



CHAPTER 5

Log System Management Commands

This chapter contains detailed information about the command line interface (CLI) commands that you can use to manage and monitor the log system for the Broadband Access Center for Cable (BACC) device provisioning engine (DPE).

Commands

This section describes the system commands that affect how you can manage DPE logs. These commands include:

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**Note**

Prior to using any debug command, you must ensure that DPE debugging is enabled. Run the **debug on** command to enable this function.

clear logs

Usage Guidelines

This command removes historic (out of date) log files that exist on the system. These files include:

- DPE log files
- hardware log files
- syslog files

Over time, historic log files accumulate within the DPE. The **support bundle state** command is used to bundle these logs. Cisco recommends that you create a bundle before clearing logs. This ensures that no necessary files are accidentally lost.

**Note**

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **clear logs** command, you must use this syntax:

```
dpe# clear logs
```

Once this command is used prompts appear to indicate that logs are being cleared. The number of log files that are cleared is also identified.

Examples

This is an example of how to use the **clear logs** command:

```
dpe# clear logs
Clearing historic log files...
+ Removing 1 DPE log files...
+ No more historic logs.
```

debug dpe cache

Usage Guidelines

This command enables the DPE cache debug logging, which involves messages pertaining to the DPE cache including:

- logging requests for cache entries
- updates to the cache
- other interactions by DPE subsystems

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.  
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **debug dpe cache** command, you must use this syntax:

```
dpe# debug dpe cache
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# debug dpe cache  
%OK
```

no debug dpe cache

Usage Guidelines

This command disables DPE cache debug logging.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.  
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **no debug dpe cache** command, you must use this syntax:

```
dpe# no debug dpe cache
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# no debug dpe cache  
%OK
```

debug dpe connection

Usage Guidelines

This command enables the debugging of the DPE connection, which logs communication subsystem status and error messages. This is useful for finding communication problems between the DPE and the RDU.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **debug dpe connection** command, you must use this syntax:

```
dpe# debug dpe connection
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# debug dpe connection
%OK
```

no debug dpe connection

Usage Guidelines

This command disables the debugging of the DPE connection.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **no debug dpe connection** command, you must use this syntax:

```
dpe# no debug dpe connection
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# no debug dpe connection
%OK
```

debug dpe dpe-server

Usage Guidelines

This command enables debugging of the DPE server, which involves logging messages about the overall status and issues of the DPE server.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.  
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **debug dpe dpe-server** command, you must use this syntax:

```
dpe# debug dpe dpe-server
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# debug dpe dpe-server  
%OK
```

no debug dpe dpe-server

Usage Guidelines

This command disables debugging of the DPE server.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.  
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **no debug dpe dpe-server** command, you must use this syntax:

```
dpe# no debug dpe dpe-server
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# no debug dpe dpe-server  
%OK
```

debug dpe event-manager

Usage Guidelines

This command enables debugging of the DPE event manager, which involves logging messages and conditions showing the state of the event manager.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **debug dpe event-manager** command, you must use this syntax:

```
dpe# debug dpe event-manager
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# debug dpe event-manager
%OK
```

no debug dpe event-manager

Usage Guidelines

This command disables debugging of the DPE event manager.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **no debug dpe event-manager** command, you must use this syntax:

```
dpe# no debug dpe event-manager
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# no debug dpe event-manager
%OK
```

debug dpe exceptions

Usage Guidelines

This command enables or disables the debugging of DPE exceptions, which involves logging full stack traces for exceptions occurring during system operation. When unusual situations occur, where the system is apparently corrupt or behaving very badly, running this command can reveal very valuable information for Cisco TAC support.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.  
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **debug dpe exceptions** command, you must use this syntax:

```
dpe# debug dpe exceptions
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# debug dpe exceptions  
%OK
```

no debug dpe exceptions

Usage Guidelines

This command disables the debugging of DPE exceptions.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.  
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **no debug dpe exceptions** command, you must use this syntax:

```
dpe# no debug dpe exceptions
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# no debug dpe exceptions  
%OK
```

debug dpe framework

Usage Guidelines

This command enables the debugging of the DPE framework, which involves logging information about the DPE server's underlying framework. This underlying infrastructure provides for all of the various servers in BACC.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **debug dpe framework** command, you must use this syntax:

```
dpe# debug dpe framework
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# debug dpe framework
%OK
```

no debug dpe framework

Usage Guidelines

This command disables the debugging of the DPE framework.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **no debug dpe framework** command, you must use this syntax:

```
dpe# no debug dpe framework
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# no debug dpe framework
& OK
```


debug dpe messaging

Usage Guidelines

This command enables the debugging of DPE messaging, which involves logging details about the DPEs messaging subsystem. This subsystem is used primarily for communication between the DPE and the RDU.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.  
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **debug dpe messaging** command, you must use this syntax:

```
dpe# debug dpe messaging
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# debug dpe messaging  
%OK
```

no debug dpe messaging

Usage Guidelines

This command disables the debugging of DPE messaging.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.  
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **no debug dpe messaging** command, you must use this syntax:

```
dpe# no debug dpe connection
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# no debug dpe messaging  
%OK
```

debug dpe tftp

Usage Guidelines

This command enables the debugging of TFTP transfers.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **debug dpe tftp** command, you must use this syntax:

```
dpe# debug dpe tftp
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# debug dpe tftp
%OK
```

no debug dpe tftp

Usage Guidelines

This command disables the debugging of TFTP messages.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **no debug dpe tftp** command, you must use this syntax:

```
dpe# no debug dpe tftp
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# no debug dpe tftp
%OK
```

debug on

Usage Guidelines

This command enables the debug logging which can be helpful when troubleshooting possible system problems. Additionally, specific debugging categories must be enabled separately with commands like **debug dpe cache**.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.  
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **debug dpe cache** command, you must use this syntax:

```
dpe# debug on
```

Examples

This command requires no special syntax, and you enter it as shown in this example:

```
dpe# debug on  
%OK
```



Caution

Enabling debug logging may have a server impact on DPE performance. The DPE should never be left running, with debug turned on, for long periods of time.

no debug

Usage Guidelines

This command disables all debug logging.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.  
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **no debug** command, you must use this syntax:

```
dpe# no debug
```

Examples

This command requires no special syntax, and you enter it as shown here:

```
dpe# no debug  
%OK
```

log level

Usage Guidelines

This command lets you set the level of minimum DPE log messages that will be saved, as described in the Cisco Broadband Access Center for Cable Administrator's Guide.

If you run this command on an unlicensed DPE, a message similar to this one appears:

```
This DPE is not licensed. Your request cannot be serviced.
Please check with your system administrator for DPE licenses.
```



Note

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering this DPE CLI command you must use this syntax:

```
log level <number>
```

Where:

- *<number>*—Identifies the logging level, by number, to be saved. These DPE log levels include:
 - 0-emergency—Sets the logging service to save all urgent messages.
 - 1-alert—Sets the logging service to save all activities that need immediate action and those of a more severe nature.
 - 2-critical—Sets the logging service to save all unusual conditions and those of a more severe nature.
 - 3-error—Sets the logging service to save all error messages and those of a more severe nature.
 - 4-warning—Sets the logging service to save all warning messages and those of a more severe nature.
 - 5-notification—Sets the logging service to save all notification messages and those of a more severe nature.
 - 6-info—Sets the logging service to save all logging messages available.
 - 7-debug—Sets the logging service to save all messages used for debugging activities.

Examples

This is an example of how to use the **log level** command to save informational messages:

```
dpe# log level 6
% OK
```

show log

Usage Guidelines

This command shows all recent log entries for the DPE. These logs contain general DPE process information, including logging all system errors or severe problems. Check this log, when the system is experiencing difficulties. If the log contains insufficient information, enable the debug logging function and experiment with the different categories related to the problem.

**Note**

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **show log** command, you must use this syntax:

```
show log
```

Examples

This is an example of how to use the **show log** command:

```
dpe# show log
2001 12 21 11:22:20 CDT: %BPR-5: Notification DPE: Device Provisioning Engine starting up
```

show log last <1..999>

Usage Guidelines

This command shows the specified number of recent log entries for the DPE. Check this log, when the system is experiencing difficulties and, if the log contains insufficient information, enable the debug logging function and experiment with the different categories related to the problem.

**Note**

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **show log last** command, you must use this syntax:

```
show log last <1..999>
```

Where the <1..999> identifies the number of log entries that you want displayed.

Examples

This is an example of how to use the **show log last** command:

```
dpe# show log last 1
2001 12 21 11:28:17 CDT: %BPR-5: Notification DPE: Device Provisioning Engine starting up
```

show log run

Usage Guidelines

This command displays the running DPE log, which starts showing all messages logged to the DPE log. The command continues to run until you press **Enter**. Check this log when the system is experiencing difficulties. If the log contains insufficient information, enable the debug logging function and experiment with the different categories related to the problem.

**Note**

This command is used with both the hardware and Solaris DPEs.

Syntax Description

When entering the **show log run** command, you must use this syntax:

```
dpe# show log run
```

Examples

This is an example of how to use the **show log run** command:

```
dpe# show log run
Press <enter> to stop.
2001 12 21 11:43:43 CDT: %BPR-5: Notification DPE: Device Provisioning Engine starting up
2001 12 21 11:43:44 CDT: %BPR-6: Info DPE: Attempt to connect to RDU
BPR_host.cisco.com:49187 failed;
2001 12 21 11:43:44 CDT: %BPR-6: Info TFTP: Ready to service requests

Stopped.
```

show syslog

Usage Guidelines

This command shows all recent DPE syslog entries. The syslog file contains information about the general DPE system, including alerts from various processes related to the DPE. Check this log when the system is experiencing difficulties.

**Note**

This command is only used in conjunction with a hardware DPE.

Syntax Description

When entering the **show syslog** command, you must use this syntax:

```
dpe# show syslog
```

Examples

This is an example of how to use the **show syslog** command:

```
dpe# show syslog
Jan 2 12:27:37 test-dpe-2 BPR: %DPE-1-109: Failed to connect to RDU
```

**Note**

The output presented in this example is trimmed.

show syslog last

Usage Guidelines

This command shows the specified number of recent DPE syslog entries, including information about the general DPE system including alerts from various processes related to the DPE. Check this log when the system is experiencing difficulties.

**Note**

This command is only used in conjunction with a hardware DPE.

Syntax Description

When entering this command, you must use this syntax:

```
show syslog last <1..999>
```

Where the <1..999> identifies the number of syslog entries that you want displayed.

Examples

This is an example of how to use the **show syslog last** command:

```
dpe# show syslog last 1
Jan 2 12:27:37 test-dpe-2 BPR: %DPE-1-109: Failed to connect to RDU
```

show syslog run

Usage Guidelines

This command shows the running syslog, which starts showing all messages logged to the syslog. The command continues to run until you press **Enter**. The syslog contains information about the general DPE system including alerts from various processes related to the DPE. Check this log when the system is experiencing difficulties.

**Note**

This command is only used in conjunction with a hardware DPE.

Syntax Description

When entering the **show syslog run** command, you must use this syntax:

```
dpe# show syslog run
```

Examples

This is an example of how to use the **show syslog run** command:

```
dpe# show syslog run
Press <enter> to stop.
Jan 2 12:27:37 test-dpe-2 BPR: %DPE-1-109: Failed to connect to RDU
Stopped.
```

syslog log-server

Usage Guidelines

This command configures the log-server to send syslog messages whenever the syslog mode is set to either both or remote. When the mode is set to local changing this setting has no effect.

**Note**

This command is only used in conjunction with a hardware DPE.

Syntax Description

When entering the **syslog log-server** command, you must use this syntax:

```
syslog log-server <x.x.x.x>
```

Where the `<x.x.x.x>` identifies the log servers IP address.

When this command is used, you must follow it by running the **reload** command to make the changes take effect. See the “[reload](#)” section on page 2-15 for additional information.

Examples

This is an example of how to use the **syslog log-server** command:

```
dpe# syslog log-server 10.10.10.15
%OK (Requires appliance restart "> reload")
```

no syslog log-server

Usage Guidelines

This command clears the settings assigned to the syslog server. When the syslog mode is set to either both or remote, clearing the syslog log server results in the log mode being automatically set back to local until a new log server is configured.



Note

This command is only used in conjunction with a hardware DPE.

Syntax Description

When entering the **no syslog log-server** command, you must use this syntax:

```
dpe# no syslog log-server
```

When this command is used, you must follow it by running the **reload** command to make the changes take effect. See the “[reload](#)” section on page 2-15 for additional information.

Examples

This is an example of how to use the **no syslog log-server** command:

```
dpe# no syslog log-server
%OK (Requires appliance restart "> reload")
```

syslog mode both

Usage Guidelines

Configures the syslog subsystem to send messages to a remote server and also logs them locally. The remote system must be configured to accept syslog messages.



Note

This command is only used in conjunction with a hardware DPE.

Syntax Description

When entering the **syslog mode both** command, you simply enter the command as indicated below:

```
dpe# syslog mode both
```


When this command is used, you must follow it by running the **reload** command to make the changes take effect. See the “[reload](#)” section on page 2-15 for additional information.

Examples

This is an example of how to use the **syslog mode** command:

```
dpe# syslog mode both
%OK (Requires appliance restart "> reload")
```

syslog mode local

Usage Guidelines

Configures the syslog subsystem to log messages locally only.

**Note**

This command is only used in conjunction with a hardware DPE.

Syntax Description

When entering the **syslog mode local** command, you simply enter the command as indicated below:

```
dpe# syslog mode local
```

When this command is used, you must follow it by running the **reload** command to make the changes take effect. See the “[reload](#)” section on page 2-15 for additional information.

Examples

This is an example of how to use the **syslog mode** command:

```
dpe# syslog mode local
%OK (Requires appliance restart "> reload")
```

syslog mode remote

Usage Guidelines

Configures the syslog subsystem to send messages remotely and not log them locally. The remote system must be configured to accept syslog messages.

**Note**

This command is only used in conjunction with a hardware DPE.

Syntax Description

When entering the **syslog mode remote** command, you simply enter the command as indicated below:

```
dpe# syslog mode remote
```

When this command is used, you must follow it by running the **reload** command to make the changes take effect. See the “[reload](#)” section on page 2-15 for additional information.

Examples

This is an example of how to use the **syslog mode** command:

```
dpe# syslog mode remote  
%OK (Requires appliance restart "> reload")
```