



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

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 debug authentication** 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 debug auto qos** 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 [all errors events packets sync
no debug cisp [initialization interface-configuration rpc
```

[illegible]



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

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

undebg 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 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 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 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 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

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

debug interface

<i>vlan-id</i>	<i>interface-id</i>	<i>interface-number</i>	<i>port-channel-number</i>
<i>vlan-id</i>	<i>interface-id</i>	<i>interface-number</i>	<i>port-channel-number</i>

<i>interface-id</i>		gigabitethernet 0/2
null	0	
port-channel	<i>port-channel-number</i>	<i>port-channel-number</i>
vlan	<i>vlan-id</i>	<i>vlan-id</i>

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

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 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 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 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

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

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

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

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



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

Use the `debug platform backup interface` privileged EXEC command to enable debugging of the Flex Links platform backup interface. Use the `no debug platform backup interface` 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 `debug platform backup interface` command is the same as the `debug platform backup interface` 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 `stack member` privileged EXEC command. Then enter the `debug platform backup interface` command at the command-line prompt of the stack member. You also can use the `debug platform backup interface` 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 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 `no debug platform cisp` form of this command to disable debugging.

```
debug platform cisp [ { initialization | configuration | rpc } ]
```

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 `debug platform cisp` 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 `stack member` privileged EXEC command and enter the debug command at the command-line prompt of the stack member. You also can use the `stack 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 _____ privileged EXEC command to enable debugging of the main (important) command-line interface (CLI) redirection events. Use the _____ form of this command to disable debugging.

_____ This command has no arguments or keywords.

_____ Debugging is disabled.

_____ Privileged EXEC

_____ 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 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.

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 **undebg 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

undebg 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

undebug 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.



```

      undebug platform ip igmp snooping
      no debug platform ip igmp
      session
      debug
      remote command

```

Catalyst 2960 and 2960-S Switch Command Reference

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

undebg 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

undebg 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

session

debug

remote command

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

undebug 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 fcd 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 fcd configure ipc iter trace
flowcontrol forced init-seq link-status read sfp show-controller speed write
xenpak

automdix

cablediag

dual-purpose

fcd 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

12.2(25)FX

This command was introduced.

The `ls` command is the same as the `ls -l` 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 `stack member` privileged EXEC command. Then enter the `debug` command at the command-line prompt of the stack member. You also can use the `stack master` 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 `debug port-manager` privileged EXEC command to enable debugging of the platform-dependent port manager software module. Use the `no debug port-manager` form of this command to disable debugging.

```

debug port-manager { all | counters | error-disabled | etherchannel |
                    | exceptions | platform | interface-descriptor | |
                    | interface-number | ios | link-detection |
                    | function | port-manager | port-manager-span |
                    | port-manager-vector | rpc | idb | operational |
                    | vlan | }

```

	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.
[vector]	Display port-manager vector-related-event debug messages. The keyword has this meaning: —Display vector-function details.
[rpc { all counters error-disabled etherchannel exceptions platform interface-descriptor interface-number ios link-detection function port-manager port-manager-span port-manager-vector }]	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 _____ 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 _____ privileged EXEC command to enable debugging of the resource manager software. Use 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 _____ 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 platform-dependent Simple Network Management Protocol (SNMP) software. Use the _____ 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 _____ 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 platform-dependent Switched Port Analyzer (SPAN) software. Use the _____ 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 _____ 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 stack manager software. Use the _____ 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 _____ privileged EXEC command to enable debugging of the software bridging function. Use the _____ 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 `show ip access-lists` privileged EXEC command to enable debugging of ternary content addressable memory (TCAM) access and lookups. Use the `no show ip access-lists` form of this command to disable debugging.

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

{ | | }
{ | | | }
{ { | } | | }
{ { | } | }
{ | | }

{ | | }
```

<code>{ { } </code>	Display Layer 2 field-based CAM look-up type debug messages. The keywords have these meanings: <code>{ }</code>—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.
------------------------	--

<code>{ { } </code>	Display Layer 3 field-based CAM look-up type debug messages. The keywords have these meanings: <code>{ }</code>—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
tcam		

forw-ram

reg

team

Though visible in the command-line help strings, the

econdary	13 local	13 secondary	ipv6	acl	input	output	local	qos
-----------------	-----------------	---------------------	-------------	------------	--------------	---------------	--------------	------------

undebug platform team

no debug platform tcam

session

debug

remote command

show debugging

debug platform udd

no

debug platform udd all error rpc events messages

no debug platform udd all error rpc events messages

all

error

rpc events messages

events

messages

undebg platform udd

no debug platform udd

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

debug
remote command

session

show debugging

debug pm

no

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

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

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



scp	pvlan
------------	--------------



undebug pm

no debug pm

debug
remote command

session

show debugging



debug port-security

no

debug port-security

no debug port-security

undebg 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

undebug qos-manager

no debug qos-manager

session

**debug
remote command**

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 **undebbug 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 **undebg 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 bpd** 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 bpd [receive | transmit]

no debug spanning-tree bpd [receive | transmit]
```

receive

transmit

Debugging is disabled.

Privileged EXEC

The **undeb** **spanning-tree bpd** command is the same as the **no deb** **spanning-tree bpd** command.

debug session

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

undebg spanning-tree bpdu-opt

no debug spanning-tree bpdu-opt

debug

session

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

undebg 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.

Use the _____ privileged EXEC command to enable debugging of spanning-tree UplinkFast events. Use the _____ 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 _____ 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 spanning-tree state information.

Use the `debug` privileged EXEC command to enable debugging of VLAN manager activities.
Use the `no debug` form of this command to disable debugging.

```
debug { [vlan] { [bad-port-manager] | [config-vlan] | [events] | [internal-vlans] | [mapping] | [packet-handling] | [vtp-vlan-redundancy] | [registries] } }  
no debug { [vlan] { [bad-port-manager] | [config-vlan] | [events] | [internal-vlans] | [mapping] | [packet-handling] | [vtp-vlan-redundancy] | [registries] } }
```

	Display debug messages for VLAN manager incidents of bad port manager cookies.
{ [vlan] }	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 <code>debug events</code> command.
	Display debug messages for VLAN manager management of internal VLANs.
	Display debug messages for VLAN mapping.
	See the <code>debug mapping</code> 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 <code>debug registries</code> command.

Debugging is disabled.

Privileged EXEC

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

The `debug` command is the same as the `debug` 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 `debug` privileged EXEC command. Then enter the `debug` command at the command-line prompt of the stack member. You also can use the `debug` 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 `debug` privileged EXEC command to enable debugging of the VLAN manager IOS file system (IFS) error tests. Use the `no debug` 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
```

```
debug
remote command session
1
2
3
4
```

```
show debugging
show vlan
```

debug sw-vlan notification

no

debug sw-vlan notification accfwdchange allowedvlanfgchange fwdchange linkchange
modechange pruningcfgchange statechange

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

accfwdchange

allowedvlanfgchange

fwdchange

linkchange

modechange

pruningcfgchange

statechange

undebug sw-vlan notification

no debug sw-vlan notification

session

debug
remote command

show debugging

show vlan

debug sw-vlan vtp
no

debug sw-vlan vtp events packets pruning packets xmit redundancy xmit
no 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.
[pruning no pruning]		Display debug messages generated by the pruning segment of the VTP code. The keywords have these meanings: —(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.
------------	------------------------------

undebg sw-vlan vtp
no debug sw-vlan vtp

session
debug
remote command

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 _____ privileged EXEC command to enable debugging of the VLAN Query Protocol (VQP) client. Use the _____ 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 _____ 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.