



DHCP Option 82 Remote ID Format

Remote identifier is the sub-option 2 of DHCP Option 82 field. Service Providers use remote identifier for troubleshooting, authentication, and accounting.

The DHCP Option 82 Remote ID Format feature adds support for the interpretation of remote-IDs that are inserted by customer premises equipment (CPE).

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Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see [Bug Search Tool](#) and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Restrictions for DHCP Option 82 Remote ID Format

The **subscriber session set cuid remote-id** command cannot be used simultaneously with either the **1 authorize identifier nas-port include-cui** command or the **1 authenticate aaa list AAA_AUTH include-cui** command because both the remote ID and Chargeable User Identity (CUID) use the same Cisco AV pair.

If the CUID has to be retrieved from AAA server and used, then configure the include-cui keyword in the **1 authorize identifier nas-port include-cui** command or the **1 authenticate aaa list AAA_AUTH include-cui** command.

If an unformatted remote-id needs to be sent in CUID, then use the **subscriber session set cuid remote-id** command.

The following example shows how to configure the CUID attribute.

```
policy-map type control TAL
  class type control always event session-start
    1 authorize identifier nas-port include-cui
  !
  class type control always event account-logon
    1 authenticate aaa list AAA_AUTH include-cui
  !
```

Information About DHCP Option 82 Remote ID Format

The remote ID is passed to AAA server through RADIUS Access Request and Accounting messages, as a printable ASCII string in Cisco remote-id-tag vendor specific attribute (VSA). For example, %"remote-id-tag=XYZ" where XYZ is the value received in DHCP option 82 remote-id field. If the character is non-printable ASCII such as control, NULL, and non-ASCII, then the whole string is converted to hexadecimal, and each hexadecimal is sent as printable character (0-9 and A-F) in the Cisco remote-id-tag VSA.

With the introduction of DHCP Option 82 Remote ID Format feature, the remote ID can be an octet string with any of the following formats:

- Printable ASCII characters
- Non-printable ASCII characters
- Non-ASCII characters

The remote ID is transparently passed to AAA server without any modification or conversion in Chargeable User Identifier (CUID) attribute as specified in GSMA specification IR.61.

Enabling DHCP Option 82 Remote ID Format

Perform this task to enable the DHCP Option 82 Remote ID Format feature.

SUMMARY STEPS

1. enable
2. configure terminal
3. subscriber session set cuid remote-id
4. end

DETAILED STEPS

	Command or Action	Purpose
Step 1	enable Example: Router> enable	Enables privileged EXEC mode. Enter password when prompted.
Step 2	configure terminal	Enters global configuration mode.

	Command or Action	Purpose
	Example: <pre>Router# configure terminal</pre>	
Step 3	<pre>subscriber session set cuid remote-id</pre> Example: <pre>Router(config)# subscriber session set cuid remote-id</pre>	Enables the DHCP Option 82 Remote ID Format feature. This command sets the CUID attribute in the RADIUS Access Request and Accounting Request messages with the unmodified value of the remote ID, which is received in the DHCP request. Note The no form of this command disables the DHCP Option 82 Remote ID Format feature.
Step 4	<pre>end</pre> Example: <pre>Router(config)# end</pre>	Returns the device to privileged EXEC mode.

Example

Additional References

Related Documents

Related Topic	Document Title
Cisco IOS commands	Cisco IOS Master Commands List, All Releases
iWAG commands	Cisco IOS Intelligent Wireless Access Gateway Command Reference

MIBs

MIB	MIBs Link
No new or modified MIBs are supported by this feature.	To locate and download MIBs for selected platforms, Cisco software releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs

Technical Assistance

Description	Link
<p>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</p> <p>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.</p> <p>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</p>	<p>http://www.cisco.com/cisco/web/support/index.html</p>

Feature Information for DHCP Option 82 Remote ID Format

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Table 1: Feature Information for DHCP Option 82 Remote ID Format

Feature Name	Releases	Feature Information
DHCP Option 82 Remote ID Format	Cisco IOS XE Release 3.15	In Cisco IOS XE Release 3.15, this feature was implemented on the Cisco ASR 1000 Series Aggregation Services Routers.