



DHCP Commands on Cisco IOS-XR Software

This chapter describes the Cisco IOS-XR software commands used to configure and monitor the Dynamic Host Configuration Protocol (DHCP).

dhcp relay information check disable

To configure a Dynamic Host Configuration Protocol (DHCP) server to not validate the relay agent information option in forwarded BOOTREPLY messages, use the **dhcp relay information check disable** command in global configuration mode. To enable the information check and return to the default behavior, use the **no** form of this command.

dhcp relay information check disable

no dhcp relay information check disable

Syntax Description This command has no arguments or keywords.

Defaults DHCP validates the relay agent information option.

Command Modes Global configuration

Command History	Release	Modification
	Release 2.0	This command was introduced.

Usage Guidelines To use this command, you must be in a user group associated with a task group that includes the proper task IDs. For detailed information about user groups and task IDs, refer to the *Configuring AAA Services on Cisco IOS-XR Software* module of the *Cisco IOS-XR System Security Configuration Guide*.

By default, DHCP validates the relay agent information option in forwarded BOOTREPLY messages. Use the **dhcp relay information check disable** command to disable the information check.

Examples The following example configures the relay agent to not validate the relay information option (Option 82) in a BOOTREPLY:

```
RP/0/RP0/CPU0:router(config)# dhcp relay information check disable
```

Related Commands	Command	Description
	dhcp relay information option	Configures a DHCP server to insert the DHCP relay agent information option in forwarded BOOTREQUEST messages.
	dhcp relay information policy	Configures the information reforwarding policy of a DHCP relay agent (what a DHCP relay agent should do if a message already contains relay information).
	dhcp server	Enables DHCP services on a networking device.

dhcp relay information option

To configure a Dynamic Host Configuration Protocol (DHCP) server to insert the DHCP relay agent information option in forwarded BOOTREQUEST messages, use the **dhcp relay information option** command in global configuration mode. To disable the insertion of relay information into forwarded BOOTREQUEST messages, use the **no** form of this command.

dhcp relay information option

no dhcp relay information option

Syntax Description This command has no arguments or keywords.

Defaults DHCP does not insert relay information.

Command Modes Global configuration

Command History	Release	Modification
	Release 2.0	This command was introduced.

Usage Guidelines To use this command, you must be in a user group associated with a task group that includes the proper task IDs. For detailed information about user groups and task IDs, refer to the *Configuring AAA Services on Cisco IOS-XR Software* module of the *Cisco IOS-XR System Security Configuration Guide*.

Use the **dhcp relay information option** command to configure a DHCP server to insert the DHCP relay agent information option in forwarded BOOTREQUEST messages. Use the **no** form of this command to restore the default setting.

This command is used by cable access router termination systems. This functionality enables a DHCP server to identify the user (cable access router) sending the request and initiate appropriate action based on this information. By default, DHCP does not insert relay information.

Examples The following example enables command functionality and configures a DHCP server to insert the DHCP relay agent information option in forwarded BOOTREQUEST messages:

```
RP/0/RP0/CPU0:router # dhcp relay information option
```

Related Commands	Command	Description
	dhcp relay information check disable	Configures a DHCP server to not validate the relay agent information option in forwarded BOOTREPLY messages.
	dhcp relay information policy	Configures the information reforwarding policy of a DHCP relay agent (what a DHCP relay agent should do if a message already contains relay information).

dhcp relay information policy

To configure the information reforwarding policy for a Dynamic Host Configuration Protocol (DHCP) relay agent (what a relay agent should do if a message already contains relay information), use the **dhcp relay information policy** command in global configuration mode. To restore the default relay information policy, use the **no** form of this command.

```
dhcp relay information policy {drop | keep | replace}
```

```
no dhcp relay information policy {drop | keep | replace}
```

Syntax Description	drop	Directs the DHCP relay agent to discard messages with existing relay information if the relay information option is already present.
	keep	Indicates that existing information is left unchanged on the DHCP relay agent.
	replace	Indicates that existing information is overwritten on the DHCP relay agent.

Defaults The DHCP server replaces existing relay information.

Command Modes Global configuration

Command History	Release	Modification
	Release 2.0	This command was introduced.

Usage Guidelines To use this command, you must be in a user group associated with a task group that includes the proper task IDs. For detailed information about user groups and task IDs, refer to the *Configuring AAA Services on Cisco IOS-XR Software* module of the *Cisco IOS-XR System Security Configuration Guide*.

Use the **dhcp relay information policy** command to configure the information reforwarding policy for a DHCP relay agent. Use the **no** form of this command to restore the default relay information policy.

This command is used by cable access router termination systems. When a DHCP relay agent receives a message from another DHCP relay agent, relay information might already be present in the message. By default, the relay information from the previous relay agent is replaced.

Examples The following examples configure a DHCP relay agent to drop messages with existing relay information, keep existing information, and replace existing information, respectively:

```
RP/0/RP0/CPU0:router(config)# dhcp relay information policy drop
```

```
RP/0/RP0/CPU0:router(config)# dhcp relay information policy keep
```

```
RP/0/RP0/CPU0:router(config)# dhcp relay information policy replace
```

Related Commands	Command	Description
	dhcp relay information check disable	Configures a DHCP server to not validate the relay agent information option in forwarded BOOTREPLY messages.
	dhcp relay information option	Configures a DHCP server to insert the DHCP relay agent information option in forwarded BOOTREQUEST messages.

dhcp server

To enable Dynamic Host Configuration Protocol (DHCP) services on a networking device, use the **dhcp server** command in global configuration mode. To disable DHCP services, use the **no** form of this command.

dhcp server

no dhcp server

Syntax Description

This command has no arguments or keywords.

Defaults

DHCP services are disabled, which means the relay agent is off.

Command Modes

Global configuration

Command History

Release	Modification
Release 2.0	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes the proper task IDs. For detailed information about user groups and task IDs, refer to the *Configuring AAA Services on Cisco IOS-XR Software* module of the *Cisco IOS-XR System Security Configuration Guide*.

When this command is enabled, by default the relay agent is on.

Examples

The following example enables DHCP services:

```
RP/0/RP0/CPU0:router(config)# dhcp server
```

Related Commands

Command	Description
dhcp relay information check disable	Configures a DHCP server to not validate the relay agent information option in forwarded BOOTREPLY messages.
dhcp relay information option	Configures a DHCP server to insert the DHCP relay agent information option in forwarded BOOTREQUEST messages.
dhcp relay information policy	Configures the information reforwarding policy of a DHCP relay agent (what a DHCP relay agent should do if a message already contains relay information).

