



Software Authentication Manager Debug Commands on Cisco IOS XR Software

This chapter describes the Cisco IOS XR software debug Software Authentication Manager (SAM) commands.

For high-level, conceptual information about using **debug** commands generally, see *Using Debug Commands on Cisco IOS XR Software*, Release 3.6.0.

debug sam

To display transactional information for the Software Authentication Manager (SAM), use the **debug sam** command in EXEC mode. To disable debugging output, use the **no** form of this command.

```
debug sam {data | events}
```

```
no debug sam {data | events}
```

Syntax Description

data	Displays data content for SAM events.
events	Displays all SAM events.

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 data keyword was added, and the detail keyword was removed.
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
crypto	read

Examples

The following is sample output from the **debug sam command** using the **events** keyword:

```
RP/0/RP0/CPU0:router# debug sam events
```

```
RP/0/RP0/CPU0:Aug 3 20:08:30.149 : rsvp[117]: Forwarding PATH message on POS0/3/0/0 from
51.51.51.51 to 70.70.70.70 (length=212 bytes, TTL=254, TOS=0xff, flags=0x1 ,RA)
RP/0/RP0/CPU0:k2#RP/0/0/CPU0:Aug 28 00:33:21.725 MET2MET,M3.5.0/: sam_server[265]: SAM
Table completes set_nvram_digest (0)
RP/0/RP0/CPU0:Aug 28 00:33:22.301 MET2MET,M3.5.0/: sam_server[265]: SAM Event: SAM begins
initialization
RP/0/RP0/CPU0:Aug 28 00:33:22.303 MET2MET,M3.5.0/: sam_server[265]: SAM begins table setup
RP/0/RP0/CPU0:Aug 28 00:33:22.307 MET2MET,M3.5.0/: sam_server[265]: SAM server binding to
SysDB at /oper/sam/node/0/
RP/0/RP0/CPU0:Aug 28 00:33:22.395 MET2MET,M3.5.0/: sam_server[265]: SAM completes table
setup, rc=No error
RP/0/RP0/CPU0:Aug 28 00:33:22.408 MET2MET,M3.5.0/: sam_server[265]: SAM Server begins
comparing the nvram digest for table SysDB Digest
RP/0/RP0/CPU0:Aug 28 00:33:22.477 MET2MET,M3.5.0/: sam_server[265]: SAM Server completes
comparing the nvram digest
```

■ debug sam