



CHAPTER 3

DPE Configuration Commands

This chapter describes the command line interface (CLI) commands that you can use to manage and monitor the Cisco Broadband Access Center (Cisco BAC) Device Provisioning Engine (DPE).

The commands described in this chapter are:

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clear cache

Use this command to erase the entire DPE cache and reset the server to a clean state. When you restart the DPE, it connects to the RDU and rebuilds the cache from the information stored in the RDU database.

Ensure that you stop the DPE before erasing the DPE cache by running the **dpe stop** command. For more information, see [dpe start | stop](#), page 3-6.

You should clear the cache only when the DPE encounters a major problem. Running this command forces the DPE to rebuild or repopulate its device cache. This process may take a long time to complete.

After the command is entered, the DPE cache is cleared and a prompt appears to indicate how much disk space was cleared as a result. If the cache could not be cleared, the reason for the failure appears.

Syntax Description No keywords or arguments.

Examples

Example 1

```
dpe# clear cache
Clearing DPE cache...
+ 417792 bytes cleared.
```

This result occurs when the cache is successfully cleared.

Example 2

```
dpe# clear cache
DPE must be stopped before clearing cache.
```

This result occurs when the DPE has not yet been stopped.

Example 3

```
dpe# clear cache
Clearing DPE cache...
+ Cache already cleared.
```

This result occurs when the cache has already been cleared.

dpe port

Use this command to specify the port the DPE uses to communicate with the RDU.

You must stop the DPE before changing its port number. If you run this command on an operational DPE, the following error message appears:

```
ERROR: DPE must be stopped before changing the port number.
```

The changes that you introduce through this command do not take effect until you restart the DPE. For information on stopping and starting the DPE, see [dpe start | stop, page 3-6](#).

Syntax Description

dpe port *port*

port—Identifies the DPE port number that is used for connecting to the RDU.

Defaults

The port that the DPE uses is, by default, 49186.

Examples

```
dpe# dpe port 49186
% OK
```

dpe provisioning-group primary

Use this command to specify the DPE as a member of a specified primary provisioning group. DPEs can be configured only with one primary provisioning group.

If you restart the DPE, while assigning new provisioning groups that have a large number of devices, it can take a long time, depending on the number of devices in your network and the size of the devices' configurations. This delay is because the cache for each provisioning group has to be synchronized; or, for new provisioning groups, completely rebuilt.



Note

In normal situations, you must change the provisioning groups only when the DPE is first deployed on the network.

After you use this command, run the **dpe reload** command so that the changes take effect. See [dpe reload, page 3-5](#), for additional information.

To remove configured primary provisioning groups, use the **no** form of this command. For more information, see [dpe rdu-server, page 3-5](#).

Syntax Description

dpe provisioning-group primary *name*

- *name*—Identifies the assigned primary provisioning group.

Example 1

```
dpe# dpe provisioning-group primary PrimaryProvGroup
% OK (Requires DPE restart "# dpe reload")
```

dpe rdu-server

Use this command to identify the RDU to which this DPE connects. Normally, you configure the RDU on the default port, but for security reasons, you could configure it to run on a nondefault port.

After you use this command, run the **dpe reload** command so that the changes take effect. See [dpe reload, page 3-5](#), for additional information.

Syntax Description

dpe rdu-server {*host* | *ip*} *port*

- *host*—Identifies the fully qualified domain name of the host on which the RDU is running.
- *ip*—Identifies the IP address of the RDU.
- *port*—Identifies the port number on which RDU is listening for DPE connections (by default, it is 49187).

Examples

Example 1

```
dpe# dpe rdu-server rdu.cisco.com 49187
% OK (Requires DPE restart "# dpe reload")
```

This result occurs when you specify the fully qualified domain name of the RDU host.

Example 2

```
dpe# dpe rdu-server 10.10.20.1 49187
% OK (Requires DPE restart "# dpe reload")
```

This result occurs when you specify the IP address of the RDU host.

dpe reload

Use this command to restart the DPE, which must be operational before you reload it. If the DPE has not stopped within 60 seconds, the Cisco BAC process watchdog (bprAgent) forces the DPE to stop, and an alert message, indicating that this has occurred, appears. After that message appears, the DPE restarts.

Syntax Description

No keywords or arguments.

Examples

```
dpe# dpe reload
Process dpe has been restarted
```

dpe shared-secret

Use this command to set the shared secret used for communication with the RDU. Communication fails if the shared secrets, set on the two servers, are not the same.

After you use this command, run the **dpe reload** command so that the changes take effect. See [dpe reload, page 3-5](#), for additional information.

Syntax Description

dpe shared-secret *secret*

secret—Identifies the RDU shared secret.

Defaults

The default shared secret used for communication with the RDU is **secret**.

Examples

```
dpe# dpe shared-secret private
% OK (Requires DPE restart "# dpe reload")
```

dpe start | stop

Use this command to start or stop the DPE.

Syntax Description

dpe start | stop

- **start**—Starts the DPE. You can use this command only when the DPE is not running. Even if the DPE starts successfully, it does not guarantee that it will run successfully. Check the DPE log to ensure that the DPE has started correctly. Also, check the log periodically to ensure that no additional errors have occurred.
- **stop**—Stops the DPE. You can use this command only when the DPE is running. If the DPE has not stopped within 60 seconds, the DPE process watchdog forces the DPE to stop, and an alert message, indicating that this has occurred, appears.

Examples

Example 1

```
dpe# dpe start
Process dpe has been started
```

Example 2

```
dpe# dpe stop
dpe is stopped
```

interface ethernet provisioning enabled

Use this command to control whether the Ethernet interface(s) is used to handle provisioning requests. This command isolates the interactions of the DPE with the RDU from its interactions with CPE.

Specifically, the fully qualified domain name of the enabled interface is set as the URL for file downloads that a CPE device performs (for information on setting the FQDN, see [interface ethernet provisioning fqdn, page 3-7](#)).

After you use this command, run the **reload** command so that the changes take effect. See [dpe reload, page 3-5](#), for additional information.

Syntax Description

```
interface ethernet {intf0 | intf1} provisioning enabled {true | false}
```

- *intf0 | intf1*—Identifies the Ethernet interface.
- **true**—Indicates that provisioning has been enabled.
- **false**—Indicates that provisioning has been disabled.

Defaults

Provisioning operations for the Ethernet interface(s) is, by default, disabled.

Examples

```
dpe# interface ethernet hme0 provisioning enabled true
% OK (Requires DPE restart "# dpe reload")
```

interface ethernet provisioning fqdn

Use this command to set the fully qualified domain name (FQDN) for a specific interface. The provisioning FQDN is the FQDN that is given to a CPE to contact the specific DPE interface. In CWMP, this FQDN is used to construct the auto-configuration server URL when performing a CPE redirect or similar functions, unless a different value was configured on the provisioning group object at the RDU.

Remember to use the same FQDN for all DPEs in a given provisioning group. If DPEs are located behind the load-balancer, use the FQDN of the load balancer as the interface FQDN, and ensure that it is the same for all DPEs that are part of the same load-balancing group.

Before setting the FQDN for an interface, ensure that provisioning is enabled on that interface. To enable provisioning on an interface, see [interface ethernet provisioning enabled, page 3-7](#).

After you use this command, run the **reload** command so that the changes take effect. See [dpe reload, page 3-5](#), for additional information.

Syntax Description

```
interface ethernet {intf0 | intf1} provisioning fqdn fqdn
```

- *intf0 | intf1*—Identifies the Ethernet interface.
- *fqdn*—Identifies the fully qualified domain name that is set on the specified interface.

Examples

```
dpe# interface ethernet hme0 provisioning fqdn cisco.com
% OK (Requires DPE restart "> dpe reload")
```

interface ip pg-communication

Use this command to configure the DPE to use the interface identified by the IP address to communicate with other provisioning groups.

If you do not run this DPE configuration command, the DPE always binds to the localhost.

**Note**

The IP address that you specify in this command must exist on the machine and must be active. You can configure only one interface at a time.

When you use this command, run the **reload** command so that the changes take effect. See [dpe reload, page 3-5](#), for additional information.

Syntax Description

```
interface ip ip_address pg-communication
```

ip_address—Specifies the IP address of the interface to be used for communication with other provisioning groups.

The DPE CLI displays the available IP addresses if **?** command is used for the *ip_address* field.

Examples

```
dpe# interface ip 10.1.1.2 pg-communication
% OK (Requires DPE restart "> dpe reload")
```

show device-config

Use this command to display a device configuration that is cached at the DPE.

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

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

Syntax Description

```
show device-config device-ID
```

device-ID—Identifies the device.

Examples

For the purpose of this example, assume that the device ID is *00000C-7816406053*.

```
dpe# show device-config 00000C-7816406053
```

Properties

```
FC-EXP_LONG=-704167
/IPDevice/extensions/incomingEventViewer=
/IPDevice/extensions/soapRequestSender=sampleExtensions.js
/ownerID=0123456789
/IPDevice/extensions/soapResponseSender=
/IPDevice/extensions/outgoingEventViewerr=
FC-EXP-LAT=51563500
/provisioning/configuration/revision=298f54e
/provisioning/firmwareConfiguration/revision=1b735cef
```

HTTP Configuration

```
HttpAuthRecord:
  IS_PERSISTENT: true
  IS_AUTO_RUN: true
  USERNAME: 00000C-7816406053
  PASSWORD:<value is set>

RoutableIPAddressRecord:
  OPERATION_ID: 2798e7:1341333c80e:80000021
  UPDATE_IP: false
  HAS_ROUTABLE_IP: null
```

```
Data Synchronization Instruction:
  IS_PERSISTENT: true
  IS_AUTO_RUN: true
  DATA_SYNC_PARAMS:
    Inform.DeviceId.ManufacturerOUI: null
    *.DeviceInfo.ModelName: null
    Inform.DeviceId.ProductClass: null
    Inform.DeviceId.Manufacturer: null
    *.ManagementServer.ParameterKey: null
    *.DeviceInfo.HardwareVersion: null
    *.DeviceInfo.SoftwareVersion: null
  FIRMWARE_CHANGED_PARAMS:
    *.DeviceInfo.ModelName
  IGNORE_EMPTY_DATA_SYNC_PARAMS:
    *.ManagementServer.ParameterKey
```

```
Firmware Rules Instruction:
  IS_PERSISTENT: true
  FIRMWARE_RULES:
  Version: 1.0
  Prerequisite Maintenance Window:
    Start Time: 04:00:00
    Duration: 20:00
  Prerequisite Expressions:
    Expression:
      Parameter: InternetGatewayDevice.DeviceInfo.Manufacturer
      Inform Parameter: null
      Rpc Argument: null
      Value: Linksys
      Operator: matchIgnoreCase
    Expression:
      Parameter: null
      Inform Parameter: null
      Rpc Argument: RequestDownload.FileType
      Value: 1 Firmware Upgrade Image
      Operator: match
```

```

Firmware Rules:
  Firmware Rule: LinksysWAG54G2Rule
    Expressions:
      Expression:
        Parameter: null
        Inform Parameter: Inform.EventCode
        Rpc Argument: null
        Values: [1 BOOT, 3 SCHEDULED]
        Operator: match
      Expression:
        Parameter: InternetGatewayDevice.DeviceInfo.SoftwareVersion
        Inform Parameter: null
        Rpc Argument: null
        Values: [1.02, 2.02]
        Operator: matchIgnoreCase
    Internal File:
      Firmware File: sample-firmware-image.bin
      File Delivery Transport: service http 1
      FileType: 1 Firmware Upgrade Image
    Firmware Rule: LinksysGenericFirmwareRule
      Expressions:
        Expression:
          Parameter: InternetGatewayDevice.DeviceInfo.SoftwareVersion
          Inform Parameter: null
          Rpc Argument: null
          Value: 66
          Operator: match
      External File:
        File Url: http://10.10.10.10:889/sample-firmware-image.bin
        Username: test
        Password: changeme
        File Size: 3449
        FileType: 1 Firmware Upgrade Image
    FORCE_FIRMWARE_UPGRADE: false

Configuration Synchronization Instruction:
  OPERATION_ID: 2798e7:1341333c80e:80000022
  IS_PERSISTENT: true
  CONFIG:
    Version: 1.0
    Configuration Objects / Parameters:
      Parameter Name:
        InternetGatewayDevice.ManagementServer.PeriodicInformEnable
        Value: true
        Type: boolean
        ValueType: NORMAL
      Parameter Name:
        InternetGatewayDevice.ManagementServer.PeriodicInformInterval
        Value: 86400
        Type: unsignedInt
        ValueType: NORMAL
    CONFIG_REV_NUMBER: 43578702 (298f54e)
    FORCE_CONFIG_UPGRADE: false
    LAST_CONFIGURED_REV_NUMBER:

```

**Note**

The label, ToBeSigned is displayed for the parameters that are designated to be signed. To generate the signed configuration, at least one parameter in the configuration template must be flagged to be signed.

show dpe

Use the **show dpe** command to see if the DPE is running. It also displays the state of the process and, if running, its operational statistics. This command does not indicate if the DPE is running successfully and servicing requests. It only indicates if the process is being executed. However, when the DPE is running, you can use statistics that this command displays to determine if the DPE is successfully servicing requests.

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 a DPE license.
```

Syntax Description

No keywords or arguments.

Examples

Example 1

```
bacdev1-t5120-2-d6# show dpe  
BAC Process Watchdog is running.  
Process [dpe] is not running.
```

This result occurs when the DPE is not running.

Example 2

```
bacdev1-t5120-2-d6# show dpe  
BAC Process Watchdog is running.  
Process [dpe] is running.  
  
Broadband Access Center [BAC 3.8 (SOL_BAC3_8_20111206_0220_143)].  
Connected to RDU [bacdev1-t5120-2-d6].  
Caching [0] device configs and [1] files.  
0 sessions succeeded and 0 sessions failed.  
0 file requests succeeded and 0 file requests failed.  
0 immediate device operations succeeded, and 0 failed.  
0 home PG redirections succeeded, and 0 failed.  
Using signature key name [] with a validity of [3600].  
Abbreviated ParamList is enabled.  
Running for [1] days [1] hours [40] mins [14] secs.
```

This result occurs when the DPE is running.

show dpe config

Use this command to display the current settings on the DPE. After you enter the command, the DPE configuration appears.

Syntax Description

No keywords or arguments.

Examples

```
dpe# show dpe config
```

```
dpe port          = 49186
rdu host          = host.abc.com
rdu port          = 49187
primary groups    = default
```

show run

Use this command to display the current configuration settings on the DPE.

Syntax Description No keywords or arguments.

Examples

```

dpe# show run
aaa authentication local
chatty-client filter enabled false
chatty-client quiet-hits-to-leave-throttled-cwmp 5
chatty-client quiet-hits-to-leave-throttled-httpfile 5
chatty-client quite-time-interval 10000
chatty-client sample-hits-to-throttle-cwmp 10
chatty-client sample-hits-to-throttle-httpfile 5
chatty-client sample-time-interval 30000
debug service cwmp 1 errors
debug service cwmp 1 http-details
debug service http framework
dpe port 49186
dpe provisioning-group primary test-other
dpe rdi-server bacdev2-t5220-1-d4 49187
dpe shared-secret <value is set>
interface ip 10.86.147.122 pg-communication
log level 5-notification
no debug
service cwmp 1 client-auth digest
service cwmp 1 enabled true
service cwmp 1 port 7547
service cwmp 1 ssl cipher all-cipher-suites
service cwmp 1 ssl client-auth none
service cwmp 1 ssl enabled false
service cwmp 1 ssl keystore server-certs <value is set> <value is set>
service cwmp 2 client-auth digest
service cwmp 2 enabled false
service cwmp 2 port 7548
service cwmp 2 ssl cipher all-cipher-suites
service cwmp 2 ssl client-auth none
service cwmp 2 ssl enabled true
service cwmp 2 ssl keystore server-certs <value is set> <value is set>
service cwmp session timeout 60000
service cwmp-redirect 1 attempts 3
service cwmp-redirect 1 limit 20
service cwmp-redirect 1 lookup enabled true
service cwmp-redirect 1 respond enabled true
service cwmp-redirect 1 retry-after-timeout 60
service cwmp-redirect 1 status-period 5000
service cwmp-redirect 1 timeout 500
service http 1 client-auth digest
service http 1 enabled true
service http 1 port 7549
service http 1 ssl cipher all-cipher-suites
service http 1 ssl client-auth none
service http 1 ssl enabled false
service http 1 ssl keystore server-certs <value is set> <value is set>
service http 2 client-auth digest
service http 2 enabled false
service http 2 port 7550
service http 2 ssl cipher all-cipher-suites
service http 2 ssl client-auth none
service http 2 ssl enabled true
service http 2 ssl keystore server-certs <value is set> <value is set>
snmp-server community bacread ro
snmp-server community bacwrite rw
snmp-server contact <unknown>
snmp-server location <unknown>
snmp-server udp-port 8001
tacacs-server retries 2
tacacs-server timeout 5

```

chatty-client filter enabled

Use this command to enable or disable the Chatty-client filter on the DPE. When you enable this filter, the DPE detects and throttles the devices that make excessive number of TR-069 or HTTP file server calls.

Syntax Description

chatty-client filter enabled {true | false}

- **true**—Enables the Chatty-client filter.
- **false**—Disables the Chatty-client filter.

Defaults

The chatty-client filter is, by default, enabled.

Examples

```
dpe# chatty-client filter enabled true
% ok
```

chatty-client sample-time-interval

Use this command to specify the duration for which the DPE monitors the activity of a device. If a device generates more than the specified number of events within the sample time interval, the DPE moves the device to a throttled state.

Syntax Description

chatty-client sample-time-interval *time*

time—Identifies the sample time interval.

Defaults

The sample time interval is, by default, 30000 milliseconds.

Examples

```
dpe# chatty-client sample-time-interval 30000
% ok
```

chatty-client quiet-time-interval

Use this command to configure the quiet time interval for the Chatty clients. The DPE monitors the activities of the throttled device for the specified duration. If the device generates less than the specified number of events within the quiet time interval, the DPE moves the device to a quiet state, otherwise it resets the device to a throttled state.

Syntax Description

chatty-client quiet-time-interval *time*

time—Identifies the quiet time interval.

Defaults

The quiet time interval is, by default, 10000 milliseconds

Examples

```
dpe# chatty-client quiet-time-interval 10000
% ok
```

chatty-client sample-hits-to-throttle-cwmp

Use this command to configure the number of CWMP events received from a device during the sample time interval. If the device generates more than the specified number of CWMP events within the sample time interval, the DPE moves the device to a throttled state.

Syntax Description

chatty-client sample-hits-to-throttle-cwmp *number_of_cwmp_events*

number_of_cwmp_events—Identifies the number of CWMP events received from a device during the sample time interval.

Defaults

The number of CWMP events received from a device during the sample time interval is, by default, 20.

Examples

```
dpe# chatty-client sample-hits-to-throttle-cwmp 20
% ok
```

chatty-client sample-hits-to-throttle-httpfile

Use this command to configure the number of HTTP file requests received from a device during the sample time interval. If the device generates more than the specified number of HTTP file requests within the sample time interval, the DPE moves the device to a throttled state.

Syntax Description

chatty-client sample-hits-to-throttle-httpfile *number_of_HTTP_file_requests*

number_of_HTTP_file_requests—Identifies the number of HTTP file requests received from a device during the sample time interval.

Defaults

The number of HTTP file requests received from a device during the sample time interval is, by default, 10.

Examples

```
dpe# chatty-client sample-hit-to-throttle-httpfile 20
% ok
```

chatty-client quiet-hits-to-leave-throttled-cwmp

Use this command to configure the number of CWMP events received from a device during the quiet time interval.

If the device generates more than the specified number of CWMP events within the quiet time interval, the DPE moves the device to a throttled state. If the number of CWMP events received from the device during the quiet time interval is less than the value configured for the quiet-hits-to-leave-throttled property, the DPE restores the device to the normal state.

Syntax Description

chatty-client quiet-hits-to-leave-throttled-cwmp *number_of_cwmp_events*

number_of_cwmp_events—Identifies the number of CWMP events received from a device during the quiet time interval.

Defaults

The number of CWMP events received from a device during the quiet time interval is, by default, 5.

Examples

```
dpe# chatty-client quiet-hits-to-leave-throttled-cwmp 20
% ok
```

chatty-client quiet-hits-to-leave-throttled-httpfile

Use this command to configure the number of HTTP file requests received from a device during the quiet time interval.

If the device generates more than the specified number of HTTP file requests within the quiet time interval, the DPE moves the device to a throttled state. If the number of HTTP file requests received from the device during the quiet time interval is less than the value configured for the quiet-hits-to-leave-throttled property, the DPE restores the device to the normal state.

Syntax Description

chatty-client quiet-hits-to-leave-throttled-httpfile *number_of_HTTP_file_requests*

number_of_HTTP_file_requests—Identifies the number of HTTP file requests received from a device during the quiet time interval.

Defaults

The number of HTTP file requests received during the quiet time interval is, by default, 5.

Examples

```
dpe# chatty-client quiet-hits-to-leave-throttled-httpfile 20
% ok
```


show chatty-client

Use this command to display the list of devices that make an excessive number of TR-069 or HTTP file server calls.

| | |
|---------------------------|---------------------------|
| Syntax Description | No keywords or arguments. |
|---------------------------|---------------------------|

Examples

```
dpe# show chatty-client
Service      Client ID
CWMP         1-AP-1
CWMP         7-AP-8
CWMP         8-AP-8
```

The chatty client list is sorted by service type and device identifier.

dpe service-auth acl-property

The name of the property that contains the device's white list.

| | |
|---------------------------|--|
| Syntax Description | dpe service-auth acl-property <i>property</i> |
|---------------------------|--|

property - The property that contains the device's white list.

| | |
|------------------|---|
| Defaults: | The property that the DPE uses, by default, FC-ACL. |
|------------------|---|

Examples:

```
dpe# dpe service-auth acl-property FC-ACL
% OK (Requires DPE restart "# dpe reload")
```

dpe service-auth authentication enable

Enables or disables Authentication of the HNB in the DPE.

| | |
|------------------|--|
| Defaults: | By default, authentication is enabled. |
|------------------|--|

- **true** - Enables authentication.
- **false** - Disables authentication.

Examples:

```
dpe# dpe service-auth authentication enable true
% OK (Requires DPE restart "# dpe reload")
```

dpe service-auth authorization enable

Enables or disables Authorization of the HNB in the DPE.

Defaults:

By default, authorization is enabled.

- **true** - Enables authorization.
- **false** - Disables authorization.

Examples:

```
dpe# dpe service-auth authorization enable true
% OK (Requires DPE restart "# dpe reload")
```

dpe service-auth xml-schema enable

Enables or disables XML schema validation in Auth service.

Defaults:

By default, XML schema validation is disabled.

- **true** - Enables XML schema validation.
- **false** - Disables XML schema validation.

Examples:

```
dpe# dpe service-auth xml-schema enable true
% OK (Requires DPE restart "# dpe reload")
```

dpe service-auth authorization-property

The name of the property to use when performing Authorization.

The property that contains the Femto gateway FQDN.

Syntax Description

dpe service-auth authorization-property *property*

property - The property that contains the Femto gateway FQDN.

Defaults:

The property that the DPE uses, by default, FC-FGW-FQDN.

Examples:

```
dpe# dpe service-auth authorization-property FC-FGW-FQDN
% OK (Requires DPE restart "# dpe reload")
```

dpe service-auth radius-authorization-property

The name of the RADIUS attribute to use when performing authorization. The name of the property that contains the Femto gateway IP.

Syntax Description

dpe service-auth radius-authorization-property *property*

property - The property that contains the Femto gateway IP.

Defaults:

The property that the DPE uses, by default, NAS-IP-Address.

Examples:

```
dpe# dpe service-auth radius-authorization-property NAS-IP-Address
% OK (Requires DPE restart "# dpe reload")
```

dpe car shared-secret

Use this command to set the shared secret used for communication with the CAR EP. Communication fails if the shared secrets, set on the two servers, are not the same.

After you use this command, run the **dpe reload** command so that the changes take effect. See [dpe reload, page 3-5](#), for additional information.

Syntax Description

dpe car shared-secret *secret*

secret - Identifies the CAR EP shared secret.

Defaults:

The default shared secret used for communication with the CAR EP is secret.

Examples:

```
dpe# dpe shared-secret private
% OK (Requires DPE restart "# dpe reload")
```

dpe cnrquery client-port

Use this command to set Lease Query Client Port. The port for lease query to bind to.

After you use this command, run the **dpe reload** command so that the changes take effect. See [dpe reload, page 3-5](#), for additional information.

Syntax Description

dpe cnrquery client-port *port*

port - Identifies the port for lease query to bind to.

Defaults:

The default port for lease query to bind to is 67.

Examples:

```
dpe# dpe cnrquery client-port 23
% OK (Requires DPE restart "# dpe reload")
```

dpe cnrquery client-socket-address

Use this command to set Lease Query interface address.

After you use this command, run the **dpe reload** command so that the changes take effect. See [dpe reload, page 3-5](#), for additional information.

Syntax Description

dpe cnrquery client-socket-address *address*

address - Identifies the address for lease query to bind to.

Defaults:

The default address of this service is 0.0.0.0:67.

Examples:

```
dpe# dpe cnrquery client-socket-address 127.0.0.1:67
% OK (Requires DPE restart "# dpe reload")
```

dpe cnrquery echo

Use this command to indicate whether the DHCP lease query must use CNR echo.

| | |
|---------------------------|---|
| Syntax Description | <code>dpe cnrquery echo {true/false}</code> |
|---------------------------|---|

By default, CNR echo is disabled.

- **true** - Enables CNR echo.
- **false** - Disables CNR echo.

| | |
|------------------|---|
| Defaults: | The default value for the flag indicating that the DHCP lease query must use CNR echo is False. |
|------------------|---|

| | |
|------------------|--|
| Examples: | <pre>dpe cnrquery echo true % OK</pre> |
|------------------|--|

dpe cnrquery giaddr

Use this command to set the address for GIADDR to use when sending lease queries.

After you use this command, run the **dpe reload** command so that the changes take effect. See [dpe reload](#), page 3-5 for additional information.

| | |
|---------------------------|--|
| Syntax Description | <code>dpe cnrquery giaddr address</code> |
|---------------------------|--|

address -Identifies the address for GIADDR to use when sending lease queries.

| | |
|------------------|--|
| Defaults: | The default address for GIADDR to use when sending lease queries is localhost. |
|------------------|--|

| | |
|------------------|--|
| Examples: | <pre>dpe# dpe cnrquery giaddr 127.0.0.1 % OK (Requires DPE restart "# dpe reload")</pre> |
|------------------|--|

dpe cnrquery require-all-answers

Use this command to indicate whether the first response should be returned or else wait for all DHCP servers to respond.

Syntax Description

dpe cnrquery require-all-answers *{true/false}*

By default, require-all-answers is disabled.

- **true** - Enables require-all-answers.
- **false** - Disables require-all-answers.

Defaults:

The default value for flag indicating the first response should be returned or else, wait for all DHCP servers to respond is False.

Examples:

```
dpe cnrquery require-all-answers true
% OK
```

dpe cnrquery retry

Use this command to set the number of times to attempt a retry with a DHCP server before giving up.

Syntax Description

dpe cnrquery retry *attempts*

attempts - Identifies the number of times to attempt a retry with a DHCP server before giving up.

Defaults:

The default attempts for the number of times to attempt a retry with a DHCP server before giving up is 1.

Examples:

```
dpe# dpe cnrquery retry 2
% OK
```

dpe cnrquery server-port

Use this command to set the port number used to send the DHCP messages.

Syntax Description

dpe cnrquery server-port *port*

port - Identifies the port number used to send the DHCP messages.

Defaults:

The default port number used to send the DHCP messages is 67.

Examples:

```
dpe# dpe cnrquery server-port 67
% OK (Requires DPE restart "# dpe reload")
```

dpe cnrquery threads

Use this command to set the maximum number of threads for lease query reads.

Syntax Description

dpe cnrquery threads *threads*

threads -Identifies the maximum number of threads for lease query reads.

Defaults:

The default maximum number of threads for lease query reads is 16.

Examples:

```
dpe# dpe cnrquery threads 16
% OK (Requires DPE restart "# dpe reload")
```

dpe cnrquery timeout

Use this command to set the amount of milli-seconds that the LeaseQuery will wait for a response from the DHCP server before giving up.

Syntax Description

dpe cnrquery timeout *timeout*

timeout -Identifies the amount of milli-seconds that the LeaseQuery will wait for a response from the DHCP server before giving up.

Defaults:

The default amount of milli-seconds that the LeaseQuery will wait for a response from the DHCP server before giving up is 500.

Examples:

```
dpe# dpe cnrquery timeout 500
% OK
```