Tivoli® System Automation for Multiplatforms

IBM

Version 2.2

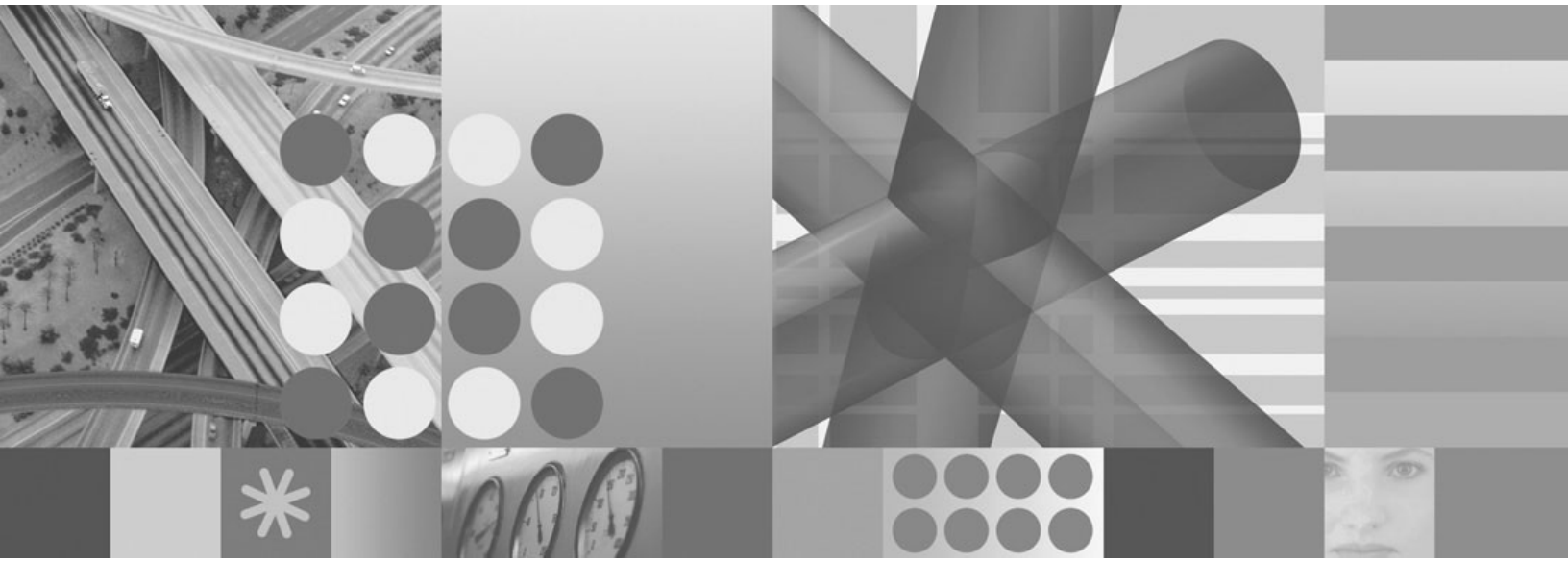
End-to-End Automation Management Component Reference

SC33-8276-00

Tivoli® System Automation for Multiplatforms

IBM

Version 2.2



End-to-End Automation Management Component Reference

SC33-8276-00

Note!
Before using this information and the product it supports, read the information in Appendix I, "Notices," on page 155.

First Edition (October 2006)

This edition of the *End-to-End Automation Management Component Reference* applies to Version 2, Release 2 of IBM Tivoli System Automation for Multiplatforms, program number 5724–M00, and to all subsequent releases and modifications of this product until otherwise indicated in new editions.

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About this guide

This book contains reference information, for example, commands and messages, pertaining to the end-to-end automation management component of IBM Tivoli System Automation for Multiplatforms.

Who should read this guide

This book is intended for all users of the end-to-end automation management component who are responsible for administering the component and for diagnosing problems related to the component.

How to use this guide

This guide is divided into the following parts:

- Part 1, "End-to-end automation management command reference," on page 1 describes the commands that you can issue in the end-to-end automation manager command shell.
- Part 2, "Automation policy reference," on page 31 describes the elements of end-to-end automation policies, lists the policy rules, and presents the sample automation policy that is shipped with the end-to-end automation management component.
- Part 3, "Messages," on page 57 lists the messages that you might encounter while working with the end-to-end automation management component.
- The Appendixes list miscellaneous reference information for administrators and operators, such as default directories and configuration properties files.

Where to find more information

In addition to this manual, the IBM Tivoli System Automation for Multiplatforms library contains the following books:

- *IBM Tivoli System Automation for Multiplatforms Installation and Configuration Guide*, SC33-8273
- *IBM Tivoli System Automation for Multiplatforms End-to-End Automation Management Component Administrator's and User's Guide*, SC33-8275
- *IBM Tivoli System Automation for Multiplatforms Base Component Administrator's and User's Guide*, SC33-8272
- *IBM Tivoli System Automation for Multiplatforms Base Component Reference*, SC33-8274

You can download the complete documentation at
`http://publib.boulder.ibm.com/tividd/td/IBMTivoliSystemAutomationforMultiplatforms2.2.html`

The IBM Tivoli System Automation for Multiplatforms home page contains useful up-to-date information, including support links and downloads for maintenance packages.

You find the IBM Tivoli System Automation for Multiplatforms home page at:

`www.ibm.com/software/tivoli/products/sys-auto-linux/`

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Conventions used in this guide

This guide uses several conventions for special terms and actions and operating system commands and paths.

Typeface conventions

This guide uses the following conventions:

- Typically, file names, directories, and commands appear in a different font. For example:
  - File name: `setup.jar`
  - Directory: `/etc/hosts`
  - Command: `startServer server1`
- Variables are either italicized, enclosed in brackets, or both. For example:
  - http://<hostname.yourco.com>/index.html
- Frequently, variables are used to indicate a root installation directory:
  - Root installation directory of the end-to-end automation management component:

    <EEZ_INSTALL_ROOT> or EEZ_INSTALL_ROOT
  - WebSphere Application Server root installation directory: <was_root> or was_root
  - Runtime root directory of Integrated Solutions Console: <isc_runtime_root> or isc_runtime_root

  For more information on such variables, see Appendix A, "Default directories," on page 133.
- Directories are shown with forward slashes (/), unless operating-system specific information is provided. On Windows systems, you should use backward slashes (\) when typing at a command line, unless otherwise noted.
- Operating-system specific information is provided. For example:
  - **AIX, Linux:** `/opt/IBM/tsamp/eez`
  - **Windows:** `C:\Program Files\IBM\tsamp\eez`

Related information

This topic to provides information about publications and Web sites related to IBM Tivoli System Automation for Multiplatforms:

WebSphere Application Server publications:

The latest versions of all WebSphere Application Server publications can be found on the WebSphere Application Server library Web site at

`www.ibm.com/software/webservers/appserv/was/library/`

IBM DB2 publications:

DB2 publications can be found on the IBM DB2 UDB Web site at

`www.ibm.com/software/data/db2/udb/support/`

The link to the PDF manuals is available in the **Other resources** section on the Web page.

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Chapter 1. Automation manager command shell commands

Command overview

Table 1list the commands that can be issued in the end-to-end automation manager command shell. The command **eezcs** that you use to issue a single command to the end-to-end automation manager or to open a command subshell that accepts multiple commands is described in 4.

Table 1. Command shell commands

Command	Description	For details, see page
lseezdom	Lists information about the automation domains that are currently known to the end-to-end automation manager.	6
eezpolicy	Activates or deactivates an end-to-end automation policy or lists information about the automation policies in the policy pool.	8
resreq	Issues online and offline requests against resources or cancels previously issued requests and suspends and resumes automation for resources.	11
resetres	Resets the operational state of end-to-end automation resources from "Unrecoverable error" to "Unknown".	14
chprefmbr	Changes the preferred member of a choice group.	15
lsrel	Lists information about the managed relationships that are defined in the currently active automation policy.	17
lsres	Lists information about the resources that are defined in the currently active end-to-end automation policy.	20
lsresreq	Lists requests and orders that were issued against resources.	24
help	Displays a command's usage statement or a list of all possible commands.	26
quit	Closes the command shell in shell mode.	28

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eezcs

Name

eezcs — executes an end-to-end automation manager command or opens a subshell

Synopsis

eezcs [**–h**] [**–S** *server_name*[*:port*]] [**–c** *command* [**–u** *user_name* **–p** *password*]] [**–V**] [**–T**]

Description

Use this command to execute one or more commands against an end-to-end automation manager:

- If you specify an automation manager command with the **–c** option, you open the command shell in line mode. In this mode, the shell will connect to the automation manager, execute the command, display the results, and quit.
- When you omit **–c** option, you open the command shell in shell mode. In this mode, a subshell opens in which you can issue an arbitrary number of commands against an end-to-end automation manager until you close the subshell with the **quit** command. To display a list of all commands that can be issued against the automation manager, use the **help** command.

To display a command's usage statement, issue the command with the **-h** option, for example:

- In line mode, enter:

  ```
  eezcs -c "lsres -h"
  ```

- In shell mode, enter:

  ```
  EEZCS> lsres -h
  ```

Options

–S *server_name*[*:port*]
: Specifies the information needed to connect to the server that hosts the end-to-end automation manager. If the option is not specified, the default `localhost:2809` is used.

–c *command*
: Specifies an automation manager command in line mode. The command shell connects to the automation manager, executes the command, writes the output to standard output, and quits. When the option is omitted, the command shell is opened in shell mode.

–u *user_ID*
: Specifies the user ID to be used for authentication to the end-to-end automation manager. The option can only be used together with the **–c** option. This ensures that user ID and password specification is only used in line mode.

–p *password*
: Specifies the password for the user ID specified with the option **–u**. The option can only be used together with the **–c** option. This ensures that user ID and password specification is only used in line mode.

–V
: Writes the command’s verbose messages to standard output.

–T Writes the command's trace messages to standard output. For your software-service organization's use only.

–h Writes the command's usage statement to standard output.

Parameters

None

Exit status

0 The command ran successfully.
1 The command was unable to contact the end-to-end automation manager.
2 An unknown flag was specified on the command line or a required parameter was not specified.
4 The command encountered a security problem.
>10 A problem occurred when the specified automation manager command was executed. For information about a specific return code, refer to the Return codes section for the command in this guide.

Authorization

To use the command shell, the user ID used to log in must have the right to execute the **eezcs** command. After the installation of the end-to-end automation management component on UNIX and Linux systems, you need root authority. On Windows, you must be able to log in to the Windows system. If you want to access a running end-to-end automation manager on a remote server, you need a valid user ID on the corresponding server.

The user name must have at least the EEZMonitor and EEZEndToEndAccess roles on the contacted end-to-end automation domain in order to list resources from the automation domain's currently active policy. For a detailed description of the end-to-end automation-specific user roles, refer to the *IBM Tivoli System Automation for Multiplatforms End-to-End Automation Management Component Administrator's and User's Guide*, chapter "Post-installation tasks for administrators".

Examples

1. To open a command shell in shell mode, contacting the end-to-end automation domain that runs on the local host, using the verbose option, enter:

   ```
   eezcs -V
   ```

2. To list all top-level resource groups that are defined in the currently active policy of the end-to-end automation domain that is running on server "REMOTE_1" on port "2810", enter:

   ```
   eezcs –S REMOTE_1:2810 –c "lsres –A"
   ```

3. To display the usage statement for the command **lsres** in line mode, enter:

   ```
   eezcs –c "lsres –h"
   ```

lseezdom

Name

lseezdom — lists information about the automation domains that are currently known to the end-to-end automation manager.

Synopsis

lseezdom [**–h**] [**–T**] [**–V**]
lseezdom [**–n** *domain_name*] [**–A p** | **d** | **b**] **–D** *Delimiter*] [**–T**] [**–V**] *Attr*

Description

The **lseezdom** command retrieves information about a specific or all automation domains that are currently known to the end-to-end automation manager. To use the command, it is not necessary to be connected to the automation domain.

The command contacts the Automation Manager J2EE Framework and gathers information about all currently known domains, which can be one or more first-level automation domains and zero or one end-to-end automation domain.

To retrieve the maximum of information about a specific or all domains, use the **–A** option with the **b** parameter. The list contains the following information about a domain:

- Name
- States
  The listed states are identical to those that are displayed on the operations console when the domain is selected.
- Dynamic and persistent attributes
  Depending on the type of automation domain, some of the domain attributes listed are always empty (for example, the ActivePolicyName attribute is always empty for first-level automation domains).
- When a first-level domain hosts one or more resources that are referenced in the active end-to-end automation policy, the domains are displayed in a tree-like structure.

Options

–n *domain*
Lists information about the specified domain.

–A p | d | b
Lists all domain attributes or the attributes of the specified type. Possible types:

p Lists the persistent attributes of a domain.

d Lists the dynamic attributes of a domain.

b Lists both the persistent and dynamic attributes of a domain.

–D *Delimiter*
Lists the output in delimited format.

–T Writes the command's trace messages to standard output. For your software-service organization's use only.

–V Writes the command's verbose messages to standard output.

–h Writes the command's usage statement to standard output.

Parameters

Attr Specifies the name of one or more attributes whose values are to be listed. Attribute names must be separated by spaces.

Exit status

0 The command ran successfully.
11 The command was unable to contact the end-to-end automation manager.
12 The user is not authorized to execute the command.
13 An incorrect flag was specified on the command line.
14 An incorrect attribute was specified on the command line.
16 The specified domain does not exist.

Authorization

EEZMonitor role

Examples

1. To list the dynamic attributes of all domains that are currently known to the end-to-end automation manager in verbose mode, enter:

   ```
   lseezdom –Ad -V
   ```

   Sample output:

   ```
   Automation Domains:
   Domain FriendlyE2E:
      DomainState                   =  Online
      CommunicationState            =  Ok
      DomainType                    =  E2E
      Domain Log has new Error      =  true
      ActivePolicyName              =  Sample E2E Policy
      PolicyActivationTime          =  Fri Jan 20 13:22:12 CET 2006
   Domain FECluster:
      DomainState                   =  Online
      CommunicationState            =  Ok
      DomainType                    =  FLA
      Domain Log has new Error      =  false
      ActivePolicyName              =
      PolicyActivationTime          =
   done.
   ```

2. To list the persistent attributes of the domain "FriendlyE2E" in verbose mode, enter:

   ```
   lseezdom -A b -n "FriendlyE2E" –V
   ```

   Sample output:

   ```
   Domain FriendlyE2E:
      DomainState                = Online
      CommunicationState         = Ok
      Domain Log has new Error   = false
      ActivePolicyName           = Sample E2E Policy
      PolicyActivationTime       = Tue Feb 28 20:45:38 CET 2006
      AutomationStartupTime      = Tue Feb 28 20:45:07 CET 2006
      AutomationProductname      = IBM Tivoli System Automation for Multiplatform
      AutomationVersion          = 2.2.0.060801, NO_APAR
      DomainType                 = typeE2EDomain
      AutomationLocation         =
      Properties:
      LOGICDECK                  = D:/projects/e2e/develop_GA22/ EEZDmnNativeC++/dvsutils/deck/E2E_LOGIC.dvs
   ```

eezpolicy

Name

eezpolicy — activates or deactivates an end-to-end automation policy or displays information about the automation policies in the policy pool.

Synopsis

eezpolicy [**–h**] [**–T**] [**–V**]

To activate an automation policy:
eezpolicy –a *policy_file_name* [**–T**] [**–V**]

To deactivate the currently active automation policy:
eezpolicy –d [**–T**] [**–V**]

To display information about a specific or all automation policies in the policy pool:
eezpolicy –A [*policy_file_name*] [**–T**] [**–V**]

Description

The **eezpolicy** command is used for the following tasks:

- Activate an automation policy
- Deactivate the currently active automation policy
- Display the list of automation policies from the policy pool
- Display information about a specific or all automation policies in the policy pool

Options

–a *policy_file_name*
: Activates the specified automation policy (after deactivating the currently active policy, if applicable).

  To obtain the correct *policy_file_name* of the automation policy, use **eezpolicy –A**.

  If the specified automation policy cannot be activated because of errors, the currently active automation policy is not deactivated and an error message is displayed.

–d
: Deactivates the active automation policy.

–A [*policy_file_name*]
: Lists detailed information about the specified automation policy or all automation policies in the policy pool.

–T
: Writes the command's trace messages to standard output. For your software-service organization's use only.

–V
: Writes the command's verbose messages to standard output.

–h
: Writes the command's usage statement to standard output.

Parameters

None

Exit status

0 The command ran successfully.
11 The command was unable to contact the end-to-end automation manager.
12 The user is not authorized to execute the command.
13 An incorrect flag was specified on the command line.
16 The specified policy was not found.
17 The specified policy cannot be activated or deactivated.

Authorization

EEZConfigurator and EEZEndToEndAccess roles

Examples

1. To list all policies in the policy pool, enter:

   ```
   eezpolicy -V
   ```

   Sample output:

   ```
   Policies in Pool 'C:\Program Files\IBM\tivoli\eez\policyPool'
       FEClusterDemo.xml
       FEClusterLinux.xml
       sample.xml
   ```

2. To list detailed information about all automation policies in the policy pool, enter:

   ```
   eezpolicy –A
   ```

   Sample output:

   ```
   Policy 1:
      PolicyFileName               =  FEClusterDemo.xml
      PolicyName                   =  FECluster Policy
      PolicyToken                  =  1.0.1
      PolicyAuthor                 =  Michael Atkins
      PolicyCheck                  =  Error

   Policy 2:
      PolicyFileName               =  FEClusterLinux.xml
      PolicyName                   =  FECluster Policy
      PolicyToken                  =  1.0.1
      PolicyAuthor                 =  Michael Atkins
      PolicyCheck                  =  Warnings

   Policy 3 (active) :
      PolicyFileName               =  sample.xml
      PolicyName                   =  Sample E2E Policy
      PolicyToken                  =  1.0.1
      PolicyAuthor                 =  Michael Atkins
      PolicyCheck                  =  ok


   EEZCS>
   ```

3. To activate an automation policy, use the **–a** option and specify the name of the policy. To retrieve the name, issue the **eezpolicy** command with the **–A** option (see the sample output in usage scenario 2).
   When the file name `sample.xml` is used to activate the policy, the output looks like this:

   ```
   eezpolicy -a sample.xml
   EEZS0100I The policy /etc/opt/IBM/tsamp/eez/policyPool/sample.xml
             has been activated.
   ```

4. To deactivate the active automation policy, enter:

   ```
   eezpolicy –d
   ```

   Sample output:

```
eezpolicy –d
EEZS0101I The policy /etc/opt/IBM/tsamp/eez/policyPool/josi.xml
          has been deactivated.
```

resreq

Name

resreq — issues requests against resources, cancels previously issued requests, or suspends or resumes automation for resources.

Synopsis

resreq [**–h**]

resreq –o *action* [**–p** *priority*] [**–s** *source*] [**–u** *user_id*] [**–c** *comments*] [**–T**] [**–V**] *resource_name*

Description

The **resreq** command is used to submit or cancel online and offline requests and to suspend and resume automation for resources.

The command shell allows you to perform the following additional tasks which cannot be performed from the operations console:

- Issue requests against resources that are in observed state "Unknown".
- Issue requests with different priorities. Note that the priority has no relevance when suspending or resuming automation.
- Specify the source of the request, which may be necessary for canceling start and stop requests because this requires that the request to be canceled and the cancel request have the same source. Note that the source has no relevance when suspending or resuming automation.

Options

–p *priority*

Determines the priority rank of the request. The request with the highest priority overrules requests that have a lower priority. The priority allows the end-to-end automation manager to resolve conflicting requests for the same resource. *priority* can be one of the following values:

low Low priority. This is the default value.

high High priority. Takes precedence over requests submitted with low priority.

force Takes precedence over requests submitted with high priority.

–o *action*

Specifies the type of request. Possible types:

start Specifies that the resource is to be started (Online request)

stop Specifies that the resource is to be stopped (Offline request)

cancel Cancels a start or stop request that was submitted against the resource by the same *source*

suspend

Suspends automation for a resource

resume

Resumes automation for a resource

–s *source*
Identifies the originator of the request. *source* can be one of the following strings:

```
Operator
ExtSched
Automation
```

Any others are allowed but get the lowest priority. If *source* is not specified, it will default to “Operator”. When canceling the request, the same *source* must be specified. Note that each *source* can only have one active request of each type against a resource.

The *source* option can also be used to distinguish between who made the request or where the request came from, for example, from an operator versus an automation shell script.

–u *user_id*
The user ID of the originator of the request. This can be any string. If the string contains blanks, it must be enclosed in quotation marks. If this option is not specified, the user ID that was specified when the connection to the automation manager was established with the **eezcs** command is used.

–c *comment*
A string representing a remark that might be related to the request. If the string contains blanks, it must be enclosed in quotation marks.

–T Writes the command’s trace messages to standard output. For your software-service organization's use only.

–V Writes the command’s verbose messages to standard output.

–h Writes the command’s usage statement to standard output.

Parameters

resource_name
Specifies the name of the resource. This is the entry point at which the requests is introduced into the resource structure and from which it propagates outward.

Exit status

0 The command ran successfully.
11 The command was unable to contact the end-to-end automation manager.
12 The user is not authorized to execute the command.
13 An incorrect flag was specified on the command line.
14 An incorrect attribute was specified on the command line.
16 The resource against which the command was submitted was not found.
17 The specified Selection_string does not match any request.

Authorization

EEZOperator and EEZEndToEndAccess roles

Examples

- To issue a high priority request against the resource “HTTP Server”, enter:

  ```
  resreq –o start -p high –u Bob –c "Need it up now." "HTTP Server"
  ```

  Sample output:

```
EEZS0131I The Online request has been issued against resource HTTP Server.
```

resetres

Name

resetres — resets the operational state of end-to-end automation resources from "Unrecoverable error" to "Unknown".

Synopsis

resetres [**–h**]

resetres –r *resource_name* [**–T**] [**–V**]

Description

An end-to-end automation resource that has the operational state "Unrecoverable error" must be manually reset to change the operational state to "Unknown" when the cause of the problem has been resolved. Only after the operational state has changed will the end-to-end automation manager again start to calculate and issue actions against the resource. When the command is issued against a resource group, the operational state of all group members is changed.

Options

–r *resource_name*
: Specifies the name of the resource to be reset.

–T
: Writes the command's trace messages to standard output. For your software-service organization's use only.

–V
: Writes the command's verbose messages to standard output.

–h
: Writes the command's usage statement to standard output.

Parameters

None

Exit status

0 The command ran successfully.
11 The command was unable to contact the end-to-end automation manager.
12 The user is not authorized to execute the command.
13 An incorrect flag was specified on the command line.
16 The specified resource was not found.

Authorization

EEZOperator and EEZEndToEndAccess roles

chprefmbr

Name

chprefmbr — changes the preferred member of a choice group.

Synopsis

chprefmbr [**–h**]

chprefmbr –g *choice_group* **–m** *new_preferred_member* [**–T**] [**–V**]

Description

The command changes the preferred member of a choice group. When the choice group has the observed state “Online”, the command triggers the following actions: the end-to-end automation manager brings the currently preferred member offline, changes the preferred member, and tries to bring it online.

Options

–g *choice_group*
: Specifies the name of the choice group whose preferred member is to be changed.

–m *new_preferred_member*
: Specifies the name of the choice group member that is to become the new preferred member.

–T Writes the command’s trace messages to standard output. For your software-service organization's use only.

–V Writes the command’s verbose messages to standard output.

–h Writes the command’s usage statement to standard output.

Parameters

None

Exit status

0 The command ran successfully.
11 The command was unable to contact the end-to-end automation manager.
12 The user is not authorized to execute the command.
13 An incorrect flag was specified on the command line.
14 An incorrect attribute was specified on the command line.
16 The specified choice group member was not found.
17 The specified choice group was not found.

Authorization

EEZOperator and EEZEndToEndAccess roles

Examples

1. To list all members of a choice group and to find out which is currently the preferred member, you can use the **lsres** command:

```
EEZCS>lsres -m -r "HTTP Server" –Ap
Resource HTTP Server:
   Type                          = CG
   Owner                         = Jenny Parker
```

```
   Description                  = This is the choice-Group for choosing one HTTP Server
   InfoLink                     = http://www.example.com/choice
   DefaultDesiredState          = Offline
   PreferredMember              = HTTP Server Prim
Resource HTTP Server Prim:
   Type                         = RR
   Owner                        = Owens, Bob
   Description                  = This is the reference with the name HTTP Server
   InfoLink                     = http://www.example.com/help/policy/HTTPServer.html
   DefaultDesiredState          = Offline
   Reference-to:
   Name                         = HTTP Server
   Class                        = IBM.ResourceGroup
   Domain                       = FEClusterSAP
   Node                         = node4

Resource HTTP Server Backup:
   Type                         = RR
   Owner                        = Harry O'Neill
   Description                  = This is the reference with the name HTTP Server
   InfoLink                     = --- No help ---
   DefaultDesiredState          = Offline
   Reference-to:
   Name                         = HTTP Server Back
   Class                        = IBM.ResourceGroup
   Domain                       = FECluster
   Node                         = nodebackup
```

2. To change the preferred member of the choice group “HTTP Server” to its backup member “HTTP Server Backup”, issue:

```
EEZCS>chprefmbr -V -g "HTTP Server" -m "HTTP Server Backup"
EEZS0140I The resource HTTP Server Backup has been set as new
          preferred member of choice group HTTP Server.
```

lsrel

Name

lsrel — lists information about the managed relationships that are defined in the currently active automation policy.

Synopsis

lsrel [**–h**] [**–T**] [**–V**]

lsrel [**–S** *source_resource_name*] [**–G** *target_resource_name*] [**–P** *relationship_type*] [**–A**] [**–t**|**–D** *delimiter*] [**–T**] [**–V**] [*Attr*[*Attr*[...]]]

Description

The **lsrel** command lists information about the managed relationships that are defined in the currently active automation policy. The command generates output only if a policy is active and contains managed relationships. The command cannot be used to list group memberships or referenced resources.

If the *relationship_type* is specified, all relationships of this type will be listed. If a resource name is specified as *source_resource_name* or *target_resource_name*, the name of the resource and the managed relationships in which it is the source or target, respectively, are listed. If both a *source_resource_name* and a *target_resource_name* are specified, only the corresponding managed relationships between the source resource and the target resource are listed.

If one or more attribute names are specified with the *Attr* parameter, the exact values of the specified attributes are listed. The *Attr* parameter must be a valid relationship attribute.

Options

–A Specifies that all attributes of a relationship are to be listed.

–D *delimiter*
Lists the output in delimited format.

–t Lists the output in tabular format. Each attribute is displayed in a separate column, one resource per line.

–S *source_resource_name*
Use this option to specify the name of the resource which is the source of all relationships that are to be listed.

–G *target_resource_name*
Use this option to specify the name of the resource which is the target of the relationships that are to be listed.

–P *relationship_type*
Specifies the type of relationship for which the relationships are to be listed. The value can be one of the following (not case-sensitive):

```
StartAfter
StopAfter
ForcedDownBy
```

–T Writes the command's trace messages to standard output. For your software-service organization's use only.

–V Writes the command's verbose messages to standard output.

–h Writes the command's usage statement to standard output.

Parameters

Attr Specifies the name of one or more attributes whose values are to be displayed. Attribute names must be separated by spaces.

Exit status

0 The command ran successfully.
11 The command was unable to contact the end-to-end automation manager.
12 The user is not authorized to execute the command.
13 An incorrect flag was specified.
14 An incorrect attribute was specified.
16 No managed relationships were found.
17 The specified source or target resource could not be found.

Authorization

EEZMonitor and EEZEndToEndAccess roles

Examples

1. To list all relationships from the currently active policy, enter:

   ```
   lsrel -V
   ```

   Sample output:

   ```
   Displaying Relationship Information:
        Source             = DB2 Connect Client
        RelationName       = StartAfter
        Target             = Enterprise DB2

        Source             = WebSphere EE
        RelationName       = StartAfter
        Target             = DNS Server

   done.
   ```

2. To list all relationships between resource references and the specification of the referenced resources, enter:

   ```
   lsrel -A
   ```

   Sample output:

   ```
   EEZCS>lsrel -A
      Source                       = WebSphere EE
      Reference-to:
      Name                         = WAS
      Class                        = APG
      Domain                       = FEPLEX2
      Node                         = node1
      RelationName                 = StartAfter
      Target                       = DNS Server
      Reference-to:
      Name                         = DNS Server
      Class                        = IBM.ResourceGroup
      Domain                       = FECluster
      Node                         = node2

      Source                       = NFS Client
      Reference-to:
      Name                         = nfs-client
      Class                        = IBM.ResourceGroup
      Domain                       = cm1cm2
      Node                         = lnxcm2
   ```

```
   RelationName                  = ForcedDownBy
   Target                        = NFS Server
   Reference-to:
   Name                          = NFS Server
   Class                         = APG
   Domain                        = FEPLEX1
   Node                          = node3
```

3. To list all relationships in tabular format, enter:

   ```
   lsrel -t
   ```

   Sample output:

   ```
   EEZCS>lsrel –t
   Source          RelationName Target
   WebSphere EE    StartAfter   DNS Server
   NFS Client      ForcedDownBy NFS Server
   SAP AppServer   StartAfter   SAP ENQ Server
   NFS Client      StartAfter   SAP AppServer
   SAP ENQ Server  StopAfter    SAP AppServer
   SAP ENQ Server  ForcedDownBy SAP AppServer
   mySAP Solutions StartAfter   DB2
   ```

4. To list all relationships between “SAP ENQ Server” as Source and “SAP AppServer” as Target, enter:

   ```
   EEZCS>lsrel -S "SAP ENQ Server" -G "SAP AppServer"
   ```

   Sample output:

   ```
   EEZCS>lsrel -S "SAP ENQ Server" -G "SAP AppServer"
      Source                     = SAP ENQ Server
      RelationName               = StopAfter
      Target                     = SAP AppServer
      Source                     = SAP ENQ Server
      RelationName               = ForcedDownBy
      Target                     = SAP AppServer
   ```

lsres

Name

lsres — lists information about the resources that are defined in the currently active end-to-end automation policy.

Synopsis

lsres [–h] [–T] [–V]

lsres [**–m**] [**–s** "Selection_String"] [**–A p | d | b**] [**–t | –D** *delimiter*] [**–r** *resource_name*] [**–T**] [**–V**] [*Attr* [*Attr* [...]]]

Description

The **lsres** command lists resources that are defined in the currently active policy. The command only generates output if a policy is active and contains resources.

When the command is issued with the **–m** option, the members of a specific group are listed. The name of the group must be specified using the **–r** option.

When the attribute option (**–A b**) is specified, the values of all possible attributes are listed.

When specified, the *Attr* parameter must be a valid resource attribute when resource information is listed. Whether a resource attribute is listed depends on which value was specified for the **–A** option. In all cases, the exact values of the attributes are listed.

Options

–A p | d | b
Specifies an attribute type. Possible types:

- **p** Lists the persistent attributes of a resource.
- **d** Lists the dynamic attributes of a resource.
- **b** Lists both the persistent and dynamic attributes of a resource.

–D *delimiter*
Lists the output in delimited format.

–m When both the **–A** and the **-m** options are specified, the command lists attribute information for the members of a group, which must be specified with the **–r** option. When the **–A** option is not specified, the **-m** option is the default, which means that all members of group resources are listed.

–r "resource_name"
Specifies the name of the resource for which information is to be listed.

–s "selection string"
Specifies a selection string. If specified without the **–m** option, this option is applied to the resource attribute fields; when the **–m** option is specified, the selection string is applied to the member-resource attribute fields. All selection strings must be enclosed in either double or single quotation marks. If the selection string contains double quotation marks, enclose the entire selection string in single quotation marks, for example:

```
-s 'Name == "testing"'
-s 'Name ?= "test"'
```

All attributes may be listed in a selection string. For information on how to specify selection strings, see "Using selection strings" on page 29.

–t Lists the output in tabular format. Each attribute is displayed in a separate column, one resource per line.

–T Writes the command's trace messages to standard output. For your software-service organization's use only.

–V Writes the command's verbose messages to standard output.

–h Writes the command's usage statement to standard output.

Parameters

Attr Specifies the name of one or more attributes whose values are to be listed. Attribute names must be separated by spaces. The exact values of the attributes will be listed.

The specified *Attr* parameter must be a valid resource attribute. Whether a resource attribute is listed depends on which value was specified for the **–A** option. In all cases, the exact values of the attributes are listed.

Exit status

0 The command ran successfully.
11 The command was unable to contact the end-to-end automation manager.
12 The user is not authorized to execute the command.
13 An incorrect flag was specified on the command line.
14 An incorrect attribute was specified on the command line.
16 The specified resource is not a group or the group has no members.
17 The specified selection string does not match any resource attribute.

Authorization

EEZMonitor and EEZEndToEndAccess roles

Examples

1. To list all currently defined resources, enter:

   ```
   lsres
   ```

   Sample output:

   ```
   eMail Hosting
   WebSphere E2E
      Enterprise DB2
      DB2 Connect Client
      WebSphere EE
      DNS Server
      NFS Client
      NFS Server
      WebSphere AE
   Friendly Computer Shop
      WebSphere AE
      mySAP Solutions
         DNS Server
         SAP ENQ Server
         SAP AppServer
   HTTP Server
      HTTP Server Prim
      HTTP Server Backup
   ```

2. To list all member and sub-member resources of the group “Friendly Computer Shop” in verbose mode, enter:

```
lsres -r "Friendly Computer Shop" -V
```

Sample output:

```
Displaying Resource Information
   Friendly Computer Shop
      WebSphere AE
      mySAP Solutions
         DNS Server
         SAP ENQ Server
         SAP AppServer
done.
```

3. To list all members and sub-members of the group “Friendly Computer Shop” and their dynamic attributes in tabular format, enter:

```
lsres -tAd -r "Friendly Computer Shop" -V
```

Sample output:

```
Displaying Resource Information
Name                  Type Desired Observed Operational Compound
Friendly Computer Shop RG   Offline Unknown  NoContact   Warning
WebSphere AE          RR   Offline Unknown  NoContact   Warning
mySAP Solutions       RG   Offline Unknown  NoContact   Warning
DNS Server            RR   Offline Unknown  NoContact   Warning
SAP ENQ Server        RR   Online  Unknown  NoContact   Warning
SAP AppServer         RR   Offline Unknown  NoContact   Warning
done.
```

4. To list all attributes of the group “DNS Server”, enter:

```
lsres -Ab -r "DNS Server"
```

Sample output:

```
Resource DNS Server:
   Type                        = typeResourceReference
   Owner                       = Jenny McDowell
   Description                 = This is the reference with the name DNS Server
   InfoLink                    = http://www.example.com/help/DNS Server
   DefaultDesiredState         = Offline
   DesiredState                = Offline
   ObservedState               = Unknown
   OperationalState            = NoContact
   CompoundState               = Warning
   Suspended                   = False
   Reference-to:
   Name                        = DNS Server
   Class                       = IBM.ResourceGroup
   Domain                      = FECluster
   Node                        = node2
   Properties:
   sa_status_compound          = Inhibited
   sa_status_desired           = Offline
   sa_status_observed          = Unknown
   sa_status_binding           = Not Applicable
   sa_status_automation        = Idle
   sa_status_control           = StartInhibited
   sa_status_health            = Not Applicable
```

5. To list the dynamic attributes of the group “WebSphere E2E”, enter:

```
lsres -Ad -r "WebSphere E2E"
```

Sample output:

```
Resource "WebSphere E2E":
   Type                        = typeResourceGroup
   DesiredState                = Offline
   ObservedState               = Unknown
   OperationalState            = NoContact
```

```
CompoundState                = Warning
Suspended                    = False
Properties
[sa_status_compound]         =  Inhibite
[sa_status_desired]          =  Offline
[sa_status_observed]         =  Unknown
[sa_status_binding]          =  Not Applicable
[sa_status_automation]       =  Internal
[sa_status_control]          =  StartInhibited
[sa_status_health]           =  Not Applicable
```

6. To list the dynamic attributes of all resources in tabular format, enter:

   ```
   lsres -t -Ad
   ```

   Sample output:

   ```
   Name                   Type Desired Observed Operational Compound
   Enterprise DB2         RR   Offline Unknown  NoContact   Warning
   DB2 Connect Client     RR   Offline Unknown  NoContact   Warning
   WebSphere EE           RR   Offline Unknown  NoContact   Warning
   DNS Server             RR   Offline Unknown  NoContact   Warning
   NFS Client             RR   Offline Unknown  NoContact   Warning
   NFS Server             RR   Offline Unknown  NoContact   Warning
   WebSphere AE           RR   Offline Unknown  NoContact   Warning
   eMail Hosting          RR   Online  Unknown  NoContact   Warning
   HTTP Server Prim       RR   Offline Unknown  NoContact   Warning
   HTTP Server Backup     RR   Offline Unknown  NoContact   Warning
   SAP ENQ Server         RR   Online  Unknown  NoContact   Warning
   SAP AppServer          RR   Offline Unknown  NoContact   Warning
   WebSphere E2E          RG   Offline Unknown  NoContact   Warning
   mySAP Solutions        RG   Offline Unknown  NoContact   Warning
   Friendly Computer Shop RG   Offline Unknown  NoContact   Warning
   HTTP Server            RG   Offline Unknown  NoContact   Warning
   ```

7. To list all table columns as comma-separated list, specify the comma (,) as delimiter character for the option **–D**. The first line of the output always shows the names of the listed attributes.

   ```
   lsres -D, -Ab
   ```

   Sample output:

   ```
   Name,Type,Owner,Default,Desired,Observed,Operational,Compound,Reference-to,
   Enterprise DB2,RR,Bob Owens,Offline,Offline,Unknown,NoContact, Warning,DB2,
   DB2 Connect Client,RR,Bob Owens,Offline,Offline,Unknown,NoContact,Warning,DB2 Connect,
   WebSphere EE,RR,Harry Smith,Offline,Offline,Unknown,NoContact,Warning,WAS,
   DNS Server,RR,Jenny McDowell,Offline,Offline,Unknown,NoContact,Warning,DNS Server,
   NFS Client,RR,Henry Smith,Offline,Offline,Unknown,NoContact,Warning,nfs-client,
   NFS Server,RR,Bob Owens,Offline,Offline,Unknown,NoContact,Warning,NFS Server,
   WebSphere AE,RR,Harry Smith,Offline,Offline,Unknown,NoContact,Warning,WebSphere
   AppServer,
   eMail Hosting,RR,Sarah O'Neill,Online,Online,Unknown,NoContact,Warning,Mail Server,
   HTTP Server Prim,RR,Owens, Bob,Offline,Offline,Unknown,NoContact,Warning,HTTP Server,
   HTTP Server Backup,RR,Harry O'Neill,Offline,Offline,Unknown,NoContact,Warning,HTTP Server Back,
   SAP ENQ Server,RR,Bob Owens,Offline,Online,Unknown,NoContact,Warning,SAP ENQ Env.,
   SAP AppServer,RR,Jenny Parker,Offline,Offline,Unknown,NoContact,Warning,SAP AppServer,
   WebSphere E2E,RG,Harry Smith,Offline,Offline,Unknown,NoContact,Warning,
   mySAP Solutions,RG,Jerry Owens,Offline,Offline,Unknown,NoContact,Warning,
   Friendly Computer Shop,RG,Jerr Owens,Offline,Offline,Unknown,NoContact,Warning,
   HTTP Server,RG,Jenny Parker,Offline,Offline,Unknown,NoContact,Warning,
   ```

lsresreq

Name

lsresreq — lists requests and orders that were issued against resources. Suspend actions are not listed.

Synopsis

lsresreq [**–h**] [**–T**] [**–V**]

lsresreq [**–L**] [**–t**|**–D** *delimiter*] [**–T**] [**–V**] [**–s** *selection_string*] [*resource_name*[,*resource_name*[,...]]]

Description

The **lsresreq** lists all requests and orders that were issued against specific resources, or only the winning request, or all outstanding requests and orders.

Options

–L Lists all requests and orders that were issued against a specified resource group or resource reference. If the option is not specified, only the winning request is listed.

–s *selection_string*
Specifies a selection string. The selection string is evaluated against all requests that were submitted against resources. Requests whose attribute values match the selection string are listed. For example, to list all requests that were issued by operators use the following selection string:

```
–s "Source == OPERATOR"
```

To list all requests that where submitted against resources whose name starts with SERVER*, specify:

```
–s "Resource like 'SERVER%'"
```

For information on how to specify selection strings, see “Using selection strings” on page 29.

–t Lists the output in tabular format. Each attribute is displayed in a separate column, one resource per line.

–D *Delimiter*
Lists the output in delimited format.

–T Writes the command’s trace messages to standard output. For your software-service organization's use only.

–V Writes the command’s verbose messages to standard output.

–h Writes the command’s usage statement to standard output.

Parameters

resource_name
Specifies the name of one or more resources whose requests are to be displayed. The resource names must be separated by spaces.

Exit status

0 The command ran successfully.
11 The command was unable to contact the end-to-end automation manager.
12 The user is not authorized to execute the command.
13 An incorrect flag was specified on the command line.
14 An incorrect attribute was specified on the command line.
16 The specified resource was not found.
17 No request with an attribute value that matches the specified selection string was found.

Authorization

EEZMonitor and EEZEndToEndAccess roles

Examples

- To list all requests against the resource ″DNS Server″, enter:

```
EEZCS>lsresreq -V "DNS Server"
```

Sample output:

```
EEZCS>lsresreq -V "DNS Server"
Requests against Resource DNS Server:
Request 1:
   Action                        = Online
   Priority                      = High
   Source                        = OPERATOR
   UserId                        = unknown
   Comment                       = none
   Additional Info               = ENTRY: DNS Server
   Timestamp                     = Thu Jun 22 10:28:26 CEST 2006
done.
```

help

Name

help — displays a command's usage statement or a list of all possible commands.

Description

The **help** command lists all possible commands, each with a short usage statement, or prints the usage statement for a specific command, similar to displaying man pages on UNIX systems. Usage statements that do not fit on a single page are split into multiple pages. One page is displayed at a time. To jump to the next page, press Enter. This behavior is comparable to that of the " | more" command on UNIX systems. Scrolling back to previous pages is not possible.

Synopsis

help [**–h**]
help *command*

Options

–h Writes the command's usage statement to standard output.

Parameters

command
Specifies the command for which detailed help information is requested.

Exit status

0 The command ran successfully.
11 The command was unable to contact the end-to-end automation manager.
13 An incorrect flag was specified on the command line.
16 The specified command was not found.

Examples

1. To list all commands that are supported by the end-to-end automation command shell, enter:

   ```
   help
   ```

   Output:

   ```
   Possible Commands:
     lseezdom - Lists information about automation domains.
     eezpolicy - Activates or deactivates an end-to-end automation policy.
     resreq - Issues requests against resources or cancels previously entered requests.
     resetres - Resets the operational state of end-to-end automation resources.
     chprefmbr - Changes the preferred member of a choice group.
     lsrel - Lists information about managed relationships.
     lsres - Lists information about resources.
     lsresreq - Lists requests and orders that were issued against resources.
     help - Displays a command's usage statement or a list of all possible commands.
     quit - Closes the command shell.
   ```

2. To list detailed usage information for the **lsrel** command, enter:

   ```
   help lsrel
   ```

   Output:

   ```
   Show Help for: lsrel
   Name
   lsrel - List managed relationships
   ```

```
Description
The lsrel command lists the managed relationships.
If the relationship name is omitted,all managed
relationships are listed.
If the resource relationship is specified,
the Resource name and the Relationship itself are listed.

Options
-A   Specifies that all attributes will be listed.
-d   Specifies delimiter-formatted output. The default delimiter
     is a colon (:). Use the -D option if you wish to change the
     default delimiter
-D Delimiter
     Specifies delimiter-formatted output that uses the specified
     delimiter. Use this option to specify something other than
     the default colon (:); for example, when the data to be displayed
     contains colons. Use this option to specifiy a delimiter of one
     or more characters.
-h   Writes the command's usage statement to standard output.
-l   Specifies long formatted output. Each attribute is displayed on
      separate line. This is the default display format.
-P    Current_relationship
Press Enter to continue...
```

quit

Name

quit — closes the command shell in shell mode. The command is not used in line mode.

Synopsis

quit [**–h**]

Options

–h Writes the command's usage statement to standard output.

Parameters

None

Exit status

None

Using selection strings

Some of the commands described in Chapter 1, "Automation manager command shell commands," on page 3 allow you to specify a selection string for the **–s** option. The selection string always applies to attributes of resources or requests. The attribute name must be specified exactly as it is displayed in the output and match it with the value specified in the selection string.

To specify a selection string, different types of expressions can be used, namely, regular expressions or SQL-like expressions. The selection strings shown in the following two examples will produce the same result when they are used in a query. Both will return resources whose name starts with a 'W' and ends with the string "Server":

```
-s "Name =~ 'W.*Server'"
-s "Name LIKE 'W%Server'"
```

Within a single selection string, multiple attributes may be combined by a boolean operator. For example:

```
-s "(Name LIKE 'W%Server') OR (Owner LIKE '%Owens')"
```

A query with this selection string will return all resources which either match by Name (as in the example above) or are owned by a person called "Owens".

The set of operators that can be used in selection strings is summarized in the following table.

Table 2. Operators that can be used in selection strings

Operator	Description	Types Left | Right	Return
<	less than	see Table 3	boolean
>	greater than		boolean
<=	less than or equal to		boolean
>=	greater than or equal to		boolean
== =	equal to		boolean
<>	not equal to		boolean
!=	matches (regular expression)		boolean
=~	does not match (regular expression)		boolean
=? like LIKE	SQL like		boolean
!? not like NOT LIKE	SQL not like		boolean
OR ||	or (one of the two must be true)		boolean
AND &&	and (both need to be true)		boolean

The following table lists the available left and right data types. An "X" in a table cell indicates that the operator shown in the header row can be used with the data type shown on the left (numbers, strings, boolean):

Table 3. Selection strings: Data types

Operator:	<		>		<=		>=		=		!=		=~		!~		=?		!?		||		&&	
Numbers	X	X	X	X	X	X	X	X	X	X	X	X												
Strings									X	X	X	X	X	X	X	X	X	X	X	X				
boolean									X	X	X	X									X	X	X	X

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Chapter 2. Policy XML reference

This section lists the XML elements, sub-elements, and attributes of end-to-end automation policies in alphabetical order. For each element, the following information is provided:

Name The name and a short description of the element or sub-element.

Restrictions
Possible restrictions that apply.

Examples
One or more examples showing how the element is used.

Attributes
Descriptions of the element's attributes.

Contexts
A list of elements that can directly contain the element (its "Parents") and a list of elements the element can contain (its "Children").

AutomationDomain

The AutomationDomain element is used within a ResourceReference specification. It is used to specify the name of the first-level automation domain that hosts the ReferencedResource.

Restrictions

Maximum number of characters supported: 64

Example

```
<ResourceReference name="WebSphere EE">
      <DesiredState>Offline</DesiredState>
      <Owner>Harry Smith</Owner>
      <InfoLink>http://www.example.com/Websphere/help</InfoLink>
      <ReferencedResource>
            <AutomationDomain>FEPLEX2</AutomationDomain>
            <Name>WAS</Name>
            <Class>APG</Class>
            <Node>node1</Node>
      </ReferencedResource>
 </ResourceReference>
```

Attributes

None

Contexts

Children: None
Parents: ReferencedResource

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AutomationDomainName

The AutomationDomainName element specifies the name of the end-to-end automation domain for which the policy will be used. A policy can only be activated if the name specified in its AutomationDomainName element is identical to the name specified on the Domain page of the configuration dialog (field Domain name).

Restrictions

Maximum number of characters supported: 64

Example

```
 <PolicyInformation>
          <PolicyName>Sample E2E Policy</PolicyName>
          <AutomationDomainName>FriendlyE2E</AutomationDomainName>
          <PolicyToken> 1.0.1</PolicyToken>
          <PolicyAuthor>Michael Atkins</PolicyAuthor>
          <PolicyDescription>Sample policy for domain
                              FriendlyE2E</PolicyDescription>
</PolicyInformation>
```

Attributes

None

Contexts

Children: None
Parents: PolicyInformation

AutomationPolicy

The AutomationPolicy element is the top-level element of the end-to-end automation policy. It serves as a container for all other elements of the policy.

Restrictions

The element is required and must occur only once in a policy.

Example

```
<AutomationPolicy version="1.0"
    xmlns="http://www.ibm.com/TSA/Policy.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.ibm.com/TSA/Policy.xsd EEZPolicy.xsd">
...
</AutomationPolicy>
```

Attributes

version
Identifies the minimum version of the end-to-end automation component. The attribute is required. Maximum number of characters supported: 32

xmlns Name space declaration for this policy. The attribute is required and must be specified as presented in the example above.

xmlns:xsi
Identifies the XML schema format for this policy XML. The attribute is required and must be specified as presented in the example above.

xsi:schemaLocation
Identifies the XML schema to which this XML policy must conform. The attribute is required and must be specified as presented in the example above.

Contexts

Must be the top-level element of a policy and must contain all other elements.

Children: PolicyInformation, ResourceReference ...
Parents: None

ChoiceGroup

The ChoiceGroup element is used as a logical container for a collection of redundant, equivalent end-to-end automation domain resources of which one is defined as the *preferred* member. If the group's desired state is Online, the *preferred* member is active and the other members of the group serve as standbys. The automation manager will try to keep the *preferred* member online and will restart it in place if it fails. If the *preferred* member fails or is to be stopped, an operator can start one of the remaining members of the ChoiceGroup.

Restrictions

- A ChoiceGroup must not be a member of a ResourceGroup.

Example

```
<ChoiceGroup name="HTTP Server">
        <DesiredState> Offline </DesiredState>
        <Description>Choice group for choosing one HTTP Server</Description>
        <Owner>Jenny Parker</Owner>
        <InfoLink>http://www.friendly.com/choice</InfoLink>
        <Members>
           <ResourceReference name="HTTP Server Prim" preferred="true"/>
           <ResourceReference name="HTTP Server Backup"/>
      </Members>
</ChoiceGroup>
```

Attributes

name=*"ChoiceGroupName"*
The attribute is used to specify the name of the ChoiceGroup. The name must be unique within an XML policy document, that is, the name that is used for a ChoiceGroup must not be used for any other ChoiceGroup, ResourceGroup or ResourceReference in the same XML policy. The attribute is required.

The name can have a maximum of 64 characters. Do not use more than one blank to separate strings within the name. Duplicate blanks will be ignored.

Contexts

Children: Members, DesiredState, Description, Owner, InfoLink
Parents: AutomationPolicy

Class

The Class element is used within a ResourceReference definition. It specifies the class of the first-level automation ReferencedResource (for example, IBM.ResourceGroup). The element is optional, but must be specified for ReferencedResources that are managed by SA for Multiplatforms or SA z/OS.

Restrictions

- Maximum number of characters supported: 64
- SA for Multiplatforms: Only create resource references to first-level automation resources of Class type IBM.ResourceGroup. Resources references that refer to first-level automation resources of class types IBM.Application, IBM.ServiceIP, and IBM.Test may cause undesired effects or severe problems in first-level automation management.

Example

```
<ResourceReference name="WebSphere EE">
                <DesiredState>Offline</DesiredState>
                <Description>Resource reference  WebSphere EE </Description>
                <Owner>Harry Smith</Owner>
                <InfoLink>http://www.example.com/Websphere/help</InfoLink>
                <ReferencedResource>
                        <AutomationDomain>FEPLEX2</AutomationDomain>
                        <Name>WAS</Name>
                        <Class>APG</Class>
                        <Node>node1</Node>
                </ReferencedResource>
 </ResourceReference>
```

Attributes

None

Contexts

Children: None
Parents: ReferencedResource

Description

The Description element is used to add a free text that provides further information about the parent element. The element is optional.

Restrictions

Maximum number of characters supported: 1024
Maximum number of occurrences per parent element: 1

Attributes

None

Contexts

Children: None
Parents: ChoiceGroup, ResourceGroup, ResourceReference

DesiredState

The DesiredState element is used to define the default desired state (the automation goal) for its parent element. Possible values are Online and Offline. The end-to-end automation manager will try to keep the resource in the DesiredState.
The element is optional.

Restrictions

Maximum number of occurrences per parent element: 1
As the element is optional, it can be omitted. In such a case, the following rules apply:

- If the desired state for a top-level resource reference is not defined in the policy, the default desired state is set to Online.
- If the desired state for a top-level resource group is not defined in the policy, the default desired state is set to Online.

  The end-to-end automation manager will try to keep *all* members of the resource group (including nested resource groups and their members) online. Desired state settings for individual resource references or nested resource groups are ignored.
- If the desired state for a choice group is not defined in the policy, the default desired state is set to Online. The end-to-end automation manager will try to keep the preferred member online and the other members offline.

Example

```
<ResourceReference name="WebSphere EE">
         <DesiredState>Offline</DesiredState>
          <Description>Resource reference WebSphere EE</Description>
          <Owner>Harry Smith</Owner>
          <InfoLink>http://www.example.com/Websphere/help</InfoLink>
          <ReferencedResource>
                    <AutomationDomain>FEPLEX2</AutomationDomain>
                    <Name>WAS</Name>
                    <Class>APG</Class>
                    <Node>node1</Node>
          </ReferencedResource>
 </ResourceReference>
```

Attributes

None

Contexts

Children: None
Parents: ChoiceGroup, ResourceGroup, ResourceReference

InfoLink

The element InfoLink is used to specify the URL of an HTML page where the operator can find additional information about the resource.

Restrictions

Maximum number of characters supported: 1024

Example

```
<ResourceReference name="WebSphere EE">
         <DesiredState>Offline</DesiredState>
         <Description>Resource reference WebSphere EE</Description>
         <Owner>Harry Smith</Owner>
         <InfoLink>http://www.example.com/Websphere/help</InfoLink>
         <ReferencedResource>
                   <AutomationDomain>FEPLEX2</AutomationDomain>
                   <Name>WAS</Name>
                   <Class>APG</Class>
                   <Node>node1</Node>
         </ReferencedResource>
 </ResourceReference>
```

Attributes

None

Contexts

Children: None
Parents: ChoiceGroup, ResourceGroup, ResourceReference

Node

The element Node is used within a ResourceReference specification. It is used to specify the host name (SA for Multiplatforms) or system name (SA z/OS) where the first-level automation resource (the ReferencedResource) is located. The element is optional.

Restrictions

- Maximum number of characters supported: 256
- Host name or system name must be specified in first-level domain syntax.
- The Node element is optional. Only specify the Node element when you create a resource reference for a fixed resource. Do not specify the node for any other type of first-level automation resource.

  Note that creating resource references for fixed resources is **not** recommended.

Example

```
<ResourceReference name="NFS Client">
         <DesiredState>Offline</DesiredState>
         <Description>Resource reference NFS Client </Description>
         <Owner>Henry Smith</Owner>
         <InfoLink>http://www.example.com/help/NFS/?help+NFS+Client</InfoLink>
         <ReferencedResource>
                <AutomationDomain>cm1cm2</AutomationDomain>
                <Name>nfs-client</Name>
                <Class>IBM.ResourceGroup</Class>
                <Node>lnxcm2</Node>
                </ReferencedResource>
</ResourceReference>
```

Attributes

None

Contexts

Children: None
Parents: ReferencedResource

Members

The Members element is a container element. It contains the list of resources that are members of an end-to-end automation ResourceGroup or ChoiceGroup.

Example

Example of a Members element in a ResourceGroup specification:

```
<ResourceGroup name="Friendly Computer Shop" >
        <DesiredState>Offline</DesiredState>
        <Description>Resource group Friendly Computer Shop</Description>
        <Owner>Jerr Owens</Owner>
        <InfoLink>http://www.example.com/help/policy/compshop.html</InfoLink>
        <Members>
           <ResourceGroup name="mySAP Solutions"/>
           <ResourceReference name="WebSphere AE"/>
        </Members>
       </ResourceGroup>
```

Example of a Members element in a ChoiceGroup specification:

```
<ChoiceGroup name="HTTP Server">
           <DesiredState> Offline </DesiredState>
           <Description>Choice group for choosing one HTTP Server</Description>
           <Owner>Jenny Parker</Owner>
           <InfoLink>http://www.example.com/choice</InfoLink>
           <Members>
               <ResourceReference name="HTTP Server Prim" preferred="true"/>
               <ResourceReference name="HTTP Server Backup"/>
         </Members>
</ChoiceGroup>
```

Attributes

None

Contexts

Children: ResourceReference, ResourceGroup, ChoiceGroup
Parents: ChoiceGroup, ResourceGroup

Name

The Name element is used within a ResourceReference specification. It is used to specify the actual name the ReferencedResource in its first-level domain. This name may be different from the name specified for the ResourceReference that refers to this resource. The element is required.

Restrictions

Maximum number of characters supported: 64

Example

```
<ResourceReference name="SAP AppServer">
        <DesiredState>Offline</DesiredState>
        <Description>Resource reference SAP AppServer </Description>
        <Owner>Jenny Parker</Owner>
```

```
        <InfoLink>http://www.example.com/help/policy/SAPAPP.html</InfoLink>
        <ReferencedResource>
               <AutomationDomain>FEClusterSAP</AutomationDomain>
               <Name>SAP AppServer</Name>
               <Class>ResourceGroup</Class>
              <Node>node4</Node>
        </ReferencedResource>
</ResourceReference>
```

Attributes

None

Contexts

Children: None
Parents: ReferencedResource

Owner

The element Owner is used to provide information about the owner of the parent element, for example, the name and telephone number of the owner of a referenced resource. The element is optional.

Restrictions

The element can only occur once per parent element.
Maximum number of characters supported: 1024

Example

Attributes

None

Contexts

Children: None
Parents: ResourceReference, ChoiceGroup, ResourceGroup

PolicyAuthor

The PolicyAuthor element is used to identify the author of the policy.

Restrictions

Maximum number of characters supported: 64

Example

```
<PolicyInformation>
       <PolicyName>Sample E2E Policy</PolicyName>
       <AutomationDomainName>FriendlyE2E</AutomationDomainName>
       <PolicyToken> 1.0.1</PolicyToken>
       <PolicyAuthor>Michael Atkins</PolicyAuthor>
       <PolicyDescription>Sample policy for domain FriendlyE2E</PolicyDescription>
</PolicyInformation>
```

Attributes

None

Contexts

Children: None
Parents: PolicyInformation

PolicyDescription

The PolicyDescription element is available for adding a free text to the XML document. It can be used, for example, to maintain a change history within the file.

Restrictions

Maximum number of characters supported: 1024

Example

```
 <PolicyInformation>
      <PolicyName>Sample E2E Policy</PolicyName>
      <AutomationDomainName>FriendlyE2E</AutomationDomainName>
      <PolicyToken> 1.0.1</PolicyToken>
      <PolicyAuthor>Michael Atkins</PolicyAuthor>
      <PolicyDescription>Sample policy for domain FriendlyE2E
            Last Update: 08/16/04
            Last Editor: Michael Atkins
            Change History:
            ------------------------------------------------------
             Date      Name                Description
             ------------------------------------------------------
             08/16/05  Michal Atkins       Initial policy definition
             ------------------------------------------------------
      </PolicyDescription>
</PolicyInformation>
```

Attributes

None

Contexts

Children: None
Parents: PolicyInformation

PolicyInformation

The PolicyInformation element contains subelements that uniquely identify this policy.

Restrictions

The element is required and must occur only once in an XML policy file.

Example

```
 <PolicyInformation>
        <PolicyName>Sample E2E Policy</PolicyName>
        <AutomationDomainName>FriendlyE2E</AutomationDomainName>
        <PolicyToken> 1.0.1</PolicyToken>
        <PolicyAuthor>Michael Atkins</PolicyAuthor>
        <PolicyDescription>Sample policy for domain FriendlyE2E</PolicyDescription>
</PolicyInformation>
```

Attributes

None

Contexts

Children: PolicyName, AutomationDomainName, PolicyToken, PolicyAuthor, PolicyDescription
Parents: AutomationPolicy

PolicyName

The PolicyName element is used to specify a meaningful name for the specific policy.

Restrictions

The element is required and must occur only once in an XML policy file.
Maximum number of characters supported: 64

Example

```
<PolicyInformation>
       <PolicyName>Sample E2E Policy</PolicyName>
       <AutomationDomainName>FriendlyE2E</AutomationDomainName>
       <PolicyToken> 1.0.1</PolicyToken>
       <PolicyAuthor>Michael Atkins</PolicyAuthor>
       <PolicyDescription>Sample policy for domain FriendlyE2E</PolicyDescription>
</PolicyInformation>
```

Attributes

None

Contexts

Children: None
Parents: PolicyInformation

PolicyToken

The PolicyToken element specifies the version of the policy. It should be updated whenever the policy is changed.

Restrictions

The element is required.
Maximum number of characters supported: 64

Example

```
<PolicyInformation>
       <PolicyName>Sample E2E Policy</PolicyName>
       <AutomationDomainName>FriendlyE2E</AutomationDomainName>
       <PolicyToken> 1.0.1</PolicyToken>
       <PolicyAuthor>Michael Atkins</PolicyAuthor>
       <PolicyDescription>Sample policy for domain FriendlyE2E</PolicyDescription>
</PolicyInformation>
```

Attributes

None

Contexts

Children: None
Parents: PolicyInformation

ReferencedResource

The ReferencedResource element is a child of the ResourceReference element. The children of the ReferencedResource element are used to describe the actual first-level automation resource to which the ResourceReference refers.

Restrictions

- The element must only occur once per parent element.
- The ReferencedResource as defined by the values specified for its children (AutomationDomain, Name, Class, and Node) must be unique within the policy, that is, the same ReferencedResource must not be referenced by more than one ResourceReference.
- SA for Multiplatforms: Resource references should always point to top-level resources (resource groups of resource class type IBM.Resource Group). Creating resource references for first-level automation resources of resource class types IBM.Application, IBM.ServiceIP, and IBM.Test is not recommended and may cause problems in first-level automation management.

Example

```
<ResourceReference name="Enterprise DB2">
         <DesiredState>Offline</DesiredState>
         <Description>Resource reference Enterprise DB2 </Description>
         <Owner>Bob Owens</Owner>
         <InfoLink>http://www.example.com/help/DB2</InfoLink>
         <ReferencedResource>
                <AutomationDomain>FEPLEX2</AutomationDomain>
                <Name>DB2</Name>
                <Class>ResourceGroup</Class>
                <Node>node1</Node>
         </ReferencedResource>
 </ResourceReference>
```

Attributes

None

Contexts

Children: AutomationDomain, Name, Class, Node
Parents: ResourceReference

Relationship

The sub-elements of the Relationship element are used to define the relationship (StartAfter, StopAfter, ForcedDownBy) between two end-to-end automation resources (ResourceReferences or end-to-end automation groups). The element is optional.

Restrictions

Example

```
<Relationship>
      <Source>
            <ResourceReference name="DB2 Connect Client"/>
      </Source>
      <Type> StartAfter</Type>
      <Target>
            <ResourceReference name="Enterprise DB2"/>
      </Target>
</Relationship>
```

Attributes

None

Contexts

Children: Source, Target, Type
Parents: AutomationPolicy

ResourceGroup

The ResourceGroup element is used to define end-to-end automation resource groups. The element is optional.

Restrictions

ResourceGroups can be nested, but a ResourceGroup must not be a member of more than one ResourceGroup.
A ChoiceGroup must not be a member of a ResourceGroup.

Example

```
<ResourceGroup name="Friendly Computer Shop" >
         <DesiredState>Offline</DesiredState>
         <Description>Resource group Friendly Computer Shop</Description>
         <Owner>Jerr Owens</Owner>
         <InfoLink>http://www.example.com/help/policy/compshop.html</InfoLink>
         <Members>
             <ResourceGroup name="mySAP Solutions"/>
             <ResourceReference name="WebSphere AE"/>
         </Members>
</ResourceGroup>
```

Attributes

name=*"ResourceGroupName"*

The attribute is used to specify the name of the ResourceGroup. The name must be unique within an XML policy document, that is, the name that is used for a ResourceGroup must not be used for another ResourceGroup, ChoiceGroup or ResourceReference within the same XML policy. The attribute is required.

The name can have a maximum of 64 characters. Do not use more than one blank to separate strings within the name. Duplicate blanks will be ignored.

Contexts

Children: Description, Owner, InfoLink, Members
Parents: AutomationPolicy

ResourceReference

This element is used in three contexts:

- It is used to define an end-to-end automation resource. Each XML policy must contain at least one ResourceReference element. The element has a number of required sub-elements.
- In ResourceGroup and ChoiceGroup definitions, it is used to specify which resources references are members of a group.
- In Relationship definitions, it is used to specify the source and target of a relationship.

Restrictions

The value of the Name attribute must be unique within the policy, that is, the name cannot be used for more than one ResourceReference.
The same name must not be used for a ChoiceGroup or ResourceGroup.

Examples

Example of a ResourceReference element in a ResourceReference specification:

```
<ResourceReference name="WebSphere AE">
        <DesiredState>Offline</DesiredState>
        <Description>Resource reference WebSphere AE </Description>
        <Owner>Harry Smith</Owner>
        <InfoLink>http://www.example.com/help/Websphere.html</InfoLink>
        <ReferencedResource>
                <AutomationDomain>FECluster</AutomationDomain>
                <Name>WebSphere AppServer</Name>
                <Class>ResourceGroup</Class>
                <Node>node2</Node>
        </ReferencedResource>
</ResourceReference>
```

Example of a ResourceReference element in a ResourceGroup specification:

```
<ResourceGroup name="Friendly Computer Shop" >
         <DesiredState>Offline</DesiredState>
         <Description>Resource group Friendly Computer Shop</Description>
         <Owner>Jerr Owens</Owner>
         <InfoLink>http://www.example.com/help/policy/compshop.html</InfoLink>
         <Members>
            <ResourceGroup name="mySAP Solutions"/>
            <ResourceReference name="WebSphere AE"/>
         </Members>
</ResourceGroup>
```

Example of ResourceReference elements in a Relationship specification:

```
 <Relationship>
        <Source>
            <ResourceReference name="WebSphere EE"/>
        </Source>
        <Type> StartAfter</Type>
       <Target>
            <ResourceReference name="DNS Server"/>
       </Target>
</Relationship>
```

Attributes

name="*ResourceReferenceName***"**
The name by which the end-to-end automation domain resource will be known in the end-to-end automation domain. The name specified here can differ from the name used for the ReferencedResource in its first-level automation domain.

The name can have a maximum of 64 characters. Do not use more than one blank to separate strings within the name. Duplicate blanks will be ignored.

Contexts

In ResourceReference specifications:
Children: DesiredState, Description, Owner, InfoLink, ReferencedResource
Parents: AutomationPolicy

In ResourceGroup or ChoiceGroup specifications:
Children: None
Parents: Members

In Relationship specifications:
Children: None
Parents: Source, Target

Source

The Source element is a container element. Its subelement ResourceReference or ResourceGroup specifies the dependent resource (ResourceReference or ResourceGroup) in a relationship (element Relationship).

Restrictions

Example

```
 <Relationship>
        <Source>
           <ResourceReference name="WebSphere EE"/>
        </Source>
        <Type> StartAfter</Type>
        <Target>
           <ResourceReference name="DNS Server"/>
        </Target>
</Relationship>
```

Attributes

None

Contexts

Children: ResourceReference, ResourceGroup, ChoiceGroup
Parents: Relationship

Target

The Target element is used to specify the supporting resource (ResourceReference or ResourceGroup) in a relationship (element Relationship).

Restrictions

Example

```
 <Relationship>
        <Source>
           <ResourceReference name="WebSphere EE"/>
        </Source>
        <Type> StartAfter</Type>
        <Target>
           <ResourceReference name="DNS Server"/>
        </Target>
</Relationship>
```

Attributes

None

Contexts

Children: ResourceReference, ResourceGroup, ChoiceGroup
Parents: Relationship

Type

The Type element is used to specify the relationship between two resources (the Source and the Target). The relationship defines in which sequence the resources must be started or stopped. The automation manager will interpret a relationship definition as automation rule and will ensure that the resources are started or stopped in the correct sequence.

Possible values:

StartAfter
Defines in which sequence two dependent resources must be started.
For a relationship *Resource A StartAfter Resource B* this means that when resource A is to be started, Resource B is started first. Only after Resource B has become online will Resource A be started.

StopAfter
Defines in which sequence two resources must be stopped
For a relationship *Resource A StopAfter Resource B* this means that when resource A has to be stopped, Resource B is stopped first. Only after Resource B has stopped will Resource A be stopped.

ForcedDownBy
Defines that a resource must be forced down when another resource is stopped.
For a relationship *Resource A ForcedDownBy Resource B* this means that resource A must be forced offline if Resource B goes offline unexpectedly or is forced down itself. Resource A and Resource B may stop in parallel. The force down of Resource A will be triggered in the following situations:

- When Resource B enters in any of the regular down states (Offline) after having previously been in an online state.
- When Resource B enters any of the terminal down states (Failed offline), regardless of its former state.

Restrictions

The element must occur once per Relationship element.

Example

```
<Relationship>
     <Source>
           <ResourceReference name="WebSphere EE"/>
     </Source>
     <Type> StartAfter</Type>
     <Target>
           <ResourceReference name="DNS Server"/>
     </Target>
</Relationship>
```

Attributes

None

Contexts

Children: None
Parents: Relationship

Chapter 3. Policy rule reference

When you define an end-to-end automation policy, you must ensure that a number of rules are observed. The compliance with these rules is checked automatically when you activate a policy. If one of the rules is violated, the policy checking tool issues a warning or an error message. Policies for which only warnings are generated can be activated, errors prohibit the activation of a policy.

Rules for resource groups and choice groups

An error message is issued if one of the following rules is not observed:

- Only resource references that are defined in the policy can be added as members to a group.
- A choice group or a resource group cannot belong to more than one group.
- A resource reference must not be a member of more than one choice group.
- A resource reference must not be a member of both a resource group and a choice group.
- A member must not occur in a group more than once.

A warning message is issued if one of the following rules is not observed:

- A choice group must not be a member of a resource group.
- A member of a choice group must not be the source or the target of a relationship.

Relationship rules

An error message is issued if one of the following rules is not observed:

- Source and target resources of a relationship must have been defined as resource references.
- A resource reference must not be the first source and the last target of a relationship of the same type.

A warning message is issued if one of the following rules is not observed:

- A relationship of type StartAfter and a relationship of StopAfter must not have the same source and target.
- A member of a choice group must not be the source or the target of a relationship.

Rules that ensure that resource names are unique

An error message is issued if one of the following rules is not observed:

- Each resource reference in a policy must have a unique name.
- The name of a resource reference must not be used for a resource group or choice group.
- Each resource group in a policy must have a unique name.
- The name of a resource group must not be used for a resource reference or choice group.
- Each choice group in a policy must have a unique name.

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- The name of a choice group must not be used for a resource reference or resource group.

Additional rules

General rule:

- An end-to-end automation resource reference can only reference resources of other automation domains.

An error message is issued if one of the following rules is not observed:

- A first-level automation resource can only be referenced by one resource reference.
- Each choice group or resource group must have at least one member.
- At least one resource reference must be defined in a policy.
- For one member of a choice group the attribute `preferred` must be set to `true`.

Chapter 4. Sample automation policy

This is the sample automation policy `sample.xml`. You find it in your policy pool directory.

```
<?xml version="1.0" encoding="UTF-8"?>

<AutomationPolicy version="1.0"
    xmlns="http://www.ibm.com/TSA/Policy.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.ibm.com/TSA/Policy.xsd EEZPolicy.xsd ">
      <PolicyInformation>
          <PolicyName>Sample E2E Policy</PolicyName>
          <AutomationDomainName>FriendlyE2E</AutomationDomainName>
          <PolicyToken> 1.0.1            </PolicyToken>
          <PolicyAuthor>Michael Atkins</PolicyAuthor>
          <PolicyDescription>Sample policy for the domain FriendlyE2E</PolicyDescription>
      </PolicyInformation>


    <!-- ********************************** -->
    <!-- Define all resource reference first. -->
    <!-- Gather information anout referenced  -->
    <!-- resources first. See users guide for -->
    <!-- instructions.                        -->
    <!-- ********************************** -->


        <ResourceReference name="Enterprise DB2">
                <DesiredState>Online</DesiredState>
                <Description>This is the reference with the name Enterprise DB2 </Description>
                <Owner>Bob Owens</Owner>
                <InfoLink>http://www.example.com/help/DB2</InfoLink>
                <ReferencedResource>
                        <AutomationDomain>FEPLEX2</AutomationDomain>
                        <Name>DB2</Name>
                        <Class>APG</Class>
                        <Node>node1</Node>
                </ReferencedResource>
        </ResourceReference>

        <ResourceReference name="DB2 Connect Client">
                <DesiredState>Offline</DesiredState>
                <Description>This is the reference with the name DB2 Connect Client </Description>
                <Owner>Bob Owens</Owner>
                <InfoLink>http://www.example.com/help/DB/Client</InfoLink>
                <ReferencedResource>
                        <AutomationDomain>FECluster</AutomationDomain>
                        <Name>DB2 Connect</Name>
                        <Class>IBM.ResourceGroup</Class>
                        <Node>node2</Node>
                </ReferencedResource>
        </ResourceReference>

        <ResourceReference name="DB2 Connect Client Backup">
                <DesiredState>Offline</DesiredState>
                <Description>This is the reference with the name DB2 Connect Client Backup</Description>
                <Owner>Bob Owens</Owner>
                <InfoLink>http://www.example.com/help/DB/Client</InfoLink>
                <ReferencedResource>
                        <AutomationDomain>FEPLEX2</AutomationDomain>
                        <Name>DB2 Connect</Name>
                        <Class>APG</Class>
                        <Node>node2</Node>
```

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```
        </ReferencedResource>
</ResourceReference>

<ResourceReference name="WebSphere EE">
        <DesiredState>Offline</DesiredState>
        <Description>This is the reference with the name WebSphere EE </Description>
        <Owner>Harry Smith</Owner>
        <InfoLink>http://www.example.com/Websphere/help</InfoLink>
        <ReferencedResource>
                <AutomationDomain>FEPLEX2</AutomationDomain>
                <Name>WAS</Name>
                <Class>APG</Class>
                <Node>node1</Node>
        </ReferencedResource>
</ResourceReference>

<ResourceReference name="DNS Server">
        <DesiredState>Offline</DesiredState>
        <Description>This is the reference with the name DNS Server </Description>
        <Owner>Jenny McDowell</Owner>
        <InfoLink>http://www.example.com/help/DNS Server</InfoLink>
        <ReferencedResource>
                <AutomationDomain>FECluster</AutomationDomain>
                <Name>DNS Server</Name>
                <Class>IBM.ResourceGroup</Class>
                <Node>node2</Node>
        </ReferencedResource>
</ResourceReference>

<ResourceReference name="NFS Client">
        <DesiredState>Offline</DesiredState>
        <Description>This is the reference with the name NFS Client </Description>
        <Owner>Henry Smith</Owner>
        <InfoLink>http://www.example.com/help/NFS/client/minor_01/?help+NFS+Client</InfoLink>
        <ReferencedResource>
                <AutomationDomain>cm1cm2</AutomationDomain>
                <Name>nfs-client</Name>
                <Class>IBM.ResourceGroup</Class>
                <Node>lnxcm2</Node>
        </ReferencedResource>
</ResourceReference>

<ResourceReference name="NFS Server">
        <DesiredState>Offline</DesiredState>
        <Description>This is the reference with the name "NFS Server </Description>
        <Owner>Bob Owens</Owner>
        <InfoLink>file://X:/help/NFS.pdf</InfoLink>
        <ReferencedResource>
                <AutomationDomain>FEPLEX1</AutomationDomain>
                <Name>NFS Server</Name>
                <Class>APG</Class>
                <Node>node3</Node>
        </ReferencedResource>
</ResourceReference>

<ResourceReference name="WebSphere AE">
        <DesiredState>Offline</DesiredState>
        <Description>This is the reference with the name WebSphere AE </Description>
        <Owner>Harry Smith</Owner>
        <InfoLink>http://www.example.com/help/Websphere.html</InfoLink>
        <ReferencedResource>
                <AutomationDomain>FECluster</AutomationDomain>
                <Name>WebSphere AppServer</Name>
                <Class>IBM.ResourceGroup</Class>
                <Node>node2</Node>
        </ReferencedResource>
</ResourceReference>
```

```
   <ResourceReference name="eMail Hosting">
           <DesiredState>Online</DesiredState>
           <Description>This is the reference with the name eMail Hosting </Description>
           <Owner>Sarah O'Neill</Owner>
           <InfoLink>http://www.example.com/help/policy/email.html</InfoLink>
           <ReferencedResource>
                   <AutomationDomain>FECluster</AutomationDomain>
                   <Name>Mail Server</Name>
                   <Class>IBM.Application</Class>
                   <Node>node2</Node>
           </ReferencedResource>
   </ResourceReference>

   <ResourceReference name="HTTP Server Prim">
           <DesiredState>Offline</DesiredState>
           <Description>This is the reference with the name HTTP Server </Description>
           <Owner>Owens, Bob</Owner>
           <InfoLink>http://www.example.com/help/policy/HTTPServer.html</InfoLink>
           <ReferencedResource>
                   <AutomationDomain>FEClusterSAP</AutomationDomain>
                   <Name>HTTP Server</Name>
                   <Class>IBM.ResourceGroup</Class>
                   <Node>node4</Node>
           </ReferencedResource>
   </ResourceReference>

<ResourceReference name="HTTP Server Backup">
           <DesiredState>Offline</DesiredState>
           <Description>This is the reference with the name HTTP Server </Description>
           <Owner>Harry O'Neill</Owner>
           <InfoLink>--- No help ---</InfoLink>
           <ReferencedResource>
                   <AutomationDomain>FECluster</AutomationDomain>
                   <Name>HTTP Server Back</Name>
                   <Class>IBM.ResourceGroup</Class>
                   <Node>nodebackup</Node>
           </ReferencedResource>
   </ResourceReference>


   <ResourceReference name="SAP ENQ Server">
           <DesiredState>Offline</DesiredState>
           <Description>This is the reference with the name SAP ENQ Server </Description>
           <Owner>Bob Owens</Owner>
           <InfoLink>http://www.example.com/help/policy/enq.html</InfoLink>
           <ReferencedResource>
                   <AutomationDomain>FEPLEX1</AutomationDomain>
                   <Name>SAP ENQ Env.</Name>
                   <Class>IBM.Application</Class>
                   <Node>node3</Node>
           </ReferencedResource>
   </ResourceReference>

   <ResourceReference name="SAP AppServer">
           <DesiredState>Offline</DesiredState>
           <Description>This is the reference with the name SAP AppServer </Description>
           <Owner>Jenny Parker</Owner>
           <InfoLink>http://www.example.com/help/policy/SAPAPP.html</InfoLink>
           <ReferencedResource>
                   <AutomationDomain>FEClusterSAP</AutomationDomain>
                   <Name>SAP AppServer</Name>
                   <Class>IBM.ResourceGroup</Class>
                   <Node>node4</Node>
           </ReferencedResource>
   </ResourceReference>
```

```
<!-- ********************************** -->
<!-- Resource references can be grouped   -->
<!-- together.                            -->
<!-- See users guide for instructions     -->
<!-- ********************************** -->


   <ChoiceGroup name="HTTP Server">
            <DesiredState> Offline </DesiredState>
             <Description>This is the choice-Group for choosing one HTTP Server</Description>
             <Owner>Jenny Parker</Owner>
             <InfoLink>http://www.example.com/choice</InfoLink>
             <Members>
             <ResourceReference name="HTTP Server Prim" preferred="true"/>
             <ResourceReference name="HTTP Server Backup"/>
          </Members>
   </ChoiceGroup>


   <ChoiceGroup name="DB2">
            <DesiredState> Offline </DesiredState>
             <Description>This is the choice-Group for choosing one DB2 Client</Description>
             <Owner>Jenny Parker</Owner>
             <InfoLink>http://www.example.com/choice</InfoLink>
             <Members>
                <ResourceReference name="DB2 Connect Client" preferred="true"/>
             <ResourceReference name="DB2 Connect Client Backup"/>
          </Members>
   </ChoiceGroup>

    <ResourceGroup name="WebSphere E2E" >
              <DesiredState> Offline </DesiredState>
              <Description>This is collection group with the name WebSphere E2E</Description>
              <Owner>Harry Smith</Owner>
              <InfoLink>http://www.example.com/help/policy/Websphere.html</InfoLink>
              <Members>
                 <ResourceReference name="Enterprise DB2"/>
                 <ResourceReference name="WebSphere EE"/>
                 <ResourceReference name="DNS Server"/>
                 <ResourceReference name="NFS Client"/>
                 <ResourceReference name="NFS Server"/>
                 <ResourceReference name="WebSphere AE"/>
              </Members>
   </ResourceGroup>

    <ResourceGroup name="mySAP Solutions" >
              <DesiredState> Offline </DesiredState>
              <Description>This is collection group with the name mySAP Solutions</Description>
              <Owner>Jerry Owens</Owner>
              <InfoLink>http://www.example.com/help/policy/mysap/Solution.html</InfoLink>
              <Members>
                 <ResourceReference name="DNS Server"/>
                 <ResourceReference name="SAP ENQ Server"/>
                 <ResourceReference name="SAP AppServer"/>
              </Members>
   </ResourceGroup>

    <ResourceGroup name="Friendly Computer Shop" >
              <DesiredState>Offline</DesiredState>
              <Description>This is collection group with the name Friendly Computer Shop</Description>
              <Owner>Jerr Owens</Owner>
              <InfoLink>http://www.example.com/help/policy/compshop.html</InfoLink>
              <Members>
                 <ResourceGroup name="mySAP Solutions"/>
                 <ResourceReference name="WebSphere AE"/>
                 <ChoiceGroup name="HTTP Server"/>
              </Members>
```

```
      </ResourceGroup>


    <!-- ********************************** -->
    <!-- Define relationships of resources    -->
    <!-- to each other                        -->
    <!-- See users guide for instructions     -->
    <!-- ********************************** -->

<!--
       <Relationship>
               <Source>
                    <ResourceReference name="DB2 Connect Client"/>
               </Source>
               <Type> StartAfter         </Type>
               <Target>
                    <ResourceReference name="Enterprise DB2"/>
               </Target>
      </Relationship>

 -->

       <Relationship>
               <Source>
                    <ResourceReference name="WebSphere EE"/>
                </Source>
               <Type> StartAfter    </Type>
               <Target>
                    <ResourceReference name="DNS Server"/>
               </Target>
      </Relationship>


       <Relationship>
               <Source>
                    <ResourceGroup name="mySAP Solutions"/>
                </Source>
               <Type> StartAfter    </Type>
               <Target>
                    <ChoiceGroup name="DB2"/>
               </Target>
      </Relationship>

       <Relationship>
               <Source>
                    <ResourceReference name="NFS Client"/>
                </Source>
               <Type> ForcedDownBy  </Type>
              <Target>
                    <ResourceReference name="NFS Server"/>
              </Target>
      </Relationship>

      <Relationship>
               <Source>
                    <ResourceReference name="NFS Client"/>
                </Source>
               <Type> StartAfter  </Type>
              <Target>
                    <ResourceReference name="SAP AppServer"/>
              </Target>
      </Relationship>

       <Relationship>
               <Source>
                    <ResourceReference name="SAP AppServer"/>
               </Source>
```

```
                <Type> StartAfter     </Type>
                <Target>
                     <ResourceReference name="SAP ENQ Server"/>
                </Target>
        </Relationship>

         <Relationship>
                <Source>
                     <ResourceReference name="SAP ENQ Server"/>
                </Source>
                <Type> StopAfter     </Type>
                <Target>
                     <ResourceReference name="SAP AppServer"/>
                </Target>
        </Relationship>

    <Relationship>
                <Source>
                     <ResourceReference name="SAP ENQ Server"/>
                </Source>
                <Type> ForcedDownBy     </Type>
                <Target>
                     <ResourceReference name="SAP AppServer"/>
                </Target>
        </Relationship>

</AutomationPolicy>
```

Part 3. Messages

Chapter 5. Overview 59

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Chapter 5. Overview

This part lists the messages and the appropriate user responses to the messages that are generated by the subcomponents and automation adapters of the end-to-end automation management component of IBM Tivoli System Automation for Multiplatforms. This part is divided into the following chapters:

- Chapter 6, "How to interpret messages that have the prefix EEZ," on page 61 describes how to interpret the unique message code that precedes most of the messages that are generated by subcomponents of the end-to-end automation management component.
- Chapter 7, "EEZ Message catalog," on page 63 lists the messages that have the prefix EEZ.
- Chapter 8, "Smart refresh messages," on page 123 lists the messages that are generated by the Smart refresh function of the operations console.
- Chapter 9, "Messages generated by the HACMP adapter and the end-to-end automation adapter of the base component," on page 125 lists the messages that are generated by these adapters.

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Chapter 6. How to interpret messages that have the prefix EEZ

Most messages that are generated by subcomponents of the end-to-end automation management component begin with a unique message code as shown in the following general example:

EEZS1234E

- **EEZ** – component identifier of the end-to-end automation management component
- **S** – represents one of the following prefixes:
  - **A** - Messages issued by automation adapters

    Note: SA z/OS adapter messages:
    - Within NetView an additional * may be appended to the end of the message text.
    - Because these messages are written to the syslog on z/OS, the message text must be in English.
  - **B, J, L, T** – Automation J2EE framework messages
  - **C** – Messages issued by various utilities
  - **D** – Automation engine messages
  - **F** – Automation engine resource adapter messages
  - **I** – Automation manager resource adapter messages
  - **K, X** – Automation Software Development Kit messages
  - **N** – Installation-related messages
  - **P** – Policy-related messages
  - **S** - Messages issued by the command shell of the end-to-end automation manager
  - **U** – Operations console messages
  - **Y, Z** - Messages issued by the MSCS adapter

  In this appendix, the messages are sorted alphabetically by subcomponent prefix.
- **1234** – unique four-digit number
- **E** – one of the following severity code identifiers:
  - **I** for Information
  - **W** for Warning
  - **E** for Error

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Chapter 7. EEZ Message catalog

This chapter lists the messages that are generated by subcomponents of the end-to-end automation management component that have the prefix EEZ. The messages are sorted alphabetically by subcomponent prefix. For information about additional messages you might encounter while working with the component, refer to the remaining message sections of this document and to the documentation for the corresponding first-level automation product.

EEZA0001E Syntax error on line *line number*

Explanation: A syntax error has occurred in the configuration file, for example, a leading = on a line.

System action: The automation adapter stops.

Operator response: Analyze the configuration file for invalid syntax.

EEZA0002E Wrong datatype in key *the key***. Expected** *the desired type***, found value** *"the value that was found"*

Explanation: The value of the given key cannot be interpreted as the desired type. For example, the system expected a boolean value but found the string "hello".

System action: The automation adapter stops.

Operator response: Analyze the configuration file for invalid key/value pairs.

EEZA0003E The key *"the key that was not found"* **was not found and no default value was given**

Explanation: The system wanted to retrieve from the configuration file a value that did not exist and no default value was given.

System action: The automation adapter stops.

Operator response: Supply a value for the key in the configuration file.

EEZA0004E Integer out of bounds in key *"the key"***. Expected value between** *the lower bound expected* **and** *the upper bound expected***, found** *the value parsed*

Explanation: The system expected an integer value between the given bounds (inclusive) for the given key, but found a value outside these bounds.

System action: The automation adapter stops.

Operator response: Supply a value within the given bounds for the key.

EEZA0006E Cannot create an instance of the class because class not found: *class name*

Explanation: The automation adapter cannot load the class.

System action: The automation adapter rejects the request.

Operator response: Check whether the class name is valid and is available in the corresponding classpath.

EEZA0007E Cannot create an instance of the class because method not found: *class name*

Explanation: The automation adapter can load the class but cannot create an instance.

System action: The automation adapter rejects the request.

Operator response: Check whether the class is valid.

EEZA0008E Cannot create an instance of the class because of an unknown error: *class name*

Explanation: The automation adapter cannot load the class or create an instance.

System action: The automation adapter rejects the request.

Operator response: Check whether the class is valid and analyze the attached original exception.

EEZA0009E Invocation of adapter plug-in failed: plug-in=*plug-in name***, method=***method name***, internalRetcode=***internal return code***, taskRetcode=***task return code*

Explanation: The automation adapter client API was called to execute a task on the remote automation adapter. There are three error categories:

- The client suffers an error on the connection
- The execution of the task within the automation adapter backend failed
- Execution failed in the automation adapter plug-in.

Automation adapter return codes:

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3 Backend detects that the request expired before it was started.
4 Backend cannot be loaded.
22 Backend cannot load the plug-in Java class.
23 An exception occurred in the backend or the plug-in returns a non-zero task return code.
24 Backend rejects the execution of the task. See the automation adapter trace for details.
30 Backend detects invalid input arguments. Cannot execute task. This is an internal error.
40 Authentication failed. The user ID or password has not been specified or an internal error occurred.
41 Authentication failed. The user ID or password is invalid on the automation adapter host.
42 Authentication failed. The user ID has been revoked. JAAS login modules may not provide this information or may also use it if the password has expired.
43 Authentication failed. The password has expired. JAAS login modules may not provide this information.

The automation adapter client connection return codes:
101 Connection timed out while open.
102 Connection failed during open/read/write because peer closed.
103 Not all data received. The data was read successfully but the number of bytes is too small. This might be an internal error.
104 Unable to connect to the automation adapter.
105 Unable to close connection. This might be an internal error.
106 Unable to send data. Connection has been aborted due to, for example, SSL mismatch or the automation adapter stopped.
107 Marshal error occurred while sending or receiving data. This is an internal error.
108 Connection is invalid, for example, connection has not been opened or previously failed.
109 Read response failed. Data is zero, for example, the connection has been aborted due to an SSL mismatch.
110 Connection timed out during read/write.

Predefined task return codes from plug-in:
<0 Internally used task return codes have been mapped to one of the automation adapter return codes.
0 The plug-in was successful.
4004 The plug-in connection timed out.
4008 The plug-in authorization is missing to execute the request.
4012 The plug-in failed but might execute the next request successfully. This is the default return code if the plug-in throws an exception but the plug-in return code is zero.
4016 The plug-in failed and might not execute the next request successfully.
4020 The plug-in failed and forces the entire automation adapter to stop.

System action: Execution of the remote task fails.

Operator response: Analyze the return code description. Contact IBM Support if it is an internal error.

EEZA0010E Request expires before the adapter passes it to the adapter plug-in. Timeout period is *timeout value* **seconds**

Explanation: All requests have an associated expiration date. The request is scheduled to an execution thread that detected that the expiration time had expired.

System action: The automation adapter rejects the request.

Operator response: Analyze the reason (for example, high working load). Increase the timeout period if necessary.

EEZA0011E The backend program specification is invalid

Explanation: The backend program is not a Java program or the Java program name was not specified.

System action: The automation adapter rejects the request.

Operator response: Check the program that called the automation adapter client API or contact IBM Support.

EEZA0012E Invalid parameter list

Explanation: The automation adapter detected a request that is associated with an invalid parameter list.

System action: The automation adapter rejects the request.

Operator response: Check the program that called the automation adapter client API or contact IBM Support.

EEZA0013E Authentication for user ID *user name* **failed**

Explanation: The request is associated with a user ID and password that have been validated unsuccessfully.

System action: The automation adapter rejects the request.

Operator response: Check whether the user ID is authorized for the system and check the security policy.

EEZA0014E **The original exception** *original-class* **needs to be transported to the remote caller**

Explanation: An exception from an underlying component needs to be transported to the remote caller.

System action: None.

Operator response: Analyze the original exception attached with this message.

EEZA0015E **Method not supported:** *name of the missing method*

Explanation: The automation adapter detected an unknown method name. The list of all valid method names is defined in the EEZAdapterInteraction interface.

System action: The automation adapter rejects the request.

Operator response: Contact IBM Support.

EEZA0017E **Request not supported:** *name of the unsupported request*

Explanation: The automation adapter plug-in does not support the specified request.

System action: The request might be rejected depending on the behavior of the plug-in.

Operator response: None.

EEZA0022E **Adapter client is unable to connect to the adapter at** *host*:*port* **due to exception:** *the exception that was caught*

Explanation: The automation adapter client cannot connect to the server at the given host and port. The original exception text is provided.

System action: The connection is not established.

Operator response: Analyze the original exception.

EEZA0023E **Cache directory is invalid**

Explanation: The EIF cache directory is not a directory.

System action: The automation adapter stops.

Operator response: Correct the configuration file.

EEZA0024E **EIF sender and receiver must not be equal**

Explanation: The EIF configuration parameters are not allowed to point to each other.

System action: The automation adapter stops.

Operator response: Correct the configuration file.

EEZA0025E **Cannot find the plug-in configuration file:** *configuration file name*

Explanation: The master configuration file contains the name of a plug-in configuration file that cannot be found.

System action: The automation adapter stops.

Operator response: Correct the configuration file.

EEZA0026E **No plug-in configuration file was specified**

Explanation: The master configuration file must contain at least one plug-in configuration file.

System action: The automation adapter stops.

Operator response: Correct the configuration file.

EEZA0027E **Cannot load configuration file:** *configuration file name*

Explanation: The specified configuration file cannot be loaded.

System action: The automation adapter stops.

Operator response: Correct the configuration file.

EEZA0028E **Plug-in configuration file does not contain all mandatory parameters:** *configuration file name*

Explanation: The specified configuration file does not contain all mandatory parameters. The plug-in is not used.

System action: The automation adapter does not deploy the plug-in.

Operator response: Correct the configuration file.

EEZA0029E **Cannot create the first instance of the plug-in class:** *class name*

Explanation: An attempt was made to create the first instance of the plug-in during initialization. Creation failed.

System action: The automation adapter does not deploy the plug-in.

Operator response: Correct the configuration file.

EEZA0030E **Cannot set up event subscription list for plug-in configuration file:** *plug-in configuration file name*

Explanation: The specification of the EIF event classes in the plug-in configuration file is invalid.

System action: The automation adapter does not deploy the plug-in.

Operator response: Correct the configuration file.

EEZA0031E Cannot load configuration file from: *plug-in configuration file name*

Explanation: The automation adapter cannot load the specified configuration file because either no configuration file or an invalid one was specified.

System action: The automation adapter stops.

Operator response: Check whether the name of the configuration file is correct.

EEZA0032E Initialization of the adapter failed: *original exception*

Explanation: An error occurred in the initialization step of the automation adapter.

System action: The automation adapter stops.

Operator response: Analyze the associated exception. If there is no exception text for this message, try to find additional messages that were sent previously.

EEZA0033E Unable to create *type of factory* **SocketFactory**

Explanation: The automation adapter server or client cannot create a socket factory for the remote contact.

System action: The automation adapter client cannot create a connection or the automation adapter server cannot receive connections.

Operator response: Analyze the reason using previous messages.

EEZA0036E The adapter suffered an unexpected interruption: *original exception*

Explanation: The automation adapter waits for a termination command. An unexpected interruption occurred.

System action: The automation adapter stops.

Operator response: Analyze the original exception.

EEZA0037E The adapter stops because no plug-in has been successfully initialized

Explanation: At least one plug-in must have been successfully initialized otherwise the automation adapter stops.

System action: The automation adapter stops.

Operator response: Analyze previous messages and exceptions issued by the failing plug-in.

EEZA0038E A (SSL) socket configuration error occurred: *exception text*

Explanation: An error occurred during the loading or processing of (SSL) socket-related configuration data. An SSL handshake exception will only be reported during initial contact.

System action: The automation adapter client cannot create a connection or the automation adapter server cannot receive connections.

Operator response: Analyze the exceptions text. Check the SSL configuration file, ing.adapter.ssl.properties, if necessary.

EEZA0039E Not all data was read from socket: *number of bytes read* **bytes read,** *number of bytes expected* **bytes expected to be read**

Explanation: The incoming request has a length in bytes, but not all bytes can be read.

System action: The automation adapter rejects the request.

Operator response: Check why the socket connection was broken while transferring data.

EEZA0040E The adapter client cannot establish connection to the adapter: *string representation of the connection*

Explanation: Opening the connection failed. A request cannot be sent to the automation adapter. The string representation of the connection contains details about the connection.

System action: The automation adapter frontend failed.

Operator response: Analyze the connection information.

EEZA0041E The adapter client cannot invoke an adapter request: InternalRC=*internal return code***, TaskRC=***task return code*

Explanation: A connection to the automation adapter has been successfully established. The automation adapter frontend might have sent a request to the automation adapter but the request failed. If the internal or task return codes are not applicable (n/a), some other unexpected exception occurred.

System action: The automation adapter frontend failed.

Operator response: Analyze the internal and task return codes (see EEZA0009E for an explanation of the return codes).

EEZA0042E The adapter has thrown a remote exception: InternalRC=*internal return code***, TaskRC=***task return code***. The original message was:** *message text*

Explanation: A connection to the automation adapter has been successfully established. The automation adapter frontend has sent a request to the automation adapter but the plug-in has thrown an exception.

System action: None.

Operator response: Analyze the internal and task return codes (see EEZA0009E for an explanation of the return codes).

EEZA0043E A required command line parameter is missing

Explanation: One of the required command line parameters is missing (such as -start,-stop or -terminate).

System action: The automation adapter frontend failed.

Operator response: Specify the required command-line parameters and try again.

EEZA0045E The adapter cannot establish a server socket due to illegal arguments: *exception text*

Explanation: The automation adapter cannot establish a receiver thread and cannot accept incoming connections.

System action: The automation adapter stops.

Operator response: Analyze the configuration file for an invalid IP address.

EEZA0047E The adapter is unable to accept connections due to socket exception *"exception"*

Explanation: An exception occurred as the automation adapter was about to accept an incoming connection.

System action: The automation adapter stops.

Operator response: Analyze the exception text.

EEZA0051W Termination of the adapter failed due to exception: *error message*

Explanation: The attempt to stop the receiver thread failed because an exception occurred.

System action: None.

Operator response: Analyze the exception text.

EEZA0052E Cannot create an in-storage EIF configuration file: *exception text*

Explanation: An instance of the Java class ByteArrayInputStream cannot be created or written.

System action: The automation adapter stops.

Operator response: This is probably an internal error. The exception text might give the reason for the problem.

EEZA0053E Missing argument for command line parameter *"the parameter"*

Explanation: A required argument for a command line parameter (such as `-start`) is missing. For example, `AdapterCmd -start` would be incorrect because `-start` requires an argument. A correct example would be:
```
AdapterCmd -start
com.ibm.ing.saplugin.INGXPluginInvocation
```

System action: Processing of this command ends.

Operator response: Check the documentation for information about valid command line arguments and their parameters.

EEZA0055E Remote Contact inactivity threshold exceeded: elapsed seconds=*elapsed seconds* **threshold=***threshold*

Explanation: The automation adapter calculates the elapsed time since the last synchronous request was received. The automation adapter stops itself if this time exceeds the number specified in the parameter eez-remote-contact-activity-interval-seconds. Any incoming event is used as a trigger for the calculation.

System action: The automation adapter stops.

Operator response: You might want to increase the number of seconds specified by the parameter eez-remote-contact-activity-interval-seconds. Setting this parameter to 0 (zero) means it never expires.

EEZA0056I Initial contact was enabled and the connection to the management server has been established

Explanation: The parameter eez-initial-contact was set to true and the automation adapter attempted to connect the management server. The handshake to the management server was successful.

System action: None.

Operator response: None.

EEZA0057E The connection to the management server cannot be established

Explanation: The automation adapter stops attempting to connect to the management server because the timeout interval is over.

System action: The automation adapter stops.

Operator response: You might want to increase the number of minutes specified by the parameter eez-initial-contact-retry-interval-minutes. Specify the value 0 (zero) in order to retry forever.

EEZA0058E The plug-in has not been deployed or not yet started: *name of the Java plug-in class*

Explanation: An attempt was made to issue a request against a non-deployed plug-in or a plug-in that has not been started.

System action: The automation adapter rejects the request.

Operator response: Check the plug-in configuration file and deploy the missing plug-in class. Search for message EEZA0115I.

EEZA0059E An internal error occurred

Explanation: The automation adapter detected an internal error.

System action: None.

Operator response: Contact IBM Support. Check the trace file for the place that threw the internal exception.

EEZA0060I The termination of the adapter is delayed for *duration of the delay in seconds* **seconds**

Explanation: Stopping the automation adapter is delayed for a short while until it has sent the appropriate domain leave events. You can configure the duration of this delay with the eez-stop-delay-seconds parameter.

System action: The automation adapter attempts to send domain leave events.

Operator response: None.

EEZA0061E Unable to bind a socket to address *eez-remote-contact-hostname* **at port** *eez-remote-contact-port***. Reason:** *message of the exception*

Explanation: The automation adapter was unable to use this address or port. Possible causes of the problem are:

- The port is already in use by another program.
- The address could not be assigned.

System action: The automation adapter stops.

Operator response: Make sure that no program is using this port (that is, an automation adapter that is already running). If another program needs this port, then configure the automation adapter to use another port (with the eez-remote-contact-port parameter in the master configuration file). Ensure that the address is valid.

EEZA0062I The start command of the automation plug-in *name of the Java plug-in class* **was successful**

Explanation: The selected automation plug-in was successfully started.

System action: The automation adapter has started the automation plug-in.

Operator response: None.

EEZA0063I The stop command of the automation plug-in *name of the Java plug-in class* **was successful**

Explanation: The selected automation plug-in was successfully stopped.

System action: The automation adapter has stopped the automation plug-in.

Operator response: None.

EEZA0064I The termination command for the adapter was successful

Explanation: The automation adapter was successfully stopped.

System action: The automation adapter stops.

Operator response: None.

EEZA0070E The host name *eez-remote-contact-hostname* **is unknown**

Explanation: The automation adapter was unable to resolve the host name.

System action: The automation adapter stops.

Operator response: Specify a valid host name.

EEZA0071E The domain name is either null or empty

Explanation: The plug-in returned an invalid domain name since it is either null or empty.

System action: The plug-in cannot be started.

Operator response: Specify a valid domain name in the plug-in configuration file.

EEZA0100I The adapter has been started

Explanation: This is the first of a sequence of three messages until the automation adapter is ready. The automation adapter starts initialization and will try to connect to the management server if eez-initial-contact=true.

System action: None.

Operator response: None.

EEZA0101I The adapter is active

Explanation: The automation adapter becomes "active" after a connection has been successfully established to the management server. The automation adapter continues initialization, finds and starts up all plug-ins.

System action: None.

Operator response: None.

EEZA0102I The adapter is ready

Explanation: The automation adapter startup sequence is complete.

System action: None.

Operator response: None.

EEZA0103I The adapter is stopping

Explanation: An internal or an external stop command has been received.

System action: The automation adapter is about to stop.

Operator response: None.

EEZA0104I The adapter has been stopped

Explanation: The automation adapter termination is complete. All possible stop delay periods are over. The process stops immediately.

System action: The automation adapter has stopped.

Operator response: None.

EEZA0105I The adapter has been stopped due to a failure, rc=*return code*

Explanation: The automation adapter stopped because an error occurred. All possible stop delay periods are over. The process stops immediately. The return code might be:

12 if initial contact failed

13 if the remote contact activity threshold is exceeded

16 if a plug-in forced termination of the automation adapter

20 if initialization failed

24 if an error occurred after initialization was successful

28 if an unsupported environment is detected

System action: The automation adapter stops.

Operator response: Search for error messages that were issued previously. On z/OS return code 28 might be caused by the 64-bit JVM. You should use the 32-bit JVM instead.

EEZA0111I The plug-in is starting: *name of the Java plug-in class*

Explanation: The automation adapter has already successfully created an instance of the plug-in class and will now call function INIT_DOMAIN.

System action: None.

Operator response: None.

EEZA0112I The plug-in has been started: *name of the Java plug-in class*

Explanation: The automation adapter plug-in has successfully initialized the domain (INIT_DOMAIN).

System action: None.

Operator response: None.

EEZA0113I The plug-in is stopping: *name of the Java plug-in class*

Explanation: The automation adapter will call plug-in function TERM_DOMAIN.

System action: None.

Operator response: None.

EEZA0114I The plug-in has been stopped: *name of the Java plug-in class*

Explanation: The automation adapter plug-in has successfully stopped the domain (TERM_DOMAIN).

System action: None.

Operator response: None.

EEZA0115I The plug-in startup failed: *name of the Java plug-in class*

Explanation: This message might follow after EEZA0111I, but the attempt to start the plug-in via function INIT_DOMAIN failed. The automation adapter plug-in will not be started automatically.

System action: The plug-in will be disabled. A join event was not sent.

Operator response: You might want to restart the

plug-in using the automation adapter start command. Analyze further plug-in messages.

EEZA9991E The message file is not installed

Explanation: The English message file must be available.

System action: The automation adapter stops.

Operator response: Make sure that the message file is in the class path

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EEZA9992E EEZAdapterLogger is not available

Explanation: The automation adapter logging component has not been initialized.

System action: The automation adapter stops. Other processes using the automation adapter client API will be unable to write messages to log and trace files.

Operator response: Contact IBM Support.

EEZC0001I Setting up Tivoli Common Directory at *location where Tivoli Common Directory is being set up***.**

Explanation: The Tivoli Common Directory path was set to its default value, as shown in the message text.

System action: No system action required.

Operator response: No operator action required.

EEZC0002I Unable to determine Tivoli Common Directory. Diverting serviceability related output to *alternative location***.**

Explanation: The system was not able to determine the Tivoli Common Directory.

System action: Processing continues. The application will attempt to divert serviceability related output to another location for this session.

Operator response: In order to manage its serviceability related output, the application should be granted read/write permission to the location /etc/ibm/tivoli/common (UNIX) or <Program_Files_Dir>\ibm\tivoli\common (Windows).

EEZC0003I Base output directory for serviceability related files (for example, message log files and trace files) has been set to *new output directory***.**

Explanation: The output directory for serviceability related files was set to its default value, as shown in the message text.

System action: From now on the application will write serviceability related information to the directory that is contained in the message text.

Operator response: No action is required if the base output directory for serviceability related files is acceptable. Otherwise, if it is required to relocate the base output directory, modify the entry in log.properties which should be located at <Program_Files_dir>\ibm\tivoli\common\cfg (Windows) or /etc/ibm/tivoli/common/cfg/ log.properties (UNIX). Changes to this file will take effect once the corresponding component is restarted.

EEZC0004I Changing base output directory for serviceability related files of *name of logger* **from** *old output directory* **to** *new output directory***.**

Explanation: Due to changes in configuration settings the output directory of serviceability related files has been relocated.

System action: From now on the system will write serviceability related information to the new location.

Operator response: No action is required if the base output directory for serviceability related files is acceptable. Otherwise, if it is required to relocate the base output directory, modify the entry in log.properties which should be located at <Program_Files_dir>\ibm\tivoli\common\cfg (Windows) or /etc/ibm/tivoli/common/cfg/ log.properties (UNIX). Changes to this file will take effect once the corresponding component is restarted.

EEZK0003E String *someString* **is too long: the maximum length of** *nameOfTheString* **Strings is** *maxLength***.**

Explanation: Setting the String to the specified value did not succeed due to string length.

System action: The current task ends.

Operator response: Verify the input parameters. If the problem persists, provide the trace file and this message text to IBM support.

EEZK0004E String named *someStringName* **must not be null and must not exceed the maximum length of** *maxLength***.**

Explanation: Setting the String to null is not allowed.

System action: The current task ends.

Operator response: Verify the input parameters. If the problem persists, provide the trace file and this message text to IBM support.

EEZK0005E An exception, which is not an instance of EEZApplicationException has been passed to the EEZApplicationTransientException. The type of the message is *exceptionType***.**

The exception message is: *exceptionMessage***.**

Explanation: This is an unexpected behavior.

System action: The current task will continue. The exception will be processed.

Operator response: Provide the logs and traces for more details, please, if any error other error occurs.

EEZB0001E **The following runtime exception occurred:** *exceptionText*

Explanation: Processing was interrupted by a RuntimeException and cannot complete correctly.

System action: The current task ends.

Operator response: If you cannot resolve the problem provide the trace file and this message text to IBM support.

EEZB0003E **A critical error has occurred in class:** *className***, method:** *methodName***. The logger object could not be initialized.**

Explanation: This component could not initialize and access a logger object.
This indicates either a configuration or programming error.

System action: The process cannot be completed. All parts of this component are affected. The system is not operational.

Operator response: Please check that the path settings are correct and all required libraries exist.
If the problem persists, collect trace data and this message text and contact IBM support.

EEZB0015E **An error has occurred in class:** *className***. The variable 'locale' has not been set.**

Explanation: This variable is mandatory for executing a request at the automation engine.
This indicates a programming error on the EJB exploiter side.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZB0025E **An error has occurred in class:** *className***, method:** *methodName***. Illegal parameter at invocation of this method.**

Explanation: The method has been invoked with a null parameter.
The method must be invoked with a parameter that is not null.
This indicates a programming error.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZB0030E **A** *exception* **has occurred in class:** *className***, method:** *methodName***. The nested exception equals null.**

Explanation: No exception object was linked to the ResourceException that has been caught.
This is an unexpected behavior and indicates a programming error on the J2C side.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZB0031E **An error has occurred in class:** *className***, method:** *methodName***. Invalid nested exception:** *nestedException***.**

Explanation: An invalid exception object was linked to the ResourceException that has been caught.
This is an unexpected behavior and indicates a programming error on the J2C side.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZB0033E **An error has occurred in class:** *className***, method:** *methodName***. JNDI Name:** *jndiName* **did not return a ConnectionFactory object.**

Explanation: The JNDI lookup of this J2C has encountered an internal error. The ConnectionFactory object could not be retrieved.
This indicates a JNDI configuration error.

System action: The current task ends. No connection to the automation engine will be possible until this problem is fixed.

Operator response: Please ensure that the JNDI settings for the J2C connection factories are correct and restart the server. Contact IBM support if the problem persists.

EEZC0001I **Setting up Tivoli Common Directory at** *location where Tivoli Common Directory is being set up***.**

Explanation: The Tivoli Common Directory path was set to its default value, as shown in the message text.

System action: No system action required.

Operator response: No operator action required.

EEZC0002I Unable to determine Tivoli Common Directory. Diverting serviceability related output to *alternative location***.**

Explanation: The system was not able to determine the Tivoli Common Directory.

System action: Processing continues. The application will attempt to divert serviceability related output to another location for this session.

Operator response: In order to manage its serviceability related output, the application should be granted read/write permission to the location /etc/ibm/tivoli/common (UNIX) or <Program_Files_Dir>\ibm\tivoli\common (Windows).

EEZC0003I Base output directory for serviceability related files (for example, message log files and trace files) has been set to *new output directory***.**

Explanation: The output directory for serviceability related files was set to its default value, as shown in the message text.

System action: From now on the application will write serviceability related information to the directory that is contained in the message text.

Operator response: No action is required if the base output directory for serviceability related files is acceptable. Otherwise, if it is required to relocate the base output directory, modify the entry in log.properties which should be located at <Program_Files_dir>\ibm\tivoli\common\cfg (Windows) or /etc/ibm/tivoli/common/cfg/ log.properties (UNIX). Changes to this file will take effect once the corresponding component is restarted.

EEZC0004I Changing base output directory for serviceability related files of *name of logger* **from** *old output directory* **to** *new output directory***.**

Explanation: Due to changes in configuration settings the output directory of serviceability related files has been relocated.

System action: From now on the system will write serviceability related information to the new location.

Operator response: No action is required if the base output directory for serviceability related files is acceptable. Otherwise, if it is required to relocate the base output directory, modify the entry in log.properties which should be located at <Program_Files_dir>\ibm\tivoli\common\cfg (Windows) or /etc/ibm/tivoli/common/cfg/ log.properties (UNIX). Changes to this file will take effect once the corresponding component is restarted.

EEZC0005W Unable to load IBMTCD10.dll.

Explanation: The system was not able to load "IBMTCD10.dll" which is required to load the value of the locale specific "Program Files" directory from the Windows Registry.

System action: Processing continues. The application will attempt to divert serviceability related output to another location.

Operator response: IBMTCD10.dll should be available to the application. Make sure the directory containing "IBMTCD10.dll" is available in the PATH environment variable.

EEZD0002E An exception was caught while trying to contact the JMS queue of the end-to-end automation manager.

Explanation: The automation engine was unable to establish contact with the end-to-end automation manager. This contact is required to forward EIF events from other automation domains.

System action: The automation engine is unable to contact the server. It has to be restarted when the problem has been resolved.

Operator response: Check the correct configuration for JMS User ID and JMS Pasword. Restart the automation engine.

EEZD0003E A 'JMSSecurityException' was caught while trying to contact the JMS queue of the end-to-end automation manager.

Explanation: The automation engine was unable to establish contact with the end-to-end automation manager. This contact is required to forward EIF events from other automation domains.

System action: The automation engine is unable to contact the server. It has to be restarted when the problem has been resolved.

Operator response: Check the correct configuration for JMS User ID and JMS Pasword. Restart the automation engine.

EEZD0004E Method was invoked with a null or empty parameter.

Explanation: A null or empty (list of) parameter was encountered.

System action: The method returns without processing the request any further.

Operator response: Provide the trace file and this message text to IBM support.

EEZD0005E A 'NoPermissionException' was caught while trying to contact the server with hostname: *server hostname* **on port:** *server port***.**

Explanation: The automation engine was unable to create an initial contact with the server in order to start the system automation.

System action: The automation engine is unable to contact the server. It has to be restarted after the problem has been resolved.

Operator response: Check the setup of permissions in order to contact the server as an EJB client. Check the contents of the file specified by the variable 'CLIENTSAS' in the start script of the automation engine process.

EEZD0006E An 'InterruptedException' was caught in method *methodName* **of class** *className***. The received message was** *message***.**

Explanation: The processing was interrupted by this exception and cannot complete.

System action: The current task ends.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZD0007E A 'RemoteException' was caught in method *methodName* **of class** *className***.**

Explanation: The processing was interrupted by this exception and cannot complete.

System action: The current task ends.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZD0008E An 'AlreadyBoundException' of service *handlerName* **was caught during startup of the automation engine.**

Explanation: This service has already bound before.

System action: The automation engine ends.

Operator response: Verify the automation engine is only started once on your system.

EEZD0009E A 'MalformedURLException' of service *handlerName* **was caught during startup of the automation engine.**

Explanation: This service name is not valid in your environment.

System action: The automation engine ends.

Operator response: Verify the URL. If you cannot resolve the problem provide the trace file and this message text to IBM support.

EEZD0010E The dispatcher thread *threadName* **of the automation engine is unable to dispatch a message or request to the automation J2EE framework. The number of retries was:** *Number of already attempted retries***. Original exception text was:** *Original Exception text*

Explanation: The automation J2EE framework is not accessible at the moment. This message will occur periodically as long as the problem persists.

System action: The thread will keep on trying to contact the automation J2EE framework to dispatch the request or event.

Operator response: Ensure that the application server hosting the automation J2EE framework of the automation manager is up and running. Verify that the automation J2EE framework is running. Check the configuration of the automation engine.

EEZD0013E The required library <*Name of Library***> cannot be loaded by the automation engine.**

Explanation: The library, which contains modules required by the automation engine, cannot be loaded.

System action: The core logic engine is unable to initialize. The automation engine is not able to receive any further commands and will terminate.

Operator response: Ensure that the library exists in the lib directory of the automation engine install root.

EEZD0014E A remote exception was caught while executing command line interface function <*Name of CLI method***>.**

Explanation: The command line interface function caught a remote exception while trying to connect to the automation engine.

System action: The command line interface was unable to execute the requested function.

Operator response: Ensure that the automation engine is running on this system and that you are allowed to execute commands against it.

EEZD0015E An error occurred preparing a request to the core logic engine used by the automation engine. Internal error message is: <*Reason for encoder error***>.**

Explanation: A request to the Core Logic Engine could not be created.

System action: The current action fails.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZD0016E An IOException was caught while trying to load policy *Name of policy* **from the policy pool.**

Explanation: The policy could not be read.

System action: The policy cannot be parsed. The automation engine is not able to activate this policy and will continue to run with the currently activated policy.

Operator response: Resolve the error indicated by the exception text.

EEZD0017E No or invalid policy pool directory specified. The value specified is: <*Policy Pool Directory***>**

Explanation: The value specified for the Policy Pool is either empty or does not specify a directory.

System action: The automation engine was not able to find or load a policy document and will continue to run with the current policy.

Operator response: Ensure that the indicated environment variable points to the correct directory on the local machine where policy documents are placed. Ensure that the automation engine process has sufficient rights to open this directory.

EEZD0019E Unable to activate policy <*Name of policy***>**

Explanation: The policy cannot be activated. This policy either does not comply with the required XML syntax or has not passed the consistency check done by the policy checker.

System action: The policy cannot be activated. The automation engine will continue operation with its currently activated policy

Operator response: See detailed error messages logged for this policy above. Resolve the error(s) in this policy before trying to activate it again.

EEZD0020E Domain name <*Name of domain in policy***> in policy <***Name of policy***> does not match automation engine domain <***Name of automation engine domain***>.**

Explanation: The policy cannot be activated. It is valid only for the indicated domain.

System action: The policy cannot be activated. The automation engine will continue operation with its currently activated policy.

Operator response: Activate a policy for the currently active domain, or reconfigure and restart the automation engine to represent another domain.

EEZD0021E Expression <*unsupported filter value***> used during query is not supported.**

Explanation: The specified filter is not supported.

System action: The enumeration of resources or relationships fails.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZD0022E Unknown event <*Event Type***> with reason <***Event Reason***> was received by the automation engine.**

Explanation: This event cannot be handled by the automation engine.

System action: The automation engine continues processing.

Operator response: Contact IBM support and provide the trace file and this message text.

EEZD0023E An EEZConfigurationException was received while trying to set the user credentials for the list of domains specified in the policy.

Explanation: The policy cannot be activated.

System action: The automation engine is not able to activate this policy and will continue to run with the currently activated policy.

Operator response: Contact IBM support and provide the trace file and this message text.

EEZD0024E A Generic user ID or password is not specified in the <*file name***> file.**

Explanation: A user and password for the GENERIC domain must always be specified in the properties file.

System action: The load of the properties file failed.

Operator response: Specify a user and password value for the GENERIC domain.

EEZD0025E Key: <*key***> occurs more than once in the properties file.**

Explanation: To avoid confusion, only unique keys can be specified in the properties file.

System action: The load of the properties file failed.

Operator response: Delete the duplicate keys from the properties file.

EEZD0027E **The required thread** *thread name* **of the automation engine process terminated. The exception with name** *exception name* **caused the thread to terminate.**

Explanation: The thread terminated because of the indicated unhandled exception.

System action: The automation engine will try to restart this required thread. However, some tasks which were just processed by the thread during this termination may have not been completed. This can cause a loss of events or requests against other automation domains. The automation engine will try to recover from this by doing some synchronization.

Operator response: If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0028E **A NotBoundException of service <***handlerName* **> was caught during shutdown processing of the automation engine.**

Explanation: This service has not been bound before.

System action: The automation engine ends.

Operator response: None.

EEZD0029E **No referenced resources hosted by a first-level automation domain were returned from the core logic engine.**

Explanation: The currently activated policy contains no, or invalidly specified, resource references, or a problem occurred during execution of a task within the core logic engine.

System action: The automation engine cannot execute the current task.

Operator response: Check the currently activated policy and activate it again.

EEZD0030E **Problem occurred parsing the core logic engine response for orders. An order was received, but an unknown action was found.**

Explanation: The response to an internal workitem from the engine could not be parsed correctly.

System action: The automation engine cannot execute the current task.

Operator response: If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0032E **Method** *Method name* **cannot be executed, since the automation engine process is starting.**

Explanation: A public method of the automation engine has been called, but the automation engine has not finished its startup processing.

System action: The automation engine cannot execute the current task.

Operator response: Wait until the automation engine startup completed message has been returned. If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0033E **Method** *Method name* **cannot be executed, since automation engine process is stopping.**

Explanation: A public method of the automation engine has been called, but the automation engine is currently shutting down on request.

System action: The automation engine cannot execute the current task.

Operator response: No action required.

EEZD0034E **Unable to create a registry for the automation engine process on port:** *Port Number* **to bind its services.**

Explanation: An exception was caught during startup of the automation engine while trying to create a registry object. This can be caused by another automation engine process running on this system, or another process using the port.

System action: The automation engine cannot complete the startup task. The automation engine process will terminate.

Operator response: Ensure that only one instance of the automation engine process is started on your system. If this is not the cause of this error, find out which process is blocking the port number indicated in the message text.

EEZD0035E **Unable to create the Command Line Interface (CLI) handler of the automation engine process.**

Explanation: A RemoteException was caught during startup of the CLI handler.

System action: The automation engine cannot complete the startup task. The automation engine process will terminate.

Operator response: If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0036E Unable to create the main thread of the automation engine process.

Explanation: A RemoteException was caught during startup of the main thread.

System action: The automation engine cannot complete the startup task. The automation engine process will terminate.

Operator response: If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0037E The following services are bound: *Service Name***.**

Explanation: The automation engine is unable to create a new registry. The listed services are already bound

System action: The automation engine cannot complete the startup task. The automation engine process will terminate.

Operator response: Ensure that only one instance of the automation engine process is started on your system.

EEZD0038E Unable to start the EIF receiver for the automation engine process on system: *Hostname* **port:** *Port Number* **to bind its services.**

Explanation: An exception was caught during startup of the automation engine while trying to start the EIF receiver. This can be caused by another automation engine process running on this system, another process using the port, or a hostname that cannot be resolved.

System action: The automation engine cannot complete the startup task. The automation engine process will terminate.

Operator response: Ensure that only one instance of the automation engine process is started on your system. If this is not the cause of this error, find out which process is blocking the port number indicated in the message text. If necessary configure another Event port number in the automation engine configuration. Ensure that the hostname can be resolved on the local system and that the hostname is not the loopback address.

EEZD0040E Not all required properties are specified within the properties file with name: *file name***. Value for property** *Property name* **is not specified.**

Explanation: The properties file cannot be loaded if not all of the required properties (key/value pairs) are specified in the file.

System action: The load of the properties file failed.

Operator response: Specify the required property correctly in the properties file.

EEZD0041E Property *Property name* **exceeds the maximum length of** *Maximum length of Property*

Explanation: The properties file contains invalid values for the specified property.

System action: The load of the properties file failed.

Operator response: Specify all required properties correctly in the properties file.

EEZD0042E Value for property *Property name* **is not a numeric value.**

Explanation: The specified property must be a number.

System action: The load of the properties file failed.

Operator response: Specify all required properties correctly in the properties file.

EEZD0050E An IOException occurred during startup of the automation engine process. Original Exception text is: *IO Exception text*

Explanation: The IOException cannot be handled by the automation engine process.

System action: The automation engine process terminates.

Operator response: Ensure that the automation engine has sufficient rights to access the indicated file.

EEZD0060E An EEZIllegalArgumentException was caught when trying to execute a list of requests. Following is a list of requests causing this exception: *List of failing requests*

Explanation: The requests cannot be executed on resources of the targeted automation domain.

System action: The automation engine will not try to invoke these requests again. They will be ignored. The automation engine continues working.

Operator response: If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0061E An EEZExecutionFailedException was caught trying to execute a list of requests. Following is a list of requests causing this exception: *List of failing requests***. The following message was returned by the exception:** *Exception Message***. Original message contained in**

the caught exception: *Original message*

Explanation: The requests cannot be executed on specified resources of the targeted automation domain. This might be caused by a broken communication link to the referenced resource.

System action: The automation engine will not try to invoke these requests again. They will be ignored. The automation engine continues working.

Operator response: Ensure that the targeted first level automation domain is accessible by the end-to-end automation manager. If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0062E **An EEZExecutionTimeoutException was caught trying to execute a list of requests. Following is a list of requests causing this exception:** *List of failing requests***.**

Explanation: The requests could not be completed within a timeout period.

System action: The automation engine tries to invoke these requests again. The automation engine continues working.

Operator response: No action required.

EEZD0063E **An EEZIllegalArgumentException was caught trying to subscribe to other automation domains. Following is a list of domains the automation engine tried to subscribe to:** *List of domains to subscribe to*

Explanation: The subscription cannot be executed.

System action: The automation engine will not try to subscribe to these domains again. They will be ignored. The automation engine continues working.

Operator response: If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0064E **An EEZExecutionFailedException was caught trying to subscribe to other automation domains. Following is a list of domains causing this exception:** *List of domains to subscribe to***. The following message was returned by the exception:** *Exception Message*

Explanation: The subscription cannot be executed.

System action: The automation engine will not try to subscribe to these domains again. They will be ignored. The automation engine continues working.

Operator response: If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0065E **An EEZExecutionTimeoutException was caught trying to subscribe to other automation domains. Following is a list of domains causing this exception:** *List of domains to subscribe to***.**

Explanation: The requests could not be completed within a timeout period.

System action: The automation engine tries to invoke these requests again. The automation engine continues working.

Operator response: No action required.

EEZD0066E **An EEZIllegalArgumentException was caught trying to subscribe to resources hosted on other automation domains. Following is a list of resources the automation engine tried to subscribe to:** *List of resources to subscribe to*

Explanation: The subscription cannot be executed.

System action: The automation engine will not try to subscribe to these domains again. They will be ignored. The automation engine continues working.

Operator response: If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0067E **An EEZExecutionFailedException was caught trying to subscribe to resources hosted on other automation domains. Following is a list of resources the automation engine tried to subscribe to:** *List of resources to subscribe to***. The following message was returned by the exception:** *Exception Message*

Explanation: The subscription cannot be executed.

System action: The automation engine will not try to subscribe to these domains again. They will be ignored. The automation engine continues working.

Operator response: If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0068E **An EEZExecutionTimeoutException was caught trying to subscribe to resources hosted on other automation domains. Following is a list of resources the automation engine tried to subscribe to:** *List of resources to subscribe to*

Explanation: The requests could not be completed within a timeout period.

System action: The automation engine tries to invoke these requests again. The automation engine continues working.

Operator response: No action required.

EEZD0069E **A Security Exception was caught trying to subscribe to resources hosted on automation domain with name** *Automation domain name***. Following is a list of resources the automation engine tried to subscribe to:** *List of resources to subscribe to***.**

Explanation: The subscription cannot be executed.

System action: The automation engine will not try to subscribe to these domains again. They will be ignored. The automation engine continues working.

Operator response: If you cannot resolve the exception, contact IBM support and provide the trace file and this message text.

EEZD0072E **An EEZUserSecurityException was caught trying to contact another automation domain. Original message text is:** *Security Exception text*

Explanation: The automation engine was unable to contact the automation domain to execute commands.

System action: The automation engine will not try to invoke the command again.

Operator response: Resolve the error indicated by the exception text. Ensure that the User credentials in the configuration of the automation engine contains correct User IDs and valid passwords to access the indicated automation domain. After fixing the problem it is also required to refresh the automation engine by using the command line interface option -RECONFIG.

EEZD0073E **An EEZSystemSecurityException was caught trying to contact another automation domain. Original message text is:** *Security Exception text*

Explanation: The automation engine was unable to contact the automation domain to execute commands.

System action: The automation engine will not try to invoke the command again.

Operator response: Resolve the error indicated by the exception text. Ensure that the User credentials in the configuration of the automation engine contains correct User IDs and valid passwords to access the indicated automation domain. After fixing the problem it is also required to refresh the automation engine by using the command line interface option -RECONFIG.

EEZD0074E **The properties file contains an invalid line.**

Explanation: A line in the properties file is not marked as a comment and cannot be read as a key-value pair.

System action: The load of the properties file failed.

Operator response: Correct a line in the properties file that should be a comment or that is missing the separator character.

EEZD0080E **An Exception was caught trying to install the license certifcate <***Certificate file name***>. Original exception was:** *Original exeption text*

Explanation: The automation engine was unable to install the mentioned license certificate.

System action: The automation engine is unable to handle this license key. It will not perform any function until a license key was successfully installed.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZD0081E **An Error occured trying to install the license certifcate <***Certificate file name***>. Original return code of the license usage management library was:** *LUM return code*

Explanation: The automation engine was unable to install the mentioned license certificate.

System action: The automation engine is unable to handle this license key. It will not perform any function until a license key was successfully installed.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZD0082E **An Error occured trying to initialize the license usage management library. Original return code was:** *LUM return code*

Explanation: The automation engine was unable to initialize the license use management.

System action: The automation engine is unable to handle license keys and will terminate.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZD0083E **No valid installed license key found on your system. Message returned by the license usage management library was:** *LUM return message* **Original return code was:** *LUM return code***.**

Explanation: The automation engine was unable to detect an installed license on your system.

System action: Without installed license key the automation engine will not start.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZD0084E **The automation engine does not have a valid license enrolled. If you purchased a license for this product, then you have a production license. This license will be automatically installed on your system during the installation process.**

Explanation: The automation engine was unable to detect an installed license on your system.

System action: Without installed license key the automation engine will not start.

Operator response: If you installed this product with help of the product installer the installation process must have encountered a problem. Provide the trace file and this message text to IBM support.

EEZD0100E **An error occurred within the core logic engine used by the automation engine. Message code <***InternalMessageCode***> has been returned.**

Explanation: The preprocessing of an internal workitem failed.

System action: The current action fails.

Operator response: Contact IBM Support, and provide the trace file and this message text.

EEZD0101E **An error occurred during initialization of the core logic engine used by the automation engine. The logic deck <***LogicDeckName***> cannot be activated. Message code <***InternalMessageCode***> has been returned.**

Explanation: The core logic engine required by the automation engine could not be created.

System action: The automation engine is not able to receive any further commands and will terminate.

Operator response: Contact IBM Support, and provide trace file and this message text.

EEZD0102E **The internal encoder used by the automation engine did not return a result.**

Explanation: The current workitem could not be encoded by the automation engine.

System action: The automation engine is not able to execute the current task.

Operator response: Contact IBM Support and provide trace file and this message text.

EEZD0103E **The CORE LOGIC ENGINE used by the automation engine did not return any result.**

Explanation: The current workitem could not be executed by the automation engine.

System action: The automation engine is not able to execute the current task.

Operator response: Contact IBM Support, and provide trace file and this message text.

EEZD0104E **A problem occurred parsing the result returned by the CLE. The automation engine is unable to get the current preferred member of choice group:** *Choice group name*

Explanation:

System action: The automation engine cannot complete this task.

Operator response: None

EEZD0105E **A problem occurred parsing the result returned by the CLE. The automation engine is unable to get orders from the response given by the Core Logic Engine.**

Explanation:

System action: The automation engine cannot complete this task.

Operator response: None

EEZD0106E **An error occurred during initialization of the core logic engine used by the automation engine. The logic deck <***LogicDeckName***> cannot be found or opened.**

Explanation: The core logic engine required by the automation engine could not be created.

System action: The automation engine is not able to receive any further commands and will terminate.

Operator response: Check that a correct file name is

specfied for the Logic definition file of the advanced domain configuration of the automation engine.

EEZD0107E **An error occurred during initialization of the automation engine. The domain identification file <*DomainIdentificationFile*> cannot be found or opened.**

Explanation: The automation engine needs the domain identification file in order to set up connections to other automation domains.

System action: The automation engine is not able to receive any further commands and will terminate.

Operator response: Check that a correct file name is specfied for the domain identfication file of the automation engine.

EEZD0110E **Resource** *ResourceName* **is not defined as member of choice group** *GroupName***. It cannot be set as new preferred member of this group.**

Explanation: Only member resoures of the specified choice group can be specified as new preferred member.

System action: The automation engine will not change the current preferred member.

Operator response: Specify some defined member resource to be set as new preferred member.

EEZD0111E **Resource** *GroupName* **is not defined as choice group in current active policy.**

Explanation: Only choice groups have a defined preferred member.

System action: The automation engine will not handle this request.

Operator response: Specify some valid choice group as target of this request.

EEZD0200E **A runtime exception was caught during execution of method** *method name***. Original exception text is:** *exception name***.**

Explanation:

System action: The automation engine cannot complete this task.

Operator response: Resolve the runtime exception, and ensure correct installation of the product.

EEZD1004W **The event notifying the automation server about the terminating automation engine cannot be delivered.**

Explanation: The automation engine assumes that the automation server has already been terminated.

System action: The automation engine continues to shut down.

Operator response: Check the shutdown sequence. The automation engine should be terminated before the automation server.

EEZD1005W **Unable to contact the server on hostname:** *server hostname* **on port:** *server port***.**

Explanation: The automation engine assumes a running server in order to start the system automation.

System action: The automation engine will retry to contact this server periodically.

Operator response: Ensure that this server is running and reachable under this hostname. Check the configuration for Host name or IP address of the automation engine.

EEZD1010W **One or more resource reference(s) in your currently active policy point to resources that cannot be found on the referenced automation domain with name** *Name of automation domain***. Following is the list of resource references that cannot be resolved:** *List of Resources which are invalid*

Explanation: The resource reference(s) may have been misspelled in your currently active policy, or they just have not been created on the referenced domain yet.

System action: The automation engine is not able to do any automation task or handle any requests against the specified resource reference(s).

Operator response: Check if the resource references are possibly misspelled. In this case, resolve this error within the policy and activate it again.

EEZD1011W **No policy can be found in the policy pool:** *Policy Pool Directory* **which matches this domain with name:** *Domain Name*

Explanation: The automation engine found at least one policy file with extension '.xml' or '.XML' but no policy file matches the current domain represented by the automation engine.

System action: The automation engine is not able to provide a list of available policies.

Operator response: Check that a correct file name is specfied for the Policy pool of the advanced domain

configuration of the automation engine. Ensure that policy documents inside this policy pool are defined for the domain name configured for the automation engine.

EEZD1012W No policy can be found in the policy pool: *Policy Pool Directory*

Explanation: The automation engine cannot find any file with extension '.xml' or '.XML'

System action: The automation engine is not able to provide a list of available policies.

Operator response: Check that a correct file name is specfied for the Policy pool of the advanced domain configuration of the automation engine. Ensure that policy documents inside this policy pool are defined for the domain name configured for the automation engine. Ensure that the user id used to start the automation engine has sufficient rights to access this directory.

EEZD1013W Problems occurred while trying to load policy *Name of policy* **from the policy pool.**

Explanation: The policy contains errors.

System action: The policy cannot be loaded and parsed. The automation engine is not able to activate this policy.

Operator response: Check the named policy for errors.

EEZD1070W An EEZApplicationException was caught trying to contact another automation domain. Retry number is: *Retry number* **Original message text is:** *Application Exception text*

Explanation: The automation engine was unable to contact the automation domain to execute commands this time. It might have been caused by a temporary problem.

System action: The automation engine will try to invoke the command again.

Operator response: No action required

EEZD1071W A RemoteException was caught trying to contact another automation domain. Retry number is: *Retry number* **Original message text is:** *Application Exception text*

Explanation: The automation engine was unable to contact the automation domain to execute commands this time. It might have been caused by a temporary problem.

System action: The automation engine will try to invoke the command again.

Operator response: No action required

EEZD2001I The automation engine has been started by a user with ID *User ID***. The automation engine is idling. No policy activated.**

Explanation: No additional information is available for this message.

EEZD2002I The automation engine is shutting down on request by a user with ID *User ID***.**

Explanation: No additional information is available for this message.

EEZD2003I The automation engine has been terminated.

Explanation: No additional information is available for this message.

EEZD2004I The automation engine was called to refresh its configuration.

Explanation: No additional information is available for this message.

EEZD2005I The automation engine has been started as a converter of EIF messages by a user with ID *User ID***.**

Explanation: No additional information is available for this message.

EEZD2010I The currently active policy *Currently active policy name* **will be deactivated before the new policy** *New policy name* **can be activated.**

Explanation: Only one policy can be active at any time. Therefore the old policy will be deactivated first.

System action: The old policy will be deactivated. All defined resource references, groups and relationships will be deleted. All requests issued by any operator against any resource reference or group will be deleted as well.

Operator response: If desired, requests will have to be issued again by an operator for the resource references and groups defined by the new policy. The same is true if the currently active policy is re-activated.

EEZD2011I The policy with name *Active policy name* **has been activated by a user with ID** *User ID***. The policy policy was loaded from the file with name** *Active policy file name*

Explanation: The policy has been activated successfully.

System action: The policy has been activated. If another policy was active before, all resource state information and all operator requests against the resource defined in the old policy have been deleted.

Operator response: No action required.

EEZD2012I **The active policy has been deactivated by a user with ID** *User ID***.**

Explanation: The policy has been deactivated successfully.

System action: The policy has been deactivated.

Operator response: No action required.

EEZD2020I **The automation engine was informed about a joined automation domain with name** *Automation domain name***.**

Explanation: The automation domain hosts resources that are referenced by at least one resource reference in the currently active policy. The automation engine will try to get the current state information of these resources.

System action: The automation engine will handle this domain join event.

Operator response: No action required.

EEZD2021I **The automation engine was informed about a leaving automation domain with name** *Automation domain name***.**

Explanation: The automation domain hosts resources that are referenced by at least one resource reference in the currently active policy. The automation engine will update the state of these resource references accordingly.

System action: The automation engine will handle this domain leave event.

Operator response: No action required.

EEZD2022I **The automation engine was informed about a communication state change of domain with name** *Automation domain name***. The new communication state is:** *New communication State name***. The old communication state was:** *Old communication State name***.**

Explanation: The automation domain hosts resources that are referenced by at least one resource reference in the currently active policy. The automation engine will update the state of these resource references accordingly.

System action: The automation engine will handle this communication state change event.

Operator response: No action required.

EEZD2023I **The automation engine was called to synchronize itself with the automation domain with name** *Automation domain name***.**

Explanation: The automation domain hosts resources that are referenced by at least one resource reference in the currently active policy. The automation engine will verify and update the state of these resource references accordingly.

System action: The automation engine will handle this synchronization request.

Operator response: No action required.

EEZD2024I **The automation engine was informed about a domain state change of domain with name** *Automation domain name***. The new domain state is:** *Communication State name***.**

Explanation: The automation domain hosts resources which are referenced by at least one resource reference in the currently active policy. The automation engine will handle requests to these resource references according to the domain state.

System action: Requests will not be sent to a domain which is in the OFFLINE state.

Operator response: No action required.

EEZD2025I **The automation engine was informed about a policy change on one automation domain with name** *Automation domain name***.**

Explanation: The indicated automation domain hosts resources that are referenced by at least one resource reference in the currently active policy. The automation engine will invalidate the existing observed states of these resource references and get the current data by subscribing to this domain again.

System action: The automation engine will handle this event.

Operator response: No action required.

EEZD2030I **Request:** *Request Name* **was issued by User ID:** *User Id* **against** *Resource Class* **with name:** *Resource Name***. Following comment was specified:** *Comment text*

Explanation:

System action: The automation engine will handle this request.

Operator response: No action required.

EEZD2031I **Request was removed by User ID:** *User ID* **from** *Resource Class* **with name:** *Resource Name*

Explanation:

System action: The automation engine will handle this remove request.

Operator response: No action required.

EEZD2032I **Resource** *New preferred member* **is set to be the new preferred member of choice group** *Choice group name***.**

Explanation:

System action:

Operator response: No action required.

EEZD2033I **A request to suspend the** *Resource Class* **with name:** *Resource Name* **from automation was received from User ID:** *User ID***. Following comment was specified:** *Comment text*

Explanation:

System action: The automation engine will handle this request to suspend the resource.

Operator response: No action required.

EEZD2034I **A request to resume automation of** *Resource Class* **with name:** *Resource Name* **was received from User ID:** *User ID***.**

Explanation:

System action: The automation engine will handle this request to resume the resource.

Operator response: No action required.

EEZD2040I **The automation engine was called to install the license certificate from file:** *Certificate file name***.**

Explanation: A successfull installation of the license certificate is required in order for the end-to-end automation engine to run.

System action: The automation engine will handle this request.

Operator response: No action required.

EEZD2041I **The license certificate has been successfully installed.**

Explanation: A successfull installation of the license certificate is required in order for the end-to-end automation engine to run.

System action:

Operator response: No action required.

EEZD9999I **DUMMY Message**

Explanation: This message should never occur.

System action: Contact IBM support and provide this message text together with the trace.

Operator response:

EEZF0001E **The WebSphere infrastructure has reported a severe error situation:** *runtimeExceptionMessage*

Explanation: The application was interrupted by a RuntimeException and cannot complete its task.

System action: The current task ends. The transaction is rolled back.

Operator response: Check if the description of the error situation indicates that the server database or another subsystem is unavailable. If the problem persists, contact IBM support.

EEZF0003E **A critical error has occurred in class:** *className***, method:** *methodName***. The logger object could not be initialized.**

Explanation: This component could not initialize and access a logger object.
This indicates either a configuration or programming error.

System action: The process cannot be completed. All parts of this component are affected. The system is not operational.

Operator response: Please check that the path settings are correct and all required libraries exist.
Collect trace data and this message text and contact IBM support if the problem persists.

EEZF0006E **A** *exception* **has occurred in class:** *className***, method:** *methodName***. The connection to the automation engine could not be established.**

Explanation: The end-to-end automation application could not connect to the automation engine.
This indicates a network or configuration problem.

System action: The current task ends.

Operator response: Check if the description of the error situation indicates that the automation engine backend is not up and running properly.
Please start or restart it in this case. If the problem persists, contact IBM support.

EEZF0007E **An error has occurred in class: *className*, method: *methodName*. The connection to the automation engine could not be established.**

Explanation: The JNDI lookup of the object representing the automation engine failed and returned null.
This indicates a network or configuration problem.

System action: The current task will not be completed. The system and automation engine remain operational.

Operator response: Check if the description of the error situation indicates that the automation engine backend is not up and running properly.
Please start or restart it in this case. If the problem persists, contact IBM support.

EEZF0011E **An error has occurred in class: *className*, method: *methodName*. Illegal invocation of this method.**

Explanation: This method is required by the J2C specification, but it is not implemented in this component
and must not be called by any exploiter. This indicates a programming error or an illegal access to this component.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZF0012E **An error has occurred in class: *className*, method: *methodName*. Illegal parameter at invocation of this method.**

Explanation: The method has been invoked with a null parameter.
The method must be invoked with a parameter that is not null.
This indicates a programming error.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZF0014E **An error has occurred in class: *className*, method: *methodName*. Illegal parameter combination at invocation of this method.**

Explanation: This method is required by the J2C specification, but it is not implemented in this component
and must not be called by any exploiter. This indicates a programming error or an illegal access to this component.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZF0015E **An error has occurred in class: *className*. The variable 'locale' has not been set.**

Explanation: This variable is mandatory for executing a request at the automation engine.
This indicates a programming error on the EJB exploiter side.

System action: The current task will not be completed. The system and automation engine remain operational.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZF0016E **An error has occurred in class: *className*, method: *methodName*. Illegal automation engine operation requested.**

Explanation: The J2C architecture tried to execute an operation on the automation engine
that is either unknown or not supported. This indicates a programming error.

System action: The current task will not be completed. The system and automation engine remain operational.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZF0017E **A *exception* has occurred in class: *className*, method: *methodName*.**

Explanation: The method encountered an expected error during invocation of an operation on the automation engine backend. This indicates a connection problem.

System action: The current task ends.

Operator response: Check if the automation engine backend is up and running properly.
Please start or restart it if not. If the problem persists, contact IBM support.

EEZF0019E **An error has occurred in class: *className*, method: *methodName*. Illegal parameter at invocation of this method.**

Explanation: Method createManagedConnection() must not be called with a null ConnectionRequestInfo object. This is an indication of an internal JCA error.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZF0031E **A *exception* has occurred in class: *className*, method: *methodName*. A connection object could not be allocated.**

Explanation: The call to getConnection() returned with an exception.
This indicates an internal J2C programming or architectural error.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZF0032E **An error has occurred in class: *className*, method: *methodName*. A connection factory object could not be allocated.**

Explanation: The ManagedConnectionFactory of this J2C encountered an internal error.
The ConnectionManager instance was null. This indicates an internal J2C programming or architectural error.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZF0501W **An exception was encountered and ignored in order to continue operation. Exception string: *exceptionString***

Explanation: The invoked method is designed to ignore exceptions and continue operation. It logs the exception for problem determination purposes.

System action: Ignores the exception.

Operator response: Evaluate the exception details.

EEZF0502W **The connection to the automation engine backend failed in class: *className*, method: *methodName*. Exception: *exception*.**

Explanation: The application was interrupted by a NameNotFoundException and cannot complete its task.

System action: The system might repeat this operation until the automation engine is found.

Operator response: Ensure that the automation engine is up and running.
If the problem persists, please collect logs and traces and provide them to IBM support.

EEZI0001E **The WebSphere infrastructure has reported a severe error situation: *runtimeExceptionMessage*.**

Explanation: The application was interrupted by a RuntimeException and cannot complete its task.

System action: The current task ends. The transaction is rolled back.

Operator response: Check the description of the error situation if it indicates that the server database or another subsystem is unavailable. If the problem persists, contact IBM support.

EEZI0003E **A critical error has occurred in class: *className*, method: *methodName*. Unable to initialize Logger.**

Explanation: No Logger object could be initialized and accessed.

System action: The process cannot be completed. All parts of this component are affected

Operator response: Contact IBM support and provide this message text.

EEZI0005E **Failing Logger initialization in: *variable text*, in class: *className*. Information: *someInfo***

Explanation: Critical error. No logger object could be obtained. The entire application might be affected.

System action: Method terminates with a ConfigurationFailedException.

Operator response: Ensure the correct classpath configuration. Contact IBM support if the problem persists.

EEZI0012E **Internal error. Null parameter passed in method: *methodName*, in class: *className*.**

Explanation: Method getConnection() must not be called with null parameters. This is an indication of a programming error on the EJB exploiter side.

System action: Method terminates with an IllegalArgumentException.

Operator response: Invoke getConnection() with a fully initialized EEZFLAConnectionSpec object as a valid parameter. Contact IBM support if the problem persists.

EEZI0013E **Internal error. Illegal parameter passed in method: *methodName*, in class: *className*.**

Explanation: The EEZFLAConnectionSpec parameter contained an uninitialized EEZFLAConfigData member object.

System action: Method terminates with an IllegalArgumentException.

Operator response: Invoke getConnection() with a fully initialized EEZFLAConnectionSpec object as a valid parameter. Contact IBM support if the problem persists.

EEZI0014E **Illegal invocation of method:** *methodName*, **in class:** *className*.

Explanation: Method invoke() must not be called with this parameter combination. It is not supported.

System action: Method terminates with an IllegalOperationException.

Operator response: Invoke invoke() with the signature(InteractionSpec, Record) as a valid parameter combination. Contact IBM support if the problem persists.

EEZI0015E **Critical error in class:** *className*, **method:** *methodName*. **A connection to the Adapter could not be established.**

Explanation: The call to EEZAdapterConnection.open(..) returned value 0.

System action: The method terminates with a ConnectionFailedException.

Operator response: See the WebSphere and Adapter logs and traces. Contact IBM support if the problem persists.

EEZI0016E **Critical error in class:** *className*, **method:** *methodName*. **Unknown AdapterException return code in** *variable text*.

Explanation: The operation has terminated with an AdapterException, but the internal return code is unknown.

System action: The method terminates with a ExecutionFailedException.

Operator response: See the WebSphere and Adapter logs and traces. Contact IBM support if the problem persists.

EEZI0017E **Critical error in class:** *className*, **method:** *methodName*. **The operation could not be performed because of** *exception*.

Explanation: An exception other than a subtype of EEZApplicationException occurred during interaction with the backend.

System action: The method terminates with a ExecutionFailedException.

Operator response: See the WebSphere and Adapter logs and traces. Contact IBM support if the problem persists.

EEZI0018E **Internal error. Illegal parameter passed in method:** *methodName*, **in class:** *className*.

Explanation: The EEZFLAConnectionRequestInfo parameter contained an uninitialized EEZFLAConfigData member object.

System action: Method terminates with an IllegalArgumentException.

Operator response: Ensure that the createManagedConnection() method is called with a fully initialized EEZFLAConnectionRequestInfo object as a valid parameter. Contact IBM support if the problem persists.

EEZI0019E **Internal error. Illegal invocation of method:** *methodName*, **in class:** *className*.

Explanation: Method createConnection() must not be called without parameters. This is an indication of an internal JCA error.

System action: Method terminates with an IllegalOperationException.

Operator response: Invoke createConnection() with a fully initialized ConnectionManager object as a valid parameter. Contact IBM support if the problem persists.

EEZI0021E **Security violation detected in class:** *className*, **method:** *methodName*. **SSL required but not enabled.**

Explanation: The ConnectionFactory of this JCA requires SSL-secure connections, but the current request does not comply.

System action: The method terminates with a SystemSecurityException.

Operator response: Check the security properties of the FLA ConnectionFactory and ensure compliant requests. Contact IBM support if the problem persists.

EEZI0022E **Security violation detected in class:** *className*, **method:** *methodName*. **The SSL configuration file could not be found.**

Explanation: The ConnectionFactory of this JCA requires SSL-secure connections, but the file containing the necessary properties could not be found.

System action: The method terminates with a ConfigurationException.

Operator response: Check the properties of the FLA ConnectionFactory and ensure that the file is in the correct location. Contact IBM support if the problem persists.

EEZI0023E **Security violation detected in class:** *className*, **method:** *methodName*. **The SSL configuration file could not be opened.**

Explanation: The ConnectionFactory of this JCA requires SSL-secure connections, but the file containing the necessary properties could not be opened and read.

System action: The method terminates with a ConfigurationException.

Operator response: Ensure the properties file is not corrupt and has the appropriate read access rights. Contact IBM support if the problem persists.

EEZI0031E **Connector exception detected in class:** *className*, **method:** *methodName*. **The content is:** *exceptionDetails*. **A Connection object could not be allocated.**

Explanation: The call to getConnection() returned with an exception that is not attributable to an internal application exception.

System action: The method terminates with a ResourceException.

Operator response: See the WebSphere logs and traces for further details. Contact IBM support if the problem persists.

EEZI0032E **Connector exception detected in class:** *className*, **method:** *methodName*. **A ConnectionFactory object could not be allocated.**

Explanation: The ManagedConnectionFactory of this JCA encountered an internal error. The ConnectionManager instance was null.

System action: The method terminates with a ConfigurationException.

Operator response: Ensure the properties file is not corrupt and has the appropriate read access rights. Contact IBM support if the problem persists.

EEZI0041E **Internal error. Illegal parameter passed in method:** *methodName*, **in class:** *className*.

Explanation: The parameter passed to this object was not initialized.

System action: Method terminates with an IllegalArgumentException.

Operator response: Invoke this method with a fully initialized object as a valid parameter. Contact IBM support if the problem persists.

EEZI0042E **Internal error. Illegal call to method** *methodName*, **in class** *className*.

Explanation: This method is specified and required by the J2C specification, but must not be called this way.

System action: Method terminates with an IllegalOperationException.

Operator response: Make sure this method is not called. Contact IBM support if the problem persists.

EEZI0044E **Critical error in** *methodName*, **in class** *className*. **SSL problem. Property** *property* **is null.**

Explanation: The SSL properties file could not be read correctly. One or more properties do not exist or are incorrect.

System action: The J2C Connector will fail to load and not be operational.

Operator response: Make sure all settings in the SSL properties file are correct and restart the server. Contact IBM support if the problem persists.

EEZI0046E **Critical error in** *methodName*, **in class** *className*. **SSL problem.**

Explanation: An SSL connection could not be established. One reason might be corrupt or incorrect SSL files.

System action: The current task ends.

Operator response: Make sure all settings in the SSL properties file are correct and that all SSL files are in the correct location and not corrupted. Contact IBM support if the problem persists.

EEZI0501W **An exception was encountered and ignored in order to continue operation. Exception string:** *exceptionString*

Explanation: The invoked method is designed to ignore exceptions and continue operation. It logs the exception for problem determination purposes.

System action: Ignores the exception.

Operator response: Evaluate the exception details.

EEZI0545W **Possible error in** *methodName*, **in class** *className*. **SSL problem. Property** *property* **equals null.**

Explanation: The SSL properties file could not be read correctly. One or more properties do not exist or are incorrect.

System action: The J2C Connector will start, but will only be operational for non-SSL operations.

Operator response: Make sure all settings in the SSL

properties file are correct, and restart the server if SSL operations are desired.

EEZJ0001E **The WebSphere infrastructure has reported a severe error situation:** *RuntimeException message*

Explanation: The application was interrupted by a RuntimeException and cannot complete its task.

System action: The current task ends. The transaction is rolled back.

Operator response: Check the description of the error situation if it indicates that the server database or another subsystem is unavailable. If the problem persists, contact IBM support.

EEZJ0002E **The WebSphere infrastructure has reported an error situation:** *Exception message*

Explanation: The application was interrupted by an unexpected exception or error that is not a RuntimeException.

System action: The current task ends, but the database operations that have been performed already remain valid (no transaction rollback).

Operator response: Contact IBM support.

EEZJ0003E **Operation** *operationName* **encountered a FinderException because automation domain** *domainName* **is unknown in the scope of the management server. The operation continues processing of the other automation domains.**

Explanation: Possible causes of the problem are:
1) The automation domain name was incorrect.
2) The automation domain has been deleted in the meantime.

System action: The operation task ends as far as the indicated automation domain is concerned. The operation continues processing of the other automation domains.

Operator response: Refresh the list of existing automation domains and verify that the domain name is contained in the list of existing domains. If not, and if the domain still exists and participates in automation, then restart the end-to-end automation adapter for this domain.

EEZJ0004E **Expected a nonempty list of input data but received none in class:** *className*, **method:** *methodName*, **parameter:** *parameterName*

Explanation: A null or empty list parameter was encountered. This is an indication of a programming error on the EJB client side.

System action: The server method ends without processing the request.

Operator response: Contact IBM support.

EEZJ0005E **Expected nonempty input but received no input in class:** *className*, **method:** *methodName*, **parameter:** *parameterName*

Explanation: A parameter with a null value was encountered. This is an indication of a programming error on the EJB client side.

System action: The server method ends without processing the request.

Operator response: Contact IBM support.

EEZJ0006E **Domain type** *domainType* **of automation domain** *domainName* **is unknown.**

Explanation: The domain type of an automation domain is unknown.

System action: The server method ends without processing the request.

Operator response: Collect trace data and contact IBM support.

EEZJ0007E **Within the list of resource requests, a request was encountered that contains a null or empty automation domain name.**

Explanation: One of the requests within the parameter list contains a null or empty automation domain name.

System action: All requests in the list are ignored.

Operator response: Retry the operation. If the problem persists, trace the application to generate more detailed data about the erroneous operation, and contact IBM support.

EEZJ0008E **The application is unable to connect to JMS topic** *topicName*. **Topic connection factory is** *topicConnectionFactoryName*.

Explanation: JMS method TopicConnectionFactory.createTopicConnection() failed.

System action: The session bean cannot publish any messages to the topic. This may result in a loss of event data.

Operator response: Retry the operation. If the problem persists, trace the application to generate more detailed data about the erroneous operation, and contact IBM support.

EEZJ0009E **Within the list of resource requests for automation domain** *firstDomainName***, a request was encountered for automation domain** *differentDomainName*

Explanation: Request lists must contain requests against a single automation domain only. The request list that causes the problem contains requests against multiple automation domains.

System action: All requests in the list are ignored.

Operator response: Retry the operation. If the problem persists, trace the application to generate more detailed data about the erroneous operation, and contact IBM support.

EEZJ0010E **The EEZDomainNameList parameter received in class:** *className***, method:** *methodName* **contains an element that is not a string.**

Explanation: An incorrect parameter value was detected. This is an indication of a programming error on the EJB client side.

System action: The method ends but the session continues to exist.

Operator response: Contact IBM support.

EEZJ0011E **The subscription method** *methodName* **in class** *className* **was called before the subscriber id was set in the session.**

Explanation: Before a subscribe or unsubscribe method can be called, the subscriber id must be set within the session. This is an indication of a programming error on the EJB client side.

System action: The method ends but the session continues to exist.

Operator response: Restart the application that failed and retry the operation. If the problem persists, contact IBM support.

EEZJ0012E **An attempt to activate automation policy** *policyName* **within automation domain** *domainName* **has been detected. This domain is not an end-to-end automation domain and does not support policy activation via System Automation interfaces.**

Explanation: A caller tried to activate an automation policy on a domain instance that does not support policy activation.

System action: The policy activation request is ignored.

Operator response: Verify that the selected domain supports policy activation via the System Automation interfaces. If it does not, use the automation product's native policy activation mechanism instead.

EEZJ0013E **Subscriber** *subscriberId* **was unable to unsubscribe from some resources in domain** *domainName* **because the automation domain is not accessible at this time.**

Explanation: The automation domain is currently not accessible, so the unsubscribe request could not be forwarded to the domain. However, the subscription cleanup within the management server was successful. Appropriate cleanup mechanisms in the domain (at domain adapter startup, for example) will take care of the orphaned subscription at the domain level.

System action: The unsubscribe operation continues to unsubscribe from resources that reside within other automation domains.

Operator response: Determine why the automation domain is not accessible at this time. If necessary, restart the end-to-end automation adapter for that domain in order to trigger resynchronization. If the domain has left, no further action is required.

EEZJ0014E **Subscriber** *subscriberId* **was unable to unsubscribe from all resources in automation domain** *domainName* **because the domain is not accessible at this time.**

Explanation: The automation domain is currently not accessible, so the unsubscribe request could not be forwarded to the domain. However, the subscription cleanup within the management server was successful. Appropriate cleanup mechanisms in the domain (at domain adapter startup, for example) will take care of the orphaned subscription at the domain level.

System action: The unsubscribe operation continues to unsubscribe from all resources that the subscriber has subscribed to previously and that reside within domains other than the failing one.

Operator response: Determine why the automation domain is not accessible at this time. If necessary, restart the end-to-end automation adapter for that domain in order to trigger resynchronization. If the domain has left, no further action is required.

EEZJ0015E **An attempt to invoke operation** *methodName* **within automation domain** *domainName* **has been detected. The type of this domain does not support the requested operation.**

Explanation: A caller tried to invoke an operation that is not supported.

System action: The operation request is ignored.

Operator response: Restart the application that failed

and retry the operation. If the problem persists, contact IBM support.

EEZJ0016E Unable to create an initial context.

Explanation: The JNDI naming directory is not accessible, and the attempt to create an initial context failed.

System action: The current task ends.

Operator response: Restart the application that logged this message. If this does not solve the problem, restart the WebSphere Application Server that provides the runtime environment for the automation manager. If the problem persists, contact IBM support.

EEZJ0017E Looking up object *jndiLookupName* **in JNDI failed.**

Explanation: Possible causes of the problem are:
1) The JNDI naming directory is not accessible.
2) The object was not bound to the JNDI correctly.

System action: The current task ends.

Operator response: Restart the WebSphere Application Server that provides the runtime environment for the automation manager. If the problem persists, contact IBM support.

EEZJ0018E Automation domain *domainName* **does not exist.**

Explanation: Possible causes of the problem are:
1) An invalid automation domain name was supplied.
2) The automation domain has been deleted in the meantime.

System action: The current task ends.

Operator response: Retry the operation. If the problem persists, trace the application to generate more detailed data about the erroneous operation, and contact IBM support.

EEZJ0019E Automation domain *domainName* **is not accessible at this time.**

Explanation: The automation domain exists, but it is currently not possible to communicate with it.

System action: The current task ends.

Operator response: Make sure that the automation domain is running. If it is a first-level automation domain, verify that the automation adapter is running. Retry the operation after the timeout period defined by the environment variable com.ibm.eez.aab.watchdog-interval-seconds. If the problem persists, restart the automation adapter (in case of a first-level automation domain) or the end-to-end automation engine (in case of an end-to-end automation domain).

EEZJ0020E Automation domain *domainName* **seems to be not accessible at this time. Invocation of method** *methodName* **failed with a RemoteException.**

Explanation: The automation domain exists, but it is currently not possible to communicate with it.

System action: The current task ends.

Operator response: Make sure that the automation domain is running. If it is a first-level automation domain, verify that the automation adapter is running. Retry the operation after the timeout period defined by the environment variable com.ibm.eez.aab.watchdog-interval-seconds. If the problem persists, restart the automation adapter (in case of a first-level automation domain) or the end-to-end automation engine (in case of an end-to-end automation domain).

EEZJ0021E Automation domain *domainName* **cannot be accessed because of a problem within the J2EE framework.**

Explanation: An attempt to create a session failed within the J2EE framework.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0022E An unrecoverable error occurred during startup of application *productName***. The application stops. Details about the error:** *exceptionDetails***.**

Explanation: An exception was encountered.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0023E An attempt to activate policy *policyName* **in automation domain** *domainName* **resulted in an error which indicates that the policy is invalid.**

Explanation: The automation domain indicates that an error was detected while processing the specified end-to-end automation policy.

System action: The current task ends.

Operator response: Verify the correctness of the end-to-end automation policy, and activate it from the operations console user interface.

EEZJ0024E An attempt to activate policy *policyName* **in automation domain** *domainName* **resulted in an error which indicates that the policy cannot be found.**

Explanation: The automation domain indicates that

the specified end-to-end automation policy cannot be found in the file system.

System action: The current task ends.

Operator response: Verify that the end-to-end automation policy file exists and contains a valid policy. Then activate it from the operations console user interface.

EEZJ0025E **The operation setPreferredMember has ended since the automation domain name specified by the choice group key:** *choiceGroupDomainName* **did not match the domain name specified by the preferred member key:** *preferredMemberDomainName*

Explanation: The resource keys that were provided do not point to the same automation domain. It is necessary, however, that the choice group and its members reside within the same domain.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0026E **Operation** *operation name* **is not supported by class** *class name***.**

Explanation: A caller tried to invoke an operation that is not supported.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0027E **An attempt to deactivate the currently active automation policy within automation domain** *domainName* **has been detected. This domain is not an end-to-end automation domain and does not support policy deactivation via System Automation interfaces.**

Explanation: A caller tried to deactivate an end-to-end automation policy on an automation domain instance that does not support policy management via System Automation interfaces.

System action: The policy deactivation request is ignored.

Operator response: Verify that the selected automation domain supports automation policy deactivation via the System Automation interfaces. If it does not, use the automation product's native policy deactivation mechanism instead.

EEZJ0028E **An attempt to retrieve an emitter object from the CEI EmitterFactory with JNDI name** *emitterFactoryJndiName* **failed with exception** *exceptionString***.**

Explanation: Although it was possible to retrieve an EmitterFactory from JNDI, it is not possible to create an emitter from that EmitterFactory.

System action: The current task ends.

Operator response: Verify that the CEI application is started. If the problem persists, restart the CEI application.

EEZJ0029E **An attempt to publish an event was stopped since there is an active transaction. Event automation domain name is** *domainName* **and event reason is** *eventReason***.**

Explanation: The application does not support sending of JMS messages within a transactional boundary.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0030E **The end-to-end automation manager is not fully initialized and refuses to accept requests.**

Explanation: The EEZEAR application is either starting or stopping. During these periods, no method requests are accepted.

System action: The current task ends.

Operator response: If the EEZEAR application is starting, retry the request. If the EEZEAR application is stopping, restart the application and retry the request.

EEZJ0031E **Refused to invoke operation** *methodName* **on end-to-end automation domain** *domainName* **because the caller is not in the EEZEndToEndAccess role.**

Explanation: The target of this operation is an end-to-end automation domain. This operation may be invoked against end-to-end automation domains only by operators that are in the EEZEndToEndAccess role.

System action: The operation request is ignored.

Operator response: If the operator is not allowed to invoke operations against end-to-end resources, no action is required. If the operator should be allowed to invoke operations against end-to-end resources, the operator's userid or a user group that contains the operator's userid has to be added to role EEZEndToEndAccess.

EEZJ0032E **Within the list of resource keys for automation domain** *firstDomainName***, a resource key was encountered for automation domain** *differentDomainName*

Explanation: In the context of this operation, each element of the list of resource keys must point to the same automation domain. This condition is not satisfied.

System action: The current task ends.

Operator response: Retry the operation. If the problem persists, trace the application to generate more detailed data about the erroneous operation, and contact IBM support.

EEZJ0033E **Automation domain** *domainName* **requires user authentication.**

Explanation: The automation domain requires that authentication information be supplied for each task. The authentication information consists of a userid and a password. The failing task did not supply that information.

System action: The current task ends.

Operator response: Case 1: If user authentication checking is enabled in the automation domain, ensure that user credential information for the automation domain is supplied. If the failing task was invoked from the TSA operations console, the user credential information must be supplied using the user preferences managed by the TSA operations console. If the failing task was invoked from the end-to-end automation engine, the user credential information must be supplied in the automation domain identification file used by the end-to-end automation engine. Case 2: If user authentication checking has been disabled in the automation domain, restart the adapter for that automation domain.

EEZJ0034E **You are not authorized to perform the operation.**

Explanation: The authorization failed while accessing the end-to-end automation manager.

System action: The requested operation is cancelled.

Operator response: Ensure that the permissions and user roles defined in the WebSphere Application Server are set up correctly. If the problem persists, contact your system administrator.

EEZJ0035E **You are not authorized to perform the operation.** *error details***.**

Explanation: The authorization failed while accessing the end-to-end automation manager.

System action: The requested operation is cancelled.

Operator response: Ensure that the permissions and user roles defined in the WebSphere Application Server are set up correctly. If the problem persists, contact your system administrator.

EEZJ0036E **A WebSphere user transaction with an unexpected status was encountered while operation** *operationName* **was processed. The expected status is** *expectedStatus* **but the actual status is** *actualStatus***.**

Explanation: In the process of using a WebSphere user transaction, an unexpected transaction state was encountered.

System action: The current task ends.

Operator response: Retry the operation. If the problem persists, restart the WebSphere Application Server.

EEZJ0100E **The processing of an event resulted in an exception:** *exceptionDetails*

Explanation: The EventHandlerBean received an exception when processing an event.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0101E **Cannot create or use an FLA connection to domain** *domainName***. Details about the exception:** *exceptionDetails***.**

Explanation: The EventHandlerBean received an exception when processing an AdapterJoin event. It was not able to create or use a connection to a first-level automation domain.

System action: The processing of the AdapterJoin event ends.

Operator response: Contact IBM support.

EEZJ0102E **Not able to add a subdomain to the domain** *domainName***. Details about the exception:** *exception***.**

Explanation: The EventHandlerBean tried to locate this automation domain, but it received an exception. Therefore it is not able to add a subdomain to this automation domain.

System action: The current task ends but event processing continues.

Operator response: Contact IBM support.

EEZJ0103E Encountered a FinderException for the domain *domainName*.

Explanation: The EventHandlerBean tried to locate this automation domain, but it received a FinderException, because the automation domain is unknown in the scope of the end-to-end automation management server.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0104E Received an exception related to a transaction when processing an event of domain *domainName*. Details about the exception: *exception*.

Explanation: The transaction that was started when processing an event resulted in an exception.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0105E Not able to communicate with automation domain *domainName*. Details about the exception: *exception*.

Explanation: The EventHandlerBean received a domain join event of an automation domain, but it was not able to communicate with this automation domain. An exception was thrown instead.

System action: The processing of the domain join event ends.

Operator response: Contact IBM support.

EEZJ0106E Received a CreateException trying to create a domain for the domain name *domainName*.

Explanation: The EventHandlerBean received a CreateException while trying to create an automation domain object.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0107E Forwarding an event to the end-to-end automation domain *domainName* failed. Details about the exception: *exception*.

Explanation: The EventHandlerBean tried to forward an event to the automation engine. This operation failed.

System action: The current task ends. But the event processing continues.

Operator response: Contact IBM support.

EEZJ0108E Activating policy *policyName* failed. Details about the exception: *exception*

Explanation: The EventHandlerBean tried to activate an end-to-end automation policy on an automation engine. This operation failed.

System action: The current task ends. But the event processing continues.

Operator response: Try to activate the policy using the operations console. If the problem persists, contact IBM support.

EEZJ0109E Resynchronizing the end-to-end automation domain *domainName* failed. Details about the exception: *exception*.

Explanation: The EventHandlerBean tried to resynchronize the automation engine. This operation failed.

System action: The current task ends. But the event processing continues.

Operator response: Contact IBM support.

EEZJ0110E FinderException received while trying to find subscriptions for entity *entityName*.

Explanation: The EventHandlerBean tried to find subscriptions for this entity, but it received a FinderException.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0111E CreateException received while trying to create a connection to the end-to-end automation domain *domainName*.

Explanation: The EventHandlerBean received a CreateException while trying to create a connection to the automation engine.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0112E RemoteException received when communicating with the end-to-end automation domain *domainName*.

Explanation: The EventHandlerBean received a RemoteException when it called a function of the automation engine.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0113E Calling checkHealth returned a null object for domain *domainName*.

Explanation: The EventHandlerBean received a null object when calling checkHealth for an automation domain that just sent a domain join event. The domain join processing failed for this automation domain.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0114E The domain object returned by checkHealth has a different domain name than the according domain join event. The event domain name is *domainName*.

Explanation: The EventHandlerBean received an incorrect object from checkHealth. The domain join processing failed for this automation domain.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0115E Exception received while trying to publish an event. Details about the exception: *exception details*.

Explanation: The EventHandlerBean received an exception when it tried to publish an event.

System action: Processing continues.

Operator response: Contact IBM support.

EEZJ0501W An exception was encountered and ignored in order to continue operation. Details about the exception: *exceptionString*

Explanation: The invoked method is designed to ignore exceptions and continue operation. It logs the exception for problem determination purposes.

System action: Processing continues.

Operator response: Evaluate the exception details.

EEZJ0502W Lookup of CEI EmitterFactory object *jndiLookupName* in JNDI failed. This indicates that the CEI service is not installed or that it is not active.

Explanation: Possible causes of the problem are:
1) JNDI is not accessible.
2) The object was not bound to the JNDI correctly.
In case of CEI this can occur when the CEI service has been disabled or CEI is not installed at all.

System action: The current task ends.

Operator response: Make sure the CEI application is in the desired state. If events have to be forwarded to TEC, the CEI application must be running.

EEZJ0503W The conversion to CBE event format failed.

Explanation: The resulting CBE event is not valid.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0504W The emitter is unable to send the event to CEI.

Explanation: The emitter cannot deliver the event to the CEI event server.

System action: The current task ends.

Operator response: Ensure that the CEI application is installed within this server and that it is running.

EEZJ0505W Unable to filter event: *event*.

Explanation: The filter is unable to filter the specified event.
Possible causes of the problem are:
1) The event is not a valid XML document.
2) The filter configuration does not match this event.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0506W Cannot load the filter configuration file *filter filename*.

Explanation: The loading of the filter configuration XML or XSLT from the EAR failed.
Possible causes of the problem are:
1) The file is not a valid XML file.
2) The file cannot be found.
3) Parsing of the filter file failed.

System action: The current task ends.

Operator response: Contact IBM support.

EEZJ0507W Unable to close the CEI emitter.

Explanation: The emitter fails to release held resources.

System action: The current task ends.

Operator response: If the problem persists, contact IBM support.

EEZJ0508W The CEI application is not running.

Explanation: Since the CEI application is not running, no events can be sent to TEC.

System action: The current task ends. An event is not sent to TEC.

Operator response: Make sure the CEI application is in the desired state. If events have to be forwarded to TEC, the CEI application must be running.

EEZJ0600W **A RemoveException was received while trying to remove an entity from the database when processing an event received from automation domain** *domainName***.**

Explanation: The EventHandlerBean received a RemoveException while trying to remove an entity after processing an event.

System action: Processing continues.

Operator response: Evaluate the exception details.

EEZJ0601W **The policy name stored in the J2EE framework and the policy name supplied by a policy changed event are not equal. The policy name stored in the J2EE framework is** *aab policyName***. The policy name supplied by the event is** *event policyName***.**

Explanation: The J2EE framework received a policy changed event that contains a policy name that does not match the policy name that was stored previously in the J2EE framework.

System action: Processing continues.

Operator response: Verify that the policy names are set correctly. If necessary, activate the policy again.

EEZJ0602W **Not able to communicate with automation domain** *domainName***.**

Explanation: The EventHandlerBean tried to communicate with an automation domain, but it received an exception.

System action: Processing continues.

Operator response: Evaluate the exception details.

EEZJ0603W **Automation domain** *oldDomainName* **has left and automation domain** *newDomainName* **has joined. These domains have the same access data. Apparently the domain has been renamed.**

Explanation: The EventHandlerBean received a domain join event. The access data of this event, such as the hostname and port, is the same as that of an existing automation domain with a different name. The EventHandlerBean created a new object for the automation domain that joined and will soon remove the object for the automation domain that left.

System action: Processing continues.

Operator response: Verify that the automation domain has not been renamed by mistake.

EEZJ1000I **Application** *productName* **has started working.**

Explanation: The application starts its asynchronous work.

System action: No system action required.

Operator response: No operator action required.

EEZJ1001I **Application** *productName* **was shut down by the J2EE container and has stopped working.**

Explanation: The application stops its asynchronous work.

System action: No system action required.

Operator response: If required, restart the application.

EEZJ1002I **Domain** *domainName* **has been inactive for a long period of time and has been removed from the automation scope.**

Explanation: The timeout defined by the environment variable com.ibm.eez.domain-removal-hours has been reached for this automation domain.

System action: No system action required.

Operator response: No operator action required. When the automation domain that has been removed from the automation scope joins the automation scope again, it is recreated.

EEZJ1003I **The communication state of automation domain** *domainName* **has changed from** *previousCommState* **to** *newCommState***.**

Explanation: The communication health state has changed.

System action: The system publishes a related event.

Operator response: Depending on the current state values and the desired communication state of the automation domain, it might be necessary to restart the automation adapter.

EEZJ1004I **Config: The timeout for backend automation calls is** *timeoutValue* **seconds.**

Explanation: Controls how many seconds each call to the backend may take at most. Default: 60, minimum: 30, maximum: 3600.

System action: No system action required.

Operator response: If needed, set or modify the environment variable com.ibm.eez.aab.invocation-timeout-seconds.

EEZJ1005I **Config: The timeout to determine domain communication health state is** *timeoutValue* **seconds.**

Explanation: Controls the number of seconds of inactivity after which the health of the communication to the automation domain is checked automatically. Default: 300, minimum: 60, maximum: 86400.

System action: No system action required.

Operator response: If needed, set or modify the environment variable com.ibm.eez.aab.watchdog-interval-seconds.

EEZJ1006I **Config: The timeout before removing domains that have left is** *timeoutValue* **hours.**

Explanation: Controls the number of hours of inactivity after which the automation domain's representation in the management server is removed automatically. Default: 48, minimum: 1, maximum: 1000.

System action: No system action required.

Operator response: If needed, set or modify the environment variable com.ibm.eez.aab.domain-removal-hours.

EEZJ1007I **The CEI application is not installed. It is therefore not possible to send any events to the IBM Tivoli Enterprise Console (TEC). The original error message is:** *errorMessage*

Explanation: CEI is not, or not properly, installed within the scope of this server.

System action: The application will not try again to send events to TEC.

Operator response: If the application is not supposed to send events to TEC, there is no action required. If the application is supposed to send events to TEC, ensure that the CEI application is installed within this WebSphere Application Server and that it is running. When the problem with CEI is resolved, you need to restart the WebSphere Application Server before any System Automation events can be sent to TEC.

EEZJ1008I **The domain state of domain** *domainName* **has changed from** *previousDomainState* **to** *newDomainState*

Explanation: The state of the automation domain has changed.

System action: The system publishes a related event.

Operator response: Depending on the current state values and the desired state of the automation domain, it might be necessary to restart the domain.

EEZJ1009I **The CEI application is not installed. It is therefore not possible to send any events to the IBM Tivoli Enterprise Console (TEC).**

Explanation: CEI is not, or not properly, installed within the scope of this server.

System action: The application will not try again to send events to TEC.

Operator response: If the application is not supposed to send events to TEC, there is no action required. If the application is supposed to send events to TEC, ensure that the CEI application is installed within this WebSphere Application Server and that it is running. When the problem with CEI is resolved, you need to restart the WebSphere Application Server before any System Automation events can be sent to TEC.

EEZJ1100I **Some data of domain** *domainName* **has changed.**

Explanation: The domain join event of the automation domain contains different data than the domain object. The domain object will be updated with the data of the event by the EventHandlerBean.

System action: Processing continues with the updated domain object.

Operator response: None.

EEZK0003E **String** *someString* **is too long: the maximum length of** *nameOfTheString* **Strings is** *maxLength***.**

Explanation: Setting the string to the specified value did not succeed due to string length.

System action: The current task ends.

Operator response: Verify the input parameters. If the problem persists, provide the trace file and this message text to IBM support.

EEZK0004E **String named** *someStringName* **must not be null and must not exceed the maximum length of** *maxLength***.**

Explanation: Setting the String to null is not allowed.

System action: The current task ends.

Operator response: Verify the input parameters. If the problem persists, provide the trace file and this message text to IBM support.

EEZK0005E **An exception that is not an instance of EEZApplicationException has been passed to the EEZApplicationTransientException. The type of the message is** *exceptionType***.**

The exception message is: *exceptionMessage*.

Explanation: This is an unexpected behavior.

System action: The current task will continue. The exception will be processed.

Operator response: If any other error occurs, please provide the logs and traces as an aid to analysis.

EEZL0001E **The WebSphere infrastructure has reported a severe error situation:** *runtimeExceptionMessage*

Explanation: The application was interrupted by a RuntimeException and cannot complete its task.

System action: The current task ends. The transaction is rolled back.

Operator response: Check the description of the error situation if it indicates that the server database or another subsystem is unavailable. If the problem persists, contact IBM support.

EEZL0002E **The WebSphere infrastructure has reported an error situation:** *exceptionMessage*

Explanation: The application was interrupted by an unexpected exception or error that is not a RuntimeException.

System action: The current task ends, but the database operations that have been performed already remain valid (no transaction rollback).

Operator response: Contact IBM support.

EEZL0003E **A critical error has occurred in class:** *className*, **method:** *methodName*. **The logger object could not be initialized.**

Explanation: This component could not initialize and access a logger object.
This indicates either a configuration or programming error.

System action: The process cannot be completed. All parts of this component are affected. The system is not operational.

Operator response: Please check that the path settings are correct and all required libraries exist.
Collect trace data and this message text and contact IBM support if the problem persists.

EEZL0004E **An error has occurred in class:** *className*, **method:** *methodName*, **parameter:** *parameterName*

Explanation: The method has been invoked with an empty or null parameter list.
The method must be invoked with a parameter list that is not null and filled.
This indicates a programming error.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0005E **An error has occurred in class:** *className*, **method:** *methodName*, **parameter:** *parameterName*

Explanation: The method has been invoked with a null parameter.
The method must be invoked with a parameter that is not null.
This indicates a programming error.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0015E **An error has occurred in class:** *className*.

Explanation: Configuration data object is null.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0016E **An error has occurred in class:** *className*.

Explanation: First-level automation name has not been set.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0017E **An error has occurred in class:** *className*.

Explanation: Host address has not been set.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0018E **An error has occurred in class:** *className*.

Explanation: Adapter plugin class has not been set.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0019E **An error has occurred in class:** *className***.**

Explanation: Port has not been set.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0020E **An error has occurred in class:** *className***.**

Explanation: Timeout value has not been set.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0021E **An error has occurred in class:** *className***.**

Explanation: User Credentials object is null.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0022E **An error has occurred in class:** *className***.**

Explanation: Username has not been set.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0023E **An error has occurred in class:** *className***.**

Explanation: Password has not been set.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0024E **An error has occurred in class:** *className***, method:** *methodName***. Illegal return object.**

Explanation: The JCA has returned an illegal argument to the EJB, which has caused a ClassCastException.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0025E **An error has occurred in class:** *className***, method:** *methodName***. Illegal parameter at invocation of this method.**

Explanation: The method has been invoked with a null parameter.
The method must be invoked with a parameter that is not null.
This indicates a programming error.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0030E **A** *exception* **has occurred in class:** *className***, method:** *methodName***. The nested exception is null.**

Explanation: No exception object was linked to the ResourceException that has been caught.
This is an unexpected behavior and indicates a programming error on the J2C side.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0031E **An error has occurred in class:** *className***, method:** *methodName***. Invalid nested exception:** *nestedException***.**

Explanation: An invalid exception object was linked to the ResourceException that has been caught.
This is an unexpected behavior and indicates a programming error on the J2C side.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0032E **An error has occurred in class:** *className***, method:** *methodName***. No Connection object could be obtained.**

Explanation: The call to EEZConnectionFactory.getConnection(..) returned null.
This is an unexpected behavior and indicates a programming error at J2C side.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0033E **An error has occurred in class:** *className***, method:** *methodName***. No Interaction object could be obtained.**

Explanation: The call to EEZConnection.createInteraction() returned null.
This is an unexpected behavior and indicates a

programming error at J2C side.

System action: The current task ends.

Operator response: Please collect logs and traces and provide them to IBM support.

EEZL0034E **An error has occurred in class: *className*, method: *methodName*. JNDI name: *jndiName* did not return a ConnectionFactory object.**

Explanation: The JNDI lookup of this J2C has encountered an internal error. The ConnectionFactory object could not be retrieved.
This indicates a JNDI configuration error.

System action: The current task ends. No connection to the first-level automation will be possible until this problem is fixed.

Operator response: Please ensure the JNDI settings for the J2C connection factories are correct and restart the server. Contact IBM support if the problem persists.

EEZL0040E **Error occurred during XML (de)serialization process. Exception: *exception* detected in *className* method *methodName*.**

Explanation: The XML decoder has received an XML string that contained unsupported encoding.

System action: The method terminates with an ExecutionFailedException.

Operator response: Please provide logs and traces and contact IBM support if the problem persists.

EEZL0501W **An exception was encountered and ignored in order to continue operation. Exception string: *exceptionString***

Explanation: The invoked method is designed to ignore exceptions and continue operation. It logs the exception for problem determination purposes.

System action: Ignores the exception.

Operator response: Evaluate the exception details.

EEZL0510W **An exception was encountered at XML serialization in class *className* method *methodName*. Exception string: *exceptionDetails***

Explanation: This might be subject to back-level toleration and can be ignored.

System action: The exception is ignored. The process will be continued.

Operator response: Evaluate the exception details. If the problem persists or causes further errors, please contact IBM support.

EEZN0010E **The connection to the LDAP server on port *port* on host *host* cannot be established.**

Explanation: The application was interrupted by a RuntimeException and cannot complete its task.

System action: The connection process ends abnormally.

Operator response: Check whether the LDAP server is running and configured to the correct port and retry if applicable.

EEZN0011E **Host *host* could not be found.**

Explanation: The connection to the LDAP server cannot be established. Possible reasons are that the server is off-line, the name is incorrect, or a network failure.

System action: The connection process ends abnormally.

Operator response: Ensure that the host name or IP address is specified correctly. Verify that the network and the LDAP server are operational and retry if applicable.

EEZN0012E **Either the user name *username* or the password was not accepted by the LDAP server.**

Explanation: Either the user name or the password or both were incorrect.

System action: Access denied.

Operator response: Retry with a correct user name and password.

EEZN0013E **An error occurred during logon to the LDAP server: *error* or the password was not accepted by the LDAP server. The contacted host was *host* with port address *port*. You tried to log in as user *username*.**

Explanation: An attempt to log on to the LDAP server resulted in an unknown error. One possible error is an incorrect password.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and retry.

EEZN0201E **An exception was encountered. Details about the exception: *exceptionString*. Attempted to create CEI Response File *ceirsp*.**

Explanation: An attempt to create the CEI Response File resulted in a "FileNotFound" error. One possible

error is incorrect user rights to create files on the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try it again.

EEZN0202E An exception was encountered. Details about the exception: *exceptionString*. **Attempted to find or open the CEI Response File** *ceirsp*.

Explanation: An attempt to find or open the CEI Response File to store all the CEI properties resulted in an "Input/Output" error. One possible error is an incorrect file path or incorrect user rights to open this file on the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try again.

EEZN0301E ISCPrereqProcess has returned the value: *iscPrereqRC*.

Explanation: The ISC Prerequisite Check Process returned an error code.

System action: No system action required.

Operator response: No operator action required.

EEZN0301I ISC Portal Server is already started!!!!

Explanation: No explanation.

System action: No system action required.

Operator response: No operator action required.

EEZN0302E An exception was encountered. Details about the exception: *errorString*. **The ISC command executed by the following system command** *javaCmd* **was not successful.**

Explanation: No explanation.

System action: No system action required.

Operator response: No operator action required.

EEZN0302I Output of the following *cmd* **is:** *line*.

Explanation: No explanation.

System action: No system action required.

Operator response: No operator action required.

EEZN0303E An exception was encountered. When trying to get the "BufferedReader-InputStream" for the following command: " *cmd* **" the result was "null".**

Explanation: One possible error is an incorrect file path or incorrect user rights to write to this file on the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try again.

EEZN0304E An exception was encountered. When trying to get the "BufferedReader-ErrorStream" for the following command: " *cmd* **" the result was "null".**

Explanation: One possible error is an incorrect file path or incorrect user rights to write to this file on the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try again.

EEZN0401E An exception was encountered. Details about the exception: *exceptionString*.

Explanation: The application is not able to get the InstallShield database from the services of ISMP.

System action: No system action required.

Operator response: No operator action required.

EEZN0402E An exception was encountered. Details about the exception: *exceptionString*. **The application is not able to set the following InstallShield variable** *isVariable* **in the InstallShield database.**

Explanation: No explanation

System action: No system action required.

Operator response: No operator action required.

EEZN0403E An exception was encountered. Details about the exception: *exceptionString*.

Explanation: Error: cannot get registry service to read vpd.properties.

System action: No system action required.

Operator response: No operator action required.

EEZN0404E **An exception was encountered. Details about the exception:** *exceptionString*.

Explanation: The operation performed by ISMP FileService fails.

System action: No system action required.

Operator response: No operator action required.

EEZN0500W **An exception was encountered and ignored in order to continue operation. Details about the exception:** *exceptionString*

Explanation: The invoked method is designed to ignore exceptions and continue operation. It logs the exception for problem determination purposes.

System action: Processing continues.

Operator response: Evaluate the exception details.

EEZN0501E **An exception was encountered. Details about the exception:** *exceptionString*. **An attempt to execute a specified system command via Java resulted in an "Input/Output" error. The Java error was:** *exceptionString*. **Attempted to execute the specified system command** *javaCmd*.

Explanation: One possible error is incorrect user rights to execute system commands on the operating system. Another possible reason is that the attributes of the command are incorrect.

System action: No system action required.

Operator response: Use the information given in the explanation text to correct the error and try again.

EEZN0501I **Found text:** *findText* **in file:** *fileName*.

Explanation: No explanation.

System action: No system action required.

Operator response: No operator action required.

EEZN0502E **An exception was encountered. Details about the exception:** *exceptionString*. **The current thread initiated by the following system command** *javaCmd* **was interrupted by another thread while it was waiting, then the wait terminated and an "InterruptedException" was thrown.**

Explanation: No explanation

System action: No system action required.

Operator response: No operator action required.

EEZN0503E **Unsupported platform. Within the beanID =** *BeanId*, **platform** *platform* **is not supported.**

Explanation: No explanation

System action: No system action required.

Operator response: No operator action required.

EEZN0504E **An exception was encountered. Details about the exception:** *exceptionString*. **An "Input/Output" error occurred trying to create the following log file or, if it exists, trying to find its directory path:** *EEZLogFile*.

Explanation: One possible error is an incorrect file path or incorrect user rights to open this file on the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try again.

EEZN0505E **An exception was encountered. Details about the exception:** *exceptionString*. **An "Input/Output" error occurred trying to write to the following log file:** *EEZLogFile*.

Explanation: One possible error is an incorrect file path or incorrect user rights to write to this file on the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try again.

EEZN0506E **An exception was encountered. Details about the exception:** *exceptionString*. **An attempt to read a line from an "Inputstream" into a from a"BufferedReader" resulted in a "Input/Output" error.**

Explanation: One possible error is an incorrect "Inputstream" from the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try it again.

EEZN0507E **An exception was encountered. Cannot find the following DepcheckWizardAction bean** *depcheckWzrdActID*.

Explanation: No explanation.

System action: No system action required.

Operator response: No operator action required.

EEZN0508E **An exception was encountered. The product "** *prodName* **" does not exist.**

Explanation: No explanation.

System action: No system action required.

Operator response: No operator action required.

EEZN0509E **An exception was encountered. Details about the exception:** *exceptionString***.**

Explanation: An "Input/Output" error occurred trying to store properties.

System action: No system action required.

Operator response: No operator action required.

EEZN0510E **An exception was encountered. Details about the exception:** *exceptionString***. An "Input/Output" error occurred trying to get the URL to the "** *rsrcName* **" resource within the application archive.**

Explanation: No explanation.

System action: No system action required.

Operator response: No operator action required.

EEZN0511E **An exception was encountered. Details about the exception:** *exceptionString***.**

Explanation: An "Input/Output" error occurred trying to load properties.

System action: No system action required.

Operator response: No operator action required.

EEZN0512E **An exception was encountered. Details about the exception:** *exceptionString***. An attempt to create a "FileInputStream" from the properties file** *prop* **resulted in a "FileNotFound" error.**

Explanation: One possible error is an incorrect file path or incorrect user rights to get this "FileInputStream" from the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try it again.

EEZN0513E **An error was found. The file "** *fileName* **" does not exist.**

Explanation: One possible error is an incorrect file path or incorrect user rights to open this file on the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try it again.

EEZN0514E **An exception was encountered. The log.properties file ("** *logPropFileName* **") does not exist.**

Explanation: One possible error is an incorrect file path or incorrect user rights to open this file on the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try it again.

EEZN0515E **An exception was encountered. The log.properties file ("** *logPropFileName* **") does not contain the property** *prop***.**

Explanation: No explanation.

System action: No system action required.

Operator response: Use the information given in the explanation text to correct the error and try it again.

EEZN0516E **An exception was encountered. The log.properties file ("** *logPropFileName* **") does not exist.**

Explanation: One possible error is an incorrect file path or incorrect user rights to open this file on the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try it again.

EEZN0517E **An exception was encountered. Details about the exception:** *exceptionString***. Unable to resolve hostname ("** *hostName* **").**

Explanation: You need to edit the config files manually.

System action: No system action required.

Operator response: You need to edit the config files manually.

EEZN0518E **An exception was encountered. Details about the exception:** *exceptionString***. An attempt to create a "FileReader" from the file "** *fileName* **" resulted in a "FileNotFound" error.**

Explanation: One possible error is an incorrect file path or incorrect user rights to get this "FileReader" from the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try it again.

EEZN0519E **An exception was encountered. Details about the exception:** *exceptionString***. An "Input/Output" error occurred trying to read from the following file:** *fileName***.**

Explanation: One possible error is an incorrect file path or incorrect user rights to write to this file on the operating system.

System action: Access denied.

Operator response: Use the information given in the explanation text to correct the error and try again.

EEZN1000I **Application** *productName* **has started working.**

Explanation: The application starts its asynchronous work.

System action: No system action required.

Operator response: No operator action required.

EEZP0001E **The specified <Source> "** *source* **" in the <Relationship> "** *source* **" "** *relationshipType* **" "** *target* **" does not exist as a <ResourceReference>, <ResourceGroup> or <ChoiceGroup>.**

Explanation: The <Source> and <Target> of a <Relationship> must exist as exactly one <ResourceReference>, <ResourceGroup> or <ChoiceGroup>.

System action: This policy cannot be activated.

Operator response: Verify this <Relationship> in the policy.

EEZP0002E **The specified <Target> "** *target* **" in the <Relationship> "** *source* **" "** *relationshipType* **" "** *target* **" does not exist as a <ResourceReference>, <ResourceGroup> or <ChoiceGroup>.**

Explanation: The <Source> and <Target> of a <Relationship> must exist as exactly one <ResourceReference>, <ResourceGroup> or <ChoiceGroup>.

System action: This policy cannot be activated.

Operator response: Verify this <Relationship> in this policy.

EEZP0003E **The specified <***policyElement***> name "** *nameOfElement* **" was found more than once as the name of a <ResourceReference>, <ResourceGroup> or <ChoiceGroup>.**

Explanation: The value of the name attributes of <ResourceReference>, <ResourceGroup> and <ChoiceGroup> must be unique.

System action: This policy cannot be activated.

Operator response: Verify this name attribute in this policy.

EEZP0004E **The specified member "** *groupMember* **" of the <***groupElement***> name "** *groupName* **" does not exist as a <ResourceReference>, <ResourceGroup> or <ChoiceGroup>.**

Explanation: The member in a group must exist as exactly one <ResourceReference>, <ResourceGroup> or <ChoiceGroup>.

System action: This policy cannot be activated.

Operator response: Verify this member name in this policy.

EEZP0005E **Syntax error in line** *lineNumber* **column** *columnNumber***. Original parser exception:** *errorMessage*

Explanation: A syntax error occurred while parsing this policy.

System action: This policy cannot be activated.

Operator response: Correct the syntax error in this policy.

EEZP0006E **The specified policy file "** *policyFile* **" cannot be found.**

Explanation: The policy cannot be loaded from this location.

System action: This policy cannot be activated.

Operator response: Verify the policy XML file name and its path.

EEZP0007E **Original Parser Exception:** *exceptionMessage*

Explanation: An internal problem occurred while parsing this policy.

System action: This policy cannot be activated.

Operator response: Verify that the product is correctly installed.

EEZP0008E **An unsupported character** *character* **was found in the string "** *completeString* **". This string was found in the element <**_elementName_**> of the parent element <**_parentElement_**>.**

Explanation: The character found in the string is not supported.

System action: This policy cannot be activated.

Operator response: Remove the unsupported character from this string in this policy.

EEZP0009E **The specified name "** *nameOfElements* **" was found in the elements <**_policyElement_**> and <**_otherPolicyElement_**>.**

Explanation: The value of the name attribute must be unique.

System action: This policy cannot be activated.

Operator response: Verify this name attribute in this policy.

EEZP0010E **The specified <ResourceReference> "** *referenceName* **" was found as a member of multiple <ChoiceGroup> elements.**

Explanation: A <ResourceReference> can only be a member of one <ChoiceGroup>.

System action: This policy cannot be activated.

Operator response: Check that the <ResourceReference> is a member of at most one <ChoiceGroup> element in this policy.

EEZP0011E **The specified <**_groupForm_**> "** *groupName* **" was found as a member of multiple other groups.**

Explanation: A group can only be a member of one group.

System action: This policy cannot be activated.

Operator response: Check that the group is a member of at most one group element in this policy.

EEZP0012E **The two <ResourceReference> elements "** *reference* **" and "** *otherReference* **" point to the same <ReferencedResource> "** *resource* **".**

Explanation: Only one <ResourceReference> can point to the same <ReferencedResource> child element values.

System action: This policy cannot be activated.

Operator response: Check that only one <ResourceReference> has the same <ReferencedResource> child element values for <AutomationDomain>, <Name>, <Class> and <Node> in this policy.

EEZP0013E **The specified member "** *memberName* **" was found multiple times in the same <**_groupForm_**> "** *groupName* **".**

Explanation: All <Members> child elements must be unique in one group.

System action: This policy cannot be activated.

Operator response: Check that the group has no duplicate <Members> child elements in this policy.

EEZP0014E **The specified <ResourceReference> "** *reference* **" was found as a member of the <ResourceGroup> "** *resourceGroupName* **" and the <ChoiceGroup> "** *choiceGroupName* **".**

Explanation: A <ResourceReference> can only be a member of multiple <ResourceGroup> elements or one <ChoiceGroup> element.

System action: This policy cannot be activated.

Operator response: Check that the <ResourceReference> is not a member of a <ResourceGroup> and a <ChoiceGroup> at the same time in this policy.

EEZP0015E **The specified <Relationship> <Type> "** *relationType* **" with <Source> "** *Source* **" and <Target> "** *Target* **" was found in a loop.**

Explanation: <Relationship> elements of the same <Type> where one <Relationship> element <Target> is the next <Relationship> element <Source> must not form a loop.

System action: This policy cannot be activated.

Operator response: Check that the <Relationship> elements are not defined as a loop in this policy.

EEZP0016E **The specified element <**_childElement_**> was found more than once as a child element of <**_parentElement_**> name "** *parentName* **".**

Explanation: At most one element of this type is allowed in this group.

System action: This policy cannot be activated.

Operator response: Check that at most one element of this type is specified in this group in this policy.

EEZP0017E **The specified element <*parentElement*> name " *parentName* " was found without <Members> child elements.**

Explanation: At least one <Members> child element must be specified in this group.

System action: This policy cannot be activated.

Operator response: Check that at least one <Members> child element is specified in this group in this policy.

EEZP0018E **The policy document does not contain a <ResourceReference> element.**

Explanation: At least one <ResourceReference> element must be specified in this policy.

System action: This policy cannot be activated.

Operator response: Check that at least one <ResourceReference> element is specified in this policy.

EEZP0019E **The specified element <ChoiceGroup> name " *groupName* " was found with more than one <Members> child element with the "preferred" attribute equal to "true".**

Explanation: One <ChoiceGroup> member must have the "preferred" attribute equal to "true".

System action: This policy cannot be activated.

Operator response: Check that exactly one <ChoiceGroup> member has the "preferred" attribute equal to "true".

EEZP0020E **The specified <Relationship> with the <Type> " *relationType* ", the <Source> " *source* " and the <Target> " *target* " was found multiple times in the policy document.**

Explanation: All <Relationship> elements must be unique.

System action: This policy cannot be activated.

Operator response: Check that at most one <Relationship> of this type is specified in this policy.

EEZP0021E **A 'UTFDataFormatException' was caughed in method *methodName* of class *className*. The received message was *message*.**

Explanation: The processing was interrupted by this exception and cannot complete.

System action: The policy cannot be loaded.

Operator response: Ensure the correct data format of the policy document by only using editors which create UTF-8-compliant documents.

EEZP0022E **The specified <*groupType*> name " *groupName* " was found in a loop.**

Explanation: Group elements cannot form a loop with their members.

System action: This policy cannot be activated.

Operator response: Check that the group <Members> child elements are not defined as a loop in this policy.

EEZP0023E **The specified element <ChoiceGroup> name " *groupName* " has no <Members> child element with the "preferred" attribute equal to "true".**

Explanation: One <ChoiceGroup> member must have the "preferred" attribute equal to "true".

System action: This policy cannot be activated.

Operator response: Check that exactly one <ChoiceGroup> member has the "preferred" attribute equal to "true".

EEZP0024E **The specified element <ResourceReference> name " *reference* " point to the same <AutomationDomainName> value specified for the element <PolicyInformation> in this policy.**

Explanation: A <ResourceReference> child element <AutomationDomain> cannot point to the same <AutomationDomainName> value specified for the element <PolicyInformation> in this policy.

System action: This policy cannot be activated.

Operator response: Check that no <ResourceReference> child element <AutomationDomain> has the same value as the <PolicyInformation> child element <AutomationDomainName> in this policy.

EEZP0500W **The specified member " *memberName* " of the <ChoiceGroup> " *choiceGroupName* " was also found as a <Source> or <Target> of a <Relationship>.**

Explanation: The member of a <ChoiceGroup> should not be the <Source> or <Target> of a <Relationship> at the same time.

System action: Application continues.

Operator response: To avoid complexity, delete the <Relationship> or delete this <ChoiceGroup> member in this policy.

EEZP0502W **The two <Relationship> elements with <Type> "StartAfter" and <Type> "StopAfter" were found with the same <Source> "** *source* **" and <Target> "** *target* **".**

Explanation: The two <Relationship> elements with <Type> "StartAfter" and <Type> "StopAfter" should not have the same <Source> and <Target>. With this configuration the <Target> is started before the <Source> and the <Target> is stopped before the <Source>.

System action: Application continues.

Operator response: Verify this behavior. The common usage of "StartAfter" together with "StopAfter" is the following: 1. The <Source> of the "StartAfter" is the <Target> of the "StopAfter". 2. The <Target> of the "StartAfter" is the <Source> of the "StopAfter".

EEZP0503W **The <DesiredState> "** *Reference State* **" of the <ResourceReference> with name "** *Reference Name* **" does not match the <DesiredState> "** *Group State* **" of its parent group with name "** *Group Name* **".**

Explanation: The <DesiredState> of the group member will be ignored.

System action: The <DesiredState> of this <ResourceReference> will be set to the <DesiredState> of its parent group. Application continues.

Operator response: To avoid this warning specify the same <DesiredState> for this <ResourceReference> and its parent group.

EEZP0504W **The <DesiredState> "** *member group State* **" of the group with name "** *member group Name* **" does not match the <DesiredState> "** *hosting group state* **" of its parent group with name "** *hosting group name* **".**

Explanation: The <DesiredState> of the group member will be ignored.

System action: The <DesiredState> of this group will be set to the <DesiredState> of its parent group. Application continues.

Operator response: To avoid this warning specify the same <DesiredState> for this group and its parent group.

EEZP2000I **Usage:**

Explanation: No additional information is available for this message.

EEZP2001I **eezpolicychecker <Policy XML file name with path>**

Explanation: No additional information is available for this message.

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Explanation: No additional information is available for this message.

EEZP2003I **Policy has been verified.**

Explanation: No additional information is available for this message.

EEZP2004I **Policy could not be verified.**

Explanation: No additional information is available for this message.

EEZP2005I **The following policy errors were found:**

Explanation: No additional information is available for this message.

EEZP2006I **The following policy warnings were found:**

Explanation: No additional information is available for this message.

EEZP2007I **ERROR:**

Explanation: No additional information is available for this message.

EEZP2008I **WARNING:**

Explanation: No additional information is available for this message.

EEZP2009I **POLICY CHECKER**

Explanation: No additional information is available for this message.

EEZP2010I **This program verifies a policy document (*.xml) for use with IBM Tivoli System Automation for Multiplatforms.**

Explanation: No additional information is available for this message.

EEZP2011I EXPLANATION:

Explanation: No additional information is available for this message.

EEZP2012I USER ACTION:

Explanation: No additional information is available for this message.

EEZS0001E Not a recognized flag: *command_flag_name***.**

Explanation: An unsupported flag or an incorrect combination of flags was specified.

System action: The command ends without processing.

Operator response: Refer to the usage statement for a list of valid flags. Correct the command and run it again.

EEZS0003E An incorrect combination of flags or an incorrect flag and operand combination was specified.

Explanation: The combination of the specified flags or the specified flag and operand combination is not allowed.

System action: The command ends without processing.

Operator response: Refer to the usage statement for a list of valid flags, operands, and flag-operand combinations. Correct the command and run it again.

EEZS0005E The *flag_name* **flag requires an operand.**

Explanation: The indicated flag must be specified with an operand when using this command.

System action: The command ends without processing.

Operator response: Check the command syntax and issue the command again.

EEZS0006E The specified policy could not be activated because it contains no resource/because it is empty.

Explanation: In order to be activated, a policy must contain at least one resource. The specified policy is empty.

System action: The policy could not be activated. Processing ends.

Operator response: Specify a non-empty policy and run the command again.

EEZS0007E Unknown command *command_name***.**

Explanation: An unknown command was specified on the command line.

System action: Processing ends.

Operator response: Use the help command for a list of possible commands. Note that commands are case-sensitive.

EEZS0008E An invalid number of operands was specified.

Explanation: The command was called with an invalid number of operands.

System action: Processing ends.

Operator response: Refer to the usage statement for a list of valid operands. Correct the command and run it again.

EEZS0009E Invalid operand *operand_name***.**

Explanation: An invalid operand was specified.

System action: The command ends without processing.

Operator response: Refer to the usage statement for a list of valid operands. Correct the command and run it again.

EEZS0010E An invalid quoted string was specified.

Explanation: An opening or closing quotation mark is missing or the specified quotation mark characters do not match.

System action: The command ends without processing.

Operator response: Correct the command and run it again.

EEZS0013E The resource *resource_name* **does not exist.**

Explanation: The specified resource name does not exist.

System action: Processing ends.

Operator response: Check the resource name and issue the command again.

EEZS0100I The policy *policy_file_name* **has been activated.**

Explanation:

System action:

Operator response:

EEZS0101I **The policy** *policy_file_name* **has been deactivated.**

Explanation:

System action:

Operator response:

EEZS0102W **No policy is currently active.**

Explanation: Currently the automation manager is idling because no policy is active.

System action:

Operator response:

EEZS0103E **The policy** *policy_file_name* **was not found in the policy pool** *policy_pool_directory***.**

Explanation: A policy with the specified file name was not found. Information about the policy cannot be displayed.

System action: Processing ends.

Operator response: Check the policy name and issue the command again.

EEZS0104I *number_of_policies* **policies were found in the policy pool.**

Explanation:

System action:

Operator response:

EEZS0110E **The domain** *domain_name* **does not exist.**

Explanation: The query for the specified domain returned no value.

System action: Processing ends.

Operator response: Check the domain name and issue the command again.

EEZS0111I **Listing information for domain** *domain_name***.**

Explanation:

System action:

Operator response:

EEZS0114E **The following problem was encountered processing command** *command_name***:**

Explanation:

System action:

Operator response:

EEZS0120I **Using end-to-end domain** *domain_name***.**

Explanation:

System action:

Operator response:

EEZS0121W **Unable to contact an end-to-end automation domain. No end-to-end automation domain is currently online.**

Explanation: The automation manager currently does not host any end-to-end automation domain which is in state Online. Only a limited set of commands can be executed in this situation.

System action:

Operator response:

EEZS0122E **Unable to contact the automation manager on server:** *server_name* **using port:** *port_number*

Explanation: The command shell is unable to contact the automation manager.

System action: The command shell ends.

Operator response: Verify that the automation manager is running on the specified host and check that the port number is correct.

EEZS0123E **Unable to authenticate to the automation manager on server:** *server_name* **with the specified user ID and password.**

Explanation: The command shell was unable to open a session with the specified automation manager because a security exception was received.

System action: The command shell ends.

Operator response: Check the user ID and password you are using to contact the automation manager. Verify that the user ID has sufficient rights to access the automation domain.

EEZS0124E **The following exception occurred while connecting to** *server_name***:** *exception_text*

Explanation: The command shell is unable to contact the server because a connection exception was received.

System action: The command shell ends.

Operator response: Check the exception message for further information.

EEZS0130E Unknown request action: *action_name*.

Explanation: The specified request action is not supported.

System action: The command cannot be executed.

Operator response: Correct the action string and issue the command again.

EEZS0131I The *request_name* **request has been issued against resource** *resource_name*.

Explanation:

System action:

Operator response:

EEZS0140I The resource *resource_name* **has been set as the new preferred member of choice group** *choice_group_name*.

Explanation:

System action:

Operator response:

EEZS0185E None of the specified resources exists.

Explanation: No matching resources were found.

System action: Processing ends.

Operator response: Check the selection string or resource names and issue the command again.

EEZS0207E No relationship exist between the source resource *source_resource_name* **and the target resource** *target_resource_name*

Explanation: No relationships exists between the specified resources.

System action: Processing ends.

Operator response: Issue the command again with existing target resources for the source.

EEZS0208I Showing information for policy: *policy_file_name*

Explanation:

System action:

Operator response:

EEZS0223E No relationships were found for the specified source resource *source_resource_name*

Explanation: The source resource is not associated with any existing relationship.

System action: Processing ends.

Operator response: Check the source resources and issue the command again.

EEZS0224E No relationships were found for the specified target resource *target_resource_name*

Explanation: The target resource is not associated with any existing relationship.

System action: Processing ends.

Operator response: Check the target resources and issue the command again.

EEZS0227E None of the specified source or target resources exists.

Explanation: The source or target resources used to query the relationships do not exist.

System action: Processing ends.

Operator response: Issue the command again with at least one existing source resource.

EEZS0344E No relationships are defined in the policy.

Explanation: No relationships were found in the policy.

System action: Processing ends.

Operator response: Activate a policy that contains relationships and issue the command again.

EEZT0001W SA detected a domain status change in domain " *domainName* **". Domain status is "** *domainStatus* **".**

Explanation: The status of this automation domain has changed.

System action: None.

Operator response: Verify that the new state is intended for this automation domain.

EEZT0002I SA received a domain join event from domain " *domainName* **" and processed that event successfully.**

Explanation: This automation domain has successfully joined to System Automation.

System action: None.

Operator response: No action required.

EEZT0003W SA received a domain leave event from domain " *domainName* " and processed that event successfully.

Explanation: This automation domain has successfully left System Automation.

System action: None.

Operator response: Verify that the new state is intended for this automation domain.

EEZT0004E SA cannot communicate with the automation adapter on IP address " *ipAddress* ". For example, a firewall could be preventing that kind of communication.

Explanation: An automation adapter was started and it tried to join to System Automation. The join attempt failed because System Automation cannot communicate with the automation adapter. Possible cause of the problem is: a firewall could be preventing communication with this domain, or SSL communication is required to be setup for communication with the automation adapter.

System action: None.

Operator response: Determine the cause of the communication problem.

EEZT0005E SA encountered a security problem while trying to access domain " *domainName* ".

Explanation: System Automation cannot access this automation domain. This is caused by a security problem. Either the EEZAutomationManager does not have the required authorization, or some credential definition in the domain identification file that is used by the end-to-end automation engine is invalid. For example, the password may have expired.

System action: None.

Operator response: Browse the domain identification file used by the end-to-end automation engine. Check if the password that is associated with the domain mentioned in the message text is valid. If the password is valid, then check the message log files of the end-to-end automation engine and of the J2EE framework for additional hints about the problem.

EEZT0006I SA domain " *domainName* " has activated a new policy. The filename of the policy is " *policyFileName* ".

Explanation: A new policy has been activated for this automation domain.

System action: None.

Operator response: Verify that the action is intended for this automation domain.

EEZT0007E SA domain " *domainName* " has encountered a severe problem. Check the domain log file for details.

Explanation: See message.

System action: None.

Operator response: Check the automation domain log file for details.

EEZT0008I SA domain " *domainName* " no longer requires someone to check its log file.

Explanation: An operator has inspected the logfile.

System action: None.

Operator response: None.

EEZT0009W SA detected a problem in domain " *domainName* ". The resource reference " *resourceName* " is unknown.

Explanation: The resource reference definition in the end-to-end automation policy does not match any resource in the specified automation domain. Possible causes of this problem are: 1) the end-to-end automation policy is incorrect, possibly caused by a spelling error. 2) the resource does not or does not yet exist in the specified automation domain.

System action: None.

Operator response: Verify the correctness of the resource reference definition in the policy. Verify that the referenced resource exists in the automation domain.

EEZT0010I SA changed the preferred member of resource group " *groupName* " in domain " *domainName* " as requested.

Explanation: See message.

System action: None.

Operator response: None.

EEZT0011W SA detected a domain communication status change in domain " *domainName* ". Domain communication status is " *communicationState* ". Domain status is " *domainState* ".

Explanation: The communication state for this automation domain has changed.

System action: None.

Operator response: Verify that the new state is intended for this automation domain.

EEZT0012W SA domain " *domainName* " no longer has an active policy.

Explanation: The automation policy has been deactivated for this automation domain.

System action: None.

Operator response: Verify that the action is intended for this automation domain.

EEZT0013E SA detected a problem in domain " *domainName* ". The resource reference " *resourceName* " is unable to contact the referenced resource. An operator needs to reset the resource reference manually.

Explanation: The operational state of the resource reference indicates that an operator needs to fix some problem and then reset the resource reference manually.

System action: None.

Operator response: Inspect the message log of the end-to-end automation domain in order to find the reason the resource reference is broken. Once the root cause of the problem is fixed, reset the resource reference.

EEZT0014W SA suspended automation for resource " *resourceName* " in domain " *domainName* ".

Explanation: An operator requested suspending automation for this resource.

System action: If this resource is a resource reference, the end-to-end automation manager no longer sends requests or orders to its referenced resource. If this resource is a resource group, the end-to-end automation manager no longer sends requests or orders to its members.

Operator response: If required, resume automation for this resource.

EEZT0015I SA resumed automation for resource " *resourceName* " in domain " *domainName* ".

Explanation: An operator requested resuming automation for this resource.

System action: If this resource is a resource reference, the end-to-end automation manager sends requests or orders to its referenced resource if required. If this resource is a resource group, the end-to-end automation manager sends requests or orders to its members if required.

Operator response: If required, suspend automation for this resource.

EEZT0750W SA event with unknown reason in domain " *domainName* ".

Explanation: See message.

System action: None.

Operator response: Analyze the event details and contact IBM support.

EEZT0753I SA automation manager started successfully.

Explanation: See message.

System action: None.

Operator response: None.

EEZT0754W SA automation manager stopped successfully.

Explanation: See message.

System action: None.

Operator response: Verify that the automation manager was stopped intentionally.

EEZT0756I SA detected a new configuration in domain " *domainName* ". New request for resource " *resourceName* " with action " *action* " and source " *source* " created.

Explanation: See message.

System action: None.

Operator response: None.

EEZT0758I SA detected a deleted configuration in domain " *domainName* ". Request for resource " *resourceName* " with action " *action* " and source " *source* " deleted.

Explanation: See message.

System action: None.

Operator response: None.

EEZT0759W SA detected a status change of resource " *resourceName* " in domain " *domainName* ". Common observed state: " *CommonObservedState* ", Common desired state: " *CommonDesiredState* ", Common operational state: " *CommonOperationalState* ", Common compound state: " *CommonCompoundState* "

Explanation: The state of this automation resource in the specified automation domain has changed.

System action: None.

Operator response: Verify that the new state is intended for this automation resource.

EEZT0770I **SA started the automation of resource "** *resourceName* **" in domain "** *domainName* **". Common observed state: "** *CommonObservedState* **", Common desired state: "** *CommonDesiredState* **", Common operational state: "** *CommonOperationalState* **", Common compound state: "** *CommonCompoundState* **"**

Explanation: This resource is now under control of System Automation.

System action: None.

Operator response: Verify that the new state is intended for this automation resource.

EEZT0771I **SA completed the automation of resource "** *resourceName* **" in domain "** *domainName* **". Common observed state: "** *CommonObservedState* **", Common desired state: "** *CommonDesiredState* **", Common operational state: "** *CommonOperationalState* **", Common compound state: "** *CommonCompoundState* **"**

Explanation: This resource is no longer under control of System Automation.

System action: None.

Operator response: Verify that the new state is intended for this automation resource.

EEZT0778I **SA set the resource "** *resourceName* **" online as requested in domain "** *domainName* **". Common observed state: "** *CommonObservedState* **", Common desired state: "** *CommonDesiredState* **", Common operational state: "** *CommonOperationalState* **", Common compound state: "** *CommonCompoundState* **"**

Explanation: System Automation has set the resource online successfully.

System action: None.

Operator response: None.

EEZT0779I **SA set the resource "** *resourceName* **" offline as requested in domain "** *domainName* **". Common observed state: "** *CommonObservedState* **", Common desired state: "** *CommonDesiredState* **", Common operational state: "** *CommonOperationalState* **", Common compound state: "** *CommonCompoundState* **"**

Explanation: System Automation has set the resource offline successfully.

System action: None.

Operator response: Verify that the new state is intended for this automation resource.

EEZT0786W **SA detected a warning in domain "** *domainName* **". The resource "** *resourceName* **" has problems caused by a dependency to another resource. Common observed state: "** *CommonObservedState* **", Common desired state: "** *CommonDesiredState* **", Common operational state: "** *CommonOperationalState* **", Common compound state: "** *CommonCompoundState* **"**

Explanation: An automation operation on the specified resource cannot be performed because it depends on another resource which prevents the operation.

System action: None.

Operator response: Inspect the status of the resources on which the specified resource depends.

EEZT0789E **SA detected a problem in domain "** *domainName* **". The resource "** *resourceName* **" cannot be set to the requested state. Common observed state: "** *CommonObservedState* **", Common desired state: "** *CommonDesiredState* **", Common operational state: "** *CommonOperationalState* **", Common compound state: "** *CommonCompoundState* **"**

Explanation: An automation operation on the specified resource cannot be performed.

System action: None.

Operator response: Inspect the individual status fields of this resource.

EEZT0790E **SA detected a problem in domain "** *domainName* **". The resource "** *resourceName* **" needs a manual reset by the operator. Common observed state: "** *CommonObservedState* **", Common desired state: "** *CommonDesiredState* **", Common operational state: "** *CommonOperationalState* **", Common compound state: "** *CommonCompoundState* **"**

Explanation: An automation operation on the specified resource cannot be performed.

System action: None.

Operator response: Reset the automation resource manually. Invoke the operation "reset from broken" in the operation console.

EEZU0001E **The following RuntimeException occurred:**
Exception text

Explanation: The processing was interrupted by a RuntimeException and cannot complete correctly.

System action: The current task ends.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZU0002E **The following error occurred while writing file** *filename***:**
Exception text

Explanation: The processing was interrupted by an error and cannot complete correctly.

System action: The current task ends.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZU0003E **The following error occurred while reading file** *filename***:**
Exception text

Explanation: The processing was interrupted by an error and cannot complete correctly.

System action: The current task ends.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZU0004E **An error has occurred while accessing the end-to-end automation manager:**
Exception text

Explanation: An error has occurred while accessing the end-to-end automation manager component running on the management server. The requested action could not be processed.
Possible reasons are:
1) The management server is down or not working correctly.
2) The are some inconsistencies regarding the level of the operations console and the end-to-end automation manager.

System action: The requested action is cancelled.

Operator response: Check your connection to the management server and ensure that you have the right permissions. Also check that the management server is up and running. Verify that the levels of the operations console and the end-to-end automation manager are appropriate. If the problem persists, contact your system administrator.

EEZU0005E **The credential vault service was not found or could not be loaded:**
Exception text

Explanation: The credential vault cannot be accessed because the corresponding service was not found or could not be loaded due to an initialization error.

System action: The current task ends.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZU0006E **The page with the ID** *Page UID* **could not be found:**
Exception text

Explanation: The application tried to load the page with the specified ID to display the log data. However, the page with this ID could not be found.

System action: The application continues, but the log data cannot be displayed.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZU0007E **The credential vault cannot be accessed:**
Exception text

Explanation: Possible causes of the problem are:
1) The credential vault is not accessible for technical reasons.
2) The credential vault is not accessible for security reasons.

System action: The current task ends.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZU0008E **The credential secret for automation domain** *Automation domain name* **is not set:**
Exception text

Explanation: A user credential for a certain automation domain was requested but is not set for the user.

System action: The current task ends.

Operator response: If the problem persists after a new log-on, provide the trace file and this message text to IBM support.

EEZU0010E **Unable to receive events from the end-to-end automation manager. The following error occurred while trying to read an event:**
Exception text

Explanation: An error has occurred while trying to access the event path to the management server. The operations console is not able to receive any events and is therefore not able to update the status information for resources if the status changes.
Possible reasons are:
1) The management server is down.
2) The JMS service of the management server is not working properly.

System action: Processing continues, but no events can be received.

Operator response: Check your connection to the management server and ensure that you have the right permissions. Also check that the management server is up and running. If the problem persists, contact your system administrator.

EEZU0011E **Unable to set up the event path between the operations console and the management server:**
Exception text

Explanation: The connection to the right JMS service on the management server could not be established. This connection is used to receive events about status changes from the end-to-end automation manager.
Possible reasons are:
1) The management server is down.
2) The JMS service of the management server is not working properly.

System action: Processing ends.

Operator response: Check your connection to the management server and ensure that you have the right permissions. Also check that the management server is up and running. If the problem persists, contact your system administrator.

EEZU0012E **An error occurred trying to look up the JMS service on the management server to establish the event path:**
Exception text

Explanation: An error has occurred while trying to access the management server. Possible reasons are:
1) The management server is down.
2) The JMS service of the management server is not working properly.
3) The JMS topic for end-to-end automation management has not been configured correctly on the management server.

System action: Processing ends.

Operator response: Check your connection to the management server and ensure that you have the right permissions. Also check that the management server is up and running and that JMS is configured correctly. If the problem persists, contact your system administrator.

EEZU0013E **An error has occurred while trying to establish the connection to the end-to-end automation manager:**
Exception text

Explanation: An error has occurred while connecting to the end-to-end automation manager component running on the management server.
Possible reasons are:
1) The management server is down or not working correctly.
2) The are some inconsistencies regarding the level of the operations console and the end-to-end automation manager.

System action: Processing ends.

Operator response: Check your connection to the management server and ensure that you have the right permissions. Also check that the management server is up and running. Verify that the levels of the operations console and the end-to-end automation manager are appropriate. If the problem persists, contact your system administrator.

EEZU0014E **An error has occurred while trying to establish the connection to the end-to-end automation manager:**
Exception text

Explanation: An error has occurred while connecting to the end-to-end automation manager component running on the management server.
Possible reasons are:
1) The management server is down or not working correctly.
2) The management server is not accessible.

System action: Processing ends.

Operator response: Verify your entries for server name and port are correct. Ensure that you have the right permissions. Also check that the management server is up and running.
Refer to the 'Related errors' section for more details about the problem.
If the problem persists, contact your system administrator.

EEZU0015E The log data cannot be displayed because the service to launch a new page was not found or could not be loaded.

Explanation: The log data is normally displayed on a new page within the Integrated Solutions Console, but the service to launch a new page was not found or could not be loaded due to an initialization error.

System action: The application continues, but the log data cannot be displayed.

Operator response: If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZU0017E There is no log data available for automation domain *Automation domain***.**

Explanation: No log file exists for the automation domain. The log file is normally located on the node where the automation domain's automation adapter is running, or if it is the end-to-end automation domain, where the end-to-end automation engine is running.

System action: The application continues without displaying log data.

Operator response: Ensure that logging is set up correctly for this automation domain; for example, check the eezjlog.properties file. If the problem persists, contact your system administrator.

EEZU0018E Creating EIF event receiver failed, error message is: *Exception text***.**

Explanation: The operations console accesses first-level automation domains directly (direct access mode). To be able to receive events from first-level automation domains an Event Integration Facility (EIF) event receiver must be created. Creating the event receiver failed.

System action: The operations console will not receive events.

Operator response: Examine the error message to find the cause of failure. If you cannot resolve the problem, provide the trace file and this message text to IBM support.

EEZU0019E The operations console was notifed of new domain *new domain* **that has the same name as the known domain** *known domain***.**

Explanation: The operations console accesses first-level automation domains directly (direct access mode). It was notifed about a new domain that has the same name as a domain that is already known by the operations console. However, the connection information of the of the form 'domainname@ip-address:port' suggest that the new domain automates a different cluster than the known domain. Every domain operated from an operations console must have a unique name.

System action: The domain is not allowed to join and therefore, will not show up in the topology view.

Operator response: Try to determine from the information of new domain where the domain is located. If the new domain automates a different cluster than the known domain, have the name of the new domain changed, and its automation adapter restarted to notify the operations console.

EEZU0020E The operations console was notifed of domain *domain* **from adapter** *adapter* **with version** *adapter version* **that is lower than the required minimum version** *minimum version***.**

Explanation: The operations console accesses first-level automation domains directly (direct access mode). It was notifed about a domain from an adapter with a version that is too low for reliable operation.

System action: The domain is not allowed to join and therefore, will not show up in the topology view.

Operator response: Try to locate the adapter that tried to join the domain and have it upgraded to a version that is equal or higher than the required minimum version. Then have the automation adapter restarted to notify the operations console.

EEZU0021E The operations console contacted a domain *domain* **with adapter** *adapter* **at version** *adapter version* **that is lower than the required minimum version** *minimum version***.**

Explanation: The operations console accesses first-level automation domains directly (direct access mode). It contacted a domain from an adapter with a version that is too low for reliable operation.

System action: The operations console must not communicate with the domain which has a too low version and therefore, the domain will remain disabled in the topology view.

Operator response: Try to locate the adapter of the domain and have it upgraded to a version that is equal

or higher than the required minimum version. Then have the automation adapter restarted to notify the operations console.

EEZU0500W The selected automation domain *domain name* **no longer exists.**

Explanation: You selected an automation domain that no longer exists. Possible reasons are that the automation domain has been deleted in the meantime.

System action: The current task continues.

Operator response: If the automation domain is still displayed, use menu item 'Refresh all' to obtain the currently available domains.

EEZU0501W The selected resource *resource name* **no longer exists.**

Explanation: You selected a resource that no longer exists. Possible reasons are that the resource has been deleted in the meantime or the automation policy has been changed or deactivated.

System action: The current task continues.

Operator response: If the resource is still displayed, use menu item 'Refresh all' to obtain the currently available resources.

EEZU0502W The selected node *node name* **no longer exists.**

Explanation: You selected a node that no longer exists. Possible reasons are that the node has been deleted in the meantime.

System action: The current task continues.

Operator response: If the node is still displayed, use menu item 'Refresh all' to obtain the currently available nodes.

EEZU0503W The request has been submitted but has not been processed yet.

Explanation: A request has been submitted but was not processed by the corresponding automation manager. Reasons for this can be a slow network or an automation manager that is not responding.

System action: The application continues.

Operator response: If the request is not processed soon, send the request again. If the problem persists, check the connections to the automation manager and inspect the log files of the automation manager for problems.

EEZU0504W The order to cancel the operator request has been submitted, but the request is still not cancelled yet.

Explanation: A cancel request has been submitted but was not processed by the corresponding automation manager. Reasons for this can be a slow network or an automation manager that is not responding.

System action: The application continues.

Operator response: If the request is not processed soon, cancel the request again. If the problem persists, check the connections to the automation manager and inspect the log files of the automation manager for problems.

EEZU0505W The order to change the automation policy has been submitted, but the policy change has not been completely processed yet.

Explanation: The order to change the automation policy has been submitted to the corresponding automation manager, but the processing of this change has not finished yet. Reasons for this can be a slow network or an automation manager that is not responding.

System action: The application continues. When the processing of the policy change has been completed the screen will automatically refresh to reflect the change.

Operator response: If the problem persists, check the connections to the automation manager and inspect the log files of the automation manager for problems.

EEZU0506W Domain *Domain name* **became unavailable.**

Explanation: The operations console accesses first-level automation domains directly (direct access mode). A domain that had been contacted successfully before, became unavailable when the operations console tried to perform a request on a first-level automation domain. The automation adapter or the node of the domain may have shut down without being able to notify the operations console.

System action: The request and any further request will not be performed on the domain until it becomes available.

Operator response: Select menue item 'Refresh all' to obtain the new state of the domains.

EEZY0001E An error occurred while initializing the automation adapter plug-in. Additional information: " *additionalInformation* **".**

Explanation: Possible reasons for the error are:
1) Missing or corrupted product files.
2) Not enough memory available.
3) Not enough disk space available.

4) Programming error in plug-in.

System action: Processing ends.

Operator response: If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZY0002E **An event cannot be generated for resource** *resourceName***.**

Explanation: The processing was interrupted by this exception and cannot complete event generation.

System action: The current task continues.

Operator response: If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZY0003E **An error occurred while stopping the automation adapter plug-in. Additional information: "** *additionalInformation* **".**

Explanation: An error occurred while stopping the plug-in.

System action: Processing ends.

Operator response: Check the additional information for details. If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZY0004E **Failed to load file** *fileName* **from disk. Additional information: "** *additionalInformation* **".**

Explanation: Failed to load the file specified in the message from disk. This file is necessary for running the automation adapter plug-in.

System action: Processing ends.

Operator response: Check the additional information for details. If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZY0005E **An operation named** *operationName* **was requested although the automation adapter plug-in is not ready for processing requests.**

Explanation: The plug-in was requested to perform an operation but it is not yet initialized or already stopped.

System action: Processing of the operation ends.

Operator response: If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZY0006E **An unsupported operation named** *operationName* **was requested.**

Explanation: The automation adapter plug-in was requested to perform an operation but this operation is not supported.

System action: Processing of the operation ends.

Operator response: If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZY0007E **An error occurred while processing the operation named** *operationName***. Additional information: "** *additionalInformation* **".**

Explanation: An error occurred while processing the operation.

System action: Processing of the operation ends.

Operator response: Check the additional information for details. If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZY0008E **An error occurred while processing an operation. Additional information: "** *additionalInformation* **".**

Explanation: An error occurred while processing an operation.

System action: Processing of the operation ends.

Operator response: Check the additional information for details. If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZY0009E **Failed to obtain entry point** *entryPointName* **in module** *moduleName***. Additional information: "** *additionalInformation* **".**

Explanation: Failed to obtain the entry point specified in the message.

System action: Processing ends.

Operator response: Check the additional information for details. If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZY0010E **Failed to obtain the memory required for processing the current operation. Additional information: "** *additionalInformation* **".**

Explanation:

System action: Processing of the operation ends.

Operator response: Check the additional information for details. If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZY0011E **An operation on a resource with the following key was requested: name "** *resourceName* **", class "** *className* **", automation domain "** *domainName* **", node "** *nodeName* **". There is no resource with the specified key.**

Explanation: An operation on a resource was requested but the resource with the specified key does not exist. Possible reasons for the error are:
1) The resource key information is not spelled correctly.
2) The resource with the specified key does not exist.
3) The resource with the specified key was deleted shortly before or when processing the operation.

System action: Processing of the operation ends.

Operator response: Verify that the resource key information is spelled correctly. Correct the information and submit the operation again.

EEZY0012E **An operation to enumerate the members of the group with the following key was requested: name "** *resourceName* **", class "** *className* **", automation domain "** *domainName* **", node "** *nodeName* **". There is no group with the specified key.**

Explanation: An operation to enumerate the members of a group was requested but the group with the specified key does not exist. Possible reasons for the error are:
1) The resource key information is not spelled correctly.
2) The resource key information does not represent a group.
3) The group with the specified key does not exist.
4) The group with the specified key was deleted shortly before or when processing the operation.

System action: Processing of the operation ends.

Operator response: Verify that the resource key information is spelled correctly. Correct the information and submit the operation again.

EEZY0013E **Failed to process an operation because malformed or incomplete input was specified.**

Explanation: The automation adapter plug-in was not able to correctly process the requested operation because malformed or incomplete input was specified.

System action: Processing of the operation ends.

Operator response: Check the specified input and submit the operation request again if desired.

EEZY2001I **A problem occured in class** *className***, method** *methodName***, file** *fileName***, line** *lineNumber***. Additional information: "** *additionalInformation* **".**

Explanation: An problem has occurred during processing and this message indicates the location where the problem occurred. An additional message indicates which problem occurred.

System action: The system action depends on the problem that occurred.

Operator response: You may search the message related to the problem that occurred and follow the recommendations given there.

EEZZ0001E **Failed to open a connection to the Microsoft Server Clustering named** *clusterName***. Additional information: "** *additionalInformation* **".**

Explanation: The automation adapter plug-in was unable to open a connection to the specified Microsoft Server Clustering. The name can be a network name or an IP address.
Possible reasons are:
1) There is no cluster with the specified name.
2) The cluster with the specified name is not reachable from the system running the plug-in.
3) The cluster with the specified name is not operational.
The name "NULL" indicates the Microsoft Server Clustering in which the system that runs the plug-in is a cluster node.

System action: Processing ends.

Operator response: Check the additional information for details.
1) Verify that the specified cluster name is spelled correctly. If not, correct the name.
2) Verify that the cluster is reachable from the system running the plug-in. If not, correct the problem.
3) Verify that the cluster is running and can be contacted by other means. If not, repair the cluster.
If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZZ0002E **An event cannot be generated for resource** *resourceName***.**

Explanation: The processing was interrupted by this exception and cannot complete event generation.

System action: The current task continues.

Operator response: If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZZ0003E **Microsoft Server Clustering failed to perform an operation requested by the automation adapter plug-in. Additional information: "** *additionalInformation* **".**

Explanation: Microsoft Server Clustering failed to perform an operation requested by the plug-in. Possible reasons are:
The cluster is not reachable from the system running the plug-in.
The cluster is not operational.
The plug-in passed wrong input when requesting the operation.

System action: Processing of the operation ends.

Operator response: Check the additional information for details.

Verify that the cluster is reachable from the system running the plug-in. If not, correct the problem.

Verify that the cluster is running and can be contacted by other means. If not, repair the cluster.

If you cannot resolve the problem, contact IBM support. Provide the log file, the trace file, and this message text to IBM support.

EEZZ0004E **Failed to bring resorce** *resourceName* **online on behalf of user** *userID***. Specified comment: "** *comment* **". Additional information: "** *additionalInformation* **".**

Explanation: The automation adapter plug-in received a request to bring the specified resource online but failed to perform the request.

System action: Processing of the operation ends.

Operator response: Check the additional error information for the reason why the request processing failed.

EEZZ0005E **Failed to take resorce** *resourceName* **offline on behalf of user** *userID***. Specified comment: "** *comment* **". Additional information: "** *additionalInformation* **".**

Explanation: The automation adapter plug-in received a request to take the specified resource offline but failed to perform the request.

System action: Processing of the operation ends.

Operator response: Check the additional error information for the reason why the request processing failed.

EEZZ0006E **Failed to bring group** *groupName* **online on behalf of user** *userID***. Specified comment: "** *comment* **". Additional information: "** *additionalInformation* **".**

Explanation: The automation adapter plug-in received a request to bring the specified group online but failed to perform the request.

System action: Processing of the operation ends.

Operator response: Check the additional error information for the reason why the request processing failed.

EEZZ0007E **Failed to take group** *groupName* **offline on behalf of user** *userID***. Specified comment: "** *comment* **". Additional information: "** *additionalInformation* **".**

Explanation: The automation adapter plug-in received a request to take the specified group offline but failed to perform the request.

System action: Processing of the operation ends.

Operator response: Check the additional error information for the reason why the request processing failed.

EEZZ0008E **Failed to include node** *nodeName* **into the cluster on behalf of user** *userID***. Specified comment: "** *comment* **". Additional information: "** *additionalInformation* **".**

Explanation: The automation adapter plug-in received a request include the node into the cluster but failed to perform the request.

System action: Processing of the operation ends.

Operator response: Check the additional error information for the reason why the request processing failed.

EEZZ0009E **Failed to exclude node** *nodeName* **from the cluster on behalf of user** *userID***. Specified comment: "** *comment* **". Additional information: "** *additionalInformation* **".**

Explanation: The automation adapter plug-in received a request exclude the node from the cluster but failed to perform the request.

System action: Processing of the operation ends.

Operator response: Check the additional error information for the reason why the request processing failed.

EEZZ0010E **The automation adapter plug-in received an unsupported request named** *requestName* **on behalf of user** *userID*. **Specified comment: "** *comment* **".**

Explanation: The plug-in received a unsupported request which will not be executed.

System action: Processing of the operation ends.

Operator response: Correct the request and submit it again if desired.

EEZZ0011E **The automation adapter plug-in received a request to take the resource** *resourceName* **offline on behalf of user** *userID*. **The plug-in rejects this request.**

Explanation: The plug-in received a request to take a resource offline on which it depends. The plug-in rejects the request because processing the request would make the plug-in unavailable.

System action: Processing of the operation ends.

Operator response: Use another way to take this Microsoft Server Clustering resource offline.

EEZZ0012E **The automation adapter plug-in received a request to take the group** *groupName* **offline on behalf of user** *userID*. **The plug-in rejects this request.**

Explanation: The plug-in received a request to take a group offline on which it depends. The plug-in rejects the request because processing the request would make the plug-in unavailable.

System action: Processing of the operation ends.

Operator response: Use another way to take this Microsoft Server Clustering group offline.

EEZZ2001I **Performing request to bring resorce** *resourceName* **online on behalf of user** *userID*. **Specified comment: "** *comment* **".**

Explanation: The automation adapter plug-in received a request to bring the specified resource online. This request was already forwarded to Microsoft Server Clustering and did not report an error until now. Processing the request may still fail.

System action: Processing of the operation continues.

Operator response: Check for messages or other indications whether the request was successfully completed.

EEZZ2002I **Performing request to take resorce** *resourceName* **offline on behalf of user** *userID*. **Specified comment: "** *comment* **".**

Explanation: The automation adapter plug-in received a request to take the specified resource offline. This request was already forwarded to Microsoft Server Clustering and did not report an error until now. Processing the request may still fail.

System action: Processing of the operation continues.

Operator response: Check for messages or other indications whether the request was successfully completed.

EEZZ2003I **Performing request to bring group** *groupName* **online on behalf of user** *userID*. **Specified comment: "** *comment* **".**

Explanation: The automation adapter plug-in received a request to bring the specified group online. This request was already forwarded to Microsoft Server Clustering and did not report an error until now. Processing the request may still fail.

System action: Processing of the operation continues.

Operator response: Check for messages or other indications whether the request was successfully completed.

EEZZ2004I **Performing request to take group** *resourceName* **offline on behalf of user** *userID*. **Specified comment: "** *comment* **".**

Explanation: The automation adapter plug-in received a request to take the specified group offline. This request was already forwarded to Microsoft Server Clustering and did not report an error until now. Processing the request may still fail.

System action: Processing of the operation continues.

Operator response: Check for messages or other indications whether the request was successfully completed.

EEZZ2005I **Performing request to exclude node** *nodeName* **from the cluster on behalf of user** *userID*. **Specified comment: "** *comment* **".**

Explanation: The automation adapter plug-in received a request to exclude the specified node from the cluster. This request was already forwarded to Microsoft Server Clustering and did not report an error until now. Processing the request may still fail.

System action: Processing of the operation continues.

Operator response: Check for messages or other indications whether the request was successfully completed.

EEZZ2006I **Performing request to include node** *nodeName* **into the cluster on behalf of user** *userID*. **Specified comment: "** *comment* **".**

Explanation: The automation adapter plug-in received a request to include the specified node into the cluster. This request was already forwarded to Microsoft Server Clustering and did not report an error until now. Processing the request may still fail.

System action: Processing of the operation continues.

Operator response: Check for messages or other indications whether the request was successfully completed.

Chapter 8. Smart refresh messages

This chapter lists the messages that are generated by the Smart refresh function of the operations console.

AZPCTP001E The refresh interval {0} is not a valid number of seconds.

Explanation: The refresh interval represents the number of seconds that will pass before the page is refreshed. The value must be a number between 5 and 999.

Operator response: Enter a valid refresh interval and run the command again.

AZPCTP009E The refresh mode has been changed to the timed refresh mode because this browser type does not support smart refresh mode.

Explanation: This browser type does not support smart refresh mode, so the refresh mode was automatically changed to timed refresh.

Operator response: Change the browser to one of the browsers supported by the Tivoli Management Portal.

AZPCTP012E Your browser does not support XMLHTTP Objects.

Explanation: Without support for XMLHTTP objects, the smart refresh mode cannot be used.

Operator response: Switch to a supported browser or do not use the smart refresh mode. Use the timed refresh mode instead.

AZPCTP013E There was an error connecting to the server while checking the smart refresh.

Explanation: When checking to see if a smart refresh was needed, the HTTP connection to the server could not be established. This might be a temporary connectivity error, or this browser might not support XMLHTTP objects.

Operator response: If this error is always seen when using this browser, then this browser probably does not support XMLHTTP objects. These objects are required for smart refresh mode. To avoid this error, switch to a supported browser or do not use the smart refresh mode. If this error is not always seen when using this browser, this might be a temporary connectivity problem with the server.

AZPCTP014E The action {0} is not a valid action for this servlet.

Explanation: The servlet has received a POST request with an invalid action. The only valid action is GET_NEWCONTENTFLAG.

Operator response: This might be an erroneous request or an attack on this servlet

Programmer response: Check that the action being sent is GET_NEWCONTENTFLAG.

AZPCTP015E No action was received in the POST request for this servlet.

Explanation: The servlet has received a POST request with no specified action. The only valid action is GET_NEWCONTENTFLAG.

Operator response: This might be an erroneous request or an attack on this servlet

Programmer response: Check that the action being sent is GET_NEWCONTENTFLAG.

AZPCTP016E No sessionId was received in the POST request for this servlet.

Explanation: The servlet has received a POST request with no specified sessionId.

Operator response: Contact IBM software support. There is a communication problem between the browser and the Tivoli Management Portal that cannot be resolved by the user.

AZPCTP017E The refresh interval {0} is not a valid number of seconds.

Explanation: The refresh interval represents the number of seconds that will pass before the page is refreshed. Only the numerical values between 5 and 999 are valid.

Operator response: Enter a valid refresh interval and repeat the command.

AZPUTL001E Unable to retrieve a connection to the database.

Explanation: Cannot open a connection to the cloudscape database. The necessary JAR files containing the driver (db2j.jar) and license (license.jar) for the cloudscape database might have been deleted or moved out of <WAS_HOME>/AppServer/lib/app.

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AZPUTL001E

Operator response: Check to see if the necessary JAR files are present.

Chapter 9. Messages generated by the HACMP adapter and the end-to-end automation adapter of the base component

This chapter lists the messages that are generated by the HACMP adapter and the end-to-end automation adapter of the base component of IBM Tivoli System Automation for Multiplatforms.

SAMA0001E Failed to load library: *lib*, **message is:** *msg*.

Explanation: Loading a library failed. Either the library or a prerequisite library is not available.

System action: The automation adapter will not start.

Operator response: Try to identify which library cannot be loaded using the following steps. Use 'find -name' to find the library. Use 'ldd library' to determine which library is not available.

SAMA0002E Domain *domain* **went offline and the automation adapter is stopped.**

Explanation: An event indicated that the domain went offline. The automation adapter can only operate with a domain that is online. Therefore, the automation adapter is stopped.

System action: The automation adapter does not accept any further requests. The automation adapter is stopped.

Operator response: If the automation adapter is automated no action is required and it will be restarted when the domain comes back online. If the automation adapter is not automated, restart it using command 'samadapter start' after the domain has become online. Use command 'samadapter status' to find out if the automation adapter is automated.

SAMA0003E Request *req* **must not be applied on automated adapter resource** *res*.

Explanation: Automated resources that control the adapter cannot accept such request because it prevents correct automation of the adapter. For example, setting the adapter 'Offline' will cause the domain to become unreachable from the administration console.

System action: The request was not performed.

Operator response: Use only supplied scripts 'samadapter start' and 'samadapter stop' to control the adapter from one of the nodes in the SAMP domain.

SAMA0004E Request *req* **failed on resource** *res* **with message:** *msg*.

Explanation: The request could not be performed on the resource. The reason may be found in the message.

System action: The request was not performed.

Operator response: Examine the message for the reason why the request failed.

SAMA0005E Unable to build command from request *req* **for resource** *res*.

Explanation: The request could not be built for the resource. The reason may be that the command is not allowed on this type of resource.

System action: The request was not performed.

Operator response: A program has issued a request that is not supported for the resource. Have IBM support analyse the problem.

SAMA0006E Failed to reset resource *res*, **message is:** *msg*.

Explanation: An error occurred, when trying to reset the resource that was marked non recoverable. The reason may be found in the message.

System action: The request to reset the resource was not performed.

Operator response: Examine the message for the reason why the reset failed.

SAMA0007E Failed to obtain members of group *res*, **message is:** *msg*.

Explanation: An error occcured, when trying to obtain the members for resource. The reason may be found in the message.

System action: Due to the error no members contained in the resource were returned.

Operator response: Examine the message for the reason why obtaining contained resource failed.

SAMA0008E Failed to get top level resources, message is: *msg*.

Explanation: An error occurred, when trying to obtain resources that are not contained in other resources. The reason may be found in the message.

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System action: Due to the error no resources were returned.

Operator response: Examine the message for the reason why obtaining top level resource failed.

SAMA0009E Cannot establish remote access for operating console in direct mode, message is *msg*.

Explanation: Access from a remote operating console over RMI was specified in sam.adapter.plugin.properties. Attempting to provide the direct access failed.

System action: The adapter is not reachable from a remote operating console.

Operator response: Examine the message. Check the configuration of the adapter for direct access from a remote operating console.

SAMA0010E Failed to exclude node *node* from automation, message is *msg*.

Explanation: An error occurred, when trying to exclude the node from automation. The reason may be found in the message.

System action: Excluding the node was not performed.

Operator response: Examine the message for the reason why excluding the node failed.

SAMA0011E Failed to unsubscribe resource *res*, message is *msg*.

Explanation: An error occurred, when trying to remove the subsription for the resource. The reason may be found in the message.

System action: The subscription may not have been removed.

Operator response: Examine the message for the reason why removing the subscription failed.

SAMA0013E Failed establish a session, message is *msg*.

Explanation: Trying to establish an RMC session with the backend failed. Therefore, the request cannot be satisfied.

System action: No session with RMC is established.

Operator response: Examine the message to find out why the RMC session failed.

SAMA0016E Failed to include node *node* into automation, message is *msg*.

Explanation: An error occurred, when trying to include the node into automation. The reason may be found in the message.

System action: Including the node was not performed.

Operator response: Examine the message for the reason why including the node failed.

SAMA0018E Failed to subscribe resource *res*, message is *msg*.

Explanation: An error occurred, when requesting a subsription for the resource. The reason may be found in the message.

System action: The subscription has not been made.

Operator response: Examine the message for the reason why requesting the subscription failed.

SAMA0019E Failed to obtain details for domain *domain*, message is *msg*.

Explanation: The domain was retrieved successfully, but trying to obtain associated class information failed. The reason may be found in the message.

System action: The information for the domain is missing.

Operator response: Examine the message for the reason why obtaining the additional information failed.

SAMA0020E Failed to validate resource: *grp*.

Explanation: The resource for which a request was made does not exist.

System action: The request is not performed

Operator response: Use list commands to verify that the resource exists. If it does not exist, the resource had been removed. If it exists the request should be repeated.

SAMA0022E Failed to get resource relationships, message is *msg*.

Explanation: An error occurred when trying to get relationships between resources. The reason may be found in the message.

System action: No relationships were returned.

Operator response: Examine the message for the reason why the request failed.

SAMA0023E Failed to lookup resources, message is *msg*.

Explanation: An error occurred when trying to identify resources. The reason may be found in the message.

System action: No resource were returned.

Operator response: Examine the message for the reason why the request failed.

SAMA0024E Failed to get resources based on filter: *filter*, message is: *msg*.

Explanation: An error occurred when trying to get resources based on a filter. The reason may be found in the message.

System action: No filtered resource were returned.

Operator response: Examine the message for the reason why the request failed.

SAMA0025E Failed to get the parent resource for *res*, message is *msg*.

Explanation: An error occurred when trying to get parent of the resource. The reason may be found in the message.

System action: The parent resource was not returned.

Operator response: Examine the message for the reason why the request failed.

SAMA0026E Failed to get the resources on node *node*, message is *msg*.

Explanation: An error occurred when trying to get the resources that can run on the node. The reason may be found in the message.

System action: No resources on that node were returned.

Operator response: Examine the message for the reason why the request failed.

SAMA0027E Failed to refresh resources, message is *msg*.

Explanation: An error occurred when trying to refresh resources. The reason may be found in the message.

System action: No resource were refreshed.

Operator response: Examine the message for the reason why the request failed.

SAMA0028E Failed to get nodes of the domain, message is *msg*.

Explanation: An error occurred when trying to get the nodes in the domain. The reason may be found in the message.

System action: No nodes were returned.

Operator response: Examine the message for the reason why the request failed.

SAMA0029E Failed to get nodes from an equivalency, message is *msg*.

Explanation: An error occurred when trying to get the nodes from an equivalency. The reason may be found in the message.

System action: No nodes were returned.

Operator response: Examine the message for the reason why the request failed.

SAMA0033E Failed to get nodes excluded from automation, message is *msg*.

Explanation: An error occurred when trying to get the nodes that are excluded from automation. The reason may be found in the message.

System action: No nodes were returned.

Operator response: Examine the message for the reason why the request failed.

SAMA0034E Failed to enable event publishing in first-level automation manager, message is *msg*.

Explanation: The reason for failing to enable publishing may be an inoperative IBM.RecoveryRM. Details may be found in the message.

System action: Event publishing was not enabled.

Operator response: Examine the message for the reason why enabling event publishing failed.

SAMA0035E Adapter stops because domain *domain* is going offline.

Explanation: The adapter was notified by an event, that the domain is going offline. The adapter cannot continue to exist if the domain is offline. Therefore, the adapter is stopped.

System action: The adapter is stopped.

Operator response: If the domain went offline unexpectedly determine the reason. The domain can be restarted using command 'startrpmdomain <domain-name>'. If the domain is online and the adapter is automated it will restart automatically.

Otherwise, issue command 'samadapter start' to restart the adapter.

SAMA0036E Request *request* is not implemented.

Explanation: The request is currently not supported

System action: The request is not performed

Operator response: Check if a more recent version of the automation adapter is available that supports the request.

SAMA0037E No domain that is online was detected. Automation adapter is stopped.

Explanation: No online domain was found or an error occured when trying to query the domain. The automation adapter can only operate with a domain that is online. Therefore, the automation adapter is stopped.

System action: The automation adapter does not accept any further requests. The automation adapter is stopped.

Operator response: If the automation adapter is automated no action is required and it will be restarted when the domain comes back online. If the automation adapter is not automated, restart it using command 'samadapter start' after the domain has become online. Use command 'samadapter status' to find out if the automation adapter is automated.

SAMA0038E Request *req* on resource *res* returned with code: *rc*, and error message: *error*.

Explanation: The request returned with a non zero return code which indicates that it has not been successfully performed. The reason may be found in the message.

System action: The request was not performed.

Operator response: Examine the message for the reason why the request failed.

SAMA0039E Request *req* on resource *res* returned without result.

Explanation: The request did not respond with return code and message.

System action: Most likely the request was not performed.

Operator response: None. If the error persists. Examine the trace for other messages around that time.

SAMA0040E Login for user-ID *user* failed for an unknown reason, message is: *msg*

Explanation: The user-ID and password validation could not be performed because PAM returned with an error.

System action: NO requests will be accepted for this user-ID.

Operator response: Examine the message. Try to login again. Make sure you type the user-ID and password using correct upper and lower case characters.

SAMA0041E Login for user-ID *user* failed, message is: *msg*

Explanation: The user-ID and password failed validation on the node where the login was performed.

System action: NO requests will be accepted for this user-ID.

Operator response: Examine the message. Try to login again. Make sure you type the user-ID and password using correct upper and lower case characters.

SAMA0042E Login for user-ID *user* failed, because the user account expired, message is: *msg*

Explanation: The user account is expired.

System action: The request was not performed.

Operator response: Have the system administrator change the expiration date of the user account.

SAMA0043E Login for user-ID *user* failed, because the password expired, message is: *msg*

Explanation: The password is expired. Have the system administrator change the expiration date.

System action: The request was not performed.

Operator response: Have the password changed.

SAMA0044E Programming error detected, message is *error-msg*.

Explanation: The automation adapter detected an error that cannot be handled.

System action: A request may not have been processed.

Operator response: Contact IBM support with diagnostic information of the automation adapter.

SAMA0045E Failed to get nodes for resource group *res*, message is *msg*.

Explanation: An error occurred when trying to get nodes on which the resource group can run. The reason may be found in the message.

System action: The nodes were not returned.

Operator response: Examine the message for the reason why the request failed.

SAMA0046E Resource group *res* is already online on node *node*.

Explanation: Trying to start a resource group failed, because it is already online on that node. The state of the resource group was offline at the time when Request online was selected, but had changed to online when the request was tried to process.

System action: The online request is not performed, because the resource group is alread online.

Operator response: Since the goal was to have the resource group online on the node, no further action is required.

SAMA0047E Resource group *res* is already online on node *online-node* and therefore cannot be started on node *requested-node*.

Explanation: Trying to start a resource group on a specific node failed, because it is already online on another node.

System action: The online request is not performed.

Operator response: Check on which node the resource group is online. If the resource group must be online on another node, first bring offline on the node where it is online. Then repeat the online request on the other node.

SAMA0048E Adapter stops because domain *domain* is going offline.

Explanation: The adapter was notified by an event, that the domain represented by the cluster services had been stopped. The adapter cannot continue to exist on a node where the cluster services have been stopped. Therefore, the adapter is stopped.

System action: The adapter is stopped.

Operator response: If the cluster services stopped unexpectedly determine the reason. The cluster services can be restarted using smitty hacmp. If the cluster services are startedthe adapter is automated it will restart automatically. Otherwise, issue command 'hacadapter start' to restart the adapter.

SAMA0049E No domain that is online was detected. Automation adapter is stopped.

Explanation: The domain represented by the cluster services was not found online or an error occured trying to trying to query the domain. The automation adapter can only operate with a domain that is online. Therefore, the automation adapter is stopped.

System action: The automation adapter does not accept any further requests. The automation adapter is stopped.

Operator response: If the automation adapter is automated by HACMP no action is required and it will be restarted when the domain comes back online. If the automation adapter is not automated, restart it using command 'hacadapter start. Use command 'hacadapter status' to find out if the automation adapter is automated.

SAMA0050E Request *req* is not allowed, because domain *cluster* has SubState: *substate*. SubState: STABLE is required.

Explanation: The request can only be performed if the domain (cluster) is in SubState: STABLE.

System action: The automation adapter does not accept the request.

Operator response: Wait until the domain has reached SubState: STABLE. To check the SubState in the operations console select the domain and inspect the Cluster-SubState in tab Additional Info. Select Refresh all before inspecting the Cluster-SubState again. If the SubState does not change to STABLE within reasonable time use smitty hacmp > Problem determination to resolve the condition.

SAMA0051E Request *req* on resource *res* has already been submitted and is currently being performed.

Explanation: The request is pending in its execution and therefore will not be submitted again.

System action: The request was not performed.

Operator response: Wait for the pending command to complete. State changes in the resource may indicated that it has completed. If the log requires attention, view the log to see if the request failed.

SAMA0500W Event of type *type* are not processed in this version.

Explanation: The event of this type is not supported.

System action: The event is not processed.

Operator response: Check if a more recent version of the automation adapter is available that supports this type of event.

SAMA0501W Closing session failed.

Explanation: An error was encountered, when the session with RMC was closed.

System action: The session may not have been closed.

Operator response: None.

SAMA0502W Unable to locate resource with name: *name***, class:** *class***, node:** *node***.**

Explanation: The resource described in an event by name,class, and node could not be found.

System action: The resource is not updated with event information.

Operator response: None.

SAMA0503W Automation mode on domain *domain* **has changed from** *mode1* **to** *mode2***.**

Explanation: The automation mode can be Auto (resources are automated) or Manual (resources are only monitored).

System action: None.

Operator response: None.

SAMA0610I Command reset from non-recoverable error has been performed on resource *res* **on behalf of user** *userid***.**

Explanation: A user found a resource flagged with non-recoverable error by automation, which means the resource is not automated until a user issued the reset.

System action: The reset has been issued to the resource.

Operator response: No action is required. You can verify in the operations console if the resource is no more in error.

SAMA0611I Command *request* **has been performed on resource** *res* **with return code:** *rc* **on behalf of user** *userid* **with comment:** *comment***.**

Explanation: A user has issued a command that requests a change of the resource state. This command is being performed by automation on the indicated resource.

System action: The command has been issued to the resource.

Operator response: No action is required. You can verify in the operations console if the resource changed it state.

SAMA0612I Node *node* **has been excluded from automation on behalf of user** *userid***.**

Explanation: A user has requested to exclude the node from automation. See 'System action below'.

System action: Resources on that node are stopped by automation. Then automation tries to restart the resources on other nodes in the domain.

Operator response: No action is required. You can verify in the operations console if the resources had been restarted on other nodes in the domain, or that their new state is acceptable.

SAMA0613I Node *node* **has been included into automation on behalf of user** *userid***.**

Explanation: A user has requested to include the node into automation. See 'System action below'.

System action: Once the node has been included into automation, automation may try to start resources on the node.

Operator response: No action is required. You can verify in the operations console if resources are automated on the included node.

Part 4. Appendixes

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Appendix A. Default directories

The following table lists the default directory paths for which variables are used in this guide. The paths in your environment may differ, for example, if you changed the default path during the installation of the application or component.

Table 4. Default directories

Variable used in this guide	Default path
<DB2_install_location>	**Windows**: C:\Program Files\IBM\SQLLIB **AIX**: /usr/opt/db2_08_01 **Linux**: /opt/IBM/db2/V8.1
<EEZ_CONF_ROOT>	**Windows**: C:\Program Files\IBM\tsamp\eez\cfg **AIX/Linux**: /etc/opt/IBM/tsamp/eez/cfg
<EEZ_INSTALL_ROOT>	**Windows**: C:\Program Files\IBM\tsamp\eez **AIX/Linux**: /opt/IBM/tsamp/eez The configuration properties files are located in the directory <EEZ_CONF_ROOT>.
<isc_runtime_root>	**Windows**: C:\Program Files\IBM\ISC **AIX/Linux**: /opt/IBM/ISC
<hacmp_adapter_install_root>	**AIX**: /opt/IBM/tsamp/eez/hac
<hacmp_adapter_conf_root>	**AIX**: /etc/opt/IBM/tsamp/eez/hac/cfg
<mscs_adapter_install_root>	**Windows**: C:\Program Files\IBM\tsamp\eez\mscs
<mscs_adapter_conf_root>	**Windows**: C:\Program Files\IBM\tsamp\eez\mscs\cfg
<Tivoli_Common_Directory>	**Windows**: C:\Program Files\IBM\tivoli\common **AIX/Linux**: /var/ibm/tivoli/common The path to the Tivoli Common Directory is specified in the properties file log.properties. The file log.properties is located in the following directory: • **Windows**: C:\Program Files\IBM\tivoli\common\cfg • **AIX/Linux**: /etc/ibm/tivoli/common/cfg
<was_root>	**Windows**: C:\Program Files\IBM\WebSphere\AppServer **AIX**: /usr/IBM/WebSphere/AppServer **Linux**: /opt/IBM/WebSphere/AppServer

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Appendix B. Configuration properties files of the end-to-end automation management component

This chapter provides a short description of the configuration properties files of the end-to-end automation management component. During the installation of the component, the properties in the files are set to values that allow you to work with the sample end-to-end automation domain as described in "Part 2. First steps", in the *IBM Tivoli System Automation for Multiplatforms End-to-End Automation Management Component Administrator's and User's Guide*.

To change the values of the properties, you use the configuration dialog of the end-to-end automation management component. This ensures that the files are not corrupted during manual editing and that the change history in the files is updated whenever a property is changed.

For information about the configuration dialog, refer to the *IBM Tivoli System Automation for Multiplatforms Installation and Configuration Guide*. For a detailed description of the configuration properties, refer to the configuration dialog help.

The configuration properties files are located in the following directory:

- **Windows**: `<EEZ_INSTALL_ROOT>/cfg`
- **AIX/Linux**: `/etc/opt/IBM/tsamp/eez/cfg`

These are the properties files that are changed when you modify a property value in the configuration dialog:

`eez.automation.engine.properties`
: The properties in this file are used to configure exactly one instance of the automation engine. The configuration properties specify, for example, the name of the end-to-end automation domain and the location of the policy pool directory.

  You browse and edit the properties that are in the file on the Domain page of the configuration dialog.

`eez.automation.engine.dif.properties`
: The domain identification file of the automation engine contains the user IDs and the corresponding passwords that the end-to-end automation engine uses to authenticate itself to first-level automation domains and to the WebSphere Application Server JMS Provider.

  The file must be protected by means of operating system mechanisms in such a way that the automation engine is still able to read the contents of the file.

  You browse and edit the properties that are in the file on the User credentials page of the configuration dialog.

`eez.fla.ssl.properties`
: This file contains the configuration properties for the SSL connection to the first-level automation domains.

  You browse and edit the properties that are in the file on the Security page of the configuration dialog.

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eezjlog.properties

The properties in this file determine which information is written to the log and trace files of the automation engine.

You browse and edit the properties that are in the file on the Logger page of the configuration dialog.

sas.eezcs.properties

The properties in this file determine whether users of the end-to-end automation command shell must specify their user credentials to use the command shell.

You browse and edit the properties that are in the file on the Command shell page of the configuration dialog.

Appendix C. Configuration properties files of the HACMP adapter

This chapter provides a short description of the configuration properties files of the HACMP adapter.

To change the values of the properties, you use the configuration dialog of the HACMP adapter. This ensures that the files are not corrupted during manual editing.

For information about the HACMP adapter configuration dialog, refer to the *IBM Tivoli System Automation for Multiplatforms Installation and Configuration Guide*. For a detailed description of the configuration properties, refer to the configuration dialog help.

The configuration properties files are located in the following directory:

`<hacmp_adapter_install_root>/cfg`

Typically, this is

`/etc/opt/IBM/tsamp/eez/hac/cfg`

The following table lists the HACMP adapter properties files.

Table 5. HACMP adapter properties files

File	Description
`hac.adapter.properties`	This files contains properties that are required by the HACMP adapter and points to the file `hac.adapter.plugin.properties`. It contains the information required for the connection to the end-to-end automation manager or base component operations console, and runtime settings for the HACMP adapter. You browse and edit the properties that are in the file on the following pages of the configuration dialog: Adapter, Host using adapter, Security.
`hac.adapter.jaas.properties`	The file contains the LoginModule configuration for user authentication. The configurable property "service" is used by PAM to authenticate the user. "sshd" is the default. It can be changed to any service existing in the `pamd.conf` or `pam.d` directory to modify the level of checking. You browse and edit the property on the Security page of the configuration dialog.

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Table 5. HACMP adapter properties files (continued)

File	Description
`hac.adapter.jlog.properties`	This file controls the logging, tracing, and FFDC behavior of the HACMP adapter. You browse and edit the properties that are in the file on the Logger page of the configuration dialog.
`hac.adapter.plugin.properties`	This file contains non-modifyable details of the plug-in behavior.
`hac.adapter.ssl.properties`	This file contains settings that are used by SSL. You browse and edit the properties that are in the file on the Security page of the configuration dialog.
`hac.adapter.conf`	This file describes the automation configuration of the HACMP adapter. Adapter automation is required when the HACMP adapter runs in a HACMP cluster with multiple nodes to allow it to fail over to another node. You browse and edit the properties that are in the file on the Automation page of the configuration dialog.

Appendix D. Configuration properties files of the MSCS adapter

This chapter provides a short description of the configuration properties files of the MSCS adapter.

To change the values of the properties, you use the configuration dialog of the MSCS adapter. This ensures that the files are not corrupted during manual editing. The names of the properties files must never be changed.

For information about the MSCS adapter configuration dialog, refer to the *IBM Tivoli System Automation for Multiplatforms Installation and Configuration Guide*. For a detailed description of the configuration properties, refer to the configuration dialog help.

The configuration properties files are located in the following directory:

```
<mscs_adapter_install_root>\cfg
```

Typically, this is

```
C:\Program Files\IBM\tsamp\eez\mscs\cfg
```

The following table lists the MSCS adapter properties files.

Table 6. MSCS adapter properties files

File	Description
`eez.service.mscs.properties`	This file contains parameters needed for installing and uninstalling, and for running the MSCS adapter as service. The file is adapted to the target system during the installation. There is no need to modify the file after the installation is complete.
`mscs.adapter.jaas.properties`	This file controls how authentication is performed by the MSCS adapter. The installer copies this file to the target system without modifying it. There is no need to modify the file after the installation is complete.
`mscs.adapter.jlog.properties`	This file controls the logging, tracing, and FFDC behavior of the MSCS adapter. The installer copies this file to the target system without modifying it. The properties in the file may need to be modified after the installation is complete to support problem determination. You browse and edit the properties on the Logger page of the configuration dialog.

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Table 6. MSCS adapter properties files (continued)

File	Description
`mscs.adapter.plugin.properties`	This file controls the behavior of the MSCS specific Java plug-in class. In particular, it contains the name of the Microsoft Server Cluster which the MSCS adapter represents and the domain name that is used for the Microsoft Server Cluster in the end-to-end automation management component. The installer copies this file to the target system without modifying it. After installation, some parameters must be adapted to the target system. To browse and edit the properties, you use the MSCS adapter configuration dialog.
`mscs.adapter.properties`	This file controls the behavior of the generic MSCS adapter. In particular, it contains the IP address or network name under which the MSCS adapter can be reached by the end-to-end automation management component. The file is adapted to the target system during the installation. After installation, some parameters must be adapted to the target system. To browse and edit the properties, you use the MSCS adapter configuration dialog.
`mscs.adapter.ssl.properties`	This file controls the SSL configuration of the MSCS adapter if session encryption between the end-to-end automation management component and the adapter is requested. The installer copies this file to the target system without modifying it. After installation, some parameters must be adapted to the target system if SSL connections are desired. You browse and edit the properties on the Security page of the configuration dialog.

Appendix E. Additional state-related information about end-to-end automation resources

When you select an end-to-end automation resource in the resource table on the operations console, the Additional info page provides information about the internal states of the automated resource. The automation engine uses these internal states to calculate the common states that are displayed on the General page.

The internal states on the Additional Info page can help an experienced operator and IBM support to understand why a specific common state is shown on the General page. The information can be useful for finding the root cause of problems that the selected resource has encountered.

The internal states that appear on the Additional info page are described in the following sections. Note that these internal states are subject to change and are listed here for reference purposes only.

This is an example of an Additional info page:

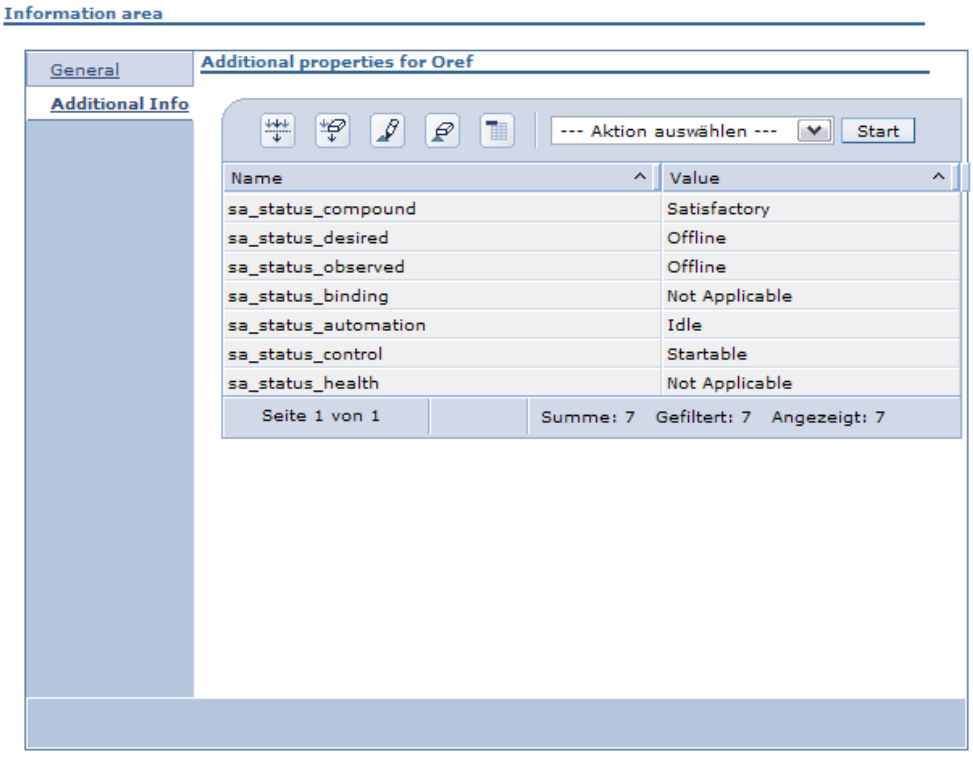

Figure 1. Additional info page for a resource reference

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The following tables lists the internal automation states.

Table 7. Internal automation states on the Additional info page

State	Description
sa_status_compound	Indicates if automation is being performed successfully or if a problem has occurred. For details, refer to "Values for sa_status_compound."
sa_status_desired	Indicates whether the desired state of the resource is Online or Offline. For details, refer to "Values for sa_status_desired" on page 143.
sa_status_observed	Indicates if the resource is currently running or if a problem has occurred. For details, refer to "Values for sa_status_observed" on page 143.
sa_status_binding	Indicates if the resource has been selected to run on a specific system. For end-to-end automation resources, this value is not used. It is always set to Not Applicable.
sa_status_automation	Indicates if the end-to-end automation manager is automating successfully or has encountered problems. For details, refer to "Values for sa_status_automation" on page 144.
sa_status_control	Provides additional information about sa_status_automation. For details, refer to "Values for sa_status_control" on page 144.
sa_status_health	Indicates if the resource has a performance problem. For end-to-end automation resources, this value is not used. It is always set to Not Applicable.

Values for sa_status_compound

This internal automation engine state can have the values that are listed in the following table.

Table 8. Values for sa_status_compound

sa_status_compound	Description
Null	The state is currently undefined.
Problem	Some problem occurred calculating this value.
Denied	This state appears for SA z/OS resources only. It indicates that the resource cannot be automated.
Inhibited	A resource on which this resource has dependencies is not in a satisfactory state.

Table 8. Values for sa_status_compound (continued)

sa_status_compound	Description
Awaiting Automation	Automation is in progress. An automation action has been triggered. The automation engine is waiting for a response.
InAutomation	Automation is in progress.
Degraded	In end-to-end automation: An interim state for groups that are being automated.
Satisfactory	Requested state matches the current state.

Values for sa_status_desired

This internal automation engine state can have the values that are listed in the following table.

Table 9. Values for sa_status_desired

sa_status_desired	Description
Null	The state is currently undefined.
Online	The current desired state of the resource is Online.
Offline	The current desired state of the resource is Offline.

Values for sa_status_observed

This internal automation engine state can have the values that are listed in the following table.

Table 10. Values for sa_status_observed

sa_status_observed	Description
Null	The state is currently undefined.
Unknown	The state has not been detected yet. The targeted first-level automation domain may not be online or the initial event that supplies the state information for the referenced resource has not yet been received.
SystemGone	The connection to the first-level automation domain was lost. In end-to-end automation, SystemGone is interpreted to mean that the first-level automation domain is gone.
Offline	The resource is currently offline.
Failed	The resource cannot be started.
PendingOnline	The resource is starting.
Online	The resource is currently online.
StuckOnline	The resource cannot be stopped.
PendingOffline	The resource is stopping.
WasOnline	The connection to the resource was lost.

Table 10. Values for sa_status_observed (continued)

sa_status_observed	Description
Ineligible	The resource is in standby mode.
InvalidReference	The referenced resource cannot be found in the targeted first-level automation domain.

Values for sa_status_automation

This internal automation engine state can have the values that are listed in the following table.

Table 11. Values for sa_status_automation

sa_status_automation	Description
Null	The state is currently undefined.
Unknown	The state has not been detected yet. The targeted first-level automation domain may not be online or the initial event that supplies the state information for the referenced resource has not yet been received.
SystemGone	The connection to the first-level automation domain was lost. In end-to-end automation, SystemGone is interpreted as First-level automation domain is gone.
Idle	No automation action is currently in progress for the selected resource.
Ordered	A request has been generated. If the selected resource is a resource reference, the request is being dispatched to the first-level automation domain.
Busy	The request has been accepted by the targeted resource. Automation is in progress.
Denied	This state appears for SA z/OS resources only. It indicates that the resource cannot be automated.
Problem	Automation has encountered a problem.
Internal	Automation is in progress.

Values for sa_status_control

This internal automation engine state can have the values that are listed in the following table.

Table 12. Values for sa_status_control

sa_status_control	Description
Null	The state is currently undefined.
Startable	The resource can be started.
NotStartable	Currently, the resource cannot be started.
StartInhibited	A dependency on another resource prevents the resource from being started.

Table 12. Values for sa_status_control (continued)

sa_status_control	Description
Denied	This state appears for SA z/OS resources only. It indicates that the resource cannot be automated.
StopInhibited	A dependency on another resource prevents the resource from being stopped.
NotControllable	The automation engine cannot control the resource.
NodeExcluded	The system or first-level automation domain that hosts this resource or referenced resource is currently excluded from automation.
NodeExcludedAndNotControllable	See the descriptions for NodeExcluded and NotControllable above.
BrokenReference	The end-to-end automation manager cannot contact the referenced resource in the first-level automation domain because an exception, for example, a security exception, has occurred.
ReferenceInError	The end-to-end automation resource is in an error state because the referenced resource has encountered an error. The error is not due to a problem within the end-to-end automation engine.
NonRecoverableError	The resource has encountered a problem that must be resolved by an operator. When the problem is resolved, a manual reset may be required.
NonRecoverableErrorAndNotControllable	The resource has encountered a problem that must be resolved by an operator. The automation engine cannot control the resource.
ResourceSuspended	Automation has been suspended for this resource.

Appendix F. Information about HACMP objects on the Additional Info page

On the Additional Info page, additional properties of the currently selected HACMP object are shown.

Figure 2 shows the Additional Info page for an HACMP resource group.

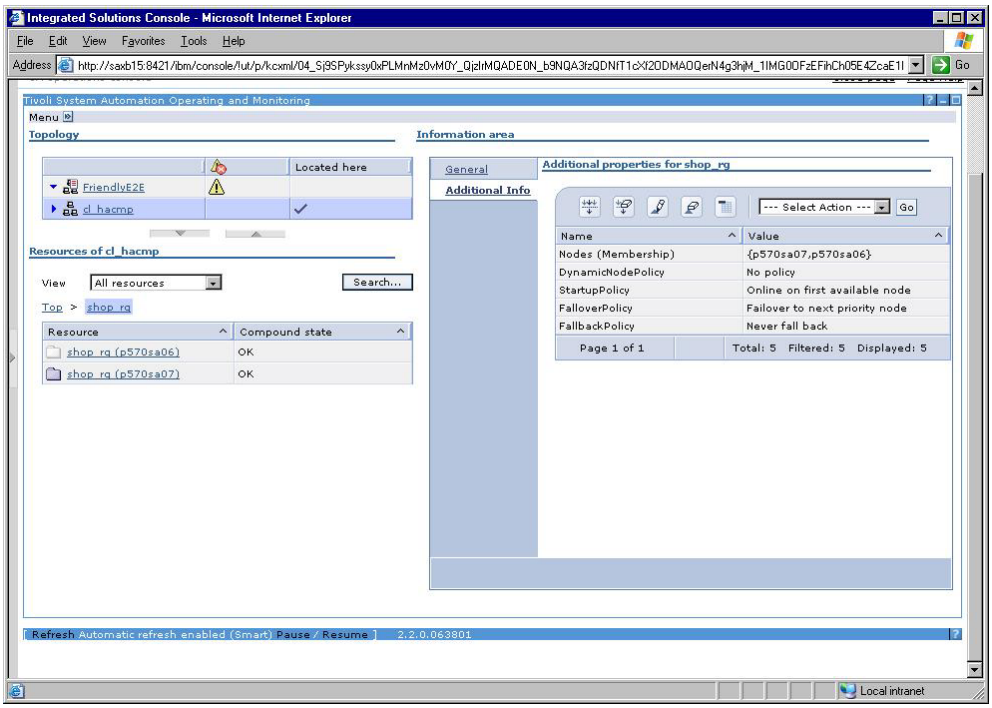

Figure 2. Additional Info page for an HACMP resource group

Which information is available on the page depends on the type of object you have selected. For a description of the information that is provided on the page, refer to the following chapters of the *HACMP Administration Guide Version 5.3, SC23-4862-07*:

Class	**Refer to the following chapter:**
IBM.HacmpResourceGroup	Configuring HACMP Resource Groups (Extended)
IBM.HacmpApplication	Configuring HACMP Application Servers Configuring Multiple Application Monitors
Domain	Configuring HACMP Cluster Topology (Extended)
IBM.HacmpNode	Configuring HACMP Cluster Topology (Extended)
IBM.HacmpServiceIP	Configuring Service IP Labels as HACMP Resources

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Appendix G. Information about Microsoft Server Clustering objects on the Additional Info page

On the Additional Info page, additional properties of the currently selected object are shown. For Microsoft Server Clustering (MSCS) domains, all common and private properties of the underlying MSCS object with the following types are displayed:

- DWORD
- String
- MultiString

In particular, common or private properties with type "binary" are not shown. Refer to the Microsoft Server Clustering documentation for more information on the available common and private properties.

Example:
MSCS resources of resource type ″IP Address″ have a private property named ″Address″ representing the desired IP address of the resource. On the operations console, this private property is shown on the ″Additional Info″ page as an additional property.

In addition to the common and private properties mentioned above, the MSCS adapter adds some additional properties depending on the particular MSCS object:

MSCS cluster

- Property ″ClusterName″: The name of the MSCS cluster adapted by the MSCS adapter of SA for Multiplatforms.
- Property ″QuorumResourceName″: The name of the MSCS resource which is the quorum resource in the MSCS cluster adapted by the MSCS adapter of SA for Multiplatforms.

MSCS group

- Property ″OwnerNodeName″: The name of the node in the MSCS cluster adapted by the MSCS adapter of SA for Multiplatforms which currently owns the group.
- Property ″PreferredOwnerNodeNames″: The names of the nodes in the MSCS cluster adapted by the MSCS adapter of SA for Multiplatforms which are preferred owners of the group.

MSCS resource

Property ″MSCSResourceType″: The type name of the MSCS resource.

Figure 3 on page 150 shows the Additional Info page for an MSCS resource.

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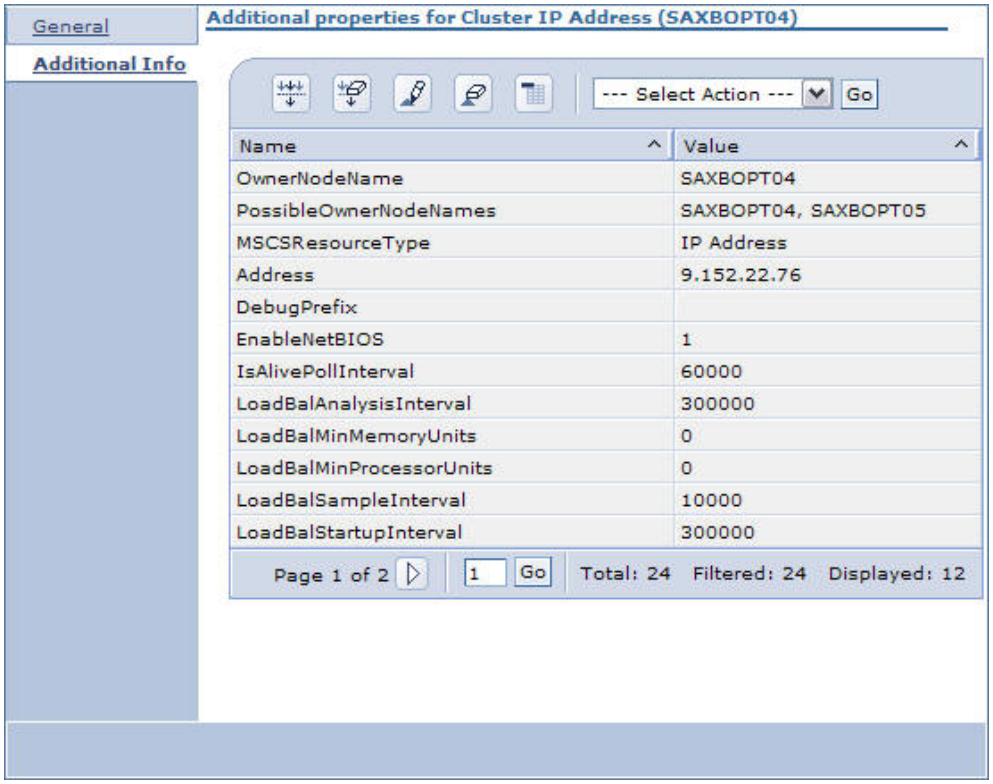

Figure 3. Additional Info page for an Microsoft Server Clustering resource

Appendix H. Operations console icons

The sections in this appendix provide an overview of how to interpret the icons that are displayed on the operations console.

Icons in the topology tree

The following table lists the domain icons that are displayed in the topology tree.

Table 13. Domain icons on the operations console

Icon	Description
	An automation domain in online state.
	An automation domain in offline state.
	A node in an automation domain. The node is online.
	A node in an automation domain. The node is offline.

The following table shows the so-called decorator icons that can be seen in various combinations together with the domain and node icons represented in the table above.

Each decorator icon has a special meaning and may coexist with an arbitrary number of other decorator icons presented in this table.

Table 14. Automation domain and node decorator icons

Icon	Description
	At least one resource event was lost.
	A new severe error message has been added to the log file of the domain.
	Commands and queries can be issued against the automation domain but resource events cannot be received.
	No commands and queries can be issued against the automation domain.
	No commands and queries can be issued against the automation domain and no resource events can be received.
	The node has been excluded from automation.

Examples:
The following table shows some examples of domain and node icons with decorators.

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Icon	Description
	The domain is online. No commands or queries can be issued against the domain but resource events can be received. A new severe error message has been added to the log file of the domain.
	The domain is offline. At least one resource event was lost.
	The node is offline. It is excluded from automation.

Resource icons

The following table lists the icons that are displayed in the resources section and information area.

Table 15. Resource icons

Icon	Description
	A first-level automation resource in online state.
	A first-level automation resource in offline state.
	A resource reference in the end-to-end automation domain in online state.
	A resource reference in the end-to-end automation domain in offline state. **Note:** The observed state Offline is always indicated by a grayed-out icon. This is true for icons representing resources, resource groups, resource references, referenced resources, and referenced resource groups.
	A first-level automation resource that is referenced by a resource reference in the active end-to-end automation policy (referenced resource). The resource is online.
	A resource group in online state.
	A first-level automation group that is referenced by a resource reference in the active end-to-end automation policy (referenced group). The group is online.
	A choice group of an end-to-end automation domain or a first-level automation move group. The group is online. For a choice group this means that the preferred member is online and the other members are offline.
	A move group that is hosted by a first-level automation domain. The move group is referenced in the active end-to-end automation policy (referenced move group). The group is online.

The following table shows the decorator icons that may be seen with resource icons.

Table 16. Resource decorator icons

Icon	Description
	The warning icon indicates that the resource is in state Warning.
	The red error icon indicates that the resource is in state Error.

Table 16. Resource decorator icons (continued)

Icon	Description
	The black error icon indicates that the resource is in an error state from which it cannot be recovered by system automation.
	The green operator icon indicates that a request was submitted by an operator against this resource and that the request was completed successfully.
	The yellow operator icon indicates that a request was submitted by an operator against this resource. The request has not yet been completed. The resource state does not match the state requested by the operator.
	Automation has been suspended for this resource. The automation manager will not react on state changes by automatically starting or stopping this resource until automation is resumed.

Examples:
The following table shows some examples of resource icons with decorators.

Icon	Description
	The resource reference is offline. The warning icon indicates that the resource is in state Warning.
	The resource reference is online. Automation is suspended for this resource reference. The red error icon indicates that the resource reference is in state Error. The yellow operator icon indicates that a request was submitted by an operator against this resource reference. The request has not yet been completed. The resource state does not match the state requested by the operator.
	A first level automation resource group that is referenced by a resource reference in the active end-to-end automation policy. The group is offline. The red error icon indicates that the resource is in state Error. The green operator icon indicates that a request was submitted by an operator against this resource and that the request was completed successfully.
	A choice group of an end-to-end automation domain or a first-level automation move group. The group is online. Automation has been suspended for this group. The black error icon indicates that the resource is in an error state from which it cannot be recovered by system automation.

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Glossary

This glossary defines technical terms and abbreviations used in end-to-end automation management documentation.

If you do not find the term you are looking for, refer to the *IBM Dictionary of Computing Terms*, located at http://www.ibm.com/networking/nsg/

In the glossary, glossary items are shown in *italics* where they are used in definitions for other items.

A

administrator. A person who configures and administers applications and components and creates and maintains policies.

automated resource. A resource that is managed by an automation manager.

automation engine. The subcomponent of end-to-end automation management that makes the automation decisions based on the policy.

C

choice group. An end-to-end automation resource group whose members are alternatives. Only one of the members can be active at a time. If the desired state of the choice group is Online, the end-to-end automation manager tries to keep the active resource online but will only start the resource in place if it fails. An operator can start a different member of a choice group from the operations console.

configuration dialog. The graphical user interface that is used to configure the end-to-end automation management component.

D

desired state. The automation goal of a resource that is pursued by the automation manager.

direct access mode. The operations console mode in which only resources that are automated by the Base component of IBM Tivoli System Automation for Multiplatforms can be managed and monitored from the console.

domain health indicator. A resource whose state is used to indicate whether or not a domain is healthy. If the observed state of such a resource differs from its desired state, an error or a warning appears on the operations console for the domain by which it is hosted.

E

end-to-end automation management. (1) The component of IBM Tivoli System Automation for Multiplatforms that allows the automation of resources that are hosted by different first-level automation domains. (2) The automation tasks that are performed by the subcomponents of the end-to-end automation management component.

end-to-end automation mode. The operations console mode in which end-to-end automation management is installed and active. In this mode, resources that are hosted by the end-to-end automation domain and by first-level automation domains can be monitored and managed from the operations console.

Extensible Markup Language. A meta-language for defining specialized markup languages. An *XML* (Extensible Markup Language) document has a hierarchical structure of tags and attributes according to a specific syntax. XML documents are plain text documents and thus platform and language independent.

F

first-level automation mode. The operations console mode in which only resources that are hosted by a first-level automation domain can be monitored and managed from the console. To run the operations console in this mode, the end-to-end automation management component must be installed but end-to-end automation management must not be active.

first-level automation resource. A resource that is automated by a first-level automation product, such as the Base component of IBM Tivoli System Automation for Multiplatforms or IBM Tivoli System Automation for z/OS.

I

installation phase. The tasks that are performed after the **Install** button is clicked in the installation wizard (contrast with *pre-installation phase*).

ISC. See *Integrated Solutions Console*.

Integrated Solutions Console. An application running in WebSphere Application Server in which multiple

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IBM applications can be installed which can be accessed from a single Web interface. The operations console is installed in Integrated Solutions Console.

L

LDAP. See *Lightweight Directory Access Protocol*.

Lightweight Directory Access Protocol. A directory service protocol that runs over TCP/IP.

Lightweight Third Party Authentication. An authentication framework that allows single sign-on across a set of servers that fall within a domain.

LTPA. See *Lightweight Third Party Authentication*

M

member. A constituent of a group.

monitor resource. A first-level automation resource whose current state can be monitored from the operations console but whose desired state cannot be changed through start and stop requests that are submitted from the console.

N

nested groups. Groups that are members of other groups.

node. A physical system on which first-level automation resources are located.

O

operations console. The graphical user interface from which automated resources can be monitored and managed.

operator. A person who monitors and manages automated resources from the operations console.

P

policy. The list of resources that are managed by end-to-end automation management, their relationships, and the set of rules that determines the behavior of the end-to-end automation manager.

policy checking tool. The tool that ensures that each policy is syntactically correct and complies with the end-to-end automation-specific rules. In end-to-end automation management, each policy is checked automatically before it is activated.

preferred member. The member of a choice group which is kept online by the automation manager if the desired state of the choice group is online. Operators can change the preferred member from the operations console.

pre-installation phase. The tasks that are performed before the **Install** button is clicked in the installation wizard (contrast with *installation phase*).

R

referenced resource. A first-level automation resource for which a resource reference has been defined in the active end-to-end automation policy.

relationship. A start or stop dependency between two resources that results in a specific automation behavior. Relationships are defined in end-to-end automation policies.

request. A method for changing the automation goal for a resource. In end-to-end automation management, Online and Offline request are used to start or stop resources.

resource. (1) In IBM Tivoli System Automation, any component, job, device, or target system capable of being monitored or automated through IBM Tivoli System Automation. (2) Any element that can be automated, monitored and managed as one unit, for example, individual resources, resource groups, and choice groups.

resource group. A collection of resources that have the same desired state and are monitored and managed as one unit. In end-to-end automation management, resource groups can comprise resource references, resource groups, and choice groups.

resource reference. A virtual resource that is managed by the end-to-end automation manager. Resource references are defined in a policy and reference to actual resources that are hosted by first-level automation domains (see *referenced resource*).

S

Secure Sockets Layer. A security protocol that ensures the data that is transferred between a client and a server remains private.

SSL. See *Secure Sockets Layer*

T

top-level resource. In end-to-end automation, a resource that is displayed at the topmost level in the resource tree for a domain. Typically, these are resources that are either not members of a group, or groups that are not nested within other groups. By default, such resources are used as *domain health indicators*.

U

user credentials. The information used for user authentication, for example, the signon information for a user (user ID and password).

V

vote. An internal request to change the *desired state* of a resource. Votes are generated by an automation manager against resources that have to be started or stopped because an Online or Offline request was issued against an automation resource that has start or stop dependencies.

X

XML. See *Extensible markup language*.

XML policy. An XML file that contains the policy definitions for an end-to-end automation policy.

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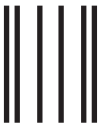

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