



APPENDIX B

Catalyst 2960 and 2960-S Switch Debug Commands

This appendix describes the **debug** privileged EXEC commands that have been created or changed for use with the Catalyst 2960 and 2960-S switch. These commands are helpful in diagnosing and resolving internetworking problems and should be enabled only under the guidance of Cisco technical support staff.



Caution

Because debugging output is assigned high priority in the CPU process, it can render the system unusable. For this reason, use the _____ commands only to troubleshoot specific problems or during troubleshooting sessions with Cisco technical support staff. It is best to use the _____ commands during periods of lower network traffic and fewer users. Debugging during these periods decreases the likelihood that increased _____ command processing overhead will affect system use.

■ debug authentication

debug authentication

debug authentication**no**

```
debug authentication {all | errors events sync feature [all] [ ] [auth_fail_vlan
auth_policy autocfg critical dhcp guest_vlan mab_pm mda multi_auth
switch_pm switch_sync vlan_assign voice webauth all errors events]}
```

```
no debug authentication {all | errors | events | sync | feature [all] [acct] [auth_fail_vlan
[auth_policy] [autocfg] [critical] [dhcp] [guest_vlan] [mab_pm] [mda] [multi_auth]
[switch_pm] [switch_sync] [vlan_assign] [voice] [webauth] [all | errors | events]}
```

Syntax Description

(Optional) Display authentication manager accounting information.

(Optional) Display all authentication manager debug messages.

(Optional) Display authentication manager errors for the restricted VLAN.

(Optional) Display authentication policy messages.

(Optional) Display autoconfiguration authentication manager debug messages.

(Optional) Display the inaccessible authentication bypass messages.

Note

critical authentication or the authentication, authorization, and accounting (AAA) fail policy.

(Optional) Display authentication manager debug messages on DHCP dynamic address-enable interfaces.

(Optional) Display all authentication manager error debug messages.

(Optional) Display all authentication manager event debug messages, including registry and miscellaneous events.

(Optional) Display authentication manager feature debug messages.

(Optional) Display guest VLAN authentication manager messages.

(Optional) Display MAC authentication manager bypass authentication debug messages.

(Optional) Display multidomain authentication manager debug messages.

(Optional) Display multi-authentication manager debug authentication messages.

(Optional) Display switch port manager messages.

(Optional) Display synchronization messages between the switch, the authentication server, and the connected devices.

(Optional) Display operational synchronization authentication manager debug messages.

(Optional) Display the VLAN-assignment debug messages.

(Optional) Display the voice-VLAN debug messages.

(Optional) Display web authentication manager debug messages.

Defaults

Command Modes

Command History	Release	Modification
	12.2(50)SE	This command was introduced.

Usage Guidelines

When you enable debugging, it is enabled only on the stack master.

To enable debugging on a stack member, you can start a session from the stack master by using the **session switch-number** command at the command-line prompt of the stack member. You also can use the **stack-member-number** *line*

Related Commands

Configures the port mode as unidirectional or bidirectional.
Sets the action for specific authentication events.
Configures a port to use web authentication as a fallback method for clients that do not support IEEE 802.1x authentication.
Sets the authorization manager mode on a port.
Enables or disables open access on a port.
Sets the order of authentication methods used on a port.
Enables or disables reauthentication on a port.
Enables manual control of the port authorization state.
Adds an authentication method to the port-priority list.
Configures the violation modes that occur when a new device connects to a port or when a new device connects to a port after the maximum number of devices are connected to that port.
Displays information about authentication manager events on the switch.

debug auto qos

debug auto qos privileged EXEC command to enable debugging of the automatic quality of service (auto-QoS) feature. Use the **no** form of this command to disable debugging.



To use this command, the switch must be running the LAN Base image.

This command has no keywords or arguments.

Auto-QoS debugging is disabled.

Privileged EXEC

To display the QoS configuration that is automatically generated when auto-QoS is enabled, enable debugging *before*

switch-number

stack-member-number LINE

Examples

auto-QoS is enabled:

```
Switch# debug auto qos
AutoQoS debugging is on
Switch# configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)# interface gigabitethernet0/1
Switch(config-if)# auto qos voip cisco-phone

21:29:41: mls qos map cos-dscp 0 8 16 26 32 46 48 56
21:29:41: mls qos
21:29:42: no mls qos srr-queue input cos-map
```

```
21:29:42: no mls qos srr-queue output cos-map
21:29:42: mls qos srr-queue input cos-map queue 1 threshold 3 0
21:29:42: mls qos srr-queue input cos-map queue 1 threshold 2 1
21:29:42: mls qos srr-queue input cos-map queue 2 threshold 1 2
21:29:42: mls qos srr-queue input cos-map queue 2 threshold 2 4 6 7
21:29:43: mls qos srr-queue input cos-map queue 2 threshold 3 3 5
21:29:43: mls qos srr-queue output cos-map queue 1 threshold 3 5
21:29:43: mls qos srr-queue output cos-map queue 2 threshold 3 3 6 7
21:29:44: mls qos srr-queue output cos-map queue 3 threshold 3 2 4
21:29:44: mls qos srr-queue output cos-map queue 4 threshold 2 1
21:29:44: mls qos srr-queue output cos-map queue 4 threshold 3 0
21:29:44: no mls qos srr-queue input dscp-map
21:29:44: no mls qos srr-queue output dscp-map
21:29:44: mls qos srr-queue input dscp-map queue 1 threshold 2 9 10 11 12 13 14 15
21:29:45: mls qos srr-queue input dscp-map queue 1 threshold 3 0 1 2 3 4 5 6 7
21:29:45: mls qos srr-queue input dscp-map queue 1 threshold 3 32
21:29:45: mls qos srr-queue input dscp-map queue 2 threshold 1 16 17 18 19 20 21 22 23
21:29:45: mls qos srr-queue input dscp-map queue 2 threshold 2 33 34 35 36 37 38 39 48
21:29:46: mls qos srr-queue input dscp-map queue 2 threshold 2 49 50 51 52 53 54 55 56
21:29:46: mls qos srr-queue input dscp-map queue 2 threshold 2 57 58 59 60 61 62 63
21:29:46: mls qos srr-queue input dscp-map queue 2 threshold 3 24 25 26 27 28 29 30 31
21:29:47: mls qos srr-queue input dscp-map queue 2 threshold 3 40 41 42 43 44 45 46 47
21:29:47: mls qos srr-queue output dscp-map queue 1 threshold 3 40 41 42 43 44 45 46 47
21:29:47: mls qos srr-queue output dscp-map queue 2 threshold 3 24 25 26 27 28 29 30 31
21:29:47: mls qos srr-queue output dscp-map queue 2 threshold 3 48 49 50 51 52 53 54 55
21:29:48: mls qos srr-queue output dscp-map queue 2 threshold 3 56 57 58 59 60 61 62 63
21:29:48: mls qos srr-queue output dscp-map queue 3 threshold 3 16 17 18 19 20 21 22 23
21:29:48: mls qos srr-queue output dscp-map queue 3 threshold 3 32 33 34 35 36 37 38 39
21:29:49: mls qos srr-queue output dscp-map queue 4 threshold 1 8
21:29:49: mls qos srr-queue output dscp-map queue 4 threshold 2 9 10 11 12 13 14 15
21:29:49: mls qos srr-queue output dscp-map queue 4 threshold 3 0 1 2 3 4 5 6 7
21:29:49: no mls qos srr-queue input priority-queue 1
21:29:49: no mls qos srr-queue input priority-queue 2
21:29:50: mls qos srr-queue input bandwidth 90 10
21:29:50: no mls qos srr-queue input buffers
21:29:50: mls qos queue-set output 1 buffers 10 10 26 54
21:29:50: interface GigabitEthernet
21:29:50: mls qos trust device cisco-phone
21:29:50: mls qos trust cos
21:29:50: no queue-set 1
21:29:50: srr-queue bandwidth shape 10 0 0 0
21:29:50: srr-queue bandwidth share 10 10 60 20
```

debug backup

Syntax Description

Defaults

Command Modes

Command History

	Release	Modification

Usage Guidelines

Related Commands

	Command	Description

debug cisp

```
debug cisp [all errors events packets sync  
no debug cisp [initialization interface-configuration rpc
```

udebug cisp no debug cisp

session
debug
remote command

cisp enable
dot1x credentials
(global configuration)
profile
show cisp

debug cluster

Syntax Description

	Display the Hot Standby Router Protocol (HSRP) debug messages.
	Display Hypertext Transfer Protocol (HTTP) debug messages.
[]	Display IP or transport packet debug messages.
	Display cluster member debug messages.
	Display Network Address Translation (NAT) debug messages.
	Display cluster neighbor debug messages.
	Display platform-specific cluster debug messages.
	Display Simple Network Management Protocol (SNMP) debug messages.
	Display VLAN Query Protocol (VQP) proxy debug messages.

Defaults

Command Modes

Command History

Release	Modification
12.2(25)FX	This command was introduced.

Usage Guidelines

debug dot1x

Syntax Description



Note

Defaults

Command Modes

Command History

	Release	Modification

Usage Guidelines

Related Commands	Command	Description

■ debug dtp

debug dtp

Syntax Description

Defaults

Command Modes

Command History

	Release	Modification

Usage Guidelines

Related Commands

	Command	Description

debug eap

md5 packets peer sm

no debug dot1x all authenticator errors events md5 packets peer sm

Syntax Description

all

authenticator

errors

events

md5

packets

peer

sm

Defaults

Command Modes

Command History

Release

Modification

Usage Guidelines

undebug dot1x

no debug dot1x

session

debug

remote command

Related Commands

Command

Description

show debugging

show eap

debug etherchannel**debug etherchannel**

EtherChannel/PAgP shim. This shim is the software module that is the interface between the Port Aggregation Protocol (PAgP) software module and the port manager software module. Use the **no** form of this command to disable debugging.

```
[     |     |     |     |     ]  
[     |     |     |     |     ]
```

(Optional) Display all EtherChannel debug messages.

(Optional) Display detailed EtherChannel debug messages.

(Optional) Display EtherChannel error debug messages.

(Optional) Debug major EtherChannel event messages.

(Optional) Display PAgP interface descriptor block debug messages.



Though visible in the command-line help strings, the **no** keyword is not supported.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

If you do not specify a keyword, all debug messages appear.

The **no** command is the same as the **no** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **enable** privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **enable** privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Displays EtherChannel information for the channel.

debug ilpower

```
controller | event | ha | port powerman registries  
no debug ilpower cdp controller | event | ha | port powerman registries
```

Syntax Description

cdp
controller
event
ha
port
powerman
registries

Defaults

Command Modes

Command History

Release	Modification
12.2(44)SE	This command was introduced.

Usage Guidelines

Related Commands

Display the values in the registers of the specified PoE controller.
Display the power status for the specified PoE port or for all PoE ports.

debug interface

vlan-id *interface-id* *interface-number* *port-channel-number*
vlan-id *interface-id* *interface-number* *port-channel-number*

interface-id **gigabitethernet 0/2**

null

0

port-channel

port-channel-number *port-channel-number*

vlan *vlan-id*

vlan-id

switch-number

stack-member-number LINE

show debugging

show etherchannel

debug ip dhcp snooping
no

debug ip dhcp snooping *mac-address agent event packet*

no debug ip dhcp snooping *mac-address agent event packet*



mac-address

agent

event

packet

undebug ip dhcp snooping

no debug ip dhcp snooping

session *switch-number*

debug

remote command *stack-member-number LINE*

show debugging

■ **debug ip verify source packet**

debug ip verify source packet

Syntax Description

Defaults

Command Modes

Command History	Release	Modification

Usage Guidelines

Related Commands	Command	Description

debug ip igmp filter

privileged EXEC command to enable debugging of Internet Group Management Protocol (IGMP) filter events. Use the `no` form of this command to disable debugging.

Syntax Description This command has no arguments or keywords.

Defaults Debugging is disabled.

Command Modes Privileged EXEC

Command History	Release	Modification
	12.2(25)FX	This command was introduced.

Usage Guidelines The `debug ip igmp filter` command is the same as the `debug ip igmp` command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the `enable` privileged EXEC command. Then enter the `debug ip igmp filter` command at the command-line prompt of the stack member. You also can use the `enable` privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
	<code>show debug</code>	Displays information about the types of debugging that are enabled.

■ **debug ip igmp max-groups**

debug ip igmp max-groups

Syntax Description

Defaults

Command Modes

Command History	Release	Modification

Usage Guidelines

Related Commands	Command	Description

debug ip igmp snooping

Syntax Description

Defaults

Command Modes

Command History	Release	Modification

Usage Guidelines

Related Commands	Command	Description

debug lacp

debug lacp

Syntax Description

Defaults

Command Modes

Command History

	Release	Modification

Usage Guidelines

Related Commands

	Command	Description

debug lldp packets

**Note**

Syntax Description

Defaults

Command Modes

Command History	Release	Modification

Usage Guidelines

Related Commands	Command	Description

■ debug mac-notification

debug mac-notification

Syntax Description

Defaults

Command Modes

Command History

	Release	Modification

Usage Guidelines

Related Commands

	Command	Description

debug macro

Syntax Description

Defaults

Command Modes

Command History	Release	Modification

Usage Guidelines

Related Commands	Command	Description

debug matm

debug matm

Syntax Description

Defaults

Command Modes

Command History	Release	Modification

Usage Guidelines

Related Commands	Command	Description

debug matm move update

**Note**

Defaults

Command Modes

Command History	Release	Modification

Usage Guidelines

Related Commands	Command	Description

■ debug monitor

debug monitor

Syntax Description

Defaults

Command Modes

Command History

	Release	Modification

Usage Guidelines

Related Commands

	Command	Description

debug mvrdbg

**Note**

Syntax Description

Defaults**Command Modes****Command History**

	Release	Modification

Usage Guidelines**Related Commands**

Command	Description

■ debug nmsp

debug nmsp

**Note**

Syntax Description

Defaults

Command Modes

Command History

Release	Modification

Usage Guidelines

Related Commands

Command	Description

debug nvram

Syntax Description

Defaults

Command Modes

Command History	Release	Modification

Usage Guidelines

Related Commands	Command	Description

debug pagp**Note**

Syntax Description

Defaults**Command Modes****Command History**

	Release	Modification

Usage Guidelines**Related Commands**

	Command	Description

debug platform acl

Syntax Description



Note

Defaults

Command Modes

Command History

Release	Modification
12.2(53)SE1	The stack keyword was added only on Catalyst 2960-S switches running the LAN base image.

Usage Guidelines

Related Commands

Command	Description
	Displays information about the types of debugging that are enabled.

 ■ debug platform backup interface

debug platform backup interface

Use the privileged EXEC command to enable debugging of the Flex Links platform backup interface. Use the form of this command to disable debugging.

**Note**

To use this command, the switch must be running the LAN Base image.

Syntax Description This command has no arguments or keywords.

Defaults Platform backup interface debugging is disabled.

Command Modes Privileged EXEC

Command History	Release	Modification
	12.2(25)FX	This command was introduced.

Usage Guidelines The command is the same as the command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the privileged EXEC command. Then enter the command at the command-line prompt of the stack member. You also can use the privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
		Displays information about the types of debugging that are enabled.

debug platform cisp

Use the **debug platform cisp** global configuration command to enable platform-level debugging of a switch that has one or more Client Information Signalling Protocol (CISP)-enabled interfaces. Use the form of this command to disable debugging.

```
|           |           ]  
|           |           ]
```

Syntax Description	Enable debugging of the CISP initialization sequence. Enable debugging of the CISP configuration. Enable debugging of the CISP RPC requests.
Defaults	Debugging is disabled.
Command Modes	Privileged EXEC
Command History	12.2(50)SE This command was introduced.
Usage Guidelines	The debug platform cisp command is the same as the enable debug cispl command. When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, start a session from the stack master by using the enable privileged EXEC command and enter the debug command at the command-line prompt of the stack member. You also can use the enable <member> privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.
	Enables Client Information Signalling Protocol (CISP) Configures a profile on a supplicant switch. Displays CISP information for a specified interface.

Use the `privilege exec` command to enable debugging of the main (important) command-line interface (CLI) redirection events. Use the `no privilege exec` form of this command to disable debugging.

This command has no arguments or keywords.

Debugging is disabled.

Privileged EXEC

The `privilege exec` command is the same as the `enable` command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the `enable` command. Then enter the `privilege exec` command at the command-line prompt of the stack member. You also can use the `enable privilege exec` command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the privileged EXEC command to enable debugging of configuration file activity across the stack. Use the form of this command to disable debugging.

{ | | }

{ | | }

Display debug messages for all configuration file transmission and reception events throughout the stack.

Display debug messages for configuration file reception from other stack members.

Display debug messages for configuration file transmission to other stack members.

Debugging is disabled.

Privileged EXEC

12.2(53)SE1 This command was introduced only on Catalyst 2960-S switches running the LAN base image.

The command is the same as the command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the privileged EXEC command. Then enter the command at the command-line prompt of the stack member. You also can use the privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the privileged EXEC command to enable debugging of platform central processing unit (CPU) receive queues. Use the form of this command to disable debugging.

```
      {   |   |   |   |   |   |  
}   {   |   |   |   |   |  
} }
```

broadcast-q	Display debug messages about packets received by the broadcast queue.
cbt-to-spt-q	Display debug messages about packets received by the core-based tree to shortest-path tree (cbt-to-spt) queue.
cpuhub-q	Display debug messages about packets received by the CPU heartbeat queue.
host-q	Display debug messages about packets received by the host queue.
icmp-q	Display debug messages about packets received by the Internet Control Message Protocol (ICMP) queue.
igmp-snooping-q	Display debug messages about packets received by the Internet Group Management Protocol (IGMP)-snooping queue.
layer2-protocol-q	Display debug messages about packets received by the Layer 2 protocol queue.
logging-q	Display debug messages about packets received by the logging queue.
remote-console-q	Display debug messages about packets received by the remote console queue.
software-fwd-q	Debug packets received by the software forwarding queue.
stp-q	Debug packets received by the Spanning Tree Protocol (STP) queue.



Though visible in the command-line help strings, the **routing-protocol-Q** and **rppfail-q** keywords are not supported.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The **undebug platform cpu-queues** command is the same as the **no debug platform cpu-queues** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **session** privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

show debugging	Displays information about the types of debugging that are enabled.
-----------------------	---

Use the **debug platform dot1x** privileged EXEC command to enable debugging of stack-related IEEE 802.1x events. Use the **no** form of this command to disable debugging.

```
debug platform dot1x {initialization | interface-configuration | rpc}  
no debug platform dot1x {initialization | interface-configuration | rpc}
```

initialization	Display IEEE 802.1x-authentication initialization sequence debug messages.
interface-configuration	Display IEEE 802.1x interface configuration-related debug messages.
rpc	Display IEEE 802.1x remote procedure call (RPC) request debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The **undebug platform dot1x** command is the same as the **no debug platform dot1x** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **session** privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

show debugging Displays information about the types of debugging that are enabled.

Use the **debug platform etherchannel** privileged EXEC command to enable debugging of platform-dependent EtherChannel events. Use the **no** form of this command to disable debugging.

```
debug platform etherchannel {init | link-up | rpc | warnings}  
no debug platform etherchannel {init | link-up | rpc | warnings}
```

init	Display EtherChannel module initialization debug messages.
link-up	Display EtherChannel link-up and link-down related debug messages.
rpc	Display EtherChannel remote procedure call (RPC) debug messages.
warnings	Display EtherChannel warning debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The **undebug platform etherchannel** command is the same as the **no debug platform etherchannel** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **session** privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

show debugging Displays information about the types of debugging that are enabled.

Use the **debug platform forw-tcam** privileged EXEC command to enable debugging of the forwarding ternary content addressable memory (TCAM) manager. Use the **no** form of this command to disable debugging.

```
debug platform forw-tcam [adjustment allocate audit error move read write  
no debug platform forw-tcam adjustment allocate audit error move read write
```

adjustment

allocate

audit

error

move

read

write

undebug platform forw-tcam

no debug platform forw-tcam

debug
remote command

session

show debugging

debug platform frontend-controller
no

debug platform frontend-controller all image led | manager | poe | register | thermal

no debug platform frontend-controller all image led | manager | poe | register | thermal

all

image

led

manager

poe

register

thermal

**udebug platform frontend-controller
frontend-controller**

no debug platform

**show platform
frontend-controller**

show debugging

debug platform ip arp inspection

no

debug platform ip arp inspection all error event packet rpc

no debug platform ip arp inspection all error event packet rpc

all

error

event

packet

rpc

**udebug platform ip arp inspection
inspection**

no debug platform ip arp

session
debug
remote command

show inventory

show debugging

debug platform ip dhcp

no

debug platform ip dhcp all error event packet rpc

no debug platform ip dhcp all error event packet rpc

all

error

event

packet

rpc

undebug platform ip dhcp

no debug platform ip dhcp

session

debug

remote command

show ip dhcp snooping

show ip dhcp snooping binding

show debugging

debug platform ip igmp snooping

no

debug platform ip igmp snooping all di error event group mgmt pak retry rpc warn

**debug platform ip igmp snooping pak error | ipopt leave query report rx svi
tx**

debug platform ip igmp snooping rpc cfg misc vlan

**no debug platform ip igmp snooping all di error event group mgmt pak retry rpc
warn**

all

di

error

event

group

mgmt

**pak |
error | ipopt leave
query report rx
svi tx**

- —IP address of the IGMP group.
- —Display IGMP snooping packet error debug messages.
- —Display IGMP snooping IP bridging options debug messages.
- —Display IGMP snooping leave debug messages.
- —Display IGMP snooping query debug messages.
- —Display IGMP snooping report debug messages.
- —Display IGMP snooping received packet debug messages.
- —Display IGMP snooping switched virtual interface (SVI) packet debug messages.
- —Display IGMP snooping sent packet debug messages.

Display IGMP snooping retry debug messages.

[| | |] Display IGMP snooping remote procedure call (RPC) event debug messages.
The keywords have these meanings:

- —(Optional) Display IGMP snooping RPC debug messages.
- —(Optional) IGMP snooping miscellaneous RPC debug messages.
- —(Optional) IGMP snooping VLAN assert RPC debug messages.

Display IGMP snooping warning messages.

**Note**

Though visible in the command-line help strings, the **l3mm**

**undebug platform ip igmp snooping
snooping**

remote command
debug

**no debug platform ip igmp
session**

**debug ip igmp
snooping**

show debugging

```
debug platform ip source-guard  
no  
  
debug platform ip source-guard all error event  
  
no debug platform ip source-guard all error event
```

all

error

event

undebug platform ip source-guard
source-guard

no debug platform ip

show ip verify source
show debugging

debug platform led
no

debug platform led generic signal stack

no debug platform led generic signal stack

generic
signal
stack

stack

udebug platform led

no debug platform led

session
debug
remote command

show debugging

```
debug platform matm
```

```
no
```

```
debug platform matm aging all ec-aging errors learning rpc secure-address warnings
```

```
no debug platform matm aging all ec-aging errors learning rpc secure-address  
warnings
```

```
aging
```

```
all
```

```
ec-aging
```

```
errors
```

```
learning
```

```
rpc
```

```
secure-address
```

```
warning
```

```
undebug platform matm
```

```
no debug platform matm
```

```
debug  
remote command
```

```
session
```

```
debug matm
```

```
show debugging
```

debug platform messaging application
no

debug platform messaging application all badpak cleanup events memerr messages
stackchg usererr

no debug platform messaging application all badpak cleanup events memerr messages
stackchg usererr

all

badpak

cleanup

events

memerr

messages

stackchg

usererr

stackchg

udebug platform messaging application
messaging application

no debug platform

session
debug
remote command

show debugging

```
debug platform phy
    no

debug platform phy automdix cablediag dual-purpose flcd configure ipc iter trace
    flowcontrol forced init-seq link-status read sfp show-controller speed write
    xenpak

no debug platform phy automdix cablediag dual-purpose flcd configure ipc iter trace
    flowcontrol forced init-seq link-status read sfp show-controller speed write
    xenpak
```

automdix

cablediag

dual-purpose

flcd configure ipc

iter trace **configure**

ipc

iter

trace

flowcontrol

forced

init-seq

link-status

read

sfp

show-controller

speed

write

xenpak Display PHY XENPAK debug messages

The **enable** command is the same as the **enable** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **EXEC** command. Then enter the **enable** command at the command-line prompt of the stack member. You also can use the **enable** privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the privileged EXEC command to enable debugging of the platform-dependent port manager software module. Use the form of this command to disable debugging.

```
[ { } ] [ { } ] [ { } ] [ { } ] [ { } ] [ { } ] [ { } ] [ { } ]
```

Display all port-manager debug messages.

Display counters for remote procedure call (RPC) debug messages.

Display error-disabled related-events debug messages.

Display EtherChannel related-events debug messages.

Display system exception debug messages.

Display platform port-manager event debug messages.

Display interface descriptor block (IDB) related-events debug messages.

Display interface-number translation-event debug messages.

Display Cisco IOS event debug messages.

Display interface link-detection event debug messages.

Display port-manager function-event debug messages.

Display port manager event debug messages.

Display port manager Switched Port Analyzer (SPAN) event debug messages.

[] Display port-manager vector-related-event debug messages. The keyword has this meaning:

—Display vector-function details.

[|] Display RPC related-event debug messages. The keywords have these meanings:

| [] —(Optional) Display RPC general events.

—(Optional) Display operational- and informational-related RPC messages.

—(Optional) Display administrative- and operational-related RPC messages.

—(Optional) Display vector-related RPC messages.

—(Optional) Display virtual ports related-events RP messages.

Display IDB output vector event debug messages.

Display operational synchronization and VLAN line-state event debug messages.

Display VLAN creation and deletion event debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX

This command was introduced.

12.2(53)SE1

The keyword was added only on Catalyst 2960-S switches running

The command is the same as the command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the privileged EXEC command. Then enter the command at the command-line prompt of the stack member. You also can use the privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the **privilege exec** command to enable debugging of the port application-specific integrated circuit (ASIC) driver. Use the **no** form of this command to disable debugging.

{ | | | | }

{ | | | | }

Display port-ASIC interrupt-related function debug messages.

Display port-ASIC periodic-function-call debug messages.

Display port-ASIC read debug messages.

Display stacking-related function debug messages.

Display port-ASIC write debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

12.2(53)SE1 The stack keyword was added only on Catalyst 2960-S switches running the LAN base image.

The **privilege exec** command is the same as the **privilege exec** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **privilege exec** command. Then enter the **enable** command at the command-line prompt of the stack member. You also can use the **privilege exec** command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the privileged EXEC command to enable debugging of platform-dependent port-security information. Use the form of this command to disable debugging.

```
{ | | | | | }
```

```
{ | | | | | }
```

Display secure address addition debug messages.

Display secure address aging debug messages.

Display all port-security debug messages.

Display secure address deletion debug messages.

Display port-security error debug messages.

Display remote procedure call (RPC) debug messages.

Display warning debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The command is the same as the command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the privileged EXEC command. Then enter the command at the command-line prompt of the stack member. You also can use the privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the privileged EXEC command to enable debugging of the quality of service (QoS) and access control list (ACL) ternary content addressable memory (TCAM) manager software. Use the form of this command to disable debugging.

{ | | | | | }

{ | | | | | }

Display all QoS and ACL TCAM (QATM) manager debug messages.

Display Cisco TCAM (CTCAM) related-events debug messages.

Display QATM error-related-events debug messages.

Display QATM label-related-events debug messages.

Display QATM mask-related-events debug messages.

Display QATM remote procedure call (RPC) related-events debug messages.

Display QATM TCAM-related events debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The command is the same as the command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the privileged EXEC command. Then enter the command at the command-line prompt of the stack member. You also can use the privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the
resource manager software. Use the

privileged EXEC command to enable debugging of the
form of this command to disable debugging.

```
{ | | | | | | | }
```

```
{ | | | | | | | }
```

Display all resource manager debug messages.

Display destination-map debug messages.

Display equal-cost-route descriptor-table debug messages.

Display error debug messages.

Display the MAC address descriptor table and multi-expansion descriptor table
debug messages.

Display the station descriptor table debug messages.

Display statistics debug messages.

Display the VLAN-list descriptor debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX

This command was introduced.

The **enable** command is the same as the
command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **enable** command at the command-line prompt of the stack member. You also can use the **enable** command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the **privilege exec** command to enable debugging of the platform-dependent Simple Network Management Protocol (SNMP) software. Use the **no privilege exec** command to disable debugging.

This command has no arguments or keywords.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The **enable** command is the same as the **privilege exec** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **enable** command. Then enter the **privilege exec** command at the command-line prompt of the stack member. You also can use the **enable** command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the **enable** privileged EXEC command to enable debugging of the platform-dependent Switched Port Analyzer (SPAN) software. Use the **no** form of this command to disable debugging.

This command has no arguments or keywords.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The **enable** command is the same as the **enable** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **enable** privileged EXEC command. Then enter the **enable** command at the command-line prompt of the stack member. You also can use the **enable** privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the manager software. Use the privileged EXEC command to enable debugging of the stack form of this command to disable debugging.

{ | | | | | }

{ | | | | | }

Display all stack manager debug messages.

Display stack manager remote procedure call (RPC) usage debug messages.

Display the Stack Discovery Protocol (SDP) debug messages.

Display the stack information module debug messages.

Display the stack state-machine debug messages.

Trace the stack manager entry and exit debug messages.

Debugging is disabled.

Privileged EXEC

12.2(53)SE1

This command was introduced only on Catalyst 2960-S switches running the LAN base image.

The

command is the same as the

command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the privileged EXEC command. Then enter the command at the command-line prompt of the stack member. You also can use the privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the privileged EXEC command to enable debugging of the supervisor application-specific integrated circuit (ASIC). Use the form of this command to disable debugging.

{ | | }

{ | | | }

Display all supervisor-ASIC event debug messages.

Display the supervisor-ASIC error debug messages.

Display the supervisor-ASIC receive debug messages.

Display the supervisor-ASIC send debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The command is the same as the command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the privileged EXEC command. Then enter the command at the command-line prompt of the stack member. You also can use the privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the bridging function. Use the privileged EXEC command to enable debugging of the software form of this command to disable debugging.

{ | | | | }

{ | | | | }

Display broadcast-data debug messages.

Display protocol-packet debug messages.

Display multicast-data debug messages.

Display sent and received data debug messages.

Display unicast-data debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The command is the same as the command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the privileged EXEC command. Then enter the command at the command-line prompt of the stack member. You also can use the privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Use the privileged EXEC command to enable debugging of ternary content addressable memory (TCAM) access and lookups. Use the form of this command to disable debugging.

```
{ | | | }  
{ { | } | }  
{ { | } | }  
{ | | }  
  
{ | | }  
{ | | }  
{ { | } | }  
{ { | } | }  
{ | | }  
  
{ | | }
```

{ { | } | } | Display Layer 2 field-based CAM look-up type debug messages. The keywords have these meanings:

{ | } —Display input or output ACL look-up debug messages.

—Display local forwarding look-up debug messages.

—Display classification and quality of service (QoS) look-up debug messages.

{ { | } | } | Display Layer 3 field-based CAM look-up type debug messages. The keywords have these meanings:

{ | } —Display input or output ACL look-up debug messages.

—Display classification and quality of service (QoS) look-up debug messages.

```
read reg ssram tcam
```

```
reg
```

```
ssram
```

```
team
```

```
search
```

```
write forw-ram reg  
team
```

```
forw-ram
```

```
reg
```

```
team
```



Though visible in the command-line help strings, the **ipv6 acl input output local qos**
esecondary l3 local l3 secondary

```
udebug platform team
```

```
no debug platform team
```

```
debug  
remote command
```

```
session
```

```
show debugging
```

debug platform udld

no

debug platform udld all error rpc events messages

no debug platform udld all error rpc events messages

all

error

rpc events messages

events

messages

undebug platform udld

no debug platform udld

session

debug

remote command

show debugging

debug platform vlan
no

debug platform vlan errors mvid rpc

no debug platform vlan errors mvid rpc

errors

mvid

rpc

undebug platform vlan

no debug platform vlan

session

debug
remote command

show debugging

debug pm

no

**debug pm all assert card etherchnl hatalbe messages port redundancy registry sm
span split vlan vp**

**no debug pm all assert card etherchnl hatalbe messages port redundancy registry
sm span split vlan vp**

all
assert
card
etherchnl
hatalbe
messages
port
redundancy
registry
sm
span
split
vlan
vp



scp pylan

undebug pm

no debug pm

debug
remote command

session

show debugging

debug port-security

no

debug port-security

no debug port-security

undebug port-security

no debug port-security

session

debug

remote command

show debugging

show port-security

debug qos-manager
no
debug qos-manager all event verbose
no debug qos-manager all event verbose

all
event
verbose

udebug qos-manager

no debug qos-manager

debug
remote command

session

show debugging

```
debug spanning-tree
  no

debug spanning-tree all backbonefast bpdu bpdu-opt config csuf/csrt etherchannel
  events exceptions general mstp pvst+ root snmp switch synchronization
  uplinkfast

no debug spanning-tree all backbonefast bpdu bpdu-opt config csuf/csrt etherchannel
  events exceptions general mstp pvst+ root snmp switch synchronization
  uplinkfast
```

all	
backbonefast	
bpdu	
bpdu-opt	
config	
csuf/csrt	
etherchannel	
events	
exceptions	
general	
mstp	
pvst+	Display per-VLAN spanning-tree plus (PVST+) event debug messages.
root	Display spanning-tree root-event debug messages.
snmp	Display spanning-tree Simple Network Management Protocol (SNMP) handling debug messages.
synchronization	Display the spanning-tree synchronization event debug messages.
switch	Display switch shim command debug messages. This shim is the software module that is the interface between the generic Spanning Tree Protocol (STP) code and the platform-specific code of various switch platforms.
uplinkfast	Display UplinkFast-event debug messages.

12.2(25)FX	This command was introduced.
12.2(53)SE1	The csuf/csrt keyword was added only on Catalyst 2960-S switches running the LAN base image.

The **undebug spanning-tree command** is the same as the **no debug spanning-tree** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **session** privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

show debugging	Displays information about the types of debugging that are enabled.
show spanning-tree	Displays spanning-tree state information.

Use the **debug spanning-tree backbonefast** privileged EXEC command to enable debugging of spanning-tree BackboneFast events. Use the **no** form of this command to disable debugging.

debug spanning-tree backbonefast [detail | exceptions]

no debug spanning-tree backbonefast [detail | exceptions]

detail	(Optional) Display detailed BackboneFast debug messages.
exceptions	(Optional) Display spanning-tree BackboneFast-exception debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX	This command was introduced.
------------	------------------------------

The **undebug spanning-tree backbonefast** command is the same as the **no debug spanning-tree backbonefast** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **session** privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

show debugging	Displays information about the types of debugging that are enabled.
show spanning-tree	Displays spanning-tree state information.

Use the **debug spanning-tree bpdu** privileged EXEC command to enable debugging of sent and received spanning-tree bridge protocol data units (BPDUs). Use the **no** form of this command to disable debugging.

debug spanning-tree bpdu [receive | transmit]

no debug spanning-tree bpdu [receive | transmit]

receive

transmit

Debugging is disabled.

Privileged EXEC

The **undebug spanning-tree bpdu** command is the same as the **no debug spanning-tree bpdu** command.

session

debug
remote command

show debugging

show spanning-tree

debug spanning-tree bpdu-opt

no

debug spanning-tree bpdu-opt detail | packet

no debug spanning-tree bpdu-opt detail | packet

detail

packet

undebug spanning-tree bpdu-opt

no debug spanning-tree bpdu-opt

session

debug
remote command

show debugging

show spanning-tree

debug spanning-tree mstp

no

**debug spanning-tree mstp all boundary bpdu-rx bpdu-tx errors flush init migration
pm proposals region roles sanity_check sync tc timers**

**no debug spanning-tree mstp all boundary bpdu-rx bpdu-tx errors flush init migration
pm proposals region roles sanity_check sync tc timers**

all

boundary

bpdu-rx

bpdu-tx

errors

flush

init

migration

pm

proposals

region

roles

sanity_check

sync

tc

timers

undebug spanning-tree mstp

no debug spanning-tree mstp

debug
remote command

session

show debugging

show spanning-tree

debug spanning-tree switch

no

**debug spanning-tree switch all errors flush general helper pm rx decode errors
interrupt process state tx decode uplinkfast**

**no debug spanning-tree switch all errors flush general helper pm rx decode errors
interrupt process state tx decode uplinkfast**

all

errors

flush

general

helper

pm

rx

decode

errors

interrupt

process

state Display spanning-tree port state change debug messages;

[] Display sent BPDU handling debug messages. The keyword has this meaning:

—(Optional) Display decoded sent packets.

Display uplinkfast packet transmission debug messages.

12.2(25)FX

This command was introduced.

The **enable** command is the same as the **enable** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **enable** privileged EXEC command. Then enter the **enable** command at the command-line prompt of the stack member. You also can use the **enable** privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Displays spanning-tree state information.

Use the **debug spanning-tree uplinkfast** privileged EXEC command to enable debugging of spanning-tree UplinkFast events. Use the **no debug spanning-tree uplinkfast** form of this command to disable debugging.

[]

[]

(Optional) Display spanning-tree UplinkFast-exception debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The **debug spanning-tree uplinkfast** command is the same as the **debug spanning-tree** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **enable** privileged EXEC command. Then enter the **debug spanning-tree uplinkfast** command at the command-line prompt of the stack member. You also can use the **enable** privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Displays spanning-tree state information.

Use the privileged EXEC command to enable debugging of VLAN manager activities. Use the form of this command to disable debugging.

```
{ | | | { | } | | | | | | | | | }
```



```
| { | | | { | } | | | | | | | }
```

Display debug messages for VLAN manager incidents of bad port manager cookies.

{ | } Display config-vlan debug messages. The keywords have these meanings:

—Display messages when the switch is booting up.

—Display messages when the command-line interface (CLI) is in config-vlan mode.

Display debug messages for VLAN manager events.

See the command.

Display debug messages for VLAN manager management of internal VLANs.

Display debug messages for VLAN mapping.

See the command.

Display debug messages for packet handling and encapsulation processes.

Display debug messages for VTP VLAN redundancy.

Display debug messages for VLAN manager registries.

See the command.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The command is the same as the command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the privileged EXEC command. Then enter the command at the command-line prompt of the stack member. You also can use the privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.

Displays the parameters for all configured VLANs or one VLAN (if the VLAN name or ID is specified) in the administrative domain.

Displays general information about VTP management domain, status, and counters.

Use the **privilege EXEC** command to enable debugging of the VLAN manager IOS file system (IFS) error tests. Use the **no** form of this command to disable debugging.

```
{ { | } | { | | | 4 write  
no debug sw-vlan ifs open read write read 1 2 3 4 write
```

```
open read write
```

```
read  
write  
read 1 2 3 4
```

```
write
```

```
undebug sw-vlan ifs
```

```
no debug sw-vlan ifs
```

```
session  
debug  
remote command
```

```
1  
2  
3  
4
```

```
show debugging
```

```
show vlan
```

debug sw-vlan notification

no

**debug sw-vlan notification accfwdchange allowedvlancfgchange fwdchange linkchange
modechange pruningcfgchange statechange**

**no debug sw-vlan notification accfwdchange allowedvlancfgchange fwdchange
linkchange modechange pruningcfgchange statechange**

accfwdchange

allowedvlancfgchange

fwdchange

linkchange

modechange

pruningcfgchange

statechange

undebug sw-vlan notification

no debug sw-vlan notification

**debug
remote command**

session

show debugging

show vlan

```
debug sw-vlan vtp
      no

bug sw-vlan vtp events packets pruning packets xmit redundancy xmit

debug sw-vlan vtp events packets pruning redundancy xmit
```

events	
	messages generated by the VTP_LOG_RUNTIME macro in the VTP code.
[]	Display debug messages for the contents of all incoming VTP packets that have been passed into the VTP code from the IOS VTP platform-dependent layer, except for pruning packets.
[]	Display debug messages generated by the pruning segment of the VTP code. The keywords have these meanings: <ul style="list-style-type: none">—(Optional) Display debug messages for the contents of all incoming VTP pruning packets that have been passed into the VTP code from the IOS VTP platform-dependent layer.—(Optional) Display debug messages for the contents of all outgoing VTP packets that the VTP code requests the IOS VTP platform-dependent layer to send.
	Display debug messages for VTP redundancy.
	Display debug messages for the contents of all outgoing VTP packets that the VTP code requests the IOS VTP platform-dependent layer to send, except for pruning packets.

12.2(25)FX This command was introduced.

undebbug sw-vlan vtp

no debug sw-vlan vtp

debug

If no further parameters are entered after the , VTP pruning debugging messages appear. They are generated by the VTP_PRUNING_LOG_NOTICE, VTP_PRUNING_LOG_INFO, VTP_PRUNING_LOG_DEBUG, VTP_PRUNING_LOG_ALERT, and VTP_PRUNING_LOG_WARNING macros in the VTP pruning code.

Displays information about the types of debugging that are enabled.

Displays general information about VTP management domain, status, and counters.

Use the **privileged EXEC** command to enable debugging of the UniDirectional Link Detection (UDLD) feature. Use the **form of this command to disable UDLD debugging.**

```
{      |      |      }  
{      |      |      }
```

Display debug messages for UDLD process events as they occur.

Display debug messages for the UDLD process as it receives packets from the packet queue and tries to send them at the request of the UDLD protocol code.

Display debug messages for the UDLD process as it processes registry calls from the UDLD process-dependent module and other feature modules.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The **command** is the same as the **command**.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **privileged EXEC** command. Then enter the **command** at the command-line prompt of the stack member. You also can use the **privileged EXEC** command on the stack master switch to enable debugging on a member switch without first starting a session.

For **, these debugging messages appear:**

- General UDLD program logic flow
- State machine state changes
- Program actions for the set and clear ErrDisable state
- Neighbor cache additions and deletions
- Processing of configuration commands
- Processing of link-up and link-down indications

For , these debugging messages appear:

General packet processing program flow on receipt of an incoming packet

Indications of the contents of the various pieces of packets received (such as type length versions [TLVs]) as they are examined by the packet reception code

Packet transmission attempts and the outcome

For , these categories of debugging messages appear:

Sub-block creation

Fiber-port status changes

State change indications from the port manager software

MAC address registry calls

Displays information about the types of debugging that are enabled.

Displays UDLD administrative and operational status for all ports or the specified port.

Use the **vqp debug** privileged EXEC command to enable debugging of the VLAN Query Protocol (VQP) client. Use the **no vqp debug** form of this command to disable debugging.

```
[ ] [ ] [ ] [ ] [ ] [ ]
```

(Optional) Display all VQP client debug messages.

(Optional) Display the VQP client command-line interface (CLI) debug messages.

(Optional) Display VQP client event debug messages.

(Optional) Display VQP client address learning debug messages.

(Optional) Display VQP client packet information debug messages.

Debugging is disabled.

Privileged EXEC

12.2(25)FX This command was introduced.

The **vqp debug** command is the same as the **debug vqp** command.

When you enable debugging, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **vxlan session** privileged EXEC command. Then enter the **debug vqp** command at the command-line prompt of the stack member. You also can use the **vxlan session** privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Displays information about the types of debugging that are enabled.