

NAME

bkconsdata - back up console data

SYNOPSIS

```
bkconsdata -r { dvd | ftp | nfs }  
[-h host-name] [-u user-ID] [--passwd password]  
[-l mount-resource-location] [-o "mount-command-options"]  
[--help]
```

DESCRIPTION

bkconsdata backs up critical Hardware Management Console (HMC) data, which is HMC data that is stored on the HMC hard disk. This backup data may be used to restore the HMC if the HMC needs to be reinstalled from the HMC recovery CDs in the event of an HMC hard disk failure.

OPTIONS

- r** The archive option for the backup data. Valid values are **dvd** for the DVD drive on the HMC, **ftp** for a remote FTP site, or **nfs** for an NFS mounted remote file system.

- h** The host name or IP address of the remote FTP or NFS server.

 This option is required when backing up the data to a remote FTP site or NFS file system. Otherwise, this option is not valid.

- u** The user ID to use to log in to the remote FTP site.

 This option is required when backing up the data to a remote FTP site. Otherwise, this option is not valid.

- passwd**
 The password to use to log in to the remote FTP site. If this option is omitted, you will be prompted to enter the password.

 This option is only valid when backing up the data to a remote FTP site.

- l** The mount resource location defined on the NFS server where the backup data will be written.

 This option is required when backing up the data to a remote NFS file system. Otherwise, this option is not valid.

- o** Options to be passed to the **mount** command used to mount the remote NFS file system where the backup data will be written. The options must be enclosed in double quotes.

 This option is only valid when backing up the data to a remote NFS file system.

- help** Display the help text for this command and exit.

EXAMPLES

Back up critical HMC data to DVD:

```
bkconsdata -r dvd
```

Back up critical HMC data to a remote FTP site:

```
bkconsdata -r ftp -h ftpserver -u ftpuser  
--passwd ftppassword
```

Back up critical HMC data to an NFS mounted remote file system:

```
bkconsdata -r nfs -h 9.3.145.52 -l /home/hmc/backups
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

bkprofdata - back up profile data

SYNOPSIS

bkprofdata -m *managed-system* **-f** *file* [**--help**]

DESCRIPTION

bkprofdata backs up profile data for the *managed-system*.

The **rstprofdata** command can be used to restore profile data for the *managed-system*.

OPTIONS

- m** The name of the managed system for which to back up profile data. The name may either be the user-defined name for the managed system, or be in the form *tttt-mmm*sssssss*, where *tttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *tttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- f** The name of the backup file where the profile data is to be written. If *file* is not fully qualified, *file* will be written to the */var/hsc/profiles/serial-number* directory on the HMC (*serial-number* is the serial number of the managed system).
- help** Display the help text for this command and exit.

EXAMPLES

Back up the profile data to a file called myFile. A floppy diskette must have already been inserted into the diskette drive and the mount command must have already been issued:

```
bkprofdata -m mySystem -f /mnt/floppy/myFile
```

Back up the profile data to a file called backup1. The file will be written to the */var/hsc/profiles/3413444* directory on the HMC:

```
bkprofdata -m 9406-570*3413444 -f backup1
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

rstprofdata

NAME

chaccfg - change access control configuration

SYNOPSIS

```
chaccfg -t {resourcerole | taskrole}
        {-f configuration-file | -i "configuration-data"}
        [--help]
```

DESCRIPTION

chaccfg changes the configuration of an access control role.

OPTIONS

- t** The type of access control role to change. Valid values are **resourcerole** for managed resource role and **taskrole** for task role.
- f** The name of the file containing the configuration data needed to change the access control role. The configuration data consists of attribute name/value pairs, which are in comma separated value (CSV) format. These attribute name/value pairs form a configuration record. A line feed marks the end of a configuration record. There can only be one configuration record in the file.

The format of a configuration record is as follows:

```
attribute-name=value,attribute-name=value,...<LF>
```

Note that certain attributes accept a comma separated list of values, as follows:

```
"attribute-name=value,value,...",...<LF>
```

When a list of values is specified, the attribute name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\` character.

If `'+='` is used in the attribute name/value pair instead of `'='`, then the specified *value* is added to the existing value for the attribute if the attribute is numerical. If the attribute is a list, then the specified *value(s)* is added to the existing list.

If `'-='` is used in the attribute name/value pair instead of `'='`, then the specified *value* is subtracted from the existing value for the attribute if the attribute is numerical. If the attribute is a list, then the specified *value(s)* is deleted from the existing list.

The `'+='` and `'-='` operators can only be used when changing a managed resource role.

Attribute names for managed resource roles:

- name**
name of the managed resource role to change (required)
- resources**
comma separated list of managed resource objects (required)

Attribute names for task roles:

- name**
name of the task role to change (required)
- resources**
comma separated list of tasks (required)
- parent**

name of the parent task role on which to base this task role (optional). Valid values are **hmcsuperadmin**, **hmcoperator**, **hmcviewer**, **hmcpe**, **hmcservicerep**, or a user-defined task role.

The **-f** and the **-i** options are mutually exclusive.

- i** This option allows you to enter configuration data on the command line, instead of using a file. Data entered on the command line must follow the same format as data in a file, and must be enclosed in double quotes.

The **-i** and the **-f** options are mutually exclusive.

- help** Display the help text for this command and exit.

EXAMPLES

Change the managed resource objects for the managed resource role **lpar_role** where **XXX** is a resource name returned from **lsaccfg -t resource --script**:

```
chaccfg -t resourcerole -i "name=lpar_role,resources=XXX"
```

Add a managed resource object to the managed resource role **mr1** where **XXX** is a resource name returned from **lsaccfg -t resource --script**:

```
chaccfg -t resourcerole -i "name=mr1,resources+=XXX"
```

Change the task role **tr1**:

```
chaccfg -t taskrole -i "name=tr1,"resources=
cec:chhwres+chsysstate,lpar:chhwres+chled+chsyscfg""
```

Change a task role using the configuration data in the file **/tmp/cfgFile**:

```
chaccfg -t taskrole -f /tmp/cfgFile
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lsaccfg, **mkaccfg**, **raccfg**

NAME

chcod - change Capacity on Demand

SYNOPSIS

To enter a CoD code:

```
chcod -o e -m managed-system -k CoD-code
```

To activate On/Off CoD resources:

```
chcod -o a -m managed-system -c onoff -r {mem | proc}
-q quantity-of-resources -d number-of-days
```

To activate Reserve CoD processors:

```
chcod -o a -m managed-system -c reserve -r proc
-q quantity-of-processors
```

To deactivate all On/Off CoD, all Reserve CoD, or all Trial CoD resources:

```
chcod -o d -m managed-system
-c {onoff | reserve | trial} -r {mem | proc}
```

DESCRIPTION

chcod performs Capacity on Demand (CoD) operations on the *managed-system*.

chcod is used to enter a CoD code for the *managed-system*. It is also used to activate On/Off CoD and Reserve CoD resources, or to deactivate On/Off CoD, Reserve CoD, or Trial CoD resources. CoD resources are either memory or processors.

OPTIONS

-o The CoD operation to perform. Valid values are **e** to enter a CoD code, **a** to activate On/Off CoD or Reserve CoD resources, and **d** to deactivate all On/Off CoD, all Reserve CoD, or all Trial CoD resources.

To change the number of Reserve CoD processors that are currently activated, specify an activate operation with this option, and specify the total number of activated Reserve CoD processors that you want with the **-q** option. An activate operation is to be used regardless of whether the total number of activated Reserve CoD processors is being increased or decreased. A deactivate operation is to be used only when you no longer want to have any activated Reserve CoD processors. A deactivate operation will deactivate all Reserve CoD processors.

Note that CUoD and Trial CoD resources are activated by entering CoD codes.

-m The name of the managed system for which the CoD operation is to be performed. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

-k The CoD code (key) to enter. Letters may be entered in either upper case or lower case.

-c The CoD type. Valid values are **onoff** for On/Off CoD, **reserve** for Reserve CoD, and **trial** for Trial CoD.

-r The CoD resource type. Valid values are **mem** for memory and **proc** for processors.

-q The quantity of On/Off CoD or Reserve CoD resources to activate. The value specified must be a whole number which is greater than 0.

When activating On/Off CoD memory, the value specified must be in megabytes, and it must be a multiple of 1024 megabytes.

- d** The number of days to activate the On/Off CoD resources. The value specified must be a whole number which is greater than 0.
- help** Display the help text for this command and exit.

EXAMPLES

Enter a CoD code:

```
chcod -m sys1 -o e -k AlphaNumericString12345
```

Activate 2 GB of On/Off CoD memory for 10 days:

```
chcod -m 9406-570*1001CA -o a -c onoff -r mem -q 2048  
-d 10
```

Activate 2 On/Off CoD processors for 5 days:

```
chcod -m sys1 -o a -c onoff -r proc -q 2 -d 5
```

Activate 3 Reserve CoD processors:

```
chcod -m 9406-570*1001CA -o a -c reserve -r proc -q 3
```

Decrease the number of activated Reserve CoD processors from 3 to 1:

```
chcod -m sys1 -o a -c reserve -r proc -q 1
```

Deactivate all On/Off CoD processors:

```
chcod -m sys1 -o d -c onoff -r proc
```

Deactivate all Reserve CoD processors:

```
chcod -m sys1 -o d -c reserve -r proc
```

Deactivate all Trial CoD memory and stop the trial:

```
chcod -m 9406-570*1001CA -o d -c trial -r mem
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lscod

NAME

chhmc - change Hardware Management Console configuration information

SYNOPSIS

To change remote access settings:

```
chhmc -c {ssh | http | websm| xntp}  
  -s {enable | disable}  
  [--help]
```

To add or remove an entry in the syslog configuration file:

```
chhmc -c syslog  
  -s {add | remove}  
  {-a IP-address | -h host-name}  
  [--help]
```

To add or remove an entry in the network time protocol configuration file:

```
chhmc -c xntp  
  -s {add | remove}  
  {-a IP-address | -h host-name}  
  {--ntpversion 1 | 2}  
  [-nm network-mask]  
  [-i interface]  
  [--help]
```

To configure whether keyboard mapping configuration will occur at the next reboot:

```
chhmc -c kbdcfg  
  -s {enable | disable}  
  [--help]
```

To permit or deny IP addresses from utilizing HMC services:

```
chhmc -c {ssh | websm | http | service}  
  -s {add | remove}  
  -a IP-address  
  [-nm network-mask]  
  [-i interface]  
  [--help]
```

If **-nm** is omitted, the default network mask will be 255.255.255.255.

If **-i** is omitted, the rule will be applied to all interfaces.

To add or remove entries from the DNS server search order or the domain suffix search order:

```
chhmc -c network  
  -s {add | remove}  
  [-ns DNS-server]  
  [-ds domain-suffix]  
  [--help]
```

To change network settings for a specific network interface:

```
chhmc -c network  
  -s modify  
  -i interface  
  [-a IP-address]
```


[-nm network-mask]
 [--lparcomm {on | off}]
 [--help]

To change other network settings:

chhmc -c network
-s modify
[-h host-name]
[-d network-domain-name]
[-g gateway]
 [--help]

DESCRIPTION

chhmc changes Hardware Management Console (HMC) configuration information, such as remote access settings and network settings.

OPTIONS

- c** The type of configuration to be modified. Valid values are **ssh**, **websm**, **http**, **syslog**, **xntp**, **network**, and **service**.
- s** The new state value of the configuration. Valid values are **enable**, **disable**, **add**, **modify**, and **remove**.
- i** The interface to configure, such as eth0.
- a** The network IP address.
- nm** The network mask.
- lparcomm**
 The LPAR communication setting for the network interface.
- d** The network domain name.
- h** The host name.
- g** The default gateway IP address.
- ns** The nameserver IP address to add or remove.
- ds** The domain suffix to add or remove.
- ntpversion**
 The ntp version if the server is not at NTP version 3 and above.
- help** Display the help text for this command and exit.

EXAMPLES

To change the Hardware Management Console host name:

chhmc -c network -s modify -h mynewhost

To set the IP address and network mask for network interface eth0:

```
chhmc -c network -s modify -i eth0 -a 10.10.10.1  
-nm 255.255.255.0
```

To enable remote access via ssh:

```
chhmc -c ssh -s enable
```

To disable remote access via http:

```
chhmc -c http -s disable
```

To enable remote access via websm:

```
chhmc -c websm -s enable
```

To add host myhost.company.com to the syslog configuration file, for remote logging:

```
chhmc -c syslog -s add -a 10.10.10.2
```

To enable keyboard mapping configuration to occur on the next reboot:

```
chhmc -c kbdfg -s enable
```

To permit a single IP address to use the ssh service over network interface eth0:

```
chhmc -c ssh -s add -a 10.10.10.3 -nm 255.255.255.255  
-i eth0
```

To permit a range of IP addresses to use the http service over network interface eth1:

```
chhmc -c http -s add -a 10.10.10.0 -nm 255.255.255.0  
-i eth1
```

To permit a single IP address to use the websm service over all network interfaces:

```
chhmc -c websm -s add -a 10.10.10.3 -nm 255.255.255.255
```

To enable Network Time Protocol service:

```
chhmc -c xntp -s enable
```

To add a Network Time Protocol server to the configuration file:

```
chhmc -c xntp -s add mytimeserver.company.com
```

Specify the hostname will not change firewall rule settings. It is assumed that the user will use the Customize Network Settings to change firewall settings.

To add a Network Time Protocol server to the configuration file, using IP address and at the same time enable firewall access through network interface eth0:

```
chhmc -c xntp -s add -a 10.10.10.32 -i eth0
```

To remove a Network Time Protocol server from the configuration file:

```
chhmc -c xntp -s remove mytimeserver.company.com
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lshmc

NAME

chhmcusr - change a Hardware Management Console user

SYNOPSIS

```
chhmcusr -u user-name
-t {assign | desc | name | passwd | pwage | taskrole}
[-o {a | r}] [-r {resource | resourcerole}]
[-v new-attribute-value] [--help]
```

DESCRIPTION

chhmcusr changes an attribute of a Hardware Management Console (HMC) user.

OPTIONS

- u** The user name of the HMC user to change.
- t** The user attribute to change. Valid values are **assign** for the user's access control managed resource object assignment or managed resource role assignment, **desc** for the user's description, **name** for the user's user name, **passwd** for the user's password, **pwage** for the number of days until the user's password expires, and **taskrole** for the user's access control task role.
- o** The managed resource object or role assignment operation to perform. Valid values are **a** to add a managed resource object or role to the user and **r** to remove a managed resource object or role from the user.

This option is required when changing the user's managed resource object assignment or managed resource role assignment. This option is not valid when changing any other user attribute.

- r** The type of access control assignment to change. Valid values are **resource** for managed resource object assignment and **resourcerole** for managed resource role assignment.

This option is required when changing the user's managed resource object assignment or managed resource role assignment. This option is not valid when changing any other user attribute.

- v** The new value for the attribute being changed.

When changing the user's managed resource object assignment, specify the managed resource object to be added or removed.

When changing the user's managed resource role assignment, specify the managed resource role to be added or removed.

When changing the user's description, specify the new description with this option. The new description can be any string.

When changing the user's user name, specify the new user name with this option. The new user name must not be longer than 32 characters, and it must begin with a letter.

When changing the user's password, you can either specify the new password with this option, or you can omit this option and you will be prompted to enter the password. The new password must be at least 7 characters in length.

When changing the number of days until the user's password expires, specify the new number of days with this option.

When changing the user's access control task role, specify the new task role with this option. Valid values are **hmcsuperadmin**, **hmcoperator**, **hmcviewer**, **hmcpe**, **hmcservicerep**, or a user-defined task role.

This option is required when changing any user attribute other than the user's password.

--help Display the help text for this command and exit.

EXAMPLES

Add the managed resource role **lpar_role** to the user **hmcuser1**:

```
chhmcusr -u hmcuser1 -t assign -o a -r resourcerole -v  
lpar_role
```

Change the password for the user **tester** (the new password must be entered when prompted):

```
chhmcusr -u tester -t passwd
```

Change the number of days until the password expires for the user **hmcuser1** to be **180**:

```
chhmcusr -u hmcuser1 -t pwage -v 180
```

Change the task role for the user **tester** to **hmcoperator**:

```
chhmcusr -u tester -t taskrole -v hmcoperator
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lshmcusr, mkhmcusr, rmhmcusr, lsaccfg

NAME

chhwres - change hardware resources

SYNOPSIS

To add, remove, or move a physical I/O slot:

```
chhwres -r io -m managed-system -o {a | r | m}
  {-p partition-name | --id partition-ID}
  [{-t target-partition-name |
  --tid target-partition-ID}]
-l slot-DRC-index [-a "attributes"]
[-w wait-time] [-d detail-level] [--force]
```

To set physical I/O attributes:

```
chhwres -r io -m managed-system -o s
  {-p partition-name | --id partition-ID}
--rsubtype {iopool | taggedio}
-a "attributes"
```

To add or remove a virtual I/O adapter:

```
chhwres -r virtualio -m managed-system -o {a | r}
  {-p partition-name | --id partition-ID}
--rsubtype {eth | scsi | serial}
-s virtual-slot-number [-a "attributes"]
[-w wait-time] [-d detail-level] [--force]
```

To set virtual I/O attributes:

```
chhwres -r virtualio -m managed-system -o s
  [{-p partition-name | --id partition-ID}]
--rsubtype {eth | hsl | virtualopti}
-a "attributes"
```

To add, remove, or move memory:

```
chhwres -r mem -m managed-system -o {a | r | m}
  {-p partition-name | --id partition-ID}
  [{-t target-partition-name |
  --tid target-partition-ID}]
-q quantity
[-w wait-time] [-d detail-level] [--force]
```

To add, remove, or move processing resources:

```
chhwres -r proc -m managed-system -o {a | r | m}
  {-p partition-name | --id partition-ID}
  [{-t target-partition-name |
  --tid target-partition-ID}]
  [--procs quantity] [--procunits quantity]
  [--5250cpwpercent percentage]
[-w wait-time] [-d detail-level] [--force]
```

To set processing attributes:

```
chhwres -r proc -m managed-system -o s
  {-p partition-name | --id partition-ID}
-a "attributes"
```

DESCRIPTION

chhwres changes the hardware resource configuration of the *managed-system*. **chhwres** is used to perform dynamic logical partitioning (DLPAR) operations.

OPTIONS

-r The type of hardware resources to change. Valid values are **io** for physical I/O, **virtualio** for virtual I/O, **mem** for memory, and **proc** for processing resources.

--subtype

The subtype of hardware resources to change. Valid physical I/O resource subtypes are **slot** for I/O slots, **iopool** for I/O pools, and **taggedio** for tagged I/O resources. Valid virtual I/O resource subtypes are **eth** for virtual ethernet, **scsi** for virtual SCSI, **serial** for virtual serial, **hsl** for High Speed Link (HSL) OptiConnect, and **virtualopti** for virtual OptiConnect resources.

This option is required for physical I/O or virtual I/O set operations, and for virtual I/O add operations. This option is not valid for memory or processor operations.

-m The name of the managed system for which the hardware resource configuration is to be changed. The name may either be the user-defined name for the managed system, or be in the form *tttt-mmm*sssssss*, where *tttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *tttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

-o The operation to perform. Valid values are **a** to add hardware resources to a partition, **r** to remove hardware resources from a partition, **m** to move hardware resources from one partition to another, and **s** to set hardware resource related attributes for a partition or the *managed-system*.

-p The name of the partition for which the operation is to be performed. For a move operation, this is the source partition (the partition the resources will be moved from) for the operation. To perform an add, remove, or move operation, the partition must be in the running state.

You can either use this option to specify the name of the partition for which the operation is to be performed, or use the **--id** option to specify the partition's ID. The **-p** and the **--id** options are mutually exclusive.

A partition is required to be specified with this option or the **--id** option for all operations except a virtual ethernet set operation.

--id The ID of the partition for which the operation is to be performed. For a move operation, this is the source partition (the partition the resources will be moved from) for the operation. To perform an add, remove, or move operation, the partition must be in the running state.

You can either use this option to specify the ID of the partition for which the operation is to be performed, or use the **-p** option to specify the partition's name. The **--id** and the **-p** options are mutually exclusive.

A partition is required to be specified with this option or the **-p** option for all operations except a virtual ethernet set operation.

-t The name of the target partition for a move operation. The partition must be in the running state.

You can either use this option to specify the name of the target partition, or use the **--tid** option to specify the ID of the partition. The **-t** and the **--tid** options are mutually exclusive.

A target partition is required to be specified with this option or the **--tid** option for a move operation. This option is not valid for any other operation.

--tid The ID of the target partition for a move operation. The partition must be in the running state.

You can either use this option to specify the ID of the target partition, or use the **-t** option to specify the name of the target partition. The **--tid** and the **-t** options are mutually exclusive.

A target partition is required to be specified with this option or the **-t** option for a move operation.

This option is not valid for any other operation.

- l** The DRC index of the physical I/O slot to add, remove, or move.
- s** The virtual slot number of the virtual I/O adapter to add or remove.
- q** The quantity of memory to add, remove, or move. The *quantity* specified must be in megabytes, and must be a multiple of the memory region size for the *managed-system*.
- procs** When adding or removing processing resources to or from a partition using dedicated processors, or when moving processing resources from a partition using dedicated processors to another partition using dedicated processors, use this option to specify the quantity of dedicated processors to add, remove, or move.

When adding or removing processing resources to or from a partition using shared processors, or when moving processing resources from a partition using shared processors to another partition using shared processors, use this option to specify the quantity of virtual processors to add, remove, or move.

When moving processing resources from a partition using dedicated processors to a partition using shared processors, use this option to specify the quantity of dedicated processors to be moved from the source partition and added as shared processors to the target partition.

This option is not valid when moving processing resources from a partition using shared processors to a partition using dedicated processors. The **--procunits** option must be used instead.

The *quantity* of processing resources specified with this option must be a whole number.

--procunits

When adding or removing processing resources to or from a partition using shared processors, or when moving processing resources from a partition using shared processors to another partition using shared processors, use this option to specify the quantity of processing units to add, remove, or move.

When moving processing resources from a partition using shared processors to a partition using dedicated processors, use this option to specify the quantity of shared processors to be moved from the source partition and added as dedicated processors to the target partition.

This option is not valid when moving processing resources from a partition using dedicated processors to a partition using shared processors. The **--procs** option must be used instead.

When moving processing resources from a partition using shared processors to a partition using dedicated processors, the *quantity* of processing units specified with this option must be a whole number. Otherwise, the *quantity* of processing units specified with this option can have up to 2 decimal places.

--5250cpwpercent

The percentage of 5250 Commercial Processing Workload (CPW) to add, remove, or move. The *percentage* specified can have up to 2 decimal places.

This option is only valid for i5/OS partitions and can only be used when the *managed-system* supports the assignment of 5250 CPW percentages to partitions.

- w** The elapsed time, in minutes, after which an add, remove, or move operation will be aborted.

wait-time must be a whole number. If *wait-time* is 0, the operation will not be timed out.

If this option is not specified, a default value of 5 minutes is used.

This option is valid for all add, remove, and move operations for AIX, Linux, and virtual I/O server partitions. This option is also valid for memory add, remove, and move operations for i5/OS partitions.

- d** The level of detail to be displayed upon return of an add, remove, or move operation. Valid values are **0** (none) through **5** (highest).

If this option is not specified, a default value of 0 is used.

This option is valid for all add, remove, and move operations for AIX, Linux, and virtual I/O server partitions.

- force** This option allows you to force an add, remove, or move operation to be performed for an AIX, Linux, or virtual I/O server partition that does not have an RMC connection. You will need to manually vary on or off the resources that are added, removed, or moved.

This option also allows you to force a remove or move operation to be performed for a physical I/O slot that is currently in use (varied on) by an i5/OS partition.

- a** The configuration data needed to create virtual I/O adapters or set hardware resource related attributes. The configuration data consists of attribute name/value pairs, which are in comma separated value (CSV) format. The configuration data must be enclosed in double quotes.

The format of the configuration data is as follows:

```
attribute-name=value,attribute-name=value,...
```

Note that certain attributes accept a comma separated list of values, as follows:

```
"attribute-name=value,value,...",...
```

When a list of values is specified, the attribute name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\` character.

If `'+='` is used in the attribute name/value pair instead of `'='`, then the specified *value* is added to the existing list for the attribute if the attribute is a list.

If `'-='` is used in the attribute name/value pair instead of `'='`, then the specified *value* is deleted from the existing list for the attribute if the attribute is a list.

Valid attribute names for attributes that can be set when adding, removing, or moving a physical I/O slot:

slot_io_pool_id

Valid attribute names for setting I/O pool attributes:

lpar_io_pool_ids

comma separated

Valid attribute names for setting tagged I/O resources (i5/OS partitions only):

load_source_slot

DRC index of I/O slot, or virtual slot
number

alt_restart_device_slot

DRC index of I/O slot, or virtual slot
number

console_slot

DRC index of I/O slot, virtual slot number, or the value **hmc**

alt_console_slot

DRC index of I/O slot, or virtual slot number

op_console_slot

DRC index of I/O slot, or virtual slot number

Valid attribute names for adding a virtual ethernet adapter:

ieee_virtual_eth

Valid values:

0 - not IEEE 802.1Q compatible

1 - IEEE 802.1Q compatible

Required

port_vlan_id

Required

addl_vlan_ids**is_trunk**

Valid values:

0 - no

1 - yes

Valid attribute names for adding a virtual SCSI adapter:

adapter_type

Valid values are **client** or **server** (server adapters can only be added to i5/OS partitions on IBM eServer i5 servers, or virtual I/O server partitions)

Required

remote_lpar_id | remote_lpar_name

One of these attributes is required for a **client** adapter

remote_slot_num

Required for a **client** adapter

Valid attribute names for adding a virtual serial adapter:

adapter_type

Valid values are **client** or **server** (client adapters cannot be added to i5/OS partitions on IBM eServer p5 servers, and server adapters can only be added to i5/OS or virtual I/O server partitions)

Required

remote_lpar_id | remote_lpar_name

One of these attributes is required for a **client** adapter

remote_slot_num

Required for a **client** adapter

supports_hmc

The only valid value is **0** for no.

Valid attribute names for setting virtual ethernet attributes:

mac_prefix

Valid attribute names for setting HSL OptiConnect attributes (i5/OS partitions only):

hsl_pool_id

Valid values are:

0 - HSL OptiConnect is disabled

1 - HSL OptiConnect is enabled

Valid attribute names for setting virtual OptiConnect attributes (i5/OS partitions only):

virtual_opti_pool_id

Valid values are:

0 - virtual OptiConnect is disabled

1 - virtual OptiConnect is enabled

Valid attribute names for setting processing attributes:

sharing_mode

Valid values are:

keep_idle_procs - valid with dedicated processors

share_idle_procs - valid with dedicated processors

cap - valid with shared processors

uncap - valid with shared processors

uncap_weight

--help Display the help text for this command and exit.

EXAMPLES

Add the I/O slot with DRC index **21010001** to partition **p1** and set the I/O pool ID for the slot to **3**:

```
chhwres -r io -m sys1 -o a -p p1 -l 21010001
-a "slot_io_pool_id=3"
```

Add I/O pools **2** and **3** to the I/O pools in which partition **p1** is participating:

```
chhwres -r io --subtype iopool -m 9406-520*1234321A -o s
-p p1 -a ""lpar_io_pool_ids+=2,3""
```

Add a virtual ethernet adapter to the partition with ID **3**:

```
chhwres -r virtualio -m 9406-520*1234321A -o a --id 3
--subtype eth -s 2 -a "ieee_virtual_eth=1,
port_vlan_id=4,"addl_vlan_ids=5,6""
```

Remove the virtual adapter in slot **3** from partition **p1**:

```
chhwres -r virtualio -m sys1 -o r -p p1 -s 3
```

Enable HSL OptiConnect for the i5/OS partition **i5_p1**:

```
chhwres -r virtualio -m sys1 -o s -p i5_p1
--subtype hsl -a "hsl_pool_id=1"
```

Add **128** MB of memory to the partition with ID **1**, and time out after **10** minutes:

```
chhwres -r mem -m sys1 -o a --id 1 -q 128 -w 10
```

Remove **512** MB of memory from the AIX partition **aix_p1**, return a detail level of **5**, and force the operation to occur if there is no RMC connection:

```
chhwres -r mem -m 9406-520*1234321A -o r -p aix_p1 -q 512  
-d 5 --force
```

Move **1** processor from partition **p1** to partition **p2** (both partitions are using dedicated processors):

```
chhwres -r proc -m 9406-520*1234321A -o m -p p1 -t p2  
--procs 1
```

Move **.5** processing units from the partition with ID **1** to the partition with ID **2** (both partitions are using shared processors):

```
chhwres -r proc -m sys1 -o m --id 1 --tid 2 --procunits .5
```

Add **.25** processing units to the i5/OS partition **i5_p1** and add **10** percent 5250 CPW:

```
chhwres -r proc -m sys1 -o a -p i5_p1 --procunits .25  
--5250cpwpercent 10
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lshwres, rsthwres, chsyscfg, lssyscfg

NAME

chled - change LED

SYNOPSIS

```
chled -r sa -t {phys | virtualpar | virtualsys}
      -m managed-system -o {on | off}
      [{-p partition-name | --id partition-ID}] [--help]
```

DESCRIPTION

chled changes the state of an LED on the *managed-system*.

OPTIONS

- r** The type of LED resource to change. The only valid value is **sa** for System Attention (SA) LED.
- t** The type of System Attention (SA) LED to change. Valid values are **phys** for the physical SA LED for the *managed-system*, **virtualpar** for a virtual partition SA LED, or **virtualsys** for the virtual SA LED for the *managed-system*.
- m** The name of the managed system on which to change the LED. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- o** The operation to perform on the LED. Valid values are **on** to activate the LED, and **off** to deactivate the LED.

The value **on** is not valid when changing the physical SA LED for the *managed-system*.

- p** The name of the partition for which the virtual partition SA LED is to be changed.

To change a virtual partition SA LED, you must either use this option to specify the name of the partition for which the LED is to be changed, or use the **--id** option to specify the partition's ID. The **-p** and the **--id** options are mutually exclusive.

This option is not valid when changing the physical SA LED or the virtual SA LED for the *managed-system*.

- id** The ID of the partition for which the virtual partition SA LED is to be changed.

To change a virtual partition SA LED, you must either use this option to specify the ID of the partition for which the LED is to be changed, or use the **-p** option to specify the partition's name. The **--id** and the **-p** options are mutually exclusive.

This option is not valid when changing the physical SA LED or the virtual SA LED for the *managed-system*.

- help** Display the help text for this command and exit.

EXAMPLES

Deactivate the physical SA LED for the system:

```
chled -m 9406-570*100103C -r sa -t phys -o off
```

Activate the virtual partition SA LED for partition **lpar3**:

```
chled -m system1 -r sa -t virtualpar -o on -p lpar3
```

Deactivate the virtual partition SA LED for the partition with ID **3**:

chled -m system1 -r sa -t virtualpar -o off --id 3

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lsled

NAME

chsacfg - change Service Agent configuration

SYNOPSIS

To change customer email notification settings:

```
chsacfg -t email
  -o { enable | disable | setsmtp | add |
        remove | test }
  -a { email-address | all }
  --events { all | callhome }
  -h host-name [-p port-number]
```

To change FTP firewall settings:

```
chsacfg -t ftpfirewall
  -o { add | remove }
  -h host-name [-p port-number]
  -u user-ID [--passwd password]
  --passive passive-mode
  --fwtype firewall-type [-n name]
```

To change FTP offload server settings:

```
chsacfg -t ftpoffload
  -o { enable | disable }
  -h host-name [-p port-number]
  -u user-ID [--passwd password]
  --passive passive-mode [-d directory]
```

DESCRIPTION

chsacfg changes the Service Agent configuration.

OPTIONS

- t** The type of Service Agent configuration information to change. Valid values are **email** for customer email notification settings, **ftpfirewall** for FTP firewall settings, and **ftpoffload** for FTP offload server settings.
- o** The operation to perform. Valid values are:
 - enable** - enable customer email notification or FTP offload of service information
 - disable** - disable customer email notification or FTP offload of service information
 - setsmtp** - set the SMTP server information for customer notification email
 - add** - add a notification email address or add a name to the exclusion list for the FTP firewall server
 - remove** - remove a notification email address or remove a name from the exclusion list for the FTP firewall server
 - test** - send a test email to a notification email address
- a** The email address to add, remove, or test for customer notification email.

When performing a remove or test operation for a customer notification email address, **all** can be specified with this option instead of a specific email address. If **all** is specified, then the remove or test operation will be performed for all notification email addresses.

This option is required when adding, removing, or testing a customer notification email address. This option is not valid for any other operation.

--events

The type of problem events for which the email address is to be notified. Valid values are **all** for all problem events, and **callhome** for only call home problem events.

This option is only valid when adding a customer email notification address. If this option is not specified when adding a customer notification email address, then the email address will be notified for all problem events.

-h When enabling customer email notification or setting the SMTP server information for customer notification email, use this option to specify the host name or IP address of the SMTP server.

When changing the FTP firewall settings, use this option to specify the host name or IP address of the firewall server.

When changing the FTP offload server settings, use this option to specify the host name or IP address of the FTP offload server.

This option is required when setting the SMTP server information for customer notification email.

-p When setting the SMTP server information for customer notification email, use this option to specify the port number to use on the SMTP server. The default port number for an SMTP server is 25.

When changing the FTP firewall settings, use this option to specify the port number to use on the firewall server.

When changing the FTP offload server settings, use this option to specify the port number to use on the FTP offload server.

The default port number for an FTP offload server or firewall server is 21.

-u When changing the FTP firewall settings, use this option to specify the user ID to use to log in to the firewall server.

When changing the FTP offload server settings, use this option to specify the user ID to use to log in to the FTP offload server.

--passwd

When changing the FTP firewall settings, use this option to specify the password to use to log in to the firewall server. If this option is omitted, you will be prompted to enter the password.

When changing the FTP offload server settings, use this option to specify the password to use to log in to the FTP offload server. If this option is omitted, you will be prompted to enter the password.

-d The directory to use on the FTP offload server.

--passive

When changing the FTP firewall settings, use this option to specify the passive mode to use. Valid values are **on** for always use PASV, **off** for always use PORT, and **optional** for try PASV then PORT.

When changing the FTP offload server settings, use this option to specify the passive mode to use. Valid values are **on** for always use PASV and **off** for always use PORT.

--fwtype

The FTP firewall type to use when offloading service information. Valid values are:

- 0** - do not use a firewall
- 1** - connect to firewall server, but send "USER user@real.host.name"
- 2** - connect to firewall server, log in with "USER fwuser" and "PASS fwpassword", and then "USER user@real.host.name"
- 3** - connect to and log in to firewall server, and then use "SITE real.host.name" followed by "USER user" and "PASS password"
- 4** - connect to and log in to firewall server, and then use "OPEN real.host.name" followed by "USER user" and "PASS password"
- 5** - connect to firewall server, but send "USER user@fwuser@real.host.name" and "PASS pass@fwpass" to log in
- 6** - connect to firewall server, but send "USER fwuser@real.host.name" and "PASS fwpass" followed by "USER user" and "PASS password" to complete the login
- 7** - connect to firewall server, but send "USER user@real.host.name fwuser" and "PASS pass" followed by "ACCT fwpass" to complete the login

This option is only valid when changing the FTP firewall settings.

- n** The host name or domain name to add to or remove from the exclusion list for the firewall server. The exclusion list is a list of domains or hosts where the firewall should not be used.

This option is required when adding or removing a name in the exclusion list for the FTP firewall server. This option is not valid for any other operation.

- help** Display the help text for this command and exit.

EXAMPLES

Enable customer email notification for problem events:

```
chsacfg -t email -o enable
```

Set the SMTP server information for customer notification email:

```
chsacfg -t email -o setsmtp -h mycompany.com -p 30
```

Add an email address to be notified when call home problem events occur:

```
chsacfg -t email -o add -a addr1@mycompany.com  
--events callhome
```

Send a test email to all customer notification email addresses:

```
chsacfg -t email -o test -a all
```

Enable the use of FTP to offload service information and set the FTP server information:

```
chsacfg -t ftpoffload -o enable -h ftphost -u ftpuser  
--passwd userpwd
```

Set the FTP firewall server information to be used when offloading service information:

```
chsacfg -t ftpfirewall --fwtype 1 -h ftpfirewall  
-u ftpuser --passwd userpwd
```

Add a name to the exclusion list for the FTP firewall server:

```
chsacfg -t ftpfirewall -o add -n excludedhost
```

Disable the use of an FTP firewall when offloading service information:

```
chsacfg -t ftpfirewall --fwtype 0
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lssacfg

NAME

chsvcevent - update a serviceable event on the HMC.

SYNOPSIS

chsvcevent -p *problem number* **-h** *analyzing hmc*
-o *close* [**--help**]

DESCRIPTION

chsvcevent update a serviceable event on the HMC.

OPTIONS

- p** The problem number, as displayed by the **lssvcevents** command.
- h** The analyzing HMC, as displayed by the **lssvcevents** command.
- o** The operation to perform. Valid values are **close**.

Use the **close** operation to close the specified serviceable event.

- help** Display the help text for this command and exit.

EXAMPLES

To close a serviceable event:

```
chsvcevent -p 1048 -h 7315-C02/KLRMT0L -o close
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lssvcevents

NAME

chsyscfg - change system resources

SYNOPSIS

```
chsyscfg -r {lpar | prof | sys | sysprof | frame}
          {-m managed-system | -e managed-frame}
          {-f configuration-file | -i "configuration-data"}
          [--help]
```

DESCRIPTION

chsyscfg changes the attributes of partitions, partition profiles, or system profiles for the *managed-system*. It can also change the attributes of the *managed-system*.

chsyscfg can also change the attributes of the *managed-frame*.

OPTIONS

- r** The type of resources to change. Valid values are **lpar** for partitions, **prof** for partition profiles, **sys** for the managed system, **sysprof** for system profiles, and **frame** for the managed frame.
- m** The name of either the managed system to be changed, or the managed system which has the system resources to be changed. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

This option is required when changing the attributes of partitions, partition profiles, system profiles, or the managed system. This option is not valid otherwise.

- e** The name of the managed frame to be changed. The name may either be the user-defined name for the managed frame, or be in the form *ttt-mmm*sssssss*, where *ttt* is the type, *mmm* is the model, and *sssssss* is the serial number of the managed frame. The *ttt-mmm*sssssss* form must be used if there are multiple managed frames with the same user-defined name.

This option is required when changing the attributes of the managed frame. This option is not valid otherwise.

- f** The name of the file containing the configuration data needed to change the resources. The configuration data consists of attribute name/value pairs, which are in comma separated value (CSV) format. These attribute name/value pairs form a configuration record. A line feed marks the end of a configuration record. The file must contain one configuration record for each resource to be changed, and each configuration record must be for the same resource type. If the resource type is the managed system or the managed frame, then the file must contain only one configuration record.

The format of a configuration record is as follows:

```
attribute-name=value,attribute-name=value,...<LF>
```

Note that certain attributes accept a comma separated list of values, as follows:

```
"attribute-name=value,value,...",...<LF>
```

When a list of values is specified, the attribute name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\` character.

If `+=` is used in the attribute name/value pair instead of `=`, then the specified *value* is added to the existing value for the attribute if the attribute is numerical. If the attribute is a list, then the

specified *value(s)* is added to the existing list.

If '=' is used in the attribute name/value pair instead of '-=', then the specified *value* is subtracted from the existing value for the attribute if the attribute is numerical. If the attribute is a list, then the specified *value(s)* is deleted from the existing list.

Attribute names for partitions:

name | lpar_id
 name or ID of the partition to
 change (required)

new_name

default_profile

ipl_source
 i5/OS only
 Valid values are **a, b, c, or d**

shared_proc_pool_util_auth
 Valid values are:
0 - do not allow authority
1 - allow authority

work_group_id

Attribute names for partition profiles:

name
 name of the partition profile to
 change (required)

lpar_name | lpar_id
 name or ID of the partition for
 which the profile to change is
 defined (required)

new_name

min_mem
 megabytes

desired_mem
 megabytes

max_mem
 megabytes

proc_mode
 Valid values are:
ded - dedicated processors
shared - shared processors

min_procs

desired_procs

max_procs

min_proc_units

desired_proc_units

max_proc_units

min_5250_cpw_percent
 Only valid for i5/OS partitions in
 managed systems that support the
 assignment of 5250 CPW percentages

desired_5250_cpw_percent
 Only valid for i5/OS partitions in
 managed systems that support the
 assignment of 5250 CPW percentages

max_5250_cpw_percent

Only valid for i5/OS partitions in managed systems that support the assignment of 5250 CPW percentages

sharing_mode

Valid values are:

keep_idle_procs - valid with dedicated processors

share_idle_procs - valid with dedicated processors

cap - valid with shared processors

uncap - valid with shared processors

uncap_weight**io_slots**

Comma separated list of I/O slots, with each I/O slot having the following format:

*slot-DRC-index/slot-IO-pool-ID/
is-required*

Both '/' characters must be present, but optional values may be omitted. Optional values are *slot-IO-pool-ID*.

Valid values for *is-required*:

0 - no

1 - yes

For example:

21010003/3/1 specifies an I/O slot with a DRC index of **21010003**, it is assigned to I/O pool **3**, and it is a required slot.

lpar_io_pool_ids

comma separated

load_source_slot

i5/OS only

DRC index of I/O slot, or virtual slot number

alt_restart_device_slot

i5/OS only

DRC index of I/O slot, or virtual slot number

console_slot

i5/OS only

DRC index of I/O slot, virtual slot number, or the value **hmc**

alt_console_slot

i5/OS only

DRC index of I/O slot, or virtual slot number

op_console_slot

i5/OS only

DRC index of I/O slot, or virtual slot

number

auto_start

Valid values are:

0 - off

1 - on

boot_mode

AIX, Linux, and virtual I/O server only

Valid values are:

norm - normal

dd - diagnostic with default boot list

ds - diagnostic with stored boot list

of - Open Firmware OK prompt

sms - System Management Services

power_ctrl_lpar_ids | power_ctrl_lpar_names

comma separated

conn_monitoring

Valid values are:

0 - off

1 - on

hsl_pool_id

i5/OS only

Valid values are:

0 - HSL OptiConnect is disabled

1 - HSL OptiConnect is enabled

virtual_opti_pool_id

i5/OS only

Valid values are:

0 - virtual OptiConnect is disabled

1 - virtual OptiConnect is enabled

max_virtual_slots

virtual_eth_adapters

Comma separated list of virtual ethernet adapters, with each adapter having the following format:

```
virtual-slot-number/is-IEEE/  
port-vlan-ID/additional-vlan-IDs/  
is-trunk/is-required
```

All 5 '/' characters must be present, but optional values may be omitted. Optional values are *additional-vlan-IDs*, and *is-trunk*.

Valid values for *is-IEEE*, *is-trunk*, and *is-required*:

0 - no

1 - yes

For example:

3/1/5/"6,7"/0/1

specifies a virtual ethernet adapter with a virtual slot number of **3**, is IEEE 802.1Q compatible, has a port virtual LAN

ID of **5**, additional virtual LAN IDs of **6** and **7**, it is not a trunk adapter, and it is required.

virtual_scsi_adapters

Comma separated list of virtual SCSI adapters, with each adapter having the following format:

```
virtual-slot-number/client-or-server/
remote-lpar-ID/remote-lpar-name/
remote-slot-number/is-required
```

All 5 '/' characters must be present, but optional values may be omitted. Optional values for server adapters are *remote-lpar-ID*, *remote-lpar-name*, and *remote-slot-number*. Optional values for client adapters are *remote-lpar-ID* or *remote-lpar-name* (one of those values is required, but not both).

Valid values for *client-or-server*:

client

server

i5/OS partitions on IBM eServer i5 servers, and virtual I/O server partitions only

Valid values for *is-required*:

0 - no

1 - yes

For example:

4/client/2//3/0

specifies a virtual SCSI **client** adapter with a virtual slot number of **4**, a remote (server) partition ID of **2**, a remote (server) slot number of **3**, and it is not required.

virtual_serial_adapters

Comma separated list of virtual serial adapters, with each adapter having the following format:

```
virtual-slot-number/client-or-server/
supports-HMC/remote-lpar-ID/
remote-lpar-name/remote-slot-number/
is-required
```

All 6 '/' characters must be present, but optional values may be omitted. Optional values for server adapters are *supports-HMC*, *remote-lpar-ID*, *remote-lpar-name*, and *remote-slot-number*.

Optional values for client adapters are *remote-lpar-ID* or *remote-lpar-name* (one of those values is required, but not both), and the *supports-HMC* value is not allowed.

Valid values for *client-or-server*:

client

not valid for i5/OS partitions on IBM eServer p5 servers

server

i5/OS and virtual I/O server partitions only

Valid values for *supports-HMC*:

0 - no

Valid values for *is-required*:

0 - no

1 - yes

For example:

4/server/0///0

specifies a virtual serial **server** adapter with a virtual slot number of **4**, it does not support an HMC connection, any client adapter is allowed to connect to it, and it is not required.

Attribute names for a managed system:

new_name

power_off_policy

Valid values are:

0 - power off after all partitions are shut down

1 - do not power off after all partitions are shut down

service_lpar_id

service_lpar_name

power_on_side

Valid values are **perm** or **temp**

power_on_speed

Valid values are **slow** or **fast**

power_on_speed_override

Valid values are **none**, **slow**, or **fast**

Attribute names for system profiles:

name

name of the system profile to change (required)

new_name

lpar_names | **lpar_ids**

comma separated

profile_names

comma separated

Attribute names for a managed frame:

new_name
frame_num

The **-f** and the **-i** options are mutually exclusive.

- i** This option allows you to enter configuration data on the command line, instead of using a file. Data entered on the command line must follow the same format as data in a file, and must be enclosed in double quotes.

When this option is used, only a single resource can be changed.

The **-i** and the **-f** options are mutually exclusive.

- help** Display the help text for this command and exit.

EXAMPLES

Change the managed system's user-defined name and power off policy:

```
chsyscfg -r sys -m 9406-570*89320051 -i "new_name=sys1,
power_off_policy=1"
```

Change partitions using the configuration data in the file **/tmp/lparfile**:

```
chsyscfg -r lpar -m sys1 -f /tmp/lparfile
```

Change a partition profile's memory amounts (reduce the profile's current memory amounts each by 256 MB), and number of desired processors:

```
chsyscfg -r prof -m sys1 -i "name=profile1,
lpar_name=partition3,min_mem-=256,desired_mem-=256,
max_mem-=256,desired_procs=2"
```

Change a system profile (add 2 new partition profiles):

```
chsyscfg -r sysprof -m sys1 -i "name=sysprof1,
lpar_names+=partition3,partition4",
profile_names+=3_prof1,4_defaultProf""
```

Change the managed frame's user-defined name and frame number:

```
chsyscfg -r frame -e 9119-59*1234567 -i "new_name=frame1,
frame_num=1"
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lssyscfg, **mksyscfg**, **rmsyscfg**, **chhwres**

NAME

chsyspwd - change system password

SYNOPSIS

```
chsyspwd -t {access | admin | general}
          {-m managed-system | -e managed-frame}
          [--passwd current-password] [--newpasswd new-password]
          [--help]
```

DESCRIPTION

chsyspwd changes a password for the *managed-system* or the *managed-frame*.

OPTIONS

- t** The password to change. Valid values are **access** for the Hardware Management Console (HMC) Access password, **admin** for the Advanced System Management (ASM) Administrator password, and **general** for the ASM General password.
- m** The name of the managed system for which to change the password. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

The **-m** and the **-e** options are mutually exclusive.
- e** The name of the managed frame for which to change the password. The name may either be the user-defined name for the managed frame, or be in the form *ttt-mmm*sssssss*, where *ttt* is the type, *mmm* is the model, and *sssssss* is the serial number of the managed frame. The *ttt-mmm*sssssss* form must be used if there are multiple managed frames with the same user-defined name.

The **-e** and the **-m** options are mutually exclusive.
- passwd** The current password. If this option is omitted, you will be prompted to enter the current password.
- newpasswd** The new password. If this option is omitted, you will be prompted to enter the new password.

The new password must be at least 4 characters in length, and cannot be longer than 63 characters.
- help** Display the help text for this command and exit.

EXAMPLES

Change the HMC Access password for the managed system **system1**:

```
chsyspwd -m system1 -t access --passwd sys1pw --newpasswd
sys1newpw
```

Change the ASM Administrator password (the current and new passwords must be entered when prompted) for the managed system **9406-520*10013CA**:

```
chsyspwd -m 9406-520*10013CA -t admin
```

Change the HMC Access password for the managed frame **frame1**:

```
chsyspwd -e frame1 -t access --passwd frame1pw --newpasswd
frame1newpw
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

chsysstate - change partition state or system state

SYNOPSIS

To power on a managed system:

```
chsysstate -m managed-system -r sys
-o { on | onstandby | onsysprof }
[-f system-profile-name ]
[-k keylock-position ]
```

To power off a managed system:

```
chsysstate -m managed-system -r sys
-o off [--immed]
```

To restart a managed system:

```
chsysstate -m managed-system -r sys
-o off --immed --restart
```

To rebuild a managed system or a managed frame:

```
chsysstate { -m managed-system | -e managed-frame }
-r { sys | frame } -o rebuild
```

To recover partition data for a managed system:

```
chsysstate -m managed-system -r sys -o recover
```

To set the keylock position for a managed system or a partition:

```
chsysstate -m managed-system -r { sys | lpar }
-o chkey [-k keylock-position ]
[{-n partition-name | --id partition-ID }]
```

To activate a partition:

```
chsysstate -m managed-system -r lpar -o on
{-n partition-name | --id partition-ID }
-f partition-profile-name
[-k keylock-position ]
[-b boot-mode ] [-i IPL-source ]
```

To shut down or restart a partition:

```
chsysstate -m managed-system -r lpar
-o { shutdown | osshutdown | dumprestart |
retrydump }
{-n partition-name | --id partition-ID }
[--immed] [--restart]
```

To perform an operator panel service function on a partition:

```
chsysstate -m managed-system -r lpar
-o { dston | remotedstoffs | remotedston |
iopreset | iopdump }
{-n partition-name | --id partition-ID }
```

To validate or activate a system profile:

```
chsysstate -m managed-system -r sysprof
-n system-profile-name
[-o on] [--continue] [--test]
```

To power off all of the unowned I/O units in a managed frame:

chsysstate -e *managed-frame* -r *frame* -o unownediooff

DESCRIPTION

chsysstate changes the state of a partition, the *managed-system*, or the *managed-frame*.

OPTIONS

-m The name of the managed system on which to perform the operation. The name may either be the user-defined name for the managed system, or be in the form *tttt-mmm*sssssss*, where *tttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *tttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

This option is required when performing a partition, system profile, or managed system operation. This option is not valid otherwise.

-e The name of the managed frame on which to perform the operation. The name may either be the user-defined name for the managed frame, or be in the form *tttt-mmm*sssssss*, where *tttt* is the type, *mmm* is the model, and *sssssss* is the serial number of the managed frame. The *tttt-mmm*sssssss* form must be used if there are multiple managed frames with the same user-defined name.

This option is required when performing a managed frame operation. This option is not valid otherwise.

-r The type of resource on which to perform the operation. Valid values are **lpar** for partition, **sys** for managed system, **sysprof** for system profile, and **frame** for managed frame.

-o The operation to perform. Valid values are:

- on** - activates a partition or a system profile, or powers on the *managed-system*. When powering on the *managed-system*, partitions that are marked as auto start and partitions that were running when the system was powered off are activated.
- onstandby** - powers on the *managed-system* to standby state.
- onsysprof** - powers on the *managed-system* then activates a system profile. Only those partitions in the system profile are activated.
- off** - powers off the *managed-system*. If the **--immed** option is specified, a fast power off (operator panel function 8) is performed, otherwise a normal power off is performed. If both the **--immed** and the **--restart** options are specified, a restart (operator panel function 3) of the *managed-system* is performed.
- rebuild** - rebuilds the *managed-system* or the *managed-frame*.
- recover** - recovers partition data for the *managed-system* by restoring the data from the backup file on the HMC.
- chkey** - sets the keylock position for a partition or the *managed-system*.
- shutdown** - shuts down a partition. If the

--immed option is specified, an immediate shut down (operator panel function 8) is performed, otherwise a delayed shut down is performed. If both the **--immed** and the **--restart** options are specified, an immediate restart (operator panel function 3) of the partition is performed.

osshutdown - issues the AIX "shutdown" command to shut down an AIX or virtual I/O server partition. If the **--immed** option is specified, the AIX "shutdown -F" command is issued to immediately shut down the partition. If the **--restart** option is specified, the "r" option is included on the AIX shutdown command to restart the partition.

dumprestart - initiates a dump on the partition and restarts the partition when the dump is complete (operator panel function 22).

retrydump - retries the dump on the partition and restarts the partition when the dump is complete (operator panel function 34). This operation is valid for i5/OS partitions only.

dston - activates dedicated service tools for the partition (operator panel function 21). This operation is valid for i5/OS partitions only.

remotedstoff - disables a remote service session for the partition (operator panel function 65). This operation is valid for i5/OS partitions only.

remotedston - enables a remote service session for the partition (operator panel function 66). This operation is valid for i5/OS partitions only.

iopreset - resets or reloads the failed IOP (operator panel function 67). This operation is valid for i5/OS partitions only.

iopdump - allows use of the IOP control storage dump (operator panel function 70). This operation is valid for i5/OS partitions only.

unownediooff - powers off all of the unowned I/O units in a managed frame.

-f When activating a partition, use this option to specify the name of the partition profile to use.

When powering on a managed system with a system profile, use this option to specify the name of the system profile to use.

-k The keylock position to set. Valid values are **manual** and **norm** for normal.

This option is required when setting the keylock position for a partition or a managed system.

This option is optional when powering on a managed system or activating a partition.

--immed

If this option is specified when powering off a managed system, a fast power off is performed.

This option must be specified when restarting a managed system.

If this option is specified when shutting down or restarting a partition, an immediate shut down or restart is performed.

--restart

If this option is specified, the partition or managed system will be restarted.

-n When performing a system profile operation, use this option to specify the name of the system profile on which to perform the operation.

When performing a partition operation, use either this option to specify the name of the partition on which to perform the operation, or use the **--id** option to specify the partition's ID. The **-n** and the **--id** options are mutually exclusive for partition operations.

--id When performing a partition operation, use either this option to specify the ID of the partition on which to perform the operation, or use the **-n** option to specify the partition's name. The **--id** and the **-n** options are mutually exclusive for partition operations.

-b The boot mode to use when activating an AIX, Linux, or virtual I/O server partition. Valid values are **norm** for normal, **dd** for diagnostic with default boot list, **ds** for diagnostic with stored boot list, **of** for Open Firmware OK prompt, or **sms** for System Management Services.

-i The IPL source to use when activating an i5/OS partition. Valid values are **a**, **b**, **c**, or **d**.

--test If this option is specified when performing a system profile operation, the system profile is validated.

--continue

If this option is specified when activating a system profile, remaining partitions will continue to be activated after a partition activation failure occurs.

--help Display the help text for this command and exit.

EXAMPLES

Power on a managed system and auto start partitions:

```
chsysstate -m 9406-520*10110CA -r sys -o on
```

Power on a managed system with a system profile:

```
chsysstate -m sys1 -r sys -o onsysprof -f mySysProf
```

Power off a managed system normally:

```
chsysstate -m sys1 -r sys -o off
```

Power off a managed system fast:

```
chsysstate -m sys1 -r sys -o off --immed
```

Restart a managed system:

```
chsysstate -m 9406-570*12345678 -r sys -o off --immed
--restart
```


Rebuild a managed system:

```
chsysstate -m 9406-570*12345678 -r sys -o rebuild
```

Recover partition data for a managed system:

```
chsysstate -m sys1 -r sys -o recover
```

Set the keylock position for a managed system:

```
chsysstate -m sys1 -r sys -o chkey -k manual
```

Activate i5/OS partition **p1** using partition profile **p1_prof1** and IPL source **b**:

```
chsysstate -m sys1 -r lpar -o on -n p1 -f p1_prof1 -i b
```

Shut down the partition with ID **1**:

```
chsysstate -m 9406-570*12345678 -r lpar -o shutdown --id 1
```

Issue the AIX shutdown command to immediately shut down partition **aix_p1**:

```
chsysstate -m 9406-570*12345678 -r lpar -o osshutdown  
-n p1 --immed
```

Immediately restart the partition with ID **1**:

```
chsysstate -m 9406-570*12345678 -r lpar -o shutdown --id 1  
--immed --restart
```

Enable a remote service session for the i5/OS partition **mylpar**:

```
chsysstate -m sys1 -r lpar -o remoteston -n mylpar
```

Validate system profile **sp1**:

```
chsysstate -m sys1 -r sysprof -n sp1 --test
```

Validate then activate system profile **sp1**:

```
chsysstate -m sys1 -r sysprof -n sp1 -o on --test
```

Activate system profile **mySysProf** and continue activating remaining partitions if a partition activation failure occurs:

```
chsysstate -m 9406-570*12345678 -r sysprof -n mySysProf  
-o on --continue
```

Rebuild a managed frame:

```
chsysstate -e myFrame -r frame -o rebuild
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lssyscfg

NAME

chusrta - provides Terms and Conditions agreement panel at login

SYNOPSIS

```
chusrta [ -o [ e | d | a | r ] [-l <language/locale>] [-f <html file>] [-c] [--help]
```

DESCRIPTION

chusrta provides a method to deploy HTML file(s) containing Terms and Conditions and presents to all users who login locally on the Hardware Management Console. When the panel is presented, if user select 'Do Not Agree' the session will end immediately. The html file must be named UserLicense.html.

OPTIONS

- o** Enables (e), disables (s) the display of the Terms and Conditions panel at login. Adds (a), removes (r) the HTML file containing the Terms and Conditions.
- l** Specifies the language/locale to deploy the UserLicense.html file. Valid values are: en, fr, de, es, hu, ja, it, ru, cs, ko, nl, pt_BR, zh_CN and zh_TW. If a locale is not specified, the default locale will be set to en.
- f** The html file containing the specific Terms and Conditions. The file must be named UserLicense.html.
- c** Removes the file UserLicense.html that was copied onto the HMC filesystem.
- help** Displays the help text for this command and exit.

EXAMPLES

The following command enable the prompting of Terms and Conditions at login:

```
chusrta -o e
```

Enables and adds a Terms and Conditions agreement using the English language:

```
chusrta -o e -f /home/hscroot/UserLicense.html
```

Adds a Terms and Conditions agreement using the English language:

```
chusrta -o a -f /tmp/UserLicense.html -l en
```

Adds a Terms and Conditions agreement using the French language. The file is on floppy:

```
mount /mnt/floppy
```

```
chusrta -o a -f /mnt/floppy/UserLicense.html -l fr
```

Removes a UserLicense.html previously deployed for the English language:

```
chusrta -o r -l en
```

Uses scp to copy the UserLicense.html to /tmp on the HMC, then adds a Terms and Conditions agreement then removes it:

```
scp <some id>@<some host>:/tmp/UserLicense.html /tmp
```

```
chusrta -o a -f /tmp/UserLicense.html -c
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

chvet - activate Virtualization Engine systems technologies

SYNOPSIS

chvet -o e -m *managed-system* -k *activation-code* [--help]

DESCRIPTION

chvet performs activation of Virtualization Engine systems technologies on the *managed-system*.

OPTIONS

- o** The operation to perform. The only valid value is **e** to enter an activation code.
- m** The name of the managed system for which the Virtualization Engine systems technologies activation is to be performed. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- k** The activation code (key) to enter. Letters may be entered in either upper case or lower case.
- help** Display the help text for this command and exit.

EXAMPLES

Enter an activation code:

```
chvet -m mySystem -o e -k AlphaNumericString12345
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lsvet, **lssyscfg**

NAME

cpdump - copy dumps

SYNOPSIS

```
cpdump -r {dvd | ftp} -f "file1 file2 ...fileN"  
[-h host-name] [-u user-ID] [--passwd password]  
[-d directory] [--help]
```

DESCRIPTION

cpdump copies managed system dumps and managed frame dumps from the Hardware Management Console (HMC) to DVD or a remote FTP site.

Use the **lsdump** command to list the managed system dumps and managed frame dumps that reside on the HMC.

OPTIONS

- r** The storage location to where the dumps will be copied. Valid values are **dvd** for the DVD drive on the HMC and **ftp** for a remote FTP site.
- f** The file name of the dump to be copied. If multiple dumps are to be copied, the file names must be separated by blanks and enclosed in double quotes.
- h** The host name or IP address of the remote FTP site.

This option is required when copying a dump to a remote FTP site. Otherwise, this option is not valid.
- u** The user ID to use to log in to the remote FTP site.

This option is required when copying a dump to a remote FTP site. Otherwise, this option is not valid.
- passwd**
The password to use to log in to the remote FTP site. If this option is omitted, you will be prompted to enter the password.

This option is only valid when copying a dump to a remote FTP site.
- d** The directory to use on the remote FTP site.

This option is only valid when copying a dump to a remote FTP site.
- help** Display the help text for this command and exit.

EXAMPLES

Copy dump files to the DVD drive on the HMC:

```
cpdump -r dvd -f "FSPDUMP.100072A.01000019.20040629205455  
SYSDUMP.100072A.01000019.20040630183112"
```

Copy a dump file to a remote FTP site:

```
cpdump -r ftp -f "FSPDUMP.100072A.01000019.20040629205455"  
-h ftpserver -u ftpuser --passwd ftppassword  
-d /tmp/dumpfiles/
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lsdump

NAME

getdump - get dump

SYNOPSIS

```
getdump {-m managed-system | -e managed-frame}
-t {pss | sp | sys} [-s {a | b}]
[--help]
```

DESCRIPTION

getdump offloads a dump from the *managed-system* or the *managed-frame* to the Hardware Management Console (HMC). The dump is written to a file in the **/dump** directory on the HMC.

The **lsdump** command can be used to list the dumps that are available on the *managed-system* or the *managed-frame*.

OPTIONS

-m The name of the managed system from which to offload the dump. The name may either be the user-defined name for the managed system, or be in the form *tttt-mmm*sssssss*, where *tttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *tttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

This option is required when offloading a service processor dump or a platform dump. This option is not valid otherwise.

-e The name of the managed frame from which to offload the dump. The name may either be the user-defined name for the managed frame, or be in the form *tttt-mmm*sssssss*, where *tttt* is the type, *mmm* is the model, and *sssssss* is the serial number of the managed frame. The *tttt-mmm*sssssss* form must be used if there are multiple managed frames with the same user-defined name.

This option is required when offloading a power subsystem dump. This option is not valid otherwise.

-t The dump to offload. Valid values are **pss** for the power subsystem dump, **sp** for the service processor dump, or **sys** for the platform dump.

-s The side of the managed frame's bulk power assembly (BPA) from which to offload the dump. Valid values are **a** for side A and **b** for side B.

This option is required when offloading a power subsystem dump. This option is not valid otherwise.

--help Display the help text for this command and exit.

EXAMPLES

Offload the service processor dump from managed system **sys1**:

```
getdump -m sys1 -t sp
```

Offload the power subsystem dump from side B of the BPA for the managed frame **9119-59*000012C**:

```
getdump -e 9119-59*000012C -t pss -s b
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lsdump, startdump

NAME

hmcshutdown - shut down the Hardware Management Console

SYNOPSIS

hmcshutdown -t { **now** | *number-of-minutes* } [**-r**] [**--help**]

DESCRIPTION

hmcshutdown shuts down the Hardware Management Console (HMC). If requested, the HMC will be rebooted after the shutdown completes.

OPTIONS

- t** The number of minutes to wait before starting the shutdown. If **now** is specified, the shutdown will be started immediately.
- r** Reboot the HMC after the shutdown. If this option is omitted, the HMC will be halted after the shutdown.
- help** Display the help text for this command and exit.

EXAMPLES

Reboot the HMC after 3 minutes:

```
hmcshutdown -t 3 -r
```

Halt the HMC immediately:

```
hmcshutdown -t now
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

hmcwin - Provides screen capture on HMC

SYNOPSIS

hmcwin { **-o c** | **v** | **r** } **-f file-name** [**--help**]

DESCRIPTION

hmcwin Provide screen capture on HMC.

OPTIONS

- o c captures the screen and save it in file-name. The file will be saved under the user's \$HOME/.screen_capture/ directory. v displays the image stored in file file-name from the user's \$HOME/.screen_capture/ directory. When using the v option, left mouse click on the displayed window or enter ctrl-c to dismiss it. r removes the file file-name under the user's \$HOME/.screen_capture directory.
- f The file name to be used to create or remove the screen captured file under the user's \$HOME/.screen_capture directory.
- help Prints the help message and exits.

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

lpcfgop - perform a partition configuration image operation

SYNOPSIS

lpcfgop -m *managed-system* **-o** { **clear** | **dump** } [**--help**]

DESCRIPTION

lpcfgop clears or dumps partition configuration data on the *managed-system*.

OPTIONS

-m The name of the managed system on which to perform the operation. The name may either be the user-defined name for the managed system, or be in the form *tttt-mmm*sssssss*, where *tttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *tttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

-o The operation to perform. Valid values are **clear** or **dump**.

The **clear** operation clears all partition configuration data on the *managed-system* and sets the configuration back to its original state. This operation can only be performed when the *managed-system* is in the Standby state.

The **dump** operation dumps all partition configuration data on the *managed-system* to a file. The file is written to the **/tmp** directory on the Hardware Management Console (HMC).

--help Display the help text for this command and exit.

EXAMPLES

Clear the partition configuration data (confirmation will be required):

```
lpcfgop -m sys1 -o clear
```

Dump the partition configuration data to a file in **/tmp**:

```
lpcfgop -m 9406-520*100132A -o dump
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

lsaccfg - list access control configuration information

SYNOPSIS

```
lsaccfg -t {resource | resourcerole | taskrole}
[--script] [--filter "filter-data"]
[-F [attribute-names] [--header]] [--help]
```

DESCRIPTION

lsaccfg lists managed resource objects, managed resource roles, or task roles.

OPTIONS

-t The type of access control objects to list. Valid values are **resource** for managed resource objects, **resourcerole** for managed resource roles, and **taskrole** for task roles.

--script

List managed resource objects in a format that can be used as input to the **chaccfg**, **chmcusr**, and **mkaccfg** commands.

This option is only valid when listing managed resource objects.

--filter The filter to apply to the access control objects to be listed. A filter is used to select which access control objects of the specified type are to be listed. If a filter is not used, then all of the access control objects of the specified type will be listed. For example, specific task roles can be listed by using a filter to specify the names of the task roles to list. Otherwise, if no filter is used, then all of the task roles on this Hardware Management Console (HMC) will be listed.

The filter data consists of filter name/value pairs, which are in comma separated value (CSV) format. The filter data must be enclosed in double quotes.

The format of the filter data is as follows:

```
"filter-name=value,filter-name=value,..."
```

Note that certain filters accept a comma separated list of values, as follows:

```
""filter-name=value,value,...",..."
```

When a list of values is specified, the filter name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\` character.

Multiple values can be specified for each filter.

Valid filter names for managed resource objects:

resource_type

Specify resource type(s):

cec - managed system objects

lpar - partition objects

Valid filter names for managed resource roles:

resourceroles

Specify managed resource role name(s)

Valid filter names for task roles:

taskroles

Specify task role name(s)

- F** A delimiter separated list of attribute names for the desired attribute values to be displayed for each access control object. If no attribute names are specified, then values for all of the attributes for each access control object will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

- help** Display the help text for this command and exit.

EXAMPLES

List all managed resource objects on this HMC:

```
lsaccfg -t resource
```

List only managed partition objects on this HMC:

```
lsaccfg -t resource --filter "resource_type=lpar"
```

List all managed resource roles on this HMC:

```
lsaccfg -t resourcerole
```

List the managed resource role lpar_role:

```
lsaccfg -t resourcerole --filter "resourceroles=lpar_role"
```

List only the names and parents of the task roles on this HMC, and separate the output values with a colon:

```
lsaccfg -t taskrole -F name:parent
```

List the task roles tr1 and tr2:

```
lsaccfg -t taskrole --filter "'taskroles=tr1,tr2'"
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chaccfg, mkaccfg, rmaccfg, chhmcusr, lshmcusr

NAME

lscod - list Capacity on Demand information

SYNOPSIS

```
lscod -t {bill | cap | code | hist | util}
-m managed-system
[-c {cuod | onoff | reserve | trial | trialex |
  trialstd}] [-r {mem | proc}]
[-F [attribute-names] [--header]] [--help]
```

DESCRIPTION

lscod lists Capacity on Demand (CoD) information for the *managed-system*.

OPTIONS

- t** The type of CoD information to list. Valid values are **bill** for On/Off CoD billing information, **cap** for CoD capacity information, **code** for information used to generate CoD codes, **hist** for the CoD history log, and **util** for shared processor pool utilization information.
- m** The name of the managed system for which CoD information is to be listed. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- c** The CoD type. Valid values are **cuod** for CUoD (permanent), **onoff** for On/Off CoD, **reserve** for Reserve CoD, **trial** for Trial CoD, **trialexc** for Trial CoD exception request, and **trialstd** for Trial CoD standard request.

This option is required when listing CoD capacity information or CoD code generation information. This option is not valid when listing the CoD history log.

To list Trial CoD capacity information, specify **trial** with this option. To list Trial CoD code generation information, specify **trialexc** or **trialstd** with this option.

- r** The CoD resource type. Valid values are **mem** for memory and **proc** for processors.

This option is required when listing On/Off CoD billing information, CoD capacity information, CoD code generation information, or shared processor pool utilization information. This option is not valid when listing the CoD history log.

- F** A delimiter separated list of attribute names representing the desired CoD attribute values to display. If this option is specified without any attribute names, then all of the CoD attributes for the type of CoD listing specified will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

- help** Display the help text for this command and exit.

EXAMPLES

Display On/Off CoD processor billing information:

```
lscod -m sys1 -t bill -r proc -c onoff
```

Display CUoD processor capacity information:

```
lscod -m 9406-570*98127634 -t cap -r proc -c cuod
```

Display Trial CoD memory capacity information:

```
lscod -m 9406-570*98127634 -t cap -r mem -c trial
```

Display the current number of unreturned On/Off CoD processors:

```
lscod -m sys1 -t cap -r proc -c onoff -F  
unreturned_onoff_procs
```

Display CUoD processor activation code generation information:

```
lscod -m sys1 -t code -r proc -c cuod
```

Display the CoD history log:

```
lscod -m 9406-570*98127634 -t hist
```

Display shared processor pool utilization information:

```
lscod -m sys1 -t util -r proc
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chcod, lshwres

NAME

lsdump - list dumps

SYNOPSIS

```
lsdump { -m managed-system | -e managed-frame | -h }  
[-s { a | b }]  
[-F [attribute-names] [--header]] [--help]
```

DESCRIPTION

lsdump lists the dumps that are available on the *managed-system* or the *managed-frame*. **lsdump** can also list the managed system dumps and the managed frame dumps that are available on the Hardware Management Console (HMC).

The **getdump** command can be used to offload an available dump from the *managed-system* or the *managed-frame* to the HMC.

The **cpdump** command can be used to copy a dump from the HMC to DVD or a remote FTP site.

OPTIONS

-m The name of the managed system for which available dumps are to be listed. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

Either this option, the **-e** option, or the **-h** option is required. The **-m**, **-e**, and the **-h** options are mutually exclusive.

-e The name of the managed frame for which available dumps are to be listed. The name may either be the user-defined name for the managed frame, or be in the form *ttt-mmm*sssssss*, where *ttt* is the type, *mmm* is the model, and *sssssss* is the serial number of the managed frame. The *ttt-mmm*sssssss* form must be used if there are multiple managed frames with the same user-defined name.

Either this option, the **-m** option, or the **-h** option is required. The **-e**, **-m**, and the **-h** options are mutually exclusive.

-h List the managed system dumps and managed frame dumps that are available on the HMC.

Either this option, the **-m** option, or the **-e** option is required. The **-h**, **-m**, and the **-e** options are mutually exclusive.

-s The side of the managed frame's bulk power assembly (BPA) for which available dumps are to be listed. Valid values are **a** for side A and **b** for side B.

This option is required when listing dumps that are available on a managed frame. This option is not valid otherwise.

-F A delimiter separated list of attribute names representing the desired dump attribute values to display. If this option is specified without any attribute names, then all of the dump attributes will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

--help Display the help text for this command and exit.

EXAMPLES

List the dumps that are currently available on the managed system **9406-520*100128A**:

lsdump -m 9406-520*100128A

List the dumps that are currently available on side A of the BPA for the managed frame **frame1**:

lsdump -e frame1 -s a

List the managed system dumps and managed frame dumps that are currently available on the HMC:

lsdump -h

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

cpdump, getdump, startdump

NAME

lshmc - list Hardware Management Console configuration information

SYNOPSIS

```
lshmc { -b | -n | -r | -v | -V }  
[-F [attribute-names] [--header]] [--help]
```

DESCRIPTION

lshmc lists Hardware Management Console (HMC) configuration information. This command can be used to list the BIOS level, network settings, remote access settings, Vital Product Data (VPD) information, and version information for the HMC.

OPTIONS

-b List the BIOS level of the HMC.

This option cannot be specified with the **-n**, **-r**, **-v**, or **-V** options.

-n List the network settings for the HMC.

This option cannot be specified with the **-b**, **-r**, **-v**, or **-V** options.

-r List the remote access settings for the HMC.

This option cannot be specified with the **-b**, **-n**, **-v**, or **-V** options.

-v List the VPD information for the HMC.

This option cannot be specified with the **-b**, **-n**, **-r**, or **-V** options.

-V List the version information for the HMC.

This option cannot be specified with the **-b**, **-n**, **-r**, or **-v** options.

-F A delimiter separated list of attribute names representing the desired attribute values to display. If this option is specified without any attribute names, then all of the attributes for the type of HMC configuration information specified will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

--help Display the help text for this command and exit.

EXAMPLES

Display the HMC's BIOS level:

```
lshmc -b
```

Display the HMC's network settings:

```
lshmc -n
```

Display the HMC's host name and IP address, and separate the output values with a colon:

lshmc -n -F hostname:ipaddr

Display the HMC's remote access settings:

lshmc -r

Display the HMC's VPD information:

lshmc -v

Display the HMC's version information:

lshmc -V

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chhmc

NAME

lshmcusr - list Hardware Management Console user information

SYNOPSIS

```
lshmcusr [--script] [--filter "filter-data"]
[-F [attribute-names] [--header]] [--help]
```

DESCRIPTION

lshmcusr lists Hardware Management Console (HMC) user information.

OPTIONS**--script**

List managed resource objects in a format that can be used as input to the **chhmcusr**, **chaccfg**, and **mkaccfg** commands.

--filter The filter to apply to the HMC users to be listed. A filter is used to select which HMC users are to be listed. If a filter is not used, then all HMC users will be listed.

The filter data consists of filter name/value pairs, which are in comma separated value (CSV) format. The filter data must be enclosed in double quotes.

The format of the filter data is as follows:

```
"filter-name=value,filter-name=value,..."
```

Note that certain filters accept a comma separated list of values, as follows:

```
""filter-name=value,value,...,"..."
```

When a list of values is specified, the filter name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\`` character.

Multiple values can be specified for each filter.

Valid filter names for this command:

names

Specify user name(s)

resources

Specify managed resource object(s)

resourceroles

Specify managed resource role name(s)

taskroles

Specify task role name(s)

-F A delimiter separated list of attribute names for the desired attribute values to be displayed for each HMC user. If no attribute names are specified, then values for all of the attributes for each HMC user will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

--help Display the help text for this command and exit.

EXAMPLES

List all HMC users:

lshmcusr

List only the user names and managed resource roles for all HMC users, and separate the output values with a colon:

lshmcusr -F name:resource:role

List the HMC users hscroot and user1:

lshmcusr --filter "names=hscroot,user1"

List the HMC users with the task role hmcviewer and the managed resource role mr1:

lshmcusr --filter "taskroles=hmcviewer,resource:roles=mr1"**ENVIRONMENT**

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chhmcusr, mkhmcusr, rmhmcusr, lsaccfg

NAME

lshwinfo - list environmental information

SYNOPSIS

lshwinfo -r frame -e *managed-frame*
[-F [*attribute-names*] [--header]] [--help]

DESCRIPTION

lshwinfo lists environmental information, such as input power levels, for the *managed-frame*.

OPTIONS

- r** The type of resource for which to list environmental information. The only valid value is **frame** for managed frame.
- e** The name of the managed frame for which to list environmental information. The name may either be the user-defined name for the managed frame, or be in the form *ttt-mmm*sssssss*, where *ttt* is the type, *mmm* is the model, and *sssssss* is the serial number of the managed frame. The *ttt-mmm*sssssss* form must be used if there are multiple managed frames with the same user-defined name.
- F** A delimiter separated list of attribute names for the desired attribute values to be displayed. If no attribute names are specified, then values for all of the attributes will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

- help** Display the help text for this command and exit.

EXAMPLES

Display environmental information for the managed frame **myFrame**:

```
lshwinfo -r frame -e myFrame
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

lshwres - list hardware resources

SYNOPSIS

To list physical I/O resources:

```
lshwres -r io --subtype { unit | bus | slot |
iopool | taggedio } -m managed-system
--level { pool | sys } [-R]
--filter "filter-data"
[-F [attribute-names]  [--header]]  [--help]
```

To list virtual I/O resources:

```
lshwres -r virtualio --subtype { eth | hsl |
virtualopti | scsi | serial | slot }
-m managed-system
--level { lpar | slot | sys }
--filter "filter-data"
[-F [attribute-names]  [--header]]  [--help]
```

To list memory resources:

```
lshwres -r mem -m managed-system
--level { lpar | sys } [-R]
--maxmem quantity  [--filter "filter-data"
[-F [attribute-names]  [--header]]  [--help]
```

To list processing resources:

```
lshwres -r proc -m managed-system
--level { lpar | pool | sys } [-R]
--procunits quantity
--filter "filter-data"
[-F [attribute-names]  [--header]]  [--help]
```

DESCRIPTION

lshwres lists the hardware resources of the *managed-system*, including physical I/O, virtual I/O, memory, and processing resources.

OPTIONS

-r The type of hardware resources to list. Valid values are **io** for physical I/O, **virtualio** for virtual I/O, **mem** for memory, and **proc** for processing resources.

--subtype

The subtype of hardware resources to list. Valid physical I/O resource subtypes are **unit** for I/O units, **bus** for I/O buses, **slot** for I/O slots, **iopool** for I/O pools, and **taggedio** for tagged I/O resources. Valid virtual I/O resource subtypes are **eth** for virtual ethernet, **hsl** for High Speed Link (HSL) OptiConnect, **virtualopti** for virtual OptiConnect, **scsi** for virtual SCSI, **serial** for virtual serial, and **slot** for virtual slot resources.

This option is required when listing physical I/O or virtual I/O resources. This option is not valid when listing memory or processing resources.

-m The name of the managed system which has the hardware resources to list. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

--level The level of information to list. Valid values are **lpar** for partition, **pool** for pool, **slot** for slot, and **sys** for system.

This option is required when listing I/O pool resources, virtual ethernet, serial, or slot resources, or memory or processing resources.

Valid levels for I/O pool resources are **pool** or **sys**. Valid levels for virtual ethernet resources are **lpar** or **sys**. Valid levels for virtual serial resources are **lpar**. Valid levels for virtual slot resources are **lpar** or **slot**. Valid levels for memory resources are **lpar** or **sys**. Valid levels for processing resources are **lpar**, **pool**, or **sys**.

- R** Only list information for partitions with hardware resources that can be restored due to a dynamic logical partitioning (DLPAR) operation failure.

The **rsthwres** command can be used to restore those hardware resources.

This option is only valid for listing physical I/O slots, or partition level memory or processing resources.

--maxmem

When this option is specified, the required minimum memory amount needed for partitions to support the maximum memory *quantity* specified is listed. All memory quantities are in megabytes, and are a multiple of the memory region size for the *managed-system*.

This information is useful for specifying memory amounts in partition profiles.

This option is only valid when listing system level memory resources.

--procunits

When this option is specified, the range of optimal 5250 CPW percentages for partitions assigned the *quantity* of processing units specified is listed. The *quantity* of processing units specified can have up to 2 decimal places.

This information is useful when specifying the 5250 CPW percentages for partitions or partition profiles.

This option is only valid when listing system level processing resources. Also, this option is only valid when the *managed-system* supports the assignment of 5250 CPW percentages to partitions.

- filter** The filter(s) to apply to the hardware resources to be listed. Filters are used to select which hardware resources of the specified type are to be listed. If no filters are used, then all of the hardware resources of the specified type will be listed. For example, all of the physical I/O slots on a specific I/O unit and bus can be listed by using a filter to specify the I/O unit and the bus which has the slots to list. Otherwise, if no filter is used, then all of the physical I/O slots in the managed system will be listed.

The filter data consists of filter name/value pairs, which are in comma separated value (CSV) format. The filter data must be enclosed in double quotes.

The format of the filter data is as follows:

```
"filter-name=value,filter-name=value,..."
```

Note that certain filters accept a comma separated list of values, as follows:

```
""filter-name=value,value,...",..."
```

When a list of values is specified, the filter name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\`` character.

Unless otherwise indicated, multiple values can be specified for each filter.

Valid filter names for this command:

buses

Specify I/O bus ID(s)

lpar_ids

Specify partition ID(s)

lpar_names

Specify partition user-defined name(s)

pools

Specify pool ID(s)

slots

Specify physical I/O slot DRC index(ices)
or virtual I/O slot number(s)

units

Specify I/O unit physical location
code(s)

v lans

Specify virtual LAN ID(s)

Valid filters with **-r io --rsubtype unit**:

units

Valid filters with **-r io --rsubtype bus**:

buses, units

Valid filters with **-r io --rsubtype slot**:

**buses, lpar_ids | lpar_names, pools, slots,
units**

Valid filters with **-r io --rsubtype iopool --level pool**:

lpar_ids | lpar_names, pools

Valid filters with **-r io --rsubtype taggedio**:

lpar_ids | lpar_names

Valid filters with **-r virtualio --rsubtype eth --level lpar**:

lpar_ids | lpar_names, slots, v lans

Valid filters with **-r virtualio --rsubtype hsl**:

lpar_ids | lpar_names, pools

Valid filters with **-r virtualio --rsubtype virtualopti**:

lpar_ids | lpar_names, pools

Valid filters with **-r virtualio --rsubtype scsi**:

lpar_ids | lpar_names, slots

Valid filters with **-r virtualio --rsubtype serial --level lpar**:

lpar_ids | lpar_names, slots

Valid filters with **-r virtualio --rsubtype slot --level lpar**:

lpar_ids | lpar_names

Valid filters with **-r virtualio --subtype slot --level slot:**
lpar_ids | lpar_names, slots

Valid filters with **-r mem --level lpar:**
lpar_ids | lpar_names

Valid filters with **-r proc --level lpar:**
lpar_ids | lpar_names

- F** A delimiter separated list of attribute names for the desired attribute values to be displayed for each hardware resource. If no attribute names are specified, then values for all of the attributes for each hardware resource will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

- help** Display the help text for this command and exit.

EXAMPLES

List all I/O units on the managed system:

```
lshwres -r io --subtype unit -m system1
```

List all buses on I/O unit **U787A.001.0395036**:

```
lshwres -r io --subtype bus -m 9406-570*12345678  
--filter "units=U787A.001.0395036"
```

List only the DRC index, description, and the owning partition for each physical I/O slot on buses **2** and **3** of I/O unit **U787A.001.0395036**:

```
lshwres -r io --subtype slot -m system1 --filter  
"units=U787A.001.0395036,"buses=2,3"" -F drc_index,  
description,lpar_name
```

List all I/O pools and the partitions and slots assigned to each I/O pool:

```
lshwres -r io --subtype iopool -m system1 --level pool
```

List the tagged I/O devices for the i5/OS partition that has an ID of 1:

```
lshwres -r io --subtype taggedio -m 9406-520*100103A  
--filter "lpar_ids=1"
```

List all virtual ethernet adapters on the managed system:

```
lshwres -r virtualio --subtype eth --level lpar -m  
system1
```

List all virtual SCSI adapters on the managed system, and only display attribute values for each adapter, following a header of attribute names:

```
lshwres -r virtualio --rsubtype scsi -m system1 -F  
--header
```

List all virtual slots for partition lpar1:

```
lshwres -r virtualio --rsubtype slot -m system1 --level  
slot --filter "lpar_names=lpar1"
```

List system level memory information:

```
lshwres -r mem -m 9406-570*98765432 --level sys
```

List recoverable memory information:

```
lshwres -r mem -m 9406-570*98765432 --level lpar -R
```

List memory information for partitions lpar1 and lpar2:

```
lshwres -r mem -m system1 --level lpar --filter  
""lpar_names=lpar_1,lpar_2""
```

List only the installed and configurable processors on the system, and separate the output values with a colon:

```
lshwres -r proc -m 9406-570*98765432 --level sys -F  
installed_sys_proc_units:configurable_sys_proc_units
```

List processing resources for all partitions:

```
lshwres -r proc -m system1 --level lpar
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chhwres, rsthwres, lssyscfg

NAME

lsled - list LEDs

SYNOPSIS

```
lsled -r sa -t { phys | virtualpar | virtualsys }
      -m managed-system [--filter "filter-data"]
      [-F [attribute-names] [--header]] [--help]
```

DESCRIPTION

lsled lists LED information for the *managed-system*.

OPTIONS

- r** The type of LED resources to list. The only valid value is **sa** for System Attention (SA) LEDs.
- t** The type of System Attention (SA) LEDs to list. Valid values are **phys** for the physical SA LED for the *managed-system*, **virtualpar** for virtual partition SA LEDs, or **virtualsys** for the virtual SA LED for the *managed-system*.
- m** The name of the managed system which has the LEDs to list. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- filter** The filter to apply to the virtual partition SA LEDs to be listed. A filter is used to select which virtual partition SA LEDs are to be listed. If no filter is used, then all of the virtual partition SA LEDs for the *managed-system* will be listed.

The filter data consists of filter name/value pairs, which are in comma separated value (CSV) format. The filter data must be enclosed in double quotes.

The format of the filter data is as follows:

```
"filter-name=value,filter-name=value,..."
```

Note that certain filters accept a comma separated list of values, as follows:

```
""filter-name=value,value,...",..."
```

When a list of values is specified, the filter name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\`` character.

Valid filter names for this command are **lpar_names** or **lpar_ids**. Only one of these filters may be specified. Multiple partitions can be specified with the filter.

This option is not valid when listing the physical SA LED or the virtual SA LED for the *managed-system*.

- F** A delimiter separated list of attribute names for the desired attribute values to be displayed for each LED. If no attribute names are specified, then values for all of the attributes for each LED will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

--help Display the help text for this command and exit.

EXAMPLES

Display the physical SA LED for the system:

```
lsled -m 9406-579*100103C -r sa -t phys
```

Display all of the virtual partition SA LEDs:

```
lsled -m system1 -r sa -t virtualpar
```

Display the virtual partition SA LEDs for partitions **lpar1** and **lpar2**:

```
lsled -m system1 -r sa -t virtualpar --filter  
"'lpar_names=lpar1,lpar2'"
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chled

NAME

lslic - list Licensed Internal Code levels

SYNOPSIS

```
lslic -m managed-system -t {sys | power | syspower}
[-r {ibmretain | ibmwebsite | ftp | dvd | disk | mountpoint}
[-h host-name] [-u user-ID] [--passwd password]
[-d directory]
[-F [attribute-names] [--header]] [--help]
```

DESCRIPTION

lslic lists Licensed Internal Code (LIC) levels installed, activated, and accepted on the *managed-system*. The LIC levels that are available to be retrieved from a repository can also be listed.

OPTIONS

- m** The name of the managed system for which LIC levels are to be listed. The name may either be the user-defined name for the managed system, or be in the form *tttt-mmm*sssssss*, where *tttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *tttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- t** The type of LIC levels to list. Valid values are **sys** for Managed System LIC levels only, **power** for Power LIC levels only, or **syspower** for both Managed System and Power LIC levels.
- r** The repository to query for LIC levels that are available to be retrieved for the *managed-system*. Valid values are **ibmretain** for the IBM support system, **ibmwebsite** for the IBM service Internet site, **ftp** for a remote FTP site, **dvd** for the DVD drive on the Hardware Management Console (HMC), **disk** for the internal hard disk drive on the HMC, or **mountpoint** for the specified mountpoint.
- h** The host name or IP address of the remote FTP server.

This option is required when displaying LIC levels that are available to be retrieved from a remote FTP site. This option is not valid otherwise.
- u** The user ID to use to log in to the remote FTP site.

This option is required when displaying LIC levels that are available to be retrieved from a remote FTP site. This option is not valid otherwise.
- passwd**
The password to use to log in to the remote FTP site. If this option is omitted, you will be prompted to enter the password.

This option is only valid when displaying LIC levels that are available to be retrieved from a remote FTP site.
- d** The mountpoint location or the directory to use on the remote FTP site. If this option is not specified for FTP, then the **/opt/ccfw/data** directory will be used.

This option is only valid when displaying LIC levels that are available to be retrieved from a mountpoint or a remote FTP site.
- F** A delimiter separated list of attribute names for the desired attribute values to be displayed for each LIC level. If no attribute names are specified, then values for all of the attributes for each LIC level will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

--help Display the help text for this command and exit.

EXAMPLES

Display Managed System LIC levels:

```
lslic -t sys -m mysystem
```

Display Power LIC levels:

```
lslic -t power -m 9406-570*1020304
```

Display Managed System and Power LIC levels and display levels available on the IBM service Internet site:

```
lslic -t syspower -m mysystem -r ibmwebsite
```

Display Managed System LIC levels and display levels available from a remote FTP server:

```
lslic -t sys -m mysystem -r ftp -h ftphost.domainname  
-u myuser --passwd mypasswd
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

updlic

NAME

lsrefcode - list reference codes

SYNOPSIS

```
lsrefcode -r {sys | lpar} -m managed-system
[-n number] [--filter "filter-data"]
[-F [attribute-names] [--header]] [--help]
```

DESCRIPTION

lsrefcode lists reference codes for the *managed-system* or for partitions in the *managed-system*.

OPTIONS

- r** The type of reference codes to list. Valid values are **sys** for managed system reference codes, and **lpar** for partition reference codes.
- m** The name of the managed system which has the reference codes to list. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- n** The *number* of reference codes to list, starting with the current reference code, for the *managed-system* or for each partition. Reference codes are listed in order, with the most recent (current) reference code first.

The *number* specified must be greater than 0. If there are fewer reference codes available than *number*, only the available reference codes will be listed.

If this option is omitted, only the current reference code will be listed.

- filter** The filter to apply to the partition reference codes to be listed. A filter is used to select the partitions for which reference codes are to be listed. If no filter is specified, then reference codes for all partitions in the *managed-system* will be listed.

The filter data consists of filter name/value pairs, which are in comma separated value (CSV) format. The filter data must be enclosed in double quotes.

The format of the filter data is as follows:

```
filter-name=value,filter-name=value,...<LF>
```

Note that certain filters accept a comma separated list of values, as follows:

```
"filter-name=value,value,...",...<LF>
```

When a list of values is specified, the filter name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\` character.

Valid filter names for this command are **lpar_names** or **lpar_ids**. Only one of these filters may be specified. Multiple partitions can be specified with the filter.

This option is not valid when listing managed system reference codes.

- F** A delimiter separated list of attribute names for the desired attribute values to be displayed for each reference code. If no attribute names are specified, then values for all of the reference code attributes will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be

displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

--help Display the help text for this command and exit.

EXAMPLES

List the current reference code for the managed system:

```
lsrefcode -r sys -m system1
```

List the last 10 reference codes for the managed system, and only display attribute values for each reference code, following a header of attribute names:

```
lsrefcode -r sys -m 9406-570*1543901A -n 10 -F --header
```

List the current reference code for each partition in the managed system, and only list the partition name, time stamp, and reference code value for each reference code, and separate the output values with a comma:

```
lsrefcode -r lpar -m system1 -F lpar_name,time_stamp,  
refcode
```

List the last 25 reference codes for partitions **p1** and **p2**:

```
lsrefcode -r lpar -m 9406-520*12345678 -n 25 --filter  
""lpar_names=p1,p2""
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

lssacfg - list Service Agent configuration information

SYNOPSIS

lssacfg -t { **email** | **ftpfirewall** | **ftpoffload** }
[-F [*attribute-names*] [--header]] [--help]

DESCRIPTION

lssacfg lists Service Agent configuration information.

OPTIONS

-t The type of Service Agent configuration information to list. Valid values are **email** for customer email notification settings, **ftpfirewall** for FTP firewall settings, and **ftpoffload** for FTP offload server settings.

-F A delimiter separated list of attribute names representing the desired attribute values to display. If this option is specified without any attribute names, then all of the attributes will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

--help Display the help text for this command and exit.

EXAMPLES

Display the Service Agent customer email notification settings:

lssacfg -t email

Display the Service Agent FTP firewall settings used for offloading service information:

lssacfg -t ftpfirewall

Display the Service Agent FTP server host name and directory used for offloading service information:

lssacfg -t ftpoffload -F host,directory

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chsacfg

NAME

lssvcevents - list console or serviceable events

SYNOPSIS

```
lssvcevents -t { console | hardware }
[-d number-of-days] [-m managed-system]
[--filter "filter-data"]
[-F [attribute-names] [--header]] [--help]
```

DESCRIPTION

lssvcevents lists console events logged by the Hardware Management Console (HMC), or serviceable events.

OPTIONS

- t** The type of events to list. Valid values are **console** for console events, or **hardware** for serviceable events.
- d** The number of days prior to today for which events will be listed. Events that occurred today will be listed, along with any events that occurred during the past *number-of-days* days.

If this option is omitted when listing console events, console events that occurred within the past 7 days will be listed.

If this option is omitted when listing serviceable events, all serviceable events will be listed.

- m** The name of the managed system for which serviceable events are to be listed. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

If this option is omitted, all serviceable events will be listed.

This option is only valid when listing serviceable events.

- filter** The filter to apply to the serviceable events to be listed. A filter is used to select which serviceable events are to be listed. For example, only open serviceable events can be listed by using a filter to specify the status (open) of the serviceable events to list. If a filter is not used, then all serviceable events will be listed.

The filter data consists of filter name/value pairs, which are in comma separated value (CSV) format. The filter data must be enclosed in double quotes.

The format of the filter data is as follows:

```
"filter-name=value,filter-name=value,..."
```

Note that certain filters accept a comma separated list of values, as follows:

```
""filter-name=value,value,...","..."
```

When a list of values is specified, the filter name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\` character.

Multiple values can be specified for each filter.

Valid filter names for serviceable events:

problem_nums

Specify event problem number(s)

status

Specify event status. Valid values are

open or **closed**.

This option is not valid when listing console events.

- F** A delimiter separated list of attribute names for the desired attribute values to be displayed for each event. If no attribute names are specified, then values for all of the attributes for each event will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

- help** Display the help text for this command and exit.

EXAMPLES

List the serviceable events that occurred today:

```
lssvcevents -t hardware -d 0
```

List the console events that occurred within the past 3 days:

```
lssvcevents -t console -d 3
```

List all of the open serviceable events for the system **system1**:

```
lssvcevents -t hardware -m system1 --filter "status=open"
```

List only the problem numbers and status of all serviceable events for the system that occurred within the last 7 days, and separate the output values with a colon:

```
lssvcevents -t hardware -m 9406-570*101234A -d 7 -F  
problem_num:status
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

lssyscfg - list system resources

SYNOPSIS

```
lssyscfg -r {lpar | prof | sys | sysprof | cage | frame}
[-m managed-system | -e managed-frame]
[--filter "filter-data"]
[-F [attribute-names] [--header]] [--help]
```

DESCRIPTION

lssyscfg lists the attributes of partitions, partition profiles, or system profiles for the *managed-system*. It can also list the attributes of the *managed-system*, and of all of the systems managed by this Hardware Management Console (HMC).

lssyscfg can also list the attributes of cages in the *managed-frame*, the attributes of the *managed-frame*, or the attributes of all of the frames managed by this HMC.

OPTIONS

- r** The type of resources to list. Valid values are **lpar** for partitions, **prof** for partition profiles, **sys** for managed systems, **sysprof** for system profiles, **cage** for managed frame cages, and **frame** for managed frames.
- m** The name of either the managed system to list, or the managed system which has the system resources to list. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

This option is required when listing partitions, partition profiles, or system profiles. This option is optional when listing managed systems, and if it is omitted, then all of the systems managed by this HMC will be listed. This option is not valid when listing managed frame cages or managed frames.

- e** The name of either the managed frame to list, or the managed frame which contains the cages to list. The name may either be the user-defined name for the managed frame, or be in the form *ttt-mmm*sssssss*, where *ttt* is the type, *mmm* is the model, and *sssssss* is the serial number of the managed frame. The *ttt-mmm*sssssss* form must be used if there are multiple managed frames with the same user-defined name.

This option is required when listing managed frame cages. This option is optional when listing managed frames, and if it is omitted, then all of the frames managed by this HMC will be listed. This option is not valid when listing partitions, partition profiles, system profiles, or managed systems.

- filter** The filter(s) to apply to the resources to be listed. Filters are used to select which resources of the specified resource type are to be listed. If no filters are used, then all of the resources of the specified resource type will be listed. For example, specific partitions can be listed by using a filter to specify the names or IDs of the partitions to list. Otherwise, if no filter is used, then all of the partitions in the managed system will be listed.

The filter data consists of filter name/value pairs, which are in comma separated value (CSV) format. The filter data must be enclosed in double quotes.

The format of the filter data is as follows:

```
"filter-name=value,filter-name=value,..."
```

Note that certain filters accept a comma separated list of values, as follows:

`""filter-name=value,value,...",..."`

When a list of values is specified, the filter name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\`` character.

Unless otherwise indicated, multiple values can be specified for each filter.

Valid filter names for partitions:

lpar_names | **lpar_ids** | **work_groups**

Only one of these three filters may be specified.

Valid filter names for partition profiles:

lpar_names | **lpar_ids**

Either the name or the ID of the partition which has the partition profiles to be listed must be specified. Only one partition name or ID can be specified.

profile_names

Valid filter names for system profiles:

profile_names

This option is required when listing partition profiles.

This option is not valid when listing managed systems, managed frame cages, or managed frames.

-F A delimiter separated list of attribute names for the desired attribute values to be displayed for each resource. If no attribute names are specified, then values for all of the attributes for the resource will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

--help Display the help text for this command and exit.

EXAMPLES

List all systems managed by this HMC:

lssyscfg -r sys

List only the user-defined name, machine type and model, and serial number for all of the systems managed by this HMC, and separate the output values with a colon:

lssyscfg -r sys -F name:type_model:serial_num

List the managed system system1:

```
lssyscfg -r sys -m system1
```

List all partitions in the managed system, and only display attribute values for each partition, following a header of attribute names:

```
lssyscfg -r lpar -m 9406-570*12345678 -F --header
```

List the partitions lpar1, lpar2, and lpar3:

```
lssyscfg -r lpar -m system1 --filter "'lpar_names=lpar1, lpar2,lpar3'"
```

List only the names, IDs, and states of partitions lpar1, lpar2, and lpar3, and separate the output values with a comma:

```
lssyscfg -r lpar -m system1 --filter "'lpar_names=lpar1, lpar2,lpar3'" -F name,lpar_id,state
```

List all partition profiles defined for partition lpar2:

```
lssyscfg -r prof -m system1 --filter "lpar_names=lpar2"
```

List the partition profiles prof1 and prof2 defined for the partition that has an ID of 2:

```
lssyscfg -r prof -m system1 --filter "lpar_ids=2, 'profile_names=prof1,prof2'"
```

List all system profiles defined for the managed system:

```
lssyscfg -r sysprof -m 9406-520*100128A
```

List the system profile sysprof1:

```
lssyscfg -r sysprof -m system1 --filter "profile_names=sysprof1"
```

List all frames managed by this HMC:

```
lssyscfg -r frame
```

List the managed frame myFrame:

```
lssyscfg -r frame -e myFrame
```

List all cages in the managed frame:

```
lssyscfg -r cage -e 9119-59*000012C
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chsyscfg, mksyscfg, rmsyscfg, lshwres

NAME

lssysconn - list system connections

SYNOPSIS

lssysconn -r all [-F *attribute-names*] [--header]
[--help]

DESCRIPTION

lssysconn lists connection information for all of the systems and frames managed by this Hardware Management Console (HMC). Connection information for all systems and frames to which this HMC is connected or attempting to connect is listed.

OPTIONS

- r** The type of resources for which to list connection information. The only valid value is **all** for all managed systems and managed frames.
- F** A delimiter separated list of attribute names for the desired connection attribute values to be displayed for each resource. If no attribute names are specified, then values for all of the connection attributes for the resource will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

- help** Display the help text for this command and exit.

EXAMPLES

List connection information for all systems and frames managed by this HMC:

lssysconn -r all

List only the IP address and connection state for all of the systems and frames managed by this HMC, and separate the output values with a colon:

lssysconn -r all -F ipaddr:state

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lssyscfg, mksysconn, rmsysconn

NAME

lsusrzca - Displays status Terms and Conditions agreement prompting

SYNOPSIS

lsusrzca [--help]

DESCRIPTION

lsusrzca Displays the status of prompting for Terms and Conditions agreement at login.

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

lsvet - list Virtualization Engine systems technologies information

SYNOPSIS

```
lsvet -t {code | hist} -m managed-system
[-F [attribute-names] [--header]] [--help]
```

DESCRIPTION

lsvet lists Virtualization Engine systems technologies information for the *managed-system*.

OPTIONS

- t** The type of information to list. Valid values are **code** for information used to generate Virtualization Engine systems technologies activation codes, and **hist** for the Virtualization Engine systems technologies activation history log.
- m** The name of the managed system for which information is to be listed. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- F** A delimiter separated list of attribute names representing the desired attribute values to display. If this option is specified without any attribute names, then all of the attributes will be displayed.

When this option is specified, only attribute values will be displayed. No attribute names will be displayed. The attribute values displayed will be separated by the delimiter which was specified with this option.

This option is useful when only attribute values are desired to be displayed, or when the values of only selected attributes are desired to be displayed.

--header

Display a header record, which is a delimiter separated list of attribute names for the attribute values that will be displayed. This header record will be the first record displayed. This option is only valid when used with the **-F** option.

- help** Display the help text for this command and exit.

EXAMPLES

Display activation code generation information:

```
lsvet -m sys1 -t code
```

Display the activation history log:

```
lsvet -m 9117-570*1001213 -t hist
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chvet

NAME

migrcfg - migrate configuration

SYNOPSIS

migrcfg -m *managed-system* -t 1 -f *file* [--help]

DESCRIPTION

migrcfg migrates partition configuration data to a *managed-system*.

OPTIONS

- m** The name of the managed system to which to migrate the partition configuration data. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- t** The migration data type. The only valid value is **1**.
- f** The name of the file on floppy diskette that contains the partition configuration data to migrate.
- help** Display the help text for this command and exit.

EXAMPLES

migrcfg -m mySystem -t 1 -f cfgFile

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lssyscfg

NAME

mkaccfg - create access control object

SYNOPSIS

```
mkaccfg -t {resourcerole | taskrole}
        {-f configuration-file | -i "configuration-data"}
        [--help]
```

DESCRIPTION

mkaccfg creates a new access control role.

OPTIONS

- t** The type of access control role to create. Valid values are **resourcerole** for managed resource role and **taskrole** for task role.
- f** The name of the file containing the configuration data needed to create the access control role. The configuration data consists of attribute name/value pairs, which are in comma separated value (CSV) format. These attribute name/value pairs form a configuration record. A line feed marks the end of a configuration record. There can only be one configuration record in the file.

The format of a configuration record is as follows:

```
attribute-name=value,attribute-name=value,...<LF>
```

Note that certain attributes accept a comma separated list of values, as follows:

```
"attribute-name=value,value,...",...<LF>
```

When a list of values is specified, the attribute name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\`` character.

Attribute names for managed resource roles (all attributes are required):

- name**
name of the managed resource role to create
- resources**
comma separated list of managed resource objects

Attribute names for task roles (all attributes are required):

- name**
name of the task role to create
- resources**
comma separated list of tasks
- parent**
name of the parent task role on which to base this task role. Valid values are **hmcsuperadmin**, **hmcoperator**, **hmcviewer**, **hmcpe**, **hmcservicerep**, or a user-defined task role.

The **-f** and the **-i** options are mutually exclusive.

- i** This option allows you to enter configuration data on the command line, instead of using a file. Data entered on the command line must follow the same format as data in a file, and must be enclosed in double quotes.

The **-i** and the **-f** options are mutually exclusive.

--help Display the help text for this command and exit.

EXAMPLES

Create a managed resource role using the configuration data in the file **/tmp/mr1file**:

```
mkaccfg -t resourcerole -f /tmp/mr1file
```

Create a task role named **tr1**:

```
mkaccfg -t taskrole -i "name=tr1,parent=hmcsuperadmin,  
resources=cec:chcod+lscod+lshwres,lpar:chsyscfg+  
lssyscfg+mksyscfg"
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chaccfg, lsaccfg, rmaccfg

NAME

mkhmcusr - create a Hardware Management Console user

SYNOPSIS

```
mkhmcusr -u user-name -a task-role [-d description]  
[--passwd password] [-M number-of-days] [--help]
```

DESCRIPTION

mkhmcusr creates a Hardware Management Console (HMC) user.

OPTIONS

- u** The user name of the HMC user to create. The user name cannot be longer than 32 characters, and it must begin with a letter.
- a** The access control task role for this user. Valid values are **hmcsuperadmin**, **hmcoperator**, **hmcviewer**, **hmcpe**, **hmcserVICerep**, or a user-defined task role.
- d** The description for this user. *description* can be any string. If this option is not specified, then the description for this user will be set to "HMC User".
- passwd**
The password for this user. If this option is omitted, you will be prompted to enter the password. The password must be at least 7 characters in length.
- M** The number of days until the password for this user expires. If this option is not specified, then this user's password will never expire.
- help** Display the help text for this command and exit.

EXAMPLES

Create the user **sysadmin**:

```
mkhmcusr -u sysadmin -a hmcsuperadmin --passwd aielkw3j  
-M 180 -d "System Administrator"
```

Create the user **myhmcuser** (the user's password must be entered when prompted):

```
mkhmcusr -u myhmcuser -a hmcviewer
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chhmcusr, **lshmcusr**, **rmhmcusr**, **lsaccfg**

NAME

mksyscfg - create system resources

SYNOPSIS

```
mksyscfg -r {lpar | prof | sysprof} -m managed-system
{-f configuration-file | -i "configuration-data"}
[--help]
```

DESCRIPTION

mksyscfg creates partitions, partition profiles, or system profiles for the *managed-system*.

OPTIONS

-r The type of system resources to create. Valid values are **lpar** for partitions, **prof** for partition profiles, and **sysprof** for system profiles.

When a partition is created, the default profile for the partition is also created.

-m The name of the managed system for which the system resources are to be created. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

-f The name of the file containing the configuration data needed to create the system resources. The configuration data consists of attribute name/value pairs, which are in comma separated value (CSV) format. These attribute name/value pairs form a configuration record. A line feed marks the end of a configuration record. The file must contain one configuration record for each resource to be created, and each configuration record must be for the same resource type.

The format of a configuration record is as follows:

```
attribute-name=value,attribute-name=value,...<LF>
```

Note that certain attributes accept a comma separated list of values, as follows:

```
"attribute-name=value,value,...",...<LF>
```

When a list of values is specified, the attribute name/value pair must be enclosed in double quotes. Depending on the shell being used, nested double quote characters may need to be preceded by an escape character, which is usually a `\`` character.

Attribute names for partitions (see below for attribute names that are common to both partitions and partition profiles):

name

name of the partition to create

[lpar_id]**profile_name**

name of the default profile to create

lpar_env

Valid values are **aixlinux**, **os400**, or **vioserver**

[shared_proc_pool_util_auth]

Valid values are:

0 - do not allow authority

1 - allow authority

[work_group_id]

Attribute names for partition profiles (see below for attribute names that are common to both partition profiles and partitions):

name
name of the partition profile to create

lpar_name | lpar_id
name or ID of the partition for which to create the profile

Attribute names for both partitions and partition profiles:

[all_resources]
Valid values are:
0 - do not use all the managed system resources
1 - use all the managed system resources (this option is not valid for i5/OS partitions on IBM eServer p5 servers)

min_mem
megabytes

desired_mem
megabytes

max_mem
megabytes

[proc_mode]
Valid values are:
ded - dedicated processors
shared - shared processors

[min_procs]

[desired_procs]

[max_procs]

[min_proc_units]

[desired_proc_units]

[max_proc_units]

[min_5250_cpw_percent]
Only valid for i5/OS partitions in managed systems that support the assignment of 5250 CPW percentages

[desired_5250_cpw_percent]
Only valid for i5/OS partitions in managed systems that support the assignment of 5250 CPW percentages

[max_5250_cpw_percent]
Only valid for i5/OS partitions in managed systems that support the assignment of 5250 CPW percentages

[sharing_mode]
Valid values are:
keep_idle_procs - valid with dedicated processors
share_idle_procs - valid with dedicated processors
cap - valid with shared processors
uncap - valid with shared processors

[uncap_weight]

[io_slots]

Comma separated list of I/O slots, with each I/O slot having the following format:

*slot-DRC-index/slot-IO-pool-ID/
is-required*

Both '/' characters must be present, but optional values may be omitted. Optional values are *slot-IO-pool-ID*.

Valid values for *is-required*:

0 - no

1 - yes

For example:

21030002/3/1 specifies an I/O slot with a DRC index of **21030002**, it is assigned to I/O pool **3**, and it is a required slot.

[lpar_io_pool_ids]

comma separated

load_source_slot

i5/OS only

DRC index of I/O slot, or virtual slot number

[alt_restart_device_slot]

i5/OS only

DRC index of I/O slot, or virtual slot number

console_slot

i5/OS only

DRC index of I/O slot, virtual slot number, or the value **hmc**

[alt_console_slot]

i5/OS only

DRC index of I/O slot, or virtual slot number

[op_console_slot]

i5/OS only

DRC index of I/O slot, or virtual slot number

[auto_start]

Valid values are:

0 - off

1 - on

[boot_mode]

AIX, Linux, and virtual I/O server only

Valid values are:

norm - normal

dd - diagnostic with default boot list

ds - diagnostic with stored boot list

of - Open Firmware OK prompt

sms - System Management Services

[power_ctrl_lpar_ids | power_ctrl_lpar_names]

comma separated

[conn_monitoring]

Valid values are:

0 - off

1 - on

[hsl_pool_id]

i5/OS only

Valid values are:

0 - HSL OptiConnect is disabled

1 - HSL OptiConnect is enabled

[virtual_opti_pool_id]

i5/OS only

Valid values are:

0 - virtual OptiConnect is disabled

1 - virtual OptiConnect is enabled

[max_virtual_slots]

[virtual_eth_adapters]

Comma separated list of virtual ethernet adapters, with each adapter having the following format:

```
virtual-slot-number/is-IEEE/  
port-vlan-ID/additional-vlan-IDs/  
is-trunk/is-required
```

All 5 '/' characters must be present, but optional values may be omitted. Optional values are *additional-vlan-IDs*, and *is-trunk*.

Valid values for *is-IEEE*, *is-trunk*, and *is-required*:

0 - no

1 - yes

For example:

```
3/1/5/"6,7"/0/1
```

specifies a virtual ethernet adapter with a virtual slot number of **3**, is IEEE 802.1Q compatible, has a port virtual LAN ID of **5**, additional virtual LAN IDs of **6** and **7**, it is not a trunk adapter, and it is required.

[virtual_scsi_adapters]

Comma separated list of virtual SCSI adapters, with each adapter having the following format:

```
virtual-slot-number/client-or-server/  
remote-lpar-ID/remote-lpar-name/  
remote-slot-number/is-required
```

All 5 '/' characters must be present, but optional values may be omitted. Optional

values for server adapters are *remote-lpar-ID*, *remote-lpar-name*, and *remote-slot-number*. Optional values for client adapters are *remote-lpar-ID* or *remote-lpar-name* (one of those values is required, but not both).

Valid values for *client-or-server*:

client

server

i5/OS partitions on IBM eServer i5 servers, and virtual I/O server partitions only

Valid values for *is-required*:

0 - no

1 - yes

For example:

4/client/2//3/0

specifies a virtual SCSI **client** adapter with a virtual slot number of **4**, a remote (server) partition ID of **2**, a remote (server) slot number of **3**, and it is not required.

[virtual_serial_adapters]

Comma separated list of virtual serial adapters, with each adapter having the following format:

```
virtual-slot-number/client-or-server/
supports-HMC/remote-lpar-ID/
remote-lpar-name/remote-slot-number/
is-required
```

All 6 '/' characters must be present, but optional values may be omitted. Optional values for server adapters are *supports-HMC*, *remote-lpar-ID*, *remote-lpar-name*, and *remote-slot-number*. Optional values for client adapters are *remote-lpar-ID* or *remote-lpar-name* (one of those values is required, but not both), and the *supports-HMC* value is not allowed.

Valid values for *client-or-server*:

client

not valid for i5/OS partitions on IBM eServer p5 servers

server

i5/OS and virtual I/O server partitions only

Valid values for *supports-HMC*:

0 - no

Valid values for *is-required*:

0 - no

1 - yes

For example:

4/server/0///0

specifies a virtual serial **server** adapter with a virtual slot number of **4**, it does not support an HMC connection, any client adapter is allowed to connect to it, and it is not required.

Attribute names for system profiles:

name

name of the system profile to create

lpar_names | **lpar_ids**

comma separated

profile_names

comma separated

Brackets around an attribute name indicate that the attribute is optional.

The **-f** and the **-i** options are mutually exclusive.

- i** This option allows you to enter configuration data on the command line, instead of using a file. Data entered on the command line must follow the same format as data in a file, and must be enclosed in double quotes.

When this option is used, only a single system resource can be created.

The **-i** and the **-f** options are mutually exclusive.

- help** Display the help text for this command and exit.

EXAMPLES

Create an AIX or Linux partition:

```
mksyscfg -r lpar -m system1 -i "name=aix_lpar2,
profile_name=prof1,lpar_env=aixlinux,min_mem=256,
desired_mem=1024,max_mem=1024,proc_mode=ded,
min_procs=1,desired_procs=1,max_procs=2,
sharing_mode=share_idle_procs,auto_start=1,
boot_mode=norm,lpar_io_pool_ids=3,
"io_slots=21010003/3/1,21030003/0"
```

Create an i5/OS partition profile:

```
mksyscfg -r prof -m 9406-570*34134441 -i "name=prof2,
lpar_id=3,min_mem=512,desired_mem=512,max_mem=1024,
proc_mode=shared,min_procs=1,desired_procs=1,max_procs=2,
min_proc_units=0.1,desired_proc_units=0.5,max_proc_units=1.5,
sharing_mode=uncap,uncap_weight=128,auto_start=1,
"lpar_io_pool_ids=1,2",
```

```
"io_slots=2101001B/1/1,2103001B/2/1,2105001B//0",  
load_source_slot=2101001B,console_slot=hmc,  
max_virtual_slots=4,  
"virtual_scsi_adapters=2/client/2//3/1,3/server////1""
```

Create partition profiles using the configuration data in the file **/tmp/profcfg**:

```
mksyscfg -r prof -m system1 -f /tmp/profcfg
```

Create a system profile:

```
mksyscfg -r sysprof -m system1 -i "name=sysprof1,  
"lpar_names=lpar1,lpar2","profile_names=prof1,prof1""
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chsyscfg, lssyscfg, rmsyscfg

NAME

mksysconn - create system connection

SYNOPSIS

```
mksysconn --ip IP-address [-r {sys | frame}]  
[--passwd password] [--help]
```

DESCRIPTION

mksysconn establishes a connection from the Hardware Management Console (HMC) to a system in the network and adds the system to the systems managed by the HMC. If a connection to the system cannot be established because the network is down, the service processor for the system is down, or too many other HMCs have already established a connection to the system, the system will be added as a managed system which is in the No Connection state.

mksysconn can also establish a connection from the HMC to a frame in the network and add the frame to the frames managed by the HMC. If a connection to the frame cannot be established because the network is down, the bulk power assembly (BPA) for the frame is down, or too many other HMCs have already established a connection to the frame, the frame will be added as a managed frame which is in the No Connection state.

If your HMC is set up as a DHCP server on a private network, do not use this command to establish HMC connections to managed systems and frames that are DHCP clients. This command is intended for use on a public network only, where the systems are set to use static IP addresses. Using this command in a DHCP environment establishes a temporary connection that will not continue to work properly over network configuration changes, system power loss, and service repair actions.

OPTIONS

--ip To connect to a system and add the system to the systems managed by the HMC, specify the IP address or host name of the service processor for the system.

To connect to a frame and add the frame to the frames managed by the HMC, specify the IP address or host name of one side of the bulk power assembly (BPA) for the frame. Note that to properly connect to a frame, it is recommended that you issue this command twice, once for each side of the BPA, in order to connect to both sides of the BPA for the frame.

-r The type of resource to which to connect and add to the HMC. Valid values are **sys** for system and **frame** for frame. If this option is omitted, then the resource to which to connect and add to the HMC is assumed to be a system.

--passwd The HMC Access password for the system or the frame to which to connect. If this option is omitted, you will be prompted to enter the password.

--help Display the help text for this command and exit.

EXAMPLES

Connect to and add the system with the host name **sys1.company.com**:

```
mksysconn --ip sys1.company.com --passwd sys1pw
```

Connect to and add the system with the IP address 9.3.152.145 (the HMC Access password for the system must be entered when prompted):

```
mksysconn --ip 9.3.152.145
```

Connect to and add the frame with the host names **frame1_A.company.com** and **frame1_B.company.com**:

```
mksysconn --ip frame1_A.company.com -r frame --passwd  
frame1pw
```



```
mksysconn --ip frame1_B.company.com -r frame --passwd  
frame1pw
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

rmsysconn, **lssyscfg**

NAME

mkvterm - open a virtual terminal session

SYNOPSIS

```
mkvterm -m managed-system  
{-p partition-name | --id partition-ID} [--help]
```

DESCRIPTION

mkvterm opens a virtual terminal session for an AIX, Linux, or virtual I/O server partition.

After establishing a virtual terminal session, the `~.` character sequence can be entered in the terminal window to terminate it, or the **rmvterm** command can be used to force the session to be closed.

A partition can only have one open virtual terminal session at a time.

OPTIONS

- m** The name of the managed system which has the partition for which to open the virtual terminal session. The name may either be the user-defined name for the managed system, or be in the form *tttt-mmm*sssssss*, where *tttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *tttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- p** The name of the partition for which to open the virtual terminal session.

You must either use this option to specify the name of the partition, or use the **--id** option to specify the partition's ID. The **-p** and the **--id** options are mutually exclusive.
- id** The ID of the partition for which to open the virtual terminal session.

You must either use this option to specify the ID of the partition, or use the **-p** option to specify the partition's name. The **--id** and the **-p** options are mutually exclusive.
- help** Display the help text for this command and exit.

EXAMPLES

Open a virtual terminal session for partition **p1**:

```
mkvterm -m mySystem -p p1
```

Open a virtual terminal session for the partition with an ID of **1**:

```
mkvterm -m 9406-570*12345678 --id 1
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

rmvterm

NAME

pedbg - Product Engineering debug tools

SYNOPSIS

pedbg **{-d {on | off} | -j {on | off} | -l {rmc | se} | -c | -r} [--help]**

DESCRIPTION

pedbg provides debug tools for Product Engineer/Support Personnel. This command requires PE authority to run, i.e, only hscpe user can access this command.

OPTIONS

- d** Turn on or off various debug tracing. This option will restart subsystems to start/stop internal tracing.
- j** Turn on or off Just in Time compiler. Turn off Just in Time compiler will result in loss of performance.
- l** List internal subsystem information. If rmc is specified, the list of RMC daemons will be displayed, along with its state. If se is specified, the IBM.ServiceEvent resource entries are displayed.
- c** Collect various logs and javacore. This option can copy the data collected onto DVD or leave a zip file in the /dump directory.
- r** Remove the log files collected that are put in /dump.
- help** Display the help text for this command and exit.

EXAMPLES

The following command turns on debug:

```
pedbg -d on
```

The following command disables debug:

```
pedbg -d off
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

pesh - provides PE Shell access

SYNOPSIS

pesh <serial number of machine>

DESCRIPTION

pesh provides full shell access to Product Engineer/Support Personnel. **pesh** takes the serial number of the machine where full shell access is requested, then prompts the user for a 1 day password obtained from the support organization. If the password is valid, the user will be granted full shell access. Only user hscpe can access this command.

EXAMPLES

The following command lists the Hardware Management Console information:

```
lshmc -v
```

```
Vital Product Data Information:
```

```
*FC ????????
```

```
*VC 20.0
```

```
*N2 Sat Apr 24 05:05:10 CDT 2004
```

```
*FC ????????
```

```
*DS Hardware Management Console
```

```
*TM 6792-LPU
```

```
*SE 23FGYWF
```

```
*MN IBM
```

```
*PN IBM
```

```
*SZ 1055961088
```

```
*OS Embedded Operating Systems
```

```
*NA 9.3.197.17
```

```
*FC ????????
```

```
*DS Platform Firmware
```

```
*RM V3R3.0
```

Using the serial number by the SE tag, pass the value to the pesh command:

```
pesh 23FGYWF
```

You will be prompted for a password.

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

rmaccfg - remove access control object

SYNOPSIS

rmaccfg -t { resource | resourcerole | taskrole }
-n name [--help]

DESCRIPTION

rmaccfg removes an access control role from the Hardware Management Console (HMC), or it removes inactive managed resource objects assigned to an HMC user.

OPTIONS

-t The type of access control objects to remove. Valid values are **resource** for inactive managed resource objects, **resourcerole** for a managed resource role, and **taskrole** for a task role.

-n When removing inactive managed resource objects assigned to an HMC user, use this option to specify the user name of the HMC user from which to remove the inactive objects.

When removing an access control role, use this option to specify the name of the role to remove. Note that the predefined task roles **hmcsuperadmin**, **hmcoperator**, **hmcviewer**, **hmcpe**, and **hmcservicerep** cannot be removed.

If the specified access control role is currently assigned to one or more HMC users, you will be prompted to confirm that you want to remove the role.

--help Display the help text for this command and exit.

EXAMPLES

Remove the managed resource role **lpar_role**:

```
rmaccfg -t resourcerole -n lpar_role
```

Purge all inactive managed resource objects from the user **superuser**:

```
rmaccfg -t resource -n superuser
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chaccfg, **lsaccfg**, **mkaccfg**, **lshmcusr**

NAME

rmhmcusr - remove a Hardware Management Console user

SYNOPSIS

rmhmcusr -u *user-name* [**--help**]

DESCRIPTION

rmhmcusr removes a Hardware Management Console (HMC) user.

OPTIONS

- u** The user name of the HMC user to remove. The HMC users **root** and **hscroot** cannot be removed.
- help** Display the help text for this command and exit.

EXAMPLES

Remove the user **tester**:

```
rmhmcusr -u tester
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chhmcusr, **lshmcusr**, **mkhmcusr**

NAME

rmsyscfg - remove a system resource

SYNOPSIS

```
rmsyscfg -r {lpar | prof | sysprof} -m managed-system
[-n resource-name] [-p partition-name]
[--id partition-ID] [--help]
```

DESCRIPTION

rmsyscfg removes a partition, a partition profile, or a system profile from the *managed-system*.

OPTIONS

-r The type of system resource to remove. Valid values are **lpar** for a partition, **prof** for a partition profile, and **sysprof** for a system profile.

When a partition is removed, all of the partition profiles that are defined for that partition are also removed.

When a partition profile is removed, any system profiles that contain just that one partition profile are also removed.

-m The name of the managed system from which the system resource is to be removed. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

-n The name of the system resource to remove.

To remove a partition, you must either use this option to specify the name of the partition to remove, or use the **--id** option to specify the partition's ID. The **-n** and the **--id** options are mutually exclusive when removing a partition.

To remove a partition profile or a system profile, you must use this option to specify the name of the profile to remove.

-p The name of the partition which has the partition profile to remove. This option is only valid when removing a partition profile.

To remove a partition profile, you must either use this option to specify the name of the partition which has the partition profile to remove, or use the **--id** option to specify the partition's ID. The **-p** and the **--id** options are mutually exclusive.

--id The partition's ID.

To remove a partition, you must either use this option to specify the ID of the partition to remove, or use the **-n** option to specify the partition's name. The **--id** and the **-n** options are mutually exclusive when removing a partition.

To remove a partition profile, you must either use this option to specify the ID of the partition that has the profile to remove, or use the **-p** option to specify the partition's name. The **--id** and the **-p** options are mutually exclusive when removing a partition profile.

This option is not valid when removing a system profile.

--help Display the help text for this command and exit.

EXAMPLES

Remove the partition **partition5**:

rmsyscfg -r lpar -m system1 -n partition5

Remove the partition with ID 5:

rmsyscfg -r lpar -m system1 --id 5

Remove the partition profile **prof1** for partition **lpar3**:

rmsyscfg -r prof -m system1 -n prof1 -p lpar3

Remove the system profile **sysprof1**:

rmsyscfg -r sysprof -m 9406-520*34134441 -n sysprof1

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chsyscfg, lssyscfg, mksyscfg

NAME

rmsysconn - remove system connection

SYNOPSIS

```
rmsysconn -o {remove | reset}
           {-m managed-system | -e managed-frame | --ip IP-address}
           [--help]
```

DESCRIPTION

rmsysconn removes or resets the connection from the Hardware Management Console (HMC) to a managed system or a managed frame.

If your HMC is set up as a DHCP server on a private network, do not use this command to remove HMC connections to managed systems and frames. The remove option of this command is intended for use on a public network only, where the HMC is not set up as a DHCP server. Using the remove option of this command prevents the HMC from managing any system or frame at that IP address, even though that address may still be assigned through DHCP.

OPTIONS

-o The operation to perform. Valid values are **remove** or **reset**.

When **remove** is specified, the HMC disconnects from the specified managed system or the specified managed frame and the managed system or managed frame is removed from the HMC.

When **reset** is specified, the HMC disconnects from the specified managed system or the specified managed frame then attempts to reconnect.

The **reset** operation is useful for retrying to establish a connection to a managed system or a managed frame that is in the "No Connection" state.

-m The name of the managed system to remove or to reset the connection to. The name may either be the user-defined name for the managed system, or be in the form *tttt-mmm*sssssss*, where *tttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *tttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

To remove or reset the connection to a managed system, you must either use this option or the **--ip** option to specify the managed system.

Either this option, the **--ip** option, or the **-e** option is required. The **-m**, **--ip**, and the **-e** options are mutually exclusive.

-e The name of the managed frame to remove or to reset the connection to. The name may either be the user-defined name for the managed frame, or be in the form *tttt-mmm*sssssss*, where *tttt* is the type, *mmm* is the model, and *sssssss* is the serial number of the managed frame. The *tttt-mmm*sssssss* form must be used if there are multiple managed frames with the same user-defined name.

When this option is used to specify the managed frame to remove or to reset the connection to, the connections to both sides of the bulk power assembly (BPA) for the managed frame are removed or reset. When the connections to both sides of the BPA for the managed frame are removed, the managed frame is removed from the HMC.

To remove or reset the connection to just one side of the BPA for the managed frame, use the **--ip** option.

Either this option, the **--ip** option, or the **-m** option is required. The **-e**, **--ip**, and the **-m** options are

mutually exclusive.

--ip To remove or reset the connection to a managed system, you can use this option to specify the IP address or host name of the service processor for the managed system to remove or to reset the connection to. Alternatively, you can use the **-m** option to specify the name of the managed system to remove or to reset the connection to.

To remove or reset the connection to just one side of the BPA for a managed frame, you can use this option to specify the IP address or host name of the BPA side to remove or to reset the connection to. To remove or reset the connection to both sides of the BPA for a managed frame, use the **-e** option. Note that a managed frame will not be removed from the HMC until the connections to both sides of the BPA for the managed frame are removed.

Either this option, the **-m** option, or the **-e** option is required. The **--ip**, **-m**, and the **-e** options are mutually exclusive.

--help Display the help text for this command and exit.

EXAMPLES

Reset the connection to the managed system with IP address **9.3.152.145**:

```
rmsysconn -o reset --ip 9.3.152.145
```

Disconnect from the managed system mySys and remove it from the HMC:

```
rmsysconn -o remove -m mySys
```

Disconnect from the managed frame myFrame and remove it from the HMC:

```
rmsysconn -o remove -e myFrame
```

Reset the connection to one side of the BPA (with IP address **9.3.152.29**) for a managed frame:

```
rmsysconn -o reset --ip 9.3.152.29
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

mksysconn, **lssyscfg**

NAME

rmvterm - close a virtual terminal session

SYNOPSIS

```
rmvterm -m managed-system  
{-p partition-name | --id partition-ID} [--help]
```

DESCRIPTION

rmvterm forces the closure of a virtual terminal session for an AIX, Linux, or virtual I/O server partition.

To close the virtual terminal session normally, enter the `~.` character sequence in the terminal window.

OPTIONS

- m** The name of the managed system which has the partition for which to close the virtual terminal session. The name may either be the user-defined name for the managed system, or be in the form *tttt-mmm*sssssss*, where *tttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *tttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- p** The name of the partition for which to close the virtual terminal session.

You must either use this option to specify the name of the partition, or use the **--id** option to specify the partition's ID. The **-p** and the **--id** options are mutually exclusive.
- id** The ID of the partition for which to close the virtual terminal session.

You must either use this option to specify the ID of the partition, or use the **-p** option to specify the partition's name. The **--id** and the **-p** options are mutually exclusive.
- help** Display the help text for this command and exit.

EXAMPLES

Close a virtual terminal session for partition **p1**:

```
rmvterm -m mySystem -p p1
```

Close a virtual terminal session for the partition with an ID of **1**:

```
rmvterm -m 9406-570*12345678 --id 1
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

mkvterm

NAME

rsthwres - restore hardware resources

SYNOPSIS

```
rsthwres -r {io | mem | proc} -m managed-system  
[-p partition-name | --id partition-ID]  
[-l slot-DRC-index] [--help]
```

DESCRIPTION

rsthwres restores the hardware resource configuration of partitions in the *managed-system*. This operation may need to be performed after a dynamic logical partitioning (DLPAR) operation fails.

OPTIONS

- r** The type of hardware resources to restore. Valid values are **io** for physical I/O slots, **mem** for memory, and **proc** for processing resources.
- m** The name of the managed system which has the partitions for which to restore the hardware resources. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- p** The name of the partition for which to restore the hardware resources.

To restore hardware resources for a single partition, you must either use this option to specify the name of the partition, or use the **--id** option to specify the partition's ID. Otherwise, hardware resources for all partitions in the *managed-system* will be restored.

The **-p** and the **--id** options are mutually exclusive.

- id** The ID of the partition for which to restore the hardware resources.

To restore hardware resources for a single partition, you must either use this option to specify the ID of the partition, or use the **-p** option to specify the partition's name. Otherwise, hardware resources for all partitions in the *managed-system* will be restored.

The **--id** and the **-p** options are mutually exclusive.

- l** The DRC index of the physical I/O slot to restore.

This option is only valid when restoring physical I/O slots.

- help** Display the help text for this command and exit.

EXAMPLES

Restore the physical I/O slots for all partitions:

```
rsthwres -r io -m mySystem
```

Restore the physical I/O slot with DRC index **21010003**:

```
rsthwres -r io -m 9406-570*12345678 -l 21010003
```

Restore memory resources for partition **p1**:

```
rsthwres -r mem -m 9406-570*12345678 -p p1
```

Restore processing resources for the partition with ID **1**:

```
rsthwres -r proc -m mySystem --id 1
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

chhwres, lshwres

NAME

rstprofdata - restore profile data

SYNOPSIS

```
rstprofdata -m managed-system -l restore-type [-f file]  
[--help]
```

DESCRIPTION

rstprofdata restores profile data for the *managed-system* from a backup file. **rstprofdata** can also be used to initialize the profile data for the *managed-system*.

The **bkprofdata** command can be used to back up profile data for the *managed-system*.

OPTIONS

- m** The name of the managed system for which to restore or initialize profile data. The name may either be the user-defined name for the managed system, or be in the form *tttt-mmm*sssssss*, where *tttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *tttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- l** The type of restore to perform. Valid values are:
- 1** - full restore from the backup file
 - 2** - merge the current profile data and profile data from the backup file, giving priority to the backup data. If the profile data conflicts, the backup data is restored over the current data.
 - 3** - merge the current profile data and profile data from the backup file, giving priority to the current data. If the profile data conflicts, the backup data is not restored over the current data.
 - 4** - initialize the profile data. All partitions, partition profiles, and system profiles for the managed system will be deleted.
- f** The name of the backup file that contains the profile data to be restored. If *file* is not fully qualified, *file* must exist in the */var/hsc/profiles/serial-number* directory on the HMC (*serial-number* is the serial number of the managed system).

This option is required for all restore types except **4** (initialize).

- help** Display the help text for this command and exit.

EXAMPLES

Do a full restore of the profile data from the file **myFile**. A floppy diskette must have already been inserted into the diskette drive and the mount command must have already been issued:

```
rstprofdata -m mySystem -l 1 -f /mnt/floppy/myFile
```

Restore the profile data from the file **backup1**, and give priority to the current profile data. The file **backup1** exists in the */var/hsc/profiles/3413444* directory on the HMC:

```
rstprofdata -m 9406-570*3413444 -l 3 -f backup1
```

Initialize the profile data:

rstprofdata -m 9406-570*3413444 -l 4

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

bkprofdata

NAME

sendfile - Transfer file from the HMC to a remote system

SYNOPSIS

```
sendfile -f filename -h remote-system -d remote-directory -u user [--passwd password] [-s] [-k keyfile]
[--help]
```

DESCRIPTION

sendfile Transfer a file from the HMC to a remote system using File Transfer Protocol. Optionally allows Secure FTP over an encrypted ssh transport to be used. When selecting the secure ftp option, user have the option to specify an identity key file, generated by the ssh-keygen command for public key authentication. If the matching public key file resides on the remote system, and the passphrase is empty, no password will be prompted.

OPTIONS

- f** The file name to transfer.
- h** The remote system name. An IP address can also be specified.
- d** The directory on the remote system to put the file.
- u** The user name on the remote system.
- passwd**
The user's password on the remote system. If not specified, the password will be prompted.
- s** Specify the option to use Secure File Transfer Protocol.
- k** Specify the identity key file for public key authentication. This is the key file generated by the ssh-keygen command. If the public key file is deployed on the remote system, and the passphrase is empty, the password will not be prompted during secure file transfer.
- help** Prints help message.

EXAMPLES

The following command transfers the file using File Transfer Protocol:

```
sendfile -f /home/joe/myfile -h myhost@company.com -d /home/joe -u myid
```

Transfer a file using Secure FTP:

```
sendfile -f /home/joe/myfile -h myhost@company.com -d /tmp -u myid -s
```

Generate a public key on the HMC then copy to the server for sendfile to use public key authentication with sftp:

```
ssh-keygen -t rsa -f mykey
```

```
scp mykey me@myhost:/home/me/.ssh/authorized_keys2
```

```
sendfile -f /home/me/myfile -h myhost@company.com -d /tmp -s -k mykey
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

startdump - start dump

SYNOPSIS

```
startdump {-m managed-system | -e managed-frame}
-t {pss | sp | sys} [-s {a | b}] [--help]
```

DESCRIPTION

startdump initiates a dump on the *managed-system* or the *managed-frame*.

The **lsdump** command can be used to determine when the dump has completed and is available. The **get-dump** command can then be used to offload the dump from the *managed-system* or the *managed-frame* to the Hardware Management Console (HMC).

OPTIONS

-m The name of the managed system on which to initiate the dump. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.

This option is required when initiating a service processor dump or a platform dump. This option is not valid otherwise.

-e The name of the managed frame on which to initiate the dump. The name may either be the user-defined name for the managed frame, or be in the form *ttt-mmm*sssssss*, where *ttt* is the type, *mmm* is the model, and *sssssss* is the serial number of the managed frame. The *ttt-mmm*sssssss* form must be used if there are multiple managed frames with the same user-defined name.

This option is required when initiating a power subsystem dump. This option is not valid otherwise.

-t The dump to initiate. Valid values are **pss** for a power subsystem dump, **sp** for a service processor dump, or **sys** for a platform dump.

When a service processor dump is started, all communications between the HMC and the *managed-system* will be halted. When the dump has completed, communications will be resumed.

When a platform dump is started, the *managed-system* will be halted. When the dump has completed, the *managed-system* will be restarted.

-s The side of the managed frame's bulk power assembly (BPA) on which to initiate the dump. Valid values are **a** for side A and **b** for side B.

This option is required when initiating a power subsystem dump. This option is not valid otherwise.

--help Display the help text for this command and exit.

EXAMPLES

Initiate a platform dump (confirmation will be required) on the managed system **9406-570*12345678**:

```
startdump -m 9406-570*12345678 -t sys
```

Initiate a power subsystem dump on side A of the BPA for the managed frame **myFrame**:

```
startdump -e myFrame -t pss -s a
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

getdump, lsdump

NAME

updhmc - update code on the Hardware Management Console

SYNOPSIS

```
updhmc -t {m | s | l}  
[-h ftp-server -u user-id [-p password | -i]]  
[-f patch-file] [-r] [-c] [--help]
```

DESCRIPTION

updhmc updates code on the Hardware Management Console (HMC). This command performs the equivalent of the Install Corrective Service task under Licensed Internal Code Maintenance/HMC Code Update on the console.

OPTIONS

- t** The source type to update from. Valid values are:
 - m - media
 - s - server
 - l - local file system. This is only valid when specifying -f and the file is on the local file system.
- h** Host name or IP address of the FTP server where the patch file is located. Only valid when s is specified on the -t flag.
- u** User ID to use on the FTP server.
- p** Password to use on the FTP server. The password will be in clear text. When running the command interactively, use the -i parameter for entering a password without echo.
- i** Prompts for password. Password will be hidden.
- f** File on the FTP server to obtain, or locally.
- r** Reboot HMC after applying the update.
- c** Remove the file from the local file system after the installation.
- help** Display the help text for this command and exit.

EXAMPLES

The following command performs an update using media and reboots afterwards.

```
updhmc -t m -r
```

The following command performs an update using a server and a viewable password.

```
updhmc -t s -h hostname -u user1 -p password  
-f /tmp/Update1.zip
```

The following command performs an update using a server and a password prompt.

```
updhmc -t s -h hostname -u user1 -i  
-f /tmp/Update1.zip
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

NAME

updlic - update Licensed Internal Code

SYNOPSIS

```
updlic -m managed-system -o { a | i | r | h | o | d | c }
[-t { sys | power | syspower | io | all }]
[-l { latest | latestconcurrent | sss | ccc,ppp }]
[-r { ibmretain | ibmwebsite | ftp | dvd | disk | mountpoint }]
[-h host-name] [-u user-ID] [--passwd password]
[-d directory] [-q] [--help]
```

DESCRIPTION

updlic updates Licensed Internal Code (LIC) on the *managed-system*.

OPTIONS

- m** The name of the managed system on which to update LIC. The name may either be the user-defined name for the managed system, or be in the form *tttt-mmm*sssssss*, where *tttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *tttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- o** The operation to perform. Valid values are **a**, **i**, **r**, **h**, **o**, **d** or **c**.
 - Use the **a** operation to retrieve, install, and activate LIC updates. Previously activated updates will be automatically accepted.
 - Use the **i** operation to retrieve and install, but not activate, LIC updates.
 - Use the **r** operation to remove the most recently installed LIC updates and activate the previously accepted level. This operation is only valid when the LIC type is both Managed System and Power.
 - Use the **h** operation to change LIC update control to the Hardware Management Console (HMC).
 - Use the **o** operation to change LIC update control to Operating System.
 - Use the **d** operation to disruptively activate LIC updates.
 - Use the **c** operation to accept currently activated updates.
- t** The type(s) of LIC updates to install. Valid values are **sys** for Managed System LIC updates only, **power** for Power LIC updates only, **syspower** for both Managed System and Power LIC updates, **io** for I/O LIC updates only, or **all** for Managed System, Power, and I/O LIC updates.
 - This option is required for **a**, **i**, and **r** operations. This option is not valid for **h**, **o**, **d** and **c** operations.
- l** The LIC level to retrieve. Valid values are **latest**, **latestconcurrent**, *sss*, or *ccc,ppp*.
 - This option is required for **a** and **i** operations. This option is not valid for **r**, **h**, **o**, **d** and **c** operations.
 - Specify **latest** to retrieve the latest LIC updates, even if disruptive.
 - Specify **latestconcurrent** to retrieve the latest concurrent LIC updates.
 - Specify *sss* to retrieve a specific level of Managed System or Power LIC updates, even if disruptive. *sss* is the three character identifier of the specific level to retrieve. This is only valid when

the LIC type is either Managed System only or Power only.

Specify *ccc,ppp* to retrieve a specific level of Managed System and Power LIC updates, even if disruptive. *ccc* is the three character identifier of the specific level of Managed System LIC updates to retrieve. *ppp* is the three character identifier of the specific level of Power LIC updates to retrieve. This is only valid when the LIC type is both Managed System and Power.

- r** The repository from which to retrieve the LIC updates. Valid values are **ibmretain** for the IBM support system, **ibmwebsite** for the IBM service Internet site, **ftp** for a remote FTP site, **dvd** for the DVD drive on the Hardware Management Console (HMC), **disk** for the internal hard disk drive on the HMC, or **mountpoint** for the specified mountpoint.

This option is required for **a** and **i** operations. This option is not valid for **r**, **h**, **o**, **d** and **c** operations.

- h** The host name or IP address of the remote FTP server.

This option is required when retrieving LIC updates from a remote FTP site. This option is not valid otherwise.

- u** The user ID to use to log in to the remote FTP site.

This option is required when retrieving LIC updates from a remote FTP site. This option is not valid otherwise.

--passwd

The password to use to log in to the remote FTP site. If this option is omitted, you will be prompted to enter the password.

This option is only valid when retrieving LIC updates from a remote FTP site.

- d** The mountpoint location or the directory to use on the remote FTP site. If this option is not specified for FTP, then the **/opt/ccfw/data** directory will be used.

This option is only valid when retrieving LIC updates from a mountpoint or a remote FTP site.

- q** Use this option to query the concurrency status of the specified update. The update is not performed when this option is specified.

This option allows you to determine if the specified update is disruptive. If so, you can shut down operating systems or configure I/O devices offline prior to performing the specified update.

When this option is used, one of the following return codes will be returned:

- 0** - no updates are available
- 1** - all updates are concurrent
- 2** - Managed System and Power updates are concurrent.
I/O updates are disruptive.
- 3** - Managed System and Power updates are disruptive.
I/O updates are concurrent.
- 4** - all updates are disruptive

Any other return code value indicates that an error occurred.

- help** Display the help text for this command and exit.

EXAMPLES

To retrieve, install, and activate the latest available Managed System LIC updates from the IBM support system:

```
updlic -m 9406-570*101234A -o a -t sys -l latest  
-r ibmretain
```

To retrieve and install specific Managed System and Power LIC levels from a remote FTP server:

```
updlic -m mysystem -o i -t syspower -l 22,21 -r ftp  
-h ftphost -u ftpuser --passwd userpw
```

To remove the most recently installed Managed System and Power LIC levels and activate the previous levels:

```
updlic -m 9406-570*101234A -o r -t syspower
```

To query whether the latest LIC updates from the IBM service web site are concurrent or disruptive:

```
updlic -m 9406-570*101234A -o a -t all -l latest  
-r ibmwebsite -q
```

To change LIC update control to HMC:

```
updlic -m mysystem -o h
```

To change LIC update control to Operating System:

```
updlic -m mysystem -o o
```

To disruptively activate LIC updates:

```
updlic -m mysystem -o d
```

To accept the currently activated LIC updates:

```
updlic -m mysystem -o c
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin

SEE ALSO

lslic

NAME

viosvrcmd - issue virtual I/O server command

SYNOPSIS

```
viosvrcmd -m managed-system  
{-p partition-name | --id partition-ID}  
-c "command" [--help]
```

DESCRIPTION

viosvrcmd issues an I/O server command line interface (ioscli) command to a virtual I/O server partition.

The ioscli commands are passed from the Hardware Management Console (HMC) to the virtual I/O server partition over an RMC session. RMC does not allow interactive execution of ioscli commands.

OPTIONS

- m** The name of the managed system which has the virtual I/O server partition to which to issue the command. The name may either be the user-defined name for the managed system, or be in the form *ttt-mmm*sssssss*, where *ttt* is the machine type, *mmm* is the model, and *sssssss* is the serial number of the managed system. The *ttt-mmm*sssssss* form must be used if there are multiple managed systems with the same user-defined name.
- p** The name of the virtual I/O server partition to which to issue the command.

You must either use this option to specify the name of the partition, or use the **--id** option to specify the partition's ID. The **-p** and the **--id** options are mutually exclusive.
- id** The ID of the virtual I/O server partition to which to issue the command.

You must either use this option to specify the ID of the partition, or use the **-p** option to specify the partition's name. The **--id** and the **-p** options are mutually exclusive.
- c** The I/O server command line interface (ioscli) command to issue to the virtual I/O server partition.

command must be enclosed in double quotes. Also, *command* cannot contain the semicolon (;), greater than (>), or vertical bar (|) characters.
- help** Display the help text for this command and exit.

EXAMPLES

Issue the **ioslevel** command to the virtual I/O server partition **vios_lpar**:

```
viosvrcmd -m mySystem -p vios_lpar -c "ioslevel"
```

Issue the **lsdev -virtual** command to the virtual I/O server partition that has an ID of **4**:

```
viosvrcmd -m 9406-570*A0001234 --id 4 -c "lsdev -virtual"
```

ENVIRONMENT

None

BUGS

None

AUTHOR

IBM Austin