounted now.

User response: Do not perform the online or offline request now.

2637-019 **Not a Directory.**

Explanation: The mount point specified is not a directory.

User response: Specify a valid directory.

2637-020 **Invalid argument.**

Explanation: One or more non-valid arguments was specified.

User response: Specify another valid argument.

2637-021 **Read only file system.**

Explanation: The resource is a read-only file system.

User response: Specify another valid option.

2637-022 **A file system can not be forced to**
offline state.

Explanation: The resource cannot be forced to offline state.

User response: Stop all activities on the resource before it can be taken offline.

Chapter 23. 2639: Audit log resource manager

When an error occurs, the audit log resource manager issues one or more messages with a prefix of **2639**.

2639-000 **Attribute identifier is invalid.**

Explanation: The number attribute identifier specified does not represent an attribute for this class.

User response: Change the attribute identifier to a valid attribute number for this class.

2639-001 **Error from registry call** *registry_function*,
rc=error_return_code.

Explanation: The registry is unable to complete a request from the audit log resource manager.

User response: Locate the RSCT registry documentation and follow the corrective actions described for the function and return code displayed in this message.

2639-002 **Attribute** *resource_attribute_name*
cannot be specified when defining a new resource.

Explanation: When defining a new resource, you specified an attribute value that is generated automatically and therefore is not valid.

User response: Remove this attribute from the define resource call.

2639-003 **The ResourceHandle specified does not exist.**

Explanation: The resource handle you specified does not match a resource that is currently defined.

User response: Specify a resource handle that matches a defined resource.

2639-005 **Attribute** *read-only attribute name* **is read-only and cannot be set.**

Explanation: You tried to modify an attribute value that cannot be changed.

User response: Do not try to modify this attribute.

2639-006 **Attribute** *attribute_name* **appears in request more than once.**

Explanation: You specified the same attribute for a single request more than once.

User response: Remove multiple copies of the same attribute within a single request.

2639-007 **The value specified for attribute**
attribute_name **has the wrong data type.**

Explanation: You specified an attribute value with a data type that does not match the definition of the attribute. For example: the attribute is defined as a string, but you supplied an integer instead.

User response: Correct the data type specified for the attribute named in the error message and resubmit the request.

2639-008 **Resource class name**
resource_class_name **is not recognized by this resource manager.**

Explanation: The audit log resource manager does not recognize the named resource class as belonging to it. This is either an internal error, or indicates a damaged resource monitoring and control (RMC) configuration.

User response: Report the information in this message to your software service organization.

2639-009 **The control point for resource class**
resource_class_name **could not be initialized.**

Explanation: The audit log resource manager was unable to initialize itself for the named resource class.

User response: Make sure the system has plenty of resources (paging space, available */var* file system space, and so on). If this does not resolve the problem, record the above information and contact your software service organization.

2639-010 **The control point for the target resource cannot not be initialized.**

Explanation: The audit log resource manager was unable to initialize itself for handling a resource.

User response: Make sure the system has plenty of resources (paging space, available file system space, and so on). If this does not resolve the problem, record the above information and contact your software service organization.

2639-013 **Attribute** *resource_attribute_name* **must be specified when a new resource is defined.**

Explanation: A required attribute was not specified when you tried to define a new resource.

User response: Add the missing attribute and try the define operation again.

2639-016 **Action identifier *action_identifier* is not valid for class *resource_class_name*.**

Explanation: The specified action is not supported by the resource class.

User response: Do not invoke the action on this resource class.

2639-017 **The number of elements in template field definition is not correct.**

Explanation: You did not specify all of the characteristics required to define a field in an audit log template.

User response: Correct the request to provide all of the required characteristics and resubmit the request.

2639-018 **The data type of an element of a field definition is not valid.**

Explanation: You specified the wrong data type for a characteristic of a field definition in an audit log template resource.

User response: Correct the data type in the request and resubmit.

2639-019 **Unknown subsystem name *subsystem_name* specified in template definition.**

Explanation: You tried to define a new audit log template for a subsystem that has not been defined.

User response: Either correct the request to refer to a subsystem that has been defined, or create an audit log resource for the subsystem and resubmit the request.

2639-020 **The name of a template field *index of the template field within the template definition* is either empty or contains characters which are not valid.**

Explanation: You did not specify a valid name for a field of an audit log template.

User response: Correct the request to specify a valid name for every field of the Audit Log Template.

2639-021 **The data type of field *name of the template field* is not valid.**

Explanation: You specified a data type that is not valid for a template field.

User response: Correct the field definition to use a valid data type and resubmit.

2639-022 **The properties for field *name of the template field* are not valid.**

Explanation: You specified a property that is not valid for a template field.

User response: Correct the field definition to use supported properties and resubmit the request.

2639-023 **Field name *name of the template field* has characteristics which are not consistent with uses in other templates.**

Explanation: You tried to use the same field name in multiple templates for one subsystem but the characteristics are not the same in all of them.

User response: Correct the template definitions to ensure that all fields of the same name within a subsystem have the same characteristics.

2639-024 **The specified subsystem name is either empty or contains characters that are not valid.**

Explanation: You tried to define a subsystem with a name that is not valid.

User response: Correct the request to provide a valid subsystem name.

2639-025 **The specified catalog name is either empty or contains characters which are not valid.**

Explanation: You tried to define a subsystem to the audit log resource manager, but omitted a message catalog name.

User response: Resubmit the request, specifying a valid message catalog name.

2639-026 **The subsystem *name of the subsystem* cannot be deleted until all of its templates are deleted.**

Explanation: You tried to remove a subsystem definition prior to deleting all of its template definitions (AuditLogTemplate resources).

User response: Remove all templates for a subsystem prior to deleting it.

2639-027 **The specified template id is larger than the maximum of 65535.**

Explanation: You tried to define an audit log template with an ID that is larger than the maximum supported.

User response: Choose a template ID that is less than 65535 and resubmit the request.

2639-028 The specified template id is already defined.

Explanation: You tried to define a template with the same identifier as one that already exists.

User response: Choose a template id that is not already defined and resubmit the request.

2639-029 Subsystem name *name of the subsystem* is already defined.

Explanation: You tried to define a new subsystem to the audit log resource manager, but the specified subsystem name is already defined.

User response: Either choose a different name for the new subsystem or remove the existing subsystem prior to resubmitting the request.

2639-030 Incorrect number of fields in record for subsystem *name of the subsystem*.

Explanation: The specified subsystem attempted to create an audit log record that has an incorrect number of fields.

User response: This is most likely an internal error in the specified subsystem. Please refer to the documentation for that subsystem.

2639-031 The data type of a common field within an audit log record for subsystem *name of the subsystem* is not correct.

Explanation: The specified subsystem attempted to create an audit log record that has an incorrect data type for one of the common fields.

User response: This is most likely an internal error in the specified subsystem. Please refer to the documentation for that subsystem.

2639-032 Template id *nonexistent template id of subsystem name of the subsystem* is not defined.

Explanation: The specified subsystem attempted to create an audit log record that refers to a template that has not been defined.

User response: This is most likely an internal error in the specified subsystem. Please refer to the documentation for that subsystem.

2639-033 Wrong data type in record field *index of the field of template id id of the template that the request refers to for subsystem name of the subsystem*.

Explanation: The specified subsystem attempted to create an audit log record that has the wrong data type for the indicated field.

User response: This is most likely an internal error in the specified subsystem. Please refer to the documentation for that subsystem.

2639-034 There is no room in the AuditLog file to contain the new record.

Explanation: A request has been received to add a new record to the audit log, but there is no more space available.

User response: The administrator must remove records from the audit log. For example, use the **rmaudrec** command or modify the pruning controls to enable the audit log resource manager to automatically remove records from the audit log when needed.

2639-035 The number of parameters passed to the retrieve records request is not valid.

Explanation: A client program attempted to retrieve records from the audit log, but the number of parameters specified is not valid.

User response: Correct the client program to provide the correct number of parameters, and resubmit the request.

2639-036 The data type of one or more parameters on the retrieve records request is not valid.

Explanation: A client program attempted to retrieve records from the audit log, but specified the wrong data type for one or more parameters.

User response: Correct the client program to provide the correct type of parameters, and resubmit the request.

2639-037 The value of the detail parameter in a request to retrieve records from the audit log is not 0 or 1.

Explanation: A client program attempted to retrieve records from the audit log, but specified a value for the detail parameter that is not valid.

User response: Correct the client program to provide a valid value for the detail parameter, and resubmit the request.

2639-038 The number of parameters passed to the delete records request is not valid. It must be one.

Explanation: A client program attempted to delete records from the audit log, but the number of parameters specified in the request is not valid.

User response: Correct the client program to provide

the correct number of parameters, and resubmit the request.

2639-039 The data type of one or more parameters for the delete records request is not valid.

Explanation: A client program attempted to delete records from the audit log, but specified the wrong data type for one or more parameters.

User response: Correct the client program to provide the correct type of parameters, and resubmit the request.

2639-040 The format string for the template is missing.

Explanation: A client program attempted to define a template, but the format string attribute is missing.

User response: Correct the client program to provide the format string, and resubmit the request.

2639-041 The format string for the template contains substitution specifiers which are not valid.

Explanation: A client program attempted to define a template, but the format string attribute contains substitution specifiers (for example, %1\$s) which are not valid.

User response: Correct the client program to provide a valid format string, and resubmit the request.

2639-100 The following error was detected when issuing the RMC API function *function: RMC_error_message*.

Explanation: The RMC subsystem encountered a problem in processing a call from one of the audit log commands.

User response: Refer to the RMC publications for further information.

2639-101 Required memory could not be allocated.

Explanation: Insufficient memory was available to process the request.

User response: Make sure there are enough system resources available. If the problem persists, record the error message and contact your software service organization.

2639-102 *name of the command:* The date and time specification must be an even number of decimal characters.

Explanation: A time and date value was encountered in a record selection string that does not have an even number of characters.

User response: Refer to the man page for the **Isaudrec** or **rmaudrec** command, and correct the selection string.

2639-103 *name of the command:* Unexpected error returned from *name of a function*.

Explanation: The indicated function returned an error that was not expected.

User response: Record the above information and contact your software service organization.

2639-104 *name of the command:* The specified absolute or relative time is not valid.

Explanation: A time value was specified in a selection string that is not valid.

User response: Refer to the **Isaudrec** or **rmaudrec** man page and correct the selection string.

2639-105 *name of the command:* The following error was returned from the RMC subsystem: *error message from RMC*.

Explanation: The RMC subsystem encountered the listed error while processing a request.

User response: Refer to the RMC publications for further information.

2639-106 *name of the command:* *invalid_operand* is not a valid operand. It must be one of the common field names.

Explanation: A record field name was specified as an operand that is not one of the fields that is common to all records.

User response: Refer to the man page for **Isaudrec** for a list of the available field names.

2639-107 *name of the command :* A record was retrieved from the audit log that has a format that is not valid and therefore cannot be displayed.

Explanation: This is typically an internal error that indicates the audit log may be damaged.

User response: Delete the audit log record. If the problem persists, record the above information and contact your software service organization.

2639-108 *command_name:* **The specified subsystem *subsystem name* that is not recognized. does not exist.**

Explanation: The value specified with the **-S** option is not a recognized subsystem name.

User response: Determine the list of defined subsystems and try the command again.

2639-109 *command_name:* **The -a and -n flags cannot be used together.**

Explanation: The command invocation included both the **-a** and **-n** options, which cannot be used together.

User response: Correct the command invocation and try the command again.

2639-110 **Internal system call execv error (errno=*error_number*) on RHEL 3.0. Please check system resources and try again.**

Explanation: Command processing encountered an internal system call error.

User response: After checking for sufficient system resources, issue the command again. If command processing encounters the same error:

1. Set the environment variable **LD_ASSUME_KERNEL** as follows:
LD_ASSUME_KERNEL=2.4.19
2. Issue the command again.

Chapter 24. 2640: Cluster utilities

When an error occurs, a cluster utility issues one or more messages with a prefix of 2640.

2640-041 Cannot find group *group-name*.

Explanation: The specified group cannot be found because it does not exist in the group database.

User response: Specify a group that exists in the group database.

2640-042 Cannot change the mode for *file-name*.

Explanation: The command was not able to change the mode for the specified file. The file may have been removed.

User response: Try running the command again.

2640-043 Cannot create *file-name* file.

Explanation: The command was not able to create the specified file.

User response: Remove the file and run the command again.

2640-044 Error when writing *file-name* file. Possibly out of space in the file system.

Explanation: The command was not able to write to the specified file, possibly because the */var* file system is full.

User response: Check to see if the */var* file system is full or if there are any other problems with the file system. Try running the command again.

2640-045 Error when closing *file-name* file. Possibly out of space in the file system.

Explanation: The command was not able to close the specified file, possibly because the */var* file system is full.

User response: Check to see if the */var* file system is full or if there are any other problems with the file system. Try running the command again.

2640-046 File *file-name* file contains incorrect information.

Explanation: The contents of the specified file are incorrect. The file should contain the group name and ID of the cluster administration group.

User response: Run the command again to

re-establish the correct group name and ID.

2640-047 Cannot change the group for *file-name*.

Explanation: The command was not able to change the group for the specified file. The file may have been removed.

User response: Run the command again.

Chapter 25. 2641: Resource manager utilities

When an error occurs, a resource manager utility issues one or more messages with a prefix of **2641**.

2641-000 **Failure allocating** *allocation request size bytes of memory.*

Explanation: A request to allocate memory failed.

User response: Attempt to restart the failing component or process that made the request. Either the requesting process has a memory leak or has reached its maximum memory size. By restarting the requesting component or process, any memory leaks are cleaned up.

2641-001 **Binary constant does not have an even number of characters near** *substring of expression.*

Explanation: The expression or selection string contains a binary constant that does not have an even number of characters.

User response: Correct the binary constant in the expression.

2641-002 **Error in resource handle constant near** *substring of expression. A value starting with either 0x or 0X was expected.*

Explanation: The expression or selection string contains a resource handle constant which has incorrect syntax. A resource handle constant must consist of five integer constants enclosed in double or single quotes.

User response: Correct the resource handle constant in the expression.

2641-003 **The hex value specified near** *substring of expression in resource handle constant is not valid.*

Explanation: The expression or selection string contains a resource handle constant which has incorrect syntax. A resource handle constant must consist of five integer constants enclosed in double or single quotes.

User response: Correct the resource handle constant in the expression.

2641-004 **Too few values specified for resource handle constant near** *substring of expression near the syntax error.*

Explanation: The expression or selection string contains a resource handle constant which has incorrect syntax. A resource handle constant must consist of five integer constants enclosed in double or single quotes.

User response: Correct the resource handle constant in the expression.

2641-005 **The variable name** *variable_name* **is not recognized.**

Explanation: The expression or selection string contains a variable name which is not defined.

User response: Correct the expression to reference valid variable names.

2641-006 **Internal error. Constant contains a character that is not valid at offset** *offset in expression of syntax error.*

Explanation: An incorrect character was detected while parsing a numeric constant. This problem should not occur and indicates an internal error in the expression utilities.

User response: Record the specific error message and the original expression string, then contact your software service organization.

2641-007 **The left operand for operator . is not valid.**

Explanation: The left operand for the field separator operator is not a variable of type structured data.

User response: Correct the expression syntax.

2641-008 **The left operand data type is not valid for the operator that has an invalid left operand operator.**

Explanation: The left operand for the specified operator does not have a compatible data type.

User response: Correct the operand or operator in the expression to be compatible.

2641-009 **The right operand data type is not valid for the operator that has an invalid right operand operator.**

Explanation: The right operand for the specified operator does not have a compatible data type.

User response: Correct the operand or operator in the expression to be compatible.

2641-010 **The operands are incompatible for operator** *operator that has incompatible operands.*

Explanation: The data types of the operands are not compatible with the specified operator.

User response: Correct the operands or operator in the expression to be compatible.

2641-011 **The character** *erroneous_character* **near offset** *offset in expression* **is not a valid operator.**

Explanation: The expression or selection string contains an incorrect operator.

User response: Change the expression to use valid operators.

2641-012 **The multi-character operator near offset** *offset of invalid operator* **is not a valid operator.**

Explanation: The expression or selection string contains an incorrect operator.

User response: Change the expression to use valid operators.

2641-013 **Syntax error. Too few operands for operator** *operator that has the wrong number of operands.*

Explanation: The expression or selection string contains the wrong number of operands for the specified operator.

User response: Change the expression to use valid operands.

2641-014 **Syntax error. Missing operators or operands.**

Explanation: The expression or selection string is missing an operator or operand.

User response: Change the expression to correct the syntax error.

2641-015 **Syntax error. Unmatched** *unmatched_character* **near offset** *offset in expression.*

Explanation: The expression or selection string is missing the closing character of a matched pair. Parentheses, square brackets and braces are examples of characters that are in this category.

User response: Change the expression so that all delimiters are properly paired.

2641-016 **Expression has too many operators to be processed.**

Explanation: The expression or selection string contains more operators than the evaluation utility can handle.

User response: Reduce the number of operands in the expression.

2641-017 **Expression has too many operands to be processed.**

Explanation: The expression or selection string contains more operands than the evaluation utility can handle.

User response: Reduce the number of operands in the expression.

2641-018 **Expression has no operators, or the data type of the expression result is not valid.**

Explanation: The expression or selection string does not contain any operators or the result of the expression is not a scalar numeric value.

User response: Change the expression so that the final result is a numeric value.

2641-019 **The compiled expression is not valid or is missing.**

Explanation: The pointer to the compiled expression is either NULL or points to an area of memory which does not contain a compiled expression.

User response: Make sure that the call to `cu_comp_expr()` that produced the compiled expression returned a successful return code. Otherwise, verify that the correct pointer to a previously compiled expression is provided.

2641-020 **A value for a required variable could not be obtained.**

Explanation: The expression utility could not get a value for a variable in an expression or selection string. The component that called the expression utility must have encountered an error, since it provides the values for each variable in the expression.

User response: If it is your component that called the expression utility, make sure that you are providing values for all variables in the expression. If some other component is the one that called the expression utility, contact your software service organization.

2641-021 **Evaluation of expression results in a division by 0.**

Explanation: The expression or selection string contains a division operation in which the divisor is 0.

User response: Correct the expression to avoid dividing by zero.

2641-022 **Operands have incompatible data types near offset *offset in expression*.**

Explanation: The expression or selection string contains an operation whose operands are not compatible.

User response: Correct the expression so the operation has compatible operands.

2641-023 **Error in binary constant. A value of either 0x or 0X was expected.**

Explanation: The expression or selection string contains a binary constant that is incorrect. A binary constant must be a sequence of 0xhh... or 0Xhh... enclosed in single or double quotes. 'hh' refers to an even number of hex characters (0-9,a-f,A-F).

User response: Change the binary constant in the expression to be valid.

2641-024 **A character was encountered in the binary constant near *substring of expression that is not valid*.**

Explanation: The expression or selection string contains a binary constant that is incorrect. A binary constant must be a sequence of 0xhh... or 0Xhh... enclosed in single or double quotes. 'hh' refers to an even number of hex characters (0-9,a-f,A-F).

User response: Change the binary constant in the expression to be valid.

2641-025 **Constant near offset *offset in the expression where the error was detected* is out of range.**

Explanation: The expression or selection string contains a numeric constant that is too large or too small to be represented.

User response: Change the constant in the expression to be within the representable range for integers or floats.

2641-026 **The right operand for the . operator is not valid.**

Explanation: The expression or selection string contains a field separator operator with a right operand which is not a variable name.

User response: Change the expression to correct the error.

2641-027 **Unrecognized option specified.**

Explanation: One of the options passed to cu_comp_expr() is not valid.

User response: Correct the options parameter that is passed to cu_comp_expr().

2641-028 **A function pointer for the specified cu_mem_func_t structure is missing.**

Explanation: The caller of one of the expression utilities specified the option to pass a list of functions for memory allocation that the expression utility was to use. However, one of the provided function pointers is NULL.

User response: Correct the parameters passed to the expression utility.

2641-029 **Syntax error near offset *offset in expression*.**

Explanation: A syntax error was detected in the expression or selection string.

User response: Change the expression to correct the syntax error.

2641-031 **The provided value list does not contain enough values to execute the expression.**

Explanation: The list of values passed to cu_exec_expr() does not contain enough values. The compiled expression contains references to more variables.

User response: Correct the list of values passed to cu_exec_expr().

2641-032 **The range specification is not valid. The left operand must be less than or equal to the right operand.**

Explanation: The expression or selection string contains a range specification which is not valid. The value of the left operand is greater than the value of the right operand. For example, the range "1..0" would produce this error.

User response: Change the expression to correct the range specification.

2641-033 **The regular expression is not valid, and the resulting error code from regcomp() is *return_code*.**

Explanation: The expression or selection string contains a regular expression operator and the provided pattern is not a valid regular expression.

User response: Refer to the man pages for regcomp() to determine the meaning of the specified error code and correct the pattern.

2641-034 A node identifier could not be generated for the node.

Explanation: A node identifier could not be generated for the node.

User response: None.

2641-035 The node already has a node identifier assigned to it.

Explanation: The node already has a node identifier assigned to it.

User response: None.

2641-036 The node does not have an assigned node identifier.

Explanation: The node does not have an assigned node identifier.

User response: None.

2641-037 The saved node identifiers do not agree.

Explanation: The saved node identifiers do not agree.

User response: None.

2641-038 An unexpected error occurred calling *routine_name* on node id file *file_name*; error code: *error_code*.

Explanation: An unexpected error occurred.

User response: None.

2641-039 An unexpected error occurred converting node id *node_ID* to ASCII; *n* characters were expected; *actual_number* characters were generated.

Explanation: An unexpected error occurred.

User response: None.

2641-040 The format of the data in node id file *file_name* is not as expected; the following data was found in the file: "*data*"

Explanation: An unexpected error occurred.

User response: None.

2641-041 An unexpected error occurred calling *routine_name* on class definition file *file_name*; error code: *error_code*.

Explanation: An unexpected error occurred operating on a class definition file.

User response: None.

2641-042 The class definition file "*file_name*" does not exist.

Explanation: The class definition file specified on a call to **cu_get_cdef_info()** does not exist.

User response: Change the name specified to be an existing cdef file and retry the operation.

2641-043 The class definition file "*file_name*" has been corrupted or is invalid.

Explanation: The class definition file specified on a call to **cu_get_cdef_info()** has been corrupted (check sum does not match) or is not a valid class definition file.

User response: Change the name specified to be an existing, valid class definition file and retry the operation.

2641-044 The class definition file "*file_name*" contains more than one class definition and is therefore invalid to be used with **cu_get_cdef_info().**

Explanation: The class definition file specified on a call to **cu_get_cdef_info()** is not a single class definition file but contains multiple class definitions and is therefore probably an aggregate or composite class database.

User response: Change the name specified to be an existing, valid class definition file and retry the operation.

2641-045 An unexpected error occurred calling *routine_name*; error code: *error_code*.

Explanation: An unexpected error occurred while calling the specified routine.

User response: None.

Chapter 26. 2645: Resource manager framework

When an error occurs, a resource manager framework function issues one or more messages with a prefix of **2645**.

2645-000 **Operation failed due to error** *error_code*
returned from *name of function*.

Explanation: The specified function returned the indicated error code.

User response: Refer to the man page for the specified function to determine the meaning of the error code.

2645-001 **No function pointer was specified for the operation.**

Explanation: A pointer to a notification function was not provided to `RMSchedule::addOperation()`.

User response: Correct the parameter list passed to `RMSchedule::addOperation()`.

2645-002 **No operation name was specified.**

Explanation: A name for the operation was not provided to `RMSchedule::addOperation()`.

User response: Correct the parameter list passed to `RMSchedule::addOperation()`.

2645-003 **The specified period** *time_period (sec)*
between operations is not valid.

Explanation: The period parameter passed to `RMSchedule::addOperation()` must have a value greater than zero.

User response: Correct the period parameter so that its value is greater than zero.

2645-004 **Operation failed due to exception**
exception_name **from** *name of failed*
function.

Explanation: The specified function failed due to the indicated exception.

User response: Refer to the man page for the specified function to determine the meaning of the error.

2645-005 **A class name must be specified to create an Rccp.**

Explanation: The resource class name passed to the constructor for class `RMRccp` is empty or `NULL`.

User response: Correct the resource class name parameter that is passed to the constructor.

2645-006 **Operation failed due to exception**
exception_name **from** *name of function*
with error code *error_code*.

Explanation: The operation failed due to an error being returned from the specified function.

User response: Refer to the man page or other documentation for the indicated function to determine the meaning of the specified error code.

2645-007 **A new thread cannot be started because the maximum number are already running.**

Explanation: `RMRmcp::startCallbackThread()` cannot create a new thread because it has reached the maximum number that it was designed to handle.

User response: Avoid using more than 16 callback threads.

2645-008 **A non-fatal error was encountered in**
function_name **with error code**
error_code.

Explanation: The indicated error code was returned from the specified function but the operation continued.

User response: This is most likely an internal error. Contact your software support organization and convey this error information.

2645-009 **An unexpected exception**
exception_name **was caught with error**
code *error_code*.

Explanation: An error situation was encountered in which the named C++ exception was caught.

User response: The name of the exception and error code should convey the reason for the error.

2645-010 **An unexpected exception**
exception_name **was caught.**

Explanation: An error situation was encountered in which the named C++ exception was caught.

User response: The name of the exception indicates the cause of the error. If this is not clear, contact your software support organization.

2645-011 Too many substitution parameters were specified for selecting or deleting rows.

Explanation: A selection string was specified which has more than 20 substitution parameters which is the maximum supported.

User response: Reduce the number of substitution parameters in the selection string.

2645-012 Registry table cannot be created because it already exists.

Explanation: The request to create a new registry table failed because the named table already exists.

User response: This is normally not an error, and the application continues using the existing table. If this is unexpected, remove the registry table prior to attempting to create it.

2645-013 A table name was specified that is not valid.

Explanation: The table name used to create a new table is not valid. The table name must specify an absolute path within the registry directory hierarchy.

User response: Correct the table name and try to create the table again.

2645-014 The specified pointer does not identify an existing table.

Explanation: The parameter that should be a pointer to a table object does not refer to a valid table object.

User response: Correct the table pointer parameter.

2645-015 At least one table must be specified.

Explanation: The request to obtain a lock on a set of registry tables failed since no tables were specified in the request.

User response: Correct the list of tables so that there is at least one table in the list to be locked.

2645-016 Global lock scope is not currently supported.

Explanation: The request to obtain a global lock on a set of registry tables failed since the global lock scope is not currently supported.

User response: Do not attempt to use the global lock scope.

2645-017 A table is present in both the shared and exclusive lists for the lock request.

Explanation: The request to obtain a lock on a group of tables failed, since at least one table exists in both the shared and exclusive lock lists.

User response: Correct the lists of tables that are passed to the lock request.

2645-018 A lock set is already active for the calling thread.

Explanation: To avoid deadlock, each thread is restricted to only hold one lock set at a time.

User response: Do not request more than one lock set at a time on each thread.

2645-019 The specified lock set identifier does not identify an existing lock set.

Explanation: An incorrect lock set identifier was specified on the request.

User response: Correct the request to reference a valid lock set identifier.

2645-020 The lock set can only be referenced by the owning thread.

Explanation: The request cannot be completed since the calling thread is not the thread that obtained the lock set.

User response: Modify the request so that it is issued from the thread that obtained the lock set.

2645-021 A transaction is currently in progress.

Explanation: The request to unlock tables failed because there is a transaction in progress.

User response: Commit or cancel the transaction prior to releasing the lock set.

2645-022 A transaction cannot be started because there are no tables locked for exclusive access.

Explanation: For a transaction to begin, an exclusive lock must be held on at least one table.

User response: Lock the tables prior to beginning a transaction.

2645-023 Local tables cannot be included in a transaction.

Explanation: Tables in memory (that is, local tables) cannot be part of a transaction.

User response: If a transaction is to be started, do not obtain exclusive locks on local tables.

2645-024 Transactions are not currently supported.

Explanation: Transactions are not currently supported.

User response: Avoid using transactions until they are supported.

2645-025 Internal error. Metadata cannot be retrieved because table is not open.

Explanation: An attempt was made to reload the metadata for a table from persistent storage, and the request failed because the persistent table is not open. This should not occur and indicates an internal error.

User response: Contact your software service organization with the above information.

2645-026 Table cannot be opened because it does not exist.

Explanation: An attempt to open a table failed since the table does not exist.

User response: Make sure that the table exists prior to opening it, or create the table instead of opening it.

2645-027 Exclusive lock cannot be obtained while shared lock is held.

Explanation: An attempt was made to obtain an exclusive lock on a table while the calling thread held a shared lock on the same table. This is not allowed.

User response: Do not attempt to obtain an exclusive lock on a table which is already locked by the calling thread.

2645-028 Internal error. Requested lock mode is not valid.

Explanation: While processing a request on a table, an internal state was determined to be incorrect. This indicates that the specified table is not valid or that memory holding the table has been overlaid.

User response: Contact your software service organization with the above information.

2645-029 No transaction is active.

Explanation: A request to commit or cancel a transaction failed since there was no active transaction.

User response: Make sure that a transaction is active prior to attempting to commit or cancel it.

2645-030 Internal error. Attempt to unlock a table by a thread that does not hold a lock.

Explanation: This error indicates an internal problem in which an attempt was made to release a read/write lock on a table by a thread that does not currently hold the lock.

User response: Contact your software service organization with the above information.

2645-031 Non-null pointer for RMRmcp parameter must be provided.

Explanation: This error indicates a programming error in using the RMVerUpd class. A NULL pointer was passed to the RMVerUpd constructor. Unless you are developing resource managers, this is most likely an internal error.

User response: Contact your software service organization with the above information.

2645-032 Non-null pointer for RMTTree parameter must be provided.

Explanation: This error indicates a programming error in using the RMVerUpd class. A NULL pointer was passed to the RMVerUpd constructor. Unless you are developing resource managers, this is most likely an internal error.

User response: Contact your software service organization with the above information.

2645-033 Cluster name must be specified.

Explanation: This error indicates a programming error in using the RMVerUpd class. A NULL string was passed to the RMVerUpd constructor. Unless you are developing resource managers, this is most likely an internal error.

User response: Contact your software service organization with the above information.

2645-034 Object list must be specified with at least one entry.

Explanation: This error indicates a programming error in using the RMVerUpd class. An empty object list was passed to the RMVerUpd constructor. Unless you are developing resource managers, this is most likely an internal error.

User response: Contact your software service organization with the above information.

**2645-035 Object passed to
RMVerUpd::RMVerUpd is not valid.**

Explanation: This error indicates a programming error in using the RMVerUpd class. An object with a type that is not valid or some other characteristic was encountered. Unless you are developing resource managers, this is most likely an internal error.

User response: Contact your software service organization with the above information.

**2645-036 Class definition is missing from
RMRccp constructor.**

Explanation: This error indicates a programming error in using the RMRccp class. A NULL pointer was specified where a pointer to a valid class definition structure is required. Unless you are developing resource managers, this is most likely an internal error.

User response: Contact your software service organization with the above information.

**2645-037 Resource class name "*resource_class*"
is invalid.**

Explanation: The specified resource class name is not valid. A resource class name must have the form "*vendor.class*", for example: **IBM.NetworkInterface**.

User response: Correct the class name specified and retry the operation.

**2645-038 Attribute "*attribute_name*" appears in
request more than once.**

Explanation: The user has supplied the same attribute for a single request more than one time.

User response: Remove multiple copies of the same attribute within a single request.

**2645-039 The value specified for attribute
"*attribute_name*" has the wrong data
type.**

Explanation: The user has specified an attribute value with a data type that does not match the definition of the attribute. For example, the attribute is defined as a string but the user supplied an integer instead.

User response: Correct the data type specified for the attribute named in the error message and resubmit the request.

**2645-040 Attribute "*attribute_name*" must be
specified when a new resource is
defined.**

Explanation: A required attribute was not specified when the user tried to define a new resource.

User response: Add the missing attribute and try the define operation again.

**2645-041 The value "*value*" specified for the
Name attribute is not unique.**

Explanation: The value specified for the Name attribute of a new resource is not unique.

User response: Choose a different name that is unique within the resource class and retry the operation.

**2645-042 The value "*value*" specified for the
Name attribute is not valid.**

Explanation: The value specified for the Name attribute is empty, contains only blanks, or contains a quotation mark character.

User response: Choose a different name that is valid and retry the operation.

**2645-043 The attribute "*attribute_name*" cannot
be set due to an error in another
attribute within same request.**

Explanation: The specified attribute cannot be set due to an error in one of the attributes within the same request.

User response: Correct the error (or errors) associated with the other attributes in the same request and retry the operation.

**2645-044 Internal error was encountered at line
line_number of file *source_file*, the
resource manager will be restarted.**

Explanation: An internal error was encountered in the resource manager framework. A core file will be generated and the system resource controller (SRC) will restart the resource manager.

User response: If the problem persists, contact the IBM Support Center.

**2645-045 A response from RMC indicates error
code *error_code* with message:
*error_message***

Explanation: The resource manager attempted to perform an RMC operation and the response indicated the error identified in this message.

User response: Try to resolve or work around the error that is indicated.

**2645-046 The specified resource type is not
compatible with the target resource
class.**

Explanation: An attempt was made to define a resource. The value for the **ResourceType** attribute is

not compatible with the type of resource that the class supports.

User response: Correct the value for the **ResourceType** attribute and try the operation again.

2645-047 The value for the NodeIDs attribute is either missing or invalid for the type of resource being defined.

Explanation: You tried to define a resource and an error occurred due to one of the following reasons. The value for the **NodeIDs** attribute:

- is missing
- contains node IDs that are not valid
- contains a number of node identifiers that is not consistent with the type of resource being defined

A fixed resource can have only one node ID; floating and concurrent resources must have one or more node IDs.

User response: Correct the value for the **NodeIDs** or **NodeNameList** attribute and try the operation again.

2645-048 A constituent resource was specified as the target of an operation that does not support constituent resources.

Explanation: You tried to delete or change a constituent resource; however, a constituent resource cannot be removed or modified directly. A constituent resource must be operated on through its aggregate resource definition.

User response: Change the target resource specification to select an aggregate resource.

2645-049 Cannot create resource because the domain does not have a majority of nodes active.

Explanation: An attempt was made to create a new resource but a majority of nodes were not active in the domain. In order to ensure that the configuration is consistent and the most recent version can be found, the configuration cannot be changed unless a majority of nodes are active in the domain.

User response: Bring nodes online or remove nodes from the cluster so that a majority of the defined nodes are online in the domain.

2645-050 Cannot delete resources because the domain does not have a majority of nodes active.

Explanation: An attempt was made to delete one or more resources, but a majority of nodes were not active in the domain. In order to ensure that the configuration is consistent and the most recent version can be found, the configuration cannot be changed unless a majority

of nodes are active in the domain.

User response: Bring nodes online or remove nodes from the cluster so that a majority of the defined nodes are online in the domain.

2645-051 Cannot change class attributes because the domain does not have a majority of nodes active.

Explanation: An attempt was made to one or more class attributes but a majority of nodes were not active in the domain. In order to ensure that the configuration is consistent and the most recent version can be found, the configuration cannot be changed unless a majority of nodes are active in the domain.

User response: Bring nodes online or remove nodes from the cluster so that a majority of the defined nodes are online in the domain.

2645-052 Cannot change resource attributes because the domain does not have a majority of nodes active.

Explanation: An attempt was made to one or more resource attributes but a majority of nodes were not active in the domain. In order to ensure that the configuration is consistent and the most recent version can be found, the configuration cannot be changed unless a majority of nodes are active in the domain.

User response: Bring nodes online or remove nodes from the cluster so that a majority of the defined nodes are online in the domain.

2645-053 There is no session active with RMC so the aggregate resource cannot be monitored.

Explanation: The resource manager was requested to start monitoring an aggregate resource which requires that a session be active so that the resource manager can monitor the constituents.

User response: Correct the problem so that RMC is active on the group leader node.

2645-054 An invalid node list was passed to the online method for a resource in the *resource_class_name* resource class.

Explanation: A node list was passed to an online request that contains a non-valid number of nodes or specifies a node that is not defined in the cluster. For fixed and floating resources, only one node can be specified.

User response: Correct the online request to pass a valid node.

2645-055 **A node that is not currently active in the cluster was specified in an online or offline request, so the request cannot be completed.**

Explanation: A node that is not currently active was specified in an online or offline request.

User response: Choose another node and try the request again.

2645-056 **The options parameter passed to the online/offline/reset request is not valid for the *resource_class_name* resource class.**

Explanation: A non-valid parameter was passed to the online method of a resource in the specified resource class.

User response: Correct the online request to pass a valid parameter.

2645-057 **The online request cannot be completed since there are no nodes available that can support the targeted resource.**

Explanation: The online request for the aggregate resource cannot be completed because there are no nodes available on which the aggregate resource is defined.

User response: Choose another resource or make one of the nodes available that hosts the aggregate resource.

2645-058 **The online request cannot be completed because a constituent resource is already online.**

Explanation: While attempting to bring an aggregate floating resource online, it was discovered that another constituent resource is already online.

User response: Take the constituent resource (that is currently online) offline and try the operation again.

2645-059 **The online request cannot be completed because the resource is considered critical and the active domain does not have operational quorum.**

Explanation: While attempting to bring a resource online, it was discovered that the resource is considered critical and the active domain does not have operational quorum. Critical resources require special protection that is ensured by only allowing critical resources to be active in a domain that has operational quorum. Operational quorum is present when more than half of the nodes are active in the domain or when exactly half

of the nodes are active and the domain owns the tie-breaker resource.

User response: Resolve whatever conditions are preventing the domain from reaching operational quorum. Retry the operation once operational quorum has been achieved.

2645-060 **The updates cannot be applied because there is no space in the filesystem.**

Explanation: An update could not be completed because there is insufficient space in the file system.

User response: Make more space available in the file system and try the operation again.

2645-061 **The requesting node cannot be authenticated by the target node.**

Explanation: A remote RMC session could not be established between two nodes because the target node could not authenticate the requesting node.

User response: Make sure that trust has been established between the requesting node and the target node. Run the **preprnode** command on the requesting node and on the target node, specifying both the requesting node name and the target node name. Also, if the requesting node is an online node of a peer domain, include all nodes in the arguments to **preprnode** when running this command on the target node.

2645-062 **Error *error-value* was returned from open() for file *file-name*.**

Explanation: An error was encountered while opening the indicated file.

User response: Try to correct the problem identified by the error number *error-value*.

2645-063 **The object definition with *id=object-ID* is not compatible with the existing object.**

Explanation: One of the objects in the input list passed to RMVerUpd() is not compatible with the existing object definition on disk. If you are not using the versioned update class directly, then this error is most likely an internal error.

User response: Contact your software support organization.

2645-064 **The update buffer contains an invalid update specification.**

Explanation: While attempting to parse an update buffer, the resource manager framework encountered an invalid value, which indicates that the update buffer is

corrupted or built improperly. This error is most likely an internal error.

User response: Contact your software support organization.

2645-065 The configuration version in the input is greater than the local configuration version so a buffer of the configuration differences cannot be built.

Explanation: The resource manager framework was called to build a list of changes that are needed to update another node's configuration to match the local nodes configuration. However, the input that identifies the version that the other node is more recent or newer than the local node's configuration. In this case, a buffer of updates cannot be built. This error is most likely an error in the component using this service, such as a resource manager, instead of an error in the framework itself.

User response: Contact your software support organization.

2645-066 A cached table cannot be opened in explicit control mode if a selection string is specified.

Explanation: An attempt was made to open a registry table using the RMCachedTable class but both a selection string was specified and explicit control mode was requested. This combination of options is not supported. This error most likely indicates a programming error.

User response: Contact your software support organization.

2645-067 No resources were found that match the specified selection string.

Explanation: An attempt was made to select resources using a selection string, but no matching resources were found.

User response: Correct the selection string to match one or more existing resources and retry.

2645-068 The updates cannot be applied because the active domain does not have operational quorum.

Explanation: While trying to send, apply, and commit the update to all active nodes in the peer domain, it was discovered that the active peer domain does not have operational quorum. Operational quorum is present when more than half of the nodes are active in the peer domain or when exactly half of the nodes are active and the peer domain owns the tiebreaker resource.

User response: Resolve whatever conditions are preventing the peer domain from reaching operational

quorum. Once operational quorum has been achieved, try the operation again.

2645-200 An unexpected exception *exception_name* was caught with error code *error_code*.

Explanation: An error situation was encountered in which the named C++ exception was caught.

User response: The name of the exception and the error code should convey the reason for the error — the name and errno of a failed system call, for example. If the cause of the error is not clear, contact your software support organization.

2645-201 An unexpected exception *exception_name* was caught.

Explanation: An error situation was encountered in which the named C++ exception was caught.

User response: The name of the exception indicates the cause of the error. If the cause is not clear, contact your software support organization.

2645-202 The user name "*user_name*" that was specified for running the command does not exist.

Explanation: While attempting to run a command, it was discovered that the user name under which the command was to be run did not exist.

User response: Change or correct the user name and retry the operation.

Chapter 27. 2649: Cluster authentication services

When an error occurs, the cluster authentication services component issues one or more messages with a prefix of **2649**.

**2649-001 Unable to start DAE: `dae_init()` failed
(`rc = code`)**

file = *file-name*
version = *file-version*
line = *line-number*

Explanation: The DAE could not be started.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-002 `ctcsd` is not running as root.

Explanation: The process running the **ctcsd** program is not owned by **root**. **ctcsd** must be run as root in order to have access to the node's private key.

User response: Start **ctcsd** from the system resource controller (SRC) or invoke it from the command line after establishing **root** identity.

**2649-003 Memory allocation error
(*file-name:line-number*).**

Explanation: An error occurred when trying to allocate memory, either directly (using **malloc** or **realloc**, for example) or indirectly (using **strdup**, for example).

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-004 Configuration file error.

Explanation: The configuration file (**ctcsd.cfg**) is either missing or corrupted, or the process does not have appropriate permission on the file.

User response: Check the **ctcsd.cfg** configuration file.

**2649-005 One of the arguments provided to
routine-name is not valid.**

Explanation: The routine checked for valid arguments and determined that one or more arguments is not valid.

User response: Call the routine with the correct arguments.

**2649-006 Error on socket operation
(*routine-name: errno = value*).**

Explanation: The socket-related routine *routine-name* encountered an error.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-007 The file descriptor ready for reading or writing does not match the connecting socket.

Explanation: The **select()** routine returned a file descriptor that is ready for reading, writing, or both that is not the connecting socket's file descriptor.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-008 The connection timed out.

Explanation: The **select()** routine returned with a timeout error. Either the server is busy or there is a problem with the operating system's environment.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-009 Data communication failure (send()**):
message length = *length-of-message-to-send*, **bytes sent** = *number-of-bytes-actually-sent*.**

Explanation: The **send()** routine was not able to transmit all of the data.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-010 The reading of data was interrupted.

Explanation: The **recv()** routine returned with zero bytes read. Either the peer did a shutdown on the socket or there is a problem with the operating system's environment.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

**2649-011 *routine-name*: the buffer containing the
marshaled data is not valid.**

Explanation: Either the length of the buffer containing

the marshalled data is empty or it is smaller than the size of the data structure encoded.

User response: Specify the buffer generated by the corresponding marshalling routine.

2649-012 Request *request-identifier* not supported by service *service-identifier*.

Explanation: The specified service does not support the specified request.

User response: Specify the identifier of a request that **ctcsd** supports.

2649-013 Service *service-identifier* is not supported by **ctcsd.**

Explanation: **ctcsd** does not support the specified service.

User response: Specify the identifier of a service that **ctcsd** supports.

2649-014 Error on thread operation (*routine-name*: **rc = *value*).**

Explanation: The thread-related routine *routine-name* encountered an error.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-015 Unable to queue request:

queue size=*size*
pending requests=*value*

Explanation: The request queue is full and the server is not able to accept any more requests (server busy condition).

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-016 Unable to create the minimum number of worker threads configured.

Explanation: The server was not able to create the minimum number of worker threads configured. The total number of threads for the system may have been reached.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-017 Unable to set the appropriate permission on file/directory *name* (chmod**(): **errno** = *value*).**

Explanation: The **chmod** command returned an error code.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-018 Error on signal operation (*routine-name*: **errno = *value*).**

Explanation: The specified routine encountered the specified error.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-019 Unable to create directory *name* (mkdir**(): **errno** = *value*).**

Explanation: The **mkdir** command returned an error code.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-020 Unable to find directory **/var/ct/.**

Explanation: **ctcsd** is not able to find the **/var/ct** directory, which is required by RSCT.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-021 The server is not able to perform the authentication request.

Explanation: The server is not able to perform the authentication request.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-022 An error occurred during the server's attempt to get the client's identity.

Explanation: An error occurred during the server's attempt to get the client's identity.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-023 **Unable to set the current working directory to /var/ct/IW/run/ctcas (chdir(): value).**

Explanation: An error occurred during the server's attempt to set the current working directory.

User response: Refer to the appropriate diagnostic procedures. If the problem persists, contact the IBM Support Center.

2649-024 **The server reported a 'server busy' condition**

Explanation: The server returned a server busy condition, meaning there is no room for queueing more requests.

User response: Increase the size of the request queue in the server's configuration file and restart the server.

2649-025 **libct_cas failure: the ctcas client library is unable to execute the /usr/sbin/rsct/bin/ctstrtcasd command. The following error was returned by the system() function call: errno = value.**

Explanation: This condition could occur if the **system()** subroutine cannot create the child process that runs the command or if the status of the child process that was created is no longer available. Failure to create the child process is usually the result of a lack of necessary resources to create another process or if the system-imposed limit on the total number of processes that are running on the system or by a single user {**CHILD_MAX**} would be exceeded. Another possible cause for this failure is that there is not enough storage space available.

User response: Make sure the command exists on the system. If it does, contact the system administrator to make sure there are enough resources on the system.

2649-026 **libct_cas failure: the ctcas client library is unable to start the ctcas SRC subsystem. Please make sure that the subsystem is registered with SRC and that /usr/sbin/rsct/bin/ctcasd exists on the system.**

Explanation: This condition may happen when the **ctcas** subsystem is not registered with SRC or **/usr/sbin/rsct/bin/ctcasd** doesn't exist on the system or cannot be executed.

User response: Make sure **/usr/sbin/rsct/bin/ctcasd** exists on the system and that **ctcas** is a registered SRC subsystem.

2649-035 **An error occurred in the MPM layer: major-status-code minor-status-code mechanism-code routine-name.**

Explanation: An error was generated by the mechanism pluggable module (MPM) during operation. *routine-name* is the name of the underlying security mechanism routine that generated the error.

User response: Consult the reference manual of the MPM or of the underlying security mechanism.

2649-036 **Caller provided incorrect arguments to routine-name.**

Explanation: One or more of the arguments provided by the caller to the routine are not valid. *routine-name* is the name of the routine that generated the error.

User response: Consult the security reference manual for details on the routine's signature.

2649-037 **Invalid security services or context token.**

Explanation: The token provided does not represent a valid token descriptor or has an incorrect type.

User response: Make sure a valid token of the correct type is used.

2649-038 **Unix MPM Failure: The credentials acquired by the unix mpm is either not valid or corrupted.**

Explanation: The Unix MPM expected to find a valid credentials data buffer but did not find one. Either the memory provided to the failing routine was corrupted, or some other internal coding error caused this failure.

User response: Note this failure condition and contact the cluster security library service provider.

2649-039 **Unable to allocate memory.**

Explanation: An error occurred when trying to allocate memory, either directly (using **malloc** or **realloc**, for example) or indirectly (using **strdup**, for example).

User response: Check the program logic of the security client application. Check for memory leaks.

2649-040 **Unix Identity mismatch.**

Explanation: An error occurred when trying to authenticate the target service. The authenticated identity presented by the security daemon on the local host does not match the user ID of the target service.

User response: Make sure the process (or service) presenting the credentials to the security daemon to authenticate the client is running under the user identity

for which the client's credentials were intended.

2649-041 Buffer has incorrect identifier or is corrupt.

Explanation: The buffer provided has a different identifier than expected or the information contained is corrupt.

User response: Make sure a buffer of the correct type is used.

2649-042 Invalid mechanism code.

Explanation: The mechanism code used is not valid.

User response: Check the MPM reference manual.

2649-043 Invalid buffer or version number.

Explanation: The version number is not valid. In the case of a buffer, the error may be related to the buffer being corrupted.

User response: Check the version of the security library used by the application.

2649-044 A socket operation failed.

Explanation: An operation that involves a socket descriptor failed.

User response: Make sure the socket is still open and active.

2649-045 Session Key expected but not received from CtCasd. Possible transmission error.

Explanation: A session key was expected but was not received from the cluster authentication services daemon **ctcasd**. This could be a transmission error.

User response: None.

2649-046 Unix mpm failure: Configuration error, Check the defaults/overrides file in /usr/sbin/rsct/lib/mpm/

Explanation: Configuration files are missing or corrupted.

User response: Check the defaults file, **/usr/sbin/rsct/lib/mpm/unixmpm.def**, and the overrides file, **/usr/sbin/rsct/lib/mpm/unixmpm.ovr**.

2649-047 Unix mpm failure: Unable to determine service name for target: *name*.

Explanation: An error occurred while trying to determine the network identity of a predefined service name.

User response: Make sure the predefined service name provided is valid.

2649-048 unix_mpm Failure: Incorrect parameters detected.

Detecting function name:

function_name

Positional parameter in error:

parameter

Value of parameter: *value*

Verify that the application is providing the correct parameters to this function, and correct the application to pass valid parameters.

Explanation: A **unix_mpm** library interface was invoked and a non-valid parameter was provided to the routine.

User response: Consult the text of this message for appropriate actions in response to this failure.

2649-049 unix_mpm Failure: Error in routine *routine_name* while getting the mapped name

Explanation: A **unix_mpm** library interface was invoked and a non-valid parameter was provided to the routine.

User response: Consult the text of this message for appropriate actions in response to this failure.

2649-050 unix_mpm : Memory allocation failure.

Function name: *function-name*

Attempted allocation: *n* bytes

Most often, this failure occurs when a process exceeds its memory allocation limit. In rare cases, this failure occurs when a number of processes allocate huge amounts of memory and utilize all available memory on the system. Verify that the allocation itself is not exceeding its own limit. If a Cluster software trusted service is exceeding its limit, contact IBM Customer Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its memory allocation limits, contact the system administrator and report this incident. System administrators should identify processes using excessive

memory and consider terminating these processes.

Explanation: A memory allocation failed in a UNIX MPM routine or in a C library routine it uses, such as the **stat()** routine.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-051 unix_mpm Failure: Invalid mapping entry in the mapping file

Explanation: A non-valid mapping entry exists for the UNIX MPM in the local or global mapping file. An error occurred while getting the mapped name.

User response: Check the local and global mapping files for the non-valid map entries for the UNIX MPM.

2649-052 unix_mpm Failure: The number of tokens in rule and network identity does not match.

Explanation: The number of tokens in the rule under processing and network identity does not match.

User response: None.

2649-053 unix_mpm Failure: The network identity (*net-ID*) supplied to translator routine is not valid

Explanation: The number of tokens in the rule under processing and network identity does not match.

User response: None.

2649-054 unix_mpm Failure: The network identity (*net-ID*) has no mapping

Explanation: The number of tokens in the rule under processing and network identity does not match.

User response: None.

2649-055 unix_mpm Failure: Context token doesn't support the data integrity services requested by application

Explanation: Data integrity services are not enabled in the context token because **ctcsd** did not return the session key.

User response: Make sure the correct level of **ctcsd** is running and the message security services (MSS) library is installed.

2649-056 unix_mpm Failure: Context token doesn't support the data privacy services requested by application

Explanation: Data privacy services are not enabled in context token either because **ctcsd** did not return the

session key or the required crypt module is not installed.

User response: Make sure the correct level of **ctcsd** is running and the message security services (MSS) library and the required crypt module or modules are installed.

2649-057 Unix MPM Failure: The network identity acquired by the Unix mpm is either not valid or corrupted.

Explanation: The UNIX MPM expected to find a network identity in a data buffer, but did not locate one. Either the data buffer passed to the failing routine is corrupted, or an internal coding failure in the UNIX MPM or the **ctcsd** daemon may exist.

User response: Note the failure condition and contact the cluster security library service provider.

2649-058 Unable to find mapping for predefined service name *name*. Check the *unix.map* file in */var/ct/cfg/* or */usr/sbin/rsct/cfg/*.

Explanation: An error while mapping the predefined service name to a UNIX user name occurred either in **mpm_login_as_service** or in **mpm_get_target_name**. The mapping file **/var/ct/cfg/unix.map** (**/usr/sbin/rsct/cfg/unix.map**) might be missing or it doesn't have an entry for the predefined service name.

User response: Check to see if the predefined service name provided exists in the **unix.map** file.

2649-059 Current process (*value1*) does not have permissions to set the user id to *value2*.

Explanation: An error occurred while setting the user ID of the process using **setuid()** system call. The process may not have permissions to set the user ID or the mapping file entry for the trusted service predefined name could be wrong.

User response: Check the map file in **/usr/sbin/rsct/cfg/** or in **/var/ct/cfg/** and make sure a proper mapping entry exists for the trusted service predefined name.

2649-060 Invalid security context token or identity context token.

Explanation: The token provided does not represent a valid identity context or security context.

User response: Make sure a valid token of the correct type is used.

2649-061 User represented by identity context (*net_ID*) is not authorized.

Explanation: The `ruesrok()` routine failed while checking the permissions for the user represented by identity context *net_ID*.

User response: Make sure the identity has an entry in the `$HOME/.rhosts` file.

2649-062 One or more input buffers supplied to the routine *interface_name* are not valid.

Explanation: One or more of the input buffers supplied to either `vectorial sign` or `vectorial verify interface` are not valid.

User response: Make sure the proper input buffers are supplied to the interface.

2649-063 Verification of the signature failed in the routine *interface_name*.

Explanation: Verification of the signature failed with UDS-based security context.

User response: Make sure the proper input buffers are supplied to the interface.

2649-064 *unix_mpm* Failure: unable to obtain the node id of the current host. Detail: `cu_get_node_id()` returned error code *code*.

Explanation: The UNIX MPM cannot obtain the node ID of the current host, possibly because the RSCT software hasn't configured on the host or the host has one or more corrupted node ID files.

User response: Configure the RSCT software on the host if it is not already configured. If the problem persists, contact IBM Customer Support.

2649-065 *unix_mpm* Failure: unable to obtain the hostname of the current host. Detail: `gethostname()` returned -1.

Explanation: The UNIX MPM cannot obtain the host name of the current host. The reason is unknown as `gethostname` does not define a reason for failing.

User response: Make sure that the host has a host name configured and can be verified by invoking the `hostname` command.

2649-066 *unix_mpm* Failure: This security mechanism does not support the use of the `SEC_F_NO_RESOLVE` flag with a host name. To use the `SEC_F_NO_RESOLVE` option, specify the target host as an address.

Explanation: The UNIX MPM does not allow the use of the `SEC_F_NO_RESOLVE` flag when the target host is specified as a host name.

User response: The application should either not specify the `SEC_F_NO_RESOLVE` option, or should specify the target host as an IPv4 or IPv6 format address string.

2649-067 *unix_mpm* Failure: The network identity (*network-identity*) provided to the routine-name routine is not a valid network identity. A valid network identity is of the following format: *<user_name>@<host_name>*.

Explanation: The network identity provided to the routine does not have a valid format. A valid network identity is of the form *<user_name>@<host_name>*. A memory violation may have occurred.

User response: The caller must provide a valid network identity.

2649-068 *unix_mpm* Failure: The network identity (*network-identity*) and the ACLE identifier (*ACLE-identifier*) provided to the routine-name routine do not match.

Explanation: The network identity provided to the routine does not match the ACLE identifier. This condition must be not be treated as an out-right error. It may happen that this is the desired behavior as a result of access control enforcement.

User response: None.

2649-069 A socket operation failed (*errno* = *value*).

Explanation: An operation that requires an `ioctl` request failed. *value* is the error number returned by the `ioctl` routine.

User response: Consult the appropriate AIX or Linux reference manual for information about the error related to the `ioctl` kernel routine.

2649-070 Authentication error.

Explanation: An error occurred during a server's or a client's attempt to authenticate a client or to mutually authenticate a server, respectively.

User response: Make sure the authentication mechanism is functional, all required services are running, and both the client and the server have network credentials.

2649-071 Network credentials error.

Explanation: A client or server application is not able to acquire network credentials.

User response: Make sure the network identity used by the client or server is correctly configured in the underlying security mechanism. Consult the underlying security mechanism's reference manual for possible login errors.

2649-072 Delegated credentials error.

Explanation: An error occurred when a server tried to use delegated credentials from a client.

User response: Make sure the underlying security mechanism is functional and the server and client are using valid network identities.

2649-073 User information processing error.

Explanation: An error occurred while trying to obtain user information from the database.

User response: Make sure the user or user principal is valid and that the application has authority to access the user's information.

2649-074 Unable to obtain host name or IP address.

Explanation: An error occurred during the determination of the host's name and IP address.

User response: Consult the appropriate AIX or Linux reference manual.

2649-075 Unable to determine service name for target: *name*.

Explanation: An error occurred while trying to determine the network identity of a predefined service name.

User response: Make sure the predefined service name provided is valid.

2649-076 Empty ACL submitted for processing.

Explanation: An empty ACL was submitted for processing.

User response: Check the content of the ACL and resubmit it for processing.

2649-077 Invalid ACL entry type.

Explanation: The ACL entry's type is not valid.

User response: Make sure the type of the ACL entry is supported.

2649-078 Invalid privilege attributes buffer.

Explanation: The privilege attribute buffer has an incorrect version or is corrupted.

User response: Check the security library's version and make sure the connection between parties is still active.

2649-101 libct_cas Failure: incorrect parameters provided.

Function name: *name_of_failing_function*
Positional parameter number: *parameter*
Parameter value: *value*

If this failure is encountered during the execution of the Cluster software trusted services, contact IBM Customer Support and report this incident. If this failure is encountered during the execution of other software, verify that the software is using this function correctly.

Explanation: The security library encountered a failure in the named routine, which was caused by the client application passing incorrect arguments to this function. *parameter* is the positional parameter that is causing this function to fail. *value* is the value of the positional parameter that is causing the failure.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-102 libct_cas Memory allocation failure.

Function name: *name_of_failing_function*
Attempted allocation: *n* bytes

Most often, this failure occurs when a process exceeds its memory allocation limit. In rare cases, this failure occurs when a number of processes allocate huge amounts of memory and utilize all available memory on the system. Verify that the allocation itself is not exceeding its own limit. If a Cluster software trusted service is exceeding its limit, contact IBM Customer Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its memory allocation limits, contact the system administrator and report this incident. System administrators should identify processes using excessive

memory and consider terminating these processes.

Explanation: The security library was unable to allocate memory. This problem usually occurs when a process exceeds its memory usage limit, and this is the most likely source of this failure. The process may have a memory leak, or it may be allocating memory but never releasing any memory. In rare cases, this failure can be caused when the virtual memory limit has been reached on the system.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-103 libct_cas Failure: The marshaled data provided to this routine is either incorrect or corrupted. It is possible that the application has inadvertently overwritten the variable containing the address of the data, or the application may have inadvertently overwritten the memory used to store the data. Verify that the application is providing the correct address for the marshaled input data to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The marshaled data provided to the security library did not meet the structural specifications required of it. The library concludes that either the address provided is not the address of the marshaled data, or that the data at this address has been corrupted somehow.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-104 libct_cas Failure: The marshaled data provided to this routine does not contain a required data field. It is possible that the application has provided an incorrect address for the marshaled data, or has inadvertently overwritten the variable containing the address of the data, or the application may have inadvertently overwritten the memory used to store the data. Verify that the application is providing the correct address for the marshaled input data to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The marshaled data provided to the security library did not meet the structural specifications required of it. The library concludes that either the

address provided is not the address of the marshaled data, or that the data at this address has been corrupted somehow.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-105 libct_cas Internal failure detected.

Function name: *function*

Return code from function: *code*

Routine calling the function: *routine*

Contact IBM Customer Support and report this incident.

Explanation: An unexpected failure was detected. This failure indicates a possible source code failure in the security library. *name* is the name of the internal function that is reporting a failure.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-106 libct_cas Failure: The security library is unable to initialize the data structures necessary to convert between the codeset used by this application and the UTF-8 data encoding format. This failure has occurred because resources needed by the cluster utilities are not available at this time. Try to run this application again at a later time.

Explanation: The utility library used by the security library was unable to obtain the resources necessary to create the data structures it needs to convert between the application's codeset and the UTF-8 data encoding format. This may be a temporary condition that will be fixed in time, as system resources become available.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-107 **libct_cas Failure:** The security library is unable to translate a character string between the application codeset and the UTF-8 data encoding format. The character string contains bytes that are non-valid in the application codeset. This failure can occur when codesets that do not fully support UTF-8 conversion are used by the execution environment. This failure can also occur if the character string memory is overwritten. Verify that the application uses a locale with a codeset that does support UTF-8 conversion, or contact the system administrator to have the default execution environment set to use such a locale. Also verify that the application is not accidentally overwriting the character string data.

Explanation: The utility library used by the security library was unable to convert a character string between the application's codeset and the UTF-8 data encoding format because the character string contained non-valid characters. This can occur because of a codeset problem, or because the memory in the character string is being corrupted.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-108 **libct_cas Failure:** The marshaled data provided to this routine is either incorrect or corrupted. The marshaled data interpretation functions of the security library detected more substitutional arguments than indicated in the marshaled data's argument count. It is possible that the application has inadvertently overwritten the variable containing the address of the data, or the application may have inadvertently overwritten the memory used to store the data. Verify that the application is providing the correct address for the marshaled input data to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The marshaled data provided to the security library did not meet the structural specifications required of it. The library concludes that either the address provided is not the address of the marshaled data, or that the data at this address has been corrupted somehow.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-109 **libct_cas Failure:** The marshaled data provided to this routine is either incorrect or corrupted. The marshaled data interpretation functions of the security library detected a repeated data field within the marshaled data. It is possible that the application has inadvertently overwritten the variable containing the address of the data, or the application may have inadvertently overwritten the memory used to store the data. Verify that the application is providing the correct address for the marshaled input data to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The marshaled data provided to the security library did not meet the structural specifications required of it. The library concludes that either the address provided is not the address of the marshaled data, or that the data at this address has been corrupted somehow.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-110 **ctcasd Daemon Failure:** The daemon was unable to locate or access the key files to be used for host-based authentication. Without these files, the daemon will be unable to authenticate the local system to other systems in the cluster. The daemon expected to find these key files in the following directory:

directory-name

The key files may be missing, the permissions on the files may have been modified to forbid any process from accessing the files, or a component of the directory name may have been modified to forbid access. Verify that the public and private key files exist, and that the permissions on the files and the directory are set to permit processes running with root permission to access the directory and the files. If this condition persists, contact the cluster software service provider and report this incident.

Explanation: The daemon was unable to locate private or public key files for this system, which it expected to find in *directory-name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-111 **ctcsd Daemon Failure: The stat system call reported a failure in obtaining kernel memory resources. This may indicate that the operating system is not configured properly, or that additional resources need to be dedicated to the operating system kernel. Consult the problem determination documentation and procedures for the operating system in use on the system and perform any corrective actions recommended by those sources.**

Explanation: The **stat()** system call reported a kernel memory failure. This is a failure beyond the control of the daemon, and may indicate that the operating system is not configured properly.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-112 **ctcsd Daemon Failure: The daemon was unable to create an initial private key file to be used for host-based authentication. Without this file, the daemon will be unable to authenticate the local system to other systems in the cluster. The daemon attempted to create the initial private key file in the following directory:**

directory-name

A component directory in the above path name may be missing, or the access permissions for one of these components may have been modified to forbid access. Verify that the directory listed above exists, and that the permissions on that directory permit processes running with root access to access the directory and create files within the directory. If this condition persists, contact the cluster software service provider and report this incident.

Explanation: The daemon was unable to create a private key file for this system, which it expected to create in *directory-name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-113 **ctcsd Daemon Failure: The daemon was unable to create an initial public key file to be used for host-based authentication. Without this file, the daemon will be unable to authenticate the local system to other systems in the cluster. The daemon attempted to create the initial public key file in the following directory:**

directory-name

A component directory in the above path name may be missing, or the access permissions for one of these components may have been modified to forbid access. Verify that the directory listed above exists, and that the permissions on that directory permit processes running with root access to access the directory and create files within the directory. If this condition persists, contact the cluster software service provider and report this incident.

Explanation: The daemon was unable to create a public key file for this system, which it expected to create in *directory-name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-114 **ctcsd Daemon Failure: The daemon was unable to create an initial private key file to be used for host-based authentication. Without this file, the daemon will be unable to authenticate the local system to other systems in the cluster. The daemon attempted to create the initial private key file in the following directory:**

directory-name

The file system containing this directory does not have sufficient space to create the initial private key file. Contact the system administrator and report this problem. System administrators should examine the file system containing this directory for obsolete files that can be removed or trimmed. The system administrator can also correct this problem by extending the size of the file system containing this directory.

Explanation: The daemon was unable to create a private key file for this system, which it expected to create in *directory-name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-115 **ctcasd Daemon Failure: The daemon was unable to create an initial public key file to be used for host-based authentication. Without this file, the daemon will be unable to authenticate the local system to other systems in the cluster. The daemon attempted to create the initial public key file in the following directory:**

directory-name

The file system containing this directory does not have sufficient space to create the initial public key file. Contact the system administrator and report this problem. System administrators should examine the file system containing this directory for obsolete files that can be removed or trimmed. The system administrator can also correct this problem by extending the size of the file system containing this directory.

Explanation: The daemon was unable to create a public key file for this system, which it expected to create in *directory-name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-116 **ctcasd Daemon Failure: The daemon was unable to create an initial private key file to be used for host-based authentication. Without this file, the daemon will be unable to authenticate the local system to other systems in the cluster. The daemon attempted to create the initial public key file in the following directory:**

directory-name

This directory may reside in a read-only file system, one of the component directories in this path name may be missing, the directory name may contain more symbolic links than the operating system can support, or the path name may not reference a directory. Contact the system administrator and report this problem. System administrators should verify that the above directory name is specified and constructed properly. If this condition persists, contact the

cluster software service provider and report this incident.

Explanation: The daemon was unable to create a private key file for this system, which it expected to create in *directory-name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-117 **ctcasd Daemon Failure: The daemon was unable to create an initial public key file to be used for host-based authentication. Without this file, the daemon will be unable to authenticate the local system to other systems in the cluster. The daemon attempted to create the initial public key file in the following directory:**

directory-name

This directory may reside in a read-only file system, one of the component directories in this path name may be missing, the directory name may contain more symbolic links than the operating system can support, or the path name may not reference a directory. Contact the system administrator and report this problem. System administrators should verify that the above directory name is specified and constructed properly. If this condition persists, contact the cluster software service provider and report this incident.

Explanation: The daemon was unable to create a public key file for this system, which it expected to create in *directory-name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-118 **ctcasd Daemon Internal failure detected.**

Function name: *function*
Return code from function: *code*
Routine calling the function: *routine*

Contact the cluster software service provider and report this incident.

Explanation: An unexpected failure was detected. This failure indicates a possible source code failure in the security daemon. *name* is the name of the internal function that is reporting a failure.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-119 **ctcasd Daemon Internal Failure:**
incorrect parameters were provided to
a daemon subroutine.

Function name: *name_of_failing_function*
Positional parameter number: *parameter*
Parameter value: *value*

**Contact the cluster software service
provider and report this incident.**

Explanation: The security daemon encountered a failure in the specified function, which was caused by another subroutine in the daemon providing incorrect arguments to this function. *parameter* is the positional parameter that is causing this function to fail. *value* is the value of the positional parameter that is causing the failure.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-120 **ctcasd Daemon Failure: the daemon
detected that an unsupported key
generation method was configured.
The following unsupported key
generation method was configured:**

method

**Repair the ctcsd daemon
configuration information to specify a
supported key generation method.**

Explanation: *method* is either unknown or is not supported by this level of the **ctcsd** security daemon.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-121 **ctcasd Daemon Failure: the daemon
detected a private key file on the local
system, but was unable to locate the
associated public key file on the local
system. The daemon has concluded
that the private and public key
configuration of the local system has
been corrupted. The daemon expected
to find public key file in the following
location:**

directory-name

**Inform the system administrator of this
failure. System administrators should
recreate the public and private key
files on the system. If cluster security
based keys are in use, these keys can
be recreated using the 'ctskeygen'
command. If secured remote shell keys
are in use, consult the documentation**

**and procedures for configuring
secured remote shell public and
private keys. System administrators
should also consider monitoring the
status of the public and private key
files, in case an application is
accidentally or intentionally removing
these files.**

Explanation: The daemon detected that the public key file was removed from the local system, but that the private key file remained. This is not an intended configuration of the local system. The daemon has concluded that the configuration was accidentally or intentionally corrupted, and must be repaired.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-122 **ctcasd Daemon Failure: the daemon
detected a public key file on the local
system, but was unable to locate the
associated private key file on the local
system. The daemon has concluded
that the private and public key
configuration of the local system has
been corrupted. The daemon expected
to find both the public and the private
key files in the following directory:**

directory-name

**Inform the system administrator of this
failure. System administrators should
recreate the public and private key
files on the system. If cluster security
based keys are in use, these keys can
be recreated using the 'ctskeygen'
command. If secured remote shell keys
are in use, consult the documentation
and procedures for configuring
secured remote shell public and
private keys. System administrators
should also consider monitoring the
status of the public and private key
files, in case an application is
accidentally or intentionally removing
these files.**

Explanation: The daemon detected that the public key file was removed from the local system, but that the private key file remained. This is not an intended configuration of the local system. The daemon has concluded that the configuration was accidentally or intentionally corrupted, and must be repaired.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-123 **ctcasd Daemon Failure: The daemon was unable to locate or access the trusted host list file to be used for host-based authentication. Without this list, the daemon will be unable to authenticate systems within the cluster. The daemon expected to find this file in the following directory:**

directory-name

The trusted host list file may be missing, the permissions on the file may have been modified to forbid any process from accessing the file, or a component of the directory name may have been modified to forbid access. Verify that the trusted host list file exists, and that the permissions on the file and the directory are set to permit processes running with root permission to access and modify the directory and the file. If this condition persists, contact the cluster software service provider and report this incident.

Explanation: The daemon was unable to locate the trusted host list file for this system, which it expected to find in *directory-name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-124 **ctcasd Daemon Failure: The daemon was unable to create an initial trusted host list file to be used for host-based authentication. Without this file, the daemon will be unable to authenticate systems within the cluster. The daemon attempted to create the initial trusted host list file in the following directory:**

directory-name

A component directory in the above path name may be missing, or the access permissions for one of these components may have been modified to forbid access. Verify that the directory listed above exists, and that the permissions on that directory permit processes running with root access to access the directory and create files within the directory. If this condition persists, contact the cluster software service provider and report this incident.

Explanation: The daemon was unable to create a

trusted host list file for this system, which it expected to create in *directory-name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-125 **ctcasd Daemon Failure: The daemon was unable to create an initial trusted host list file to be used for host-based authentication. Without this file, the daemon will be unable to authenticate systems within the cluster. The daemon attempted to create the initial trusted host list file in the following directory:**

directory-name

The file system containing this directory does not have sufficient space to create the initial trusted host list file. Contact the system administrator and report this problem. System administrators should examine the file system containing this directory for obsolete files that can be removed or trimmed. The system administrator can also correct this problem by extending the size of the file system containing this directory.

Explanation: The daemon was unable to create a trusted host list file for this system, which it expected to create in *directory-name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-126 **ctcasd Daemon Failure: The daemon was unable to create an initial trusted host list file to be used for host-based authentication. Without this file, the daemon will be unable to authenticate systems within the cluster. The daemon attempted to create the initial trusted host list file in the following directory:**

directory-name

This directory may reside in a read-only file system, one of the component directories in this path name may be missing, the directory name may contain more symbolic links than the operating system can support, or the path name may not reference a directory. Contact the system administrator and report this problem. System administrators should verify that the above directory name is

specified and constructed properly. If this condition persists, contact the cluster software service provider and report this incident.

Explanation: The daemon was unable to create a trusted host list file for this system, which it expected to create in *directory-name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-127 Unix Identity mis-match.

Explanation: An error occurred when trying to validate the requesting process. The user ID of the requesting process does not match the user ID of the target service for which the credentials were intended.

User response: Make sure the process presenting the credentials to the **ctcsd** security daemon is running under the correct identity.

2649-128 The system call to retrieve the local hostname failed.

Explanation: The system call to retrieve the local host name failed.

User response: None.

2649-129 The credentials have expired.

Explanation: The credentials have expired.

User response: None.

2649-130 The credentials are either not valid or corrupted.

Explanation: The credentials are not valid, or they are corrupted.

User response: None.

2649-131 The public key in *file-name* does not match the public key for the host in the Trusted Host List *list-name*.

Explanation: The trusted host list entry for the host has a public key that does not match the public key in the public key file.

User response: Stop the **ctcsd** daemon and remove the trusted host list. Restart the daemon; a new trusted host list will be generated.

2649-132 Environment Variable: *value* value is in error.

Explanation: The environment variable has a value that is not valid.

User response: Reissue the **startsrc** command with the correct value.

2649-133 ctcsd Failure: the cipher contained in the CCDB has a length (*length*) that is not multiple of the RSA modulus for the type of key used for decryption (*modulus*). This condition may happen when the client and server hosts have different types of host keys. Please make sure that the client and server hosts have the same type of host-based authentication (HBA) keys.

Explanation: This condition may happen when the client and server hosts have different types of host keys.

User response: Make sure that the client and server hosts have the same type of host HBA keys.

2649-134 libct_cas Status: The host identified in the credentials is not a trusted host on this system.

Explanation: The host (or hosts) listed in the credentials are not listed in the local host's trusted host list, or none of the public keys for the host (or hosts) were successful in authenticating the credential.

User response: Possibly no action required. System administrators should verify that the trusted host list contains valid entries for all hosts trusted by this system.

2649-135 ctcsd Failure: Unable to construct a credential for the requesting client.

Failing routine: *subroutine-name*

Return code from failing routine: *code*

This failure may occur when the **ctcsd** daemon is unable to allocate memory. Verify that the system has sufficient virtual memory available. Administrators might consider extending the virtual memory size of the system or terminating applications using excessive virtual memory. If this condition persists or occurs frequently, contact the cluster software security service provider and report this condition.

Explanation: The **ctcsd** daemon was unable to properly construct a credential for the requesting client.

User response: Consult the text of the error message for the appropriate actions to take in response to this failure.

2649-136 **libct_cas Failure:** The marshaled data provided to this routine is either not valid or corrupted. The most probable cause of this problem is that the public key of the source host in the target's host THL file does not match the private key of the source host. Another possible cause is that the application has inadvertently overwritten the variable containing the address of the data, or the application may have inadvertently overwritten the memory used to store the data. Verify that the public keys in the THL files match their corresponding private keys from the host listed in the THL records. Also verify that the application is providing the correct address for the marshaled input data to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The marshalled data provided to the security library did not meet the structural specifications required of it. The library concludes that public keys of the hosts do not match their corresponding private keys or that either the address provided is not the address of the marshalled data, or that the data at this address has been corrupted somehow.

User response: Consult the text of this message for the appropriate responses to this failure.

2649-137 **Unix Identity mis-match.** The party asking for credential authentication (*party_identity*) is not the intended target of the credentials. This condition may happen if the service name used by the client does not map to the same user ID on both the client's and the server's host. Please check whether the process presenting the credential for authentication to the ctcd security daemon is running under the correct identity.

Explanation: An error occurred during an attempt to validate the process requesting credential authentication. The user ID of the requesting process does not match the user ID of the target service for which the credentials were intended.

User response: Determine whether the process presenting credentials to the ctcd security daemon is running under the correct identity.

2649-138 **ctcd daemon Failure:** The daemon detected a public key file on the local system, but was unable to locate the associated private key file on the local system. The daemon has concluded that the private and public key configuration of the local system has been corrupted. The daemon expected to find the private key file in the following location:

private_key_file_name

Inform the system administrator of this failure. System administrators should recreate the public and private key files on the system. If cluster security based keys are in use, these keys can be recreated using the 'ctskeygen' command. If secured remote shell keys are in use, consult the documentation and procedures for configuring secured remote shell public and private keys. System administrators should also consider monitoring the status of the public and private key files, in case an application is accidentally or intentionally removing these files.

Explanation: Consult the text of this message for the complete explanation.

User response: Consult the text of this message for appropriate responses.

2649-139 **libct_cas Failure:** Unable to determine the permission of the client socket file.

socket file name: *file_name*
stat() errno: *error_number*

Make sure that there is no other application that deleted the socket file.

Explanation: Consult the text of this message for the complete explanation.

User response: Consult the text of this message for appropriate responses.

2649-140 **libct_cas Failure:** Unable to change the file permission of the client socket file to at least execute/read/write by owner.

socket file name: *file_name*
chmod() errno: *error_number*
file permission: *socket_file_permission*
file's owner uid: *socket_file_owner_uid*
effective uid of process: *effective_uid*

Make sure that there is no other application that modified the socket file in any way.

Explanation: Consult the text of this message for the complete explanation.

User response: Consult the text of this message for appropriate responses.

2649-141 ctcasd Failure: The daemon was unable to initialize the CLiC runtime environment. The following message was returned by CLiC initialization routine:

error_message
File name: *file_name*
Line number: *line_number*

Explanation: This error could occur when the ICC runtime setup is not done correctly.

User response: Make sure the ICC runtime libraries exist the expected location and are at the expected version level.

2649-200 *command: daemon-file-name* is not executable.

Explanation: The daemon program is not an executable file or does not exist. If the file exists, the daemon program must be an executable file in order for the subsystem defined by *command* to operate.

User response: Make sure the daemon program exists on the system. If it does exist, make sure it is an executable file.

2649-201 *command: ctskeygen-file-name* is not executable.

Explanation: The **ctskeygen** program is not an executable file or does not exist. If the file exists, the **ctskeygen** program must be an executable file in order for *command* to run.

User response: Make sure the **ctskeygen** command exists on the system. If it does exist, make sure it is an executable file.

2649-202 *command: ctsthl-file-name* is not executable.

Explanation: The **ctsthl** program is not an executable file or does not exist. If the file exists, the **ctsthl** program must be an executable file in order for *command* to run.

User response: Make sure the **ctsthl** command exists on the system. If it does exist, make sure it is an executable file.

2649-203 *command: Unable to add subsystem-name* subsystem to SRC.

Explanation: The daemon program is not an executable file or does not exist. If the file exists, the daemon program must be an executable file in order for the subsystem defined by *command* to operate.

User response: Make sure the daemon program exists on the system. If it does exist, make sure it is an executable file.

2649-204 *command: the ctskeygen command* is unable to create the host public and private key files (*rc = code*).

Explanation: The **ctskeygen** command could not create the host's public and private key files. The return code (*code*) identifies the reason for the failure.

User response: Make sure the directory where the host's key files reside exists and is writable.

2649-205 *command: the ctsthl command* is unable to add the host public key to the THL file (*rc = code*).

Explanation: The **ctsthl** command could not add the host's public key to the trusted host list (THL) file. The return code (*code*) identifies the reason for the failure.

User response: Make sure the directory where the THL file resides exists and is writable.

2649-206 *command: the ctskeygen command* is unable to delete the host public and private key files (*rc = code*).

Explanation: The **ctskeygen** command could not delete the host's private and public key files. The return code (*code*) identifies the reason for the failure.

User response: Make sure the directory where the host's key files reside exists and is writable.

2649-207 *command: the ctsthl command* is unable to delete the THL file (*rc = code*).

Explanation: The **ctsthl** command could not delete the trusted host list (THL) file. The return code (*code*) identifies the reason for the failure.

User response: Make sure the directory where the THL file resides exists and is writable.

2649-208 *command: The /var/ct/IW symbolic link* does not exist!

Explanation: The **/var/ct/IW** symbolic link does not exist on the file system. This subdirectory must be created before the **ctcasctrl** command runs. This

condition indicates that something went wrong during the configuration of RSCT.

User response: Make sure the `/var/ct/IW` directory exists.

Chapter 28. 2650: Cluster security services

When an error occurs, the cluster security services component issues one or more messages with a prefix of **2650**.

2650-001 **An error occurred in the MPM layer:**
major-status-code minor-status-code
mechanism-code routine-name.

Explanation: An error was generated by the mechanism pluggable module (MPM) during operation. *routine-name* is the name of the underlying security mechanism routine that generated the error.

User response: Consult the reference manual of the MPM or of the underlying security mechanism.

2650-002 **Caller provided incorrect arguments to**
routine-name.

Explanation: One or more of the arguments provided by the caller to the routine are not valid.

User response: Consult the security reference manual for details on the routine's signature.

2650-003 **Invalid security services or context**
token.

Explanation: The token provided does not represent a valid token descriptor or has an incorrect type.

User response: Make sure a valid token of the correct type is used.

2650-004 **Unable to allocate memory.**

Explanation: An error occurred when trying to allocate memory, either directly (for example: malloc, realloc) or indirectly (for example: strdup).

User response: Check the program logic of the security client application. Check for memory leaks.

2650-005 **Buffer has incorrect identifier or is**
corrupt.

Explanation: The buffer provided has a different identifier than expected or the information contained is corrupt.

User response: Make sure a buffer of correct type is used.

2650-006 **Invalid mechanism code.**

Explanation: The mechanism code used is not valid.

User response: Check the MPM reference manual.

2650-007 **Invalid buffer or ACL entry version**
number.

Explanation: The version number is not valid. In case of a buffer, the error may be related to the buffer being corrupted.

User response: Check the version of the security library used by the application.

2650-008 **A socket operation failed.**

Explanation: An operation that involves a socket descriptor failed.

User response: Verify whether the socket is still open and active.

2650-009 **An ioctl operation failed (errno =**
*value***).**

Explanation: An operation that requires an **ioctl** request failed.

User response: Refer to the appropriate AIX reference manual for errors related to the **ioctl** kernel routine.

2650-010 **Authentication error.**

Explanation: An error occurred during a server's or a client's attempted to authenticate a client or to mutually authenticate a server, respectively.

User response: Make sure the authentication mechanism is functional, all required services are running, and both the client and the server have network credentials.

2650-011 **Network credentials error.**

Explanation: A client or server application is not able to acquire network credentials.

User response: Make sure the network identity used by the client or server is correctly configured in the underlying security mechanism. Consult the underlying security mechanism's reference manual for possible login errors.

2650-012 **Delegated credentials error.**

Explanation: An error occurred when a server tried to use delegated credentials from a client.

User response: Make sure the underlying security

mechanism is functional and the server and client are using valid network identities.

2650-013 User information processing error.

Explanation: An error occurred while trying to obtain user information from the database.

User response: Make sure the user or user principal is valid and that the application has authority to access the user's information.

2650-014 Unable to obtain host name or ip address.

Explanation: An error occurred during the determination of the host's name and IP address.

User response: Consult the AIX reference manual.

2650-015 Unable to determine service name for target: *name*.

Explanation: An error occurred while trying to determine the network identity of a predefined service name.

User response: Check whether the predefined service name provided is valid.

2650-016 Empty ACL submitted for processing.

Explanation: An empty ACL was submitted for processing.

User response: Check the content of the ACL and resubmit for processing.

2650-017 Invalid ACL entry type.

Explanation: The ACL entry's type is not valid.

User response: Check whether the type of the ACL entry is supported.

2650-018 Invalid privilege attributes buffer.

Explanation: The privilege attribute buffer has an incorrect version or is corrupted.

User response: Check the security library's version and whether the connection between parties is still active.

2650-019 An error occurred during processing of the configuration file or the configuration file does not exist.

Explanation: The security configuration file contains information that cannot be processed by the security library or it doesn't exist.

User response: Check the security configuration file and make sure it contains only valid records.

2650-020 The MPM file does not exist, does not have a valid format, or does not export all required routines.

Explanation: The security library encountered an error when it attempted to load and initialize a mechanism pluggable module (MPM). This may be because the file does not exist, or because the file is not a loadable share object module, or because the module does not export all required routines.

User response: Check the security configuration file and make sure it contains only valid records.

2650-021 The context token must be SEC_C_NO_TOKEN when SEC_F_P2P_CONTEXT flag is used.

Explanation: `sec_start_sec_context()` does not allow a previously-allocated context token when the SEC_F_P2P_CONTEXT flag is used.

User response: Initialize the context token variable to SEC_C_NO_TOKEN before passing it as an argument to this routine when the SEC_F_P2P_CONTEXT flag is also used.

2650-022 Only authenticated context tokens can be used with this routine.

Explanation: `sec_process_data()` and `sec_prepare_data()` require an authenticated context token.

User response: Make sure the client is using a mechanism supported by the application server.

2650-023 An internal error occurred. Please contact customer support.

Explanation: An internal error occurred that cannot be explained. This is a critical error that stops the security library from functioning correctly.

User response: Contact the IBM Support Center.

2650-024 The MPM must provide output data if the context needs more data to complete.

Explanation: The MPM requires more data in order to complete the security context. The data must be received from the other party. In order to instruct the other party to provide required data, the MPM must provide output data that will be sent by the application to the other party.

User response: Contact the MPM provider's customer support.

2650-025 **The MPM must provide output data if the other party's context needs more data to complete.**

Explanation: The MPM requires more data in order to complete the other party's security context. The data must be sent to the other party by the calling application.

User response: Contact the MPM provider's customer support.

2650-026 **Cannot exceed the maximum CCDB sequence number (*value*).**

Explanation: The maximum sequence number is 255. The MPM requires more steps than the maximum allowed to complete the security context. This is a limitation that the MPM's provider must take into consideration during the design of the MPM.

User response: Contact the MPM provider's customer support.

2650-027 **The `sec_prepare_data` and `sec_process_data` routines require a valid input buffer.**

Explanation: `sec_prepare_data()` and `sec_process_data()` must receive an input buffer with a length greater than 0 and a corresponding body.

User response: Check the input buffer and make sure it is valid.

2650-028 **A mismatch in mechanism code occurred between the client and server.**

Explanation: The buffer received from the other party contains a mechanism code different from the mechanism code used by this party.

User response: Make sure both parties are using the same mechanism.

2650-029 **An MPM's cannot return `SEC_S_UNAUTHENTICATED` on the server's side after the first round of data exchange.**

Explanation: The Mechanism Abstract Layer (MAL) does not allow any MPMs to treat the client as unauthenticated after the completion of the first round of data exchange between the client and the server.

User response: Contact the MPM provider's customer support.

2650-030 **The security runtime was instructed to not accept unauthenticated clients.**

Explanation: Cluster security services was instructed by either the application or by the system administrator to not accept unauthenticated clients. Either the application called `sec_start()` with the `SEC_F_DISALLOW_UNAUTH` flag or the `ctsec.cfg` file contains an attribute entry with the `UNAUTHENT` value set to `DISALLOW`. The application's setup overrides the setup in the configuration file.

User response: Check whether the application allows unauthenticated clients or change the setup in the configuration file.

2650-031 **`libct_sec` Failure: incorrect parameters provided.**

Function name: *function*
Positional parameter number: *parm*
Parameter value: *value*

If this failure is encountered during the execution of the Cluster software trusted services, contact IBM Customer Support and report this incident. If this failure is encountered during the execution of other software, verify that the software is using this function correctly.

Explanation: The security library encountered a failure in the named routine, which was caused by the client application passing incorrect arguments to *function_name*.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-032 **`libct_sec` Memory allocation failure.**

Function name: *function*
Attempted allocation: *n* bytes

Most often, this failure occurs when a process exceeds its memory allocation limit. In rare cases, this failure occurs when a number of processes allocate huge amounts of memory and utilize all available memory on the system. Verify that the allocation itself is not exceeding its own limit. If a Cluster software trusted service is exceeding its limit, contact IBM Customer Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its

memory allocation limits, contact the system administrator and report this incident. System administrators should identify processes using excessive memory and consider terminating these processes.

Explanation: The security library was unable to allocate memory. This problem usually occurs when a process exceeds its memory usage limit, and this is the most likely source of this failure. The process may have a memory leak, or it may be allocating memory but never releasing any memory. In rare cases, this failure can be caused when the virtual memory limit has been reached on the system.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-033 **libct_sec Internal failure: duplicate identity entries in an access control entry list. The access control editing software permitted duplicate entries to be added, or the security library permitted the software to submit multiple entries for the same identity. The security library cannot make an arbitrary decision as to which entry is the valid entry when duplicates exist. If this failure is encountered during the execution of a Cluster software trusted service ACL editor, contact IBM Customer Support and report the incident. If the failure is encountered during the execution of other software, examine the software to ensure that multiple entries are not being provided in the access control entry list.**

Explanation: The security library detected multiple entries for the same user or group identity in an access control entry list during the process of converting this list to an access control list.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-034 **libct_sec Internal failure detected.**

Function name: *function*
Return code from function: *code*
Routine calling the function: *routine*

Contact IBM Customer Support and report this incident.

Explanation: An unexpected failure was detected. This failure indicates a possible source code failure in the security library.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-035 **libct_sec Advisory message: No access control entries were detected within the specified access control list for the mechanism request.**

Mechanism code used in request: *code*
Identity used in request: *identity*

Explanation: The security library was instructed to find one or more access control entries within an existing access control list for a specific security mechanism, and none were detected.

This is not always a failure condition. It is valid for the security library to find no such entries if none were ever added to the access control list.

User response: Make sure the software using the security library is specifying the correct mechanism code value.

2650-036 **libct_sec Failure: Unsupported security mechanism code provided:**

Mechanism code: *code*

If this failure is encountered during the execution of the Cluster software trusted services or their associated access control list editing software, contact IBM Customer Support and report this incident. If this failure is encountered during the execution of other software, verify that the software is providing a supported security mechanism code.

Explanation: The security library was instructed to create an access control list entry of a security mechanism whose code number is unknown to the security library. The library has rejected this request and the attempt to create the entry has failed.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-037 **libct_sec Failure: Unable to locate an entry within an access control list. The security library was searching for an entry which met these conditions:**

Security Mechanism code: *code*
Identifier value: *identity*

It is possible that an entry for this identifier and security mechanism was not created within the access control list. Verify and correct the security mechanism code and identifier information.

Explanation: The security library was instructed to

locate an access control list entry for the specified security identifier for the security mechanism indicated by the mechanism code number. The security library was unable to locate this entry. The entry was never added to the access control list.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-038 **libct_sec Failure: The access control list provided to this routine is either incorrect or corrupted. It is possible that the application has inadvertently overwritten the variable containing the address of the access control list, or the application may have inadvertently overwritten the memory used to store the access control list. Verify that the application is providing the correct address for the access control list to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.**

Explanation: The access control list provided to the security library did not meet the structural specifications required of it. The library concludes that either the address provided is not the address of an access control list, or that the access control list at this address has been corrupted somehow.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-039 **libct_sec Failure: Unable to load shared object.**

Name of shared object: *object-name*
dlopen()'s errno: *value*
dlopen()'e error message: *error-message*

Make sure that the library containing the shared object exists on the system and is readable by the process.

Explanation: The **libct_sec** library could not load the **libct_mss** library's shared object. The shared object is required for the legacy support of the message authentication routines exported by **libct_sec**.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-040 **libct_sec Failure: Unable to find symbol in shared object.**

Name of shared object: *object-name*
Name of symbol: *symbol-name*

dlsym()'s errno: *value*
dlsym()'e error message: *error-message*

Make sure that the library containing the shared object exists on the system and is readable by the process.

Explanation: The **libct_sec** library could not load the **libct_mss** library's shared object. The shared object is required for the legacy support of the message authentication routines exported by **libct_sec**.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-045 **The key buffer does not contain a DES key.**

Explanation: A DES key does not get formatted correctly if it is not 8 bytes long or if the bit parity is not set correctly.

User response: Call **sec_generate_key()** to obtain a DES key that is formatted correctly.

2650-046 **An error occurred in the cryptography module of libct_sec.a**

Explanation: One of the cryptography routines encountered an error.

User response: Contact the IBM Support Center.

2650-047 **The signature buffer is not valid.**

Explanation: The signature buffer is not the correct length or it is not formatted correctly.

User response: Call **sec_process_message** to obtain a signature buffer that is formatted correctly.

2650-048 **The key provided does not match the key used to sign the input message.**

Explanation: There is a mismatch between the key provided to the **sec_process_message()** routine and the key provided to the **sec_prepare_message()** routine.

User response: Provide the same key to **sec_process_message()** and **sec_prepare_message()**.

2650-049 **The digest provided does not match the input message.**

Explanation: There is a mismatch between the digest provided and the input message.

User response: Call **sec_prepare_message()** to obtain the correct digest and signature of the message.

2650-050 **Unable to find or obtain information about the MPM file:** *file_name* (**stat()**: *error_number*).

Explanation: The security library was not able to locate the MPM file *file_name* or to obtain status about this file.

User response: Check to see if the MPM file is present and that it does not represent an unresolvable link or a loop link.

2650-051 **Unable to load the MPM file:** *file_name* (**dlopen()**: *error_number*) **dLError()**: *message*

Explanation: The security library was not able to load the MPM file. The message returned by **dLError()** explains the reason.

User response: Contact the IBM Support Center.

2650-052 **Unable to locate the MPM initialization routine:** *file_name* (**dlsym()**: *error_number*) **dLError()**: *message*

Explanation: The security library was not able to load the MPM file. The message returned by **dLError()** explains the reason.

User response: Contact the IBM Support Center.

2650-060 **libct_sec: Incorrect parameters provided to** *routine-name*.

Positional parameter number: *number*
 Parameter value: *value*

Explanation: MAL encountered a failure in *routine-name*, which was caused by the client application passing incorrect arguments to this routine.

User response: If this failure is encountered during the execution of the Cluster software trusted services, contact IBM Customer Support and report this incident. If this failure is encountered during the execution of other software, verify that the software is using this function correctly.

2650-061 **libct_sec: Invalid security or identity context.**

Explanation: The token provided does not represent a valid token descriptor or has an incorrect type.

User response: Make sure a valid security or identity token of the correct type is used.

2650-062 **libct_sec: The routine requires a security context instead of an identity context.**

Explanation: The token provided is an identity context and this routine requires a security context.

User response: Provide a security context to this routine.

2650-063 **libct_sec: The routine requires an identity context instead of a security context.**

Explanation: The token provided is a security context and this routine requires an identity context.

User response: Provide an identity context to this routine.

2650-064 **libct_sec: The caller must provide *n* bytes of memory in the second argument of sec_get_client_groups.**

Explanation: The buffer provided by the caller for the array of buffers that contains the client's group information is too small. The routine returns the number of bytes that are required.

User response: Provide a buffer that is large enough to hold the entire array of buffers that contains the client's group information.

2650-065 **libct_sec: The identity context provided does not contain the client's privilege set.**

Explanation: The identity context does not contain the client's privilege set. The most probable cause is that the application specified the SEC_F_IDCTX_NO_MAP flag to the sec_create_id_context routine when it created the identity context.

User response: Create the identity context without specifying the SEC_F_IDCTX_NO_MAP flag.

2650-066 **libct_sec: One and only one of the SEC_F_IDCTX_SECCTX and SEC_F_IDCTX_CIDB must be specified by the caller of this routine.**

Explanation: The sec_create_id_context accepts only one of the following flags as an input argument: either SEC_F_IDCTX_SECCTX or SEC_F_IDCTX_CIDB. These flags represent the type of the value provided by the caller of this routine in the third argument: either a security context or a CIDB, respectively. This error message is generated because the caller provided both flags.

User response: Provide either SEC_F_IDCTX_SECCTX or SEC_F_IDCTX_CIDB to this routine.

2650-067 **libct_sec: The mechanism specific security context data contains an authenticated identity of length 0. MPM code is *code*.**

Explanation: This is an abnormal condition for an authenticated security context. MPMs used to establish a security context must provide an authenticated identity of length greater than zero (0).

User response: Verify whether the MPM used to establish the security context is valid and up to date. If the MPM used to establish the security context is provided by IBM, please contact IBM Customer Support and report the incident.

2650-068 **libct_sec: Internal Error: The security context does not contain any MPM info. This is an abnormal condition for an authenticated security context.**

Explanation: A security context that is marked as authenticated must contain info related to what MPM was used to establish it. This message is set when the security context does not have any information regarding the MPM. This may happen if there is a memory corruption in the security library or the application or any other library used by the application.

User response: Contact IBM Customer Support and report the incident.

2650-069 **libct_sec: At most one of the SEC_F_IDCTX_FORCE_MAP and SEC_F_IDCTX_NO_MAP can be specified by the caller of this routine.**

Explanation: The `sec_create_id_context` routine accepts the `SEC_F_IDCTX_FORCE_MAP` flag or the `SEC_F_IDCTX_NO_MAP` flag as an input argument. The `SEC_F_IDCTX_FORCE_MAP` flag instructs cluster security services to get the mapped identity and group membership for the identity context. The `SEC_F_IDCTX_NO_MAP` flag instructs cluster security services to skip the mapping and group membership.

User response: Specify the `SEC_F_IDCTX_FORCE_MAP` flag or the `SEC_F_IDCTX_NO_MAP` flag.

2650-070 **libct_sec: Unable to find an MPM that match the mechanism code *code* in the cluster security services's configuration file.**

Explanation: The cluster security services configuration file does not contain an entry for an MPM that supports the security mechanism specified by *code*. It is possible that such an entry exists in the file, but it is commented out.

User response: Add an entry for the security

mechanism specified by *code* to the cluster security services configuration file.

2650-071 **libct_sec: Internal Error: mechanism specific data is missing from the (authenticated) security or identity context.**

Explanation: An authenticated security or identity context must contain mechanism specific data. This error message is returned when there is no mechanism data available. This condition may happen because of a memory violation either in the security library or in the application.

User response: If the application is provided by IBM, contact IBM Customer Support and report the incident. If the application is not provided by IBM, please contact the provider of the application.

2650-072 **libct_sec: Internal Error: client network name is missing from the identity context (mechanism code = *code*).**

Explanation: The identity context does not contain a network identity for the client, although it is marked as authenticated. This condition can be reached if there is a memory violation either in the security library or in the application itself.

User response: If the application is provided by IBM, contact IBM Customer Support and report the incident. If the application is not provided by IBM, please contact the provider of the application.

2650-073 **libct_sec: putenv() failed to set the CT_SEC_IMP_MECHS environment variable. The only reason for this failure is ENOMEM (Insufficient memory was available).**

Explanation: The `putenv()` routine failed to set the `CT_SEC_IMP_MECHS` environment variable to the value specified. The only reason for this failure is insufficient memory available for the process. This condition may occur when a number of processes allocate large amounts of memory and use all of the available memory on the system.

User response: Verify that the allocation itself is not exceeding its own limit. If a cluster software trusted service is exceeding its limit, contact IBM Customer Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its memory allocation limits, contact the system administrator and report this incident. System administrators should identify processes using excessive memory and consider terminating these processes.

2650-074 **libct_sec: Internal Error: The length of the environment variable *variable-name* exceeds the maximum allowed of 64 characters.**

Explanation: The length of *variable-name* is greater than the maximum length allowed for environment variables defined by cluster security services.

User response: Provide an environment variable that complies with the maximum length allowed by cluster security services.

2650-075 **libct_sec: Configuration Error: The length of the value for the environment variable *variable-name* exceeds the maximum allowed of 256 characters.**

Explanation: The length of the string representing the value of *variable-name* exceeds the maximum length allowed for environment variables defined by cluster security services.

User response: Contact IBM Customer Support and report this incident.

2650-076 **libct_sec: Mechanism Error: The length of the MPM mnemonic *mnemonic* is greater than the maximum length allowed by CtSec.**

Explanation: The length of the string representing the MPM mnemonic exceeds the maximum length allowed by cluster security services for the value of MPM mnemonics.

User response: Check the mechanism mnemonic string provided by the caller of the routine.

2650-077

libct_sec: Internal failure detected.
Function name: *function*
Return code from function: *code*
Routine calling the function: *routine*
Contact IBM Customer Support and report this incident.

Explanation: An unexpected failure was detected. This failure indicates a possible source code failure in the security library.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-078 **libct_sec: The security library is unable to initialize the data structures necessary to convert between the codeset used by this application and the UTF-8 data encoding format. This failure has occurred because resources needed by the cluster utilities are not available at this time. Try to run this application again at a later time.**

Explanation: The utility library used by the security library was unable to obtain the resources necessary to create the data structures it needs to convert between the application's codeset and the UTF-8 data encoding format. This may be a temporary condition that will be fixed in time, as system resources become available.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-079 **libct_sec: The security library is unable to translate a character string between the application codeset and the UTF-8 data the UTF-8 data encoding format. The character string contains bytes that are not valid in the application codeset. This failure can occur when codesets that do not fully support UTF-8 conversion are used by the execution environment. This failure can also occur if the character string memory is overwritten. Verify that the application uses a locale with a codeset that does support UTF-8 conversion, or contact the system administrator to have the default execution environment set to use such a locale. Also verify that the application is not accidentally overwriting the character string data.**

Explanation: The utility library used by the security library was unable to convert a character string between the application's codeset and the UTF-8 data encoding format because the character string contained non-valid characters. This can occur because of a codeset problem, or because the memory in the character string is being corrupted.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-080 **libct_sec: Mechanism mnemonic error: The MPM mnemonic *mnemonic* is not a valid mnemonic of a configured MPM.**

Explanation: The MPM mnemonic provided is not valid or there is no MPM configured in the cluster security services configuration file with that mnemonic.

User response: Check the mechanism mnemonic

string provided by the caller of the routine, as well as the cluster security services configuration file.

2650-081 **libct_sec: The buffer in position *index* in the vector provided is not valid: it contains a non-zero length and a NULL base.**

Explanation: The buffer provided has a non-zero length, which represents the length of the data it contains, but with a zero base (no data).

User response: Make sure the buffer has a length that matches its base length.

2650-082 **libct_sec: Context token error: sec_get_client_identity cannot generate a typed id buffer from an identity context. The caller of the routine must provide a security context in order to obtain a typed id buffer. If the application requires both the mapped identity and the typed identity buffer, then it should consider calling the routine twice with appropriate arguments.**

Explanation: The application provided an identity context to sec_get_client_identity in order to obtain a typed identity context.

User response: Provide a security context to the sec_get_client_identity in order to obtain a typed identity context.

2650-083 **libct_sec: signature buffer error: the signature buffer provided by the caller to the sec_verify_data_v routine is not valid: either its length is 0 (zero) or its value is NULL. Please provide a signature buffer generated by either the sec_sign_data_v or the sec_process_data routines.**

Explanation: The application provided a signature buffer that has either a zero length or a NULL value.

User response: Provide a valid signature, generated by either the sec_sign_data_v or sec_process_data routines.

2650-084 **libct_sec: configuration error: the MPM defined with mnemonic *mnemonic1* and code *code1* has the same priority as the MPM defined with mnemonic *mnemonic2* and code *code2*: priority**

Explanation: There are two configuration records in the ctsec.cfg file that have the same priority. This is an error and the administrator must correct the condition for the successful reading of the configuration file.

User response: Provide different priorities to each configuration file record.

2650-085 **libct_sec: configuration error: the MPM defined with mnemonic *mnemonic1* and code *code1* has the same mnemonic or code as the MPM defined with mnemonic *mnemonic2* and code *code2*.**

Explanation: There are two configuration records in the ctsec.cfg file that have the same mechanism mnemonic or code. This is an error and the administrator must correct the condition for the successful reading of the configuration file.

User response: Provide different mnemonics and codes to each configuration file record.

2650-086 **libct_sec: unauthentication warning: MAL was instructed by one of the MPMs to create an unauthenticated security context, but the current configuration does not allow it. The main reason for this condition is that the CT_SEC_IMP_MECHS environment variable for the process does not contain mechanism none.**

Explanation: MAL was instructed by an MPM to return an unauthenticated security context but the current process configuration does not allow it. The most probable reason is that the CT_SEC_IMP_MECHS environment variable for the process does not contain the mechanism "none".

User response: Check the value of the CT_SEC_IMP_MECHS environment variable for the process.

2650-087 **libct_sec: Identity context error: sec_create_id_context() is unable to generate an identity context token from the CIDB provided. The CIDB contains an identity that is usable only on the host where the CIDB was created and is ambiguous on the current host. Please ensure that the CIDB contains a network identity that is not ambiguous.**

Mechanism code: *code*
RSCT node ID (of host where CIDB was created): *node*

Explanation: The application provided a CIDB that contains an ambiguous network identity that cannot be used on the current host.

User response: Check the text of the message for corrective action.

2650-088 **libct_sec:** The ACL buffer provided to the routine is not valid: either its length is zero or its value is NULL. Please provide a valid ACL to the routine.

Explanation: A non-valid ACL buffer was provided to the routine. At a minimum, a valid ACL buffer contains the header information.

User response: Check the contents of the message for the appropriate course of action.

2650-089 **libct_sec:** The client identified by the identity context provided does not have sufficient permission for the operation requested. The client's permission from the ACL provided is *permission-from-ACL* and the permission required for the operation is *required-permission*.

Explanation: The client does not have authority to perform the operation required based on the ACL protecting the resource and the permission required. This is not an error, but simply the result of access control enforcement.

User response: None.

2650-100 **Incorrect parameters provided to**
routine_name().

Positional parameter number: *parameter*

Please provide a valid argument to the routine. Each routine defines its own criteria for valid arguments. Check the CtSec programming guide for the routine's man page to determine the range of valid arguments.

Explanation: The specified routine encountered an error that was caused by the client application passing incorrect arguments.

User response: If this failure is encountered during the execution of the cluster software trusted services, contact the IBM Support Center and report this incident. If this failure is encountered during the execution of other software, verify that the software is using this function correctly.

2650-101 **Failure: incorrect parameters provided.**

Function name: *name_of_failing_function*
Positional parameter number: *parameter*
Parameter value: *value*

If this failure is encountered during the execution of the Cluster software

trusted services, contact IBM Customer Support and report this incident. If this failure is encountered during the execution of other software, verify that the software is using this function correctly.

Explanation: The security library encountered a failure in the named routine, which was caused by the client application passing incorrect arguments to this function. *parameter* is the positional parameter that is causing this function to fail. *value* is the value of the positional parameter that is causing the failure.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-102 **Failure: Memory allocation failure.**

Function name: *name_of_failing_function*
Attempted allocation: *n* bytes

Most often, this failure occurs when a process exceeds its memory allocation limit. In rare cases, this failure occurs when a number of processes allocate huge amounts of memory and utilize all available memory on the system. Verify that the allocation itself is not exceeding its own limit. If a Cluster software trusted service is exceeding its limit, contact IBM Customer Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its memory allocation limits, contact the system administrator and report this incident. System administrators should identify processes using excessive memory and consider terminating these processes.

Explanation: The security library was unable to allocate memory. This problem usually occurs when a process exceeds its memory usage limit, and this is the most likely source of this failure. The process may have a memory leak, or it may be allocating memory but never releasing any memory. In rare cases, this failure can be caused when the virtual memory limit has been reached on the system.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-103 **Failure:** duplicate identity entries in an access control entry list. The access control editing software permitted duplicate entries to be added, or the security library permitted the software to submit multiple entries for the same identity. The security library cannot make an arbitrary decision as to which entry is the valid entry when duplicates exist. If this failure is encountered during the execution of a Cluster software trusted service ACL editor, contact IBM Customer Support and report the incident. If the failure is encountered during the execution of other software, examine the software to ensure that multiple entries are not being provided in the access control entry list.

Explanation: The security library detected multiple entries for the same user or group identity in an access control entry list during the process of converting this list to an access control list.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-104 **Internal failure detected.**

File name: *name*
Line number: *number*
Error code: *code*

Contact IBM Customer Support and report this incident.

Explanation: An unexpected failure was detected. This failure indicates a possible source code failure in the ACL library.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-105 **Advisory message: No access control entries were detected within the specified access control list for the mechanism request.**

Mechanism code used in request: *code*
Identity used in request: *identity*

Explanation: The security library was instructed to find one or more access control entries within an existing access control list for a specific security mechanism, and none were detected.

User response: This is not always a failure condition. It is valid for the security library to find no such entries if none were ever added to the access control list. The software using the security library should ensure that it is specifying the correct mechanism code value.

2650-106 **Failure:** The access control list provided to this routine is either incorrect or corrupted. It is possible that the application has inadvertently overwritten the variable containing the address of the access control list, or the application may have inadvertently overwritten the memory used to store the access control list. Verify that the application is providing the correct address for the access control list to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The access control list provided to the security library did not meet the structural specifications required of it. The library concludes that either the address provided is not the address of an access control list, or that the access control list at this address has been corrupted somehow.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-107 **Failure:** The type of the access control entry (ACLE) provided to this routine (*ACLE-type*) is of a wrong or unknown type. This routine accepts only an ACLE of type 'user' or 'group'. It is possible that the application has inadvertently overwritten the variable passed to the routine as the ACLE argument. Verify that the application is providing the correct type of ACLE to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-108 **Failure:** The access control entry (ACLE) provided to this routine does not have a valid mechanism mnemonic or identifier. An ACLE of type 'user' or 'expanded' must have both a valid mechanism mnemonic and a valid identifier. An ACLE of type of type 'group' must have a valid identifier. It is possible that the application has inadvertently overwritten the variable passed to the routine as the ACLE argument. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The access control list entry (ACLE) provided to this routine does not have a valid mechanism mnemonic or identifier.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-109 **Failure:** The access control (ACL) buffer provided to this routine does not appear to be a valid ACL buffer. It is possible that the application has inadvertently overwritten the variable passed to the routine as the ACL argument. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The access control list (ACL) buffer provided to this routine does is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-110 **Failure:** The access control (ACL) buffer provided to this routine appears to be corrupted. It is possible that the application has inadvertently overwritten the value of the ACL buffer. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory. (*file-name:line-number*)

Explanation: The access control list (ACL) buffer provided to this routine is corrupted.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-111 **Failure:** The access control list (ACL) buffer/file provided to this routine appears to be corrupted. In any ACL, there can be only one ACL entry (ACLE) of type 'unauthenticated' or 'anyother'. It is possible that the application has inadvertently overwritten the value of the ACL buffer or that the ACL file is corrupted. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying the memory use for the ACL buffer. In case of an ACL file make sure that there is only one such entry in the file.

Explanation: The access control list (ACL) buffer provided to this routine is corrupted.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-112 **Failure:** A user access control entry (ACLE) with the specified typed identity (*mechanism-mnemonic: network-identity*) does not exist in the ACL.

Explanation: The access control list (ACL) buffer provided does not contain a user access control list entry (ACLE) with the specified mechanism and network identity.

User response: Check the mechanism mnemonic and the network identity.

2650-113 **Failure:** The buffer provided by the caller for the second argument is not a valid ACL buffer (type). It is possible that the application provided the wrong buffer to the routine or that it has inadvertently overwritten the ACL buffer. Make sure that the application is providing the correct variable to the routine and perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The buffer provided is not a valid ACL buffer.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-114 **Failure:** The ACL buffer provided by the caller for the second argument does not have a supported version. Valid ACL buffer versions are version 1. It is possible that the application provided the wrong ACL buffer to the routine or that it has inadvertently overwritten the ACL buffer. Make sure that the application is providing the correct variable to the routine and perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The buffer provided does not have a valid version.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-115 **Failure:** The ACL buffer provided by the caller for the second argument does not have the correct byte ordering for the machine. Please ensure that the application converts the ACL buffer to the machine's byte ordering by calling `sec_convert_acl_tohost` before providing the ACL buffer to this routine. It is also possible that the application has inadvertently overwritten the ACL buffer. Make sure that the application converts the ACL buffer to the machine's byte ordering and perform memory leak and memory use verification tests on the application to ensure that it is not inadvertently modifying this memory.

Explanation: The buffer provided does not have the correct byte ordering for the processor.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-116 **Failure:** The type of the access control entry (ACLE) provided to this routine (*ACLE-type*) is of a wrong or unknown type. Valid ACLE types are 'unauthenticated' (1), 'anyother' (2), 'user' (3), and 'group' (4). It is possible that the application has inadvertently overwritten the variable passed to the routine as the ACLE argument. Verify that the application is providing the correct type of ACLE to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-117 **Failure:** The type of the access control entry (ACLE) provided to this routine (*ACLE-type*) requires either a valid mechanism mnemonic or an identifier, or both. It is possible that the application has inadvertently overwritten the variable passed to the routine as the ACLE argument. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The access control list entry (ACLE) provided to this routine requires a valid mechanism mnemonic, identifier, or both.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-118 **Failure:** The access control list (ACL) provided to the routine does not contain an access control list entry (ACLE) that matches the type (*ACLE-type*), the mechanism (*mechanism-mnemonic*), and the identifier (*identifier*) of the ACLE provided.

Explanation: The access control list entry (ACLE) provided to this routine cannot be found in the ACL.

User response: Provide a valid ACLE.

2650-119 **Failure:** The access control list (ACL) provided is not valid. Its length (*ACL-buffer-length*) is smaller than the size of an ACL buffer header. It is also possible that the application has inadvertently overwritten the ACL buffer. Please perform memory leak and memory use verification tests on the application to ensure that it is not inadvertently modifying this memory. (*file-name:line-number*)

Explanation: The access control list (ACL) buffer provided has a length that is too small for a valid ACL buffer.

User response: Provide a valid ACL buffer.

2650-120 **Failure:** The type of access control list entries (ACLEs) in the current sub-ACL (*ACLE-type*) is of a wrong or unknown type. Valid ACLE types are 'unauthenticated' (1), 'anyother' (2), 'user' (3), and 'group' (4). It is possible that the application has inadvertently overwritten the variable that contains the ACL buffer. Verify that the application is providing the correct type of ACLE to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.
(*file-name:line-number*)

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-121 **Failure:** The type of access control list entries (ACLEs) in the current sub-ACL (*ACLE-type*) should not contain any mechanism. It is possible that the application has inadvertently overwritten the variable that contains the ACL buffer. Verify that the application is providing the correct type of ACLE to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.
(*file-name:line-number*)

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-122 **Failure:** An access control list (ACL) can have at most one entry of type 'unauthenticated' or 'anyother' each. It is possible that the application has inadvertently overwritten the variable that contains the ACL buffer. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.
(*file-name:line-number*)

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-123 **Failure:** The access control list (ACL) provided contains a 'user' sub-ACL with an incorrect length for the mechanism mnemonic: *length*. The length of the mechanism mnemonic must be greater than 1 and less or equal than 16 bytes. It is possible that the application has inadvertently overwritten the variable that contains the ACL buffer. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.
(*file-name:line-number*)

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-124 **Failure:** The access control list (ACL) provided contains a 'user' sub-ACL with an incorrect mechanism mnemonic: *length*. The length of the mechanism mnemonic must be greater than 1 and less or equal than 16 bytes. It is possible that the application has inadvertently overwritten the variable that contains the ACL buffer. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.
(*file-name:line-number*)

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-125 **Failure:** The access control list (ACL) contains contains an access control list entry (ACLE) with a version that is not supported by the ACL library (*mechanism-mnemonic*). It is possible that the application has inadvertently overwritten the variable that contains the ACL buffer. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.
(*file-name:line-number*)

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-126 **Failure:** The access control list (ACL) contains an access control list entry (ACLE) of type 'unauthenticated' or 'anyother' that has an identifier with length greater than zero (0). These types of ACLEs do not contain identifiers and the presence of an identifier in such an ACLE indicates a problem. It is possible that the application has inadvertently overwritten the variable that contains the ACL buffer. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.
(file-name:line-number)

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-127 **Failure:** The access control list (ACL) contains an access control list entry (ACLE) of type 'user' or 'group' that has an incorrect identifier: the length of the identifier in the ACLE does not match the length of the identifier string. It is possible that the application has inadvertently overwritten the variable that contains the ACL buffer. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.
(file-name:line-number)

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-128 **Failure:** The type of the access control entry (ACLE) provided to this routine (ACLE-type) is of a wrong or unknown type. This routine accepts only an ACLE types of 'unauthenticated', 'anyother', and 'user'. It is possible that the application has inadvertently overwritten the variable passed to the routine as the ACLE type argument. Verify that the application is providing the correct type of ACLE to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently

modifying this memory.

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-129 **Failure:** The type of the access control entry (ACLE) provided to this routine requires a valid mechanism mnemonic that is not NULL or empty string. It is possible that the application has inadvertently overwritten the variable passed to the routine as the mechanism mnemonic argument. Verify that the application is providing the correct mechanism mnemonic to the routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-130 **Failure:** The type of the access control entry (ACLE) provided to this routine requires a valid identifier that is not NULL or empty string. It is possible that the application has inadvertently overwritten the variable passed to the routine as the mechanism mnemonic argument. Verify that the application is providing the correct mechanism mnemonic to the routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The type of the access control list entry (ACLE) provided to this routine is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-131 **Internal failure:** The ACL library is unable to lock/unlock the internal state data. This failure is unexpected and may occur because of a programming error or memory violation. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying the memory use for the internal state. If there are no memory violation, contact IBM's Customer Service. (*file-name:line-number, return-code*)

Explanation: The security library detected an internal error and cannot continue.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-132 **Failure:** The mechanism mnemonic provided to the routine for the first argument is not valid. It is either an empty string or its length is greater than the maximum allowed of 16 bytes. Please provide a valid mechanism mnemonic to the routine.

Explanation: The mechanism mnemonic provided is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-133 **Failure:** The ACL file name provided is not valid. This routine requires a 'full path' ACL file name when no username is specified. Please provide the full path to the ACL file or a user name in whose home directory the ACL file resides.

Explanation: The ACL file name provided is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-134 **Failure:** The username provided is not valid. A valid user name does not start with the NULL ('\0') character and is configured on the local host. Please provide a valid user name.

Explanation: The user name provided is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-135 **Failure:** The C/ACL file name provided (*ACL-file-name*) is not valid. The ACL library is either unable to find such a file or the file is not a regular file. Please provide an ACL file name that exists on the filesystem and it is not of type block, special character or fifo. (*stat(): errno = value*)

Explanation: The ACL library cannot find the ACL file name provided on the system.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-136 **Failure:** The ACL file name provided (*ACL-file-name*) is not valid in combination with the username provided (*user-name*). When the caller provides a username to the routine, the ACL file must either have a full path name (i.e. it starts with a '/') or a simple name (i.e. it does not contain any '/'). Please provide a valid name for the ACL file.

Explanation: The ACL library cannot find the ACL file name provided on the system.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-137 **Failure:** Unable to open the ACL file: *ACL-file-name*. The following error was returned by the open() subroutine: *number*. Please make sure that the ACL file name provided is valid and that the ACL file exists on the file system and is readable by the user identity of the process in which the caller of the routine is running.

Explanation: The ACL library cannot open the ACL file specified.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-138 **Failure:** Unable to lock or unlock the ACL file or the cached ACL file: *ACL-file-name*. The following error was returned by the fcntl() subroutine: *number*. Please make sure that the ACL file name provided is valid and it exists on the file system.

Explanation: The ACL library cannot lock or unlock the ACL file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-139 **Failure:** An error occurred while reading the ACL file. The ACL library was able to read only *number-of-bytes-read* bytes out of a total of *total-number-of-bytes* bytes that represents the size of the file. The read routine returned the following *errno: value*. Please check the ACL file for validity.

Explanation: The ACL library cannot read the entire contents of the ACL file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-140 **Failure:** The user provided to the routine (*user-name*) cannot be found on this system. Please provide a valid user.

Explanation: The specified user name was not found on the system.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-141 **Failure:** The ACL file provided or its correspondent CACL file are not owned by the username provided by the caller, or their file permissions allow others than to owner to write to it, or the CACL file had different file permissions than the corresponding ACL file. ACL/CACL file name: *ACL-file-name* User name: *user-name* Please ensure the following statements are true: (1) the ACL and CACL files are owned by the user whose name is provided to the routine; (2) only the owner can write to it; and (3) the CACL file has the same file permissions as the corresponding ACL file.

Explanation: The ownership and file permissions of the ACL file are not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-142 **Failure:** The ACL library is unable to initialize the data structures necessary to convert between the codeset used by this application and the UTF-8 data encoding format. This failure has occurred because resources needed by the cluster utilities are not available at this time. Try to run this application again at a later time.

Explanation: The utility library used by the security library was unable to obtain the resources necessary to

create the data structures it needs to convert between the application's codeset and the UTF-8 data encoding format. This may be a temporary condition that will be fixed in time, as system resources become available.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-143 **Failure:** The ACL library is unable to translate a character string between the application codeset and the UTF-8 data the UTF-8 data encoding format. The character string contains bytes that are not valid in the application codeset. This failure can occur when codesets that do not fully support UTF-8 conversion are used by the execution environment. This failure can also occur if the character string memory is overwritten. Verify that the application uses a locale with a codeset that does support UTF-8 conversion, or contact the system administrator to have the default execution environment set to use such a locale. Also verify that the application is not accidentally overwriting the character string data.

Explanation: The utility library used by the ACL library was unable to convert a character string between the application's codeset and the UTF-8 data encoding format because the character string contained non-valid characters. This can occur because of a codeset problem, or because the memory in the character string is being corrupted.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-144 **Failure:** An error occurred while parsing the ACL file. It appears that the ACLE at line *line-number* in the ACL file is corrupted or contains characters that are not understood by the ACL library. Please check the contents of the ACL file and make sure it conforms with the syntax and semantics defined in the RSCT Guide.

Explanation: The ACL library cannot read the entire contents of the ACL file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-145 **Failure:** An error occurred while parsing the ACL file. The mechanism mnemonic (*mechanism-mnemonic*) at line (*line-number*) is not valid: it is longer than the maximum 16 characters allowed. Please edit the ACL file and provide a valid mechanism mnemonic.

Explanation: The mechanism mnemonic provided is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-146 **Failure:** One of the characters in the ACLE's permission ('x') does not correspond to a valid permission template. Please verify that the character representation of the permissions used corresponds to the permission template set used.

Explanation: The character representation of a permission template is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-147 **Failure:** The access control list (ACL) does not contain an entry (ACLE) that corresponds to the type (*ACLE-type*), and, possibly, the mechanism (*ACLE-mechanism*) and the identifier (*ACLE-identifier*) provided. Make sure the ACL contains such an entry.

Explanation: An ACLE corresponding to the type, mechanism, and identifier that were provided in the ACL could not be found.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-148 **Failure:** The access control list (ACL) file name (*ACL-file-name*) is longer or the same length as the the maximum allowed for a file name. This condition makes is impossible for the cached ACL (CACL) file to exist. The CACL file has the same name as the ACL file with the added extension of '.cacl'. In order to save the compiled ACL in a CACL file, please provide an ACL file name that has a length smaller than the maximum allowed on the system minus 6.

Explanation: The ACL file name is too long and the CACL file cannot be created.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-149 **Failure:** The access control list (ACL) file (*ACL-file-name*) and its corresponding cached ACL (CACL) file do not have the same ownership (user or group). Please change the ownership of the CACL file to be the same as the ownership of the ACL file.

Explanation: The ACL and CACL files do not have the same ownership.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-150 **Failure:** The access control list (ACL) file (*ACL-file-name*) and its corresponding cached ACL (CACL) file do not have the same file permission . Please change the permission of the CACL file to be the same as the permission of the ACL file.

Explanation: The ACL and CACL files do not have the same file permission.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-151 **Failure:** Unable to open file (*ACL-file-name*) for writing. Please verify that there is sufficient space on the file system.

Explanation: The CACL file could not be opened for writing.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-152 **Failure:** An error occurred while writing the compiled ACL to the caching file. The ACL library was able to write only *number-of-bytes-written* bytes out of a total of *total-number-of-bytes* bytes that represents the size of the compiled ACL. The write routine returned the following errno: *value*. Please check whether there is sufficient space on the file system.

Explanation: The entire compiled ACL could not be written to the file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-153 **Failure:** An error occurred while trying to truncate the existing cached ACL file to the new size (*size*). Please contact IBM's Customer Service.

Explanation: The CACL file could not be truncated.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-154 **Failure:** An error occurred while trying to set the ownership of the cached ACL (CACL) file (*CACL-file-name*) to user id *user-ID* and group id *group-ID*. Make sure that the process calling this routine is running as root.

Explanation: The new ownership of the CACL file could not be set.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-155 **Failure:** An error occurred while trying to set the file permission of the cached ACL (CACL) file (*CACL-file-name*) to *new-file-permission*. Make sure that the process calling this routine has sufficient authority to change the file permission on the CACL file.

Explanation: The file permission of the CACL file could not be set.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-156 **Failure:** Timeout occurred when trying to lock the C/ACL file (*file-name*). The reason for the time out may be because the file is being locked by another process for more than 2 seconds. Make sure that there is no other process locking the file for more than 2 seconds.

Explanation: A timeout occurred during the locking of the ACL file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-157 **Failure:** Duplicate entries in the ACL. The ACL already contains an entry with identical type and/or mechanism mnemonic and/or identity. ACLE type: *ACLE-type*; mechanism: *ACLE-mechanism*; identity: *ACLE-identity*. Please make sure that all ACL entries in the ACL file or in the ACL buffer are unique.

Explanation: There are duplicate ACL entries in the ACL file or ACL buffer.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-158 **Failure:** The ACL entry at line *line-number* in the ACL file is longer than the maximum allowed of 1096 characters, including the end of line character. Make sure that the ACL file does not contain any line longer than 1024 characters.

Explanation: A line in the ACL file is too long.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-160 **Failure:** The following option was specified more than once: *option*. Please verify that the command was issued correctly.

Explanation: The specified option was provided more than once when the **ctaclfck** command was issued.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-161 **Failure:** The command detected an incorrect option or a missing option argument. Please verify that the command was issued correctly.

Explanation: The **ctaclfck** command was issued with an option that is either not supported or requires a value.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-162 **Failure:** The command requires the '-f' option specifying the name of the ACL file that needs to be verified syntactically. Please verify that the command was issued correctly.

Explanation: The **ctaclfck** command was issued without the **-f** option, which specifies the name of the ACL file that needs to be verified.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-163 **Warning:** The command option '-S' has not been implemented yet. This option instructs the command to stream the input ACL file and it is suitable for large ACL files.

Explanation: The **ctaclfck** command does not recognize the **-S** option.

User response: None.

2650-164 **Warning: The '-s' option is ignored because the command was invoked with the '-u' option.**

Explanation: The **ctaclfck** command ignored the **-s** option because the caller provided a user name.

User response: None.

2650-165 **Failure: The ACL file name provided (*ACL-file-name*) is not valid in combination with providing a user name (*user-name*). When a username is provided to the command, the file name must not contain any path, absolute or relative, and the file must reside in the user's home directory. Provide an ACL file that resides in the specified user's home directory.**

Explanation: The ACL file name is not valid relative to the user name.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-166 **Failure: Unable to determine the current working directory! (routine: *routine*; errno: *value*) Please report this condition to the system administrator.**

Explanation: The command cannot obtain the current working directory.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-167 **Failure: The path to the current working directory is too long for the name of the ACL file. Current working directory: *path* ACL file name: *ACL-file-name* Please provide a valid ACL file name and, if the problem persist, report this condition to the system administrator.**

Explanation: The path to the current working directory is too long for the ACL file name provided.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-168 **Failure: The ACL file name constructed from the options provided (*ACL-file-name*) is incorrect. The command is either unable to find such a file or the file is not a regular file. Please provide an ACL file name that exists on the filesystem and it is not of type block, special character or fifo. (stat(): errno = *value*)**

Explanation: The ACL file name provided could not be found on the system.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-169 **Failure: The ACL file provided (*ACL-file-name*) is not owned by the username (*user-name*) provided by the invoker, or the ACL file permissions allow others than to owner to write to it. Please ensure the following are true: (1) the ACL file is owned by the user whose name is provided to the routine; and (2) that only the owner can write to it.**

Explanation: The ownership and file permissions of the ACL file are not appropriate.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-170 **Failure: Unable to open the ACL file: *ACL-file-name*. The following error was returned by the open() subroutine: *value*. Please make sure that the ACL file name provided is valid and it exists on the file system, and that the invoker of the command has permission to read the ACL file.**

Explanation: The ACL file specified could not be opened.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-171 **ctaclfck: The ACL file (*ACL-file-name*) is empty! Please invoke the command with an ACL file that is not empty.**

Explanation: The ACL file is empty.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-172 **Failure: An error occurred while parsing the ACL file. It appears that the ACLE at line *line-number* in the ACL file is missing one or more tokens. Please check the contents of the ACL file and make sure it conforms with the syntax and semantics defined in the RSCT Guide.**

Explanation: The ACLE at the specified line in the ACL file could not be parsed.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-173 **Failure:** An error occurred while parsing the ACL file. It appears that the ACLE at line *line-number* in the ACL file has more tokens than expected. Please check the contents of the ACL file and make sure it conforms with the syntax and semantics defined in the RSCT Guide.

Explanation: The ACLE at the specified line in the ACL file could not be parsed.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-174 **Failure:** Duplicate 'anyother' or 'unauthenticated' entries in the ACL. The ACL already contains an entry with identical type. ACLE type: *ACLE-type*. Please make sure that all ACL entries in the ACL file or in the ACL buffer are unique.

Explanation: There are duplicate ACL entries in the ACL file or ACL buffer.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-175 **Failure:** Duplicate 'group' entries in ACL. The ACL already contains a group with an identical identifier. ACLE type: *ACLE-type*; ACLE identifier: *ACLE-identifier*. Please make sure that all ACL entries in the ACL file or in the ACL buffer are unique.

Explanation: There are duplicate ACL entries in the ACL file or ACL buffer.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-176 **Warning:** Unable to cache the contents of the compiled ACL file because of previously encountered errors. Please correct all errors in the ACL file before the caching can succeed.

Explanation: The contents of the compiled ACL file could not be cached because of errors.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-177 **Failure:** Unable to rename the temporary ACL cache file to its permanent name. Temporary CACL file: *temporary-CACL-file-name* Permanent CACL file: *permanent-CACL-file-name* Check whether the full directory path exists and it is writable by the user id

of the application's process.

Explanation: The CACL file's temporary name could not be changed to its permanent name.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-178 **Failure:** One of the bits in the ACLE's bit-mask permission (*value*) does not correspond to a valid permission template. Please verify that the bit-mask representation of the permissions used corresponds to the permission template set used.

Explanation: The bit-mask representation of a permission template is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-179 **Failure:** An error occurred while parsing the ACL file. It appears that the ACLE at line *line-number* in the ACL file does not have a valid ACLE type (*ACLE-type*). A valid ACLE type is one of the following characters:

'n'/'N' for unauthenticated ACLE;
'o'/'O' for any-other ACLE;
'u'/'U' for user ACLEs;
'e'/'E' for expanded ACLEs; and
'g'/'G' for group ACLEs.

Please check the contents of the ACL file and make sure it conforms with the syntax and semantics defined in the RSCT Guide.

Explanation: The entire contents of the ACL file could not be read.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-180 **Failure:** An error occurred while parsing the ACL file. It appears that the ACLE at line *line-number* in the ACL file does not have a valid permission set (x). Please verify that the character representation of the permissions used corresponds to the permission template set used.

Explanation: The character representation of a permission template is not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-200 SKC Failure: Unable to initialize one of the elements of the locking mechanism or the Session Key Cache descriptor. The most probable reason for this failure is a lack of available system resources. Please ensure that there are sufficient system resources available by reducing the number of applications running on the system.

Failing routine: *routine-name*

Return code: *return-code*

File name: *file-name*

Line no.: *line-number*

Explanation: The routine was not able to initialize the session key cache descriptor or one of the elements of the locking mechanism, probably because system resources were not available.

User response: Reduce the number of applications running on the system to make sure that there are enough system resources available.

2650-201 SKC Failure: The SKC context token provided to the routine is not valid. Please use the `sec_skc_alloc_context` routine in order to obtain a valid SKC context token. If `sec_skc_alloc_context` returned an error, do not attempt to end the context token returned.

Explanation: The caller provided an SKC context token that is not valid.

User response: Specify an SKC context token that was successfully allocated by the `sec_skc_alloc_context` routine.

2650-202 SKC Failure: The SKC context token provided to the routine is being terminated by another thread. No operation is allowed on a SKC context that is terminating, including another termination, acquiring session keys, setting context attributes, starting the context, etc. Please wait for the other thread to finish terminating the SKC context.

Explanation: The caller tried to terminate the same SKC context more than once at the same time.

User response: Wait for the first thread that tries to terminate the SKC context to finish terminating the context provided.

2650-203 SKC Failure: The SKC context attribute provided cannot be (re)set after the context was started.

Attribute identifier: *identifier*

Please terminate the current SKC context (`sec_skc_end_context`), allocate a new one (`sec_skc_alloc_context`) and then set the value of the attribute before starting the context.

Explanation: The caller tried to set (or reset) the value of an attribute after the SKC context was started. Some of the attributes defined for SKC contexts cannot be set (or reset) after the starting of the context.

User response: Terminate the current SKC context (`sec_skc_end_context`), allocate a new SKC context (`sec_skc_alloc_context`), and then set the value of the attribute before starting the context.

2650-204 SKC Failure: The value of the attribute provided is not valid.

Attribute identifier: *identifier*

Attribute value: *value*

Please provide a valid value for the SKC context attribute.

Explanation: The caller provided a non-valid value for the SKC context attribute specified. The format of an attribute's value depends on the attribute itself.

User response: For information about the format of each attribute's value, see the programming guide or contact the application's provider.

Specify a valid value for the SKC context attribute.

2650-205 SKC Failure: The value of the SKC file name attribute provided is not valid. Its length is longer than maximum allowed by the operating system either by itself (if full path) or relative to the process's current working directory (if relative path).

SKC file name: *file-name*

Current working directory: *directory*

Please provide a valid file name for the SKC file cache.

Explanation: The file name that the caller provided for the SKC file cache is too long, either by itself or relative to the current working directory.

User response: Specify a valid file name for the SKC file cache.

2650-206 SKC Failure: The value of the SKC key limit attribute is not valid. A valid total number of keys in the cache must be a positive, non-zero 32 bit integer.

Key limit provided: *limit*

Please provide a valid number of keys the SKC must hold.

Explanation: You specified **0** or a negative number for the total number of keys in the key cache.

User response: Specify a valid value for the SKC key limit attribute.

2650-207 SKC Failure: The value of the SKC key type attribute is not valid.

Key type: *type*

The following is a list of key types supported:
SEC_C_KEYTYPE_DES_MD5,
SEC_C_KEYTYPE_3DES_MD5, and
SEC_C_KEYTYPE_AES256_MD5.
Please provide a valid key type for the SKC context.

Explanation: The key type is not valid.

User response: Specify a valid key type for the SKC context.

2650-208 SKC Failure: The value of the SKC maximum number of key generator threads attribute provided is not valid. A valid maximum number of key generator threads must be a positive, 32 bit integer that is also smaller than the maximum allowed.

Max number of key generator threads provided: *max-provided*
Max number of key generator threads allowed: *max-allowed*

Please provide a valid number of max key generator threads.

Explanation: The maximum number of key generator threads for the SKC context is not valid.

User response: Specify a valid value for the maximum number of key generator threads.

2650-209 SKC Failure: The value of the SKC key generator's quota attribute is not valid. This attribute specifies how many keys a generator thread generates in one step, before adding them to the key cache. A valid key generator quota is a positive, non-zero 32 bit integer that is also smaller than the maximum allowed.

Key generator quota provided: *quota*
Maximum key generator quota allowed: *max-quota*

Please provide a valid number of max keys that a generator thread generates before saving them to the key cache.

Explanation: The value of the SKC key generator's quota attribute is not valid. This attribute specifies how many keys a generator thread generates in one step, before adding them to the key cache. A valid key generator quota is a positive, non-zero 32-bit integer that is smaller than the maximum allowed.

User response: Specify a valid value for *max-quota*.

2650-210 SKC Failure: The value of the SKC key generator thread priority attribute is not valid. This attribute specifies how much lower the priority of the key generator threads will be compared to the default thread priority. A valid key generator thread priority is a positive, non-zero, 32 bit integer that is also smaller than the maximum allowed.

Key generator thread priority provided: *priority*
Max key generator thread priority allowed: *max-priority*

Please provide a valid number for the key generator thread priority.

Explanation: The value of the SKC key generator thread priority attribute is not valid.

User response: Specify a valid value for the SKC key generator thread priority attribute.

2650-211 SKC Failure: The value of the SKC key generator threshold attribute is not valid. This attribute specifies how many keys must be removed from the key cache before new keys are being generated. A valid key generator threshold is a positive, non-zero, 32 bit integer that is also smaller than the maximum allowed.

Key generator threshold provided:
threshold

Maximum key generator threshold allowed: *max-threshold*

Please provide a valid number for the key generator threshold.

Explanation: The value of the SKC key generator threshold attribute is not valid.

User response: Specify a valid value for the key generator threshold.

2650-212 SKC Failure: The SKC context has already been allocated. In the current implementation, the SKC context cannot be allocated twice. Use **sec_skc_end_context** to terminate the previously allocated context and then allocate the context again.

Explanation: The caller attempted to allocate the SKC context twice.

User response: Terminate the SKC context by calling **sec_skc_end_context** and then allocate it again.

2650-213 SKC Internal failure: Unable to lock the pthread mutex defined by the SKC context. A most possible reason for this failure is a lack of system resources.

Failing routine: *routine-name*
Return code: *return-code*

Terminate the application, reduce the number of overall applications on the system and then restart the application.

File name: *file-name*
Line number: *line-number*

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-214 SKC Internal failure: The SKC context did not initialize properly. The pthread locking mechanism elements are not available for using. This may be due to a lack of system resources. Terminate the application, reduce the number of overall applications on the system and then restart the application.

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-215 SKC Failure: The SKC context token provided was not allocated prior to calling this routine. Only allocated contexts can be used to set attribute values, get attribute values, start, or get keys from them. Allocate the SKC context by calling **sec_skc_alloc_context** before attempting to do any of the operation mentioned before.

Explanation: The caller tried to start a context that was not previously allocated.

User response: Consult the text of the message for the appropriate corrective action.

2650-216 SKC Internal Failure: Unable to initialize a pthread attribute. A most possible reason for this failure is a lack of system resources.

Failing routine: *routine-name*
Return code: *return-code*

Terminate the application, reduce the number of overall applications on the system and then restart the application.

File name: *file-name*
Line number: *line-number*

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-217 SKC Internal Failure: Unable to get the scheduling paramaters of the current thread. There is no documented reason for this routine to fail in the manner it is being used.

Failing routine: *routine-name*
Return code: *return-code*

If this is an IBM provided application, contact Customer Support. If this is a third party application, contact the application provider.

File name: *file-name*
Line number: *line-number*

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-218 SKC Failure: The buffer containing the marshalled or encrypted key provided to this routine is not valid. Either its length or its value are incorrect.

Length of key buffer: *length*
Address of key buffer value: *address*

Please provide the key buffer from the key doublet obtained from the key cache with the `sec_sk_get_keys()` routine.

Explanation: The caller provided a key buffer that is not valid.

User response: Consult the text of the message for the appropriate corrective action.

2650-219 SKC Failure: The buffer argument provided by the caller is either NULL or its length is smaller than what is required to hold the requested number of keys.

Address of key buffer: *address*
Length of the buffer provided: *length*
Number of keys requested: *number*
Required minimum length of buffer: *min-length*

The caller must provide a buffer of at least the length specified.

Explanation: The caller provided a NULL buffer or a buffer that is too small.

User response: Consult the text of the message for the appropriate corrective action.

2650-220 SKC Internal Failure: Unable to set the scheduling paramaters of a pthread attribute. The most probable reason for this failure is a memory violation in the application's process.

Failing routine: *routine-name*
Return code: *return-code*

If this is an IBM provided application, contact Customer Support. If this is a third party application, contact the application provider.

File name: *file-name*
Line number: *line-number*

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-221 SKC Internal Failure: Unable to set the detach state of a pthread attribute. The most probable reason for this failure is a memory violation in the application's process.

Failing routine: *routine-name*
Return code: *return-code*

If this is an IBM provided application, contact Customer Support. If this is a third party application, contact the application provider.

File name: *file-name*
Line number: *line-number*

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-222 SKC Internal Failure: Unable to create the key generator thread. The most probable reason for this failure is a lack of system resources. Another reason may be a memory violation in the application's process.

Failing routine: *routine-name*
Return code: *return-code*

If this is an IBM provided application, contact Customer Support. If this is a third party application, contact the application provider.

File name: *file-name*
Line number: *line-number*

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-223 **SKC Failure:** The number of keys requested is not valid. A valid number of keys must be a positive number, greater than 0.

Number of requested keys: *number*

Provide a valid number of keys that this routine should return.

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-224 **SKC Failure:** Another thread decided to terminate the SKC context before any keys were available in the key cache. This is a normal condition generated by the application's coding practices. Please allocate and start a new SKC context before requesting any more keys from the SKC library.

File name: *file-name*

Line number: *line-number*

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-225 **SKC Internal failure:** An unexplained error condition occurred. The most probable cause is a memory violation in the application's process. A less probable cause is a coding error. Contact the application provider and make sure a memory utilization analysis is performed on the application. If this is an IBM application, contact IBM's Customer Support.

File name: *file-name*

Line number: *line-number*

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-226 **SKC Internal Failure:** The master key generator thread is no longer valid. The most probable cause is a memory violation in the application's process. A less probable cause is a coding error. Contact the application provider and make sure a memory utilization analysis is performed on the application. If this is an IBM application, contact IBM's Customer Support.

File name: *file-name*

Line number: *line-number*

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-227 **SKC Failure:** The SKC context token provided was not started prior to calling this routine. Keys can be obtained only from started SKC contexts. Please start the SKC context by calling `sec_skc_start_context` before retrieving keys from the key cache.

Explanation: The caller tried to start a context that was not previously allocated.

User response: Consult the text of the message for the appropriate corrective action.

2650-228 **SKC Failure:** The value of the SKC key generator's spin attribute is not valid. This attribute specifies how many spins a generator thread goes through before terminating. At the end of each spin, the quota of keys generated is added to the cache. A valid number of spins is a positive, non-zero 32 bit integer that is also smaller than the maximum allowed.

Number of spins provided: *spins*

Maximum number of spins allowed:
max-spins

Please provide a valid number of spins that each common generator thread goes through before terminating.

Explanation: Consult the text of the message.

User response: Consult the text of the message for the appropriate corrective action.

2650-229 SKC Failure: The buffer containing the marshalled or encrypted key provided to this routine is not valid. Either its length or its value are not valid.

Address of key buffer value: *address*
Length of key buffer: *length*

Please provide the key buffer from the key doublet obtained from the key cache with the `sec_skf_get_keys()` routine.

Explanation: The caller provided a key buffer that is not valid.

User response: Consult the text of the message for the appropriate corrective action.

2650-230 SKC Failure: The encryption/decryption key provided does not have a supported key type. The encryption/decryption key should be a CtSec (MSS) generated typed key.

Type of encryption/decryption key:
key-type

Please provide a typed key that was generated by CtSec MSS service for the encryption key argument of this routine.

Explanation: The caller provided an encryption key that is not valid.

User response: Consult the text of the message for the appropriate corrective action.

2650-231 SKC Failure: The buffer argument provided by the caller is either NULL or its length is smaller than what is required to hold the requested number of keys.

Address of key buffer: *address*
Length of the buffer provided: *length*
Number of keys requested: *number*
Required minimum length of buffer:
min-length

The caller must provide a buffer of at least the length specified.

Explanation: The caller provided a NULL buffer or a buffer that is too small.

User response: Consult the text of the message for the appropriate corrective action.

2650-232 SKC Failure: The library attempts to read/write the on-disk key cache file without any file being specified in the context. Specify the name of the on-disk key cache by setting the `SEC_C_SKF_ATTR_FILENAME` attribute for the context.

File name: *file-name*
Line number: *line-number*

Explanation: The library tried to read (or write) the on-disk key cache file even though no file name was specified for the context.

User response: Specify the name of the on-disk key cache by setting the `SEC_C_SKF_ATTR_FILENAME` attribute for the context.

2650-233 SKC Failure: The filename specified for the on-disk key cache does not represent a valid file or the process is unable to get information about the file.

On-disk key cache file name: *name*
stat()'s **errno:** *value*

Provide the name of an existing on-disk key cache file by setting the `SEC_C_SKF_ATTR_FILENAME` attribute for the context.

File name: *file-name*
Line number: *line-number*

Explanation: The specified on-disk key cache file name does not represent a valid file.

User response: Consult the text of the message for the appropriate corrective action.

2650-234 SKC Failure: The on-disk key cache specified does not have a valid header.

On-disk key cache file name: *name*

Provide the name of an existing on-disk key cache file by setting the `SEC_C_SKF_ATTR_FILENAME` attribute for the context. An on-disk key cache can be generated using the `ctscachgen` command.

File name: *file-name*
Line number: *line-number*

Explanation: The specified on-disk key cache file name does not represent a valid file.

User response: Consult the text of the message for the appropriate corrective action.

2650-235 **Failure:** Unable to lock the on-disk key cache file.

On-disk key cache file name: *name*
File descriptor: *descriptor*
fcntl()'s errno: *value*

Please make sure that the on-disk key cache file name provided is valid and it exists on the file system.

File name: *file-name*
Line number: *line-number*

Explanation: The `fcntl()` routine was not able to lock (or unlock) the on-disk key cache file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-236 **Failure:** Timeout occurred when trying to lock the on-disk key cache file.

On-disk key cache file name: *name*
File descriptor: *descriptor*

The reason for the time out may be because the file is being locked by another process for more than 2 seconds. Make sure that there is no other process locking the file for more than 2 seconds.

File name: *file-name*
Line number: *line-number*

Explanation: A timeout occurred when a process was locking the ACL file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-237 **Failure:** An error occurred while reading the contents of the on-disk key cache file into the process's memory.

On-disk key cache file name: *name*
File descriptor: *descriptor*
read()'s errno: *value*
File name: *file-name*
Line number: *line-number*
Please make sure that the on-disk key cache file exists and is valid.

Explanation: An error occurred while the `read()` routine was reading the contents of the on-disk key cache file into the memory of the process.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-238 **Failure:** An error occurred while reading the contents of the on-disk key cache file into the process's memory. The number of bytes read is smaller than the number of bytes requested to be read.

On-disk key cache file name: *name*
Number of bytes read: *bytes-read*
Number of bytes requested to be read: *bytes-requested*
File name: *file-name*
Line number: *line-number*

Explanation: An error occurred while the program was reading the contents of the on-disk key cache file into the memory of the process.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-239 **Failure:** The maximum number of readings of the key cache file has been exceeded. As a security precaution, this file is rendered useless and will not be read again.

On-disk key cache file name: *name*
Number of previous readings: *number*

Please generate another key cache file using the `ctscachgen` command or synchronize the in-memory key cache with the on-disk key cache file using the SKC API.

File name: *file-name*
Line number: *line-number*

Explanation: The program read the on-disk key cache file too many times.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-240 **Failure:** The on-disk key cache file uses a pre-encryption key to encrypt the session keys, however, the SKC context does not have a pre-encryption key set.

On-disk key cache file name: *name*

Please set the pre-encryption key attribute for the SKC context using the same key as the one used in the on-disk key cache file.

File name: *file-name*
Line number: *line-number*

Explanation: The on-disk key cache file uses a pre-encryption key, but the SKC context does not have one set.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-241 **Failure: The content of the on-disk key cache file appears to be corrupted! The SKC library did not encounter the information expected in the appropriate location in the file.**

On-disk key cache file name: *name*

Please generate another key cache file using the ctscachgen command or synchronize the in-memory key cache with the on-disk key cache file using the SKC API.

File name: *file-name*
Line number: *line-number*

Explanation: The contents of the key cache file are not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-242 **Failure: The pre-encryption key challenge in the on-disk key cache file could not be verified.**

On-disk key cache file name: *name*

Please generate another key cache file using the ctscachgen command or synchronize the in-memory key cache with the on-disk key cache file using the SKC API.

File name: *file-name*
Line number: *line-number*

Explanation: The contents of the key cache file are not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-243 **Failure: The number of bytes remained to be read from the on-disk key cache file is a negative number.**

Number of bytes: *number*
On-disk key cache file name: *name*

The main reason for this failure is a memory corruption in the application's process. Please use a memory

analysis tool and make sure there are no memory violations in the application. A less probable reason for this failure is a coding error in the SKC library. Please contact IBM's Customer Service and report this problem.

File name: *file-name*
Line number: *line-number*

Explanation: The contents of the key cache file are not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-244 **Failure: The number of bytes provided for the marshalled key doublet is less than what is required.**

Number of bytes provided: *num-provided*
Number of bytes required: *num-required*

Please provide a buffer large enough for the marshalled key buffer.

File name: *file-name*
Line number: *line-number*

Explanation: Not enough memory was provided for the marshalled key doublet.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-245 **Failure: A failure occurred during the unmarshalling of the key doublet read from the on-disk key cache file. The most probable reason for this failure is a corrupted key cache file. Please generate another key cache file using the ctscachgen command or synchronize the in-memory key cache with the on-disk key cache file using the SKC API.**

File name: *file-name*
Line number: *line-number*

Explanation: The contents of the key cache file are not valid.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-246 **Failure: A failure occurred when updating the read count of the on-disk key cache file.**

On-disk key cache file name: *name*
On-disk key cache file descriptor:

descriptor
lseek()'s *errno*: *value*

The most probable reason for this failure is a corrupted key cache file. Please generate another key cache file using the **ctscachgen** command or synchronize the in-memory key cache with the on-disk key cache file using the SKC API.

File name: *file-name*
Line number: *line-number*

Explanation: The **lseek()** routine was not able to update the read count of the on-disk key cache file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-248 **Failure:** An error occurred while writing the contents of the on-disk key cache file.

On-disk key cache file name: *name*
File descriptor: *descriptor*
write()'s *errno*: *value*

Please check that the file system where the file resides has sufficient disk space and that it can be expandable to the size required by the write operation.

File name: *file-name*
Line number: *line-number*

Explanation: An error occurred while the **write()** routine was writing the contents of the on-disk key cache file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-249 **Failure:** An error occurred while writing the contents of the on-disk key cache file.

On-disk key cache file name: *name*
open()'s *errno*: *value*
File name: *file-name*
Line number: *line-number*
Please make sure that the on-disk key cache file exists and is valid.

Explanation: An error occurred while the **open()** routine was writing the contents of the on-disk key cache file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-250 **Failure:** There are no keys in the context that can be saved into an on-disk key cache file. Please retry the operation at a later moment.

On-disk key cache file name: *name*
File name: *file-name*
Line number: *line-number*

Explanation: An error occurred while the program was writing the contents of the on-disk key cache file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-251 **Failure:** A failure occurred when sync'ing the on-disk key cache file.

On-disk key cache file name: *name*
On-disk key cache file descriptor: *descriptor*
fsync()'s *errno*: *value*

The most probable reason for this failure is a corrupted key cache file. Please generate another key cache file using the **ctscachgen** command or synchronize the in-memory key cache with the on-disk key cache file using the SKC API.

File name: *file-name*
Line number: *line-number*

Explanation: The **fsync()** routine was not able to synchronize the key cache in memory with the key cache file on disk.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-252 **SKC Failure:** The SKC context token provided was not started prior to calling this routine. Only started contexts can be synchronized with their corresponding on-disk key cache files. Start the context using **sec_skc_start_context** before synchronizing it to disk.

Explanation: The caller tried to synchronize a context that was not previously started.

User response: Consult the text of the message for the appropriate corrective action.

2650-253 **SKC Warning: Unable to write all the keys in the context to the on-disk key cache file. The error occurs because of several reasons, most probably not sufficient memory or not enough space on the file system.**

On-disk key cache file name: *name*
Number of keys written: *number-written*
Number of keys in the context: *number*
File name: *file-name*
Line number: *line-number*

Explanation: The program was not able to write all the keys in the context to the on-disk key cache file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-254 **SKC Failure: Unable to set the permission of the key cache file to read/write by owner only. The most probable cause of this problem is a lack of sufficient permission for the application's process.**

On-disk key cache file name: *name*
`chmod()`'s `errno`: *value*
File name: *file-name*
Line number: *line-number*

Explanation: The `chmod()` routine was not able to set the permission of the key cache file to read/write by owner only.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-255 **SKC Failure: Unable to open the on-disk key cache file for reading and/or writing. There are several reasons for this condition: lack of sufficient file permissions for the process; the file is part of a read-only file system; too many symbolic links encountered in the path or the pathname resolution of a symbolic link produced an intermediate result whose length exceeds the maximum file name length allowed; or the maximum allowable number of files opened in the system has been reached.**

On-disk key cache file name: *name*
`open()`'s `errno`: *value*
File name: *file-name*
Line number: *line-number*

Explanation: The `open()` routine was not able to open the on-disk key cache file for reading, writing, or both.

User response: Consult the text of this message for

the appropriate responses to this failure.

2650-256 **SKC Failure: The on-disk key cache file does not represent a regular file.**

On-disk key cache file name: *name*
File name: *file-name*
Line number: *line-number*
Please make sure that the on-disk key cache file exists and is valid.

Explanation: The on-disk key cache file does not represent a regular file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-257 **Failure: The on-disk key cache file does not use a pre-encryption key to encrypt the session keys, however, the SKC context has the pre-encryption key attribute set.**

On-disk key cache file name: *name*

On-disk key cache file name: *%1\$s*
Please do not set the pre-encryption key attribute for the SKC context when reading an on-disk key cache file that does not use a pre-encryption key to encrypt the session keys.

File name: *file-name*
Line number: *line-number*

Explanation: The on-disk key cache uses a pre-encryption key, but the SKC context does not have one set.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-258 **Failure: The session key type used by the on-disk key cache file is different from the session key type set for the SKC context.**

On-disk key cache file name: *name*

Please generate an on-disk key cache file containing the same session key type as the one set for the SKC context.

File name: *file-name*
Line number: *line-number*

Explanation: The on-disk key cache uses a different type of session keys compared to the type of session key that is set for the context.

User response: Consult the text of this message for

the appropriate responses to this failure.

2650-260 **ctscachgen Failure: Only one copy of the on-disk key cache file name option is allowed.**

Explanation: You specified the key cache file name option more than once.

User response: Specify the key cache file name option once and run the command again.

2650-261 **ctscachgen Failure: Only one copy of the session key generation method is allowed.**

Explanation: You specified the session key generation method more than once.

User response: Specify the session key generation method once and run the command again.

2650-262 **ctscachgen Failure: Only one copy of the encryption key filename is allowed.**

Explanation: You specified the encryption key file name more than once.

User response: Specify the encryption key file name once and run the command again.

2650-263 **ctscachgen Failure: Only one copy of the encryption key type is allowed.**

Explanation: You specified the encryption key type more than once.

User response: Specify the encryption key type once and run the command again.

2650-264 **ctscachgen Failure: The value of the on-disk key cache size provided is not valid. A valid value is a positive, non-zero integer.**

Explanation: You specified an incorrect value for the size of the on-disk key cache.

User response: Specify a positive, non-zero integer for the size of the on-disk key cache and run the command again.

2650-265 **ctscachgen Failure: One or more options provided to the command are not valid.**

Explanation: You specified one or more incorrect options with the command.

User response: Specify the correct options and run the command again.

2650-266 **ctscachgen Missing Option: On-disk key cache filename is missing. Please provide the name of the on-disk key cache filename (the '-c' option).**

Explanation: You specified one or more non-valid arguments with the command.

User response: Specify the name of the on-disk key cache file using the **-c** option.

2650-267 **ctscachgen Failure: The '-i' option cannot be used in conjunction with the '-n', '-k'/'-t', '-q', or '-f' options.**

Explanation: You specified an incorrect combination of options.

User response: Specify the correct options and run the command again.

2650-268 **ctscachgen Failure: At most one of the '-n', '-k'/'-t' and '-q' options or combination of options is allowed.**

Explanation: You specified an incorrect combination of options.

User response: Specify the correct options and run the command again.

2650-269 **ctscachgen Failure: The value of the '-m' option is not valid. Valid values for the '-m' option: des_md5, 3des_md5 and aes256_md5.**

Explanation: You specified an incorrect value with the **-m** option.

User response: Specify a valid value and run the command again.

2650-270 **ctscachgen Failure: The '-k' and '-t' options must be used in conjunction with each other.**

Explanation: You specified an incorrect combination of options.

User response: Specify the correct options and run the command again.

2650-271 **ctscachgen Failure: The value of the '-t' option is not valid. Valid values for the '-t' option are as follows:**

des_cbc	des_md5	3des_md5
aes256_md5	rsa512_sha	rsa1024_sha

Explanation: You specified an incorrect value with the **-t** option.

User response: Specify a valid value and run the command again.

2650-272 **ctscachgen Failure: The value of the '-k' option is not valid. A valid value for the option is a non-empty array characters representing the hexadecimal value of the encryption key.**

Explanation: You specified an incorrect value with the -k option.

User response: Specify a valid value and run the command again.

2650-273 **ctscachgen Failure: Search permission is denied for a component of the on-disk key cache filepath prefix.**

(Error info: *error-location*)

Explanation: The on-disk key cache file resides in a directory for which the invoker does not have access.

User response: Make sure the invoker has access to the on-disk key cache file path.

2650-274 **ctscachgen Failure: A component of the on-disk key cache path prefix is not a directory.**

(Error info: *error-location*)

Explanation: One or more of the subdirectories in the on-disk key cache file path do not exist.

User response: Make sure the on-disk key cache file path exists and the invoker has access to it.

2650-275 **ctscachgen Failure: Unable to determine whether the on-disk key cache file exists or not.**

(Error info: *error-location, errno-value*)

Explanation: The on-disk key cache file resides in a directory for which the invoker does not have access.

User response: Make sure the invoker has access to the on-disk key cache file path.

2650-276 **ctscachgen Failure: The on-disk key cache file name provided does not represent a regular file.**

(Error info: *error-location*)

Explanation: The on-disk key cache file name provided does not represent a regular file.

User response: Specify a valid file name.

2650-277 **ctscachgen Failure: File permission error! Check whether write permission is allowed on the directory containing the on-disk key cache file or, in case the sticky bit is set on the directory containing the on-disk key cache file, whether the invoker of the command is the file owner, or whether it is the directory owner, or whether it has appropriate privileges.**

(Error info: *error-location*)

Explanation: A file permission error occurred.

User response: Make sure the invoker of the command has permission to delete the on-disk key cache file.

2650-278 **ctscachgen Failure: Permission error! The on-disk key cache file specified is part of a read-only file system.**

(Error info: *error-location*)

Explanation: The on-disk key cache file resides in a directory for which the invoker does not have access.

User response: Make sure the on-disk key cache file is part of a writable file system.

2650-279 **ctscachgen Failure: Only one copy of the encryption key value is allowed.**

Explanation: You specified the encryption key value more than once.

User response: Specify the encryption key value once and run the command again.

2650-500 **libct_mss: Incorrect parameters provided to *routine_name*.**

Positional parameter number: *parm*
Parameter value: *value*

Explanation: The message security library encountered a failure in the named routine, which was caused by the client application passing incorrect arguments to this routine.

User response: If this failure is encountered during the execution of the cluster software trusted services, contact IBM Customer Support and report this incident. If this failure is encountered during the execution of other software, verify that the software is using this function correctly.

2650-501 **libct_mss: Memory allocation failure in *function_name*.**

Attempted allocation: *n* bytes

Explanation: The message security library was unable to allocate memory. This problem usually occurs when a process exceeds its memory usage limit, and this is the most likely source of this failure. The process may have a memory leak, or it may be allocating memory but never releasing any memory. In rare cases, this failure can be caused when the virtual memory limit has been reached on the system.

User response: Verify that the allocation itself is not exceeding its own limit. If a cluster software trusted service is exceeding its limit, contact IBM Customer Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its memory allocation limits, contact the system administrator and report this incident. System administrators should identify processes using excessive memory and consider terminating these processes.

2650-502 **libct_mss: The system cannot create the MSS pseudo random number generator pthread key.**

Explanation: The system lacked the necessary resources to create another thread-specific data key, or the system-imposed limit on the total number of keys per process PTHREAD_KEYS_MAX has been exceeded.

User response: Increase the value of PTHREAD_KEYS_MAX in case it is already set. If it is not set, contact the IBM Support Center and report this incident.

2650-503 **libct_mss: The system was unable to allocate sufficient memory to associate pthread data with the PRNG's pthread key.**

Explanation: The system was unable to allocate memory. This problem usually occurs when a process exceeds its memory usage limit, and this is the most likely source of this failure. The process may have a memory leak, or it may be allocating memory but never releasing any memory. In rare cases, this failure can be caused when the virtual memory limit has been reached on the system.

User response: Verify that the allocation itself is not exceeding its own limit. If a Cluster software trusted service is exceeding its limit, contact IBM Customer Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its memory allocation

limits, contact the system administrator and report this incident. System administrators should identify processes using excessive memory and consider terminating these processes.

2650-504 **libct_mss: An internal error occurred when the program attempted to associate pthread specific data with the PRNG's pthread key.**

Explanation: The process was unable to associate pthread data with the PRNG pthread key. The reason is that the PRNG pthread key is not valid.

User response: Contact the IBM Support Center and report this incident.

2650-505 **libct_mss: The encryption module required by this type of key (*module_name*) failed a previous loading attempt. It is possible that the encryption module does not exist, does not export the appropriate interface, or is corrupted.**

Explanation: The MSS library failed a previous attempt to load the specified encryption module. The library attempts to load an encryption module only once and never unloads it.

User response: Check to see if the specified encryption module exists on the system. If it does, make sure it is the correct module (this library does not support third party modules). If it is the correct module, contact the IBM Support Center and report the incident.

2650-506 **libct_mss: An internal error occurred in the MSS library (file: *file_name*, line: *number*, condition: *error_condition_description*).**

Explanation: An internal error occurred in the software product specified. This error was not generated by incorrect usage or environment. It was generated by an internal error condition.

User response: Contact IBM Customer Support and report the incident.

2650-507 **libct_mss: Unable to find encryption module *module_name*.**

Explanation: The library was not able to find the encryption module specified. This could happen if the encryption module was not installed, was moved to a different location, or was renamed.

User response: Check with the system administrator to see if the encryption module was installed on the system and report the incident.

2650-508 **libct_mss: Unable to load the encryption module file: *file_name* (dlopen(): *error_number*) dlopen(): *message***

Explanation: The security library was not able to load the encryption module file. The message returned by **dlopen()** explains the reason.

User response: Check with the system administrator to make sure that the encryption module is valid or that all prerequisites are available.

2650-509 **libct_mss: The encryption module *module_name* does not export the standard interface.**

Explanation: The encryption module specified does not export the routines required by the MSS library. It is possible that the encryption module is corrupted or is not authentic.

User response: Check with the system administrator to make sure the encryption module is valid.

2650-510 **libct_mss: The key provided does not have a supported type (*key_type*) or is mal-formatted.**

Explanation: The key provided does not have a supported type or is not formatted correctly. The length of the key does not match the type or its value is not valid.

User response: Use the MSS-provided routines to generate a key of the types supported. If this is an application provided by IBM, contact IBM Customer Support; otherwise, contact the Customer Support of the product vendor.

2650-511 **libct_mss: The signature provided is not valid: length: *signature_length*, value: *address_of_signature_data***

Explanation: The signature provided either has a length of 0 or a NULL pointer for its data. This could happen because data exchange in the application did not complete successfully or because another thread is interfering with some other thread's memory, for example.

User response: If this is an application provided by IBM, contact IBM Customer Support; otherwise, contact the Customer Support of the product vendor.

2650-512 **libct_mss: The signature provided does not verify the message provided.**

Explanation: The signature provided does not match the message that was provided. This means that either the message or the signature were corrupted while in transit, or that the provided signature was calculated using a different key (either type or value).

User response: Make sure the message and the signature provided are correct and that the signature was calculated with the same key (matching types and values).

2650-513 **libct_mss: The key type provided (*key_type*) is not supported in the current implementation.**

Explanation: The key type provided is not supported in the current implementation. This means that either the key type provided is not valid or the library is back-level.

User response: Make sure that the the key type is valid and the library is at the latest level.

2650-514 **libct_mss: The key type provided (*key_type*) is not supported by the MSS crypto module: *module_name*.**

Explanation: The key type provided is not supported by the specified MSS cryptographic module.

User response: Provide the appropriate key to the cryptographic module.

2650-515 **libct_mss: The input buffer provided to the cryptographic routine is greater than the maximum allowed (*value*).**

Explanation: The length of the input buffer provided to the cryptographic routine is greater than the maximum allowed. The maximum allowed for the encryption routine is 100k. The maximum allowed for the decryption routine varies, depending on the encryption algorithm.

User response: Provide an input buffer that has the supported length. You may need to split the message up into pieces that conform with the MSS policies.

2650-516 **libct_mss: The input buffer provided to the typed key unmarshaling routine is smaller than the minimum size allowed for a typed key (length of buffer data = *length*).**

Explanation: The length of the input buffer provided to the typed key unmarshaling routine is smaller than the minimum allowed. The minimum size allows for the unmarshaling of an empty typed key (without any value).

User response: Provide an input buffer that was generated by the corresponding marshaling routine.

2650-517 **libct_mss: The input buffer provided to the typed key unmarshaling routine is not valid (*reason_for_failure:value_of_failure*).**

Explanation: The input buffer provided to the unmarshaling routine is not valid. This could happen if the key type is not supported, the key length is incorrect, or the total size of the buffer does not match the size of the typed key.

User response: Provide an input buffer that was generated by the corresponding marshaling routine.

2650-518 **libct_mss: The length of the signature buffer provided to the signing routine is smaller than the required size(length of buffer data = length).**

Explanation: The length of the signature buffer provided to the routine is smaller than required.

User response: Provide a signature buffer that is at least equal to the length returned by this routine.

2650-519 **ctmss_cryptoinit Internal failure: Unable to test the FIPS certified operation of the CLiC library.**

Failing routine: *routine-name*
Return code: *return-code*

Contact IBM Customer Service Support and report this problem.

File name: *file-name*
Line number: *line-number*

Explanation: The routine was not able to test the FIPS certified operation of the CLiC library.

User response: Report this problem to the IBM Support Center.

2650-520 **ctmss_cryptoinit Internal failure: Unable to initialize the CLiC global context. The most probable cause is failure to allocate memory.**

Failing routine: *routine-name*
Return code: *return-code*

Contact IBM Customer Service Support and report this problem.

File name: *file-name*
Line number: *line-number*

Explanation: The routine was not able to initialize the CLiC global context.

User response: Report this problem to the IBM Support Center.

2650-521 **ctmss_cryptoinit Internal failure: Unable to initialize the CLiC global context. The following error message was set by the initialization routine:**

error-message

Contact IBM Customer Service Support and report this problem.

File name: *file-name*
Line number: *line-number*

Explanation: The routine was not able to initialize the CLiC global context.

User response: Report this problem to the IBM Support Center.

2650-522 **libct_mss Failure: The input message provided by the caller of this routine is invalid. Its length and/or its value is/are not valid.**

Length of input message: *length*
Address of input message: *address*

Please provide a valid input message.

File name: *file-name*
Line number: *line-number*

Explanation: The input message has an incorrect length or value.

User response: Provide a valid input message.

2650-524 **libct_mss Failure: A failure occurred in a preceeding libct_mss routine. This failure has made the internal cache of the local system trusted host list unusable. Use the sec_read_host_keys interface to bypass this failure.**

Internal status code: *status-code*
Retained failure code: *failure-code*

Explanation: The internal cache is unusable.

User response: The application should use the **sec_read_host_keys()** routine to bypass the problem.

2650-525 **libct_mss Failure:** The specified typed key file does not exist. Verify that the name provided to this routine is correct. If the file name is correct, the file may have been removed from the system. Consider recreating the file, and monitor the file to detect if the file is being accidentally or intentionally removed by other applications or system users.

Failing routine name: *routine_name*
Key file name as provided: *file_name*

Explanation: The **libct_mss** routine could not find the specified file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-526 **libct_mss Failure:** The specified typed key file cannot be accessed by this process. The permissions on the file do not permit the user of this process to access the file. Verify that the file path name provided to this routine is correct. If the correct file path name was provided, the process may not have been invoked by the correct user. Verify that the process is being started by the correct system user, and that the user has sufficient permission to access the file.

Failing routine name: *routine_name*
Key file name as provided: *file_name*

Explanation: The **libct_mss** routine could not access the specified file. File permissions are set to deny access to this file for the system user running this process.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-527 **libct_mss Memory allocation failure in**
routine_name.

Function name: *function_name*
Attempted allocation: *n* bytes

Most often, this failure occurs when a process exceeds its memory allocation limit. In rare cases, this failure occurs when a number of processes allocate huge amounts of memory and utilize all available memory on the system. Verify that the allocation itself is not exceeding its own limit. If a Cluster software trusted service is exceeding its limit, contact IBM Customer

Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its memory allocation limits, contact the system administrator and report this incident. System administrators should identify processes using excessive memory and consider terminating these processes.

Explanation: A memory allocation failed in a **libct_mss** routine or in a C library routine that the **libct_mss** routine uses (the **stat()** routine, for example).

User response: Consult the text of this message for the appropriate responses to this failure.

2650-528 **libct_mss Internal failure detected in**
function_name.

Function name: *function*
Return code from function: *code*
Routine calling the function: *routine*

Contact IBM Customer Support and report this incident.

Explanation: An unexpected failure was detected. This failure indicates a possible source code failure in the security library.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-529 **libct_mss Failure:** This routine was not able to lock the specified typed key file for exclusive use within a reasonable period of time. Another process has exclusive use of the file. Retry this request at a later time. If the condition persists, examine the system for other processes that may be attempting to examine or modify the same typed key file. A process making use of the same typed key file may have become suspended and may need to be forceably shut down. If this file is not in use by another process and the condition persists, consider removing and recreating the key file, but be aware that removing this key file may cause other applications that attempt to use the same typed key file to fail while the file is being recreated and redistributed to the nodes within the cluster that require it.

Failing routine name: *routine_name*
Key file name as provided: *file_name*

Explanation: The routine attempted to get exclusive use of the named key file. The routine tries to lock these files to ensure that the contents do not change while the command is setting or reading the file. The routine could not acquire the lock because another process already holds the lock, and after a series of retries, the routine decided that the other process was not releasing the lock. The routine was terminated.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-530 **libct_mss Failure:** The typed key file provided to this routine is either corrupted, or was created by a later version of the libct_mss library than the one currently installed on this system. This problem will prevent the libct_mss library from properly authenticating or deciphering incoming messages from other hosts within the cluster. Contact the system administrator and report this problem.

Failing routine name: *routine_name*
Key file name as provided: *file_name*

Corruption can occur if attempts are made to modify this binary file using a text editor or other unsupported file access tool. System administrators should verify that all nodes within the cluster are using the same version of the libct_mss library, or that the typed key file was created using the oldest version of the libct_mss library available within the cluster. Shut down all cluster trusted services that make use of the key stored within this file, regenerate the typed key, and redistribute the typed key to all nodes within the cluster. Once the key is redistributed, the cluster trusted services may be restarted. Monitor this file to ensure that no other applications or users are erroneously accessing and modifying this file.

Explanation: The libct_mss routine failed to read information from the named typed key file. The file format is not as expected, or the file appears too small, or specific information sought in the file does not exist. This problem can occur when the file contents get corrupted, or when a typed key file from a later version of the libct_mss library is copied to a node using an earlier version of the libct_mss library.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-531

libct_mss Failure: The named typed key file does not contain any keys. Other applications or privileged system users may have deleted the last key from this file, and may be in the process of creating a new key.

Failing routine name: *routine_name*
Key file name as provided: *file_name*

Try this function again at a later time. If this condition persists, report the failure to the system administrator, and verify that the keys have not been explicitly deleted from this file to prevent applications from running. If system administrators have not purposely removed the keys from this file, a new key needs to be generated. Shut down all cluster trusted services that make use of the key stored within this file, regenerate the typed key, and redistribute the typed key to those nodes within the cluster that require it. Once the key is redistributed, the cluster trusted services may be restarted. Monitor this file to ensure that no other applications or users are erroneously accessing and modifying this file.

Explanation: The libct_mss routine detected that the named key file did not contain any keys. This may be a temporary failure if another application is generating a new key, or a longer term failure if the final key was removed from the file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-532

libct_mss Failure: The named typed key file does not contain a key with the version requested by this application. Other applications or privileged system users may have deleted this version of the key from this file, the requested version of the key may not be known to this node, or the requested version of the key may be obsolete.

Failing routine name: *routine_name*
Key file name as provided: *file_name*
Key version requested: *version*

This process may be requesting an incorrect key version. Verify that the process is requesting the correct version of the key, instead of an obsolete version of the key. If the process is requesting the proper version, the system may have an

obsolete version of the key file that does not contain recent updates made by other systems within the cluster. For this type of failure, the process should wait and attempt the same function again at a later time. If this failure condition persists, report this failure to the system administrator. System administrators should verify that the key version requested is a valid version, and if so, update the named key file to contain this version of the key.

Explanation: The `libct_mss` routine was unable to find a specific version of a typed key in the named key file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-533 **libct_mss Failure:** The routine attempted to record a typed key to a key file, using a version that is already used by an existing key in the file.

Failing routine name: *routine_name*
Key file name as provided: *file_name*
Key version specified: *version*

This process may be requesting an incorrect key version. Verify that the process is requesting the correct version of the key, instead of an active version of the key. If the process is requesting the proper version, the system may have an obsolete version of the key file that does not contain recent updates made by other systems within the cluster. For this type of failure, the process should wait and attempt the same function again at a later time. If this failure condition persists, report this failure to the system administrator. System administrators should verify that the key version requested is a valid version, and if so, update the named key file to remove this version of the key.

Explanation: The `libct_mss` routine detected a key in an existing key file using the same version number specified by an application attempting to record a new key to the file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-534

libct_mss Failure: The routine attempted to record a typed key to a key file, using a type that is different than the type currently in use by the file.

Failing routine name: *routine_name*
Key file name as provided: *file_name*
Key type specified: *type*

This process may be requesting an incorrect key type. Verify that the process is requesting the correct type of key. If the process is requesting the proper key type, the system may have an obsolete version of the key file that does not contain recent updates made by other systems within the cluster. For this type of failure, the process should wait and attempt the same function again at a later time. If this failure condition persists, report this failure to the system administrator. System administrators should verify that the key type requested is the appropriate key type for this file, and if so, replace this key file with a file containing the correct type of keys.

Explanation: The `libct_mss` routine detected that a key being recorded to a file does not use the same type as the key file uses.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-535

libct_mss Failure: The routine attempted to record a typed key from a key file, using a type that is different than the type currently in use by the file.

Failing routine name: *routine_name*
Key file name as provided: *file_name*
Key type specified: *type*

This process may be requesting an incorrect key type. Verify that the process is requesting the correct type of key. If the process is requesting the proper key type, the system may have an obsolete version of the key file that does not contain recent updates made by other systems within the cluster. For this type of failure, the process should wait and attempt the same function again at a later time. If this failure condition persists, report this failure to the system administrator. System administrators should verify that the key type requested is the

appropriate key type for this file, and if so, replace this key file with a file containing the correct type of keys.

Explanation: The `libct_mss` routine detected that a key being deleted from a file does not use the same type as the key file uses.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-536 **libct_mss Failure: The routine attempted to delete a typed key from a key file, using a version that is not used by an existing key in the file.**

Failing routine name: *routine_name*
Key file name as provided: *file_name*
Key version specified: *version*

This process may be requesting an incorrect key version. Verify that the process is requesting the correct version of the key, instead of an obsolete version of the key. If the process is requesting the proper version, the system may have an obsolete version of the key file that does not contain recent updates made by other systems within the cluster. For this type of failure, the process should wait and attempt the same function again at a later time. If this failure condition persists, report this failure to the system administrator. System administrators should verify that the key version requested is a valid version, and if so, check the key file to ensure that all needed versions of the key exist in this file.

Explanation: The `libct_mss` routine failed to locate a key in an existing key file using the same version number specified by an application attempting to delete that key.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-537 **libct_mss Failure: The routine attempted to delete the currently active key from a typed key file.**

Failing routine name: *routine_name*
Key file name as provided: *file_name*
Key version specified: *version*

This process may be requesting an incorrect key version. Verify that the process is requesting the correct version of the key, instead of the active

version of the key. If the process is requesting the proper version, the system may have an obsolete version of the key file that does not contain recent updates made by other systems within the cluster. For this type of failure, the process should wait and attempt the same function again at a later time. If this failure condition persists, report this failure to the system administrator. System administrators should verify that the key version requested is a valid version, and if so, check the key file to ensure that all needed versions of the key exist in this file.

Explanation: The `libct_mss` routine failed to locate a key in an existing key file using the same version number specified by an application attempting to delete that key.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-538 **libct_mss Failure: The local host's public key file cannot be accessed by this process. The permissions on the file do not permit the user of this process to access the file. This process may not have been invoked by the correct user. Verify that the process is being started by the correct system user, and that the user has sufficient permission to access the file.**

Failing routine name: *routine_name*

Explanation: The `libct_mss` routine could not access the local host's public key file. File permissions are set to deny access to this file for the system user running this process.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-539 **libct_mss Failure:** The local host's public key file cannot be opened by this process. The public key file either does not exist, or the contents of the public key file are corrupted. Report this problem to the system administrator. System administrators should consider recreating the public key file on the local node, and redistributing the new public key to all nodes within the cluster that will attempt to authenticate to the local node. During the recreation and redistribution process, any processes on remote nodes attempting to authenticate to trusted services on the local node may fail the authentication attempt while the new public key is being recreated and redistributed.

Failing routine name: *routine_name*

Explanation: The **libct_mss** routine could not access the local host's public key file. The file either does not exist, or its contents are corrupted.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-540 **libct_mss Failure:** This routine was not able to lock the public key file on the local host for exclusive use within a reasonable period of time. Another process has exclusive use of the file. Retry this request at a later time. If the condition persists, examine the system for other processes that may be attempting to examine or modify the public key file. A process making use of the public key file may have become suspended and may need to be forceably shut down. If this file is not in use by another process and the condition persists, contact the system administrator and report this problem. System administrators can consider shutting down the **ctcasd** daemon on the local node, removing the public key file, and restarting the **ctcasd** daemon to recreate the file. After the file is recreated, the public key recorded in this file must be placed in the trusted host list on this node and any remote node that may attempt to authenticate with services executing on this node. Be aware that modifying the public key on the local host will cause other applications that attempt to use the same typed key file to fail while the file is being recreated and redistributed to the nodes within the cluster that require it.

Failing routine name: *routine_name*

Explanation: The **libct_mss** routine attempted to get exclusive use of the public key file. The routine tries to lock these files to ensure that the contents do not change while the command is setting or reading the file. The routine could not acquire the lock because another process already holds the lock, and after a series of retries, the routine decided that the other process was not releasing the lock. The routine was terminated.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-541 **libct_mss Failure:** The local host's private key file cannot be accessed by this process. The permissions on the file do not permit the user of this process to access the file. This process may not have been invoked by the correct user. Verify that the process is being started by the correct system user, and that the user has sufficient permission to access the file.

Failing routine name: *routine_name*

Explanation: The **libct_mss** routine could not access the local host's private key file. File permissions are set to deny access to this file for the system user running this process.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-542 **libct_mss Failure:** The local host's private key file cannot be opened by this process. The private key file either does not exist, or the contents of the public key file are corrupted. Report this problem to the system administrator. System administrators should consider recreating the private key file on the local node, and redistributing a new public key to all nodes within the cluster that will attempt to authenticate to the local node. During the recreation and redistribution process, any processes on remote nodes attempting to authenticate to trusted services on the local node may fail the authentication attempt while the new keys are being recreated and redistributed.

Failing routine name: *routine_name*

Explanation: The **libct_mss** routine could not access the local host's private key file. The file either does not exist, or its contents are corrupted.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-543 **libct_mss Failure:** This routine was not able to lock the private key file on the local host for exclusive use within a reasonable period of time. Another process has exclusive use of the file. Retry this request at a later time. If the condition persists, examine the system for other processes that may be attempting to examine or modify the private key file. A process making use of the private key file may have become suspended and may need to be forceably shut down. If this file is not in use by another process and the condition persists, contact the system administrator and report this problem. System administrators can consider shutting down the **ctcasd** daemon on the local node, removing the private key file, and restarting the **ctcasd** daemon to recreate the file. After the file is recreated, the public key recorded in this file must be placed in the trusted host list on this node and any remote node that may attempt to authenticate with services executing on this node. Be aware that modifying the private key on the local host will cause other applications that attempt to use the same typed key file to fail while the file is being recreated and redistributed to the nodes within the cluster that require it.

Failing routine name: *routine_name*

Explanation: The **libct_mss** routine attempted to get exclusive use of the private key file. The routine tries to lock these files to ensure that the contents do not change while the command is setting or reading the file. The routine could not acquire the lock because another process already holds the lock, and after a series of retries, the routine decided that the other process was not releasing the lock. The routine was terminated.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-544 **libct_mss Failure:** The local host's trusted host list cannot be accessed by this process. The permissions on the file do not permit the user of this process to access the file. This process may not have been invoked by the correct user. Verify that the process is being started by the correct system user, and that the user has sufficient permission to access the file.

Failing routine name: *routine_name*

Explanation: The **libct_mss** routine could not access the local host's trusted host list file. File permissions are set to deny access to this file for the system user running this process.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-545 **libct_mss Failure:** The local host's trusted host list cannot be opened by this process. The trusted host list either does not exist, or the contents of the trusted host list are corrupted. Report this problem to the system administrator. System administrators should consider recreating the trusted host list file on the local node. During the recreation of the trusted host list, any processes on the local node attempting to authenticate to trusted services on remote nodes may fail the authentication attempt while the new trusted host list file is being created.

Failing routine name: *routine_name*

Explanation: The **libct_mss** routine could not access the local host's trusted host list. Either the file does not exist or its contents are corrupted.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-546 **libct_mss Failure:** This routine was not able to lock the public key file on the local host for exclusive use within a reasonable period of time. Another process has exclusive use of the file. Retry this request at a later time. If the condition persists, examine the system for other processes that may be attempting to examine or modify the public key file. A process making use of the public key file may have become suspended and may need to be forcefully shut down. If this file is not in use by another process and the condition persists, contact the system administrator and report this problem. System administrators can consider shutting down the **ctcsd** daemon on the local node, removing the public key file, and restarting the **ctcsd** daemon to recreate the file. After the file is recreated, the public key recorded in this file must be placed in the trusted host list on this node and any remote node that may attempt to authenticate with services executing on this node. Be aware that modifying the public key on the local host will cause other applications that attempt to use the same typed key file to fail while the file is being recreated and redistributed to the nodes within the cluster that require it.

Failing routine name: *routine_name*

Explanation: The **libct_mss** routine attempted to get exclusive use of the public key file. The routine tries to lock these files to ensure that the contents do not change while the command is setting or reading the file. The routine could not acquire the lock because another process already holds the lock, and after a series of retries, the routine decided that the other process was not releasing the lock. The routine was terminated.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-547 **libct_mss Failure:** This routine was not able to obtain the host key for the following system name:

Requested system name: *host_name*
Failing routine name: *routine_name*

This host is not known within the trusted host list file on the local node. Verify that the correct host name was provided to this routine. The host name must be specified as it is known to the trusted host list, so this failure

may occur of the application provides a short host name to the routine when the trusted host list uses either full domain names or Internet host addresses. If the correct host name was provided, report this failure to the system administrator. System administrators should verify that the host being requested is a host that should have been recorded in the trusted host list file for this node, and add the node and its public key to the trusted host list file if necessary.

Explanation: The application attempted to obtain a host key for a remote host, but the remote host was not registered in the trusted host list file on the local node.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-548 **ctmsskf Failure: required options not provided. Verify that the command was entered correctly, using the following usage message as a guide.**

Explanation: The **ctmsskf** command was invoked, and at least one of the required options to this command was not provided. This message is followed by message INFO500, which indicates the expected usage of this command.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-549 **ctmsskf Failure: The following option was specified more than once:**

option

Please verify that the command was issued correctly.

Explanation: The **ctmsskf** command was invoked, and an option was specified more than once on the command line. This message is followed by message INFO500, which indicates the expected usage of this command.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-550 **ctmsskf Failure: The command detected an incorrect option or a missing option argument. Please verify that the command was issued correctly.**

Explanation: The **ctmsskf** command was invoked, and an unknown or unsupported option was specified on the command line. This message is followed by

message INFO500, which indicates the expected usage of this command.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-551 **ctmsskf Failure: The command was issued with conflicting options. The following options cannot be specified together in the same execution of this command:**

option1 and option2

Please verify that the command was issued correctly.

Explanation: The **ctmsskf** command was invoked, and mutually-exclusive options were specified at the same time to the command. This message is followed by message INFO500, which indicates the expected usage of this command.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-552 **ctmsskf Failure: The command detected an incorrect or unsupported key type specification. Please verify that the command was issued correctly.**

Explanation: The **ctmsskf** command was invoked, and an incorrect or unsupported key type was provided with the **-t** option. This message is followed by message INFO500, which indicates the expected usage of this command.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-553 **ctmsskf Failure: The command detected an incorrect key version number specification. Please verify that the command was issued correctly.**

Explanation: The **ctmsskf** command was invoked, and an incorrect key version number was provided with the **-v** option. This message is followed by message INFO500, which shows the valid usage of this command.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-554 **ctmsskf Failure: The command detected an incorrect key value from the command line. Please verify that the command was issued correctly, and that a hexadecimal value was specified as the key value. Verify that the key value is expressed as an even number of characters.**

Explanation: The **ctmsskf** command was invoked, and an incorrect key value was provided with the **-k** option. This message is followed by message INFO500, which shows the valid usage of this command.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-555 **ctmsskf Failure: The key value provided to this command is larger than this command can support. Verify that the correct key value has been provided to this command, and that the key value does not contain extraneous characters.**

Explanation: The **ctmsskf** command was invoked, and the key value specified by the **-k** option is too large for this command to accommodate. This message is followed by message INFO500, which indicates the expected usage of this command.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-556 **ctmsskf Failure: An unexpected failure occurred in a subroutine called by this command. Please record the following diagnostic information:**

Failing routine name: *routine_name*
Error status from failing routine:
status

Failing routine called by:
internal_routine

Please contact your software service provider and report this information.

Explanation: An unexpected error occurred. This may indicate a coding problem with the command or the libraries it uses.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-557 **ctmsskf Failure: This command is unable to create or modify the specified key file on this system. There is insufficient space in the file system where the key file would be stored to create this file. The file system causing this failure contains the following directory:**

directory_name

Increase the amount of space in this file system, or identify and remove unnecessary files in this file system to restore space to this file system.

Explanation: The **ctmsskf** command attempted to create or modify a typed key file on this system. The attempt failed, because the file system that would contain this file does not have enough space to store the file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-558 **ctmsskf Failure: The command was not able to lock the specified key file for exclusive use within a reasonable period of time. Another process has exclusive use of the file. Retry this request at a later time. If the condition persists, examine the system for other processes that may be attempting to examine or modify the same key file. A process making use of the private key file may have become suspended and may need to be forcefully shut down. If this file is not in use by another process and the condition persists, consider removing and recreating the key file, but be aware that removing this key file may cause other applications that attempt to use the private key file to fail while the file is being recreated.**

Explanation: The command attempted to get exclusive use of the named key file. The command tries to lock these files for writing, to ensure that the contents do not change while the command is setting the file. The command could not acquire the lock because another process already holds the lock, and after a series of retries, the command decided that the other process was not releasing the lock. The command was halted.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-559 **ctmsskf Failure:** The typed key file provided to this routine is either corrupted, or was created by a later version of the libct_mss library than the one currently installed on this system. This problem will prevent the libct_mss library from properly authenticating or deciphering incoming messages from other hosts within the cluster. Contact the system administrator and report this problem.

Key file path name: *file_name*

Corruption can occur if attempts are made to modify this binary file using a text editor or other unsupported file access tool. System administrators should verify that all nodes within the cluster are using the same version of the libct_mss library, or that the typed key file was created using the oldest version of the libct_mss library available within the cluster. Shut down all cluster trusted services that make use of the key stored within this file, regenerate the typed key, and redistribute the typed key to all nodes within the cluster. Once the key is redistributed, the cluster trusted services may be restarted. Monitor this file to ensure that no other applications or users are erroneously accessing and modifying this file.

Explanation: The command attempted to make use of a specified key file, and the format of that file is not the format expected by this command or the libct_mss library. ctmsskf concludes that the key file has been corrupted.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-560 **ctmsskf Failure:** The user of this command does not have sufficient privilege to access the following file:

file_name

Verify that the command is being invoked by the correct system user, and that the user has sufficient operating system privileges to access this file. Verify that the permissions on the file are correct.

Explanation: The command attempted to make use of a specified file, but the user does not have sufficient privileges to access this file.

User response: Consult the text of this message for

the appropriate responses to this failure.

2650-561 **ctmsskf Failure:** The following file cannot be opened, or does not contain any typed keys:

file_name

Verify that the correct file name was provided to this command, and that the file exists. Also verify that the correct system user is invoking this command, and that the file has granted that user permission to access the file. If any of the directories in the file path name forbid the user access to that directory, this command will be unable to access the file. If none of the above conditions exist, another process may have exclusive use of the file. Retry this request at a later time.

Explanation: This command was unable to open a file, lock the file for modification, or the command discovered that the file did not contain any keys.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-562 **ctmsskf Failure:** The command detected a failure in an operating system call caused by a kernel memory allocation failure. This command did not attempt to allocate memory directly, but the underlying operating system call failed to obtain memory it needed to complete its function. The kernel may require additional memory resources. Report this failure to the system administrator. Identify processes using large amounts of memory and consider shutting these processes down. Perform a system analysis to ensure that the kernel has been allocated sufficient memory resources.

Failing routine name: *internal_routine*

Error status from failing routine:

status

Failing routine called by:

routine_name

Explanation: An underlying operating system call returned an unexpected memory allocation failure. The command cannot continue.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-563 **ctmsskf Failure: The command detected that the specified key version already exists within the key file:**

Key file path name: *file_name*
Requested key version: *version*

Verify that the correct key version number was provided to this command. If the correct version number was specified, the key using the same version number in the key file must first be removed before the new key can be added. Keep in mind that if the existing key with this version is removed while applications are still running, some applications may experience authentication failures when the key value is changed. Consider using a different key version number that is not already used by a key within this file.

Explanation: The command attempted to add a new key with this version number to the named key file, but a key already exists with this version number.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-564 **ctmsskf Failure: The key type provided to this command is not the key type used by the key file specified:**

Key file path name: *file_name*
Key type specified by the command user: *type*

Verify that the correct file name and key type name were specified. Use the 'ctmsskf -l' command to view the contents of this file, and to determine the type of keys recorded in this file. Reissue the command again using the correct file name and key type.

Explanation: The **ctmsskf** command detected that the key file specified by the user contains a different key type than the one specified to the command with the **-t** option.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-565 **ctmsskf Failure: The routine attempted to delete the currently active version of a key from a key file.**

Typed key file path name: *file_name*
Key version specified: *version*

The user may be requesting an incorrect key version. Verify that the correct version of the key was specified, instead of the currently active version of the key. If the user is requesting the proper version, the system may have an outdated version of the key file that does not contain recent updates made by other systems within the cluster. For this type of failure, the user should wait and attempt the command again at a later time. If this failure condition persists, report this failure to the system administrator. System administrators should verify that the key version requested is a valid version, and if so, check the key file to ensure that all needed versions of the key exist in this file.

Explanation: An attempt to remove a specific version of a key from a key file failed. The version is currently in use as the active key within the file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-566 **ctmsskf Failure: The command could not allocate sufficient memory to store a typed key in memory. This failure could occur when many processes allocate huge amounts of memory and utilize all available memory on the system. Verify that the allocation itself is not exceeding its own limit. If a Cluster software trusted service is exceeding its limit, contact IBM Customer Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its memory allocation limits, contact the system administrator and report this incident. System administrators should identify processes using excessive memory and consider terminating these processes. If this failure continues to occur, report this failure to IBM Customer Support.**

Explanation: A memory allocation failed in either a **libct_mss** routine, or in a C library routine it uses, such as the **stat()** routine.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-567	ctmsskf Failure: The specified key version could not be found in the key file. Key file path name: <i>file_name</i> Requested version number: <i>version</i>
Explanation:	The specified key version does not exist in the key file.
User response:	None.

2650-570	ctmss_crypto Failure: A CLiC cryptographic routine encountered an error during its execution. Name of the failing routine: <i>name</i> Return code from failing routine: <i>code</i> Contact IBM Customer Service Support and report this problem. File name: <i>file-name</i> Line number: <i>line-number</i>
Explanation:	A CLiC cryptographic routine encountered an error during its execution.
User response:	Report this problem to the IBM Support Center.

2650-572	ctmss_crypto Failure: The value of the typed key provided is not valid: it does not represent a valid PKCS#8 encoded private or SPKI encoded public key. Key type: <i>key-type</i> Decoded key type: <i>decoded-key-type</i> Contact IBM Customer Service Support and report this problem. File name: <i>file-name</i> Line number: <i>line-number</i>
Explanation:	The value of the typed key provided is not valid.
User response:	Report this problem to the IBM Support Center.

2650-573	ctscrypto Failure: The decrypted message is not valid. Please ensure that the cipher provided was not corrupted before decrypting it and that the key used for decrypting the cipher pairs the key used for encrypting the message. File name: <i>file-name</i> Line number: <i>line-number</i>
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Explanation:	The decrypted message is not valid.
User response:	Make sure the cipher provided was not corrupted before decrypting it and that the key used for decrypting the cipher pairs was the key used for encrypting the message.

2650-574	ctscrypto Failure: The search for prime factors has been exhausted. The private exponent provided cannot be converted to a PKCS#1 encoding. Please ensure that the private and public keys provided are valid and in pair. File name: <i>file-name</i> Line number: <i>line-number</i>
Explanation:	The search for prime factors has been exhausted. The private exponent provided cannot be converted to a PKCS#1 encoding.
User response:	Make sure the private and public keys provided are valid and in pairs.

2650-575	ctscrypto Failure: The guessed prime factors do not verify the private exponent of the public key. The private exponent provided cannot be converted to a PKCS#8 encoding. Please ensure that the private and public keys provided are valid and in pair. File name: <i>file-name</i> Line number: <i>line-number</i>
Explanation:	The guessed prime factors do not verify the private exponent of the public key. The private exponent provided cannot be converted to a PKCS#8 encoding.
User response:	Make sure the private and public keys provided are valid and in pairs.

2650-576	ctscrypto Failure: Unable to encode the private/public key material in the PKCS#8/SPKI format. Please ensure that the private and public keys provided are valid and in pair. File name: <i>file-name</i> Line number: <i>line-number</i>
Explanation:	The program was not able to encode the private/public key material in the PKCS#8/SPKI format.
User response:	Make sure the private and public keys provided are valid and in pairs.

2650-577 **ctscrypto Failure: Unable to decode the private/public key material from the PKCS#8/SPKI format. Please ensure that the private and public keys provided are valid and in pair.**

File name: *file-name*
Line number: *line-number*

Explanation: The program was not able to decode the private/public key material from the PKCS#8/SPKI format.

User response: Make sure the private and public keys provided are valid and in pairs.

2650-578 **ctscrypto Failure: The private key provided is not a valid CLiC v1 proprietary encoded private key. Please provide a private key encoded in the CLiC v1 proprietary format.**

File name: *file-name*
Line number: *line-number*

Explanation: The private key provided is not a valid CLiC v1 proprietary encoded private key.

User response: Provide a private key encoded in the CLiC v1 proprietary format.

2650-579 **ctscrypto Failure: The public key provided is not a valid CLiC v1 proprietary encoded public key. Please provide a public key encoded in the CLiC v1 proprietary format.**

File name: *file-name*
Line number: *line-number*

Explanation: The public key provided is not a valid CLiC v1 proprietary encoded public key.

User response: Provide a public key encoded in the CLiC v1 proprietary format.

2650-580 **ctscrypto Failure: The private and public keys provided are not in pair. They either have a different modulus size or they do not resolve to the same challenge. Please provide private and public keys that are in pair.**

File name: *file-name*
Line number: *line-number*

Explanation: The private and public keys provided are not in pairs. They either have a different modulus size or they do not resolve to the same challenge.

User response: Provide private and public keys that are in pairs.

2650-600 **libct_crypt: Either key length or input buffer length provided to *interface_name* is zero**

Explanation: The key length or input buffer length provided to the internal encryption or decryption interface is 0.

User response: If this is an application provided by IBM, contact the IBM Support Center. Otherwise, contact the product vendor's Support Center.

2650-601 **libct_crypt: Unsupported key length: *type (key_type)* length (*key_length*)**

Explanation: The key length supplied is not supported by the encryption type.

User response: If this is an application provided by IBM, contact the IBM Support Center. Otherwise, contact the product vendor's Support Center.

2650-602 **libct_crypt: Encryption/Decryption failed**

Explanation: Encryption or decryption of the data failed with the supplied key.

User response: If this is an application provided by IBM, contact the IBM Support Center. Otherwise, contact the product vendor's Support Center.

2650-603 **libct_crypt: Unable to compute the key schedule**

Explanation: Computation of the key schedule to make encryption or decryption faster failed.

User response: If this is an application provided by IBM, contact the IBM Support Center. Otherwise, contact the product vendor's Support Center.

2650-604 **Invalid buffer provided for decryption routine (*routine_name*):buffer length(*value*)**

Explanation: Computation of the key schedule to make encryption or decryption faster failed.

User response: If this is an application provided by IBM, contact the IBM Support Center. Otherwise, contact the product vendor's Support Center.

2650-625 **Could not create backup log: *log_name*.**

Explanation: The key conversion utility (**spk2ck**) could not create the backup log.

User response: Check for incorrect permissions or see if the file system is full.

2650-626 **Invalid input : *flag* flag required.**

Explanation: The argument list is incorrect.

User response: Check the call parameters.

2650-627 **Invalid input : *flag* must be followed by an argument.**

Explanation: The argument list is incorrect.

User response: Check the call parameters.

2650-628 **Error on dlopen of library *library_name*.**

Explanation: The library cannot be installed.

User response: Check for shared library names.

2650-629 **This command invoked as:
*program_name argument_list***

Explanation: The logs are calling the argument list.

User response: None.

2650-630 **Invalid argument: *flag* was entered.**

Explanation: The argument list is incorrect.

User response: Check the call parameters.

2650-631 ***program_name* exiting with Return
Code *code*.**

Explanation: This program is exiting with a return code.

User response: None.

2650-632 **Error from *routine_name* call from
library_name, return code=*code*.**

Explanation: An error occurred when an API was called.

User response: Check the API's availability.

2650-633 **Error renaming temporary keytab file:
temporary_file_name to converted
keytab: *file_name*. The temporary file
will be deleted.**

Explanation: An error occurred when **fopen** was called.

User response: Check for incorrect permissions or see if the file system is full.

2650-634 **Error from stat function for file:
*file_name***

Explanation: An error occurred when **stat** was called.

User response: See if the file exists and check the file permissions.

2650-635 **Error from chmod function for file:
*file_name***

Explanation: An error occurred when **chmod** was called.

User response: See if the file exists and check the file permissions.

2650-636 **Error removing the file: *file_name*.**

Explanation: The **rm** function did not succeed on the specified file.

User response: Remove the file manually.

2650-637 **Error from setting address for
routine_name from *library_name*.**

Explanation: An error occurred while setting the address of an API call.

User response: Check the API's availability.

2650-638 **No keys were found for the principal
principal_name in the DCE keytab file:
file_name.**

Explanation: The DCE keytab file did not contain keys for the principal.

User response: Check the DCE keytab file for keys for this principal.

2650-639 **The DCE keytab file: *file_name* does
not exist.**

Explanation: The DCE keytab file does not exist.

User response: Check the *RSCT: Diagnosis Guide* to find out what to do about missing keys.

2650-640 **One or more of the flags entered are
incorrect OR argument value is not
supplied to a valid flag.**

Explanation: An argument value was not supplied to a valid flag or an incorrect flag was entered.

User response: Check the **spk2ck** command usage.

2650-641 **Warning: Number of keys returned from DCE keyfile is zero**

Explanation: The number of keys is zero.

User response: Check the DCE key file in /spdata/sys1/keyfiles.

2650-642 **Internal error while processing the keyfile**

Explanation: The number of keys is negative.

User response: Check the DCE key file and make sure DCE is up and running.

2650-643 **Warning: Key version number in DCE keyfile reached the maximum**

Explanation: The key version reached its maximum.

User response: Follow the procedure in the *RSCT: Administration Guide*.

2650-650 **libct_idm Failure: Incorrect parameters detected.**

Detecting function name:
function_name

Positional parameter in error:
parameter

Value of parameter: *value*

Verify that the application is providing the correct parameters to this function, and correct the application to pass valid parameters.

Explanation: A libct_idm library interface was issued, and an incorrect parameter was provided to the routine.

User response: Consult the text of this message for appropriate actions in response to this failure.

2650-651 **libct_idm Failure: Incorrect parameters detected by an internal subroutine.**

Detecting function name:
function_name

Positional parameter in error:
parameter

Value of parameter: *value*

Contact the system administrator and report this problem. System administrators should report this failure to the cluster software service representative.

Explanation: An internal subroutine in the libct_idm library detected that incorrect parameters were provided by a subroutine within the library.

User response: Consult the text of this message for appropriate actions in response to this failure.

2650-652 **libct_idm Failure: Unable to locate any security service identity mapping files on the local system. Identity mapping and group based authorization is not possible without the mapping files. The mapping files were expected in one of the following locations:**

directory_name local_mapping_filename
directory_name global_mapping_filename

These files are optional, and not required for individual based authorization functions. If these files were previously available, they may have been accidentally or intentionally removed. If the files were accidentally removed, contact the system administrator and request that these files be reconstructed or restored from a backup.

Explanation: The identity mapping subsystem failed to locate the identity mapping definition files for the local system.

User response: Consult the text of this message for appropriate actions in response to this failure.

2650-653 **libct_idm Failure: The specified identity mapping file cannot be accessed by this process. The permissions on the file do not permit the user of this process to access the file. Verify that the user of this application has sufficient privilege to access the identity mapping files.**

Failing routine name: *routine_name*
Identity mapping file name: *file_name*

Explanation: The routine could not access the named file. File permissions are set to deny access to this file for the system user running this process.

User response: Consult the text of this message for appropriate actions in response to this failure.

2650-654 **libct_idm Memory allocation failure.**

Function name: *function_name*
Attempted allocation: *n* bytes

Most often, this failure occurs when a process exceeds its memory allocation limit. In rare cases, this failure occurs when a number of processes allocate huge amounts of memory and utilize

all available memory on the system. Verify that the allocation itself is not exceeding its own limit. If a Cluster software trusted service is exceeding its limit, contact IBM Customer Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its memory allocation limits, contact the system administrator and report this incident. System administrators should identify processes using excessive memory and consider terminating these processes.

Explanation: A memory allocation failed in either a libct_idm routine, or in a C library routine it uses, such as the stat() routine.

User response: Consult the text of this message for appropriate actions in response to this failure.

2650-655 libct_idm Internal failure detected.

Function name: *function*
Return code from function: *code*
Routine calling the function: *routine*

Contact the cluster security software service representative and report this incident.

Explanation: An unexpected failure was detected. This failure indicates a possible source code failure in the security library.

User response: Consult the text of this message for appropriate actions in response to this failure.

2650-656 libct_idm Failure: This routine was not able to lock the identity mapping definition file for exclusive use within a reasonable period of time. Another process has exclusive use of the file. Retry this request at a later time. If the condition persists, examine the system for other processes that may be attempting to examine or modify the same identity map file. A process making use of the same file may have become suspended and may need to be forcibly shut down. If this file is not in use by another process and the condition persists, consider removing and recreating the identity mapping file or restoring a backup copy of the file. If you choose to remove this file, be aware that the identity mapping and group based authorization functions of the cluster security service may not be able to function without this file. While the file is missing or locked, authorization attempts may fail.

Failing routine name: *routine_name*
Identity mapping definition
file name: *file_name*

Explanation: The routine attempted to get exclusive use of the named file. The routine tries to lock these files to ensure that the contents do not change while the program is setting or reading the file. The routine could not acquire the lock because another process already holds the lock, and after a series of retries, the routine decided that the other process was not releasing the lock. The routine was terminated.

User response: Consult the text of this message for appropriate actions in response to this failure.

2650-657 libct_idm Failure: Unable to open a stream for an identity mapping definition file. Report this failure to the system administrator. System administrators should report this failure to the cluster security software service representative.

Identity mapping definition file: *file*
File descriptor value: *value*
Error code from fdopen subroutine:
code

Explanation: The libct_idm routine could not successfully create a stream from an existing open file. This may indicate an internal software failure.

User response: Consult the text of this message for appropriate actions in response to this failure.

2650-658 **libct_idm Failure: Memory allocation failure:**

Function name: *function_name*
Attempted allocation: *n* bytes

Most often, this failure occurs when a process exceeds its memory allocation limit. In rare cases, this failure occurs when a number of processes allocate huge amounts of memory and utilize all available memory on the system. Verify that the allocation itself is not exceeding its own limit. If a Cluster software trusted service is exceeding its limit, contact IBM Customer Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its memory allocation limits, contact the system administrator and report this incident. System administrators should identify processes using excessive memory and consider terminating these processes.

Explanation: A memory allocation failed in either a **libct_idm** routine, or in a C library routine it uses, such as the **stat()** routine.

User response: Consult the text of this message for appropriate actions in response to this failure.

2650-659 **libct_idm Failure: The library could not determine the modification time of an identity mapping definition file that it had already opened. The library cannot perform identity mapping or group based authorization functions at this time.**

Identity mapping definition file name:
file
File descriptor value: *value*
Error code from **fstat()** C library
routine: *code*

This failure is occasionally caused by a lack of kernel memory, which should also cause failures in other unrelated system applications. If multiple system applications are also failing, contact the system administrator and request that a kernel memory availability analysis be performed on the system. If kernel memory availability is not a cause of failure, this condition may indicate an internal failure within the

libct_idm library. Contact the cluster security software service representative and report this condition.

Explanation: After opening a file for reading purposes, the library could not obtain the modification time of the file. This is impossible, unless there is a kernel memory resource problem, or unless there is an internal failure within the **libct_idm** library.

User response: Consult the text of this message for appropriate actions in response to this failure.

2650-660 **libct_idm Failure: The MPM calling the IDM mapping service did not register a translator and cleanup routine with the IDM's native mapping service.**

MPM mnemonic: *mnemonic*

Explanation: The IDM's native mapping service requires support from the MPM used to build the security context in dealing with network identities specific to the MPM. Each MPM that wants to take advantage of the IDM's native mapping must register a translator and cleanup routine with the IDM's native mapping service that translates a network identity and a mapping entry into ID and mapping rule structures defined by the IDM's native mapping service. The fact that the IDM's native mapping service cannot find a translator and cleanup routine registration for the MPM is because of either a backlevel MPM or the MPM decided to not support the IDM's native mapping service.

User response: Check the version of the MPM. If it is backlevel, install the the most current one. If it is the most current, contact the provider of the MPM. If the provider of the MPM is IBM, contact IBM customer support and report this failure.

2650-661 **libct_idm Failure: The library was unable to initialize a mutex required by its internal structure.**

Routine where error occurred: *routine*

Explanation: The system lacks the necessary resources to initialize the mutual exclusion object for the IDM library. A possible cause for this failure is that too many processes are running.

User response: Check with the system administrator and verify the current setup of the host machine.

2650-662 **libct_idm Failure: The rule structure does not contain valid registry information or a valid number of tokens, or is ambiguous.**

Explanation: The rule structure does not represent a

valid rule. A valid rule must contain a registry of type and name supported by the calling MPM, must have at least one token in the list of tokens, and must not be ambiguous. A rule is ambiguous when it is not possible to determine the mapping based on its tokens and mapping information. An example of an ambiguous rule is when the mapping is a wildcard character and there is more than one wildcard character token.

User response: Contact the provider of the MPM used to establish the security context.

2650-663 **libct_idm Failure: The rule structure and the id structure do not share the same registry information.**

Explanation: The rule structure and the ID structure contain different registry type or name information.

User response: Contact the provider of the MPM used to establish the security context.

2650-664 **libct_idm Failure: The rule structure and the id structure contain a different number of tokens.**

Number of tokens contained by the
rule structure: *rule_tokens*
Number of tokens contained by the
id structure: *ID_tokens*

Explanation: The rule structure and the ID structure contain a different number of tokens. The IDM's native mapping service expects the same number of tokens in the rule and id structures

User response: Contact the provider of the MPM used to establish the security context.

2650-665 **libct_idm Failure: The rule structure does not contain valid registry information of a valid number of tokens.**

Explanation: The ID structure does not represent a valid ID. A valid ID must contain a registry of type and name supported by the calling MPM and must have at least one token in the list of tokens.

User response: Contact the provider of the MPM used to establish the security context.

2650-666 **libct_idm Failure: Unable to find a match between a rule token (*rule_token*) and the corresponding id token (*ID_token*).**

Explanation: The rule token cannot be matched to the corresponding ID token.

User response: Check the mapping rule or the specifying mapping entry.

2650-667 **libct_idm Failure: Unable to find a match between the rule registry (*rule_registry*) and the id registry (*ID_registry*).**

Explanation: The rule token cannot be matched to the ID registry.

User response: Check the mapping rule or the specifying mapping entry.

2650-668 **ctsidmck Failure: The command failed to successfully read the CtSec library configuration file. This file is expected to reside in the following locations:**

/var/ct/cfg/ctsec.cfg
/usr/sbin/rsct/cfg/ctsec.cfg

These files may not be available on the system, permissions on the files may have been altered, or the contents of these files may be corrupted. Ensure that at least one of these files is present, and that the file has granted read-only access to all system users. Check the configuration file for content errors.

Explanation: The **ctsidmck** command could not read the cluster security services library configuration file.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-669 **ctsidmck Failure: The command could not allocate memory. This failure can be caused by insufficient virtual memory on the system, or when the user has exceeded the memory usage limit. Check for processes started by this user that may be using large amounts of memory, and consider terminating these processes. If this failure persists, contact the cluster security software service provider and report this failure.**

Explanation: The **ctsidmck** command could not allocate memory it needed for storage of internal data.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-670 **ctsidmck Failure: An internal failure was encountered:**

Failing function name: *function*
Return code for failing function:

code
Routine invoking the failing function:
routine

Contact the cluster security software service provider and report this failure information.

Explanation: An unexpected failure occurred while the **ctsidmck** command was running. This failure should not occur.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-671 **ctsidmck Failure: The command was unable to load the security mechanism pluggable module (MPM) used by the CtSec library to interface with the following security mechanism:**

security_mechanism_mnemonic

Consult the cluster security services documentation to determine the appropriate response to this module loading failure.

Explanation: The **ctsidmck** command failed to load the cluster security services MPM associated with the mnemonic listed in the failure message.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-672 **ctsidmck Failure: The command encountered a failure while loading the security mechanism pluggable module (MPM) for the following security mechanism:**

security_mechanism_mnemonic

The following failure information was provided by the security mechanism pluggable module:

Major status code: *major_status_code*
Minor status code: *minor_status_code*
Mechanism status code: *status_code*
Mechanism status description:
status

Consult the cluster security services documentation to determine the appropriate response to this module loading failure.

Explanation: The **ctsidmck** command experienced a failure while loading the cluster security services MPM associated with the named security mechanism. The MPM rejected the load request, and returned the failure

information listed in this message.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-673 **ctsidmck Failure: An internal failure occurred within this command. The command provided incorrect parameters to the translation routine provided by the security mechanism pluggable module. Contact the cluster security software service provider and report this failure.**

Explanation: This command invoked the identity mapping translation function provided by the cluster security services library's mechanism pluggable module (MPM) for the security mechanism requested by the command user. This routine reported that incorrect arguments were provided. This indicates that the **ctsidmck** command's source code is in error or the MPM code is in error.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-674 **ctsidmck Failure: An unexpected failure was reported by the security mechanism pluggable module from the translation routine:**

Return code for failing function:
code

Contact the cluster security software service provider and report this failure information.

Explanation: An unexpected failure occurred while the **ctsidmck** command was running. This failure should not occur.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-675 **ctsidmck Failure: An unexpected failure was reported by the security mechanism pluggable module from identity rule application routine:**

Return code for failing function:
code

Contact the cluster security software service provider and report this failure information.

Explanation: An unexpected failure occurred while the **ctsidmck** command was running. This failure should not occur.

User response: Consult the text of this message for

the appropriate responses to this failure.

2650-676 **ctsidmck Failure: An internal failure occurred within this command. The command provided incorrect parameters to the identity mapping rule application routine provided by the security mechanism pluggable module. Contact the cluster security software service provider and report this failure.**

Explanation: This command invoked the identity mapping rule application function provided by the cluster security services library's mechanism pluggable module (MPM) for the security mechanism requested by the command user. This routine reported that incorrect arguments were provided. This indicates that the **ctsidmck** command's source code is in error or the MPM code is in error.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-677 **ctsidmck Failure: The command was unable to read the identity mapping files for the local system. These files are expected to reside in at least one of the following locations:**

*/var/ct/cfg/ctsec_map.local
/var/ct/cfg/ctsec_map.global
/usr/sbin/rsct/cfg/ctsec_map.global*

Verify that at least one of these files can be accessed by users on the local system, and that all system users have been granted read access to the file and the directory where the file is stored. Verify that the contents of these files have not been corrupted.

Explanation: The **ctsidmck** command was unable to read one or more of the identity mapping files on the local system. The files may not be present, may not be accessible, or one of the files may have corrupted contents.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-678 **ctsidmck Failure: A required argument was not provided by the command user.**

Explanation: The **ctsidmck** command was invoked with required options missing. This message is followed by the **ctsidmck** usage information message.

User response: Repair the usage of this command and reattempt the command.

2650-679 **ctsidmck Failure: An incorrect option for the output detail level was provided to this command: *setting***

Explanation: The requested level of output detail is not a recognized level.

User response: Repair the usage of this command and reattempt the command.

2650-680 **ctsidmck Failure: Multiple output level specifications were detected in the command line arguments. Only one output level may be specified.**

Explanation: Multiple output levels were specified by the command user.

User response: Repair the usage of this command and reattempt the command.

2650-681 **ctsidmck Failure: Multiple security mechanism specifications were detected in the command line arguments. Only one security mechanism may be specified.**

Explanation: Multiple security mechanisms were specified by the command user.

User response: Repair the usage of this command and reattempt the command.

2650-682 **ctsidmck Failure: A required argument to a command option is missing.**

Explanation: The command user omitted an argument required by one of the command options the user specified. This message is followed by INFO650.

User response: Repair the usage of this command and reattempt the command.

2650-683 **ctsidmck Failure: An incorrect option was specified by the command user.**

Explanation: The command user specified an incorrect argument to this command. This message is followed by INFO650.

User response: Repair the usage of this command and reattempt the command.

2650-684 **ctsidmck Failure: The command user provided mutually exclusive options to this command.**

Explanation: The command user specified options that cannot be combined in the same use of the command. This message is followed by a display of message INFO650.

User response: Repair the usage of this command

and reattempt the command.

2650-685 **ctsismck Failure: The command is unable to locate the security mechanism pluggable module (MPM) for the requested security mechanism. The module was expected to reside in the following location:**

path_name

Verify that the correct security mechanism was specified on the command line. Contact the system administrator and ensure that the security mechanism pluggable module is installed, and that the module has not been corrupted.

Explanation: The command was unsuccessful in locating the security mechanism pluggable module for the requested security mechanism.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-686 **ctsismck Failure: The command was unable to load the security mechanism pluggable module (MPM) for the specified security mechanism. The failure message obtained from the operating system was:**

message

The security mechanism pluggable module used by this command was:

path_name

Verify that the correct security mechanism was specified on the command line. Contact the system administrator and ensure that the security mechanism pluggable module is installed, and that the module has not been corrupted.

Explanation: The command was unable to load the mechanism pluggable module for the specified security mechanism. The operating system was queried for information on the failure, and any obtained failure information message is placed in this message.

User response: Consult the operating system error message and take appropriate action.

2650-687 **ctsismck Failure: The command was unable to locate the required initialization function within the security mechanism pluggable module (MPM) for the specified security mechanism. The failure message obtained from the operating system was:**

message

The security mechanism pluggable module used by this command was:

path_name

Verify that the correct security mechanism was specified on the command line. Contact the system administrator and ensure that the security mechanism pluggable module is installed, and that the module has not been corrupted.

Explanation: The command was unable to locate the initialization function for the specified security mechanism's pluggable module. The operating system was queried for information on the failure, and any obtained failure information message is placed in this message.

User response: Consult the operating system error message and take appropriate action.

2650-688 **ctsismck Failure: Identity mapping is not supported for the specified security mechanism.**

Explanation: The mechanism pluggable module (MPM) that supports the specified security mechanism does not provide the interfaces necessary to implement identity mapping.

User response: None.

2650-690 **libct_idm Invalid entry in cluster hosts configuration file.**

Explanation: There is an incorrect entry in the cluster hosts configuration file.

User response: Check the `/var/ct/cfg/ctsec.nodeinfo` file.

2650-691 **libct_idm Error while inserting the balanced tree node.**

Explanation: An error occurred while inserting the node into the internal data structure (balanced tree).

User response: Consult the administrator.

2650-692 **libct_idm: stat() system call on cluster hosts configuration file failed**

Explanation: An error occurred in a **stat** system call on the cluster hosts configuration file. The file may not exist.

User response: Make sure the **ctsec.nodeinfo** file exists in the **/var/ct/cfg** directory and the process has appropriate permissions.

2650-693 **libct_idm: The process doesn't have permissions to read the cluster hosts configuration file**

Explanation: An error occurred in a **open** system call on the cluster hosts configuration file. The process may not have permission to read it.

User response: Make sure the **ctsec.nodeinfo** file exists in the **/var/ct/cfg** directory and the process has appropriate permissions.

2650-694 **libct_idm: read() system call failed.**

Explanation: An error occurred while reading the data from the cluster hosts configuration file.

User response: Make sure the **ctsec.nodeinfo** file exists in the **/var/ct/cfg** directory and the process has appropriate permissions.

2650-695 **ctsidmck Failure: The security mechanism specified by the command user is not a recognized security mechanism for this system. The mechanism name supplied by the command user was:**

name

Verify that the correct security mechanism name was specified.

Explanation: The specified security mechanism does not appear in the cluster security services configuration.

User response: Consult the test of the error message for appropriate actions to take for this failure.

2650-696 **ctsidmck Failure: No security network identifier was provided by the caller.**

Explanation: The caller did not provide a required argument to the command. This message is followed by the **ctsidmck** usage information message.

User response: Repair the usage of this command and reattempt the command.

2650-697 **ctsidmck Failure: Unrecognized arguments or multiple security network identifiers provided to this command.**

Explanation: The **ctsidmck** command verifies the mapping for one security network identifier per execution. This message is followed by the **ctsidmck** usage information message.

User response: Repair the usage of this command and reattempt the command.

2650-698 **libct_idm Failure: The user specified by name *user_name* does not exist on this system. Before attempting to acquire group membership, please make sure the user name provided represents a valid user on the system.**

Explanation: The **getpwnam_r** routine returned an error, indicating that the user does not exist on the current system.

User response: Make sure the user exists on the system before trying to acquire the group membership.

2650-699 **libct_idm Failure: Unable to get information about the group specified by group id *group_ID*.**

Explanation: The **getpwgid_r** routine returned an error, indicating that the group specified by the group id provided is not valid.

User response: Make sure the group exists on the system before trying to acquire information about it.

2650-700 **libct_idm Failure: getgrent_r() failed with *errno* = *value*.**

Explanation: The **getgrent_r** routine returned an error, with **errno** set to the value provided.

User response: Make sure the group db is not readable and not corrupted.

2650-922 ***command-name* Failure: The private key contained in the private key file could not be converted to the Public Key Cryptography Standard (PKCS) format. This conversion requires that the private key and public key values be in pair. This failure can occur when the command makes use the wrong set of private and public key files. This failure can also occur if the private key file contents have been corrupted. The files used by the command were from the following locations:**

Private key file path name: *private-key*
Public key file path name: *public-key*

For further detail on the nature of the configuration problem, issue the *command-name* command with the most detailed output option enabled. The appropriate corrective action will depend on the nature of the configuration problem.

- * For user access failures, ensure that the correct system user is issuing this command.
- * For other conditions, ensure that the correct private key file path name is specified in the *private-key-option* option or the configuration file. Also ensure that the correct public key file path name is specified in the *public-key-option* option or the configuration file. If the file path name is correct, the system administrator should consider generating a new pair of private and public keys using the *ctskeygen* command and replacing the entries for the local system in the trusted host list file using the *ctsthl* command. System administrators should remember that when these keys are regenerated for a node, all systems that consider the local system a trusted host must be informed of the public key value change and update their trusted host lists accordingly.
- * If the command cannot determine the private key file status, the file system may require further manual examination.

Explanation: The command detected a configuration problem with the private key file.

User response: Consult the message text for the appropriate response actions to this message.

2650-923 **ctskeygen Attention:** The command was not able to create a Public Key Encryption Standard (PKCS) encoded version of the private key. A private key does exist for this system and will continue to be used in place of the PKCS formatted key. The security subsystem may experience a slight performance degradation, but should continue to function properly. The private key file used by this command was:

Private Key File Name: *private-key-file*

The command may have failed if the private key file contents are not in pair with the public key file contents.

Public Key File Name: *public-key-file*

Ensure that the correct private and public key files were used, and verify the arguments to the '-p' and '-q' options. In most cases, if either the '-p' or '-q' option was specified, the other option should also be specified to ensure that the correct files are used by the command. If this condition persists, the contents of either the private or the public key file may be corrupted, and a new private and public key pair may need to be generated for the system. Do not generate new private and public keys unless this system is experiencing authentication failures. If new private and public keys are generated for this system, the public key must be distributed to any remote nodes that need to authenticate to this system.

Explanation: The *ctskeygen -c* command could not successfully generate a PKCS encoded version of the private key file.

User response: Consult the text of this message for appropriate actions.

2650-924 **ctskeygen Failure:** The command was unable to obtain the private key from the private key file. The file contents may be corrupted, or the command user does not have sufficient privilege to access the private key file. The private key file used for this command was:

File name: *file-name*

Verify that the correct file name was used in this command, and ensure that the correct system user is issuing this command. If both of these conditions are satisfied, the private key file contents may be corrupted, and a new private and public key pair need to be generated for this system. If new private and public keys are generated for this system, the public key must be distributed to any remote nodes that need to authenticate to this system.

Explanation: The command could not extract a private key from the private key file.

User response: Consult the text of this message for appropriate actions.

2650-925 **ctskeygen Failure: The following public key format is not supported by this version of the 'ctskeygen' command:**

string

Please verify that the command was issued correctly. Use the 'ctskeygen -i' command to obtain the list of key generation methods supported by this version of the command.

Explanation: The **ctskeygen** command does not support the key generation method that you specified using the **-k** option.

User response: Make sure the command was issued correctly. Use the **ctskeygen -i** command to obtain the list of key generation methods supported by this version of the command.

2650-926 **ctsthl Failure: This command is unable to create a file to store the compressed trusted host list on this system. There is insufficient space in the file system where the trusted host list is stored to create a temporary file that is needed to compress the trusted host list file. The trusted host list file has not been changed. The file system causing this failure contains the following directory:**

directory_name

Increase the amount of space in this file system, or identify and remove unnecessary files in this file system to restore space to this file system.

Explanation: The **ctsthl** command tried to create a new file to store the compressed contents of the trusted host list file on this system. The attempt failed, because the file system that would contain this file does not have enough space to store the file.

User response: Consult the message text for the appropriate responses.

2650-927 ***command_name* Failure: Unable to remove the file *path_name* on the node. The unlink() sytem call failed with errno = *value*. Either the file specified does not exist or the user does not have permissions to remove the file. Please check the file permissions of the file and make sure the user attempting to remove the file has sufficient authority to do that.**

Explanation: The command detected a configuration problem with the public key file, private key file, or THL file.

User response: Consult the message text for the appropriate responses.

2650-928 ***command_name* Failure: The public key file has a configuration problem. The public key file used by this command resides in the following location:**

Public key file path name:
path_name

For further detail on the nature of the configuration problem, issue the *command_name* command with the most detailed output option enabled. The appropriate corrective action will depend on the nature of the configuration problem. For user access failures, ensure that the correct system user is issuing this command. For other conditions, ensure that the correct public key file path name is specified in the *command_option* option or the configuration file. If the file path name is correct, the system administrator should consider generating a new pair of private and public keys using the **ctskeygen** command and replacing the entries for the local system in the trusted host list file using the **ctsthl** command. System administrators should remember that when these keys are regenerated for a node, all systems that consider the local system a trusted host must be informed of the public key value change and update their trusted host lists accordingly. If the command cannot determine the public key file status, the file system may require further manual examination.

Explanation: The command detected a configuration problem with the public key file.

User response: Consult the message text for appropriate responses.

2650-929 ***command_name* Failure: The private key file has a configuration problem. The private key file used by this command resides in the following location:**

Private key file path name:
path_name

For further detail on the nature of the configuration problem, issue the *command_name* command with the most detailed output option enabled. The appropriate corrective action will depend on the nature of the configuration problem. For user access failures, ensure that the correct system user is issuing this command. For other conditions, ensure that the correct private key file path name is specified in the *command_option* option or the configuration file. If the file path name is correct, the system administrator should consider generating a new pair of private and public keys using the *ctskeygen* command and replacing the entries for the local system in the trusted host list file using the *ctsthl* command. System administrators should remember that when these keys are regenerated for a node, all systems that consider the local system a trusted host must be informed of the public key value change and update their trusted host lists accordingly. If the command cannot determine the private key file status, the file system may require further manual examination.

Explanation: The command detected a configuration problem with the private key file.

User response: Consult the message text for appropriate responses.

2650-930 *command_name* Failure: The command was unable to obtain the local host identity information necessary for the host based authentication (HBA) security mechanism to correctly identify this system to a remote system. This failure may be the result of poor network performance between the local system and the network domain name server, by poor performance on the domain name server, or by network host name resolution configuration problems. Perform the proper problem determination procedures to identify and repair host name resolution and domain name service problems. Repeat this command at a later time.

Explanation: The command was unable to fully resolve the local system's primary host name through domain-name services.

User response: Consult the message text for appropriate responses.

2650-931 *command_name* Failure: The command was unable to verify the contents of the trusted host list file. The trusted host list file used by this command is: *host_list_file_path_name* The file either has incorrect file permissions that restrict the user of this command from examining the contents of this file, or the file contents are corrupted. Verify that the correct path name for the trusted host list file was used, and that the file permissions are correct. If both items are correct, consider removing and rebuilding the trusted host list file on this system to repair the problem.

Explanation: An error occurred while attempting to retrieve one or more entries from the trusted host list.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-932 *command_name* Failure: A required option or argument was omitted from this command.

Explanation: A required option or argument was omitted from the command line. This message will be followed by a syntax message for the command.

User response: Correct the command line usage and retry the command.

2650-933 *command_name* Failure: The following option was specified more than once:

repeated_option

Please verify that the command was issued correctly.

Explanation: The command was invoked, and an option was specified more than once on the command line.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-934 *command_name* Failure: This command could not allocate memory needed. Identify processes currently executing on the system that are consuming large amounts of memory, and consider cancelling or terminating these processes. If this condition persists or occurs every time this command is invoked, this symptom may indicate a possible problem with the command itself, and the software service provider should be contacted.

Explanation: The command was unable to allocate

memory needed to complete its processing. This failure should not occur unless several processes executing on the system are consuming all available memory.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-935 *command_name* **Failure: Cannot query the available network interfaces for the local system. The command was unable to create a socket to perform this query. Retry this command at a later time. If the condition persists, contact the system administrator. System administrators should verify that there are not an excessive number of opened files on the local system, and should contact the cluster security software service provider to report this failure.**

Explanation: This command attempted to obtain the list of configured network interfaces for the local system through a socket, but was unable to create the socket. The command did not complete.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-936 *command_name* **Failure: An unexpected failure occurred in a subroutine called by this command. Please record the following diagnostic information:**

Failing routine name: *subroutine_name*

Error status from failing routine:

error_status

Failing routine called by:

internal_caller

Please contact your software service provider and report this information.

Explanation: An unexpected error occurred. This error might indicate a coding problem with the command or the libraries it uses.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-937 *command_name* **Failure: This command is unable to access the private key file on this system, because of a configuration problem on this system or because of insufficient user privilege. The failure involves the following file name:**

private_key_file_name

The command user may not have sufficient privilege to access this file. The private key file using this name may not exist, a component of this directory may not exist, may contain an unresolved symbolic link, may contain too many symbolic links, may not be a directory. If the '-q' option was specified, verify that the correct file name was provided as an argument for that command option. Examine the system configuration for this directory name, and correct any of these problems that may exist.

Explanation: The **ctskeygen** command attempted to access a private key file on this system. The attempt failed because of problems with the directory where the file is to be stored.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-938 *command_name* **Failure: The command detected an incorrect option or a missing option argument. Please verify that the command was issued correctly.**

Explanation: The specified command was invoked, and an unknown or unsupported option was specified on the command line.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-939 *libct_has* **Failure: Cannot query the available network interfaces for the local system. An attempt to query this information through an established socket connection failed. Retry the application at a later time. If the condition persists, contact the system administrator. System administrators should contact the cluster security software service provider to report this failure.**

Error code from ioctl() system call:
error_code

Explanation: The **ctsthl -s** command was issued. This command attempted to obtain the list of configured network interfaces for the local system through a socket, but was unable to query the socket. The command did not complete.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-940 **libct_has Failure: Cannot query the available network interfaces for the local system. The library was unable to create a socket to perform this query. Retry this application at a later time. If the condition persists, contact the system administrator. System administrators should verify that there are not an excessive number of opened files on the local system, and should contact the cluster security software service provider to report this failure.**

Explanation: The **ctsthl -s** command was issued. This command attempted to obtain the list of configured network interfaces for the local system through a socket, but was unable to create the socket. The command did not complete.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-941 ***command_name* Failure: Invalid message number string detected as argument to the *command_option* option. Message number strings are expected to have the following format:**

xxxx-yyy

The failure condition was detected when parsing this portion of the argument string:

incorrect_argument

Explanation: The command was unable to completely parse the list of message number strings provided. Message numbers must conform to a specific format as mentioned in this failure message, and these strings must be 8 characters in length.

User response: Reissue the command with the correct message number string.

2650-942 ***command_name* Failure: Unable to access the Host Based Authentication mechanism configuration file on this system. The configuration file is expected to reside in the following file:**

configuration_file_name

Ensure that this files is present, and verify that the user issuing this command has sufficient privilege to read these files. If the file does not exist, contact the system administrator and report this problem.

Explanation: The command was unable to read the listed configuration file.

User response: Consult the message text for the appropriate actions to take.

2650-943 **ctsthl Failure: Insufficient space in file system. The file system where the trusted host list file is stored has insufficient space available. The modification attempted by this command has failed.**

Trusted Host List File name:
filename

Contact the system administrator and report this problem. System administrators should extend the size of the file system where this file is stored, remove unnecessary files from this file system, or compress files residing in this file system to regain storage.

Explanation: The command attempted to modify the contents of the trusted host list file, but the attempt failed because of insufficient space within the file system containing this file.

User response: Consult the text of this message for appropriate responses to this failure.

2650-944 **ctsthl Failure: The value provided for the host identity value does not end on a full byte boundary:**

character-string

This command requires that all identifier values end on full byte boundaries. The value provided must contain an even number of hexadecimal characters. Verify that the correct value for the identifier value has been provided as the argument to the -p option.

Explanation: This command requires any identifier value to end on a full byte boundary. If the string contains an odd number of hexadecimal characters, the value will not end on this boundary and cannot be used.

User response: Consult the text of this message and specify a valid value with the **-p** option of the **ctsthl** command.

2650-945 **ctsthl Failure: Cannot query the available network interfaces for the local system. An attempt to query this information through an established socket connection failed. Retry this command at a later time. If the condition persists, contact the system administrator. System administrators should contact the cluster security software service provider to report this failure.**

Error code from ioctl() system call:
code

Explanation: The **ctsthl -s** command was issued. This command tried to obtain the list of configured network interfaces for the local system through a socket, but was unable to query the socket. The command did not complete.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-946 **ctsthl Failure: Cannot query the available network interfaces for the local system. The command was unable to create a socket to perform this query. Retry this command at a later time. If the condition persists, contact the system administrator. System administrators should verify that there are not an excessive number of opened files on the local system, and should contact the cluster security software service provider to report this failure.**

Explanation: The **ctsthl -s** command was issued. This command tried to obtain the list of configured network interfaces for the local system through a socket, but was unable to create the socket. The command did not complete.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-947 **ctsthl Failure: Cannot obtain a host identifier token for the local system. The user of this command may not have sufficient privilege to access the local system public key file, or the file permissions are incorrect, or permissions on the directory containing the public key file have been altered. Verify that the correct user is using this command. Verify that the file and directory permissions are set correctly. If the file permissions are not correct, contact the system administrator.**

Explanation: The command user requested the **-s** option. The command attempted to locate the public key for the local system, but was unable to access the file containing that key. The command could not complete.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-948 **ctsthl Failure: Cannot obtain a host identifier token for the local system. The user of this command may not have sufficient privilege to access the local system public key file, or the file is not present on the local system, or the file permissions are incorrect. Verify that the correct user is using this command. Verify that the public key file exists on this system, and that the file permissions are set correctly. If the file is not present, contact the system administrator.**

Explanation: The command user requested the **-s** option. The command attempted to locate the public key for the local system, but was unable to access the file containing that key. The command could not complete.

User response: Consult the text of this message for the appropriate responses to this failure.

2650-949 **libct_has Failure: Cannot locate a host identifier token for the following host name in the trusted host list on the local system: *host* Verify that the correct host identifier was provided to this routine. If the host identifier is correct, the host may not be recognized as a trusted host on this system. Contact the system administrator if this host is believed to be a trusted host to this system.**

Explanation: A host identifier token cannot be obtained for the named host, because the host is not listed among the trusted hosts in the local node's trusted host list.

User response: Consult the text of this message for appropriate responses to this failure.

2650-950 **libct_has Failure: A failure was detected while preparing a key schedule for the typed key being read from a file.**

Failure code (documented in
***/usr/include/rsct/ct_sec.h*):** *code*
Path name of typed key file:
file_name
Failing routine called by:
routine_name

The attempt to read the typed key from the file has failed. The key cannot be used for authentication or encryption functions. This failure can be caused by insufficient available memory to store the key schedule, or it can also be caused by a corruption of the key value within the file. Verify that the correct file name was specified. If the correct key file was used, report this problem to the system administrator. System administrators should verify that the key file is not corrupted, or repair or regenerate the key file if corruption is detected. Disable any trusted systems making use of this key file before regenerating the key file. Whenever a key file is regenerated, the system administrator may need to transfer the new key file to any remote systems that make use of the key within this file.

Explanation: The `libct_has` library creates a key schedule for typed keys when these keys are read from a file. This failure occurred because the key schedule creation routine reported a failure.

User response: Consult the text of this message for appropriate responses to this failure.

2650-951 **libct_has Failure: incorrect parameters provided to *function_name*.**

Function name: *function_name*

Positional parameter number:
parameter

Parameter value: *value*

If this failure is encountered during the execution of the Cluster software trusted services, contact IBM Customer Support and report this incident. If this failure is encountered during the execution of other software, verify that the software is using this function correctly.

Explanation: The security library encountered a failure in the named routine, which was caused by the client application passing incorrect arguments to this function.

User response: Consult the text of this message for appropriate responses to this failure.

2650-952 **libct_has Memory allocation failure in *function_name*.**

Function name: *function_name*

Attempted allocation: *n* bytes

Most often, this failure occurs when a process exceeds its memory allocation limit. In rare cases, this failure occurs when a number of processes allocate huge amounts of memory and utilize all available memory on the system. Verify that the allocation itself is not exceeding its own limit. If a Cluster software trusted service is exceeding its limit, contact IBM Customer Support and report this incident. If another software application is exceeding its limit, examine the software for memory management problems and memory leaks. If the application is not exceeding its memory allocation limits, contact the system administrator and report this incident. System administrators should identify processes using excessive memory and consider terminating these processes.

Explanation: The security library was unable to allocate memory. This problem usually occurs when a process exceeds its memory usage limit, and this is the most likely source of this failure. The process may have a memory leak, or it may be allocating memory but never releasing any memory. In rare cases, this failure can be caused when the virtual memory limit has been reached on the system.

User response: Consult the text of this message for appropriate responses to this failure.

2650-953 **libct_has Internal failure detected in *function_name*.**

Function name: *function*

Return code from function: *code*

Routine calling the function: *routine*

Contact IBM Customer Support and report this incident.

Explanation: An unexpected failure was detected. This failure indicates a possible source code failure in the security library.

User response: Consult the text of this message for appropriate responses to this failure.

2650-954 **libct_has Failure: Host identifier problem in *function_name*.**

Function name: *function_name*

The host identifier token provided to this routine is either not valid or corrupted. It is possible that the application has inadvertently

overwritten the variable containing the address of the token, or the application may have inadvertently overwritten the memory used to store the token. Verify that the application is providing the correct address for the host identifier token to this routine. Perform memory leak and memory use verification tests on the application to ensure that the application is not inadvertently modifying this memory.

Explanation: The host identifier token provided to the security library did not meet the structural specifications required of it. The library concludes that either the address provided is not the address of a host identifier token, or that the token at this address has been corrupted somehow.

User response: Consult the text of this message for appropriate responses to this failure.

2650-955 **libct_has Failure: Internationalization failure in *function_name*.**

Function name: *function_name*

The execution environment used by this application is using a codeset that cannot be converted to the UTF-8 data encoding format. The security library uses the UTF-8 data encoding scheme, and cannot continue if it cannot translate from the current codeset to UTF-8 data encoding.

Name of codeset in use: *codeset*

Correct the application to set locale information that uses a codeset that does support UTF-8 conversion, or contact the system administrator to have the default execution environment set to use such a locale.

Explanation: The security library is unable to convert to or from the codeset currently used by the application and the UTF-8-based data encoding that it uses internally. The library treats this as a failure, because it may receive information from remote systems in UTF-8 format, and will be unable to interpret this data.

User response: Consult the text of this message for appropriate responses to this failure.

2650-956 **libct_has Failure: Internationalization failure in *function_name*. The security library is unable to initialize the data structures necessary to convert between the codeset used by this application and the UTF-8 data encoding format. This failure has occurred because resources needed by the cluster utilities are not available at this time. Try to run this application again at a later time.**

Explanation: The utility library used by the security library was unable to obtain the resources necessary to create the data structures it needs to convert between the application's codeset and the UTF-8 data encoding format. This may be a temporary condition that will be fixed in time, as system resources become available.

User response: Consult the text of this message for appropriate responses to this failure.

2650-957 **libct_has Failure: Translation failure in *function_name*.**

Function name: *function_name*

The security library is unable to translate a character string between the application codeset and the UTF-8 data encoding format. The character string contains bytes that are non-valid in the application codeset. This failure can occur when codesets that do not fully support UTF-8 conversion are used by the execution environment. This failure can also occur if the character string memory is overwritten. Verify that the application uses a locale with a codeset that does support UTF-8 conversion, or contact the system administrator to have the default execution environment set to use such a locale. Also verify that the application is not accidentally overwriting the character string data.

Explanation: The utility library used by the security library was unable to convert a character string between the application's codeset and the UTF-8 data encoding format because the character string contained non-valid characters. This can occur because of a codeset problem, or because the memory in the character string is being corrupted.

User response: Consult the text of this message for appropriate responses to this failure.

2650-958 **libct_has Failure: Security file access failure.** A failure occurred while attempting to access the trusted host list file, the local public key file, or the local private key file. The file does not exist on this system, or does not have the correct file permissions. The file is expected to have the following name:

File name: *file_name*

The following error code was returned by the open or stat function:

Error code: *code*
(documented in */usr/include/errno.h*)

Verify that the correct user is attempting this function. Certain security files can only be accessed by the system administrator. Contact the system administrator and report problems when authorized users are denied access to this file. System administrators should verify that the file exists, and that the permissions on this file are set as indicated above. System administrators should also verify that each directory component of the above path name permits the contents of the directory to be viewed by all system users.

Explanation: The library was unable to locate or open the specified file. The file either does not exist, or has incorrect permissions set.

User response: Consult the text of this message for appropriate responses to this failure.

2650-959 **libct_has Failure: Trusted host list file corrupted.** The file containing the trusted host list appears to be corrupted. This problem will prevent the security library from properly authenticating incoming traffic from other hosts within the cluster. Contact the system administrator and report this problem. System administrators should ensure that the permissions set on this file are set to *permission_code*, and that other applications or users are not modifying the file.

Explanation: The library detected an error with the contents of the trusted host list file. The file is considered corrupted and unusable. This corruption can occur if other applications attempt to make use of, or modify the contents of, this file without using this library to do so (for example, using a text editor to update the contents of the file).

User response: Consult the text of this message for appropriate responses to this failure.

2650-960 **libct_has Failure: No space left in *file_name*.** The file system where the trusted host list file is stored has no space available. The modification attempted by this routine has failed. Name of failing library routine: *routine_name* File name used: *file_name* Contact the system administrator and report this problem. System administrators should extend the size of the file system where this file is stored, remove unnecessary files from this file system, or compress files residing in this file system to regain storage.

Explanation: The library attempted to modify the contents of the trusted host list file, but the attempt failed because of insufficient space within the file system containing this file.

User response: Consult the text of this message for appropriate responses to this failure.

2650-961 **ctskeygen Failure: required options not provided.** Verify that the command was entered correctly, using the following usage message as a guide.

Explanation: The **ctskeygen** command was invoked, and at least one of the required options to this command was not provided. This message is followed by message INFO950, which indicates the expected usage of this command.

User response: Consult the text of this message for appropriate responses to this failure.

2650-962 **ctskeygen Failure: The following option was specified more than once:**

option

Please verify that the command was issued correctly.

Explanation: The **ctskeygen** command was invoked, and an option was specified more than once on the command line. This message is followed by message INFO950, which indicates the expected usage of this command.

User response: Consult the text of this message for appropriate responses to this failure.

2650-963 **ctskeygen Failure: The command was issued with conflicting options. The following options cannot be specified together in the same execution of this command:**

option1 and option2

Please verify that the command was issued correctly.

Explanation: The **ctskeygen** command was invoked, and mutually-exclusive options were specified at the same time to the command. This message is followed by message INFO950, which indicates the expected usage of this command.

User response: Consult the text of this message for appropriate responses to this failure.

2650-964 **ctskeygen Failure: The command detected an incorrect option or a missing option argument. Please verify that the command was issued correctly.**

Explanation: The **ctskeygen** command was invoked, and an unknown or unsupported option was specified on the command line. This message is followed by message INFO950, which indicates the expected usage of this command.

User response: Consult the text of this message for appropriate responses to this failure.

2650-965 **ctskeygen Failure: The following key generation method is not supported by this version of the 'ctskeygen' command:**

method

Please verify that the command was issued correctly. Use the 'ctskeygen -l' command to obtain the list of key generation methods supported by this version of the command.

Explanation: The key generation method selected through the **-m** option is not supported by this version of the **ctskeygen** command.

User response: Consult the text of this message for appropriate responses to this failure.

2650-966 **ctskeygen Failure: The private key file already exists on this system. As a precaution, the 'ctskeygen' command will not replace the contents of this file unless explicitly instructed to do so through the use of the '-f' option is specified to this command. Please verify that this command was issued correctly. To replace the contents of the existing private key file, modify the command usage to include the '-f' option.**

Explanation: The **ctskeygen** command detected that the private (local) key file already exists on this system.

User response: Consult the text of this message for appropriate responses to this failure.

2650-967 **ctskeygen Failure: The public key file already exists on this system. As a precaution, the 'ctskeygen' command will not replace the contents of this file unless explicitly instructed to do so through the use of the '-f' option is specified to this command. Please verify that this command was issued correctly. To replace the contents of the existing public key file, modify the command usage to include the '-f' option.**

Explanation: The **ctskeygen** command detected that the public key file already exists on this system.

User response: Consult the text of this message for appropriate responses to this failure.

2650-968 **ctskeygen Failure: The user of this command does not have sufficient privilege to access, or modify the contents of, the private key file on this system. Verify that the user is executing this command as the correct system user, and verify that the permissions on the private key file and the directory containing the file permit the command user to access the file.**

Explanation: The **ctskeygen** command attempted to either create the private key file on this system, or modify the contents of the private key file. The user does not have sufficient privilege to perform either of these actions.

User response: Consult the text of this message for appropriate responses to this failure.

2650-969 **ctskeygen Failure:** The user of this command does not have sufficient privilege to access, or modify the contents of, the public key file on this system. Verify that the user is executing this command as the correct system user, and verify that the permissions on the public key file and the directory containing the file permit the command user to access the file.

Explanation: The **ctskeygen** command attempted to either create the public key file on this system, or modify the contents of the public key file. The user does not have sufficient privilege to perform either of these actions.

User response: Consult the text of this message for appropriate responses to this failure.

2650-970 **ctskeygen Failure:** This command is unable to create a file to store the private key on this system. There is insufficient space in the file system where the private key file would be stored to create this file. The file system causing this failure contains the following directory:

directory_name

Increase the amount of space in this file system, or identify and remove unnecessary files in this file system to restore space to this file system.

Explanation: The **ctskeygen** command attempted to create a private key file on this system. The attempt failed, because the file system that would contain this file does not have enough space to store the file.

User response: Consult the text of this message for appropriate responses to this failure.

2650-971 **ctskeygen Failure:** This command is unable to create a file to store the public key on this system. There is insufficient space in the file system where the public key file would be stored to create this file. The file system causing this failure contains the following directory:

directory_name

Increase the amount of space in this file system, or identify and remove unnecessary files in this file system to restore space to this file system.

Explanation: The **ctskeygen** command attempted to

create a public key file on this system. The attempt failed, because the file system that would contain this file does not have enough space to store the file.

User response: Consult the text of this message for appropriate responses to this failure.

2650-972 **ctskeygen Failure:** This command is unable to create a file to store the private key on this system, because of a configuration problem on this system. The failure involves the following directory name:

directory_name

A component of this directory may not exist, may contain an unresolved symbolic link, may contain too many symbolic links, may not be a directory, or may exist in a read-only file system. Examine the system configuration for this directory name, and correct any of these problems that may exist.

Explanation: The **ctskeygen** command attempted to create a private key file on this system. The attempt failed, because of problems with the directory where the file is to be stored.

User response: Consult the text of this message for appropriate responses to this failure.

2650-973 **ctskeygen Failure:** This command is unable to create a file to store the public key on this system, because of a configuration problem on this system. The failure involves the following directory name:

directory_name

A component of this directory may not exist, may contain an unresolved symbolic link, may contain too many symbolic links, may not be a directory, or may exist in a read-only file system. Examine the system configuration for this directory name, and correct any of these problems that may exist.

Explanation: The **ctskeygen** command attempted to create a public key file on this system. The attempt failed, because of problems with the directory where the file is to be stored.

User response: Consult the text of this message for appropriate responses to this failure.

2650-974 **ctskeygen Failure:** The command was not able to lock the private key file for exclusive use within a reasonable period of time. Another process has exclusive use of the file. Retry this request at a later time. If the condition persists, examine the system for other processes that may be attempting to examine or modify the system's private key file. A process making use of the private key file may have become suspended and may need to be forcibly shut down. If this file is not in use by another process and the condition persists, consider removing and recreating the private key file, but be aware that removing this key file may cause other applications that attempt to use the private key file to fail while the file is being recreated.

Explanation: The command attempted to get exclusive use of the named key file. The command tries to lock these files for writing, to ensure that the contents do not change while the command is setting the file. The command could not acquire the lock because another process already holds the lock, and after a series of retries, the command decided that the other process was not releasing the lock. The command was halted.

User response: Consult the text of this message for appropriate responses to this failure.

2650-975 **ctskeygen Failure:** The command was not able to lock the public key file for exclusive use within a reasonable period of time. Another process has exclusive use of the file. Retry this request at a later time. If the condition persists, examine the system for other processes that may be attempting to examine or modify the system's public key file. A process making use of the public key file may have become suspended and may need to be forcibly shut down. If this file is not in use by another process and the condition persists, consider removing and recreating the public key file, but be aware that removing this key file may cause other applications that attempt to use the public key file to fail while the file is being recreated.

Explanation: The command attempted to get exclusive use of the named key file. The command tries to lock these files for writing, to ensure that the contents do not change while the command is setting the file. The command could not acquire the lock because another process already holds the lock, and after a

series of retries, the command decided that the other process was not releasing the lock. The command was halted.

User response: Consult the text of this message for appropriate responses to this failure.

2650-976 **ctskeygen Failure:** An unexpected failure occurred in a subroutine called by this command. Please record the following diagnostic information:

Failing routine name: *routine_name1*

Error status from failing routine:
status

Failing routine called by:
routine_name2

Explanation: An unexpected error occurred. This may indicate a coding problem with the command or the libraries it uses.

User response: Consult the text of this message for appropriate responses to this failure.

2650-977 **ctskeygen Failure:** This command could not allocate memory to store the public or private keys. Identify processes currently executing on the system that are consuming large amounts of memory, and consider cancelling or terminating these processes. If this condition persists or occurs every time this command is invoked, this symptom may indicate a possible problem with the command itself, and the software service provider should be contacted.

Explanation: The command was unable to allocate memory to store the public and private keys it was processing. This failure should not occur unless several processes executing on the system are consuming all available memory.

User response: Consult the text of this message for appropriate responses to this failure.

2650-978 **libct_has Failure:** cannot lock trusted host list or key file. The library was not able to lock a file for exclusive use within a reasonable period of time. Another process has exclusive use of the file. Retry this request at a later time. If the condition persists, examine the system for other processes that may be attempting to examine or modify the trusted host list or the system's key files. A process making use of these files may have become suspended and may need to be forcibly shut down.

Explanation: The library attempted to get exclusive use of either a trusted host list or one of the system's key files. The library tries to lock these files for reading or writing, depending on the request attempted, to ensure that the contents do not change while the library is examining the file. The library could not acquire the lock because another process already holds the lock, and after a series of retries, the library decided that the other process was not releasing the lock. The request was halted, and an error reported back to the application.

User response: Consult the text of this message for appropriate responses to this failure.

2650-979 **ctskeygen Failure: This command is unable to access the public key file on this system, because of a configuration problem on this system. The failure involves the following directory name:**

directory_name

The public key file may not exist in this directory, a component of this directory may not exist, may contain an unresolved symbolic link, may contain too many symbolic links, may not be a directory. If the '-p' option was specified, verify that the correct file name was provided as an argument for that command option. Examine the system configuration for this directory name, and correct any of these problems that may exist.

Explanation: The **ctskeygen** command attempted to create a public key file on this system. The attempt failed, because of problems with the directory where the file is to be stored.

User response: Consult the text of this message for appropriate responses to this failure.

2650-980 **ctsthl Failure: The user of this command does not have sufficient privilege to access, or modify the contents of, the trusted host list file on this system. Verify that the user is executing this command as the correct system user, and verify that the permissions on the trusted host list file and the directory containing the file permit the command user to access the file.**

Explanation: The **ctsthl** command attempted to either access or create the trusted host list file on this system. The user does not have sufficient privilege to perform either of these actions.

User response: Consult the text of this message for appropriate responses to this failure.

2650-981 **ctsthl Failure: This command is unable to create a file to store the trusted host list on this system. There is insufficient space in the file system where the trusted host list file would be stored to create this file. The file system causing this failure contains the following directory:**

directory_name

Increase the amount of space in this file system, or identify and remove unnecessary files in this file system to restore space to this file system.

Explanation: The **ctsthl** command attempted to create a trusted host list file on this system. The attempt failed, because the file system that would contain this file does not have enough space to store the file.

User response: Consult the text of this message for appropriate responses to this failure.

2650-982 **ctsthl Failure: This command is unable to create a file to store the trusted host list on this system, because of a configuration problem on this system. The failure involves the following directory name:**

directory_name

A component of this directory may not exist, may contain an unresolved symbolic link, may contain too many symbolic links, may not be a directory, or may exist in a read-only file system. Examine the system configuration for this directory name, and correct any of these problems that may exist.

Explanation: The **ctsthl** command attempted to create a trusted host list file on this system. The attempt failed, because of problems with the directory where the file is to be stored.

User response: Consult the text of this message for appropriate responses to this failure.

2650-983 **ctsthl Failure: An unexpected failure occurred in a subroutine called by this command. Please record the following diagnostic information:**

Failing routine name: *routine_name*
Error status from failing routine:

status

Failing routine called by:
internal_routine

Please contact your software service provider and report this information.

Explanation: An unexpected error occurred. This may indicate a coding problem with the command or the libraries it uses.

User response: Consult the text of this message for appropriate responses to this failure.

2650-984 **ctsthl Failure: The command was not able to lock the trusted host list file for exclusive use within a reasonable period of time. Another process has exclusive use of the file. Retry this request at a later time. If the condition persists, examine the system for other processes that may be attempting to examine or modify the system's trusted host list file. A process making use of the trusted host list file may have become suspended and may need to be forcibly shut down. If this file is not in use by another process and the condition persists, consider removing and recreating the trusted host list file, but be aware that removing this file may cause other applications using the host-based authentication mechanism through the Cluster Security Services to fail while the file is being recreated.**

Explanation: The command attempted to get exclusive use of the trusted host list file. The command tries to lock these files, to ensure that the contents do not change while the command is processing the file. The command could not acquire the lock because another process already holds the lock, and after a series of retries, the command decided that the other process was not releasing the lock. The command was halted.

User response: Consult the text of this message for appropriate responses to this failure.

2650-985 **ctsthl Failure: This command could not allocate memory needed to process the trusted host list file. Identify processes currently executing on the system that are consuming large amounts of memory, and consider cancelling or terminating these processes. If this condition persists or occurs every time this command is invoked, this symptom may indicate a possible problem with the command itself, and the software service**

provider should be contacted.

Explanation: The command was unable to allocate memory to store the public and private keys it was processing. This failure should not occur unless several processes executing on the system are consuming all available memory.

User response: Consult the text of this message for appropriate responses to this failure.

2650-986 **ctsthl Failure: This command is unable to access the trusted host list file on this system, because of a configuration problem on this system. The failure involves the following directory name:**

directory_name

The trusted host list file may not exist in this directory, a component of this directory may not exist, may contain an unresolved symbolic link, may contain too many symbolic links, may not be a directory. If the '-f' option was specified, verify that the correct file name was provided as an argument for that command option. Examine the system configuration for this directory name, and correct any of these problems that may exist.

Explanation: The **ctsthl** command attempted to access a trusted host list file on this system. The attempt failed, because of problems with the directory where the file is to be stored.

User response: Consult the text of this message for appropriate responses to this failure.

2650-987 **ctsthl Failure: required options not provided. Verify that the command was entered correctly, using the following usage message as a guide.**

Explanation: The **ctsthl** command was invoked, and at least one of the required options to this command was not provided. This message is followed by message INFO956, which indicates the expected usage of this command.

User response: Consult the text of this message for appropriate responses to this failure.

2650-988 **ctsthl Failure: The following option was specified more than once:**

option

Please verify that the command was issued correctly.

Explanation: The **ctsthl** command was invoked, and an option was specified more than once on the command line. This message is followed by message INFO956, which indicates the expected usage of this command.

User response: Consult the text of this message for appropriate responses to this failure.

2650-989 **ctsthl Failure: The following host was not found in the trusted host list file:**

host_name

Verify that the correct host name was provided using the '-n' option. If the '-f' option was used, verify that the correct file name was provided.

Explanation: The command could not locate an entry in the trusted host list file for the named host.

User response: Consult the text of this message for appropriate responses to this failure.

2650-990 **ctsthl Failure: The command was issued with conflicting options. The following options cannot be specified together in the same execution of this command:**

option1 and *option2*

Please verify that the command was issued correctly.

Explanation: The **ctsthl** command was invoked, and mutually-exclusive options were specified at the same time to the command. This message is followed by message INFO956, which indicates the expected usage of this command.

User response: Consult the text of this message for appropriate responses to this failure.

2650-991 **ctsthl Failure: The '*option1*' option must be specified when using the '*option2*' option.**

Explanation: The command user did not supply an option required by another options specified by the command user. This message is followed by message INFO956, which indicates the expected usage of this command.

User response: Consult the text of this message for appropriate responses to this failure.

2650-992 **ctsthl Failure: The following key generation method is not supported by this version of the 'ctsthl' command:**

method

Please verify that the command was issued correctly. Use the 'ctskeygen -l' command to obtain the list of key generation methods supported by this version of the command.

Explanation: The key generation method selected through the **-m** option is not supported by this version of the **ctsthl** command.

User response: Consult the text of this message for appropriate responses to this failure.

2650-993 **ctsthl Failure: Inconsistency detected between the two trusted host lists provided to this routine. A host name appears in both lists, but each list contains a different host identifier value for that host. This routine considers this to be an input error, and has stopped the processing being performed on these lists.**

Failing routine name: *routine_name*
Host name: *host_name*

Ensure that correct addresses are being provided to this routine for each trusted host list. The application may be erroneously constructing these lists, or the application may be overwriting information stored in these lists.

Explanation: When processing the two input lists, the routine detected that both lists contained an entry from a common host name, but that they provided differing host identifier values for this host. The routine treats this as an input error condition and ceases processing.

User response: Consult the text of this message for appropriate responses to this failure.

2650-994 **ctsthl Failure: The command detected an incorrect option or a missing option argument. Please verify that the command was issued correctly.**

Explanation: The **ctsthl** command was invoked, and an unknown or unsupported option was specified on the command line. This message is followed by message INFO956, which indicates the expected usage of this command.

User response: Consult the text of this message for appropriate responses to this failure.

2650-995 **libct_has Failure: Unable to generate an usable host identifier token for the local system. All host identifier tokens generated by the library failed the usage acceptance tests imposed by the library. Contact the cluster security software service provider and report this failure.**

Explanation: The host identifier tokens generated by the library failed to satisfy the acceptance test of successfully encoding and decoding test data used by the library. Repeated attempts were made to obtain an usable host identifier token, and all attempts failed. The library considers this an unrecoverable error and ceases its processing at this point.

User response: Consult the text of this message for appropriate responses to this failure.

2650-996 **libct_has Failure: The file containing a libct_mss formatted typed key appears to be corrupted. This problem will prevent the security library from properly authenticating or deciphering incoming messages from other hosts within the cluster. Contact the system administrator and report this problem. System administrators should check the permissions on the following file:**

file_name

Permissions on this file should be set to:

permission_code

If the file permissions are correct, the file contents may be corrupted. Corruption can occur if attempts are made to modify this binary file using a text editor or other unsupported file access tool. System administrators should shut down all cluster trusted services that make use of the key stored within this file, regenerate the typed key, and redistribute the typed key to all nodes within the cluster. Once the key is redistributed, the cluster trusted services may be restarted. Monitor this file to ensure that no other applications or users are erroneously accessing and modifying this file.

Name of internal failing routine:

routine

Error code from system call:

error_code

Explanation: The library detected an error with the contents of a typed key file. The file is considered corrupted and unusable. This corruption can occur if other applications attempt to make use of, or modify the contents of, this file without using this library to do so (for example, using a text editor to update the contents of the file).

User response: Consult the text of this message for appropriate responses to this failure.

2650-997 **libct_has Failure: The routine could not record a typed key to the specified typed key file. The file system where this file resides does not have sufficient space to store the resulting file.**

Failing routine name: *routine_name*

Key file name as provided: *file_name*

Report this failure to the system administrator. System administrators should consider identifying and removing obsolete file from this file system, removing obsolete versions of this key from this key file, or increasing the disk space allocated to this file system.

Explanation: The routine attempted to record a key to a key file, but the operating system did not have sufficient space to store the modified file.

User response: Consult the text of this message for appropriate responses to this failure.

2650-998 **libct_has Failure: The routine could not access a specified directory while attempting to create a typed key file. The directory may not exist, may not be a directory, may contain too many symbolic links within its path name, or may have an unresolved symbolic name within its path name.**

Failing routine name: *routine_name*

File path name in error: *file_name*

The following error code was returned by the open() or creat() function: Error code: *code* (documented in /usr/include/errno.h) Verify that the correct file path name has been provided. If the correct path name was provided, check the path for any of the problems mentioned in this message.

Explanation: This routine could not create a typed key file in the path name provided.

User response: Consult the text of this message for

appropriate responses to this failure.

2650-999 **libct_has Failure:** The routine could not access a specified directory while attempting to create a typed key file. The user of this process does not have sufficient permission to access the directory that would contain this file.

Failing routine name: *routine_name*
File path name in error: *file_name*

The following error code was returned by the open or stat function: Error code: *code* (documented in */usr/include/errno.h*) Verify that the correct file path name has been provided. If the correct path name was provided, contact the system administrator. System administrators should verify that the process user has sufficient permission to access the directory that would contain this file.

Explanation: This routine could not create a typed key file in the path name provided.

User response: Consult the text of this message for appropriate responses to this failure.

Chapter 29. 2660: Low-level application programming interface (LAPI)

When an error occurs, the low-level application programming interface (LAPI) component issues one or more messages with a prefix of **2660**.

2660-400 Internal communication error.

Explanation: An error of unknown origin has occurred. This error is returned when it is not likely that you can fix the problem. Examples of such conditions include internal LAPI problems and non-zero return codes from system calls.

User response: Gather information about the problem and follow local problem-reporting procedures.

2660-401 All available LAPI instances in use.

Explanation: LAPI could not initialize a handle because all available LAPI instances are already in use. An error in your program probably caused this condition.

User response: Make sure your program does not try to initialize an excessive number of LAPI instances.

2660-402 Both Network statements set for single LAPI instance.

Explanation: In non-shared mode, **MP_LAPI_NETWORK** and **MP_LAPI_INET_ADDR** are set. In shared mode, **MP_MPI_NETWORK** and **MP_CHILD_INET_ADDR** are set. In general, the parallel operating environment (POE) component of the Parallel Environment for AIX 5L (PE) licensed program sets these variables.

User response: If LAPI is running under POE, make sure neither variable is set in your environment. If LAPI is running in standalone mode, you should set only a **NETWORK** statement when running in user space. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-404 Unable to load user space support library.

Explanation: LAPI cannot load the library to support operations in the communication subsystem.

User response: Gather information about the problem and follow local problem-reporting procedures.

2660-405 lapi_info pointer is NULL.

Explanation: NULL was passed for the **lapi_info** argument to **LAPI_Init**. An error in your program probably caused this condition.

User response: **LAPI_Init** requires the address of a **lapi_info_t** structure for the **lapi_info** argument. You

should clear the contents of the **lapi_info_t** structure (using the **bzero** subroutine, for example) before setting any values in the fields.

2660-406 Error in MP_MSG_API.

Explanation: Environment variable **MP_MSG_API** is set to a value that is not valid. **MP_MSG_API** must have one of the following values to run LAPI jobs:

- **lapi**
- **lapi,mpi**
- **mpi,lapi**
- **mpi_lapi**

User response: Before calling LAPI, make sure **MP_MSG_API** is set to a valid value in your environment. If the problem persists after you reset the **MP_MSG_API** value, gather information about the problem and follow local problem-reporting procedures.

2660-407 No Network statement is set.

Explanation: Each LAPI instance requires a network statement to be set in your environment. In general, POE sets this variable.

User response: If LAPI is running in standalone mode, you must set a network statement to run in user space. If LAPI is running under POE, or if the problem persists in standalone mode after a network statement is set, gather information about the problem and follow local problem-reporting procedures.

2660-408 No method to distribute UDP address and port information.

Explanation: An error in your program probably caused this condition. This error should occur only when LAPI is running over UDP in standalone mode, because POE provides a handler. For UDP initialization without POE, you must provide a list of IP addresses and port information for each task or a callback handler to provide this information.

User response: Make sure a valid callback handler or a list is passed to LAPI during initialization.

2660-409 Header handler is NULL.

Explanation: LAPI active message routines (**LAPI_Amsend**, for example) require a user header handler. This error occurs when NULL is passed for the header handler. An error in your program probably caused this condition.

User response: Make sure a valid header handler callback is passed to LAPI when using active message calls.

2660-410 Non-root user attempted to initialize in PSS mode.

Explanation: LAPI can only be initialized in Persistent Subsystem (PSS) mode by **root**. This error occurs when a non-**root** user tries to initialize in PSS mode.

User response: If you are trying to initialize in PSS mode, become **root** first.

2660-412 Shared Memory kernel extension not loaded.

Explanation: LAPI includes a kernel extension that must be loaded for shared memory communication. This error occurs if LAPI is initialized for shared memory and the required kernel extension is not loaded. The kernel extension is normally loaded automatically upon system boot.

User response: A system administrator can run **/usr/lib/methods/cfgzcmem** to load the kernel extension manually, but a larger problem may exist if it is not loading automatically on reboot. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-413 Communication timeout has occurred.

Explanation: LAPI message transfers will time out from lack of response. You can configure the timeout value using **LAPI_Senv**. This error will also occur asynchronously during LAPI communication and will invoke the user's error handler if registered.

User response: Make sure the communication subsystem is functioning correctly and the **TIMEOUT** value is not set too low in **LAPI_Senv**. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-414 Error during re-registering of a timer.

Explanation: LAPI cannot re-register a timer with the communication subsystem.

User response: Make sure the communication subsystem is functioning correctly. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-415 UDP pkt size is not in valid range.

Explanation: You can control the size of LAPI UDP packets with the **MP_UDP_PACKET_SIZE** environment variable. This error occurs when the value set in this variable is out of the valid range.

User response: Make sure **MP_UDP_PACKET_SIZE**

is set correctly. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-416 User UDP handler returns error.

Explanation: This error will only occur when LAPI is running standalone in UDP mode and you passed in a callback pointer for UDP initialization. LAPI will return this error if your callback returns a non-zero value, which is interpreted by LAPI as an error.

User response: Determine the cause of the error code from within your callback.

2660-417 Invalid handle passed into LAPI.

Explanation: A non-valid LAPI handle was passed to an API call. An error in your program probably caused this condition.

User response: Make sure the handle passed to the LAPI call has been initialized correctly and has not been terminated.

2660-418 Out data pointer is NULL.

Explanation: NULL was passed to a reference parameter. LAPI expects to return some value to the caller through this parameter, but cannot because it is NULL. An error in your program probably caused this condition.

User response: Make sure a valid data pointer is passed to all required reference parameters.

2660-419 Address handle range is not valid.

Explanation: An address handle (*addr_hndl*) passed to LAPI is outside of the valid range. An error in your program probably caused this condition. The maximum value for address handles is 1 less than the value returned by calling **LAPI_Qenv** with the **LOC_ADDRTBL_SZ** query type.

User response: Make sure the *addr_hndl* value is within the valid range.

2660-420 Out address table is NULL.

Explanation: NULL was passed for a reference parameter through which LAPI expects to return a data table. An error in your program probably caused this condition.

User response: Make sure a valid data pointer is passed to all required reference parameters.

2660-421 Destination task is purged.

Explanation: Network connectivity is not available between these two tasks. This situation can occur if your program calls **LAPI_Purge_totask**.

User response: You can code around this problem or terminate the job. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-422 Multiple threads are waiting on the same counter.

Explanation: Only a single thread may wait on a counter. An error in your program probably caused this condition.

User response: None.

2660-423 Unable to allocate storage.

Explanation: An attempt by LAPI to allocate memory has failed.

User response: Determine the cause of the memory shortage. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-424 Unused fields in `lapi_info_t` are not cleared.

Explanation: The `lapi_info_t` structure contains reserved fields. These fields must be cleared before **LAPI_Init** is called.

User response: Before calling **LAPI_Init**, you should clear the contents of the `lapi_info_t` structure (using the **bzero** subroutine, for example), then set any desired fields.

2660-425 Source address pointer is NULL.

Explanation: NULL was passed for an address on the origin task. An error in your program probably caused this condition.

User response: Make sure a valid data pointer is passed to all required reference parameters.

2660-426 Target address pointer is NULL.

Explanation: NULL was passed for an address on the target task. An error in your program probably caused this condition.

User response: Make sure a valid data pointer is passed to all required reference parameters.

2660-427 Data length exceeds maximum.

Explanation: A data length was passed that exceeds **LAPI_MAX_MSG_SZ**. An error in your program probably caused this condition.

User response: Make sure user data lengths do not exceed **LAPI_MAX_MSG_SZ**.

2660-428 Invalid target task id.

Explanation: LAPI was passed a target task ID that is out of range. An error in your program probably caused this condition. Valid target ID values are 0 through the total number of tasks minus 1. The number of tasks in the job is determined by the **MP_PROCS** environment variable. This value can be queried using **LAPI_Qenv** with the **NUM_TASKS** query type.

User response: Make sure target task IDs are in the valid range.

2660-429 `uhdr` is NULL but `uhdr_len` is non-zero.

Explanation: The address for user header data is NULL, but the value of `uhdr_len` is not 0. A non-zero `uhdr_len` value indicates to LAPI that user header data should be sent, but the pointer to that data is NULL. An error in your program probably caused this condition.

User response: If user header data is to be sent, make sure the pointer is initialized correctly. If you are not sending user header data, make sure the value of `uhdr_len` is 0.

2660-430 `uhdr_len` is out of range.

Explanation: The `uhdr_len` value passed to LAPI exceeds the maximum. The maximum value can be determined by calling **LAPI_Qenv** with the **MAX_UHDR_SZ** query type. An error in your program probably caused this condition.

User response: Make sure user header lengths do not exceed the maximum.

2660-431 `uhdr_len` is not a multiple of word size.

Explanation: LAPI requires a user header length that is a multiple of the processor's word size. It is likely that an error in your program caused this condition.

User response: Make sure user header lengths are in multiples of the processor's word size.

2660-432 Source vector's extent is out of range.

Explanation: The extent of a vector data transfer must not exceed **LAPI_MAX_MSG_SZ**. This error is returned when an origin vector description will result in an extent that exceeds the maximum (**LAPI_MAX_MSG_SZ**). An error in your program probably caused this condition.

User response: Make sure the origin vector's extent does not exceed **LAPI_MAX_MSG_SZ**.

2660-433 Source vector's stride is less than its block.

Explanation: An origin vector description has `vec_type` **LAPI_GEN_STRIDED_XFER**, with stride (`info[2]`) that is less than its block size (`info[1]`). The stride must be at least as large as block size for a strided transfer. An error in your program probably caused this condition.

User response: Make sure the origin vector's stride is at least as large as its block size.

2660-434 No connectivity to task.

Explanation: Connectivity to the target task is no longer available.

User response: Check connectivity in the communication subsystem. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-435 All adapters are down.

Explanation: LAPI cannot get access to the adapters on the local node.

User response: Check the functionality of the local node's adapters. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-436 RECV of msg did not complete.

Explanation: This error occurs when a remote node becomes unreachable during the execution of a user completion handler.

User response: Determine why the target node is unavailable. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-437 SEND of msg did not complete.

Explanation: This error occurs when a remote node becomes unreachable during the execution of a user completion handler.

User response: Determine why the target node is unavailable. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-438 SEND of msg timed out.

Explanation: This error is sent to a user's send completion handler when the handler is invoked due to a send timeout (target response exceeds **TIMEOUT**).

User response: Check connectivity between the origin node and the target node. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

**2660-439 Setup of shared memory failed.
Problem may be due to slow application load time (filesystem).**

Explanation: An error occurred while LAPI was trying to initialize shared memory. One of these conditions could have caused the error:

1. There are more than 128 tasks on one node.
2. A system call failed during shared memory setup.
3. LAPI is running on GPFS or a non-local file system.

User response: Check the number of tasks on each node and check the file system's performance. If the problem persists, gather information about the problem and follow local problem-reporting procedures.

2660-440 Source vector address is NULL but its len is greater than 0.

Explanation: An origin vector description has a length greater than 0 for some `vec_len[i]` but the corresponding base address (`info[i]`) is NULL. An error in your program probably caused this condition.

User response: Make sure all vector addresses (`info[i]`) are set correctly.

2660-441 Sum of source vector lengths exceeds maximum.

Explanation: An origin vector has `vec_type` of either **LAPI_GEN_IOVECTOR** or **LAPI_GEN_GENERIC** and the sum of the vector lengths (`vec_len` array) is greater than **LAPI_MAX_MSG_SZ**. An error in your program probably caused this condition.

User response: Make sure the total message length described by the vector does not exceed **LAPI_MAX_MSG_SZ**.

2660-442 Source vector pointer is NULL.

Explanation: NULL was passed for the address of an origin vector description. An error in your program probably caused this condition.

User response: Make sure a valid address is passed for the origin vector.

2660-443 Source vector type is not valid.

Explanation: An error in your program probably caused this condition. This error is returned when the origin vector description type (*vec_type*) is unknown. LAPI has three vector types:

- **LAPI_GEN_IOVECTOR**
- **LAPI_GEN_STRIDED_XFER**
- **LAPI_GEN_GENERIC**

User response: Make sure the origin vector's type (**vec_type**) is one of the three valid types.

2660-444 Source stride vector address is NULL.

Explanation: An origin vector description has type **LAPI_GEN_STRIDED_XFER**, but the address of the stride value is NULL. An error in your program probably caused this condition.

User response: Make sure the origin vector stride *info[2]* is set correctly.

2660-445 Target stride vector address is NULL.

Explanation: A target vector description has type **LAPI_GEN_STRIDED_XFER**, but the address of the stride value is NULL. An error in your program probably caused this condition.

User response: Make sure the target vector stride *info[2]* is set correctly.

2660-446 Target vector's extent is out of range.

Explanation: A target vector's extent exceeds **LAPI_MAX_MSG_SZ**. An error in your program probably caused this condition.

User response: Ensure that the target vector's extent does not exceed **LAPI_MAX_MSG_SZ**.

2660-447 Target vector's stride is less than its block.

Explanation: A target vector description has a *vec_type* of **LAPI_GEN_STRIDED_XFER**, with stride (*info[2]*) that is less than its block size (*info[1]*). The stride must be at least as large as block size for a strided transfer. An error in your program probably caused this condition.

User response: Make sure the target vector's stride is at least as large as its block size.

2660-448 Target vector address is NULL but its len is greater than 0.

Explanation: A target vector description has a length greater than 0 for some *vec_len[i]* but the corresponding base address (*info[i]*) is NULL. An error in your program probably caused this condition.

User response: Make sure all vector addresses (*info[i]*) are set correctly.

2660-449 Target vector's length is out of range.

Explanation: A target vector has *vec_type* of either **LAPI_GEN_IOVECTOR** or **LAPI_GEN_GENERIC** and the sum of the vector lengths (*vec_len* array) is greater than **LAPI_MAX_MSG_SZ**. An error in your program probably caused this condition.

User response: Ensure that the total message length described by the vector does not exceed **LAPI_MAX_MSG_SZ**.

2660-451 Target vector pointer is NULL.

Explanation: NULL was passed for the address of a target vector description. An error in your program probably caused this condition.

User response: Make sure a valid address is passed for the target vector.

2660-452 Target vector type is not valid.

Explanation: An error in your program probably caused this condition. This error is returned when the target vector description type (*vec_type*) is unknown. LAPI has three vector types:

- **LAPI_GEN_IOVECTOR**
- **LAPI_GEN_STRIDED_XFER**
- **LAPI_GEN_GENERIC**

User response: Make sure the target vector's type (*vec_type*) is one of the three valid types.

2660-453 Source & Target vectors have different num_vecs.

Explanation: Vector transfers of type **LAPI_GEN_IOVECTOR** require that the origin and target vector descriptions have the same number of vectors (*num_vecs*). Transfers of type **LAPI_GEN_GENERIC**, which are available only for **LAPI_Amsendv**, support differences in the target and origin vector descriptions. An error in your program probably caused this condition.

User response: Make sure the transfer type is **LAPI_GEN_GENERIC**. If the vector type is **LAPI_GEN_IOVECTOR**, make sure the target vector descriptions match.

2660-454 Source & Target vectors have different vec_type.

Explanation: LAPI requires that the origin and target vector descriptions have the same type (*vec_type*). This error is returned when the *vec_type* values do not match. An error in your program probably caused this condition.

User response: Make sure the origin and target vector descriptions have the same type (*vec_type*).

2660-455 Source & Target vectors have different len[].

Explanation: For transfers of type **LAPI_GEN_IOVECTOR**, the *len* arrays of the origin and target vector descriptions must be identical. **LAPI_GEN_GENERIC** transfers, which are available only for **LAPI_Amsendv**, will support differences in the vector descriptions. An error in your program probably caused this condition.

User response: Make sure the transfer type is **LAPI_GEN_GENERIC**. If the vector type is **LAPI_GEN_IOVECTOR**, make sure the target vector descriptions match.

2660-456 info ptr in LAPI_Msgpoll is NULL.

Explanation: This error is returned from **LAPI_Msgpoll** when a NULL info pointer is passed. An error in your program probably caused this condition.

User response: Make sure a valid data pointer is passed to all required reference parameters.

2660-458 Counter pointer is NULL.

Explanation: LAPI was expecting a valid counter pointer but got NULL. An error in your program probably caused this condition.

User response: Make sure a valid data pointer is passed to all required reference parameters.

2660-459 Counter value passed in is less than zero for LAPI_Nopoll_wait call.

Explanation: **LAPI_Nopoll_wait** was called with a counter value that is less than 0. An error in your program probably caused this condition.

User response: Make sure the counter's value is greater than or equal to 0.

2660-460 Invalid query type.

Explanation: This error is returned when either **LAPI_Qenv** or **LAPI_Senv** is called with an unknown query type. An error in your program probably caused this condition.

User response: Make sure the query type is valid.

2660-461 LAPI_Rmw's in_val pointer is NULL.

Explanation: This error is returned when **LAPI_Rmw** is called with a NULL-valued *in_val* pointer. An error in your program probably caused this condition.

User response: Make sure the *in_val* pointer is passed correctly.

2660-462 RMW operator is not valid.

Explanation: An error in your program probably caused this condition. This error is returned when the operator passed to **LAPI_Rmw** or **LAPI_Rmw64** is not valid. Valid operator types are:

- **FETCH_AND_ADD**
- **FETCH_AND_OR**
- **SWAP**
- **COMPARE_AND_SWAP**

User response: Make sure a valid operator type is passed to **LAPI_Rmw** or **LAPI_Rmw64**.

2660-463 LAPI_Rmw's tar_var address is NULL.

Explanation: This error is returned when the address of the *tgt_var* passed to **LAPI_Rmw** or **LAPI_Rmw64** is NULL. An error in your program probably caused this condition.

User response: Make sure a valid *tgt_var* address is passed.

2660-464 LAPI_Senv's set_val is not valid.

Explanation: This error is returned when **LAPI_Senv** is called with an unknown query type or a query type that the user cannot set. An error in your program probably caused this condition.

User response: Make sure the query type is valid and can be set by the user.

2660-465 DGSP is NULL or not registered.

Explanation: A DGSP handle that is NULL or is not registered was passed to a LAPI call. LAPI requires the user to register a DGSP handle using **LAPI_Util** before the handle can be used. An error in your program probably caused this condition.

User response: Make sure DGSP handles have been registered before they are used.

2660-466 DGSP atom_size is not valid.

Explanation: The atom size of your DGSP is outside of the valid range. An error in your program probably caused this condition.

User response: Make sure the atom size of the DGSP is valid.

2660-467 DGSP processed incorrect branch.

Explanation: Execution of a user DGSP resulted in the processing of an incorrect branch. An error in your program probably caused this condition.

User response: Make sure DGSP branch operations do not exceed the bounds of the DGSP code.

2660-468 DGSP control block has errors.

Explanation: An error occurred while processing a DGSP control instruction. One possible cause is an attempt to execute a control instruction during a gather operation. An error in your program probably caused this condition.

User response: Make sure control instructions are used correctly.

2660-469 DGSP has bad copy length.

Explanation: A user DGSP has an incorrect copy length. An error in your program probably caused this condition.

User response: Make sure the DGSP's copy length is within the valid range.

2660-470 Attempt to free invalid DGSP.

Explanation: An attempt was made to free a DGSP that is not registered. An error in your program probably caused this condition.

User response: Check for excessive attempts to free a DGSP handle.

2660-471 DGSP op-code is not valid.

Explanation: A DGSP contains a non-valid operation code. An error in your program probably caused this condition.

User response: Make sure DGSP operation codes are correct.

2660-472 DGSP has bad reps (less than 0).

Explanation: A DGSP was passed with a number of repetitions that was less than 0. An error in your program probably caused this condition.

User response: Make sure control instructions are used correctly.

2660-473 DGSP stack has depth less than or equal to 0.

Explanation: The user DGSP stack has a negative stack depth. An error in your program probably caused this condition.

User response: Make sure the DGSP stack depth is not negative.

2660-474 lapi_rmw_t size not set to 32 or 64.

Explanation: LAPI requires that `lapi_rmw_t` size be set to either 32 or 64. An error in your program probably caused this condition.

User response: Make sure the `lapi_rmw_t` size is set correctly.

2660-475 udp_port info pointer is NULL.

Explanation: The user's `udp_port` info pointer is NULL. An error in your program probably caused this condition.

User response: Make sure the `udp_port` pointer is set correctly.

2660-476 Invalid LAPI_Xfer command type.

Explanation: `LAPI_Xfer` was called with an unknown command type. An error in your program probably caused this condition.

User response: Make sure the command type passed to `LAPI_Xfer` is valid.

2660-477 Invalid LAPI_Util command type.

Explanation: `LAPI_Util` was called with an unknown command type. An error in your program probably caused this condition.

User response: Make sure the command type passed to `LAPI_Util` is valid.

2660-478 Cannot open message catalog.

Explanation: An NLS-enabled message catalog could not be opened.

User response: Make sure LAPI is installed with the required NLS support.

2660-479 Insufficient Pack buffer space.

Explanation: The buffer provided to pack DGSP data is not large enough. An error in your program probably caused this condition.

User response: Make sure the DGSP pack buffer has enough space.

2660-480 Error processing DGSP.

Explanation: An error occurred while processing a DGSP. For example, this error will be returned if the DGSP code size is less than zero. An error in your program probably caused this condition.

User response: Make sure the DGSP is correct.

2660-481 Error on UDP socket operation.

Explanation: Error in initializing UDP sockets.

User response: Gather information about the problem and follow local problem-reporting procedures.

2660-482 PSS system attempted collective call.

Explanation: An attempt was made to do a collective call (for example, **LAPI_Address_init**, **LAPI_Gfence**) while running in Persistent Subsystem (PSS) mode.

User response: Do not make collective calls while running in PSS mode.

2660-485 Failover/Recovery setup failed: internal error.

Explanation: An internal problem caused an error to occur during the setup of the failover/recovery function. This is an informational message; the program will continue without the failover/recovery function.

User response: Gather information about the problem and follow local problem-reporting procedures.

2660-486 Failover/Recovery setup failed: cannot open NAM device.

Explanation: An inability to open the Network Availability Matrix (NAM) device caused an error to occur during the setup of the failover/recovery function. This is an informational message; the program will continue without the failover/recovery function.

User response: Make sure the **rsct.lapi.nam** component has been installed correctly and a valid **/dev/nampd0** device special file has been generated on the nodes where the program is run. If the problem persists, gather information about the problem and follow local problem reporting procedures.

2660-487 Failover/Recovery setup failed: no HAGS update detected.

Explanation: An inability to detect that the group services daemon (**cthagsgslm**) is installed and running caused an error to occur during the setup of the failover/recovery function. This is an informational message; the program will continue without the failover/recovery function.

User response: Make sure the group services component has been installed correctly and the **cthagsgslm** daemon is active. If the problem persists, gather information about the problem and follow local problem reporting procedures.

2660-488 Failover/Recovery setup failed: POE functionality not up to date.

Explanation: The use of a back-level version of the parallel operating environment (POE) component of the Parallel Environment for AIX 5L (PE) licensed program caused an error to occur during the setup of the failover/recovery function. This is an informational message; the program will continue without the failover/recovery function.

User response: Make sure PE is at the level required for the failover/recovery function. See *RSCT: LAPI Programming Guide* for more information. If the problem persists, gather information about the problem and follow local problem reporting procedures.

2660-489 Failover/Recovery setup failed: can't find POE.

Explanation: An inability to find the object **mpipoe_r.o** (or **mpipoe64_r.o** for 64-bit programs) of the **libmpi_r.a** library caused an error to occur during the setup of the failover/recovery function. The **libmpi_r.a** library is included with the Parallel Environment for AIX 5L (PE) licensed program. This is an informational message; the program will continue without the failover/recovery function.

User response: Make sure PE has been installed correctly on the nodes where the program is being run and the library paths have been set up correctly. If the problem persists, gather information about the problem and follow local problem reporting procedures.

2660-490 Failover/Recovery setup failed: non-snX device.

Explanation: The failover/recovery function is only supported for High Performance Switch (HPS) adapter devices. This is an informational message; the program will continue without the failover/recovery function.

User response: If you need to use the failover/recovery function, request the use of HPS adapter devices in your job launch file.

2660-491 Failover/Recovery setup halted: internal error.

Explanation: An internal error caused the failover/recovery function to halt, but the program will continue without this function.

User response: Gather information about the problem and follow local problem-reporting procedures.

2660-492 Invalid RDMA context provided for target.

Explanation: An RDMA operation could not start because a non-valid RDMA context was provided for the target of the RDMA operation.

User response: Make sure a valid RDMA context is provided for the target of the RDMA operation.

2660-493 Invalid RDMA context provided for source.

Explanation: An RDMA operation could not start because a non-valid RDMA context was provided for the source of the RDMA operation.

User response: Make sure a valid RDMA context is provided for the source of the RDMA operation.

2660-494 Invalid RDMA buffer handle provided for target.

Explanation: An RDMA operation could not start because a non-valid buffer handle was provided for the target of the RDMA operation.

User response: Make sure a valid buffer handle is provided for the target of the RDMA operation.

2660-495 Invalid RDMA buffer handle provided for source.

Explanation: An RDMA operation could not start because a non-valid buffer handle was provided for the source of the RDMA operation.

User response: Make sure a valid buffer handle is provided for the source of the RDMA operation.

2660-496 Invalid RDMA buffer offset provided for target.

Explanation: An RDMA operation could not start because the data area does not fall entirely within the previously-registered buffer. This will occur if the offset is less than 0 or if the offset+transfer length is greater than the size of the registered buffer.

User response: Make sure the data area to be transferred falls entirely within the region of the registered target buffer.

2660-497 Invalid RDMA buffer offset provided for source.

Explanation: An RDMA operation could not start because the data area does not fall entirely within the previously-registered buffer. This will occur if the offset is less than 0 or if the offset+transfer length is greater than the size of the registered buffer.

User response: Make sure the data area to be transferred falls entirely within the region of the registered source buffer.

2660-498 Job ended due to no RDMA resources.

Explanation: Checkpoint restarted with no RDMA resources.

User response: Use the same RDMA resources for checkpoint restart that were used with the initial job submission.

2660-500 COMM TIMEOUT ERROR occurred between current task, *current-task-ID*, and remote task, *remote-task-ID*, on handle *handle*

Explanation: A timeout occurred while sending a packet.

User response: Gather information about the problem and follow local problem-reporting procedures.

2660-502 Task *task-ID* failed to initialize shared memory.

Explanation: The specified task failed to initialize shared memory.

User response: Make sure the memory footprint of the program allows creation of a shared memory segment.

2660-503 CHECKPOINT: Failed to restart shared memory transport, rc = *code* handle = *handle*.

Explanation: LAPI shared memory initialization failed at checkpoint restart. Shared memory is not used after a resume operation.

User response: Make sure the file system can load checkpointed files in a timely manner.

2660-504 Shared memory not used on this node due to sole task running.

Explanation: LAPI shared memory was not used. Only a single task is running.

User response: Make sure there is more than one task per node if you want to use the shared memory protocol.

2660-505 Task *task-ID* failed to create shared memory.

Explanation: LAPI shared memory was not used. The specified task cannot create a shared segment.

User response: Make sure the user has permission and there are resources available to create a shared memory segment.

2660-506 Task *task-ID* failed to get shared memory.

Explanation: LAPI shared memory was not used. The specified task cannot create a shared segment.

User response: Make sure no user shared memory segments with a shared memory key that end in **0xECAB** or **0xECAC** are used.

2660-507 Task *task-ID* failed to attach shared memory.

Explanation: LAPI shared memory was not used. The specified task cannot attach to shared memory.

User response: Make sure the memory footprint of the program allows creation of a shared memory segment.

2660-510 Required environment variable is not set.

Explanation: A required environment variable — **MP_CHILD** or **MP_PROCS** — is not set or is not set correctly.

User response: If you are not using the parallel operating environment (POE) to start the job, make sure the **MP_CHILD** or **MP_PROCS** environment variable is set correctly.

2660-511 No callback registered when RDMA target notification was requested.

Explanation: You requested RDMA target notification for RDMA messages, but no callback was registered for the user tag.

User response: Make sure a callback function has been registered for the tag that is being used in the RDMA operation.

2660-512 No counter registered when RDMA target notification was requested.

Explanation: You requested RDMA target notification for RDMA messages, but no counter was registered for the user tag.

User response: Make sure a LAPI counter has been registered for the tag that is being used in the RDMA operation.

2660-513 Translation and mapping of user memory failed.

Explanation: The requested mapping of a user buffer to the adapter failed. This could have been caused if you tried to register memory that is not read/write-accessible or if the memory region is larger than the maximum size that can be registered. It could

also mean that there are no more RDMA resources available.

User response: Make sure only read/write-accessible memory is registered. Do not try to register a memory region that is larger than the maximum region size. Reduce RDMA resource consumption.

2660-514 RDMA resources exhausted.

Explanation: The request for RDMA resources exceeds the user allotment. Typically, this means that more remote rCxts have been requested than are available.

User response: Restart the job with a larger number of rCxt blocks.

2660-515 The sum of *uhdr_len* and *udata_len* is too large.

Explanation: For **LAPI_Xfer** with transfer type **LAPI_AM_LW_XFER**, the sum of the user header length and the user data length must be less than or equal to the value that is returned by calling **LAPI_Qenv** with the **BUF_CP_SIZE** query type.

User response: Specify valid values for *uhdr_len* and *udata_len*.

2660-516 No header handler has been set.

Explanation: The user header handler must be registered before calling **LAPI_Xfer**.

User response: Register the user header handler.

2660-517 DGSP offset exceeds maximum.

Explanation: A DGSP offset was passed that exceeds **LAPI_MAX_MSG_SZ**. This is most likely caused by an error in the user's code.

User response: Make sure the DGSP offset does not exceed **LAPI_MAX_MSG_SZ**.

2660-518 Unable to cancel rCxt.

Explanation: LAPI could not cancel an in-flight RDMA message. This error is an indication that a system is not configured correctly.

User response: Make sure the system firmware is configured correctly. Gather information about the problem and follow local problem-reporting procedures.

2660-519 The error code is unknown to LAPI.

Explanation: The error code is not in the range known to LAPI.

User response: Gather information about the problem and follow local problem-reporting procedures.

Chapter 30. 2664: Common Information Model (CIM) resource manager

When an error occurs, the Common Information Model (CIM) resource manager issues one or more messages with a prefix of **2664**.

2664-000 Input value is invalid.

Explanation: The input value to a request is invalid.

User response: Provide valid input value and reissue the request.

2664-001 The specified input ResourceHandle is invalid.

Explanation: The input ResourceHandle to a request does not exist.

User response: Provide a valid ResourceHandle value and reissue the request.

2664-002 Cannot locate InstanceMI for the class *class_name*

Explanation: The CMPI InstanceMI cannot be located.

User response: Make sure the InstanceProvider library is installed properly.

2664-003 Cannot open CDB for the CIM-Class *class_name*

Explanation: The indicated CIM-Class CDB file cannot be opened.

User response: Make sure this CIM-Class is installed properly.

2664-004 Error returned from CMPIInstanceMI getInstance().

Explanation: The CMPIInstanceMI getInstance method returned an error.

User response: Contact the IBM Support Center and supply this message number.

2664-005 Cannot create a RCCP for the CIM-Class name *class_name*

Explanation: The CIM-Class RCCP cannot be created.

User response: Contact the IBM Support Center and supply this message number.

2664-006 Error returned from CMPIInstanceMI enumInstanceNames().rc=error_code, message =error_message

Explanation: The CMPIInstanceMI enumInstanceNames method returned the indicated error, along with a descriptive message that further explains the problem.

User response: Contact the IBM Support Center and supply this error code and message.

2664-007 Error returned from CMPIInstanceMI enumInstances().rc=error_code, message = error_message

Explanation: The CMPIInstanceMI enumInstances method returned the indicated error, along with a descriptive message that further explains the problem.

User response: Contact the IBM Support Center and supply this error code and message.

2664-008 Error returned from CMPIInstanceMI getInstance().rc=error_code, message = error_message

Explanation: The CMPIInstanceMI getInstance method returned the indicated error, along with a descriptive message that further explains the problem.

User response: Contact the IBM Support Center and supply this error code and message.

2664-009 Error returned from CMPIAssociationMI associatorNames().rc=error_code, message = error_message

Explanation: The CMPIAssociationMI associatorNames method returned the indicated error, along with a descriptive message that further explains the problem.

User response: Contact the IBM Support Center and supply this error code and message.

2664-010 Error returned from CMPIAssociationMI associators().rc=error_code, message = error_message

Explanation: The CMPIAssociationMI associators method returned the indicated error, along with a descriptive message that further explains the problem.

User response: Contact the IBM Support Center and supply this error code and message.

2664-011 Cannot resolve the input ResourceHandle RMC-Class name.

Explanation: The CIM resource manager cannot find the RMC-Class name associated with the input resource handle.

User response: Provide a valid ResourceHandle value and reissue the request.

2664-012 Cannot create an RCCP for the input ResourceHandle.

Explanation: The CIM resource manager cannot create an RCCP for the input resource handle.

User response: Contact the IBM Support Center and supply this message number.

2664-013 Cannot convert input ResourceHandle to a CMPIObjectPath.

Explanation: The CIM resource manager cannot convert the input resource handle into an object path.

User response: Contact the IBM Support Center and supply this message number.

2664-014 Cannot convert resulting CMPIObjectPath to a ResourceHandle.

Explanation: The CIM resource manager cannot convert the resulting CMPI object path into a resource handle.

User response: Contact the IBM Support Center and supply this message number.

2664-015 Cannot convert resulting CMPIInstance to a ResourceHandle.

Explanation: The CIM resource manager cannot convert the resulting CMPI instance into a resource handle.

User response: Contact the IBM Support Center and supply this message number.

2664-016 There is no InstanceProvider support for the class *class_name*

Explanation: The indicated CIM class is not supported by an InstanceProvider.

User response: Do not issue this request to the class.

2664-017 An attribute identifier is invalid.

Explanation: A non-valid attribute ID was detected.

User response: Provide this message number to the IBM Support Center.

2664-018 A required attribute was not provided.

Explanation: A required attribute was not provided during a define resource operation.

User response: Provide this message number to the IBM Support Center.

2664-019 The action id *action_ID* in class *CIM_class_name* could not be found.

Explanation: A requested action could not be invoked because it was not found in the provider for the specified class.

User response: Use the **mkcimreg** command to re-register the specified class and restart the RMC subsystem.

2664-020 The action *action_name* in class *CIM_class_name* is not supported by the CIM provider.

Explanation: A requested action could not be invoked because it was not supported by the provider for the specified class.

User response: Use the **mkcimreg** command to register a provider that supports this action.

2664-021 The action *action_name* in class *CIM_class_name* failed due to improper input parameters.

Explanation: A requested action could not be invoked because one or more user arguments were incorrect.

User response: Verify that the correct arguments were supplied as action input.

2664-022 The action *action_name* in class *CIM_class_name* failed due to insufficient memory.

Explanation: A requested action could not be invoked because the system is low on memory.

User response: Reduce load on the system to make more memory available to RMC.

2664-023 The action *action_name* in class *CIM_class_name* is not supported by the CIM provider.

Explanation: A requested action could not be invoked because it is not supported by the CIM provider.

User response: Use the **mkcimreg** command to register a provider that supports this action.

2664-024 **The action *action_name* in class *CIM_class_name* could not be run by the provider.**

Explanation: The provider could not run this action successfully.

User response: Provide this message number to the IBM Support Center.

2664-500 *file-name: line-number:*
syntax-error-message at token-at-error

Explanation: File syntax error. In the indicated file, at the indicated line number, the command parser encountered an unexpected token, *token-at-error*.

User response: Check the syntax of the file at the indicated line number, and correct the problem. Then reissue the command.

2664-501 *flag is not a recognized flag.*

Explanation: An unsupported flag, or an incorrect combination of flags, was specified. *flag* indicates the flag that was originally specified.

User response: Refer to the **mkcimreg** command's usage statement, which lists valid flags and flag combinations. Correct the syntax and reissue the command.

2664-502 **Required memory could not be allocated.**

Explanation: Command processing failed to allocate a sufficient amount of memory to continue.

User response: Attempt to run the **mkcimreg** command again. If this second attempt fails, contact your software support organization.

2664-503 *operand is not a recognized operand.*

Explanation: An unsupported operand or incorrect combination of operands was specified. *operand* indicates the argument or combination that was originally specified.

User response: Refer to the **mkcimreg** command's usage statement, which lists valid operands and operand combinations. Correct the syntax and reissue the command.

2664-504 *file-name: line-number: Required superclass *superclass-name* has not been registered.*

Explanation: In the indicated file, the indicated line contains the declaration of a class that references an unregistered superclass.

User response: Use the **mkcimreg** command to

register the required superclass before registering any classes that derive from it.

2664-505 *file-name: line-number: Qualifier *qualifier-name* has not been registered.*

Explanation: The indicated line, found in the indicated managed object format (MOF) file, contains a qualifier that has not been registered yet.

User response: Use the **mkcimreg** command to register the qualifier before using it in a CIM element declaration.

2664-506 *file-name: line-number: Method cannot return array type.*

Explanation: The indicated line, found in the indicated managed object format (MOF) file, contains a method that returns an array.

User response: Contact the vendor who supplied the MOF file.

2664-507 *file-name: line-number: Invalid array subscript value.*

Explanation: The indicated line, found in the indicated managed object format (MOF) file, contains a non-numeric or negative value in an array subscript.

User response: Contact the vendor who supplied the MOF file.

2664-508 *file-name: line-number: Qualifier *qualifier-name* cannot have a NULL value.*

Explanation: The indicated line, found in the indicated managed object format (MOF) file, contains a non-boolean qualifier that was declared without a value.

User response: Contact the vendor who supplied the MOF file.

2664-509 **Could not find MOF file *file-name*.**

Explanation: A managed object format (MOF) file, which was passed as an argument on the command line, could not be found.

User response: On the **mkcimreg** command, use the **-I** flag to supply the directory containing the required MOF file. Then reissue the **mkcimreg** command.

2664-510 *file-name:line-number: Could not find include MOF file *file-name*.*

Explanation: The indicated line contains an **#include** statement that specifies a managed object format (MOF) file that could not be found.

User response: On the **mkcimreg** command, use the

-I flag to supply the directory containing the required MOF file. Then reissue the command.

2664–511 File name missing.

Explanation: The **mkcimreg** command that was issued did not contain the name of a managed object format (MOF) file.

User response: Correct the **mkcimreg** command syntax to include the name of at least one MOF file. Then reissue the command.

2664–512 Error creating file *file-name* (system-error-code).

Explanation: The indicated file could not be created on the disk.

User response: Try reissuing the **mkcimreg** command later. If the command still fails, contact the IBM Support Center and supply this error code.

2664–513 Error opening file *file-name* (system-error-code).

Explanation: The indicated file could not be opened.

User response: Try reissuing the **mkcimreg** command later. If the command still fails, contact the IBM Support Center and supply this error code.

2664–514 Error closing file *file-name* (system-error-code).

Explanation: The indicated file could not be closed.

User response: Try reissuing the **mkcimreg** command later. If the command still fails, contact the IBM Support Center and supply this error code.

2664–515 Error setting file pointer in *file-name* (system-error-code).

Explanation: A file pointer could not be set in the indicated file.

User response: Try reissuing the **mkcimreg** command later. If the command still fails, contact the IBM Support Center and supply this error code.

2664–516 Error reading from file *file-name* (system-error-code).

Explanation: The indicated file could not be read.

User response: Try reissuing the **mkcimreg** command later. If the command still fails, contact the IBM Support Center and supply this error code.

2664–517 Error writing to file *file-name* (system-error-code).

Explanation: Data could not be written to the indicated file.

User response: Try reissuing the **mkcimreg** command later. If the command still fails, contact the IBM Support Center and supply this error code.

2664–518 *module-name*: Unrecognized property type detected.

Explanation: A property with an invalid type was detected.

User response: Contact the vendor who supplied the MOF file.

2664–519 *file-name*: *line-number*: Qualifier *qualifier-name* cannot be overridden. Skipping.

Explanation: In the indicated managed object format (MOF) file, on the indicated line, a class illegally overrides the qualifier of a parent class.

User response: Contact the vendor who supplied the MOF file.

2664–520 Error accessing file *file-name* (system-error-code).

Explanation: The indicated file could not be mapped into memory.

User response: Try reissuing the **mkcimreg** command later. If the command still fails, contact the IBM Support Center and supply this error code.

2664–521 Required superclass *superclass-name* has not been registered.

Explanation: A class in a managed object format (MOF) referenced an unregistered superclass, which is identified by *superclass-name*.

User response: Use the **mkcimreg** command to register the required superclass before registering any classes that derive from it.

2664–522 *file-name* is corrupted and cannot be loaded.

Explanation: A checksum or other integrity test on the indicated file has failed.

User response: Try reissuing the **mkcimreg** command later. If the command still fails, contact the IBM Support Center.

2664–523 Cannot access directory *class-directory*.

Explanation: The indicated directory could not be read or created.

User response: Try reissuing the **mkcimreg** command later. If the command still fails, contact the IBM Support Center and supply this message number.

2664–524 Cannot create directory *class-directory*.

Explanation: The indicated directory could not be created.

User response: Try reissuing the **mkcimreg** command later. If the command still fails, contact the IBM Support Center and supply this message number.

2664–525 *file-name: line-number:* Instance of class *class-name* cannot be created because the class has not been registered.

Explanation: In the indicated file, at the indicated line, a user attempted to introduce an instance of a class that is not registered.

User response: Use the **mkcimreg** command to register the class before creating any instances of it.

2664–526 *file-name: line-number:* Instance of class *class-name* cannot be created because no property values are defined.

Explanation: In the indicated file, at the indicated line, a user attempted to introduce an instance of a class without initial property values.

User response: Add property values to produce a valid class instance.

2664–527 *file-name: line-number:* Instance of class *class-name* cannot be created because property *property-name* has not been defined in this class.

Explanation: In the indicated file, at the indicated line, a class instance attempted to initialize a property that is not part of the definition of this class.

User response: Contact the vendor who supplied the MOF file.

2664–528 Provider registration failed with reason *error-code*.

Explanation: Provider registration failed.

User response: Contact the IBM Support Center and supply this error code.

2664–529 Internal error. RMC CDB creation for class *class-name* failed.

Explanation: Class registration failed because RSCT was unable to create control data that the resource monitoring and control (RMC) subsystem needs for the indicated class.

User response: Make sure the **/var** directory is not full and try the operation again. If the problem persists, contact the IBM Support Center.

2664–530 Internal error. RMC CDB creation for class *class-name* failed due to error in CIMCBD file.

Explanation: Class registration failed because RSCT was unable to create control data that the resource monitoring and control (RMC) subsystem needs for the indicated class.

User response: Make sure the **/var** directory is not full and try the operation again. If the problem persists, contact the IBM Support Center.

2664–531 Message catalog creation for class *class-name* failed. No class-specific messages will be available for this class.

Explanation: A message catalog for the indicated class could not be created.

User response: Make sure the **/var** directory is not full and try the operation again. If the problem persists, contact the IBM Support Center.

2664–532 The command **/usr/sbin/rsct/bin/rmcctrl required to restart RMC is not available.**

Explanation: The **rmcctrl** command for the resource monitoring and control (RMC) subsystem is missing.

User response: Reinstall RSCT.

2664–533 The class "*class-name*" already exists in namespace *class-namespace*. Please re-issue the command with the **"-f" flag to overwrite the existing class.**

Explanation: The CIM resource manager did not register the indicated class because it already is registered.

User response: Either use the **-f** flag on the **mkcimreg** command to overwrite the existing class, or cancel this operation.

2664-534 **Provider registration failed because read or search permission to the provider directory was denied.**

Explanation: The CIM resource manager could not register the provider library because access to its directory was denied.

User response: Move the provider library to a different directory and reissue the **mkcimreg** command.

2664-535 **Provider registration failed because an IO error occurred while trying to access the provider directory.**

Explanation: The CIM resource manager could not register the provider library because an I/O error occurred while the resource manager was trying to access the provider directory.

User response: Possible causes of this error include a file-system malfunction that is unrelated to this command. Try reissuing the **mkcimreg** command; if the error reoccurs, look for additional error messages that identify the cause of the error.

2664-536 **Provider registration failed because of too many symbolic links to provider directory.**

Explanation: The CIM resource manager could not register the provider library because of a symbolic link loop.

User response: Remove the symbolic link loop, and reissue the **mkcimreg** command

2664-537 **Provider registration failed because a component name in the provider path is too long.**

Explanation: The CIM resource manager could not register the provider library because a component name in the path is too long.

User response: Move the provider library to a different directory with shorter component path names. Then reissue the **mkcimreg** command.

2664-538 **Provider registration failed because the provider directory does not exist.**

Explanation: The CIM resource manager could not register the provider library because the provider directory does not exist.

User response: Move the provider library to a valid directory, and reissue the **mkcimreg** command.

2664-539 **Provider registration failed because a component in the provider path is not a directory.**

Explanation: The CIM resource manager could not register the provider library because the specified provider directory is a non-terminating component of the provider path. A non-terminating component of the provider path is not a directory.

User response: Correct the provider library path, and reissue the **mkcimreg** command.

2664-540 **Provider registration failed due to an error creating or opening *file_name*.**

Explanation: An error occurred while the CIM resource manager was attempting to open or create the indicated file or directory.

User response: Make sure this program has permission to access the indicated file or directory. Then reissue the **mkcimreg** command.

2664-541 **Provider registration failed due to incorrect PG_ProviderCapabilities instance data. *instance_property***

Explanation: The indicated instance property of the PG_ProviderCapabilities class has a malformed property or missing property value. Because of this error, the CIM resource manager could not register the provider.

User response: Correct the indicated error in the managed object format (MOF) file. Then reissue the **mkcimreg** command.

2664-542 **Provider registration failed due to incorrect PG_ProviderModule instance data. *instance_property***

Explanation: The indicated instance property of the PG_ProviderModule class has a malformed property or missing property value. Because of this error, the CIM resource manager could not register the provider.

User response: Correct the indicated error in the managed object format (MOF) file. Then reissue the **mkcimreg** command.

2664-543 **Property "*property_name*" in class "*class_name*" overrides parent class's property but does not have Override qualifier.**

Explanation: A child class illegally attempted to override the indicated property of the indicated parent class.

User response: Apply the "Override" qualifier to the indicated property in the child class. Then reissue the **mkcimreg** command.

2664-544 **Method "*method_name*" in class "*class_name*" overrides parent class's method but does not have Override qualifier.**

Explanation: A child class illegally attempted to override the indicated method of the indicated parent class.

User response: Apply the "Override" qualifier to the indicated method in the child class. Then reissue the **mkcimreg** command.

2664-545 ***file_name:line_number: "element_name"* is a name reserved for RMC use.**

Explanation: One of the following names was found in a managed object format (MOF) file:

- NodeIDs
- NodeNameList
- ActivePeerDomain

These names cannot be used for a CIM method or property name because they are reserved for IBM use.

User response: Contact the vendor who supplied the MOF file.

2664-546 **The CIM class "*class_name*" is not a valid association class.**

Explanation: At least two references could not be found in the association class.

User response: Contact the vendor who supplied the MOF file.

2664-547 **The CIM association class "*class_name*" could not be registered due to an internal error.**

Explanation: An internal error has prevented an association class from being added to the association map.

User response: Try running the command again later or contact the IBM Support Center.

2664-548 **This is not a supported combination of command line arguments.**

Explanation: The combination of arguments you supplied is not valid.

User response: Check the command's usage statement and then reissue the command with a valid combination of arguments.

2664-549 **The directory *directory_name* could not be created.**

Explanation: A system error occurred that prevented the **mkcimreg** command from creating a required directory.

User response: Make sure **root** has the authority to access the specified directory.

Chapter 31. 2667: Least-privilege (LP) resource manager

When an error occurs, the least-privilege (LP) resource manager issues one or more messages with a prefix of **2667**.

2667-001 **Class name *class_name* is not recognized by this resource manager.**

Explanation: The specified class name is not valid.

User response: Specify a valid class name.

2667-002 **Could not initialize control point for class *class_name*.**

Explanation: The least-privilege (LP) resource manager could not initialize a control point for the specified class.

User response: None.

2667-003 **Error calculating CheckSum.**

Explanation: An unexpected system error occurred while the least-privilege (LP) resource manager was calculating the **CheckSum** value. This error usually occurs when system memory resources are not available or the file system is not stable.

User response: Check the availability of system resources and try the operation again. If the problem persists, contact the IBM Support Center.

2667-004 **Check sum mismatch. Command not invoked.**

Explanation: The stored **CheckSum** attribute value of the least-privilege (LP) resource does not match the calculated **CheckSum** value.

User response: The LP command script may have been modified or the LP script does not exist. Invoke **ReCalCheckSum** to calculate the **CheckSum** of the modified LP resource or make sure the LP command is valid.

2667-005 **Input to the RunRootCommand action is not valid.**

Explanation: This action requires input parameters.

User response: You must specify valid input parameters to this action.

2667-006 **The Command Path is empty or contains control characters.**

Explanation: The command path was empty or contains control characters.

User response: Check the **CommandPath** string for

control characters. Resubmit the request using a valid (non-empty) command path.

2667-007 **Cannot delete a Locked Resource.**

Explanation: The **Lock** attribute value is **1**.

User response: Change the **Lock** attribute value to **0** and resubmit the request.

2667-008 **One or more of the input arguments is invalid.**

Explanation: The input parameters to the resource action contain one or more non-valid characters. The non-valid characters are: **&**, **;**, **`**, **'**, ****, **"**, **|**, *****, **?**, **~**, **<**, **>**, **^**, **(**, **)**, **[**, **]**, **{**, **}**, and **\$**.

User response: Check the input string for non-valid characters and resubmit the request.

2667-009 **The Lock attribute must be 0(UNLOCK) or 1(LOCK).**

Explanation: The valid values for the **Lock** attribute are **0** and **1**. The **Lock** attribute is set to a value other than **0** or **1**.

User response: Set the **Lock** attribute value to **0** or **1** and resubmit the request.

2667-010 **The ControlFlags attribute must be 0, 1, 2 or 3.**

Explanation: The valid values for the **ControlFlags** attribute are **0**, **1**, **2**, and **3**. The **ControlFlags** attribute is set to a value other than one of the valid values.

User response: Set the **ControlFlags** attribute value to **0**, **1**, **2**, or **3** and resubmit the request. See *RSCT: Administration Guide* to check the meaning of each value.

2667-012 **FilterScript invocation resulted in error with return code *return_code*.**

Explanation: An error occurred while running **FilterScript**. This error usually occurs when a system resource is not available or is not stable.

User response: Check the availability of system resources and try the operation again. If the problem persists, contact the IBM Support Center.

2667-013 **The CommandPath is empty or**

contains control characters.

Explanation: The command path was empty or contained control characters.

User response: Check the **CommandPath** string for control characters. Resubmit the request using a valid, non-empty **CommandPath** value.

2667-014 The RunCmdName is empty or contains control characters.

Explanation: The **RunCmdName** attribute value was empty or contained control characters.

User response: Check the **RunCmdName** string for control characters. Resubmit the request using a valid, non-empty **RunCmdName** value.

2667-015 Input to GetCommandHistory class action can be 0 (Clears history list) or a number not greater than 1000.

Explanation: The **NumCmds** input to the **GetCommandHistory** class action must be in the range 0 to 1000.

User response: Change the value of **NumCmds** to a number in the specified range and resubmit the request.

2667-500 The combination of -r flag with attr=value type arguments is not allowed.

Explanation: You cannot specify the **-r** flag along with any *attr=value* arguments when using the **chlpcmd** command.

User response: See the **chlpcmd** man page for more information about the use of this command.

2667-501 The combination of -r flag with attr=value type arguments or -l or -c flags is not allowed.

Explanation: The **-r** flag cannot be used with the **-c** flag, the **-l** flag, or *attr=value* arguments.

User response: See the **chlpcmd** man page for more information about the use of this command.

2667-511 Input to lphistory is not valid. Valid input ranges from 1 to 1000.

Explanation: The valid range for input to the **lphistory** command is 1 to 1000.

User response: Specify a number in the valid range.

2667-512 Input option to -L is not valid. Valid display options are a,t,u,m,n,x,c.

Explanation: The display option specified with the **-L** flag is not valid. The valid options are **a**, **t**, **u**, **m**, **n**, **x**, and **c**.

User response: Specify a valid option.

2667-513 Cannot combine display option "a" with other display options.

Explanation: The **a** display option cannot be used with any other options of the **-L** flag.

User response: Use the **a** option or one or more other options with the **-L** flag and run the command again.

2667-514 Cannot combine -L and -c flags.

Explanation: The **-L** flag and the **-c** flag cannot both be used with this command.

User response: Use the **-L** flag or the **-c** flag and run the command again.

2667-515 Invalid time format for -B or -E.

Explanation: The format of the time that was specified with the **-B** flag or the **-E** flag is not valid.

User response: Make sure the time is specified in the correct format (*mmddhhmmYYYY*) and run the command again.

2667-520 The combination of -R flag with LP resource names or -A flag is not allowed.

Explanation: The **-R** flag cannot be used with least-privilege (LP) resource names or with the **-A** flag.

User response: See the **lslpcmd** man page for more information about the use of this command.

2667-530 The name of the LP command cannot be blank.

Explanation: You did not specify a valid LP command name.

User response: Enter the LP command name again.

2667-701 The permission *permission* is not valid.

Explanation: The specified permission is not valid.

User response: Specify a valid permission and run the command again.

2667-702 The number of user identities and permissions is not the same.

Explanation: The list of user identities and permissions specified does not contain the same number of user identities and permissions.

User response: Check the list and run the command again.

2667-881 The permission *permission* is not valid.

Explanation: The specified permission is not valid.

User response: Specify a valid permission and run the command again.

2667-882 The number of user identities and permissions is not the same.

Explanation: The list of user identities and permissions specified does not contain the same number of user identities and permissions.

User response: Check the list and run the command again.

2667-883 The combination of *flag1* and *flag2* is not allowed.

Explanation: The combination of the specified flags is not allowed.

User response: Refer to the usage statement, which lists the valid flags, operands, and flag-operand combinations.

2667-884 Incorrect number of operands.

Explanation: The command was called with an incorrect number of operands.

User response: Refer to the usage statement, which lists the valid flags, operands, and flag-operand combinations.

2667-885 Unable to read the input file *file_name*: error.

Explanation: The file name you specified to be used as input cannot be read. The error message contains the reason for the error.

User response: Take corrective steps to resolve the error.

2667-886 Unexpected input was found in the input file *file_name*: line *line_number*.

Explanation: The specified file name contained unexpected input on line *line_number*.

User response: Check the contents of the input file.

2667-887 No input data found in *file_name*.

Explanation: The specified file name contained no input data to process.

User response: Check the contents of the input file.

2667-888 Only one node name is allowed.

Explanation: The **-n** flag specifies more than one node. In this case, only one node name is allowed.

User response: Specify one node name using the **-n** flag.

2667-889 An unexpected return code of *return_code* was received by the command.

Explanation: The command received an unexpected return code from a process.

User response: Report this problem to your software service organization.

Chapter 32. 2668: Storage resource manager

When an error occurs, the storage resource manager issues one or more messages with a prefix of **2668**.

2668-000 **An operation *requested-function* could not complete due to an internal error *error-description*.**

Explanation: An operation could not be completed because an internal error occurred.

User response: See the error stack, if available, for more information.

2668-001 **The attribute "*attribute-name*" cannot be specified when defining a new resource.**

Explanation: When defining a new resource, you specified an attribute that is not valid because its value is generated automatically.

User response: Remove the specified attribute from the define resource call.

2668-002 **The attribute *attribute-name* appears in the request more than once.**

Explanation: You specified the same attribute for a single request more than once.

User response: Remove all duplicate copies of the same attribute in the request.

2668-003 **The resource class name *class_name* is not recognized by this resource manager.**

Explanation: The storage resource manager does not recognize that the specified resource class belongs to it. This is either an internal error or it indicates a corrupted resource monitoring and control (RMC) configuration.

User response: Record the information in this message and contact your software service organization.

2668-004 **The control point for resource class "*class_name*" cannot be initialized.**

Explanation: The storage resource manager could not create and initialize the resource class control point (RCCP) for the specified resource class.

User response: Make sure the system has enough resources, such as paging space and space available in the */var* file system. If this does not resolve the problem, record the information in this message and contact your software service organization.

2668-005 **Invalid parameter format passed to the `configCoordinationAll` action for resource class *class-name*.**

Explanation: The resource manager received the `configCoordinationAll` action for the specified resource class, but the input format is not valid or is not supported.

User response: This is an internal error. Contact your software service organization.

2668-006 **Onlining the device *device-name* in the resource class *class-name* is not possible due to an error code of *return-code*.**

Explanation: Before trying to bring the specified device online, the storage resource manager determined that the device could not be brought online, possibly because the required attributes (such as **MountPoint**) are not defined.

User response: Check the resource class attributes or the resource configuration.

2668-007 **The online operation of device *device-name* in the resource class *class-name* has failed with an error code of *return-code*.**

Explanation: The online operation of the specified device failed.

User response: Make sure the associated or dependent devices are available and working properly.

2668-008 **The offline operation of the device *device-name* in the resource class *class-name* has failed with an error code of *return-code*.**

Explanation: The offline operation of the specified device failed.

User response: Make sure the associated or dependent devices are available and working properly.

2668-009 **The local device *device-name* in the resource class *class-name* does not exist, is not accessible, or is missing a data structure.**

Explanation: The device-specific object for the specified resource class cannot be found or does not exist.

User response: Check the resource class and make sure the associated device is working properly. For a user-created file system, make sure the volume group is available.

2668-010 **The disk reserve operation on the device *device-name* in the resource class *class-name* has failed with an error code of *return-code*.**

Explanation: The reserve operation on the disk failed.

User response: Check the status of the disk.

2668-011 **The disk release operation on the device *device-name* has failed with an error code of *return-code*.**

Explanation: The release operation on the disk failed.

User response: Check the status of the disk.

2668-012 **The reset operation on the device *device-name* in the resource class *class-name* has failed with an error code of *return-code*. The device is either not available or currently used.**

Explanation: The reset operation on the disk failed because the device is not available or because its OpState is currently online.

User response: Check to see if the resource OpState is online or whether the device is working.

2668-013 **The disk reservation break operation on the device *device-name* in the resource class *class-name* has failed with an error code of *return-code*.**

Explanation: The reservation break operation on the disk failed.

User response: Check the status of the disk.

2668-014 **The ConfigCoordination action to class *class-name* of request *requested-ID* is rejected because one or more resources are currently active.**

Explanation: The request to stop the node or remove it from the domain is rejected because one or more resources in the storage resource manager are active.

User response: Take the resources in the storage resource manager offline and then try the request again.

2668-015 **Shared memory allocation for key *shared-memory-key* and size *requested-size* has failed with errno *errno*.**

Explanation: Shared memory allocation to keep track of the resource state failed.

User response: Check the system memory to see if the requested ID already exists or if the requested size is too large.

2668-016 **Attaching a shared memory of key *shared-memory-key* has failed with errno *errno*.**

Explanation: A shmat operation failed to attach shared memory.

User response: Check the shared memory status.

2668-017 **The filesystem *device-name* (*vfs=virtual-file-system*) cannot be mounted on *mount-point*. Return code=*return-code* and errno=*errno*.**

Explanation: A file system could not be mounted.

User response: Check to see if the mount point is being used. Make sure the file system is valid and usable.

2668-018 **A file system mount point '*mount-point*' is not configured or not available for the device *device-name***

Explanation: The file system could not be mounted because its mount point is not configured or is not available.

User response: Configure the **MountPoint** attribute in the **IBM.AgFileSystem** resource.

2668-019 **The unmount of filesystem *device-name* from the mount point *mount-point* failed with the errno *errno*.**

Explanation: The file system could not be unmounted.

User response: Check to see if the file system exists. Unmount the file system manually and reset the **IBM.AgFileSystem** resource.

2668-020 **The following error was returned from the RMC subsystem while attempting Harvest: *error*.**

Explanation: An error occurred on the remote node while trying to apply a harvested configuration change on the local node.

User response: Resolve the specified error on the remote node.

2668-021 **Online a disk *disk-name* fails because its volume group *group-name* is composed of multiple physical volumes.**

Explanation: On AIX, managed disk resources must be volume groups that are made up of exactly one physical volume.

User response: Use the **reducevg** command to reconfigure the logical volume manager (LVM) volume group so that it contains only one physical volume.

2668-022 **The specified HarvestInterval (*harvest-interval*) should be either 0 or at least equal to or greater than *min-harvest-interval* seconds.**

Explanation: The configuration will be reharvested periodically.

User response: Specify the suggested value.

2668-023 **The reservation operation on the disk device *device-name* failed due to the open failure of device *sg-device-name* with errno *errno*.**

Explanation: The reserve operation on the disk failed because the SCSI Generic (sg) device could not be opened.

User response: Make sure the device and its sg device are available.

2668-024 **The SCSI reserve operation on the disk device *device-name* has failed because a scsi operation on *sg-device-name* gives driver status = *driver-status*, host status = *host-status*, masked status = *masked-status*, return code=*return-code*.**

Explanation: The SCSI reserve operation on the device failed.

User response: Make sure the device and its SCSI Generic (sg) device are available.

2668-025 **The SCSI release operation on the disk device *device-name* has failed because a scsi operation on *sg-device-name* gives driver status = *driver-status*, host status = *host-status*, masked status = *masked-status*, return code=*return-code*.**

Explanation: The SCSI release operation on the device failed.

User response: Make sure the device and its SCSI Generic (sg) device are available.

2668-026 **The monitoring operation on the device *device-name* in the resource class *class-name* has failed with code *return-code*.**

Explanation: The monitoring operation failed.

User response: Check the status of the resource.

2668-027 **A UserControl resource can only be created as an aggregate resource with a ResourceType of 1.**

Explanation: A user-controlled resource creation has failed due to an unsupported resource type.

User response: Check the value of **ResourceType**.

2668-028 **Another resource with the same Name *name* already exists. Try again with the 'Force=1' option.**

Explanation: Another resource with the same **Name** attribute already exists.

User response: Specify a different value for *name* or use the 'Force=1' option.

2668-029 **Another resource with the same DeviceName *device-name* already exists. Try again with the 'Force=1' option."**

Explanation: Another resource with the same **DeviceName** attribute already exists.

User response: Specify a different value for *device-name* or use the 'Force=1' option.

2668-030 **Unable to mount device *device-name* on mount point *mount-point*. The command "*command-name*" failed with error number *error-code*.**

Explanation: The device, the mount point, or both need administrator attention.

User response: Refresh the configuration.

2668-031 **The resource "*resource-name*" in the resource class "*class-name*" cannot be deleted or changed because it is online. Use the command "**stopsrc**" to offline the resource and try again.**

Explanation: The resource cannot be deleted or changed because it is online.

User response: Make sure the resource is offline and retry the operation.

2668-032 **The online operation of the resource "*resource-name*" in the resource class "*class-name*" has failed because it is online on another node.**

Explanation: The online execution of the resource failed.

User response: Check to see if another constituent resource is online.

2668-033 **The online operation to the volume group "*AIX-volume-group*" has been rejected because no PVs are found in the volume group.**

Explanation: At least one PV (a disk or a partition, for example) must be configured in a volume group.

User response: Re-configure the LVM volume group.

2668-034 **The operation on filesystem *device-name* has failed because it is currently mounted but not at the intended mount point *mount-point*.**

Explanation: A file system operation failed.

User response: Check to see if the filesystem is mounted. If so, unmount it manually and reset the **IBM.AgFileSystem** resource.

2668-035 **The operation on filesystem *device-name* has failed because another filesystem is mounted at the intended mount point *mount-point*.**

Explanation: A file system operation failed.

User response: Check to see if another filesystem is mounted at the intended mount point. If so, unmount it manually and reset the **IBM.AgFileSystem** resource.

2668-036 **The operation on filesystem *device-name* has failed because it failed to get data from OS kernel about mounted filesystems.**

Explanation: A file system operation failed.

User response: Check to see if the operating system kernel has information about mounted file systems.

2668-037 **The command "*path-name*" failed with error *error-code* and reported the following to standard error:*standard-error***

Explanation: A command that was run on the local node failed.

User response: Based on the command and the standard error, try to correct the problem. For example,

make sure that a process is not using a mounted storage device before it tries to unmount (that is, go offline).

2668-038 **The unmount of device *device-name* failed with return code *error-number*. Check that the file system is not busy.**

Explanation: The unmount of the specified device failed.

User response: Check to see that no processes are currently using the file system. You can use the **fuser** command on the node to identify process IDs of processes currently using the file system. In order to forcefully unmount the device, you can issue the **resetrsrsc** command against the device. This will terminate any processes currently using the file system and then attempt to forcefully unmount the file system.

2668-039 **The offline operation of the device "*device-name*" in the resource class "*class-name-1*" has failed because the dependent or containing resources of the class "*class-name-2*" are currently online.**

Explanation: The offline execution of the device has failed.

User response: Take the associated or dependent resources offline first.

2668-040 **The device "*device-name*" of the resource class "*class-name*" was already offlined when the Storage resource manager restarted and therefore the resource will not be recovered.**

Explanation: The resource was already taken offline when the storage resource manager was stopped.

User response: Check to see if the resource was taken offline properly.

2668-041 **The reset operation of the device "*device-name*" of the resource class "*class-name*" has failed because the resource is currently online.**

Explanation: The resource is currently online.

User response: Perform the offline operation before performing the reset operation.

2668-042 **Attribute "*attribute_name*" cannot be changed for the harvested file systems.**

Explanation: The attributes of the harvested file system are not allowed to be changed.

User response: Check to see if the resource was created by a user.

2668-043 **Attribute "*attribute_name*" is not provided or specified with an improper value.**

Explanation: A required attribute was not provided or was specified with an incorrect value.

User response: Add the attribute with a valid value and try the define operation again.

2668-044 **Name attribute of a file system resource '*resource_name*' is the same as its label and can not be changed.**

Explanation: The file system's name and label are the same, so the name cannot be changed.

User response:

| **2668-045** **At least RSCT active version**
| ***required_version* is required for the**
| **attribute '*attribute_name*'.**

| **Explanation:** An operation was requested that
| requires a later version of RSCT than is active in the
| peer domain.

| **User response:** Make sure that all nodes have been
| upgraded to the required level and then update the
| active version by running the **CompleteMigration** action
| of the **IBM.PeerDomain** resource class.

| **2668-046** **DeviceLockMode in *class_name* may**
| **not be changed for this resource type.**

| **Explanation:** Some resources types have restrictions
| on the **DeviceLockMode** values they permit.

| **User response:** Make sure the value specified for the
| **DeviceLockMode** attribute is valid: (**0**, to disable device
| locking, or **1**, to enable device locking).

Chapter 33. 2670: Service Availability Forum (SAF) resource manager

When an error occurs, the Service Availability Forum (SAF) resource manager issues one or more messages with a prefix of **2670**.

2670-001 Component Instantiate command failed.

Explanation: The instantiate command that was specified for this resource has failed.

User response: Check the command syntax, make sure that any arguments you specified are valid, and then try running the command again.

2670-002 Component Start command failed.

Explanation: The component start command that was specified for this resource has failed.

User response: Check the command syntax, make sure that any arguments you specified are valid, and then try running the command again.

2670-003 The components Presence state does not allow the resource to be brought online.

Explanation: Before the resource can be brought online, the component's Presence state must be **PRESENCE_INSTANTIATED** or **PRESENCE_UNINSTANTIATED**.

User response: Check the resource's Presence state. If required, reset the resource.

2670-004 Component Terminate command failed.

Explanation: The component terminate command that was specified for this resource has failed.

User response: Check the command syntax, make sure that any arguments you specified are valid, and then try running the command again.

2670-005 Component Cleanup command failed.

Explanation: The component cleanup command that was specified for this resource has failed.

User response: Check the command syntax, make sure that any arguments you specified are valid, and then try running the command again.

2670-006 Client does not support the required callback function.

Explanation: The component process did not provide a required callback function.

User response: Make sure the component provides all required callback functions.

2670-007 Client has disconnected and cannot be contacted.

Explanation: The component process has disconnected and cannot be contacted.

User response: Check the component for any error logs to determine why the process disconnected prematurely.

2670-008 SAF server library cannot allocate more memory.

Explanation: The SAF server has run out of memory.

User response: Restart the SAF server. If problem persists, contact your support organization.

2670-009 SAFRM internal error.

Explanation: An error occurred in the SAF resource manager.

User response: Contact your support organization.

2670-010 SAF_CSI resource cannot be brought online since it does not have an ActiveComponent set.

Explanation: The SAF_CSI resource must have an active SAF_Component resource that is online, instantiated, and will provide services to the SAF_CSI resource.

User response: Assign this SAF_CSI resource to an existing SAF_Component resource by setting its ActiveComponent attribute to the resource handle of the SAF_Component resource.

2670-011 The ActiveComponent ('resource_name') is not online so this SAF_CSI resource cannot be brought online.

Explanation: The SAF_CSI resource must have an active SAF_Component that is online, instantiated, and will provide services to the SAF_CSI resource.

User response: Make sure the ActiveComponent resource is online.

2670-012 The ActiveComponent is not instantiated so this SAF_CSI resource cannot be brought online.

Explanation: The SAF_CSI resource must have an active SAF_Component that is online, instantiated, and will provide services to the SAF_CSI resource.

User response: Make sure the ActiveComponent resource is online.

Appendix A. Accessibility features for RSCT

Accessibility features help users who have a disability, such as restricted mobility or limited vision, to use information technology products successfully.

Accessibility features

The following list includes the major accessibility features in RSCT:

- Keyboard-only operation
- Interfaces that are commonly used by screen readers
- Keys that are discernible by touch but do not activate just by touching them
- Industry-standard devices for ports and connectors
- The attachment of alternative input and output devices

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Appendix B. Product-related information

Reliable Scalable Cluster Technology (RSCT) is a component of the following licensed programs:

- AIX 5L
- Cluster Systems Management (CSM) for Linux
- System Automation for Multiplatforms

RSCT version

This edition applies to RSCT version:

- 2.3.11.0 for AIX 5.2
- 2.4.7.1 for AIX 5.3 and Linux

To find out which version of RSCT is running on a particular AIX node, enter:

```
lslpp -L rsct.basic.rte
```

To find out which version of RSCT is running on a particular Linux node, enter:

```
rpm -qa | grep rsct.basic
```

ISO 9000

ISO 9000 registered quality systems were used in the development and manufacturing of this product.

Product-related feedback

To contact the IBM cluster development organization, send your comments by e-mail to:

cluster@us.ibm.com

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Glossary

access control. The process of limiting access to system objects and resources to authorized principals.

access control list. A list of principals and the type of access allowed to each.

ACL. See *access control list*.

action. The part of the event response resource that contains a command and other information about the command.

attribute. Attributes are either persistent or dynamic. A resource class is defined by a set of persistent and dynamic attributes. A resource is also defined by a set of persistent and dynamic attributes. Persistent attributes define the configuration of the resource class and resource. Dynamic attributes define a state or a performance-related aspect of the resource class and resource. In the same resource class or resource, a given attribute name can be specified as either persistent or dynamic, but not both.

AIX. Advanced Interactive Executive. See *AIX operating system*.

AIX operating system. IBM's implementation of the UNIX operating system.

authentication. The process of validating the identity of an entity, generally based on user name and password. However, it does not address the access rights of that entity. Thus, it simply makes sure a user is who he or she claims to be.

authorization. The process of granting or denying access to an entity to system objects or resources, based on the entity's identity.

checksum. A count of the number of bits in a transmission unit that is included with the unit so that the receiver can check to see whether the same number of bits arrived. If the counts match, it's assumed that the complete transmission was received. TCP and UDP communication layers provide a checksum count and verification as one of their services.

client. Client applications are the ordinary user interface programs that are invoked by users or routines provided by trusted services for other components to use. The client has no network identity of its own: it assumes the identity of the invoking user or of the process where it is called, who must have previously obtained network credentials.

cluster. A group of servers and other resources that act like a single system and enable high availability and, in some cases, load balancing and parallel processing.

clustering. The use of multiple computers (such as UNIX workstations, for example), multiple storage devices, and redundant interconnections to form what appears to users as a single highly-available system. Clustering can be used for load balancing, for high availability, and as a relatively low-cost form of parallel processing for scientific and other applications that lend themselves to parallel operations.

cluster security services. A component of RSCT that is used by RSCT applications and other RSCT components to perform authentication within both management domains and peer domains.

condition. A state of a resource as defined by the event response resource manager (ERRM) that is of interest to a client. It is defined by means of a logical expression called an event expression. Conditions apply to resource classes unless a specific resource is designated.

condition/response association. A link between a condition and a response.

CSM. Clusters Systems Management.

datagram. Synonymous with *UDP packet*.

DNS. See *domain name system*.

domain. (1) A set of network resources (such as applications and printers, for example) for a group of users. A user logs in to the domain to gain access to the resources, which could be located on a number of different servers in the network. (2) A group of server and client machines that exist in the same security structure. (3) A group of computers and devices on a network that are administered as a unit with common rules and procedures. Within the Internet, a domain is defined by its IP address. All devices that share a common part of the IP address are said to be in the same domain.

domain name. A meaningful and easy-to-remember "handle" for an Internet address.

domain name system. The service through which domain names are located and translated into IP addresses.

event. Occurs when the event expression of a condition evaluates to True. An evaluation occurs each time an instance of a dynamic attribute is observed.

event expression. A definition of the specific state when an event is true.

event response. One or more actions as defined by the event response resource manager (ERRM) that take place in response to an event or a rearm event.

failover. A backup operation that automatically switches to another adapter if one adapter fails. Failover is an important fault-tolerance function of mission-critical systems that rely on constant accessibility. Automatically and transparently to the user, failover redirects requests from the failed adapter to another adapter that mimics the operations of the failed adapter.

FFDC. See *first failure data capture*.

first failure data capture. Provides a way to track problems back to their origin even though the source problem may have occurred in other layers or subsystems than the layer or subsystem with which the end user is interacting. FFDC provides a correlator called an **ffdc_id** for any error that it writes to the AIX error log. This correlator can be used to link related events together to form a chain.

FIFO. First in first out, usually referring to buffers.

High Performance Switch. The switch that works in conjunction with a specific family of IBM System p servers.

HPS. See *High Performance Switch*.

Internet Protocol. The method by which data is sent from one computer to another on the Internet.

IP. See *Internet Protocol*.

IP address. A 32-bit (in IP Version 4) or 128-bit (in IP Version 6) number identifying each sender or receiver of information that is sent in packets across the Internet.

LAPI. See *low-level application programming interface*.

LAPI for Linux. The version of LAPI that runs on the Linux operating system. See also *low-level application programming interface*.

Linux. A freeware clone of UNIX for 386-based personal computers (PCs). Linux consists of the **linux** kernel (core operating system), originally written by Linus Torvalds, along with utility programs developed by the Free Software Foundation and by others.

LoadLeveler®. A job management system that works with POE to let users run jobs and match processing needs with system resources, in order to make better use of the system.

low-level application programming interface. A low-overhead message-passing protocol that uses a one-sided communication model and active message paradigm to transfer data among tasks. See also *LAPI for Linux* and *RSCT LAPI for AIX 5L*. Contrast with *PSSP LAPI*.

logical unit number. A unique identifier used on a SCSI bus that enables it to differentiate between up to eight separate devices (each of which is a logical unit).

Each LUN is a unique number that identifies a specific logical unit, which may be an end user, a file, or an application program.

LUN. See *logical unit number*.

management domain. A set of nodes configured for manageability by the Clusters Systems Management (CSM) licensed program. Such a domain has a management server that is used to administer a number of managed nodes. Only management servers have knowledge of the whole domain. Managed nodes only know about the servers managing them; they know nothing of each other. Contrast with *peer domain*.

Message Passing Interface. A standardized API for implementing the message-passing model.

MPI. See *Message Passing Interface*.

mutex. See *mutual exclusion object*.

mutual exclusion object. A program object that allows multiple program threads to share the same resource, such as file access, but not simultaneously. When a program is started, a mutual exclusion object is created with a unique name. After this stage, any thread that needs the resource must lock the mutual exclusion object from other threads while it is using the resource. The mutual exclusion object is set to unlock when the data is no longer needed or the routine is finished.

network credentials. These represent the data specific to each underlying security mechanism.

OSI. Operating system image.

PAC. See *privileged attribute certificate*.

packet. The unit of data that is routed between an origin and a destination on the Internet or any other packet-switched network.

Parallel Environment. An IBM licensed program that is an execution and development environment for parallel C, C++, and FORTRAN programs. PE also includes tools for debugging, profiling, and tuning parallel programs.

parallel operating environment. An execution environment that smooths the differences between serial and parallel execution. It lets you submit and manage parallel jobs.

Parallel System Support Programs. The IBM Parallel System Support Programs for AIX 5L licensed program is system administration software for the IBM RS/6000 SP system.

PE. See *Parallel Environment*.

peer domain. A set of nodes configured for high availability by the configuration resource manager. Such a domain has no distinguished or master node. All

nodes are aware of all other nodes, and administrative commands can be issued from any node in the domain. All nodes also have a consistent view of the domain membership. Contrast with *management domain*.

POE. See *parallel operating environment*.

port. A "logical connection place". Using TCP/IP, the way a client program specifies a particular server program on a computer in a network.

principal. A user, an instance of the server, or an instance of a trusted client whose identity is to be authenticated.

privileged attribute certificate. Contains such information as the client's name and the groups to which it belongs. Its format is dependent on the underlying security mechanism.

protocol. The set of rules that endpoints in a telecommunication connection use when they communicate.

PSSP. See *Parallel System Support Programs*.

PSSP LAPI. The version of LAPI that supports the SP Switch2.

rearm event. Occurs when the rearm expression for a condition evaluates to True.

rearm expression. An expression that generates an event which alternates with an original event in the following way: the event expression is used until it is true; then, the rearm expression is used until it is true; then, the event expression is used. The rearm expression is commonly the inverse of the event expression. It can also be used with the event expression to define an upper and lower boundary for a condition of interest.

Reliable Scalable Cluster Technology. A set of software components that together provide a comprehensive clustering environment for AIX and Linux. RSCT is the infrastructure used by a variety of IBM products to provide clusters with improved system availability, scalability, and ease of use.

resource. An entity in the system that provides a set of services. Examples of hardware entities are processors, disk drives, memory, and adapters. Examples of software entities are database applications, processes, and file systems. Each resource in the system has one or more attributes that define the state of the resource.

resource class. A broad category of system resource, for example: node, file system, adapter. Each resource class has a container that holds the functions, information, dynamic attributes, and conditions that

apply to that resource class. For example, the **/tmp space used** condition applies to a file system resource class.

resource manager. A process that maps resource and resource-class abstractions into calls and commands for one or more specific types of resources. A resource manager can be a standalone daemon, or it can be integrated into an application or a subsystem directly.

RSCT. See *Reliable Scalable Cluster Technology*.

RSCT LAPI for AIX 5L. The version of LAPI that runs on the AIX 5.2 and 5.3 operating systems. See also *low-level application programming interface*.

RSCT peer domain. See *peer domain*.

SCSI. See *Small System Computer Interface*.

Small System Computer Interface. A parallel interface that can have up to eight devices all attached through a single cable; the cable and the host (computer) adapter make up the SCSI bus. The bus allows the interchange of information between devices independently of the host. In the SCSI program, each device is assigned a unique number, which is either a number between 0 and 7 for an 8-bit (narrow) bus, or between 8 and 16 for a 16-bit (wide) bus. The devices that request input/output (I/O) operations are initiators and the devices that perform these operations are targets. Each target has the capacity to connect up to eight additional devices through its own controller; these devices are the logical units, each of which is assigned a unique number for identification to the SCSI controller for command processing.

SD. Structured data.

security context token. A pointer to an opaque data structure called the context token descriptor. The context token is associated with a connection between a client and the server.

security services token. A pointer to an opaque descriptor called the security token descriptor. It keeps track of the mechanism-independent information and state.

servers. Server programs are usually daemons or other applications running in the background without a user's inherited credentials. A server must acquire its own network identity to get to access other trusted services.

SP Switch2. The switch that works in conjunction with IBM RS/6000 SP systems.

standalone system. A system on which you are using LAPI for Linux or RSCT LAPI for AIX 5L that is *not* running PE.

striping. The distribution of message data across multiple communication adapters in order to increase bandwidth.

TCP. See *Transmission Control Protocol*.

Transmission Control Protocol. One of the core Internet protocols. TCP ports are 16-bit entities, so a maximum of 65535 different endpoints are possible within a single IP address.

UDP. See *User Datagram Protocol*.

User Datagram Protocol. One of the core Internet protocols. UDP is a layer 4 protocol (Transport layer of the OSI model) within the Internet protocol suite. It provides a mechanism to identify different endpoints on a single host by using ports. UDP deals with single-packet delivery that is provided by the underlying IP. As a stateless protocol, it is often used in applications where data must arrive quickly. This smaller feature set provides quicker data transmittal and lower total overhead. UDP packets (or *datagrams*) contain, in addition to the lower-level headers, a UDP header, which consists of the packet length, source and destination ports, and a checksum. UDP ports are 16-bit entities, so a maximum of 65535 different endpoints are possible within a single IP address.

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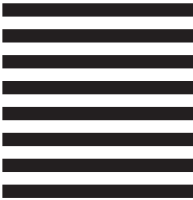
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