



## SNMP Debug Commands on Cisco IOS XR Software

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This chapter describes the commands used to debug Simple Network Management Protocol (SNMP) on Cisco IOS XR software.



### Caution

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Because debugging output is assigned high priority in the CPU process, it can render the system unusable. For this reason, use **debug** commands only to troubleshoot specific problems or during troubleshooting sessions with Cisco technical support staff. Moreover, it is best to use **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.

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# debug snmp bag

To enable the debug messages for the Simple Network Management Protocol (SNMP) bag operation use the **debug snmp bag** command in EXEC mode. To disable the display of debug messages, use the **no** form of this command.

**debug snmp bag**

**no debug snmp bag**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values

**Command Modes** EXEC

## Command History

Release	Modification
Release 2.0	This command was introduced on the Cisco CRS-1.
Release 3.0	No modification.
Release 3.2	This command was supported on the Cisco XR 12000 Series Router.
Release 3.3.0	No modification.
Release 3.4.0	No modification.
Release 3.5.0	No modification.
Release 3.6.0	No modification.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

## Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

Task ID	Task ID	Operations
	snmp	read, write

**Examples**

The following example shows how to enable SNMP bag operation debugging:

```
RP/0/RP0/CPU0:router# debug snmp bag
```

# debug snmp client

To display the Simple Network Management Protocol (SNMP) client information, use the **debug snmp client** command in EXEC mode. To disable SNMP client information, use the **no** form of this command.

**debug snmp client**

**no debug snmp client**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values

**Command Modes** EXEC

Command History	Release	Modification
	Release 3.8.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.

**Usage Guidelines** To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

Task ID	Task ID	Operations
	snmp	read, write

**Examples** The following example shows how to enable the debug messages for the SNMP client:

```
RP/0/RP0/CPU0:router# debug snmp client
```

# debug snmp correlator

To display the Simple Network Management Protocol (SNMP) trap correlation data, use the **debug snmp correlator** command in EXEC mode. To disable SNMP trap correlation data, use the **no** form of this command.

```
debug snmp correlator {errors | events | verbose}
```

```
no debug snmp correlator {errors | events | verbose}
```

## Syntax Description

<b>errors</b>	Displays SNMP trap correlation error messages.
<b>events</b>	Displays SNMP trap correlation events information.
<b>verbose</b>	Displays SNMP trap correlation verbose information.

## Defaults

No default behavior or values

## Command Modes

EXEC

## Command History

Release	Modification
Release 3.8.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.

## Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

## Task ID

Task ID	Operations
snmp	read, write

## Examples

The following example shows how to enable the SNMP trap correlation debugging:

```
RP/0/RP0/CPU0:router# debug snmp correlator errors
```

# debug snmp ctxmapping

To enable the Simple Network Management Protocol (SNMP) context-mapping information, use the **debug snmp ctxmapping** command in EXEC mode. To disable SNMP context-mapping debugging information, use the **no** form of this command.

**debug snmp ctxmapping**

**no debug snmp ctxmapping**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values

**Command Modes** EXEC

## Command History

Release	Modification
Release 3.8.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.

## Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

## Task ID

Task ID	Operations
snmp	read, write

## Examples

The following example shows how to enable the debug messages for the SNMP context-mapping information:

```
RP/0/RP0/CPU0:router# debug snmp ctxmapping
```

# debug snmp general

To display the Simple Network Management Protocol (SNMP) general information, use the **debug snmp general** command in EXEC mode. To disable SNMP general information, use the **no** form of this command.

**debug snmp general**

**no debug snmp general**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values

**Command Modes** EXEC

Command History	Release	Modification
	Release 3.8.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.

**Usage Guidelines** To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

Task ID	Task ID	Operations
	snmp	read, write

**Examples** The following example shows how to display the the debug messages for the SNMP general information:

```
RP/0/RP0/CPU0:router# debug snmp general
```

# debug snmp request

To enable the Simple Network Management Protocol (SNMP) request information, use the **debug snmp request** command in EXEC mode. To disable SNMP request information, use the **no** form of this command.

**debug snmp request**

**no debug snmp request**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values

**Command Modes** EXEC

## Command History

Release	Modification
Release 3.8.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.

## Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

## Task ID

Task ID	Operations
snmp	read, write

## Examples

The following example shows how to display the the debug messages for the SNMP request information:

```
RP/0/RP0/CPU0:router# debug snmp general
```



# debug snmp config

To configure the Simple Network Management Protocol (SNMP) database transactions, use the **debug snmp config** command in EXEC mode. To disable SNMP configuration transactions, use the **no** form of this command.

**debug snmp config**

**no debug snmp config**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values

**Command Modes** EXEC

Command History	Release	Modification
	Release 2.0	This command was introduced on the Cisco CRS-1.
	Release 3.0	No modification.
	Release 3.2	This command was supported on the Cisco XR 12000 Series Router.
	Release 3.3.0	No modification.
	Release 3.4.0	No modification.
	Release 3.5.0	No modification.
	Release 3.6.0	No modification.
	Release 3.7.0	No modification.
	Release 3.8.0	No modification.

**Usage Guidelines** To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

**■ debug snmp config**

Task ID	Task ID	Operations
	snmp	read, write

**Examples**

The following example shows how to enable SNMP database transaction debugging:

```
RP/0/RP0/CPU0:router# debug snmp config
```

# debug snmp dll

To load or unload the Simple Network Management Protocol (SNMP) Management Information Base (MIB) Dynamic Link Library (DLL), use the **debug snmp dll** command in EXEC mode. To disable SNMP configuration transactions, use the **no** form of this command.

**debug snmp dll**

**no debug snmp dll**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values

**Command Modes** EXEC

## Command History

Release	Modification
Release 2.0	This command was introduced on the Cisco CRS-1.
Release 3.0	No modification.
Release 3.2	This command was supported on the Cisco XR 12000 Series Router.
Release 3.3.0	No modification.
Release 3.4.0	No modification.
Release 3.5.0	No modification.
Release 3.6.0	No modification.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

## Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

**debug snmp dll**

Task ID	Task ID	Operations
	snmp	read, write

**Examples**

The following example shows how to enable SNMP MIB DLL debugging:

```
RP/0/RP0/CPU0:router# debug snmp dll
```

# debug snmp lib

To display the Simple Network Management Protocol (SNMP) library data, use the **debug snmp lib** command in EXEC mode. To disable SNMP library display, use the **no** form of this command.

```
debug snmp lib {context | ipc {client | server} | mibmgr { cache | dll | general | server} | object
{general | map | request }} [job id]
```

```
no debug snmp lib {context | ipc {client | server} | mibmgr { cache | dll | general | server} | object
{general | map | request }} [job id]
```

Syntax Description		
<b>context</b>		Displays SNMP context library debug information.
<b>ipc</b>		Displays SNMP IPC library debug information.
<b>client</b>		Enables SNMP IPC client activity.
<b>server</b>		Enables SNMP IPC server activity.
<b>mibmgr</b>		Displays MIB Manager library debug information.
<b>cache</b>		Displays MIB cache transactions debug information.
<b>dll</b>		Displays MIB DLL debug information.
<b>general</b>		Displays general library debug information.
<b>server</b>		Displays SNMP agent interactions debug information.
<b>object</b>		Displays object DB library debug information.
<b>map</b>		Displays object DB operations debug information.
<b>request</b>		Displays SNMP requests processing debug information.
<b>job id</b>		Specifies a job ID.

**Defaults** No default behavior or values

**Command Modes** EXEC

Command History	Release	Modification
	Release 3.5.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
	Release 3.6.0	No modification.
	Release 3.7.0	No modification.
	Release 3.8.0	The <b>debug snmp lib</b> command replaced the <b>debug snmp lib cache</b> command.

**Usage Guidelines**

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

**Task ID**

Task ID	Operations
snmp	read, write

**Examples**

The following example shows how to enable SNMP library data debugging:

```
RP/0/RP0/CPU0:router# debug snmp lib context
```

# debug snmp mib

To display the Simple Network Management Protocol (SNMP) Management Information Base (MIB) data, use the **debug snmp mib** command in EXEC mode. To disable SNMP configuration transactions, use the **no** form of this command.

```
debug snmp mib {entitymib | all | accmib | arpmib | atmmib | atmoammib | atmqosmib | authmib |
bgpmib | bridgemib | bulkfilemib | cbqosmib | cdpmib | ciscoassetmib | ciscobgppamib |
ciscocontpmib | ciscocootnifmib | ciscoDs3mib | ciscoietfbfdmib | ciscoprocessmib |
ciscosensormib | ciscosonetmib | ciscosyslogmib | ciscosystemmib | confcopymib |
configmanmib | contextmappingmib | dot3admib | ds3mib | enhancedmempoolmib |
enhimagemib | etherlikemib | eventmib | expressionmib | fabmcastapplmib | frucontrolmib |
fabmcastmib | fabmib | flashmib | freemib | ftpclientmib | hsrpmib | icmpmib [location
node-id] | ietftcpmib | ietfudpmib | ifextmib | ifmib | ipmib [location node-id] |
ipsecflowmonmib | ipsecmib | ipsecpolmapmib | ipv4forward | ipv6forward | ipv6mib |
ipv6rfcmib | isismib | l3vpnib | maumib | mempoolmib | mgmd- mld- mib | mldmib |
mplslldpmib | mplslsrmib | mplstemib | mplstep2mpmib | mroutemib | msdpmib |
notiflogmib | ospfmib | ospfv3mib | pimib | pingmib | pwenetmib | pwfrmib | pwmib |
pwmplsmib | rfmb | rttmonmib | sonetmib | tcpmib | udpmib | vlanifrelationmib |
vplsdpmb | vplsmib}
```

```
no debug snmp mib {entitymib | all | accmib | arpmib | atmmib | atmoammib | atmqosmib |
authmib | bgpmib | bridgemib | bulkfilemib | cbqosmib | cdpmib | ciscoassetmib |
ciscobgppamib | ciscocontpmib | ciscocootnifmib | ciscoDs3mib | ciscoietfbfdmib |
ciscoprocessmib | ciscosensormib | ciscosonetmib | ciscosyslogmib | ciscosystemmib |
confcopymib | configmanmib | contextmappingmib | dot3admib | ds3mib |
enhancedmempoolmib | enhimagemib | etherlikemib | eventmib | expressionmib |
fabmcastapplmib | frucontrolmib | fabmcastmib | fabmib | flashmib | freemib | ftpclientmib |
hsrpmib | icmpmib [location node-id] | ietftcpmib | ietfudpmib | ifextmib | ifmib | ipmib
[location node-id] | ipsecflowmonmib | ipsecmib | ipsecpolmapmib | ipv4forward |
ipv6forward | ipv6mib | ipv6rfcmib | isismib | l3vpnib | maumib | mempoolmib | mgmd-
mld- mib | mldmib | mplslldpmib | mplslsrmib | mplstemib | mplstep2mpmib | mroutemib |
msdpmib | notiflogmib | ospfmib | ospfv3mib | pimib | pingmib | pwenetmib | pwfrmib |
pwmib | pwmplsmib | rfmb | rttmonmib | sonetmib | tcpmib | udpmib | vlanifrelationmib |
vplsdpmb | vplsmib}
```

## Syntax Description

<i>entitymib</i>	Displays entity MIB debug information.
<b>all</b>	Enables or disable all MIB debug information.
<b>accmib</b>	Displays accmib debug information.
<b>arpmib</b>	Displays ARP MIB debug information.
<b>atmmib</b>	Displays ATM MIB debug information.
<b>atmoammib</b>	Displays ATM OAM MIB debug information.
<b>atmqosmib</b>	Displays ATM QoS MIB debug information.
<b>authmib</b>	Displays authmib debug information.
<b>bgpmib</b>	Displays BGP MIB debug information.
<b>bridgemib</b>	Displays bridgemib debug information.
<b>bulkfilemib</b>	Displays bulkfilemib debug information.
<b>cbqosmib</b>	Displays cbqosmib debug information.

<b>cdpmib</b>	Displays CDP debug information.
<b>ciscoassetmib</b>	Displays Cisco asset MIB debug information.
<b>ciscobgppamib</b>	Displays Cisco BGP PA MIB debug information.
<b>ciscocontpmib</b>	Displays Cisco contp MIB debug information.
<b>ciscocootnifmib</b>	Displays Cisco cootnif MIB debug information.
<b>ciscoDs3mib</b>	Displays Cisco ds3 MIB debug information.
<b>ciscoietf bfdmib</b>	Displays Cisco IETF BFD MIB debug information.
<b>ciscoprocessmib</b>	Displays Cisco process MIB debug information.
<b>ciscosensormib</b>	Displays Cisco sensor MIB debug information.
<b>ciscosonetmib</b>	Displays Cisco sonet MIB debug information.
<b>ciscosyslogmib</b>	Displays Cisco system log MIB debug information.
<b>ciscosystemmib</b>	Displays Cisco system MIB debug information.
<b>confcopymib</b>	Displays configuration copy MIB debug information.
<b>configmanmib</b>	Displays configuration management MIB debug information.
<b>contextmappingmib</b>	Displays context mapping MIB debug information.
<b>dot3admib</b>	Displays dot3 administration MIB debug information.
<b>ds3mib</b>	Displays ds3 MIB debug information.
<b>enhancedmempoolmib</b>	Displays enhanced memory pool MIB debug information.
<b>enhimagemib</b>	Displays enhance image MIB debug information.
<b>etherlikemib</b>	Displays ethernet like MIB debug information.
<b>eventmib</b>	Displays event MIB debug information.
<b>expressionmib</b>	Displays expression MIB debug information.
<b>fabmcastapplmib</b>	Displays fabric multicast application MIB debug information.
<b>fabmcastmib</b>	Displays fabric multicast MIB debug information.
<b>fabmib</b>	Displays fabric MIB debug information.
<b>flashmib</b>	Displays flash MIB debug information.
<b>frucontrolmib</b>	Displays FRU control MIB debug information.
<b>freemib</b>	Displays free MIB debug information.
<b>ftpclientmib</b>	Displays ftp client MIB debug information.
<b>hsrpmib</b>	Displays HSRP MIB debug information.
<b>icmpmib</b>	Displays ICMP MIB debug information.
<b>location <i>node-id</i></b>	Displays ICMP MIB debug information for a specified location. The <i>node-id</i> argument is entered in the <i>rack/slot/module</i> notation.
<b>ietftcpmib</b>	Displays IETF TCP MIB debug information.
<b>ietfudpmib</b>	Displays IETF UDP MIB debug information.
<b>ifextmib</b>	Displays interface extension MIB debug information.
<b>ifmib</b>	Displays interface MIB debug information.
<b>ipmib</b>	Displays IP MIB debug information.
<b>location <i>node-id</i></b>	Displays IP MIB debug information for a specified location. The <i>node-id</i> argument is entered in the <i>rack/slot/module</i> notation.
<b>ipsecflowmonmib</b>	Displays IPsec flow monitor MIB debug information.
<b>ipsecmib</b>	Displays IPsec flow MIB debug information.



<b>ipsecpolmapmib</b>	Displays IPsec policy map MIB debug information.
<b>ipv4forward</b>	Displays IPv4 forward MIB debug information.
<b>ipv6forward</b>	Displays IPv6 forward MIB debug information.
<b>ipv6mib</b>	Displays IPv6 MIB debug information.
<b>ipv6rfcmib</b>	Displays IPv6 rfc MIB debug information.
<b>isismib</b>	Displays IS-IS MIB debug information.
<b>l3vpn</b>	Displays Layer 3 VPN MIB debug information.
<b>maumib</b>	Displays MAU MIB debug information.
<b>mempoolmib</b>	Displays memory pool MIB debug information.
<b>mgmd- mld- mib</b>	Displays MGMD MLD MIB debug information.
<b>mldmib</b>	Displays MLD MIB debug information.
<b>mplsldpmib</b>	Displays MPLS LDP MIB debug information.
<b>mplsrmib</b>	Displays MPLS LSRMIB debug information.
<b>mplstemib</b>	Displays MPLS TE MIB debug information.
<b>mplstep2mpmib</b>	Displays MPLS TE P2MP MIB debug information.
<b>mroutemib</b>	Displays mroute MIB debug information.
<b>msdpmib</b>	Displays MSDP MIB debug information.
<b>notiflogmib</b>	Displays notification log MIB debug information.
<b>ospfmib</b>	Displays OSPF MIB debug information.
<b>ospfv3mib</b>	Displays OSPFv3 MIB debug information.
<b>pimmib</b>	Displays PIM MIB debug information.
<b>pingmib</b>	Displays ping MIB debug information.
<b>pwenetmib</b>	Displays pwenet MIB debug information.
<b>pwfrmib</b>	Displays pwfr MIB debug information.
<b>pwmib</b>	Displays MIB password debug information.
<b>pwmplsmib</b>	Displays MPLS MIB password debug information.
<b>rfmib</b>	Displays RF MIB debug information.
<b>rttmonmib</b>	Displays RTTMON MIB debug information.
<b>sonetmib</b>	Displays SONET MIB debug information.
<b>tepmib</b>	Displays TCP MIB debug information.
<b>udpmib</b>	Displays UPD MIB debug information.
<b>vlanifrelationmib</b>	Displays VLAN interface relation MIB debug information.
<b>vplsdpmib</b>	Displays VPLS DP MIB debug information.
<b>vplsmib</b>	Displays VPLS MIB debug information.

**Defaults**

No default behavior or values

**Command Modes**

EXEC

**Command History**

Release	Modification
Release 2.0	This command was introduced on the Cisco CRS-1.
Release 3.0	No modification.
Release 3.2	This command was supported on the Cisco XR 12000 Series Router.
Release 3.3.0	No modification.
Release 3.4.0	The <b>ethermib</b> keyword was removed. The following keywords were added: <b>accmib, authmib, bulkfilemib, ciscoassetmib, ciscosensormib, ciscosonetmib, eventmib, expressionmib, frucontrolmib, ftpclientmib, ifextmib, ipsecflowmonmib, ipsecmib, ipsecpolmapmib, ipv6mib, ipv6rfcmib, l3vpn timer, mgmd-mld-mib, msdp timer, notiflog timer, ping timer, pwenet timer, pwmib, rfmib, rttmon timer.</b>
Release 3.5.0	No modification.
Release 3.6.0	No modification.
Release 3.7.0	No modification.
Release 3.8.0	The <b>fabhfr timer</b> and <b>qos timer</b> keywords were removed. The following keywords were added: <b>atmmib, atmoammib, atmqos timer, bridgemib, cbqos timer, ciscocont timer, ciscocootnif timer, ciscoDs3 timer, ciscoietfbfd timer, contextmapping timer, ds3 timer, etherlikemib, fab timer, freemib, isis timer, maumib, mplstep2mp timer, pwfr timer, vplsd timer, vplsmib.</b>

**Usage Guidelines**

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

**Task ID**

Task ID	Operations
snmp	read, write

**Examples**

The following example shows how to enable SNMP MIB data debugging:

```
RP/0/RP0/CPU0:router# debug snmp mib all
```

# debug snmp packets

To display the Simple Network Management Protocol (SNMP) incoming or outgoing data packets, use the **debug snmp packets** command in EXEC mode. To disable SNMP configuration transactions, use the **no** form of this command.

**debug snmp packets**

**no debug snmp packets**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values

**Command Modes** EXEC

## Command History

Release	Modification
Release 2.0	This command was introduced on the Cisco CRS-1.
Release 3.0	No modification.
Release 3.2	This command was supported on the Cisco XR 12000 Series Router.
Release 3.3.0	No modification.
Release 3.4.0	No modification.
Release 3.5.0	No modification.
Release 3.6.0	No modification.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

## Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

**debug snmp packets**

Task ID	Task ID	Operations
	snmp	read, write

**Examples**

The following example shows how to enable SNMP data packets debugging:

```
RP/0/RP0/CPU0:router# debug snmp packets
```

# debug snmp sysdb

To display the Simple Network Management Protocol (SNMP) database transactions, use the **debug snmp sysdb** command in EXEC mode. To disable SNMP configuration transactions, use the **no** form of this command.

**debug snmp sysdb**

**no debug snmp sysdb**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values

**Command Modes** EXEC

## Command History

Release	Modification
Release 2.0	This command was introduced on the Cisco CRS-1.
Release 3.0	No modification.
Release 3.2	This command was supported on the Cisco XR 12000 Series Router.
Release 3.3.0	No modification.
Release 3.4.0	No modification.
Release 3.5.0	No modification.
Release 3.6.0	No modification.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

## Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

**debug snmp sysdb**

Task ID	Task ID	Operations
	snmp	read, write

**Examples**

The following example shows how to enable SNMP database transactions debugging:

```
RP/0/RP0/CPU0:router# debug snmp sysdb
```

# debug snmp trap

To display the Simple Network Management Protocol (SNMP) Management Information Base (MIB) logging information, use the **debug snmp trap** command in EXEC mode. To disable SNMP MIB logging, use the **no** form of this command.

**debug snmp trap**

**no debug snmp trap**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values

**Command Modes** EXEC

Command History	Release	Modification
	Release 3.6.0	This command was introduced on the Cisco XR 12000 Series Router.
	Release 3.7.0	No modification.
	Release 3.8.0	No modification.

**Usage Guidelines** To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Debugging output is assigned high priority in the CPU process and, therefore, can affect system performance. For more information about the impact on system performance when using debug commands, refer to *Using Debug Commands on Cisco IOS XR Software*.

Task ID	Task ID	Operations
	snmp	read, write

**Examples** The following example shows how to enable SNMP database MIB logging:

```
RP/0/0/CPU0:router# debug snmp trap RP/0/0/CPU0
```

■ `debug snmp trap`