APPENDIX 1

Catalyst 3750-X and 3560-X Switch Debug Commands

This appendix describes the **debug** privileged EXEC commands that have been created or changed for use with the Catalyst 3750-X and 3560-X 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 **debug** commands only to troubleshoot specific problems or during troubleshooting sessions with Cisco technical support staff. It is best to use the **debug** commands during periods of lower network traffic and fewer users. Debugging during these periods decreases the likelihood that increased **debug** command processing overhead will affect system use.

debug authentication

Use the **debug authentication** privileged EXEC command to enable debugging of the authentication settings on an interface. Use the **no** form of this command to disable debugging.

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**]}

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		
acct	(Optional) Display authentication manager accounting information.	
all	(Optional) Display all authentication manager debug messages.	
auth_fail_vlan	(Optional) Display authentication manager errors for the restricted VLAN.	
auth_policy	(Optional) Display authentication policy messages.	
autocfg	(Optional) Display autoconfiguration authentication manager debug messages.	
critical	(Optional) Display the inaccessible authentication bypass messages.	
	Note The inaccessible authentication bypass feature is also referred to as critical authentication or the authentication, authorization, and accounting (AAA) fail policy.	
dhcp	(Optional) Display authentication manager debug messages on DHCP dynamic address-enable interfaces.	
errors	(Optional) Display all authentication manager error debug messages.	
events	(Optional) Display all authentication manager event debug messages, including registry and miscellaneous events.	
feature	(Optional) Display authentication manager feature debug messages	
guest_vlan	(Optional) Display guest VLAN authentication manager messages.	
mab_pm	(Optional) Display MAC authentication manager bypass authentication debug messages.	
mda	(Optional) Display multidomain authentication manager debug messages.	
multi_auth	(Optional) Display multi-authentication manager debug authentication messages.	
switch_pm	(Optional) Display switch port manager messages.	
switch_sync	(Optional) Display synchronization messages between the switch, the authentication server, and the connected devices.	
sync	(Optional) Display operational synchronization authentication manager debug messages.	
vlan_assign	(Optional) Display the VLAN-assignment debug messages.	
voice	(Optional) Display the voice-VLAN debug messages.	
webauth	(Optional) Display web authentication manager debug messages.	

Defaults   Authentication debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines The **undebug authentication** command is the same as the **no debug authentication** command.

On a 3750-E switch, 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** privileged EXEC command and then entering the **debug authentication** command at the command-line prompt of the stack member. You also can use the **remote command stack-member-number** *line* privileged EXEC command on the stack master switch to enable debugging on a stack member.

Related Commands

Command	Description
authentication control-direction	Configures the port mode as unidirectional or bidirectional.
authentication event	Sets the action for specific authentication events.
authentication fallback	Configures a port to use web authentication as a fallback method for clients that do not support IEEE 802.1x authentication.
authentication host-mode	Sets the authorization manager mode on a port.
authentication open	Enables or disables open access on a port.
authentication order	Sets the order of authentication methods used on a port.
authentication periodic	Enables or disables reauthentication on a port.
authentication port-control	Enables manual control of the port authorization state.
authentication priority	Adds an authentication method to the port-priority list.
authentication violation	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.
show authentication	Displays information about authentication manager events on the switch.

debug auto qos

Use the **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.

> **debug auto qos**

> **no debug auto qos**

Syntax Description   This command has no keywords or arguments.

Defaults   Auto-QoS debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   To display the QoS configuration that is automatically generated when auto-QoS is enabled, enable debugging *before* you enable auto-QoS. You enable debugging by entering the **debug auto qos** privileged EXEC command.

The **undebug auto qos** command is the same as the **no debug auto qos** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Examples   This example shows how to display the QoS configuration that is automatically generated when 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 gigabitethernet2/0/1
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 GigabitEthernet2/0/1
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
```

Related Commands

Command	Description
auto qos voip	Configures auto-QoS for voice over IP (VoIP) within a QoS domain.
show auto qos	Displays the initial configuration that is generated by the automatic auto-QoS feature
show debugging	Displays information about the types of debugging that are enabled.

debug backup

Use the **debug backup** privileged EXEC command to enable debugging of the Flex Links backup interface. Use the **no** form of this command to disable debugging.

debug backup {**all** | **errors** | **events** | **vlan-load-balancing**}

no debug backup {**all** | **errors** | **events** | **vlan-load-balancing**}

Syntax Description		
	all	Display all backup interface debug messages.
	errors	Display backup interface error or exception debug messages.
	events	Display backup interface event debug messages.
	vlan-load-balancing	Display backup interface VLAN load balancing.

Command Default   Backup interface debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug backup** command is the same as the **no debug backup** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug cisp

Use the **debug cisp** global configuration command to enable debugging message exchanges and events on a Client Information Signalling Protocol (CISP)-enabled interface.Use the **no** form of this command to disable debugging.

> **debug cisp [all | errors | events | packets | sync]**

> **no debug cisp [initialization | interface-configuration | rpc]**

Syntax Description

all	Display all CISP debug messages.
errors	Display CISP debug messages.
events	Display CISP event debug messages.
packets	Display CISP packet debug messages.
sync	Display CISP operational synchronization debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Related Commands

Command	Description
cisp enable	Enables Client Information Signalling Protocol (CISP)
dot1x credentials (global configuration) *profile*	Configures a profile on a supplicant switch.
show cisp	Displays CISP information for a specified interface.

debug cluster

Use the **debug cluster** privileged EXEC command to enable debugging of cluster-specific events. Use the **no** form of this command to disable debugging.

> **debug cluster** {**discovery** | **events** | **extended** | **hsrp** | **http** | **ip** [**packet**] | **members** | **nat** | **neighbors** | **platform** | **snmp** | **vqpxy**}

> **no debug cluster** {**discovery** | **events** | **extended** | **hsrp** | **http** | **ip** [**packet**] | **members** | **nat** | **neighbors** | **platform** | **snmp** | **vqpxy**}

Syntax Description		
	discovery	Display cluster discovery debug messages.
	events	Display cluster event debug messages.
	extended	Display extended discovery debug messages.
	hsrp	Display the Hot Standby Router Protocol (HSRP) debug messages.
	http	Display Hypertext Transfer Protocol (HTTP) debug messages.
	ip [**packet**]	Display IP or transport packet debug messages.
	members	Display cluster member debug messages.
	nat	Display Network Address Translation (NAT) debug messages.
	neighbors	Display cluster neighbor debug messages.
	platform	Display platform-specific cluster debug messages.
	snmp	Display Simple Network Management Protocol (SNMP) debug messages.
	vqpxy	Display VLAN Query Protocol (VQP) proxy debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   This command is available only on the cluster command switch stack or cluster command switch.

The **undebug cluster** command is the same as the **no debug cluster** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
show debugging	Displays information about the types of debugging that are enabled.
show cluster	Displays the cluster status and a summary of the cluster to which the switch belongs.
show cluster candidates	Displays a list of candidate switches when entered on the command switch.
show cluster members	Displays information about cluster members when executed on the command switch.

debug device-sensor

To enable debugging for Device Sensor, use the **debug device-sensor** command in privileged EXEC mode.

debug device-sensor errors events

Syntax Description	errors	Displays Device Sensor error messages.
	events	Displays messages for events such as protocol packet arrivals, identity updates, and release events sent to the session manager.

Command Default   There are no defaults for this command.

Command Modes   Privileged EXEC (#)

Command History

Release	Modification
15.0(1)SE1	This command was introduced.

Usage Guidelines   Use the **debug device-sensor** command in conjunction with the **debug authentication all** command to troubleshoot scenarios where the Device Sensor cache entries are not being created for the connected devices.

Examples   The following is sample output from the **debug device-sensor events** command. The debug output shows how Cisco Discovery Protocol packets and TLVs are received from the device connected to the GigabitEthernet 2/1 interface.

```
Switch# debug device-sensor events

Switch#
*Nov 30 23:58:45.811: DSensor: Received cdp packet from GigabitEthernet2/1:00d0.2bdf.08a5
*Nov 30 23:58:45.811: DSensor: SM returned no or invalid session label for
GigabitEthernet2/1:00d0.2bdf.08a5
*Nov 30 23:58:45.811: DSensor: Updating SM with identity attribute list
  cdp-tlv            0    00 01 00 0B 4A 41 45 30 37 34 31 31 50 53 32
  cdp-tlv            0    00 03 00 03 32 2F 38
  cdp-tlv            0    00 04 00 04 00 00 00 0A
  cdp-tlv            0    00 05 00 68 57 53 2D 43 32 39 34 38 20 53 6F 66 74 77 61 72 65
2C 20 56 65 72 73 69 6F 6E 20 4D 63 70 53 57 3A 20 36 2E 34 28 35 2E
 30 29 20 4E 6D 70 53 57 3A 20 36 2E 34 28 35 29 0A 43 6F 70 79 72 69 67 68 74 20 28 63 29
20 31 39 39 35 2D 32 30 30 33 20 62 79 20 43 69 73 63 6F 20 53 79 73
74 65 6D 73 2C 20 49 6E 63 2E 0A
  cdp-tlv            0    00 06 00 08 57 53 2D 43 32 39 34 38
  cdp-tlv            0    00 09 00 00
  cdp-tlv            0    00 0A 00 02 00 21
  cdp-tlv            0    00 0B 00 01 01
  cdp-tlv            0    00 12 00 01 00
  cdp-tlv            0    00 13 00 01 00
```

```
 cdp-tlv             0   00 14 00 00
 cdp-tlv             0   00 15 00 0A 06 08 2B 06 01 04 01 09 05 2A
 cdp-tlv             0   00 16 00 16 00 00 00 02 01 01 CC 00 04 00 00 00 0001 01 CC 00 04
01 01 01 01
 cdp-tlv             0   00 17 00 01 00
 swidb               0   604702240 (0x240B0620)
 clid-mac-addr       0   00 D0 2B DF 08 A5
*Nov 30 23:58:46.831: DSensor: Received cdp packet from
GigabitEthernet2/1:00d0.2bdf.08a5exi
Switch#
*Nov 30 23:58:51.171: %SYS-5-CONFIG_I: Configured from console by console
```

Related Commands	**Command**	**Description**
	debug authentication all	Displays all debugging information about Authentication Manager and all features.
	device-sensor accounting	Adds the Device Sensor protocol data to the accounting records and generates additional accounting events when new sensor data is detected.

debug dot1x

Use the **debug dot1x** privileged EXEC command to enable debugging of the IEEE 802.1x authentication feature. Use the **no** form of this command to disable debugging.

> **debug dot1x** {**all** | **errors** | **events** | **feature** | **packets** | **registry** | **state-machine**}

> **no debug dot1x** {**all** | **errors** | **events** | **feature** | **packets** | **registry** | **state-machine**}

Syntax Description		
all	Display all IEEE 802.1x authentication debug messages.	
errors	Display IEEE 802.1x error debug messages.	
events	Display IEEE 802.1x event debug messages.	
feature	Display IEEE 802.1x feature debug messages.	
packets	Display IEEE 802.1x packet debug messages.	
registry	Display IEEE 802.1x registry invocation debug messages.	
state-machine	Display state-machine related-events debug messages.	

Note   Though visible in the command-line help strings, the **redundancy** keyword is not supported.

Command Default   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
	show debugging	Displays information about the types of debugging that are enabled.
	show dot1x	Displays IEEE 802.1xstatistics, administrative status, and operational status for the switch or for the specified port.

debug dtp

Use the **debug dtp** privileged EXEC command to enable debugging of the Dynamic Trunking Protocol (DTP) activity. Use the **no** form of this command to disable debugging.

debug dtp {**aggregation** | **all** | **decision** | **events** | **oserrs** | **packets** | **queue** | **states** | **timers**}

no debug dtp {**aggregation** | **all** | **decision** | **events** | **oserrs** | **packets** | **queue** | **states** | **timers**}

Syntax Description

aggregation	Display DTP user-message aggregation debug messages.
all	Display all DTP debug messages.
decision	Display the DTP decision-table debug messages.
events	Display the DTP event debug messages.
oserrs	Display DTP operating system-related error debug messages.
packets	Display DTP packet-processing debug messages.
queue	Display DTP packet-queueing debug messages.
states	Display DTP state-transition debug messages.
timers	Display DTP timer-event debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug dtp** command is the same as the **no debug dtp** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
show debugging	Displays information about the types of debugging that are enabled.
show dtp	Displays DTP information for the switch or for a specified interface.

debug eap

Use the **debug eap** privileged EXEC command to enable debugging of the Extensible Authentication Protocol (EAP) activity. Use the **no** form of this command to disable debugging.

> **debug dot1x** {**all** | **authenticator** | **errors** | **events** | **md5** | **packets** | **peer** | **sm**}

> **no debug dot1x** {**all** | **authenticator** | **errors** | **events** | **md5** | **packets** | **peer** | **sm**}

Syntax Description		
	all	Display all EAP debug messages.
	authenticator	Display authenticator debug messages.
	errors	Display EAP error debug messages.
	events	Display EAP event debug messages.
	md5	Display EAP-MD5 debug messages.
	packets	Display EAP packet debug messages.
	peer	Display EAP peer debug messages.
	sm	Display EAP state-machine related-events debug messages.

Command Default   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
	show debugging	Displays information about the types of debugging that are enabled.
	show eap	Displays EAP registration and session information for the switch or for the specified port.

debug etherchannel

Use the **debug etherchannel** privileged EXEC command to enable debugging of the 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.

> **debug etherchannel** [**all** | **detail** | **error** | **event** | **idb**]

> **no debug etherchannel** [**all** | **detail** | **error** | **event** | **idb**]

Syntax Description

all	(Optional) Display all EtherChannel debug messages.
detail	(Optional) Display detailed EtherChannel debug messages.
error	(Optional) Display EtherChannel error debug messages.
event	(Optional) Debug major EtherChannel event messages.
idb	(Optional) Display PAgP interface descriptor block debug messages.

Note   Though visible in the command-line help strings, the **linecard** keyword is not supported.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

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

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
show debugging	Displays information about the types of debugging that are enabled.
show etherchannel	Displays EtherChannel information for the channel.

debug fastethernet

Use the **debug fastethernet** privileged EXEC command to enable debugging of the Ethernet management port. Use the **no** form of this command to disable debugging.

> **debug fastethernet** {**af** | **events** | **packets**}

> **no debug fastethernet** {**af** | **events** | **packets**}

Syntax Description		
	af	Display Ethernet management port software-address-filter debug messages.
	events	Display Ethernet management port event debug messages.
	packets	Display Ethernet management port packet debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug fastethernet** {**af** | **events** | **packets**} command is the same as the **no debug fastethernet** {**af** | **events** | **packets**} command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
	show debugging	Displays information about the types of debugging that are enabled.
	show controllers ethernet-controller fastethernet	Displays information about the Ethernet management port.

debug ilpower

Use the **debug ilpower** privileged EXEC command to enable debugging of the power controller and Power over Ethernet (PoE) system. Use the **no** form of this command to disable debugging.

debug ilpower {**cdp** | **controller** | **event** | **ha** | **port** | **powerman** | **registries**}

no debug ilpower {**cdp** | **controller** | **event** | **ha** | **port** | **powerman** | **registries**}

Syntax Description		
	cdp	Display PoE Cisco Discovery Protocol (CDP) debug messages.
	controller	Display PoE controller debug messages.
	event	Display PoE event debug messages.
	ha	Display PoE high-availability messages.
	port	Display PoE port manager debug messages.
	powerman	Display PoE power management debug messages.
	registries	Display PoE registries debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   This command is supported only on PoE-capable switches.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
	show controllers power inline	Displays the values in the registers of the specified PoE controller.
	show power inline	Displays the power status for the specified PoE port or for all PoE ports.

■ **debug interface**

debug interface

Use the **debug interface** privileged EXEC command to enable debugging of interface-related activities. Use the **no** form of this command to disable debugging.

debug interface {*interface-id* | **null** *interface-number* | **port-channel** *port-channel-number* | **vlan** *vlan-id*}

no debug interface {*interface-id* | **null** *interface-number* | **port-channel** *port-channel-number* | **vlan** *vlan-id*}

Syntax Description		
	interface-id	Display debug messages for the specified physical port, identified by type switch number/module number/ port, for example **gigabitethernet 1/0/2**.
	null *interface-number*	Display debug messages for null interfaces. The *interface-number* is always **0**.
	port-channel *port-channel-number*	Display debug messages for the specified EtherChannel port-channel interface. The *port-channel-number* range is 1 to 48.
	vlan *vlan-id*	Display debug messages for the specified VLAN. The *vlan-id* range is 1 to 4094.

Defaults Debugging is disabled.

Command Modes Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

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

The **undebug interface** command is the same as the **no debug interface** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
	show debugging	Displays information about the types of debugging that are enabled.
	show etherchannel	Displays EtherChannel information for the channel.

debug ip dhcp snooping

Use the **debug ip dhcp snooping** privileged EXEC command to enable debugging of DHCP snooping. Use the **no** form of this command to disable debugging.

>   **debug ip dhcp snooping** {*mac-address* | **agent** | **event** | **packet**}

>   **no debug ip dhcp snooping** {*mac-address* | **agent** | **event** | **packet**}

Syntax Description

mac-address	Display debug messages for a DHCP packet with the specified MAC address.
agent	Display debug messages for DHCP snooping agents.
event	Display debug messages for DHCP snooping events.
packet	Display debug messages for DHCP snooping.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug ip dhcp snooping** command is the same as the **no debug ip dhcp snooping** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug ip verify source packet

Use the **debug ip verify source packet** privileged EXEC command to enable debugging of IP source guard. Use the **no** form of this command to disable debugging.

> **debug ip verify source packet**

> **no debug ip verify source packet**

Syntax Description	This command has no arguments or keywords.

Defaults	Debugging is disabled.

Command Modes	Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug ip verify source packet** command is the same as the **no debug ip verify source packet** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug ip igmp filter

Use the **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.

debug ip igmp filter

no debug ip igmp filter

Syntax Description   This command has no arguments or keywords.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug ip igmp filter** command is the same as the **no debug ip igmp filter** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug ip igmp max-groups

Use the **debug ip igmp max-groups** privileged EXEC command to enable debugging of Internet Group Management Protocol (IGMP) maximum groups events. Use the **no** form of this command to disable debugging.

debug ip igmp max-groups

no debug ip igmp max-groups

Syntax Description	This command has no arguments or keywords.

Defaults	Debugging is disabled.

Command Modes	Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines

The **undebug ip igmp max-groups** command is the same as the **no debug ip igmp max-groups** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

Appendix 1   Catalyst 3750-X and 3560-X Switch Debug Commands

debug ip igmp snooping ■

debug ip igmp snooping

Use the **debug igmp snooping** privileged EXEC command to enable debugging of Internet Group Management Protocol (IGMP) snooping activity. Use the **no** form of this command to disable debugging.

debug ip igmp snooping [**group** | **management** | **querier** | **router** | **timer**]

no debug ip igmp snooping [**group** | **management** | **querier** | **router** | **timer**]

Syntax Description

group	(Optional) Display IGMP snooping group activity debug messages.
management	(Optional) Display IGMP snooping management activity debug messages.
querier	(Optional) Display IGMP snooping querier debug messages.
router	(Optional) Display IGMP snooping router activity debug messages.
timer	(Optional) Display IGMP snooping timer event debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug ip igmp snooping** command is the same as the **no debug ip igmp snooping** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
debug platform ip igmp snooping	Displays information about platform-dependent IGMP snooping activity.
show debugging	Displays information about the types of debugging that are enabled.

Catalyst 3750-X and 3560-X Switch Command Reference

OL-29704-01   **1-23**

debug lacp

Use the **debug lacp** privileged EXEC command to enable debugging of Link Aggregation Control Protocol (LACP) activity. Use the **no** form of this command to disable debugging.

debug lacp [**all** | **event** | **fsm** | **misc** | **packet**]

no debug lacp [**all** | **event** | **fsm** | **misc** | **packet**]

Syntax Description		
	all	(Optional) Display all LACP debug messages.
	event	(Optional) Display LACP event debug messages.
	fsm	(Optional) Display LACP finite state-machine debug messages.
	misc	(Optional) Display miscellaneous LACP debug messages.
	packet	(Optional) Display LACP packet debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug lacp** command is the same as the **no debug lacp** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
show debugging	Displays information about the types of debugging that are enabled.
show lacp	Displays LACP channel-group information.

debug lldp packets

Use the **debug lldp packets** privileged EXEC command to enable debugging of Link Layer Discovery Protocol (LLDP) packets. Use the **no** form of this command to disable debugging.

debug lldp packets

no debug lldp packets

Syntax Description   This command has no arguments or keywords.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug lldp packets** command is the same as the **no debug lldp packets** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug logging smartlog debug

To debug smart logging, use the **debug logging smartlog debug** command in privileged EXEC mode. To disable smart logging debugging, use the **no** form of this command.

> **debug logging smartlog debug**
>
> **no debug logging smartlog debug**

Syntax Description	This command has no arguments or keywords.

Defaults	Debugging is disabled.

Command Modes	Privileged EXEC

Command History

Release	Modification
12.2(58)SE	This command was introduced.

Usage Guidelines   The **undebug logging smartlog debug** command is the same as the **no debug logging smartlog debug** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug mac-notification

Use the **debug mac-notification** privileged EXEC command to enable debugging of MAC notification events. Use the **no** form of this command to disable debugging.

> **debug mac-notification**

> **no debug mac-notification**

Syntax Description   This command has no arguments or keywords.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug mac-notification** command is the same as the **no debug mac-notification** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
show debugging	Displays information about the types of debugging that are enabled.
show mac address-table notification	Displays the MAC address notification information for all interfaces or the specified interface.

debug macsec

To enable debugging of 802.1ae Media Access Control Security (MACsec), use the **debug macsec** privileged EXEC command. To disable debugging, use the **no** form of this command.

> **debug macsec** [**errors** | **events**]

> **no debug macsec** [**errors** | **events**]

Syntax Description		
errors	(Optional) Displays MACsec error debugging messages.
events	(Optional) Displays MACsec event debugging messages.

Defaults   MACsec debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   Entering the **debug macsec** command with no keywords starts all MACsec debugging facilities.

The **undebug macsec** command is the same as the **no debug macsec** 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** *switch-number* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without starting a session.

Related Commands

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

debug matm

Use the **debug matm** privileged EXEC command to enable debugging of platform-independent MAC address management. Use the **no** form of this command to disable debugging.

>   **debug matm**

>   **no debug matm**

Syntax Description   This command has no arguments or keywords.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug matm** command is the same as the **no debug matm** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
debug platform matm	Displays information about platform-dependent MAC address management.
show debugging	Displays information about the types of debugging that are enabled.

debug matm move update

Use the **debug matm move update** privileged EXEC command to enable debugging of MAC address-table move update message processing.

> **debug matm move update**

> **no debug matm move update**

Syntax Description	This command has no arguments or keywords.
Defaults	Debugging is disabled.
Command Modes	Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines

The **undebug matm move update** command is the same as the **no debug matm move update** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
mac address-table move update {**receive** | **transmit**}	Configures MAC address-table move update feature on the switch.
show debugging	Displays information about the types of debugging that are enabled.
show mac address-table move update	Displays the MAC address-table move update information on the switch.

debug mka

To enable debugging of the MACsec Key Agreement (MKA) protocol sessions, use the **debug mka** privileged EXEC command. To disable debugging, use the **no** form of this command.

debug mka [**errors** | **events** | **lli** | **mli** | **packets** | **trace**]

no debug mka [**errors** | **events** | **lli** | **mli** | **packets** | **trace**]

Syntax Description

errors	(Optional) Displays MKA errors that occur during normal MKA operation. You can use this command for verification of MKA sessions.
events	(Optional) Displays MKA debugging messages for significant events that occur during MKA operation. You can use this command for verification of MKA sessions.
lli	(Optional) Displays MKA debugging messages for events passing through the LinkSec Layer Interface (LLI) to see the interaction between MKA and Authentication manager.
mli	(Optional) Displays MKA debugging messages for events passing through the MACSec Layer Interface (lli) to see the interaction between MKA and MACsec.
packets	(Optional) Displays MKA debugging messages for MKPDU transmissions and receptions during normal MKA operation.
trace	(Optional) Displays MKA debugging messages for tracing the normal operation of MKA sessions.

Defaults

MKA debugging is disabled.

Command Modes

Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines

Entering the **debug mka** command with no keywords enables all MKA debugging facilities.

The **undebug backup** command is the same as the **no debug backup** 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** *switch-number* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without starting a session.

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

debug monitor

Use the **debug monitor** privileged EXEC command to enable debugging of the Switched Port Analyzer (SPAN) feature. Use the **no** form of this command to disable debugging.

>   **debug monitor** {**all** | **errors** | **idb-update** | **info** | **list** | **notifications** | **platform** | **requests** | **snmp**}

>   **no debug monitor** {**all** | **errors** | **idb-update** | **info** | **list** | **notifications** | **platform** | **requests** | **snmp**}

Syntax Description		
	all	Display all SPAN debug messages.
	errors	Display detailed SPAN error debug messages.
	idb-update	Display SPAN interface description block (IDB) update-trace debug messages.
	info	Display SPAN informational-tracing debug messages.
	list	Display SPAN port and VLAN-list tracing debug messages.
	notifications	Display SPAN notification debug messages.
	platform	Display SPAN platform-tracing debug messages.
	requests	Display SPAN request debug messages.
	snmp	Display SPAN and Simple Network Management Protocol (SNMP) tracing debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug monitor** command is the same as the **no debug monitor** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
	show debugging	Displays information about the types of debugging that are enabled.
	show monitor	Displays information about all SPAN and remote SPAN (RSPAN) sessions on the switch.

debug mvrdbg

Use the **debug mvrdbg** privileged EXEC command to enable debugging of Multicast VLAN Registration (MVR). Use the **no** form of this command to disable debugging.

debug mvrdbg {**all** | **events** | **igmpsn** | **management** | **ports**}

no debug mvrdbg {**all** | **events** | **igmpsn** | **management** | **ports**}

Syntax Description		
	all	Display all MVR activity debug messages.
	events	Display MVR event-handling debug messages.
	igmpsn	Display MVR Internet Group Management Protocol (IGMP) snooping-activity debug messages.
	management	Display MVR management-activity debug messages.
	ports	Display MVR port debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug mvrdbg** command is the same as the **no debug mvrdbg** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
	show debugging	Displays information about the types of debugging that are enabled.
	show mvr	Displays the current MVR configuration.

debug nmsp

Use the **debug nmsp** privileged EXEC command to the enable debugging of the Network Mobility Services Protocol (NMSP) on the switch. Use the **no** form of this command to disable debugging.

debug nmsp {**all** | **connection** | **error** | **event** | **packet** | **rx** | **tx**}

no debug nmsp

Syntax Description   This command has no arguments or keywords.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug nmsp** command is the same as the **no debug nmsp** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug nvram

Use the **debug nvram** privileged EXEC command to enable debugging of NVRAM activity. Use the **no** form of this command to disable debugging.

debug nvram

no debug nvram

Syntax Description   This command has no arguments or keywords.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug nvram** command is the same as the **no debug nvram** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug pagp

Use the **debug pagp** privileged EXEC command to enable debugging of Port Aggregation Protocol (PAgP) activity. Use the **no** form of this command to disable debugging.

> **debug pagp** [**all** | **dual-active** | **event** | **fsm** | **misc** | **packet**]

> **no debug pagp** [**all** | **dual-active** | **event** | **fsm** | **misc** | **packet**]

Syntax Description

all	(Optional) Display all PAgP debug messages.
dual-active	(Optional) Display dual-active detection messages.
event	(Optional) Display PAgP event debug messages.
fsm	(Optional) Display PAgP finite state-machine debug messages.
misc	(Optional) Display miscellaneous PAgP debug messages.
packet	(Optional) Display PAgP packet debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug pagp** command is the same as the **no debug pagp** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
show debugging	Displays information about the types of debugging that are enabled.
show pagp	Displays PAgP channel-group information.

debug platform acl

Use the **debug platform acl** privileged EXEC command to enable debugging of the access control list (ACL) manager. Use the **no** form of this command to disable debugging.

> **debug platform acl** {**all** | **exit** | **label** | **main** | **racl** | **stack** | **vacl** | **vlmap** | **warn**}

> **no debug platform acl** {**all** | **exit** | **label** | **main** | **racl** | **stack** | **vacl** | **vlmap** | **warn**}

Syntax Description

all	Display all ACL manager debug messages.
exit	Display ACL exit-related debug messages.
label	Display ACL label-related debug messages.
main	Display the main or important ACL debug messages.
racl	Display router ACL related debug messages.
stack	Display ACL stack-related debug messages.
	This keyword is supported only on Catalyst 3750-X switches.
vacl	Display VLAN ACL-related debug messages.
vlmap	Display ACL VLAN-map-related debug messages.
warn	Display ACL warning-related debug messages.

✎

Note   Though visible in the command-line help strings, the stack keyword is not supported on Catalyst 3560-X switches.

Command Default   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform acl** command is the same as the **no debug platform acl** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
	show debugging	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** form of this command to disable debugging.

debug platform backup interface

no debug platform backup interface

Syntax Description	This command has no arguments or keywords.

Command Default	Platform backup interface debugging is disabled.

Command Modes	Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines The **undebug platform backup interface** command is the same as the **no platform debug backup interface** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
show debugging	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** form of this command to disable debugging.

> **debug platform cisp [initialization | interface-configuration | rpc]**

> **no debug platform cisp [initialization | interface-configuration | rpc]**

Syntax Description

initialization	Enable debugging of the CISP initialization sequence.
interface-configuration	Enable debugging of the CISP configuration.
rpc	Enable debugging of the CISP RPC requests.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   When you enable debugging on a switch stack, 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 **session switch-number** privileged EXEC command and enter the debug command at the command-line prompt of the stack member. You also can use the **remote command stack-member-number** *<line>* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
cisp enable	Enables Client Information Signalling Protocol (CISP)
dot1x credentials (global configuration)*profile*	Configures a profile on a supplicant switch.
show cisp	Displays CISP information for a specified interface.

debug platform cli-redirection main

Use the **debug platform cli-redirection main** privileged EXEC command to enable debugging of the main (important) command-line interface (CLI) redirection events. Use the **no** form of this command to disable debugging.

debug platform cli-redirection main

no debug platform cli-redirection main

Note   This command is supported only on Catalyst 3750-X switches.

Syntax Description   This command has no arguments or keywords.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform cli-redirection main** command is the same as the **no debug platform cli-redirection main** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform configuration

Use the **debug platform configuration** privileged EXEC command to enable debugging of configuration file activity across the stack. Use the **no** form of this command to disable debugging.

> **debug platform configuration** {**all** | **reception** | **transmission**}

> **no debug platform configuration** {**all** | **reception** | **transmission**}

Note   This command is supported only on Catalyst 3750-X switches.

Syntax Description

all	Display debug messages for all configuration file transmission and reception events throughout the stack.
reception	Display debug messages for configuration file reception from other stack members.
transmission	Display debug messages for configuration file transmission to other stack members.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform configuration** command is the same as the **no debug platform configuration** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform cpu-queues

Use the **debug platform cpu-queues** privileged EXEC command to enable debugging of platform central processing unit (CPU) receive queues. Use the **no** form of this command to disable debugging.

> **debug platform cpu-queues** {**broadcast-q** | **cbt-to-spt-q** | **cpuhub-q** | **host-q** | **icmp-q** | **igmp-snooping-q** | **layer2-protocol-q** | **logging-q** | **remote-console-q** | **routing-protocol-q** | **rpffail-q** | **software-fwd-q** | **stp-q**}

> **no debug platform cpu-queues** {**broadcast-q** | **cbt-to-spt-q** | **cpuhub-q** | **host-q** | **icmp-q** | **igmp-snooping-q** | **layer2-protocol-q** | **logging-q** | **remote-console-q** | **routing-protocol-q** | **rpffail-q** | **software-fwd-q** | **stp-q**}

Syntax Description		
	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.
	routing-protocol-q	Display debug messages about packets received by the routing protocol queue.
	rpffail-q	Display debug messages about packets received by the reverse path forwarding (RFP) failure queue.
	software-fwd-q	Debug packets received by the software forwarding queue.
	stp-q	Debug packets received by the Spanning Tree Protocol (STP) queue.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform device-manager

Use the **debug platform device-manager** privileged EXEC command to enable debugging of the platform-dependent device manager. Use the **no** form of this command to disable debugging.

> **debug platform device-manager** {**all** | **device-info** | **poll** | **port-download** | **trace**}

> **no debug platform device-manager** {**all** | **device-info** | **poll** | **port-download** | **trace**}

Note   This command is not supported on switches running the LAN base feature set.

Syntax Description		
all	Display all platform device manager debug messages.
device-info	Display platform device manager device structure debug messages.
poll	Display platform device manager 1-second poll debug messages.
port-download	Display platform device manager remote procedure call (RPC) usage debug messages.
trace	Trace platform device manager function entry and exit debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform device-manager** command is the same as the **no debug platform device-manager** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform dot1x

Use the **debug platform dot1x** privileged EXEC command to enable debugging of IEEE 802.1x events. On switch stacks, this command enables 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**}

Syntax Description	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.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug platform etherchannel

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**}

Syntax Description		
	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.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug platform fallback-bridging

Use the **debug platform fallback-bridging** privileged EXEC command to enable debugging of the platform-dependent fallback bridging manager. Use the **no** form of this command to disable debugging.

> **debug platform fallback-bridging** [**error** | **retry** | **rpc** {**events** | **messages**}]

> **no debug platform fallback-bridging** [**error** | **retry** | **rpc** {**events** | **messages**}]

Note   This command is not supported on switches running the LAN base feature set.

Syntax Description		
error	(Optional) Display fallback bridging manager error condition messages.
retry	(Optional) Display fallback bridging manager retry messages.
rpc {**events**	**messages**}	(Optional) Display fallback bridging debugging information. The keywords have these meanings: • **events**—Display remote procedure call (RPC) events. • **messages**—Display RPC messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   If you do not specify a keyword, all fallback bridging manager debug messages appear.

The **undebug platform fallback-bridging** command is the same as the **no debug platform fallback-bridging** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug platform forw-tcam

Use the **debug platform forw-tcam** privileged EXEC command to enable debugging of the forwarding hardware memory 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**]

Note   This command is not supported on switches running the LAN base feature set.

Syntax Description

adjustment	(Optional) Display hardware manager adjustment debug messages.
allocate	(Optional) Display hardware manager allocation debug messages.
audit	(Optional) Display hardware manager audit messages.
error	(Optional) Display hardware manager error messages.
move	(Optional) Display hardware manager move messages.
read	(Optional) Display hardware manager read messages.
write	(Optional) Display hardware manager write messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   If you do not specify a keyword, all forwarding hardware manager debug messages appear.

The **undebug platform forw-tcam** command is the same as the **no debug platform forw-tcam** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform frontend-controller

Use the **debug platform frontend-controller** privileged EXEC command to enable debugging of front-end controller activity. Use the **no** form of this command to disable debugging.

> **debug platform frontend-controller** {**all** | **image** | **led** | **manager** | **poe** | **register** | **thermal**}

> **no debug platform frontend-controller** {**all** | **image** | **led** | **manager** | **poe** | **register** | **thermal**}

Syntax Description

all	Display all the debug messages for front-end controller.
image	Display Image Manager debug messages.
led	Display LED debug messages.
manager	Display front-end-controller manager debug messages.
poe	Display Power over Ethernet (PoE) debug messages.
register	Display Register Access debug messages.
thermal	Display thermal debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform frontend-controller** command is the same as the **no debug platform frontend-controller** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
show platform frontend-controller	Displays counter and status information for the front-end controller manager and subordinate applications, and displays the hardware and software information for the front-end controller.
show debugging	Displays information about the types of debugging that are enabled.

debug platform ip arp inspection

Use the **debug platform ip arp inspection** privileged EXEC command to debug dynamic Address Resolution Protocol (ARP) inspection events. Use the **no** form of this command to disable debugging.

debug platform ip arp inspection {**all** | **error** | **event** | **packet** | **rpc**}

no debug platform ip arp inspection {**all** | **error** | **event** | **packet** | **rpc**}

Syntax Description

all	Display all dynamic ARP inspection debug messages.
error	Display dynamic ARP inspection error debug messages.
event	Display dynamic ARP inspection event debug messages.
packet	Display dynamic ARP inspection packet-related debug messages.
rpc	Display dynamic ARP inspection remote procedure call (RPC) request debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform ip arp inspection** command is the same as the **no debug platform ip arp inspection** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
show inventory	Displays the dynamic ARP inspection configuration and operating state.
show debugging	Displays information about the types of debugging that are enabled.

debug platform ip dhcp

Use the **debug platform ip dhcp** privileged EXEC command to debug DHCP events. Use the **no** form of this command to disable debugging.

debug platform ip dhcp [**all** | **error** | **event** | **packet** | **rpc**]

no debug platform ip dhcp [**all** | **error** | **event** | **packet** | **rpc**]

Syntax Description		
	all	(Optional) Display all DHCP debug messages.
	error	(Optional) Display DHCP error debug messages.
	event	(Optional) Display DHCP event debug messages.
	packet	(Optional) Display DHCP packet-related debug messages.
	rpc	(Optional) Display DHCP remote procedure call (RPC) request debug messages.

Defaults Debugging is disabled.

Command Modes Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines The **undebug platform ip dhcp** command is the same as the **no debug platform ip dhcp** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
	show ip dhcp snooping	Displays the DHCP snooping configuration.
	show ip dhcp snooping binding	Displays the DHCP snooping binding information.
	show debugging	Displays information about the types of debugging that are enabled.

debug platform ip igmp snooping

Use the **debug platform ip igmp snooping** privileged EXEC command to enable debugging of platform-dependent Internet Group Management Protocol (IGMP) snooping. Use the **no** form of this command to disable debugging.

debug platform ip igmp snooping {**all** | **di** | **error** | **event** | **group** | **mgmt** | **pak** | **retry** | **rpc** | **warn**}

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

debug platform ip igmp snooping rpc [**cfg** | **l3mm** | **misc** | **vlan**]

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

Syntax Description		
all	Display all IGMP snooping debug messages.	
di	Display IGMP snooping destination index (di) coordination remote procedure call (RPC) debug messages.	
error	Display IGMP snooping error messages.	
event	Display IGMP snooping event debug messages.	
group	Display IGMP snooping group debug messages.	
mgmt	Display IGMP snooping management debug messages.	
pak {*ip-address*	**error**	**ipopt**	**leave**	**query**	**report**	**rx**	**svi**	**tx**}	Display IGMP snooping packet event debug messages. The keywords have these meanings:	
	• *ip-address*—IP address of the IGMP group.	
	• **error**—Display IGMP snooping packet error debug messages.	
	• **ipopt**—Display IGMP snooping IP bridging options debug messages.	
	• **leave**—Display IGMP snooping leave debug messages.	
	• **query**—Display IGMP snooping query debug messages.	
	• **report**—Display IGMP snooping report debug messages.	
	• **rx**—Display IGMP snooping received packet debug messages.	
	• **svi**—Display IGMP snooping switched virtual interface (SVI) packet debug messages.	
	• **tx**—Display IGMP snooping sent packet debug messages.	
retry	Display IGMP snooping retry debug messages.	

rpc [**cfg** | **l3mm** | **misc** | **vlan**]	Display IGMP snooping remote procedure call (RPC) event debug messages. The keywords have these meanings:
	• **cfg**—(Optional) Display IGMP snooping RPC debug messages.
	• **l3mm**—(Optional) IGMP snooping Layer 3 multicast router group RPC debug messages.
	• **misc**—(Optional) IGMP snooping miscellaneous RPC debug messages.
	• **vlan**—(Optional) IGMP snooping VLAN assert RPC debug messages.
warn	Display IGMP snooping warning messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform ip igmp snooping** command is the same as the **no debug platform ip igmp snooping** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
debug ip igmp snooping	Displays information about platform-independent IGMP snooping activity.
show debugging	Displays information about the types of debugging that are enabled.

debug platform ip multicast

Use the **debug platform ip multicast** privileged EXEC command to enable debugging of IP multicast routing. Use the **no** form of this command to disable debugging.

> **debug platform ip multicast** {**all** | **mdb** | **mdfs-rp-retry** | **midb** | **mroute-rp** | **resources** | **retry** | **rpf-throttle** | **snoop-events** | **software-forward** | **swidb-events** | **vlan-locks**}

> **no debug platform ip multicast** {**all** | **mdb** | **mdfs-rp-retry** | **midb** | **mroute-rp** | **resources** | **retry** | **rpf-throttle** | **snoop-events** | **software-forward** | **swidb-events** | **vlan-locks**}

Syntax Description		
all	Display all platform IP-multicast event debug messages.	
	Note Using this command can degrade the performance of the switch.	
mdb	Display IP-multicast debug messages for multicast distributed fast switching (MDFS) multicast descriptor block (mdb) events.	
mdfs-rp-retry	Display IP-multicast MDFS rendezvous point (RP) retry event debug messages.	
midb	Display IP-multicast MDFS multicast interface descriptor block (MIDB) debug messages.	
mroute-rp	Display IP-multicast RP event debug messages.	
resources	Display IP-multicast hardware resource debug messages.	
retry	Display IP-multicast retry processing event debug messages.	
rpf-throttle	Display IP-multicast reverse path forwarding (RPF) throttle event debug messages.	
snoop-events	Display IP-multicast IGMP snooping event debug messages.	
software-forward	Display IP-multicast software forwarding event debug messages.	
swidb-events	Display IP-multicast MDFS software interface descriptor block (swidb) or global event debug messages.	
vlan-locks	Display IP-multicast VLAN lock and unlock event debug messages.	

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform ip multicast** command is the same as the **no debug platform ip multicast** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform ip unicast

Use the **debug platform ip unicast** privileged EXEC command to enable debugging of platform-dependent IP unicast routing. Use the **no** form of this command to disable debugging.

debug platform ip unicast {**adjacency** | **all** | **arp** | **dhcp** | **errors** | **events** | **interface** | **mpath** | **registries** | **retry** | **route** | **rpc** | **rpf** | **standby** | **statistics**}

no debug platform ip unicast {**adjacency** | **all** | **arp** | **dhcp** | **errors** | **events** | **interface** | **mpath** | **registries** | **retry** | **route** | **rpc** | **rpf** | **standby** | **statistics**}

Syntax Description		
adjacency	Display IP unicast routing adjacency programming event debug messages.	
all	Display all platform IP unicast routing debug messages.	
	Note Using this command can degrade the performance of the switch.	
arp	Display IP unicast routing Address Resolution Protocol (ARP) and ARP throttling debug messages.	
dhcp	Display IP unicast routing DHCP dynamic address-related event debug messages.	
errors	Display all IP unicast routing error debug messages, including resource allocation failures.	
events	Display all IP unicast routing event debug messages, including registry and miscellaneous events.	
interface	Display IP unicast routing interface event debug messages.	
mpath	Display IP unicast routing multi-path adjacency programming event debug messages (present when performing equal or unequal cost routing).	
registries	Display IP unicast routing forwarding information database (FIB), adjacency add, update, and delete registry event debug messages.	
retry	Display IP unicast routing reprogram FIBs with hardware memory allocation failure debug messages.	
route	Display IP unicast routing FIB hardware programming event debug messages.	
rpc	Display IP unicast routing Layer 3 unicast remote procedure call (RPC) interaction debug messages.	
rpf	Display IP unicast routing Layer 3 unicast reverse path forwarding (unicast RPF) event debug messages.	
standby	Display IP unicast routing standby event debug messages, helpful in troubleshooting Hot Standby Routing Protocol (HSRP) issues.	
statistics	Display IP unicast routing statistics gathering-related event debug messages.	

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform ip unicast** command is the same as the **no debug platform ip unicast** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug platform ip wccp

Use the **debug platform ip wccp** privileged EXEC command to enable debugging of Web Cache Communication Protocol (WCCP). Use the **no** form of this command to disable debugging.

debug platform ip wccp {**acl** | **event** | **odm** | **trace**}

no debug platform ip wccp {**acl** | **event** | **odm** | **trace**}

Note   This command is available only if your switch is running the IP services feature set.

Syntax Description		
acl	Display WCCP access control lists (ACLs).	
event	Display WCCP event debug messages.	
odm	Display WCCP OD merge VMRs.	
trace	Trace WCCP execution.	

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform ip wccp** command is the same as the **no debug platform ip wccp** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform ipc

Use the **debug platform ipc** privileged EXEC command to enable debugging of the platform-dependent Interprocess Communication (IPC) Protocol. Use the **no** form of this command to disable debugging.

>   **debug platform ipc** {**all** | **init** | **receive** | **send** | **trace**}

>   **no debug platform** {**all** | **init** | **receive** | **send** | **trace**}

Note   This command is supported only on Catalyst 3750-X switches.

Syntax Description

all	Display all platform IPC debug messages.
	Note Using this command can degrade the performance of the switch.
init	Display debug messages related to IPC initialization.
receive	Display IPC traces each time an IPC packet is received by the switch.
send	Display IPC traces each time an IPC packet is sent by the switch.
trace	Display IPC trace debug messages, tracing the code path as the IPC functions are executed.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform ipc** command is the same as the **no debug platform ipc**.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform led

Use the **debug platform led** privileged EXEC command to enable debugging of light-emitting diode (LED) actions. Use the **no** form of this command to disable debugging.

debug platform led {**generic** | **signal** | **stack**}

no debug platform led {**generic** | **signal** | **stack**}

Syntax Description		
	generic	Display LED generic action debug messages.
	signal	Display LED signal bit map debug messages.
	stack	Display LED stack action debug messages.
		This keyword is supported only on Catalyst 3750-X switches.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform led** command is the same as the **no debug platform led** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug platform matm

Use the **debug platform matm** privileged EXEC command to enable debugging of platform-dependent MAC address management. Use the **no** form of this command to disable debugging.

> **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**}

Syntax Description

aging	Display MAC address aging debug messages.
all	Display all platform MAC address management event debug messages.
ec-aging	Display EtherChannel address aging-related debug messages.
errors	Display MAC address management error messages.
learning	Display MAC address management address-learning debug messages.
rpc	Display MAC address management remote procedure call (RPC) related debug messages.
secure-address	Display MAC address management secure address learning debug messages.
warning	Display MAC address management warning messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform matm** command is the same as the **no debug platform matm** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
debug matm	Displays information about platform-independent MAC address management.
show debugging	Displays information about the types of debugging that are enabled.

debug platform messaging application

Use the **debug platform messaging application** privileged EXEC command to enable debugging of application messaging activity. Use the **no** form of this command to disable debugging.

> **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**}

Syntax Description

all	Display all application-messaging debug messages.
badpak	Display bad-packet debug messages.
cleanup	Display clean-up debug messages.
events	Display event debug messages.
memerr	Display memory-error debug messages.
messages	Display application-messaging debug messages.
stackchg	Display stack-change debug messages.
	This keyword is supported only on Catalyst 3750-X switches.
usererr	Display user-error debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform messaging application** command is the same as the **no debug platform messaging application** command.

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

Related Commands

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

debug platform phy

Use the **debug platform phy** privileged EXEC command to enable debugging of PHY driver information. Use the **no** form of this command to disable debugging.

> **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**}

Syntax Description

automdix	Display PHY automatic medium-dependent interface crossover (auto-MDIX) debug messages.
cablediag	Display PHY cable-diagnostic debug messages.
dual-purpose	Display PHY dual-purpose event debug messages.
flcd {**configure** | **ipc** | **iter** | **trace**}	Display PHY FLCD debug messages. The keywords have these meanings: • **configure**—Display PHY configure debug messages. • **ipc**—Display Interprocess Communication Protocol (IPC) debug messages. • **iter**—Display iter debug messages. • **trace**—Display trace debug messages.
flowcontrol	Display PHY flowcontrol debug messages.
forced	Display PHY forced-mode debug messages.
init-seq	Display PHY initialization-sequence debug messages.
link-status	Display PHY link-status debug messages.
read	Display PHY-read debug messages.
sfp	Display PHY small form-factor pluggable (SFP) modules debug messages.
show-controller	Display PHY show-controller debug messages.
speed	Display PHY speed-change debug messages.
write	Display PHY-write debug messages.
xenpak	Display PHY XENPAK debug messages

Defaults Debugging is disabled.

Command Modes Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

■ **debug platform phy**

Usage Guidelines   The **undebug platform phy** command is the same as the **no debug platform phy** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform pm

Use the **debug platform pm** privileged EXEC command to enable debugging of the platform-dependent port manager software module. Use the **no** form of this command to disable debugging.

> **debug platform pm** {**all** | **counters** | **errdisable** | **etherchnl** | **exceptions** | **hpm-events** | **idb-events** | **if-numbers** | **ios-events** | **link-status** | **platform** | **pm-events** | **pm-span** | **pm-vectors** [**detail**] | **rpc** [**general** | **oper-info** | **state** | **vectors** | **vp-events**] | **soutput-vectors** | **stack-manager** | **sync** | **vlans**}

> **no debug platform pm** {**all** | **counters** | **errdisable** | **etherchnl** | **exceptions** | **hpm-events** | **idb-events** | **if-numbers** | **ios-events** | **link-status** | **platform** | **pm-events** | **pm-span** | **pm-vectors** [**detail**] | **rpc** [**general** | **oper-info** | **state** | **vectors** | **vp-events**] | **soutput-vectors** | **stack-manager** | **sync** | **vlans**}

Syntax Description

all	Display all port-manager debug messages.
counters	Display counters for remote procedure call (RPC) debug messages.
errdisable	Display error-disabled related-events debug messages.
etherchnl	Display EtherChannel related-events debug messages.
exceptions	Display system exception debug messages.
hpm-events	Display platform port-manager event debug messages.
idb-events	Display interface descriptor block (IDB) related-events debug messages.
if-numbers	Display interface-number translation-event debug messages.
ios-events	Display Cisco IOS event debug messages.
link-status	Display interface link-detection event debug messages.
platform	Display port-manager function-event debug messages.
pm-events	Display port manager event debug messages.
pm-span	Display port manager Switched Port Analyzer (SPAN) event debug messages.
pm-vectors [**detail**]	Display port-manager vector-related-event debug messages. The keyword has this meaning: • **detail**—Display vector-function details.
rpc [**general** | **oper-info** | **state** | **vectors** | **vp-events**]	Display RPC related-event debug messages. The keywords have these meanings: • **general**—(Optional) Display RPC general events. • **oper-info**—(Optional) Display operational- and informational-related RPC messages. • **state**—(Optional) Display administrative- and operational-related RPC messages. • **vectors**—(Optional) Display vector-related RPC messages. • **vp-events**—(Optional) Display virtual ports related-events RP messages.
soutput-vectors	Display IDB output vector event debug messages.
stack-manager	Display stack-manager related-events debug messages. This keyword is supported only on Catalyst 3750-X switches.

sync	Display operational synchronization and VLAN line-state event debug messages.
vlans	Display VLAN creation and deletion event debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform pm** command is the same as the **no debug platform pm** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform port-asic

Use the **debug platform port-asic** privileged EXEC command to enable debugging of the port application-specific integrated circuit (ASIC) driver. Use the **no** form of this command to disable debugging.

debug platform port-asic {**interrupt** | **periodic** | **read** | **stack** | **write**}

no debug platform port-asic {**interrupt** | **periodic** | **read** | **stack** | **write**}

Syntax Description		
	interrupt	Display port-ASIC interrupt-related function debug messages.
	periodic	Display port-ASIC periodic-function-call debug messages.
	read	Display port-ASIC read debug messages.
	stack	Display stacking-related function debug messages.
		This keyword is supported only on Catalyst 3750-X switches.
	write	Display port-ASIC write debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform port-asic** command is the same as the **no debug platform port-asic** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug platform port-security

Use the **debug platform port-security** privileged EXEC command to enable debugging of platform-dependent port-security information. Use the **no** form of this command to disable debugging.

> **debug platform port-security** {**add** | **aging** | **all** | **delete** | **errors** | **rpc** | **warnings**}

> **no debug platform port-security** {**add** | **aging** | **all** | **delete** | **errors** | **rpc** | **warnings**}

Syntax Description

add	Display secure address addition debug messages.
aging	Display secure address aging debug messages.
all	Display all port-security debug messages.
delete	Display secure address deletion debug messages.
errors	Display port-security error debug messages.
rpc	Display remote procedure call (RPC) debug messages.
warnings	Display warning debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform port-security** command is the same as the **no debug platform port-security** command.

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

Related Commands

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

debug platform qos-acl-tcam

Use the **debug platform qos-acl-tcam** privileged EXEC command to enable debugging of the quality of service (QoS) and access control list (ACL) hardware memory manager software. Use the **no** form of this command to disable debugging.

> **debug platform qos-acl-tcam** {**all** | **ctcam** | **errors** | **labels** | **mask** | **rpc** | **tcam**}

> **no debug platform qos-acl-tcam** {**all** | **ctcam** | **errors** | **labels** | **mask** | **rpc** | **tcam**}

Syntax Description		
all	Display all QoS and ACL ternary content addressable memory (QATM) manager debug messages.	
ctcam	Display Cisco TCAM (CTCAM) related-events debug messages.	
errors	Display QATM error-related-events debug messages.	
labels	Display QATM label-related-events debug messages.	
mask	Display QATM mask-related-events debug messages.	
rpc	Display QATM remote procedure call (RPC) related-events debug messages.	
tcam	Display QATM hardware-memory-related events debug messages.	

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform qos-acl-tcam** command is the same as the **no debug platform qos-acl-tcam** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug platform remote-commands

Use the **debug platform remote-commands** privileged EXEC command to enable debugging of remote commands. Use the **no** form of this command to disable debugging.

debug platform remote-commands

no debug platform remote-commands

Note   This command is not supported on switches running the LAN base feature set.

Syntax Description   This command has no arguments or keywords.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform remote-commands** command is the same as the **no debug platform remote-commands** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform resource-manager

Use the **debug platform resource-manager** privileged EXEC command to enable debugging of the resource manager software. Use the **no** form of this command to disable debugging.

debug platform resource-manager {**all** | **dm** | **erd** | **errors** | **madmed** | **sd** | **stats** | **vld**}

no debug platform resource-manager {**all** | **dm** | **erd** | **errors** | **madmed** | **sd** | **stats** | **vld**}

Syntax Description

all	Display all resource manager debug messages.
dm	Display destination-map debug messages.
erd	Display equal-cost-route descriptor-table debug messages.
errors	Display error debug messages.
madmed	Display the MAC address descriptor table and multi-expansion descriptor table debug messages.
sd	Display the station descriptor table debug messages.
stats	Display statistics debug messages.
vld	Display the VLAN-list descriptor debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform resource-manager** command is the same as the **no debug platform resource-manager** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform snmp

Use the **debug platform snmp** privileged EXEC command to enable debugging of the platform-dependent Simple Network Management Protocol (SNMP) software. Use the **no** form of this command to disable debugging.

debug platform snmp

no debug platform snmp

Syntax Description	This command has no arguments or keywords.

Defaults	Debugging is disabled.

Command Modes	Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform snmp** command is the same as the **no debug platform snmp** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform span

Use the **debug platform span** 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.

debug platform span

no debug platform span

Syntax Description	This command has no arguments or keywords.

Defaults	Debugging is disabled.

Command Modes	Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform stack-manager

Use the **debug platform stack-manager** privileged EXEC command to enable debugging of the stack manager software. Use the **no** form of this command to disable debugging.

debug platform stack-manager {**all** | **rpc** | **sdp** | **sim** | **ssm** | **trace**}

no debug platform stack-manager {**all** | **rpc** | **sdp** | **sim** | **ssm** | **trace**}

Note This command is supported only on Catalyst 3750-X switches.

Syntax Description

all	Display all stack manager debug messages.
rpc	Display stack manager remote procedure call (RPC) usage debug messages.
sdp	Display the Stack Discovery Protocol (SDP) debug messages.
sim	Display the stack information module debug messages.
ssm	Display the stack state-machine debug messages.
trace	Trace the stack manager entry and exit debug messages.

Defaults Debugging is disabled.

Command Modes Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines The **undebug platform stack-manager** command is the same as the **no debug platform stack-manager** command.

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

Related Commands

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

debug platform supervisor-asic

Use the **debug platform supervisor-asic** privileged EXEC command to enable debugging of the supervisor application-specific integrated circuit (ASIC). Use the **no** form of this command to disable debugging.

> **debug platform supervisor-asic** {**all** | **errors** | **receive** | **send**}

> **no debug platform supervisor-asic** {**all** | **errors** | **receive** | **send**}

Syntax Description		
	all	Display all supervisor-ASIC event debug messages.
	errors	Display the supervisor-ASIC error debug messages.
	receive	Display the supervisor-ASIC receive debug messages.
	send	Display the supervisor-ASIC send debug messages.

Defaults Debugging is disabled.

Command Modes Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines The **undebug platform supervisor-asic** command is the same as the **no debug platform supervisor-asic** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug platform sw-bridge

Use the **debug platform sw-bridge** privileged EXEC command to enable debugging of the software bridging function. Use the **no** form of this command to disable debugging.

> **debug platform sw-bridge** {**broadcast** | **control** | **multicast** | **packet** | **unicast**}

> **no debug platform sw-bridge** {**broadcast** | **control** | **multicast** | **packet** | **unicast**}

Syntax Description		
	broadcast	Display broadcast-data debug messages.
	control	Display protocol-packet debug messages.
	multicast	Display multicast-data debug messages.
	packet	Display sent and received data debug messages.
	unicast	Display unicast-data debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform sw-bridge** command is the same as the **no debug platform sw-bridge** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug platform tcam

Use the **debug platform tcam** privileged EXEC command to enable debugging of hardware memory access and lookups. Use the **no** form of this command to disable debugging.

debug platform tcam {**log** | **read** | **search** | **write**}

debug platform tcam **log l2** {**acl** {**input** | **output**} | **local** | **qos**}

debug platform tcam **log l3** {**acl** {**input** | **output**} | **ipv6** {**acl** {**input** | **output**} | **local** | **qos** | s**econdary**} | **local** | **qos** | **secondary**}

debug platform tcam **read** {**reg** | **ssram** | **tcam**}

debug platform tcam **search**

debug platform tcam **write** {**forw-ram** | **reg** | **tcam**}

no debug platform tcam {**log** | **read** | **search** | **write**}

no debug platform tcam **log l2** {**acl** {**input** | **output**} | **local** | **qos**}

no debug platform tcam **log l3** {**acl** {**input** | **output**} | **ipv6** {**acl** {**input** | **output**} | **local** | **qos** | s**econdary**} | **local** | **qos** | **secondary**}

no debug platform tcam **read** {**reg** | **ssram** | **tcam**}

no debug platform tcam **search**

no debug platform tcam **write** {**forw-ram** | **reg** | **tcam**}

Syntax Description	**log l2** {**acl** {**input**	**output**}	**local**	**qos**}	Display Layer 2 field-based CAM look-up type debug messages. The keywords have these meanings:
		• **acl** {**input**	**output**}—Display input or output ACL look-up debug messages.
		• **local**—Display local forwarding look-up debug messages.
		• **qos**—Display classification and quality of service (QoS) look-up debug messages.

l3 {**acl** {**input** | **output**} | **ipv6** {**acl** {**input** | **output**} | **local** | **qos** | **secondary**} | **local** | **qos** | **secondary**}	Display Layer 3 field-based CAM look-up type debug messages. The keywords have these meanings: • **acl** {**input** | **output**}—Display input or output ACL look-up debug messages. • **ipv6** {**acl** {**input** | **output**} | **local** | **qos** | s**econdary**}—Display IPv6-based look-up debug messages. Options include displaying input or output ACL look-up, local forwarding look-up, classification and QoS look-up, or secondary forwarding look-up debug messages. • **local**—Display local forwarding look-up debug messages. • **qos**—Display classification and quality of service (QoS) look-up debug messages. • **secondary**—Display secondary forwarding look-up debug messages.
read {**reg** | **ssram** | **tcam**}	Display hardware-memory-read debug messages. The keywords have these meanings: • **reg**—Display hardware-memory-register read debug messages. • **ssram**—Display synchronous static RAM (SSRAM)-read debug messages. • **tcam**—Display hardware-memory-read debug messages.
search	Display supervisor-initiated hardware-memory-search results debug messages.
write {**forw-ram** | **reg** | **tcam**}	Display hardware-memory-write debug messages. The keywords have these meanings: **forw-ram**—Display forwarding-RAM write debug messages. **reg**—Display hardware-memory-register write debug messages. **tcam**—Display hardware-memory-write debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform tcam** command is the same as the **no debug platform tcam** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug platform udld

Use the **debug platform udld** privileged EXEC command to enable debugging of the platform-dependent UniDirectional Link Detection (UDLD) software. Use the **no** form of this command to disable debugging.

debug platform udld [**all** | **error** | **rpc** {**events** | **messages**}]

no debug platform udld [**all** | **error** | **rpc** {**events** | **messages**}]

Syntax Description		
all	(Optional) Display all UDLD debug messages.	
error	(Optional) Display error condition debug messages.	
rpc {**events**	**messages**}	(Optional) Display UDLD remote procedure call (RPC) debug messages. The keywords have these meanings:	
	• **events**—Display UDLD RPC events.	
	• **messages**—Display UDLD RPC messages.	

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug platform udld** command is the same as the **no debug platform udld** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug platform vlan

Use the **debug platform vlan** privileged EXEC command to enable debugging of the VLAN manager software. Use the **no** form of this command to disable debugging.

> **debug platform vlan** {**errors** | **mvid** | **rpc**}

> **no debug platform vlan** {**errors** | **mvid** | **rpc**}

Syntax Description

errors	Display VLAN error debug messages.
mvid	Display mapped VLAN ID allocations and free debug messages.
rpc	Display remote procedure call (RPC) debug messages.

Defaults

Debugging is disabled.

Command Modes

Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug pm

Use the **debug pm** privileged EXEC command to enable debugging of port manager (PM) activity. The port manager is a state machine that controls all the logical and physical interfaces. All features, such as VLANs, UniDirectional Link Detection (UDLD), and so forth, work with the port manager to provide switch functions. Use the **no** form of this command to disable debugging.

> 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**}

Syntax Description

all	Display all PM debug messages.
assert	Display assert debug messages.
card	Display line-card related-events debug messages.
etherchnl	Display EtherChannel related-events debug messages.
hatable	Display Host Access Table events debug messages.
messages	Display PM debug messages.
port	Display port related-events debug messages.
redundancy	Display redundancy debug messages.
registry	Display PM registry invocation debug messages.
sm	Display state-machine related-events debug messages.
span	Display spanning-tree related-events debug messages.
split	Display split-processor debug messages.
vlan	Display VLAN related-events debug messages.
vp	Display virtual port related-events debug messages.

✎
Note Though visible in the command-line help strings, the **scp** and **pvlan** keywords are not supported.

Defaults Debugging is disabled.

Command Modes Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug pm** command is the same as the **no debug pm** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug port-security

Use the **debug port-security** privileged EXEC command to enable debugging of the allocation and states of the port security subsystem. Use the **no** form of this command to disable debugging.

> **debug port-security**

> **no debug port-security**

Syntax Description	This command has no arguments or keywords.
Defaults	Debugging is disabled.
Command Modes	Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines

The **undebug port-security** command is the same as the **no debug port-security** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
show debugging	Displays information about the types of debugging that are enabled.
show port-security	Displays port-security settings for an interface or for the switch.

debug qos-manager

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

> **debug qos-manager** {**all** | **event** | **verbose**}

> **no debug qos-manager** {**all** | **event** | **verbose**}

Syntax Description		
all	Display all QoS-manager debug messages.	
event	Display QoS-manager related-event debug messages.	
verbose	Display QoS-manager detailed debug messages.	

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug qos-manager** command is the same as the **no debug qos-manager** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug spanning-tree

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

> **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**}

Syntax Description

all	Display all spanning-tree debug messages.
backbonefast	Display BackboneFast-event debug messages.
bpdu	Display spanning-tree bridge protocol data unit (BPDU) debug messages.
bpdu-opt	Display optimized BPDU handling debug messages.
config	Display spanning-tree configuration change debug messages.
csuf/csrt	Display cross-stack UplinkFast and cross-stack rapid transition activity debug messages. This keyword is supported only on Catalyst 3750-X switches.
etherchannel	Display EtherChannel-support debug messages.
events	Display spanning-tree topology event debug messages.
exceptions	Display spanning-tree exception debug messages.
general	Display general spanning-tree activity debug messages.
mstp	Debug Multiple Spanning Tree Protocol events.
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.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug spanning-tree backbonefast

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**]

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

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug spanning-tree bpdu

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**]

Syntax Description		
receive	(Optional) Display the nonoptimized path for received BPDU debug messages.	
transmit	(Optional) Display the nonoptimized path for sent BPDU debug messages.	

Defaults Debugging is disabled.

Command Modes Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug spanning-tree bpdu-opt

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

debug spanning-tree bpdu-opt [**detail** | **packet**]

no debug spanning-tree bpdu-opt [**detail** | **packet**]

Syntax Description		
	detail	(Optional) Display detailed optimized BPDU-handling debug messages.
	packet	(Optional) Display packet-level optimized BPDU-handling debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug spanning-tree mstp

Use the **debug spanning-tree mstp** privileged EXEC command to enable debugging of the Multiple Spanning Tree Protocol (MSTP) software. Use the **no** form of this command to disable debugging.

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**}

Syntax Description		
all	Enable all the debugging messages.	
boundary	Debug flag changes at these boundaries:	
	• An multiple spanning-tree (MST) region and a single spanning-tree region running Rapid Spanning Tree Protocol (RSTP)	
	• An MST region and a single spanning-tree region running 802.1D	
	• An MST region and another MST region with a different configuration	
bpdu-rx	Debug the received MST bridge protocol data units (BPDUs).	
bpdu-tx	Debug the sent MST BPDUs.	
errors	Debug MSTP errors.	
flush	Debug the port flushing mechanism.	
init	Debug the initialization of the MSTP data structures.	
migration	Debug the protocol migration state machine.	
pm	Debug MSTP port manager events.	
proposals	Debug handshake messages between the designated switch and the root switch.	
region	Debug the region synchronization between the switch processor (SP) and the route processor (RP).	
roles	Debug MSTP roles.	
sanity_check	Debug the received BPDU sanity check messages.	
sync	Debug the port synchronization events.	
tc	Debug topology change notification events.	
timers	Debug the MSTP timers for start, stop, and expire events.	

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

■ **debug spanning-tree mstp**

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug spanning-tree switch

Use the **debug spanning-tree switch** privileged EXEC command to enable debugging of the software interface between the Spanning Tree Protocol (STP) software module and the port manager software module. Use the **no** form of this command to disable debugging.

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**}

Syntax Description

all	Display all spanning-tree switch debug messages.
errors	Display debug messages for the interface between the spanning-tree software module and the port manager software module.
flush	Display debug messages for the shim flush operation.
general	Display general event debug messages.
helper	Display spanning-tree helper-task debug messages. Helper tasks handle bulk spanning-tree updates.
pm	Display port-manager event debug messages.
rx	Display received bridge protocol data unit (BPDU) handling debug messages. The keywords have these meanings: • **decode**—Display decoded received packets. • **errors**—Display receive error debug messages. • **interrupt**—Display interrupt service request (ISR) debug messages. • **process**—Display process receive BPDU debug messages.
state	Display spanning-tree port state change debug messages;
tx [**decode**]	Display sent BPDU handling debug messages. The keyword has this meaning: • **decode**—(Optional) Display decoded sent packets.
uplinkfast	Display uplinkfast packet transmission debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

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

debug spanning-tree uplinkfast

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

> **debug spanning-tree uplinkfast** [**exceptions**]

> **no debug spanning-tree uplinkfast** [**exceptions**]

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

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

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

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug sw-vlan

Use the **debug sw-vlan** privileged EXEC command to enable debugging of VLAN manager activities. Use the **no** form of this command to disable debugging.

debug sw-vlan {**badpmcookies** | **cfg-vlan** {**bootup** | **cli**} | **events** | **ifs** | **management** | **mapping** | **notification** | **packets** | **redundancy** | **registries** | **vtp**}

no debug sw-vlan {**badpmcookies** | **cfg-vlan** {**bootup** | **cli**} | **events** | **ifs** | **management** | **mapping** | **notification** | **packets** | **redundancy** | **registries** | **vtp**}

Syntax Description		
	badpmcookies	Display debug messages for VLAN manager incidents of bad port manager cookies.
	cfg-vlan {**bootup**	**cli**}	Display config-vlan debug messages. The keywords have these meanings: • **bootup**—Display messages when the switch is booting up. • **cli**—Display messages when the command-line interface (CLI) is in config-vlan mode.
	events	Display debug messages for VLAN manager events.
	ifs	See the **debug sw-vlan ifs** command.
	management	Display debug messages for VLAN manager management of internal VLANs.
	mapping	Display debug messages for VLAN mapping.
	notification	See the **debug sw-vlan notification** command.
	packets	Display debug messages for packet handling and encapsulation processes.
	redundancy	Display debug messages for VTP VLAN redundancy.
	registries	Display debug messages for VLAN manager registries.
	vtp	See the **debug sw-vlan vtp** command.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug sw-vlan** command is the same as the **no debug sw-vlan** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
show debugging	Displays information about the types of debugging that are enabled.
show vlan	Displays the parameters for all configured VLANs or one VLAN (if the VLAN name or ID is specified) in the administrative domain.
show vtp	Displays general information about VTP management domain, status, and counters.

debug sw-vlan ifs

Use the **debug sw-vlan ifs** privileged 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.

debug sw-vlan ifs {**open** {**read** | **write**} | **read** {**1** | **2** | **3** | **4**} | **write**}

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

Syntax Description

open {**read**	**write**}	Display VLAN manager IFS file-open operation debug messages. The keywords have these meanings: • **read**—Display VLAN manager IFS file-read operation debug messages. • **write**—Display VLAN manager IFS file-write operation debug messages.
read {**1**	**2**	**3**	**4**}	Display file-read operation debug messages for the specified error test (1, 2, 3, or 4).
write	Display file-write operation debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug sw-vlan ifs** command is the same as the **no debug sw-vlan ifs** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

When selecting the file read operation, Operation **1** reads the file header, which contains the header verification word and the file version number. Operation **2** reads the main body of the file, which contains most of the domain and VLAN information. Operation **3** reads type length version (TLV) descriptor structures. Operation **4** reads TLV data.

Related Commands

Command	Description
show debugging	Displays information about the types of debugging that are enabled.
show vlan	Displays the parameters for all configured VLANs or one VLAN (if the VLAN name or ID is specified) in the administrative domain.

debug sw-vlan notification

Use the **debug sw-vlan notification** privileged EXEC command to enable debugging of the activation and deactivation of Inter-Link Switch (ISL) VLAN IDs. Use the **no** form of this command to disable debugging.

> **debug sw-vlan notification** {**accfwdchange** | **allowedvlancfgchange** | **fwdchange** | **linkchange** | **modechange** | **pruningcfgchange** | **statechange**}

> **no debug sw-vlan notification** {**accfwdchange** | **allowedvlancfgchange** | **fwdchange** | **linkchange** | **modechange** | **pruningcfgchange** | **statechange**}

Syntax Description

accfwdchange	Display debug messages for VLAN manager notification of aggregated access interface spanning-tree forward changes.
allowedvlancfgchange	Display debug messages for VLAN manager notification of changes to the allowed VLAN configuration.
fwdchange	Display debug messages for VLAN manager notification of spanning-tree forwarding changes.
linkchange	Display debug messages for VLAN manager notification of interface link-state changes.
modechange	Display debug messages for VLAN manager notification of interface mode changes.
pruningcfgchange	Display debug messages for VLAN manager notification of changes to the pruning configuration.
statechange	Display debug messages for VLAN manager notification of interface state changes.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History

Release	Modification
12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug sw-vlan notification** command is the same as the **no debug sw-vlan notification** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands	Command	Description
	show debugging	Displays information about the types of debugging that are enabled.
	show vlan	Displays the parameters for all configured VLANs or one VLAN (if the VLAN name or ID is specified) in the administrative domain.

debug sw-vlan vtp

Use the **debug sw-vlan vtp** privileged EXEC command to enable debugging of the VLAN Trunking Protocol (VTP) code. Use the **no** form of this command to disable debugging.

debug sw-vlan vtp {**events** | **packets** | **pruning** [**packets** | **xmit**] | **redundancy** | **xmit**}

no debug sw-vlan vtp {**events** | **packets** | **pruning** | **redundancy** | **xmit**}

Syntax Description		
	events	Display debug messages for general-purpose logic flow and detailed VTP messages generated by the VTP_LOG_RUNTIME macro in the VTP code.
	packets	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 [**packets**	**xmit**]	Display debug messages generated by the pruning segment of the VTP code. The keywords have these meanings:
		• **packets**—(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.
		• **xmit**—(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.
	redundancy	Display debug messages for VTP redundancy.
	xmit	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.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

■ **debug sw-vlan vtp**

Usage Guidelines   The **undebug sw-vlan vtp** command is the same as the **no debug sw-vlan vtp** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

If no further parameters are entered after the **pruning keyword**, 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.

Related Commands

Command	Description
show debugging	Displays information about the types of debugging that are enabled.
show vtp	Displays general information about VTP management domain, status, and counters.

debug udld

Use the **debug udld** privileged EXEC command to enable debugging of the UniDirectional Link Detection (UDLD) feature. Use the **no** form of this command to disable UDLD debugging.

>   **debug udld** {**events** | **packets** | **registries**}

>   **no debug udld** {**events** | **packets** | **registries**}

Syntax Description		
	events	Display debug messages for UDLD process events as they occur.
	packets	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.
	registries	Display debug messages for the UDLD process as it processes registry calls from the UDLD process-dependent module and other feature modules.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug udld** command is the same as the **no debug udld** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

For **debug udld events**, 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 **debug udld packets**, 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 **debug udld registries**, 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

Related Commands	Command	Description
	show debugging	Displays information about the types of debugging that are enabled.
	show udld	Displays UDLD administrative and operational status for all ports or the specified port.

debug vqpc

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

debug vqpc [**all** | **cli** | **events** | **learn** | **packet**]

no debug vqpc [**all** | **cli** | **events** | **learn** | **packet**]

Syntax Description		
	all	(Optional) Display all VQP client debug messages.
	cli	(Optional) Display the VQP client command-line interface (CLI) debug messages.
	events	(Optional) Display VQP client event debug messages.
	learn	(Optional) Display VQP client address learning debug messages.
	packet	(Optional) Display VQP client packet information debug messages.

Defaults   Debugging is disabled.

Command Modes   Privileged EXEC

Command History	Release	Modification
	12.2(53)SE2	This command was introduced.

Usage Guidelines   The **undebug vqpc** command is the same as the **no debug vqpc** command.

When you enable debugging on a switch stack, 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* privileged EXEC command. Then enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

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

debug vqpc