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Ivanti EPMM 11.4.0.0 - 11.12.0.0 Command Line Interface (CLI) Reference

November 2023

Revision history

For the complete revision history of this document, see the [online version here](#).

Contents

About the Command Line Interface

The CLI, or command line interface, enables authorized administrators to access certain functions from the command line in a terminal window. Many of these functions are also available using the Ivanti EPMM System Manager, which is a web portal, described in the *Ivanti EPMM System Manager Guide*.

> **WARNING**: Do **NOT** perform a forced update. Your system might behave in an unexpected way if you upgrade to 11.9.0.1 using this CLISH command: `software force-update`.

Logging in

Procedure

1. Use **ssh** to log in to Ivanti EPMM.

2. Log in as the administrator user established during installation.

3. Enter the corresponding password.

Logging out

Use **Ctrl-d** to terminate the CLI session and close the terminal window. You can also enter one of the following commands:

- logout
- exit

Help commands

Two commands are available to help you use the CLI:

- help
- ? (question mark)

Enter `help` to display a description of the interactive help system, including:

- Auto-complete keys
- Movement keys
- Deletion keys

Enter **?** to list available commands in the current mode or details for the current command.

For example, the following command lists all commands in the current mode:

```
>?
```

The following command lists details about the show command:

```
>show ?
```

The following command lists details about the show ip command:

```
>show ip ?
```

ⓘ   The list of available commands varies according to the mode you are in. See "Modes" on the next page.

Auto-complete keys

The following keys provide auto-completion capabilities:

- **Enter –** Auto-completes the command line, performs syntax checking, and executes the command if no syntax error exists. If a syntax error exists, help text displays.

- **Spacebar –** Auto-completes the command.

Movement keys

- [CTRL-A] – Move to the start of the line
- [CTRL-E] – Move to the end of the line.
- [up] – Move to the previous command line held in history.
- [down] – Move to the next command line held in history.
- [left] – Move the insertion point left one character.
- [right] – Move the insertion point right one character.

Deletion keys

- [CTRL-C] – Delete and abort the current line.
- [CTRL-D] – Delete the character to the right of the insertion point.
- [CTRL-K] – Delete all the characters to the right of the insertion point.
- [CTRL-U] – Delete the whole line.
- [backspace] – Delete the character to the left of the insertion point.
- [CTRL-Z] – Quits the session.

Modes

The CLI uses the following modes:

- **EXEC** – Default mode established when you log in successfully.

- **EXEC PRIVILEGED** – Privileged mode, enabling commands that affect device management.

- **CONFIG** – Configuration mode, enabling commands that affect network management. In this mode, you can use the Tab key to cycle through the available commands and sub-commands.

- **INTERFACE** – Mode for configuring physical and VLAN interfaces.

Entry to each mode is sequential: EXEC, EXEC PRIVILEGED, CONFIG, INTERFACE. To access each mode, move to the mode from the previous mode. For example, to access the CONFIG mode, you must be in the EXEC PRIVILEGED mode.

To access the different modes:

TABLE 1. ACCESSING CLI MODES

Mode	Accessible through...	Command to access	Return to the previous mode
EXEC	The default mode	Not applicable	exit Exits the CLI session.
EXEC PRIVILEGED	EXEC mode	enable	disable
CONFIG	EXEC PRIVILEGED mode	configure terminal	end
INTERFACE	CONFIG mode	interface GigabitEthernet n interface vlan n	end

EXEC mode commands

EXEC mode command summary

The commands specific to the EXEC mode are summarized in the following table, and then listed in detail in alphabetical order.

Command	Description
"enable" on the next page	Accesses privileged commands.
"exit" on the next page	Closes the terminal window.
"help " on the next page	Displays a description of the interactive help system.
"host" on page 10	Performs a DNS lookup for a specified IP address or host name.
"logout" on page 11	Closes the terminal window.
"ping" on page 11	Sends echo messages.
show	Shows running system information: • "show banner" on page 11 • "show clock" on page 11 • "show common_criteria_mode_status" on page 12 • "show fips" on page 12 • "show hostname" on page 12 • "show interfaces" on page 12 • "show ip" on page 13 • "show log" on page 14 • "show logging" on page 15 • "show logtail" on page 16 • "show memory" on page 17

Command	Description
	• "show ntp status" on page 17 • "show processes" on page 17 • "show service" on page 18 • "show software repository" on page 18 • "show tcp" on page 18 • "show timeout" on page 20 • "show version" on page 20
"timeout" on page 20	Sets the idle timeout for the CLI.
"traceroute" on page 20	Traces route to destination.

EXEC mode command details

enable

Enables EXEC PRIVILEGED mode for access to advanced commands.

Prompts for the enable-secret password, which is the system password initially set during installation. Entering the correct password changes the command line prompt from > to #.

Example

```
> enable
Password:
 #
```

See also "enable secret" on page 44

exit

Exits the EXEC mode and closes the terminal window.

help

Displays a description of the interactive help system, including:

- Auto-completion keys
- Movement keys
- Deletion keys

See .

host

Queries Internet name servers to perform a DNS lookup. Specify one of the following parameters:

TABLE 2. HOST COMMAND PARAMETERS

Parameter	Description
hostname	The hostname of the destination server to look up.
IP address	The IP address of the destination server to look up.

This command returns the hostname of the server if you specify an IP address. It returns the IP address if you specify the hostname.

ℹ️ This command executes the Linux command nslookup. See Linux man pages for more information.

Example

```
>host yahoo.com
Server:          172.16.0.1
Address:         172.16.0.1#53

Non-authoritative answer:
Name:    yahoo.com
Address: 98.137.149.56
Name:    yahoo.com
Address: 98.139.180.149
Name:    yahoo.com

Address: 209.191.122.70
Name:    yahoo.com
Address: 72.30.2.43
```

logout

Exits from the EXEC mode and closes the terminal window.

ping

This command sends echo messages (pings) to the destination server that the parameter specifies.

Specify one of the following parameters:

TABLE 3. PING COMMAND PARAMETERS

Parameter	Description
hostname	The destination's host name.
IP address	The destination's IP address.

Example

```
>ping yahoo.com
```

show banner

Displays the banner that was displayed when you logged on to the command line interface.

Example

```
>show banner
**********************************************************
*                      Ivanti EPMM CLI                   *
*                                                        *
*                                                        *
**********************************************************
Welcome user it is Tue Dec 13 21:27:03 UTC 2011
```

show clock

Displays the current system date, time, and time zone.

Example

```
> show clock
Displaying system clock details
Tue Dec 13 21:25:12 UTC 2011
```

show common_criteria_mode_status

Displays whether Common Criteria mode is enabled.

Example

```
> show common_criteria_mode_status
Common Criteria Mode is enabled.
>
```

show fips

Displays whether FIPS mode is enabled.

Example

```
> show fips
FIPS 140 mode is disabled.
>
```

show hostname

Displays the hostname for Ivanti EPMM.

Example

```
>show hostname
appname.domain.com
```

show interfaces

Displays the configuration of the network interfaces configured for Ivanti EPMM.

Example

```
>show interfaces
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 16436 qdisc noqueue
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast qlen 1000
    link/ether 00:0c:29:6b:c6:23 brd ff:ff:ff:ff:ff:ff
3: eth1: <BROADCAST,MULTICAST> mtu 1500 qdisc noop qlen 1000
    link/ether 00:0c:29:6b:c6:2d brd ff:ff:ff:ff:ff:ff
4: eth2: <BROADCAST,MULTICAST> mtu 1500 qdisc noop qlen 1000
    link/ether 00:0c:29:6b:c6:37 brd ff:ff:ff:ff:ff:ff
```

```
5: eth3: <BROADCAST,MULTICAST> mtu 1500 qdisc noop qlen 1000
    link/ether 00:0c:29:6b:c6:41 brd ff:ff:ff:ff:ff:ff
```

show ip

Displays IP information.

Specify one of the following parameters:

TABLE 4. SHOW IP COMMAND PARAMETERS

Parameter	Description
arp	Displays the physical network address that corresponds to the IP address of Ivanti EPMM. ARP is Address Resolution Protocol, a low-level network protocol.
domain-name	Displays the domain name of Ivanti EPMM.
interface brief	Displays IP interface status and configuration. Add the following parameters to the command: <ifacename> <interfaceid> The **<ifacename>** is either `GigabitEthernet` or `VLAN`. The **<interfaceid>** has the value 1 to 6 for GigabitEthernet and 1 - 4094 for VLAN. These interfaces are configured using the Ivanti EPMM System Manager in the Admin Portal, described in "Managing network interfaces" in the *Ivanti EPMM System Manager Guide.*
name-server	Displays the IP address of the Internet name servers that Ivanti EPMM uses. These interfaces are configured using the Ivanti EPMM System Manager in the Admin Portal, described in "DNS and Hostname" in the *Ivanti EPMM System Manager Guide.*
route	Displays the routing table of Ivanti EPMM. These static network routes are configured using the Ivanti EPMM System Manager in the Admin Portal, described in "Routes" in the *Ivanti EPMM System Manager Guide.*

Example

```
>show ip domain-name
+------------------
    Domain Name
```

```
+------------------
 mydomain.com


>show ip interface brief GigabitEthernet 1
+---------------+-----------+-------------+-------------+------------------
        Interface      IP Address     Mask    Hw Addr        Admin State
+---------------+-----------+-------------+-------------+------------------
        GigabitEthernet1      10.10.17.152   255.255.0.0    00:50:56:91:22:7e        up

>show ip route
192.168.57.0/24 via 10.10.1.1 dev eth0
10.10.0.0/16 dev eth0 proto kernel scope link src 10.10.17.80
default via 10.10.1.1 dev eth0
```

> ℹ️ In the `show ip route` output, `default` indicates that the network and mask are both 0.0.0.0.

show log

Displays the log file that the parameter specifies.

Consider the following when viewing log files:

- To navigate within the log, use standard vi commands.
- To exit the log, enter q to quit.

> ℹ️ The log files are in the Linux directory /var/log.

The command takes one parameter that is the name of the log file. The following table lists the available log file names you can use:

TABLE 5. SHOW LOG COMMAND AVAILABLE LOG FILE NAMES

Log file name	Description
mi.log	A superset of the information in the mics, mifs, and employee logs.
startup.log	Information logged during startup.
cron	All cron jobs run since last reboot.
rpmpkgs	A listing of all the deployed rpm packages on the system.
boot.log	Information collected during boot up.

Log file name	Description
suspend.log	Not used.
mysqld.log	Information collected during MySQL startup.
messages	All system messages since last restart.
dmesg	Hardware status messages collected during startup.
secure	List of executed commands since last restart.
mivmstat.log	Running log of information about the virtual machine, including, but not limited to, processes, free, buffered, and cached memory, swap, i/o, system, and CPU.
mics.log	WARN, INFO, and ERROR messages from the Ivanti EPMM System Manager.
employee.log	WARN, INFO, and ERROR messages about employee device registration activity.
mifs.log	WARN, INFO, and ERROR messages from the Admin Portal.
mai.log	MAI information, if MAI is enabled.
catalina.out	Stdout for the tomcat1 server. Includes verbose Employee and MIFS logs.
catalina2.out	Stdout for the tomcat2 server. A verbose MIFS log.
catalina3.out	Stdout for the tomcat3 server. A verbose MAI log, if MAI is enabled.
catalina4.out	Stdout for the tomcat4 server. A verbose Atlas log, if Atlas is enabled.

Example

```
> show log mifs.log
> --log 'tomcat/mifs.log' --
```

show logging

Displays the configured syslog server information:

- IP address

- log level

- state

This information is configured in the Ivanti EPMM System Manager, in **Settings > Data Export SysLog Servers**, described in "Syslog" in the *Ivanti EPMM System Manager Guide*.

The log level values displayed by this command correspond to the configured log levels as follows:

TABLE 6. SHOW LOGGING COMMAND LOG LEVELS

Log level value	Log level description
0	Emergency
1	Alert
2	Critical
3	Error
4	Warning
5	Notice
6	Info
7	Debug

Example

```
>show logging
+-------------+-------------+--------------
 IP Address    +  Loglevel   +     State
+-------------+-------------+--------------
myLogserver.com          5         enable
```

show logtail

Displays the last ten lines (the tail) of the specified log. The command takes one parameter that is the name of the log file. See "show log" on page 14 for the list of available log files.

To exit from the show logtail command, enter **Ctrl-C**.

Example

```
>show logtail mifs.log
--log 'tomcat/mifs.log' --tail --
/mi/tomcat2/webapps/mics/WEB-INF/pages/include.jsp
/mi/tomcat2/webapps/mics/WEB-INF/pages/index.jsp
/mi/tomcat2/webapps/mics/WEB-INF/pages/styles
/mi/tomcat2/webapps/mics/WEB-INF/pages/styles/mobir.css
/mi/tomcat2/webapps/mics/WEB-INF/pages/listRadius.jsp
/mi/tomcat2/webapps/mics/WEB-INF/pages/micsLogin.jsp
/mi/tomcat2/webapps/mics/WEB-INF/remoting-servlet.xml
/mi/tomcat-properties/license.properties
```

```
/mi/tomcat-properties/datapurge.properties
/mi/tomcat-properties/mifs.properties
```

show memory

Displays information about free and used memory on Ivanti EPMM.

This command executes the Linux command `free`. See Linux man pages for more information.

Example

```
> show memory
total        used         free      shared     buffers      cached
Mem:        2135892     2065440       70452           0      146848      456292
-/+ buffers/cache:    1462300      673592
Swap:       4192956          12     4192944
```

show ntp status

Displays the currently configured time sources. The time sources are Network Time Protocol (NTP) servers. An NTP server figures out how much the system clock drifts and smoothly corrects it.

You can configure the NTP servers using the Ivanti EPMM System Manager in the Admin Portal, described in "Date and Time (NTP)" in the *Ivanti EPMM System Manager Guide*.

Example

```
>show ntp status
+----------+-------------------+
  Index     +     NTP Server    +
+----------+-------------------+
  0              172.16.0.1
```

show processes

Displays the processes running on Ivanti EPMM.

> **i** This command executes the Linux command `ps auxwww`. See Linux man pages for more information.

Example

```
>show processes
```

---

show service

Displays the status for configured services such as SSH and NTP. You can enable SSH and set the maximum number of sessions using the Ivanti EPMM System Manager in the Admin Portal, described in "CLI" in the *Ivanti EPMM System Manager Guide.* For NTP, see "Date and Time (NTP)" in the same guide.

Example

```
>show service
+-----------+----------+--------------
 Servicename + Enabled   + Max.Sessions
+-----------+----------+--------------
 ssh             yes          5
ntp      yes
```

show software repository

Displays the currently configured location for Ivanti EPMM software updates. This location is configured using the Ivanti EPMM System Manager in **Maintenance > Software Updates**.

Example

```
>show software repository
+-----------------------------------------+--------------+-----------
        Software repository                   Username      Password
+-----------------------------------------+--------------+-----------
        myRepositoryServer.com          RepositoryUserId
```

show tcp

Lists information about all active TCP ports. This information provides traffic statistics and can help identify network problems.

ⓘ This command executes the Linux command `netstat -nat`. See Linux man pages for more information.

Example

```
>show tcp
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address              Foreign Address         State
tcp       0      0 127.0.0.1:8005             0.0.0.0:*               LISTEN
tcp       0      0 127.0.0.1:199              0.0.0.0:*               LISTEN
```

```
tcp       0      0 127.0.0.1:3306           0.0.0.0:*                LISTEN
.
.
.
```

The following table describes the information displayed:

TABLE 7. SHOW TCP COMMAND INFORMATION DISPLAY

Column heading	Description
Proto	The protocol. Always TCP.
Recv-Q	The number of bytes not copied by the user program connected to this socket.
Send-Q	The number of bytes not acknowledged by the remote host.
Local Address	The IP address of the local computer and the port number being used. If the port is not yet established, the port number is shown as an asterisk (*).
Foreign Address	The IP address and port number of the remote computer to which the socket is connected. If the port is not yet established, the port number is shown as an asterisk (*).
State	The state of the connection. Possible states are: LISTEN SYN-SENT SYN-RECEIVED ESTABLISHED FIN-WAIT-1 FIN-WAIT-2 CLOSE-WAIT CLOSING LAST-ACK TIME-WAIT These states are further described in http://tools.ietf.org/html/rfc793.

show timeout

Displays the currently configured idle timeout for the CLI in minutes. The value 0 indicates no timeout. The timeout value is configured using the Ivanti EPMM System Manager in the Admin Portal, described in "CLI" in the *Ivanti EPMM System Manager Guide*.

Example

```
>show timeout
+---------------------------
 Cli Idle Timeout in Minute(s)
+---------------------------
 0
```

show version

Displays the currently installed version of Ivanti EPMM software.

Example

```
>show version
VSP 4.5.0 Build 47
```

timeout

Sets the idle timeout for the CLI. Enter the number of minutes between 0 and 9999.

Example

```
>timeout 150
```

You can also set the CLI idle timeout using the Ivanti EPMM System Manager in the Admin Portal, described in "CLI" in the *Ivanti EPMM System Manager Guide*.

traceroute

Displays the network route to the specified destination.

Specify one of the following parameters:

TABLE 8. TRACEROUTE COMMAND PARAMETERS

Parameter	Description
hostname	The destination's host name.
IP address	The destination's IP address.

Example

```
>traceroute 173.194.33.43
traceroute to 173.194.33.43 (173.194.33.43), 30 hops max, 40 byte packets
 1  10.10.1.1 (10.10.1.1)  4.808 ms  5.481 ms  6.112 ms
 2  * * *
.
.
.
>traceroute google.com
traceroute to google.com (173.194.33.45), 30 hops max, 40 byte packets
 1  10.10.1.1 (10.10.1.1)  5.268 ms  5.933 ms  6.564 ms
 2  * * *
.
.
.
```

EXEC PRIVILEGED mode commands

-
-

EXEC PRIVILEGED mode command summary

The commands specific to the EXEC PRIVILEGED mode are summarized in the following table, and then listed in detail in alphabetical order.

> All EXEC mode commands, except enable and logout, are also available in EXEC PRIVILEGED mode.

TABLE 9. EXEC PRIVILEGED MODE COMMAND SUMMARY

Command	Description
"appanalytics" on page 24	Enables app analytics.
"clear arp-cache" on page 24	Clears the ARP cache on Ivanti EPMM.
"configure terminal" on page 25	Enters configuration mode.
"dbcleanup purge_data" on page 25	Deletes old data from the database.
"disable" on page 25	Returns to EXEC mode.
"diskcleanup retired_devices" on page 25	Removes retired devices data from the disk.
"end" on page 26	Returns to EXEC mode.
"failover" on page 26	Manages Ivanti EPMM failover.
"grubupdate" on page 26	Updates the grub configuration. Requires a reload.
"install rpm" on page 27	Installs VMware Tools.
"no install rpm" on page 28	Deletes, resets, and disables various system configurations.
"poweroff" on page 28	Turns off Ivanti EPMM.

TABLE 9. EXEC PRIVILEGED MODE COMMAND SUMMARY (CONT.)

Command	Description
"reload" on page 29	Halts Ivanti EPMM and performs a cold restart.
"service" on page 29	Performs operations on the Tomcat and iptables services.
"system-monitor" on page 36	Initiates a system monitor run from the CLI to help with troubleshooting.
"setup" on page 30	Runs the setup wizard to reconfigure an installation.
show	Shows running system information: • "show kparams" on page 30 • "show portalacl" on page 30 • "show sshd_authorized_key" on page 32 • "show running-config" on page 31 • "show statichost" on page 32 • "show system" on page 32 • "show tech" on page 34 ⓘ In addition to the above commands, all EXEC mode show commands are also available in EXEC PRIVILEGED mode.
"software checkupdate" on page 35	Checks the configured software repository for available updates to Ivanti EPMM.
"software update" on page 35	Installs the updates located using software checkupdate.
"ssh" on page 35	Opens an ssh connection.
"telnet" on page 36	Opens a telnet connection.
"write" on page 37	Saves configuration changes.

EXEC PRIVILEGED mode command details

appanalytics

Enables app analytics, which causes Ivanti EPMM to collect data about apps installed and available to devices. When app analytics is enabled, the Ivanti EPMM Admin Portal displays the apps dashboard at **Dashboard > Apps**.

When app analytics is enabled, Ivanti EPMM collects app data once each day at 5:00 A.M. UTC.

> **Important** Enabling app analytics can impact Ivanti EPMM performance at the time when the app analytics data collection job runs.

Contact Technical Support if you want app analytics to run at a different time or more frequently than once each day.

Example
```
#appanalytics on
```

Related topics

- "no" on page 51 in "CONFIG mode command details" on page 40
- "Using the Dashboard" in Getting Started with Ivanti EPMM

clear arp-cache

Clears the ARP cache on Ivanti EPMM, listing each cleared ARP entry. The ARP cache stores a mapping of IP addresses with link layer addresses, which are also known as Ethernet addresses and MAC addresses. If the mapping in the cache is stale, use this command to clear the cache. A mapping can become stale, if, for example, an IP address has moved to a new host.

Example
```
#clear arp-cache

Deleting Arp Entry for 100.10.10.10
Deleting Arp Entry for 10.10.19.21
```

configure terminal

Enters configuration mode. See "CONFIG mode commands" on page 38 for the commands you can enter in configuration mode.

Example

```
#configure terminal

Enter configuration commands, one per line.
/config#
```

dbcleanup purge_data

Deletes old data from the database. Requires portal service restart.

You can optionally provide an integer parameter that is a number of days. Data older than the specified number of days is deleted. If you do not specify a parameter, all old data is deleted.

Example

```
#dbcleanup purge_data

Warning:Maintenance mode command.
Takes several minutes.
Portal service will be stopped during this operation. Proceed? (y/n)y
Stopping tomcat:                                    [  OK  ]
/etc/elasticsearch/elasticsearch.yml
Stopping elasticsearch:        [  OK  ]
/mi/bin/purgedb: Deleting.....
```

disable

Returns to EXEC mode.

Example

```
#disable
>
```

diskcleanup retired_devices

Removes retired devices data from the disk.

Example

```
#diskcleanup retired_devices

diskCleanup.pl - VSP disk cleanup script

[2] Finding device resources to delete...
=========================================

Searching and removing device files...

----------------------
Found 0 devices with devices data, removed 0 devices' data.
0 bytes freed up
----------------------
```

end

Returns to EXEC mode.

Example

```
#end
>
```

exit

Terminates the CLI session and closes the terminal window.

failover

Commands to assist with managing Ivanti EPMM failover. Failover allows a secondary Ivanti EPMM to take over if the primary Ivanti EPMM fails when your installation requires high availability. For more information about implementing a high availability solution, contact Technical Support.

ⓘ   High availability is a non-standard Ivanti EPMM feature.

grubupdate

Updates the grub configuration. Requires a reload.

ℹ   This command should not be used on VMs. It should be used only for the physical box.

Example

```
#grubupdate
```

install rpm

Installs VMware Tools. If your Ivanti EPMM runs in VMware, use this command to install the VMware Tools installation package. The installation package is an RPM file or a .tar.gz. The parameter specifies where to find the file.

ℹ   **Warning**! Use this command only to install third-party RPM or tar files that Ivanti has approved, such as VMware Tools.

TABLE 10. INSTALL RPM COMMAND PARAMETERS

Parameter	Description
cdrom	Installs the RPM from a CDROM.
file	Unused.
url	Installs the RPM from a URL. Specify the URL as the final parameter.
info	Displays a list of installed third-party RPMs.

To uninstall a third-party RPM, use `no install rpm`. See .

Example

The following example shows the initial output when installing VMwareTools from CD ROM. Although not shown here, the installation continues with VMwareTools configuration.

```
#install rpm cdrom

mount: block device /dev/cdrom is write-protected, mounting read-only Select rpm/tar
file to install 0. None - Do not install any thing 1
/mnt/VMwareTools-4.0.0-171294.tar.gz
Enter your selection: 1

Installing /mnt/VMwareTools-4.0.0-171294.tar.gz
```

```
Creating a new VMware Tools installer database using the tar4 format.
Installing VMware Tools.

In which directory do you want to install the binary files? [/usr/bin]
What is the directory that contains the init directories (rc0.d/ to rc6.d/)?
[/etc/rc.d]
What is the directory that contains the init scripts? [/etc/rc.d/init.d]
In which directory do you want to install the daemon files? [/usr/sbin]
In which directory do you want to install the library files? [/usr/lib/vmware-tools]


The path "/usr/lib/vmware-tools" does not exist currently. This program is going to
create it, including needed parent directories. Is this what you want? [yes]
In which directory do you want to install the documentation files?
[/usr/share/doc/vmware-tools]
The path "/usr/share/doc/vmware-tools" does not exist currently. This program is going
to create it, including needed parent directories. Is this what you want? [yes]
The installation of VMware Tools 4.0.0 build-171294 for Linux completed successfully.
You can decide to remove this software from your system at any time by invoking the
following command: "/usr/bin/vmware-uninstall-tools.pl".
Before running VMware Tools for the first time, you need to configure it by invoking
the following command: "/usr/bin/vmware-config-tools.pl". Do you want this program to
invoke the command for you now? [yes]
....
```

no install rpm

Uninstalls an Ivanti EPMM-approved third-party RPM. See "install rpm" on the previous page.

For the list of "no" commands possible in CONFIG mode, see "no" on page 51.

poweroff

Turns off Ivanti EPMM. This command not only logs you out of the CLI, but shuts down the operating system and powers off Ivanti EPMM.

Example

```
#poweroff

System configuration may have been modified. Save? [yes/no]: yes
Configuration saved.
Proceed with power-off? [yes/no]
```

reload

Halts Ivanti EPMM and performs a cold restart.

Example

```
#reload

System configuration mat have been modified. Save? [yes/no]: yes
Configuration saved.
Proceed with reload?
```

service

Performs operations on the Tomcat and iptables services. You can start and stop these services, and check their status.

TABLE 11. SERVICE COMMAND PARAMETERS

Parameter	Description
service name	The name of the Linux service. Possible values are: • tomcat • iptables
operation	The operation to perform on the specified service. Possible values are: • start • stop • status

Example

```
#service tomcat start
Starting tomcat: Using TOMCAT_ALLOCATION_MB=11235
.
.
.
        [OK]
#service iptables start
Applying iptables firewall rules:       [OK]
```

```
#service iptables status
Table: filter
Chain INPUT (policy ACCEPT)
.
.
.
#service iptables stop
Flushing firewall rules:           [OK]
Setting chains to policy ACCEPT: filter nat     [OK]
Unloading iptables modules:     [OK]
```

setup

Runs the setup wizard to reconfigure an installation. This command takes you through the initial configuration of Ivanti EPMM.

Example

```
#setup

VSP 4.5.2 Build 32 (Branch r4.5.2)
Welcome to the Mobile Iron Configuration Wizard
Use the '-' character to move back to the previous field
Continue with configuration dialog? [yes/no]:
```

show kparams

Shows the kernel parameters used at runtime. This command executes the Linux command `/sbin/sysctl -p` internally.

Example

```
#show kparams
```

show portalacl

Displays the configured portal Access Control Lists (ACLs), which restrict access to various portals of Ivanti EPMM. The access is restricted to certain servers or networks by specifying their IP addresses or network/mask pairs.

You configure the portal ACLs in the Ivanti EPMM System Manager, **Security > Access Control List > Portal ACLs**, described in "Access Control Lists" in the *Ivanti EPMM System Manager Guide*.

Example

```
#show portalacl


+-------------------------------------------------------------------
Module  + Access Allowed From
+-------------------------------------------------------------------
MyPhoneAtWork    10.10.17.12
```

show running-config

Displays the configuration under which Ivanti EPMM is currently running.

The following table lists the configuration information that this command displays. It also shows where in the Ivanti EPMM System Manager to configure this information.

TABLE 12. SHOW RUNNING-CONFIG COMMAND INFORMATION

Configuration Displayed	Ivanti EPMM System Manager User Interface
Network interfaces	**Settings > Network > Interfaces**
DB config	Not used.
Network routes	**Settings > Network > Routes**
ssh and ntp status	**Settings > CLI**
DNS servers	**Settings > DNS and Hostname**
Ivanti EPMM host name and domain name	**Settings > DNS and Hostname**
NTP servers	**Settings > Date and Time (NTP)**
CLI session timeout	**Settings > CLI**
Ivanti EPMM System Manager user names	**Security > Identity Source > Local Users**
Portal Access Control Lists	**Security > Access Control Lists > Portal ACLs**

Example

```
#show running-config
```

show sshd_authorized_key

Displays the public key for SSH authorization if one has been added using the `sshd_authorized_key` command.

Example

```
#show sshd_authorized_key
SSHD Authorized Key:
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAABAQCnFsywrE7Q6kGU+uVFKCLaY4/XlgXtxB1pUQAOPJjKRZukn5z
fdbGmLqGaJWjWc7TRMTkbPegV4skPW1ddIcUXNuV79Mfbco4sFJkLFr4Qg7xKQUyo/kk47otSE2HRq4EUoTxfN
5
UeEuD81WEeU3aqdH6RcrIx0gkdvteFbUuSacWorRw4xoskySYplWeLTva4IgERPXI5jkydBF/uH14B3R1V/TzI
x
o914xW08o6C0dC/A/bnbPzAnvlngOdskGikUDOQ29jXqvHhrw9jnAWPYcq7vsJfNi2b/6AIAeKVcEZkLOuul1i
9
WtkePXX1k4lXR8e8lBI2MPhXOfiSIDGx admin
```

show statichost

Displays the configured static hosts. The static hosts are configured using the Ivanti EPMM System Manager, in **Settings > Static Hosts**, described in the *Ivanti EPMM System Manager Guide*. You can also configure static hosts using the CLI command "statichost" on page 57.

Example

```
#show statichost
+----------------+----------------------------------
        IP Address      FQDN
+----------------+----------------------------------
        172.16.80.2     mysentry.mycompany.com
```

show system

Displays system information as specified by the parameter. Most parameters result in displaying output from Linux commands. For more information about Linux command output, see the Linux man page description available on the Web.

Specify one of the following parameters:

TABLE 13. SHOW SYSTEM COMMAND PARAMETERS

Parameter	Description
aspm	Displays whether the PCIe Active State Power Management subsystem is disabled on physical Ivanti EPMM appliances.
disk	Displays disk usage information for each mounted file system. Linux command: `df -h`
meminfo	Displays the memory usage by each program and the total memory usage.
top	Displays a snapshot of the running tasks and threads, including their command-line parameters. Enter h for help on navigating the output. Enter q to quit. Linux command: `top -bcHss -n 1`
toprt	Displays the running tasks, memory usage, and the uptime status, updating the display in real-time. Enter h for help. Enter q to quit. Linux command: `top`
uptime	Displays the following information: • the current time • the system status (up) • how long the system has been running • how many users are currently logged on • the system load averages for the last 1, 5, and 15 minutes Linux command: `uptime`
user	Displays the list of Ivanti EPMM System Manager users.

Example

```
#show system disk


Filesystem      Size    Used    Avail   Use%    Mounted on
```

```
/dev/sda3      80G     3.0G     73G     4%      /
/dev/sda1      99M     12M     82M     13%     /boot
tmpfs  7.9G     8.0K     7.9G     1%      /dev/shm


#show system user
+-----------------------+
           Users
+-----------------------+
miadmin


#show system uptime

18:23:11 up 23:15, 2 users, load average: 0.00 0.00 0.00


#show system toprt

top - 18:25:57 up 23:15, 2 users, load average: 0.00 0.00 0.00
Mem: 1643612k total, 3412864k used, 13023136k free, 148648k buffers
Swap:1849804k total,    0k used, 18490804k free, 14869890k cached
PID    USER    PR    NI     VIRT    RES     SHR    S     %CPU    %MEM    TIME+
19186  root    20    0      67088   2732    1292   S     0.0     0.0
.
.
.
```

show tech

Gets Ivanti EPMM logs and database dumps for diagnostics. This command transfers the diagnostic files to a server that you specify, using either HTTP(S) or SFTP.

TABLE 14. SHOW TECH COMMAND PARAMETERS

Parameter	Description
http sftp	Select the transport method for the files.
URL	When using HTTP, enter the URL for the destination server. For example: https://support.ivanti.com/uploads
host	When using SFTP, enter the host name or IP address of the destination server. For example: support.ivanti.com

TABLE 14. SHOW TECH COMMAND PARAMETERS (CONT.)

Parameter	Description
alllogs	Enter `No`. Enter `Yes` only if Ivanti EPMM had restarted since the issue occurred.
username	Enter the user name for logging in to the server that you specified. The command will prompt you for the corresponding password.
support-ticket-number	Enter the support ticket number, if you have one. This parameter is optional.

You can use the Ivanti EPMM System Manager to manipulate logs. See "Working with logs", in the *Ivanti EPMM System Manager Guide.*

Example

```
#show tech http https://support.ivanti.com/uploads No mysupportusername
Enter Password for user mysupportusername:
```

software checkupdate

Checks the configured software repository for available updates to Ivanti EPMM. The repository information is configured using the Ivanti EPMM System Manager, in **Maintenance > Software Updates**.

Example
```
#software checkupdate
```

software update

Installs the updates located using software checkupdate. Use the reload command after using the software update command.

Example
```
#software update
...
#reload
```

ssh

Opens an ssh connection.

Specify the following parameters:

TABLE 15. SSH COMMAND PARAMETERS

Parameter	Description
user	The ID of the user making the connection.
server	The IP address or hostname of the target server.

Example

```
#ssh miadmin 100.10.10.10


miadmin@100.10.10.10's password:
```

system-monitor

You can initiate a background system monitor run from the Ivanti EPMM CLI. The system monitor information helps with capturing crucial diagnostic information when a system is malfunctioning.

Following the command, enter the number of iterations and intervals:

TABLE 16. SYSTEM-MONITOR COMMAND PARAMETERS

Parameter	Description
<iterations>	Range: Any positive integer. Default: 30 iterations
<interval>	Optional. Range: Any positive integer. Default: 5 seconds

For example, entering `system-monitor 30 5` results in 30 iterations of 5 seconds each. You can also specify just the iterations. For example, `#system-manager 65` would result in 65 iterations of 5 seconds each.

Example

```
#system-manager 45 10
#system-manager 60
```

telnet

Opens a telnet connection.

Specify the following parameter:

TABLE 17. TELNET COMMAND PARAMETERS

Parameter	Description
server	The IP address or hostname of the target server.

Example

```
#telnet 100.10.10.10
```

write

Saves configuration changes.

The changes you make in your CLI session are not saved across reboots of Ivanti EPMM, although they are remembered between CLI sessions. Therefore, to ensure your changes are not lost, use the write command to save your changes.

If you do not save your changes, a reboot will return Ivanti EPMM to its previously-saved configuration.

Example

```
#write
```

CONFIG mode commands

-
-

CONFIG mode command summary

The commands specific to the CONFIG mode are summarized in the following table, and then listed in detail in alphabetical order.

In addition, the EXEC mode commands exit, help, and timeout are also available in CONFIG mode.

TABLE 18. CONFIG MODE COMMANDS

Command	Description
"activemq" on page 40	Enable the Apache ActiveMQ message broker service.
"banner" on page 40	Defines the text to appear in the CLI login banner.
"certificate client" on page 41	Generates a self-signed certificate for the client for use with TLS.
"certificate portal" on page 41	Generates a self-signed certificate for Sentry configurations.
"clock set" on page 42	Sets the date and time on Ivanti EPMM.
"common_criteria_mode" on page 42	Enables Common Criteria mode on Ivanti EPMM.
"db-admin-account" on page 43	For locking or unlocking MySQL miadmin account.
"do" on page 43	Runs EXEC or EXEC PRIVILEGED commands from CONFIGURE mode.
"enable secret" on page 44	Changes the enable-secret password.
"end" on page 45	Returns to EXEC PRIVILEGED mode.
"eula" on page 45	Sets the End User License Agreement information.
"fips" on page 45	Enable FIPS mode.
"hostname" on page 46	Configures Ivanti EPMM's fully-qualified host name.

TABLE 18. CONFIG MODE COMMANDS (CONT.)

Command	Description
"hsts-disable" on page 47	Disables HSTS. Requires restart of the httpd service.
"httpd-reset-default-ssl-ciphers" on page 47	Resets the cipher suites to the default values.
"interface GigabitEthernet" on page 47	Switches to INTERFACE mode to configure a physical interface.
"interface VLAN" on page 48	Switches to INTERFACE mode to configure a VLAN interface.
"ip arp" on page 48	Updates the ARP cache on Ivanti EPMM.
"ip domain-name" on page 49	Sets the default domain name.
"ip name-server" on page 49	Sets the preferred DNS server.
"ip route" on page 49	Configures a static network route.
"kparam" on page 50	Configures kernel parameters.
"mod-security-disable" on page 51	Disables the ModSecurity Apache module. Requires restart of the HTTPD service.
"no" on page 51	Deletes, resets, and disables various system configurations.
"ntp" on page 52	Configures the time sources.
"portalacl" on page 53	Configures the portal Access Control Lists (ACLs), which restrict access to various portals of Ivanti EPMM.
"randomizer" on page 54	Configure random source. Requires system reload.
"reset-devshell-password" on page 54	Resets the devshell password.
"resize_boot_partition" on page 55	Increases the boot partition size to 1 GB.
"service" on page 55	Enables the service ssh or ntp.
"software repository" on page 55	Configures the software repository URL.
"sshd_authorized_key" on page 56	Sets the public SSH authorization key.
"statichost" on page 57	Maps a fully-qualified domain name to an IP address.
"syslog" on page 57	Configures syslog server information.

TABLE 18. CONFIG MODE COMMANDS (CONT.)

Command	Description
"system user" on page 58	Creates a Ivanti EPMM System Manager user account.
"system aspm" on page 58	Sets a kernel boot parameter to turn off the PCIe Active State Power Management (ASPM) subsystem on Ivanti EPMM physical appliances.
"x-frame" on page 59	Sets the XFrame configuration for your HTTPd web server.

CONFIG mode command details

The following commands are available from the CONFIG mode.

activemq

Apache ActiveMQ service is an open source message broker with a full Java Message Service (JMS) client. When enabled, the service fosters communication from more than one client or server.

Example

```
/config#activemq
Warning:Maintenance mode command.
Portal service will be stopped during this operation. Proceed? (y/n)
```

banner

Defines the text to appear in the CLI login banner. The text also appears on the Admin Portal, *Ivanti EPMM System Manager*, and self-service user portal login screens.

Specify the following parameters:

TABLE 19. BANNER COMMAND PARAMETERS

Parameter	Description
bannername	Multi-word string enclosed in quotes.

Example

```
/config#banner "Welcome MyCompany"
```

certificate client

Generates a self-signed certificate for the client for use with Transport Layer Security (TLS). You can also use the Ivanti EPMM System Manager **Security > Certificate Mgmt** page for this command. For more information, see "Certificate Mgmt" in the *Ivanti EPMM System Manager Guide*.

Example

```
/config#certificate client
Tlsproxy service will be disrupted.
Would you like to proceed? [y/n]:
/config#
```

ℹ   The CLI does not provide a confirmation that the certificate was generated.

certificate portal

Generates a self-signed certificate for Sentry configurations.For more information, see "Certificate Mgmt" in the *Ivanti EPMM System Manager Guide*.

Example

```
/config#certificate portal
Services will be disrupted.
Would you like to proceed? [y/n]: y
/config#
```

ℹ   The CLI does not provide a confirmation that the certificate was generated.

clock set

Sets the date and time on Ivanti EPMM.

Specify the following parameters:

TABLE 20. CLOCK SET PARAMETERS

Parameter	Description
time	Current time using the format HH:MM:SS. Specify the hours as a value between 00 and 23.
day	Day of the month as a value between 1 and 31.
month	Month of the year. Specify one of the following: January, February, March, April, May, June, July, August, September, October, November, December.
year	Specify as a 4 digit string. For example: 2021

Example
```
/config#clock set 10:34:59 23 February 2021
/config#
```

common_criteria_mode

Sets Common Criteria mode on Ivanti EPMM. After the command completes, do a reload for it to take effect on Ivanti EPMM.

Common Criteria mode refers to a set of features in Ivanti EPMM that meet requirements associated with Common Criteria. Also referred to as Common Criteria for Information Technology Security Evaluation, Common Criteria is an international set of guidelines and specifications for evaluating information security products to ensure they meet the established security standard for government deployments.

Example
```
/config#common_criteria_mode
....
                        /config#do reload
```

```
System configuration may have been modified. Save? [yes/no]:
```

Enter **yes** to save.

```
                                              Configuration saved.
                                    Proceed with reload? [yes/no]:
```

Enter **yes** to reboot.

```
         Broadcast message from root (pts/0) (Sat Nov 16 21:54:52 2013):
                             The system is going down for reboot NOW!
```

The system will not be reachable until the reboot is complete.

db-admin-account

This commands locks and unlocks MySQL miadmin accounts.

TABLE 21. DB-ADMIN-ACCOUNT PARAMETERS

Parameter	Description
lock	Lock the MySQL database miadmin account.
unlock	Unlock the MySQL database miadmin account.

Example

```
/config#db-admin-account lock
```

do

Runs EXEC or EXEC PRIVILEGED commands from CONFIGURE mode.

Use the do command when you are in CONFIGURE mode and want to run a command from EXEC PRIVILEGED mode, but don't want to have to exit and reenter CONFIGURE mode. After the keyword do, enter the command. For example:

```
config#do ping someWebSite.com
```

The following table lists the commands you can run using do:

TABLE 22. DO SUB-COMMANDS

Command	Description
"clear arp-cache" on page 24	Clears the ARP cache on Ivanti EPMM.
"clock set" on page 42	Sets the date and time on Ivanti EPMM.
"disable" on page 25	Returns to EXEC mode.
"help " on page 9	Describes the interactive help system.
"host" on page 10	Performs a DNS lookup for a specified IP address or host name.
"logout" on page 11	Closes the terminal window.
"ping" on page 11	Sends echo messages.
"poweroff" on page 28	Turns off Ivanti EPMM.
"reload" on page 29	Halts Ivanti EPMM and performs a code restart.
show	Executes show commands specified in "EXEC mode commands" on page 8 and "EXEC PRIVILEGED mode commands" on page 22.
"telnet" on page 36	Opens a telnet connection.
"timeout" on page 20	Sets the idle timeout for the CLI.
"traceroute" on page 20	Traces route to destination.
"write" on page 37	Saves configuration changes.

Example

```
/config#do show banner
```

enable secret

Changes the enable-secret password. This password allows you to change from EXEC mode to EXEC PRIVILEGED mode in the CLI.

You can also use the Ivanti EPMM System Manager **Settings > CLI** page for this command. For more information, see "CLI" in the *Ivanti EPMM System Manager Guide*.

Example

```
/config#enable secret NewPwd123
```

end

Returns to EXEC PRIVILEGED mode.

Example

```
/config#end
```

eula

Sets the End User License Agreement (EULA) information.

Specify the following parameters:

TABLE 23. EULA PARAMETERS

Parameter	Description
companyname	The name of the company accepting the EULA. Enclose the name in double quotes if it contains spaces.
contactname	The name of the contact at the company. Enclose the name in double quotes if it contains spaces.
contactemail	Email address for the contact.

Example

```
/config#eula "My Company" "Joe Doe" jdoe@mycompany.com
```

fips

Enables FIPS mode on Ivanti EPMM.

The Federal Information Processing Standard (FIPS) Publication 140-2 is a U.S. government computer security standard used to accredit cryptographic modules. FIPS 140-2 defines four levels of security, simply named "Level 1" to "Level 4". It does not specify in detail what level of security is required by any particular application. Ivanti EPMM products are FIPS 140-2 Level 1 Compliant.

> ℹ️ Enabling FIPS mode results in Ivanti EPMM changing the selected TLS protocol version for incoming connections to TLS 1.2 and the disabled TLS versions to TLS 1.0 and TLS 1.1. For outgoing connections, the selected and disabled lists remain unchanged. See "Advanced: Incoming SSL Configuration" and "Advanced: Outgoing SSL Configuration" in the *Ivanti EPMM System Manager Guide*.

Example

```
/config#fips
1/3 Generating initramfs-2.6.32-696.6.3.el6.x86_64.fips.img ... This will take a while
1/3 Generating initramfs-2.6.32-696.6.3.el6.x86_64.fips.img ...Done
2/3 Updating grub.conf ...
2/3 Updating grub.conf ...Done
3/3 Updating prelink configuration
3/3 Updating prelink configuration...Done
Must reload system before FIPS 140 enabled.

/config#do reload
```

```
                System configuration may have been modified. Save? [yes/no]:
```

1. Enter yes.

```
                                                   Configuration saved.
                                          Proceed with reload? [yes/no]:
```

2. Enter yes.

```
        Broadcast message from root (pts/0)  (Sat Nov 16 21:54:52 2013):
                        The system is going down for reboot NOW!
```

The system will not be reachable until the reboot is complete.

hostname

Configures Ivanti EPMM's fully-qualified host name.

Specify the following parameter:

Parameter	Description
hostname	The fully-qualified host name for Ivanti EPMM.

You can also use the Ivanti EPMM System Manager **Settings > DNS and Hostname** page for this command. For more information, see "DNS and Hostname" in the *Ivanti EPMM System Manager Guide*.

Example

```
/config#hostname myhost123
Please reload the system for the changes to be effective.
/config#
```

hsts-disable

Disables HSTS.

You can also use the Ivanti EPMM System Manager **Security > Advanced > HSTS** page for this command. For more information, see "Advanced: HSTS" in the *Ivanti EPMM System Manager Guide*.

Example

```
/config#hsts-disable
HSTS disabled adn httpd service to be restarted in 1 minute.
/config#
```

httpd-reset-default-ssl-ciphers

Resets the cipher suites to their default values.

Example

```
/config#httpd-reset-default-ssl-ciphers
/config#
```

interface GigabitEthernet

Switches to INTERFACE mode to configure a physical interface. Specify 1, 2, 3, 4, 5, or 6 to select the interface.

You can also configure the physical interfaces in the Ivanti EPMM System Manager **Settings > Network > Interfaces** page for this command. For more information, see "Managing network interfaces" in the *Ivanti EPMM System Manager Guide*.

Example

```
/config#interface GigabitEthernet 2
/config-if#
```

See "INTERFACE mode commands" on page 60 for available commands.

interface VLAN

Switches to INTERFACE mode to configure virtual Local Area Network (VLAN) interfaces. Specify a number between 1 and 4094 for the VLAN ID.

You can also configure the VLAN interfaces in the Ivanti EPMM System Manager **Settings > Network > Interfaces** page for this command. For more information, see "Managing network interfaces" in the *Ivanti EPMM System Manager Guide*.

Example

```
/config#interface vlan 2
/config-vlan#
```

ip arp

Updates the ARP cache on Ivanti EPMM. The ARP cache stores a mapping of IP addresses with link layer addresses, which are also known as Ethernet addresses and MAC addresses.

Typically, the ARP cache is updated automatically, making this command unnecessary.

Specify the following parameters:

TABLE 25. IP ARP PARAMETERS

Parameter	Description
IP address	IP address of Ivanti EPMM.
Mac address	Corresponding Mac address, using format: xx:xx:xx:xx:xx:xx
Interface type	Specify GigabitEthernet or VLAN.
Interface ID	Specify 1 to 6 for GigabitEthernet.

TABLE 25. IP ARP PARAMETERS (CONT.)

Parameter	Description
	Specify 1 - 4094 for VLAN.

Example

```
/config#ip arp 10.10.15.41 00:50:56:91:71:1B GigabitEthernet 1
```

ip domain-name

Sets the default domain name for Ivanti EPMM.

You can also configure the default domain name in the Ivanti EPMM System Manager **Settings > DNS and Hostname** page, described in "DNS and Hostname" in the *Ivanti EPMM System Manager Guide.*

Example

```
/config# ip domain-name mycompany.com
/config#
```

ip name-server

Sets the preferred DNS server, which is the IP address of the primary DNS server to use.

You can also configure the preferred DNS server in the Ivanti EPMM System Manager **Settings > DNS and Hostname** page, described in "DNS and Hostname" in the *Ivanti EPMM System Manager Guide.*

Example

```
/config# ip name-server 10.10.15.6
/config#
```

ip route

Configures a static network route. This command specifies the subnet mask and gateway to use for routing from a network IP address.

Specify the following parameters:

TABLE 26. IP ROUTE PARAMETERS

Parameter	Description
IP address	Network IP address.
mask	Subnet mask.
gateway	IP address for the gateway.

You can also configure a static network route in the Ivanti EPMM System Manager **Settings > Network > Routes** page, described in "Routes" in the *Ivanti EPMM System Manager Guide*.

Example

```
/config#ip route 192.168.57.0 255.255.255.0 10.10.1.1
```

kparam

This command configures kernel parameters. Specify the following parameters:

TABLE 27. KPARAM PARAMETERS

Parameter	Description
name	The name of the kernel parameter. Enter **rp_filter**, **log_martians**, or **tcp_mtu_probing**.
value	The value for rp_filter or log_martians. Enter 0, 1, or 2 as follows: • **rp_filter values**: 　○ 0 - No source validation 　○ 1 - (the default value) Strict mode as defined in RFC 3704 　○ 2 - Loose mode as defined in RFC 3704 (use to enable asymmetric routes) 　　ⓘ　We recommend that to protect against IP spoofing, you *do not* set **rp_filter** to 0. • **log_martians values:** 　○ 0 - Disable 　○ 1 - Enable • **tcp_mtu_probing** values:

TABLE 27. KPARAM PARAMETERS (CONT.)

Parameter	Description
	○ 0 - Disable MTU probing entirely.
	○ 1 - (the default value) Perform ICMP-based MTU probing, and fall back to TCP-based MTU probing if a black hole is detected.
	○ 2 - Perform TCP-based MTU probing only.

Example

```
/config#kparam rp_filter 2
/config#kparam log_martians 1
```

mod-security-disable

Mod_security is an Apache module that helps to protect your website from various attacks. It is used to block commonly-known exploits by use of regular expressions and rule sets. This command disables the Apache ModSecurity module. Requires a restart of the HTTPD service.

Example

```
/config#mod-security-disable
<cr>
```

no

Deletes, resets, and disables various system configurations, as described in the following table.

TABLE 28. NO COMMAND PARAMETERS

Command	Description
no appanalytics	Disables app analytics.
no banner	Reverts to the original login banner.
no hostname	Reverts the system's fully qualified domain name to `localhost.localdomain`. Requires a system reload for the change to take effect.
no interface vlan *<vlan number 1 - 4094>*	Deletes the specified VLAN interface.
no ip arp *<IP address>*	Deletes the specified IP address from the ARP cache.

TABLE 28. NO COMMAND PARAMETERS (CONT.)

Command	Description
no ip domain-name	Deletes the domain-name of Ivanti EPMM.
no ip name-server *<IP address>*	Deletes the specified Internet name server from the list of Internet name servers that Ivanti EPMM uses for DNS lookup.
no ip route *<IP address> <mask>*	Deletes the specified static network route from Ivanti EPMM's routing table.
no ntp *<IP address or hostname>*	Deletes the specified NTP server from Ivanti EPMM's list of NTP servers.
no portalacls	Deletes portal ACLs.
no service *<service name>*	Disables the specified service (ssh or ntp).
no sshd_authorized_key	Disables SSH public key authentication. The public key for the logged in administrator is removed.
no statichost *<IP address>*	Deletes the static host entry.
no syslog *<IP address or hostname>*	Deletes the syslog server specified by the parameter.
no system user *<username>*	Deletes the system user specified by the parameter.
no system aspm	Sets a kernel boot parameter to turn on the PCIe Active State Power Management (ASPM) subsystem on Ivanti EPMM physical appliances.

ntp

Configures the time sources. The time sources are Network Time Protocol (NTP) servers. An NTP server figures out how much the system clock drifts and smoothly corrects it.

You can also configure the NTP servers in the Ivanti EPMM System Manager **Settings > Date and Time (NTP)** page, described in "Date and Time (NTP)" in the *Ivanti EPMM System Manager Guide*.

Specify the following parameters:

TABLE 29. NTP COMMAND PARAMETERS

Parameter	Description
server	Hostname or IP address of the NTP server.
index	The order this NTP server appears in the configuration (0-2).

Example

```
/config# ntp 172.16.0.1 0
```

portalacl

Configures the portal Access Control Lists (ACLs), which restrict access to various portals of Ivanti EPMM. Access is restricted to servers or networks by specifying their IP addresses, network and mask pairs, or hostname.

TABLE 30. PORTALACL COMMAND PARAMETERS

Parameter	Description
module	Enter one of the following options: • MyPhoneAtWork • SmartphoneManagerPortal • SystemManagerPortal • SentryConnection • APIConnection • iOSMDM • iOSiRegURL • AppStorefrontConnection
host	The IP address, network, or hostname from which access is allowed. Only one host configuration is supported from CLI. Use the Ivanti EPMM System Manager portal to configure multiple hosts or Networks.

You can also configure the ACLs in the Ivanti EPMM System Manager **Security > Access Control Lists** page, described in "Access Control Lists" in the *Ivanti EPMM System Manager Guide*.

Example

```
/config#portalacl MyPhoneAtWork 10.101.1.119
```

randomizer

This command configures a random source. Requires a system reload.

TABLE 31. RANDOMIZER COMMAND PARAMETERS

Parameter	Description
random	Using `/dev/random` may require waiting for the result, as it uses a so-called entropy pool, where random data may not be available at the moment. `/dev/random` should be suitable for uses that need very high quality randomness such as one-time pad or key generation. When the entropy pool is empty, reads from `/dev/random` will block until additional environmental noise is gathered.
urandom	`/dev/urandom` returns as many bytes as user requested and thus it is less random than `/dev/random`. A read from the `/dev/urandom` device will not block waiting for more entropy. As a result, if there is not sufficient entropy in the entropy pool, the returned values are theoretically vulnerable to a cryptographic attack on the algorithms used by the driver. Knowledge of how to do this is not available in the current unclassified literature, but it is theoretically possible that such an attack may exist. If this is a concern in your application, use `/dev/random` instead.

Example

```
/config#randomizer urandom
```

reset-devshell-password

This command resets the devshell password.

Example

```
/config#reset-devshell-password
2+0 records in
2+0 records out
1024 bytes (1.0 kB) copied, 0.000208748 s, 4.9 MB/s
2+0 records in
2+0 records out
1024 bytes (1.0 kB) copied, 0.00016912 s, 6.1 MB/s
```

```
devshell password reset successfully.
```

resize_boot_partition

Increases the boot partition size to 1 GB. Executing this command stops all Ivanti EPMM services, and must be followed by an Ivanti EPMM reload. See "reload" on page 29.

Example

```
/config#resize_boot_partition
```

service

Enables the service ssh or ntp. For ssh, this command also sets the number of instances allowed for the service.

TABLE 32. SERVICE COMMAND PARAMETERS

Parameter	Description
name	The name of the service. Enter either ssh or ntp.
instances	Maximum sessions allowed for ssh.

You can also configure this information in the Ivanti EPMM System Manager **Settings > CLI** page. See "CLI" in the *Ivanti EPMM System Manager Guide*.

Example

```
/config#service ssh 4
```

software repository

Configures the software repository URL. This URL specifies the location of software updates for Ivanti EPMM.

You can also configure the software repository in the Ivanti EPMM System Manager, in Maintenance > Software Updates, described in "Ivanti EPMM server software updates" in the *Ivanti EPMM System Manager Guide*.

Specify the following parameters:.

TABLE 33. SOFTWARE REPOSITORY PARAMETERS

Parameter	Description
urlstring	URL for the software repository.
username	The username portion of the credentials for accessing the repository.
password	The password portion of the credentials for accessing the repository.

sshd_authorized_key

Use this command to enable SSH public key authorization for a CLI user. With this command, you provide Ivanti EPMM with the public key of a SSH public/private key pair. Providing the public key allows a CLI user to use SSH to connect to Ivanti EPMM using the matching private key rather than with a password.

You can enable public key authorization only for the administrator user that you use to log into the CLI session. Each administrator user can have only one public key. If you enable public key authorization with a second public key, the first public key is overwritten.

Procedure

To enable SSH public key authorization, do the following in CONFIG mode:

1. Enter **sshd_authorized_key**.

2. When prompted, paste the public key.

3. Press **Enter**.

4. When prompted to save the configuration, enter **yes**.

Example

```
asdfasd/config#sshd_authorized_key

Please provide the public key and press enter: ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAAABAQCnFsywrE7Q6kGU+uVFKCLaY4/XlgXtxB1pUQAOPJjKRZukn5zfdbGmLq
GaJWjWc7TRMTkbPegV4skPW1ddIcUXNuV79Mfbco4sFJkLFr4Qg7xKQUyo/kk47otSE2HRq4EUoTxfN5UeEuD8
1WEeU3aqdH6RcrIx0gkdvteFbUuSacWorRw4xoskySYplWeLTva4IgERPXI5jkydBF/uH14B3R1V/TzIxo914x
W08o6C0dC/A/bnbPzAnvlngOdskGikUDOQ29jXqvHhrw9jnAWPYcq7vsJfNi2b/6AIAeKVcEZkLOuul1i9Wtke
PXX1k4lXR8e8lBI2MPhXOfiSIDGx admin

Entered key is: ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAAABAQCnFsywrE7Q6kGU+uVFKCLaY4/XlgXtxB1pUQAOPJjKRZukn5zfdbGmLq
GaJWjWc7TRMTkbPegV4skPW1ddIcUXNuV79Mfbco4sFJkLFr4Qg7xKQUyo/kk47otSE2HRq4EUoTxfN5UeEuD8
1WEeU3aqdH6RcrIx0gkdvteFbUuSacWorRw4xoskySYplWeLTva4IgERPXI5jkydBF/uH14B3R1V/TzIxo914x
W08o6C0dC/A/bnbPzAnvlngOdskGikUDOQ29jXqvHhrw9jnAWPYcq7vsJfNi2b/6AIAeKVcEZkLOuul1i9Wtke
PXX1k4lXR8e8lBI2MPhXOfiSIDGx admin

Confirm to add to the authorized keys (y/n): y
```

```
Done adding to the authorized keys.
```

statichost

A static host configuration maps a fully-qualified domain name to an IP address. This static mapping is useful in the following cases:

- A DNS server is not available.

- The DNS server entry for a fully-qualified domain name points to an external IP address, outside of your firewall, although the ultimate destination is inside your firewall. You can use this static mapping if you want to associate the fully-qualified domain name with an internal IP address, inside your firewall.

You can also configure static hosts using the Ivanti EPMM System Manager **Settings > Static Hosts** page, described in "Static Hosts" in the *Ivanti EPMM System Manager Guide*.

Specify the following parameters:

TABLE 34. STATICHOST COMMAND PARAMETERS

Parameter	Description
ip	IP address of the fully-qualified domain name.
fqdn	The fully-qualified domain name.

Example

```
/config#statichost 172.16.80.2 mysentry.mycompany.com
```

syslog

Configures syslog server information.

TABLE 35. SYSLOG COMMAND PARAMETERS

Parameter	Description
server	Hostname or IP address of the syslog server
loglevel	Specify the log level to be enabled (0-7)

The log level value you specify in this command corresponds to the following log levels:

TABLE 36. SYSLOG LOG LEVEL VALUES

Log level value	Log level description
0	Emergency
1	Alert
2	Critical
3	Error
4	Warning
5	Notice
6	Info
7	Debug

You can also configure the syslog servers in the Ivanti Ivanti EPMM System Manager **Settings > Data Export > Syslog Servers** page, described in "Syslog" in the *Ivanti EPMM System Manager Guide*.

system user

Creates a Ivanti EPMM System Manager user account. Specify the following parameters:.

TABLE 37. SYSTEM USER COMMAND PARAMETERS

Parameter	Description
username	User name
password	The unencrypted (cleartext) user password

You can also configure Ivanti EPMM System Manager users in the Ivanti EPMM System Manager, in **Security > Identity Source > Local Users**, described in "Identity Source > Local Users" in the *Ivanti EPMM System Manager Guide*.

system aspm

Sets a kernel boot parameter (pcie_aspm) to turn off the PCIe Active State Power Management (ASPM) subsystem on Ivanti EPMM physical appliances.

Turning off the PCIe ASPM subsystem is necessary if Ivanti EPMM physical appliances lose connectivity because of issues in some e1000e interface drivers. These faulty drivers erroneously go off-line and stay off-line when the PCIe ASPM subsystem puts the driver into low power mode. When the driver is off-line, Ivanti EPMM physical appliances that use the driver, such as the M2100 Gen 3 or M2200, lose connectivity. Because the PCIe ASPM subsystem's capability to save power is not applicable to Ivanti EPMM appliances, turning off the subsystem solves the interface driver issue with no impact to Ivanti EPMM behavior.

The setting persists across reboots. However, it does not persist after an Ivanti EPMM upgrade if the upgrade includes an upgrade to the kernel. Re-execute the command after such an upgrade.

x-frame

This command sets the XFrame configuration for Hypertext Transfer Protocol daemon (HTTPd), that is, your web server. The X-Frame options can be used to indicate whether or not a browser should be allowed to render a page in a <frame>, <iframe>, <embed> or <object>. Sites can use this to avoid click-jacking attacks, by ensuring that their content is not embedded into other sites.

TABLE 38. X-FRAME COMMAND PARAMETERS

Parameter	Description
SameOrigin	The page can only be displayed in a frame on the same origin as the page itself. The spec leaves it up to browser vendors to decide whether this option applies to the top level, the parent, or the whole chain, although it is argued that the option is not very useful unless all ancestors are also in the same origin.
Deny	The page cannot be displayed in a frame, regardless of the site attempting to do so.
Allow-From	This is an obsolete directive that no longer works in modern browsers. Don't use it. In supporting legacy browsers, a page can be displayed in a frame only on the specified origin URI.

INTERFACE mode commands

- "INTERFACE mode command summary" below
- "INTERFACE mode command details" on the next page

INTERFACE mode command summary

INTERFACE mode comes in two flavors:

- **GigabitEthernet** — Configures the physical ethernet interfaces.
- **VLAN** — Configures the virtual Local Area Network (VLAN) interfaces.

You enter each INTERFACE mode from the CONFIG mode using the commands "interface GigabitEthernet" on page 47 or "interface VLAN" on page 48.

Example

```
/config# interface GigabitEthernet 2
/config-if#
```

Each INTERFACE mode has its own set of commands that are applied to the specified interface, such as `GigabitEthernet 2` in the above example. Most commands are shared by both modes.

The commands specific to the INTERFACE modes are summarized in the following table, and then listed in detail in alphabetical order.

TABLE 39. INTERFACE MODE COMMANDS

Command	Description
do	Runs EXEC or EXEC PRIVILEGED commands.
"end" on the next page	Returns to CONFIGURE mode.
exit	Exits the EXEC mode and closes the terminal window.
"ip address" on the next page	Configures the IP address of a physical or VLAN interface.
"no" on page 62	no ip address - Resets the IP address of a physical or VLAN interface.

TABLE 39. INTERFACE MODE COMMANDS (CONT.)

Command	Description
	no shutdown - Enables a physical or VLAN interface.
"physical interface GigabitEthernet" on the next page	(Available in INTERFACE VLAN mode only.) Creates a VLAN interface on the specified physical interface.
"shutdown" on page 63	Disables the current VLAN or physical interface.

INTERFACE mode command details

end

Returns to CONFIGURE mode.

Example

```
/config-if#end
/config#
/config-vlan#end
/config#
```

ip address

Configures the IP address and mask of the interface you specified in the `interface` command. The interface is one of the following:

- a physical interface when in INTERFACE GigabitEthernet mode.

- a VLAN interface when in INTERFACE VLAN mode. Before you can configure the IP address of a VLAN interface, create the VLAN interface, using the command "physical interface GigabitEthernet" on the next page.

Specify the following parameters:

TABLE 40. IP ADDRESS COMMAND PARAMETERS

Parameter	Description
IP address	IP address of the physical network interface when in INTERFACE GigabitEthernet mode. IP address of the VLAN interface when in INTERFACE VLAN mode.
mask	The netmask of the interface.

Example

```
/config#interface GigabitEthernet 2
/config-if#ip address 10.10.17.27 255.255.255.0
```

no

Use the `no` command in INTERFACE mode as described in the following table.

TABLE 41. NO COMMAND PARAMETERS

Command	Description
no ip address	Resets the IP address and mask of the interface that you specified in the `interface` command. The interface can be a physical or VLAN interface. This command sets both the IP address and the mask to 0.0.0.0.
no shutdown	Enables the GigibitEthernet or VLAN interface that you specified in the `interface` command.

physical interface GigabitEthernet

Creates a VLAN interface on the specified physical interface. This command is available only in INTERFACE VLAN mode.

TABLE 42. PHYSICAL INTERFACE GIGABITETHERNET PARAMETERS

Parameter	Description
GigabitEthernet interface number	A value between 1 and 6 that specifies the GigabitEthernet interface on which to create the VLAN interface.

Example

```
/config#interface vlan 1
```

```
/config-vlan#
/config-vlan#physical interface GigabitEthernet 1
```

shutdown

Disables the VLAN or physical interface that you specified in the `interface` command. To enable the interface, use `no shutdown`. See "no" on the previous page.

Example

The following command disables a physical interface:

```
/config#interface GigabitEthernet 1
/config-if#shutdown
/config-if#
```

The following command disables a VLAN interface:

```
/config#interface vlan 1
/config-vlan#shutdown
/config_vlan#
```

IPV6 commands

This section describes IPV6 commands.

TABLE 43. IPV6 COMMANDS

Command	Mode	Description
ipv6 enable	Configure terminal	Enables IPV6 on the system
ipv6 disable	Configure terminal	Disable IPV6 on the system
ipv6 address <ipv6 address> <ipv6 network prefix> <ipv6 default gateway (optional)>	Configure terminal > Configure interface GigabitEthernet 1	Assigns IPV6 address to Gigabit Ethernet 1 interface
no ipv6 address	Configure terminal > Configure interface Gigabitethernet 1	Removes IPV6 address from Gigabit Ethernet 1 interface
ipv6 route <ipv6 address> <ipv6 network prefix> <gateway address>	Configure terminal	Adds an IPV6 route
ping6 <ipv6 address>	Enable mode	Able to ping a destination with IPV6 address
show ipv6 route	Enable mode	Displays all available IPV6 routes
show ipv6 interface brief GigabitEthernet 1	Enable mode	Displays the IPV6 configuration on a network interface
traceroute6 <ipv6 address>	Enable mode	Traces route to the IPV6 destination
ipv6 name-server <ipv6 address of the name server> <index>	Configure terminal	Adds a name server with IPV6 address
ping6 <domain or ipv6 address>	Enable	Pings IPV6 address