Tracing Commands

Information About Tracing

Information About Trace Management

The tracing functionality logs internal events. Trace files are automatically created and saved on the persistent storage device of specific platforms.

The contents of trace files are useful to troubleshoot if a device has an issue. The trace file outputs provide information that can be used for locating and solving the issue, and helps to get a detailed view of system actions and operations.

To view the most recent trace information for a specific process, use the **show logging [process | Profile | process-helper]** command. The process uses the name of the process, the profile lists predefined set of process names, and the profile-helper displays the available names.

To change the verbosity in a trace message output, you can adjust the trace level of processes using the **set platform software trace level** command. You can choose the **all** keyword to adjust the trace level for all the processes listed or you can select a specific process. When you select a specific process, there is also the option of adjust the trace level for a specific module or the **all-modules** keyword can be used to adjust all the process's modules.

Tracing Levels

Trace level determines the types of traces outputted. Each trace message is assigned a trace level. If the trace level of a process or its module it set at a greater than or equal to level as the trace message, the trace message is displayed otherwise, it is skipped. For example, the default trace level is **Notice** level, so all traces with the **Notice** level and below the notice level are included while the traces above the **Notice** level are excluded.

The following table shows all of the tracing levels that are available, and provides descriptions of the message that are displayed with each tracing level. The tracing levels listed in the table are from the lowest to the highest order. The default trace level is **Notice**.

Table 1: Tracing Levels and Descriptions

Tracing Level	Description
Fatal	The message stating the process is aborted.
Emergency	The message is regarding an issue that makes the system unusable.
Alert	The message indicating that an action must be taken immediately.
Critical	The message is regarding a critical event causing loss of important functions.
Error	The message is regarding a system error.
Warning	The message is regarding a system warning.
Notice	The message is regarding a significant event.

Tracing Level	Description
Informational	The message is useful for informational purposes only.
Debug	The message provides debug-level output.
Verbose	All possible trace messages are sent.
Noise	All possible trace messages for the module are logged. The noise level is always equal to the highest possible tracing level. Even if a future enhancement to tracing introduces a higher tracing level, the noise level will become equal to the level of that new enhancement.

set platform software trace

To set the trace level for a specific module within a process, use the **set platform software trace** command in privileged EXEC or user EXEC mode.

set platform software trace *process slot module trace-level*

Syntax Description

process	Process whose tracing level is being set. Options include: • **chassis-manager**—The Chassis Manager process. • **cli-agent**—The CLI Agent process. • **dbm**—The Database Manager process. • **emd**—The Environmental Monitoring process. • **fed**—The Forwarding Engine Driver process. • **forwarding-manager**—The Forwarding Manager process. • **host-manager**—The Host Manager process. • **iomd**—The Input/Output Module daemon (IOMd) process. • **ios**—The IOS process. • **license-manager**—The License Manager process. • **logger**—The Logging Manager process. • **platform-mgr**—The Platform Manager process. • **pluggable-services**—The Pluggable Services process. • **replication-mgr**—The Replication Manager process. • **shell-manager**—The Shell Manager process. • **smd**—The Session Manager process. • **table-manager**—The Table Manager Server. • **wireless**—The wireless controller module process. • **wireshark**—The Embedded Packet Capture (EPC) Wireshark process.

slot	Hardware slot where the process for which the trace level is set, is running. Options include: • *number*—Number of the SIP slot of the hardware module where the trace level is set. For instance, if you want to specify the SIP in SIP slot 2 of the switch, enter 2. • *SIP-slot / SPA-bay*—Number of the SIP switch slot and the number of the shared port adapter (SPA) bay of that SIP. For instance, if you want to specify the SPA in bay 2 of the SIP in switch slot 3, enter 3/2. • **F0**—The Embedded-Service-Processor in slot 0. • **FP active**—The active Embedded-Service-Processor. • **R0**—The route processor in slot 0. • **RP active**—The active route processor. • **switch** <*number*> —The switch with its number specified. • **switch active**—The active switch. • **switch standby**—The standby switch.
module	Module within the process for which the tracing level is set.

trace-level	Trace level. Options include: • **debug**—Debug level tracing. A debug-level trace message is a non-urgent message providing a large amount of detail about the module. • **emergency**—Emergency level tracing. An emergency-level trace message is a message indicating that the system is unusable. • **error**—Error level tracing. An error-level tracing message is a message indicating a system error. • **info**—Information level tracing. An information-level tracing message is a non-urgent message providing information about the system. • **noise**—Noise level tracing. The noise level is always equal to the highest tracing level possible and always generates every possible tracing message. The noise level is always equal to the highest-level tracing message possible for a module, even if future enhancements to this command introduce options that allow users to set higher tracing levels. • **notice**—The message is regarding a significant issue, but the switch is still working normally. • **verbose**—Verbose level tracing. All possible tracing messages are sent when the trace level is set to verbose. • **warning**—Warning messages.

Command Default

The default tracing level for all modules is **notice**.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Everest 16.5.1a	This command was introduced.

Usage Guidelines

The *module* options vary by process and by *hardware-module*. Use the ? option when entering this command to see which *module* options are available with each keyword sequence.

Trace files are stored in the tracelogs directory in the harddisk: file system. These files can be deleted without doing any harm to your switch operation.

Trace file output is used for debugging. The trace level is a setting that determines how much information should be stored in trace files about a module.

Examples

This example shows how to set the trace level for all the modules in dbm process:

```
# set platform software trace dbm R0 all-modules debug
```

show platform software trace level

To view the trace levels for all the modules under a specific process, use the **show platform software trace level** command in privileged EXEC or user EXEC mode.

show platform software trace level *process slot*

Syntax Description

process	Process whose tracing level is being set. Options include: • **chassis-manager**—The Chassis Manager process. • **cli-agent**—The CLI Agent process. • **cmm**—The CMM process. • **dbm**—The Database Manager process. • **emd**—The Environmental Monitoring process. • **fed**—The Forwarding Engine Driver process. • **forwarding-manager**—The Forwarding Manager process. • **geo**—The Geo Manager process. • **host-manager**—The Host Manager process. • **interface-manager**—The Interface Manager process. • **iomd**—The Input/Output Module daemon (IOMd) process. • **ios**—The IOS process. • **license-manager**—The License Manager process. • **logger**—The Logging Manager process. • **platform-mgr**—The Platform Manager process. • **pluggable-services**—The Pluggable Services process. • **replication-mgr**—The Replication Manager process. • **shell-manager**—The Shell Manager process. • **sif**—The Stack Interface (SIF) Manager process. • **smd**—The Session Manager process. • **stack-mgr**—The Stack Manager process. • **table-manager**—The Table Manager Server. • **thread-test**—The Multithread Manager process. • **virt-manager**—The Virtualization Manager process. • **wireless**—The wireless controller module process.

slot	Hardware slot where the process for which the trace level is set, is running. Options include:
	• *number*—Number of the SIP slot of the hardware module where the trace level is set. For instance, if you want to specify the SIP in SIP slot 2 of the switch, enter 2.
	• *SIP-slot / SPA-bay*—Number of the SIP switch slot and the number of the shared port adapter (SPA) bay of that SIP. For instance, if you want to specify the SPA in bay 2 of the SIP in switch slot 3, enter 3/2.
	• **F0**—The Embedded Service Processor in slot 0.
	• **F1**—The Embedded Service Processor in slot 1.
	• **FP active**—The active Embedded Service Processor.
	• **R0**—The route processor in slot 0.
	• **RP active**—The active route processor.
	• **switch** <*number*> —The switch, with its number specified.
	• **switch active**—The active switch.
	• **switch standby**—The standby switch.
	  • *number*—Number of the SIP slot of the hardware module where the trace level is set. For instance, if you want to specify the SIP in SIP slot 2 of the switch, enter 2.
	  • *SIP-slot / SPA-bay*—Number of the SIP switch slot and the number of the shared port adapter (SPA) bay of that SIP. For instance, if you want to specify the SPA in bay 2 of the SIP in switch slot 3, enter 3/2.
	  • **F0**—The Embedded Service Processor in slot 0.
	  • **FP active**—The active Embedded Service Processor.
	  • **R0**—The route processor in slot 0.
	  • **RP active**—The active route processor.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Everest 16.5.1a	This command was introduced.

Examples

This example shows how to view the trace level:

```
# show platform software trace level dbm switch active R0
```

```
Module Name                      Trace Level
--------------------------------------------------
binos                            Notice
binos/brand                      Notice
bipc                             Notice
btrace                           Notice
bump_ptr_alloc                   Notice
cdllib                           Notice
chasfs                           Notice
dbal                             Informational
dbm                              Debug
evlib                            Notice
evutil                           Notice
file_alloc                       Notice
green-be                         Notice
ios-avl                          Notice
klib                             Debug
services                         Notice
sw_wdog                          Notice
syshw                            Notice
tdl_cdlcore_message              Notice
tdl_dbal_root_message            Notice
tdl_dbal_root_type               Notice
```

request platform software trace archive

To archive all the trace logs relevant to all the processes running on a system since the last reload on the switch and to save this in the specified location, use the **request platform software trace archive** command in privileged EXEC or user EXEC mode.

request platform software trace archive [**last** *number-of-days* [**days** [**target** *location*]] | **target** *location*]

Syntax Description

last *number-of-days*	Specifies the number of days for which the trace files have to be archived.
target *location*	Specifies the location and name of the archive file.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Everest 16.5.1a	This command was introduced.

Usage Guidelines

This archive file can be copied from the system, using the tftp or scp commands.

Examples

This example shows how to archive all the trace logs of the processes running on the switch since the last 5 days:

```
# request platform software trace archive last 5 days target flash:test_archive
```

show platform software btrace-manager

To display the most recent UTF/UTM information for a specific module, use the **show platform software btrace-manager** command in privileged EXEC or user EXEC mode.

show platform software trace filter-binary *filter* [**status** *UTF* *UTM*]

Syntax Description

filter	Shows the UTF binary stream filter.
status	Shows the status of the binary trace manager filter.
UTF	Shows the UTF unified trace file.
UTM	Shows the UTM trace encoder.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Everest 16.5.1a	This command was introduced.

Examples

```
Device# show platform software btrace-manager R0 utf
Estimated disk usage for UTF storage (mbytes):........61
Disk UTF quota set from: default
Stored preserved UTF time window (current boot):
 [2023/03/17 08:40:00.419987197] - [2023/03/17 20:16:59.895805251]
Stored non-preserved UTF time window (current boot): none
Disk usage for UTF storage (mbytes):..................23
Maximum number of files to retain:....................27
Number of retained UTF files:........................18
Maximum inflated UTF file size (mbytes):..............20
Maximum number of files to preserve:..................2
Number of preserved UTF files:........................2
Stale messages from stream:...........................0
Compressed file write failures (disk full):...........0
```

```
Device# show platform software btrace-manager R0 UTM brief
Current Time ........................... Fri Mar 17 20:55:25 2023
Unified Consolidated Mode .............. FALSE
Process [Main-ID / Demux-ID / FRU ] .... [6382 / 17304 / RP-FRU]
Number of Processes  ................... 79
Number of Active trace files  .......... 61
Message Rate/Sec [Current/Average/Peak]. 20 / 11 / 10356
Total Messages ......................... 311406
```

set logging

To display the time zone for logging operations, use the **set logging** command in privileged EXEC or user EXEC mode.

set logging { **backtrace** *process* | **marker** *string* | **ra** { **collect** } | **timezone** { **UTC** | **local** } | **tracelog-number** *process* | **tracelog-files-to-preserve** *number* | **tracelog-storage-quota** *size* }

Syntax Description

backtrace	Displays the backtrace details of a specific process.
marker	Selects the logs corresponding to the specified marker: • **start last marker**— The **latest** matching marker in the marker list. • **end marker**— The first matching marker **after** the start marker.
timezone	Sets the time zone to be displayed in trace logs. The time zone set by using the **set logging** command is displayed for the trace logs of **show logging** and **monitor logging** commands. If the time zone is not set for a device, then the trace logss appear in Cordinated Universal Time (UTC).
ra	Sets the RA attributes.
tracelog-number	Sets the tracelog number of a specific process.
tracelog-files-to-preserve	Set amount of files to preserve from rotation
tracelog-storage-quota	Set Tracelog files to preserve

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Usage Guidelines

In scenarios where the time zone has already been set and the trace logs need to be dispalyed in UTC, use the command **set logging timezone UTC** and the trace logs will appear in UTC. Note that using this command, you can only configure how you want to see the timestamp for trace logs. The timestamps within the trace file is not modified.

This example shows the trace logs when the time zone is set to **UTC**.

```
device_2_9222#show clock *06:14:29.031 IST Fri Oct 4 2019

device_2_9222#show logging process ios
Displaying logs from the last 0 days, 0 hours, 5 minutes, 13 seconds
executing cmd on chassis 1 ...
Collecting files on current[1] chassis.
# of files collected = 15
2019/10/04 06:12:38.051848 {IOSRP_R0-0}{1}: [iosrp] [6107]: (info): *Oct 4 00:42:37.992:
%VUDI-6-EVENT:
[serial number: 9SQTGKYU119], [vUDI: ], vUDI is successfully retrieved from license file
```

```
device_2_9222#set logging timezone UTC

device_2_9222#show logging process ios
Displaying logs from the last 0 days, 0 hours, 5 minutes, 40 seconds
executing cmd on chassis 1 ...
Collecting files on current[1] chassis.
# of files collected = 15
2019/10/04 00:42:38.051848 {IOSRP_R0-0}{1}: [iosrp] [6107]: (info): *Oct 4 00:42:37.992:
%VUDI-6-EVENT:
[serial number: 9SQTGKYU119], [vUDI: ], vUDI is successfully retrieved from license file
```

This example shows the trace logs when the time zone is set to **local**.

```
device_2_9222#set logging timezone local

device_2_9222#show logging process ios
Displaying logs from the last 0 days, 0 hours, 7 minutes, 32 seconds
executing cmd on chassis 1 ...
Collecting files on current[1] chassis.
# of files collected = 12
2019/10/04 06:12:38.051848 {IOSRP_R0-0}{1}: [iosrp] [6107]: (info): *Oct 4 00:42:37.992:
%VUDI-6-EVENT: [serial number: 9SQTGKYU119], [vUDI: ], vUDI is successfully retrieved from
 license file
```

set logging marker

To add a marker trace to all the processes, use the **set logging marker** command. Use the **show logging markers** command to see the markers that were set using the **set logging marker** along with the timestamp.

set logging marker *marker-name*

Syntax Description

marker-name	Sets the marker trace in the trace logs of a process. The marker string entered is not case sensitive.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

This example show how to set a logging marker.

```
Device# set logging marker global_100

Device# show logging markers
Timestamp UTC                 Marker
--------------------------------------------------------------------------------
2023/03/13 10:31:34.667836    global_100
```

show logging

To display the state of system logging (syslog) and the contents of the standard system logging buffer, use the **show logging** command in privileged EXEC or user EXEC mode.

show logging

Syntax Description

This command has no arguments or keywords.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Examples

This example shows the output of the **show logging** command:

```
device# show logging
Syslog logging: enabled (0 messages dropped, 2 messages rate-limited, 0 flushes, 0 overruns,
 xml disabled, filtering disabled)
No Active Message Discriminator.

No Inactive Message Discriminator.

    Console logging: level debugging, 67 messages logged, xml disabled,
                     filtering disabled
    Monitor logging: level debugging, 0 messages logged, xml disabled,
                     filtering disabled
    Buffer logging:  level debugging, 160 messages logged, xml disabled,
                    filtering disabled
    Exception Logging: size (4096 bytes)
    Count and timestamp logging messages: disabled
    File logging: disabled
    Persistent logging: disabled

No active filter modules.

    Trap logging: level informational, 157 message lines logged
        Logging Source-Interface:       VRF Name:
    TLS Profiles:

Log Buffer (102400 bytes):

*Mar  9 11:32:47.051: %SMART_LIC-6-AGENT_ENABLED: Smart Agent for Licensing is enabled
*Mar  9 11:32:50.053: pagp init: platform supports EC/LACP xFSURA Tracing tool registry
return: 0
*Mar  9 11:32:50.103: LACP-GR: infra cb, GR_NONE

*Mar  9 11:32:50.104: BFD: brace register success
*Mar  9 11:32:52.617: %CRYPTO-4-AUDITWARN: Encryption audit check could not be performed
*Mar  9 11:32:52.617: %CRYPTO_ENGINE-4-CSDL_COMPLIANCE_DISABLED: Cisco PSB security compliance
 has been disabled
*Mar  9 11:32:52.630: %SPANTREE-5-EXTENDED_SYSID: Extended SysId enabled for type vlan
*Mar  9 11:32:52.964: %LINK-3-UPDOWN: Interface Lsmpi18/3, changed state to up
```

```
*Mar  9 11:32:52.976: %LINK-3-UPDOWN: Interface EOBC18/1, changed state to up
*Mar  9 11:32:52.976: %LINEPROTO-5-UPDOWN: Line protocol on Interface LI-Null0, changed
state to up
*Mar  9 11:32:52.977: %LINK-3-UPDOWN: Interface GigabitEthernet0/0, changed state to down
*Mar  9 11:32:52.977: %LINK-3-UPDOWN: Interface LIIN18/2, changed state to up
*Mar  9 11:32:52.977: %LINK-5-CHANGED: Interface Bluetooth0/4, changed state to
administratively down
*Mar  9 11:32:53.072: %PNP-6-PNP_DISCOVERY_STARTED: PnP Discovery started
*Mar  9 11:32:53.075: %HMANRP-6-HMAN_IOS_CHANNEL_INFO: HMAN-IOS channel event for switch
1: EMP_RELAY: Channel UP!
<output truncated>
```

This example shows the output of show logging command for switching devices:

```
device# show logging
Syslog logging: enabled (0 messages dropped, 2 messages rate-limited, 0 flushes, 0 overruns,
 xml disabled, filtering disabled)

No Active Message Discriminator.



No Inactive Message Discriminator.


    Console logging: level debugging, 97 messages logged, xml disabled,
                     filtering disabled
    Monitor logging: level debugging, 0 messages logged, xml disabled,
                     filtering disabled
    Buffer logging:  level debugging, 190 messages logged, xml disabled,
                    filtering disabled
    Exception Logging: size (4096 bytes)
    Count and timestamp logging messages: disabled
    File logging: disabled
    Persistent logging: disabled

No active filter modules.

    Trap logging: level informational, 187 message lines logged
        Logging Source-Interface:       VRF Name:
    TLS Profiles:

Log Buffer (102400 bytes):

*Mar  9 11:32:47.051: %SMART_LIC-6-AGENT_ENABLED: Smart Agent for Licensing is enabled
*Mar  9 11:32:50.053: pagp init: platform supports EC/LACP xFSURA Tracing tool registry
return: 0
*Mar  9 11:32:50.103: LACP-GR: infra cb, GR_NONE

*Mar  9 11:32:50.104: BFD: brace register success
*Mar  9 11:32:52.617: %CRYPTO-4-AUDITWARN: Encryption audit check could not be performed
*Mar  9 11:32:52.617: %CRYPTO_ENGINE-4-CSDL_COMPLIANCE_DISABLED: Cisco PSB security compliance
 has been disabled
*Mar  9 11:32:52.630: %SPANTREE-5-EXTENDED_SYSID: Extended SysId enabled for type vlan
*Mar  9 11:32:52.964: %LINK-3-UPDOWN: Interface Lsmpi18/3, changed state to up
*Mar  9 11:32:52.976: %LINK-3-UPDOWN: Interface EOBC18/1, changed state to up
*Mar  9 11:32:52.976: %LINEPROTO-5-UPDOWN: Line protocol on Interface LI-Null0, changed
state to up
*Mar  9 11:32:52.977: %LINK-3-UPDOWN: Interface GigabitEthernet0/0, changed state to down
*Mar  9 11:32:52.977: %LINK-3-UPDOWN: Interface LIIN18/2, changed state to up
*Mar  9 11:32:52.977: %LINK-5-CHANGED: Interface Bluetooth0/4, changed state to
administratively down
*Mar  9 11:32:53.072: %PNP-6-PNP_DISCOVERY_STARTED: PnP Discovery started
```

```
*Mar  9 11:32:53.075: %HMANRP-6-HMAN_IOS_CHANNEL_INFO: HMAN-IOS channel event for switch
1: EMP_RELAY: Channel UP!
*Mar  9 11:32:35.689: %STACKMGR-6-STACK_LINK_CHANGE: Switch 1 R0/0: stack_mgr: Stack port
1 on Switch 1 is cable-not-connected
*Mar  9 11:32:35.689: %STACKMGR-6-STACK_LINK_CHANGE: Switch 1 R0/0: stack_mgr: Stack port
2 on Switch 1 is down
*Mar  9 11:32:35.689: %STACKMGR-6-STACK_LINK_CHANGE: Switch 1 R0/0: stack_mgr: Stack port
2 on Switch 1 is cable-not-connected
*Mar  9 11:32:36.114: %STACKMGR-4-SWITCH_ADDED: Switch 1 R0/0: stack_mgr: Switch 1 has been
 added to the stack.
*Mar  9 11:32:38.537: %STACKMGR-4-SWITCH_ADDED: Switch 1 R0/0: stack_mgr: Switch 1 has been
 added to the stack.
*Mar  9 11:32:40.548: %STACKMGR-4-SWITCH_ADDED: Switch 1 R0/0: stack_mgr: Switch 1 has been
 added to the stack.
*Mar  9 11:32:40.548: %STACKMGR-6-ACTIVE_ELECTED: Switch 1 R0/0: stack_mgr: Switch 1 has
been elected ACTIVE.
*Mar  9 11:32:53.079: %HMANRP-6-EMP_NO_ELECTION_INFO: Could not elect active EMP switch,
setting emp active switch to 0: EMP_RELAY: Could not elect switch with mgmt port UP
*Mar  9 11:32:53.541: %SYS-5-CONFIG_P: Configured programmatically by process MGMT VRF
Process from console as vty0
<output truncated>
```

This example shows the output of show logging command for routing devices:

```
Syslog logging: enabled (0 messages dropped, 5 messages rate-limited, 0 flushes, 0 overruns,
 xml disabled, filtering disabled)

No Active Message Discriminator.



No Inactive Message Discriminator.


    Console logging: disabled
    Monitor logging: level debugging, 0 messages logged, xml disabled,
                     filtering disabled
    Buffer logging:  level debugging, 117 messages logged, xml disabled,
                    filtering disabled
    Exception Logging: size (4096 bytes)
    Count and timestamp logging messages: disabled
    Persistent logging: disabled

No active filter modules.

    Trap logging: level informational, 114 message lines logged
        Logging Source-Interface:       VRF Name:
    TLS Profiles:

Log Buffer (102400 bytes):

*Mar 10 08:51:07.464: %CRYPTO-5-SELF_TEST_START: Crypto algorithms release (Rel5b), Entropy
 release (3.4.1)
       begin self-test
*Mar 10 08:51:07.687: %CRYPTO-5-SELF_TEST_END: Crypto algorithms self-test completed
successfully
       All tests passed.
*Mar 10 08:51:10.262: %SMART_LIC-6-AGENT_ENABLED: Smart Agent for Licensing is enabled
*Mar 10 08:51:10.428: %SMART_LIC-6-EXPORT_CONTROLLED: Usage of export controlled features
is not allowed
*Mar 10 08:51:13.266: SDWAN INFO: sdwan_if subsys init for autonomous mode
*Mar 10 08:51:13.266: SDWAN INFO: Received ctrl_mng_mode Enable event
*Mar 10 08:51:13.483: SDWAN INFO: IOS-SDWAN-RP: Registered for chasfs events, rc 0
```

```
*Mar 10 08:51:14.309: %SPANTREE-5-EXTENDED_SYSID: Extended SysId enabled for type vlan
*Mar 10 08:51:14.312: %TLSCLIENT-5-TLSCLIENT_IOS: TLS Client is IOS based
*Mar 10 08:51:14.420: %CRYPTO_ENGINE-5-CSDL_COMPLIANCE_ENFORCED: Cisco PSB security compliance
 is being enforced
*Mar 10 08:51:14.420: %CRYPTO_ENGINE-5-CSDL_COMPLIANCE_EXCEPTION_ADDED: Cisco PSB security
 compliance exception has been added by this platform for use of RSA Key Size
*Mar 10 08:51:14.459: %CUBE-3-LICENSING:  SIP trunking (CUBE) licensing is now based on
dynamic sessions counting, static license capacity configuration through 'mode border-element
 license capacity' would be ignored.
*Mar 10 08:51:14.459: %SIP-5-LICENSING: CUBE license reporting period has been set to the
minimum value of 8 hours.
*Mar 10 08:51:14.496: %VOICE_HA-7-STATUS: CUBE HA-supported platform
detected.pm_platform_init() line :3156

*Mar 10 08:51:16.689: %IOSXE_RP_ALARM-2-PEM: ASSERT CRITICAL Power Supply Bay 1 Power
Supply/FAN Module Missing
*Mar 10 08:51:16.712: %CRYPTO_SL_TP_LEVELS-6-ROMMON_VAL: Current rommon value: T1
*Mar 10 08:51:16.712: %CRYPTO_SL_TP_LEVELS-6-TIER_BASED_LIC: Tier Based License Support: 1
*Mar 10 08:51:16.713: %CRYPTO_SL_TP_LEVELS-6-TP_THROTTLE_STATE: Crypto throughput is
throttled. New level is 250000
*Mar 10 08:51:16.762: %LINK-3-UPDOWN: Interface EOBC0, changed state to up
*Mar 10 08:51:16.779: %LINK-3-UPDOWN: Interface Lsmpi0, changed state to up
*Mar 10 08:51:16.779: %LINEPROTO-5-UPDOWN: Line protocol on Interface LI-Null0, changed
state to up
*Mar 10 08:51:16.780: %LINEPROTO-5-UPDOWN: Line protocol on Interface VoIP-Null0, changed
state to up
*Mar 10 08:51:16.780: %LINEPROTO-5-UPDOWN: Line protocol on Interface SR0, changed state
to up
*Mar 10 08:51:16.781: %LINK-3-UPDOWN: Interface LIIN0, changed state to up
*Mar 10 08:51:16.929: %PNP-6-PNP_DISCOVERY_STARTED: PnP Discovery started
*Mar 10 08:50:14.051: %IOSXE-6-PLATFORM: R0/0: disk-module: Number of disks detected:1
*Mar 10 08:50:24.124: %IOSXE-6-PLATFORM: R0/0: disk-module: forcing config of LVM in
non-raid-enable case
*Mar 10 08:50:24.143: %IOSXE-6-PLATFORM: R0/0: disk-module: /obfl is not mounted yet,
sleeping...
*Mar 10 08:50:25.152: %IOSXE-6-PLATFORM: R0/0: disk-module: /obfl is not mounted yet,
sleeping...
*Mar 10 08:50:26.161: %IOSXE-6-PLATFORM: R0/0: disk-module: /obfl is not mounted yet,
sleeping...
*Mar 10 08:50:27.171: %IOSXE-6-PLATFORM: R0/0: disk-module: /obfl is not mounted yet,
sleeping...
*Mar 10 08:50:28.181: %IOSXE-6-PLATFORM: R0/0: disk-module: /obfl is not mounted yet,
sleeping...
*Mar 10 08:50:29.200: %IOSXE-6-PLATFORM: R0/0: disk-module: /obfl is not mounted yet,
sleeping...
*Mar 10 08:50:31.555: %IOSXE-6-PLATFORM: R0/0: disk-module: check_lvm_mismatch: disk_count=1,
 pv_count=1, db_pv_uuid=PVUUID:vcxG9z-fWQg-Q1yS-eeFk-kEVA-hmTX-Wiklni uuid_count=1
*Mar 10 08:50:31.783: %IOSXE-6-PLATFORM: R0/0: disk-module: no mismatch found
*Mar 10 08:50:32.138: %IOSXE-6-PLATFORM: R0/0: disk-module: Volume group alredy existing
<output truncated>
```

This example shows the output of show logging command for wireless devices:

```
device#show logging
Syslog logging: enabled (0 messages dropped, 5 messages rate-limited, 0 flushes, 0 overruns,
 xml disabled, filtering disabled)

No Active Message Discriminator.



No Inactive Message Discriminator.
```

```
    Console logging: disabled
    Monitor logging: level debugging, 0 messages logged, xml disabled,
                     filtering disabled
    Buffer logging:  level debugging, 130 messages logged, xml disabled,
                    filtering disabled
    Exception Logging: size (4096 bytes)
    Count and timestamp logging messages: disabled
    Persistent logging: disabled

No active filter modules.

    Trap logging: level informational, 130 message lines logged
        Logging Source-Interface:       VRF Name:
    TLS Profiles:

Log Buffer (102400 bytes):

*Mar 10 08:50:59.304: %CRYPTO-5-SELF_TEST_START: Crypto algorithms release (Rel5b), Entropy
 release (3.4.1)
       begin self-test
*Mar 10 08:50:59.606: %CRYPTO-5-SELF_TEST_END: Crypto algorithms self-test completed
successfully
       All tests passed.
*Mar 10 08:51:02.432: %SMART_LIC-6-AGENT_ENABLED: Smart Agent for Licensing is enabled
*Mar 10 08:51:02.661: %SMART_LIC-6-EXPORT_CONTROLLED: Usage of export controlled features
is not allowed
*Mar 10 08:51:05.434: SDWAN INFO: sdwan_if subsys init for autonomous mode
*Mar 10 08:51:05.434: SDWAN INFO: Received ctrl_mng_mode Enable event
*Mar 10 08:51:05.710: SDWAN INFO: IOS-SDWAN-RP: Registered for chasfs events, rc 0
*Mar 10 08:51:06.812: %SPANTREE-5-EXTENDED_SYSID: Extended SysId enabled for type vlan
*Mar 10 08:51:06.816: %TLSCLIENT-5-TLSCLIENT_IOS: TLS Client is IOS based
*Mar 10 08:51:06.938: %CRYPTO_ENGINE-5-CSDL_COMPLIANCE_ENFORCED: Cisco PSB security compliance
 is being enforced
*Mar 10 08:51:06.938: %CRYPTO_ENGINE-5-CSDL_COMPLIANCE_EXCEPTION_ADDED: Cisco PSB security
 compliance exception has been added by this platform for use of RSA Key Size
*Mar 10 08:51:06.982: %CUBE-3-LICENSING:  SIP trunking (CUBE) licensing is now based on
dynamic sessions counting, static license capacity configuration through 'mode border-element
 license capacity' would be ignored.
*Mar 10 08:51:06.982: %SIP-5-LICENSING: CUBE license reporting period has been set to the
minimum value of 8 hours.
*Mar 10 08:51:07.032: %VOICE_HA-7-STATUS: CUBE HA-supported platform
detected.pm_platform_init() line :3156

*Mar 10 08:51:09.341: %IOSXE_RP_ALARM-2-PEM: ASSERT CRITICAL Power Supply Bay 1 Power
Supply/FAN Module Missing
*Mar 10 08:51:09.378: %CRYPTO_SL_TP_LEVELS-6-ROMMON_VAL: Current rommon value: 1000000
*Mar 10 08:51:09.378: %CRYPTO_SL_TP_LEVELS-6-TIER_BASED_LIC: Tier Based License Support: 1
<output truncated>
```

show logging process

To view messages logged by binary trace for a process or processes, use the **show logging process** command in privileged EXEC or user EXEC mode.

show logging process *process-name*

Syntax Description

process-name	You can choose a certain process for which the logs need to be displayed. Example: **dbm**, **sman**, **ios**, **btman** and so on. The process name is not case sensitive.

Command Default

The default tracing level for all modules is **notice**.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

This example shows how to display the logs below the **notice** level.

```
device#show logging process ios level notice
Logging display requested on 2022/10/27 09:38:29 (PDT) for Hostname: [vwlc_1_9222], Model:
 [C9800-CL-K9], Version: [17.11.01], SN: [9ZY0U03YBM0], MD_SN: [9ZY0U03YBM0]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis 1 ...
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2022/10/27 09:31:52.835197577 {iosrp_R0-0}{1}: [parser_cmd] [26471]: (note): id=
console@console:user= cmd: 'show logging process ios' SUCCESS 2022/10/27 08:31:48.762 PST
2022/10/27 09:31:59.651965736 {iosrp_R0-0}{1}: [parser_cmd] [26471]: (note): id=
console@console:user= cmd: 'show logging process ios internal' SUCCESS 2022/10/27 08:31:56.485
 PST
2022/10/27 09:32:14.066181552 {iosrp_R0-0}{1}: [parser_cmd] [26471]: (note): id=
console@console:user= cmd: 'show logging process ios' SUCCESS 2022/10/27 08:32:06.271 PST
2022/10/27 09:38:16.803577389 {iosrp_R0-0}{1}: [parser_cmd] [26471]: (note): id=
console@console:user= cmd: 'show logging process ios level error' SUCCESS 2022/10/27
08:38:14.411 PST
============================================================
======= Unified Trace Decoder Information/Statistics ======
============================================================
----------------- Decoder Input Information ---------------
============================================================
 Num of Unique Streams .. 1
 Total UTF To Process ... 1
 Total UTM To Process ... 77004
 UTM Process Filter ..... ios
 MRST Filter Rules ...... 48
============================================================
```

```
----------------- Decoder Output Information --------------
============================================================
 First UTM TimeStamp ............... 2022/10/27 02:21:47.048461994
 Last UTM TimeStamp ................ 2022/10/27 09:38:28.248097600
 UTM [Skipped / Rendered / Total] .. 77000 / 4 / 77004
 UTM [ENCODED] ..................... 76864
 UTM [PLAIN TEXT] .................. 97
 UTM [DYN LIB] ..................... 0
 UTM [MODULE ID] ................... 0
 UTM [TDL TAN] ..................... 43
 UTM [APP CONTEXT] ................. 0
 UTM [MARKER] ...................... 0
 UTM [PCAP] ........................ 0
 UTM [LUID NOT FOUND] .............. 0
============================================================
```

This example shows the traces for a process with the process name **ios**.

```
device#show logging process ios
Logging display requested on 2022/10/27 09:32:06 (PDT) for Hostname: [vwlc_1_9222], Model:
 [C9800-CL-K9], Version: [17.11.01], SN: [9ZY0U03YBM0], MD_SN: [9ZY0U03YBM0]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis 1 ...
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2022/10/27 09:31:52.835197577 {iosrp_R0-0}{1}: [parser_cmd] [26471]: (note): id=
console@console:user= cmd: 'show logging process ios' SUCCESS 2022/10/27 08:31:48.762 PST
2022/10/27 09:31:59.651965736 {iosrp_R0-0}{1}: [parser_cmd] [26471]: (note): id=
console@console:user= cmd: 'show logging process ios internal' SUCCESS 2022/10/27 08:31:56.485
 PST
============================================================
======= Unified Trace Decoder Information/Statistics ======
============================================================
----------------- Decoder Input Information ---------------
============================================================
 Num of Unique Streams .. 1
 Total UTF To Process ... 1
 Total UTM To Process ... 75403
 UTM Process Filter ..... ios
 MRST Filter Rules ...... 4
============================================================
----------------- Decoder Output Information --------------
============================================================
 First UTM TimeStamp ............... 2022/10/27 02:21:47.048461994
 Last UTM TimeStamp ................ 2022/10/27 09:32:04.919540850
 UTM [Skipped / Rendered / Total] .. 75401 / 2 / 75403
 UTM [ENCODED] ..................... 75266
 UTM [PLAIN TEXT] .................. 94
 UTM [DYN LIB] ..................... 0
 UTM [MODULE ID] ................... 0
 UTM [TDL TAN] ..................... 43
 UTM [APP CONTEXT] ................. 0
 UTM [MARKER] ...................... 0
 UTM [PCAP] ........................ 0
 UTM [LUID NOT FOUND] .............. 0
============================================================
```

This example shows the traces for a process with the process name **dbman**.

```
device# show logging process dbman
Logging display requested on 2023/03/10 10:12:53 (UTC) for Hostname: [FABRIEK], Model:
[C8300-1N1S-4T2X], Version: [17.12.01], SN: [FDO24190V85], MD_SN: [FDO2451M13G]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis local ...
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

============================================================
======= Unified Trace Decoder Information/Statistics ======
============================================================
----------------- Decoder Input Information ---------------
============================================================
 Num of Unique Streams .. 1
 Total UTF To Process ... 1
 Total UTM To Process ... 62792
 UTM Process Filter ..... dbman
 MRST Filter Rules ...... 1
============================================================
----------------- Decoder Output Information --------------
============================================================
 First UTM TimeStamp ............... 2023/03/10 08:50:15.477092062
 Last UTM TimeStamp ................ 2023/03/10 10:12:51.936845381
 UTM [Skipped / Rendered / Total] .. 62792 / 0 / 62792
 UTM [ENCODED] ..................... 0
 UTM [PLAIN TEXT] .................. 0
 UTM [DYN LIB] ..................... 0
 UTM [MODULE ID] ................... 0
 UTM [TDL TAN] ..................... 0
 UTM [APP CONTEXT] ................. 0
 UTM [MARKER] ...................... 0
 UTM [PCAP] ........................ 0
 UTM [LUID NOT FOUND] .............. 0
 UTM Level [EMERGENCY / ALERT / CRITICAL / ERROR] .. 0 / 0 / 0 / 0
 UTM Level [WARNING / NOTICE / INFO / DEBUG] ....... 0 / 0 / 0 / 0
 UTM Level [VERBOSE / NOISE / INVALID] ............. 0 / 0 / 0
============================================================
```

This example shows the traces for Cisco SD-WAN processes.

```
Device# show logging process fpmd internal start last boot
Logging display requested on 2020/11/09 07:13:08 (UTC) for Hostname: [Device], Model:
[ISR4451-X/K9], Version: [17.04.01], SN: [FOC23125GHG], MD_SN: [FGL231432EQ]

Displaying logs from the last 7 days, 0 hours, 14 minutes, 55 seconds
executing cmd on chassis local ...

2020/11/02 07:00:59.314166 {fpmd_pman_R0-0}{1}: [btrace] [7403]: (note): Btrace started for
 process ID 7403 with 512 modules
2020/11/02 07:00:59.314178 {fpmd_pman_R0-0}{1}: [btrace] [7403]: (note): File size max used
 for rotation of tracelogs: 8192
2020/11/02 07:00:59.314179 {fpmd_pman_R0-0}{1}: [btrace] [7403]: (note): File size max used
 for rotation of TAN stats file: 8192
2020/11/02 07:00:59.314179 {fpmd_pman_R0-0}{1}: [btrace] [7403]: (note): File rotation
timeout max used for rotation of TAN stats file: 600
2020/11/02 07:00:59.314361 {fpmd_pman_R0-0}{1}: [btrace] [7403]: (note): Boot level config
 file [/harddisk/tracelogs/level_config/fpmd_pman_R0-0] is not available. Skipping
2020/11/02 07:00:59.314415 {fpmd_pman_R0-0}{1}: [benv] [7403]: (note): Environment variable
 BINOS_BTRACE_LEVEL_MODULE_PMAN is not set
2020/11/02 07:00:59.314422 {fpmd_pman_R0-0}{1}: [benv] [7403]: (note): Environment variable
 FPMD_BTRACE_LEVEL is not set
2020/11/02 07:00:59.314424 {fpmd_pman_R0-0}{1}: [fpmd_pman] [7403]: (note): BTRACE_FILE_SI
```

show logging process-helper

To display the logs for a specific process, use the **show logging process-helper** command in privileged EXEC or user EXEC mode.

show logging process-helper *process-name*

Syntax Description

process-name	You can choose a certain process for which the logs need to be displayed. Example: **bt-logger**, **btrace-manager**, **ios**, **dbm**, **logger**, and so on.

Command Default

The default tracing level for all modules is **notice**.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

The following example shows how to display logs for a specific process.

```
Device# show logging process-helper ios
Logging display requested on 2023/03/13 10:30:29 (UTC) for Hostname: [FABRIEK], Model:
[C8300-1N1S-4T2X], Version: [17.12.01], SN: [FDO24190V85], MD_SN: [FDO2451M13G]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis local ...
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2023/03/13 10:30:16.884663022 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'enable' SUCCESS 2023/03/13 10:30:10.721 UTC
============================================================
======= Unified Trace Decoder Information/Statistics ======
============================================================
----------------- Decoder Input Information ---------------
============================================================
 Num of Unique Streams .. 1
 Total UTF To Process ... 1
 Total UTM To Process ... 88985
 UTM Process Filter ..... IOSRP
 MRST Filter Rules ...... 1
============================================================
----------------- Decoder Output Information --------------
============================================================
 First UTM TimeStamp ............... 2023/03/13 08:13:19.321653302
 Last UTM TimeStamp ................ 2023/03/13 10:30:27.267645695
 UTM [Skipped / Rendered / Total] .. 88984 / 1 / 88985
 UTM [ENCODED] ..................... 1
 UTM [PLAIN TEXT] .................. 0
 UTM [DYN LIB] ..................... 0
```

```
 UTM [MODULE ID] ................... 0
 UTM [TDL TAN] ..................... 0
 UTM [APP CONTEXT] ................. 0
 UTM [MARKER] ...................... 0
 UTM [PCAP] ........................ 0
 UTM [LUID NOT FOUND] .............. 0
 UTM Level [EMERGENCY / ALERT / CRITICAL / ERROR] .. 0 / 0 / 0 / 0
 UTM Level [WARNING / NOTICE / INFO / DEBUG] ....... 0 / 1 / 0 / 0
 UTM Level [VERBOSE / NOISE / INVALID] ............. 0 / 0 / 0
============================================================
```

show logging profile

To display the logs for a specific profile, use the **show logging profile** command in privileged EXEC or user EXEC mode.

show logging profile *profile-name*

Syntax Description

profile-name	• **all**: Displays the logs for all processes. • **file**: Displays the logs for a specific profile file. • **hardware-diagnostics**: Displays the logs for the hardware-diagnostics specific processes • **install**: Displays the logs for Install-specific processes. • **netconf-yang**: Displays the logs for netconf-yang specific processes. • **restconf**: Displays the logs for restconf-specific processes. • **sdwan**: Displays the logs for SDWAN-specific processes. • **wireless**: Displays the logs for Wireless-specific processes.

Command Default

None

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Examples

This examples shows how to display trace logs for all processes:

```
device# show logging profile all
Logging display requested on 2023/03/10 17:57:15 (UTC) for Hostname: [FABRIEK], Model:
[C8300-1N1S-4T2X], Version: [17.12.01], SN: [FDO24190V85], MD_SN: [FDO2451M13G]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis local ...
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2023/03/10 17:47:58.925423708 {btman_R0-0}{255}: [utm_main] [6412]: (note): Inserted UTF(2)
 HT(old):droputil_R0-0[13] lnode /tmp/rp/trace/droputil_R0-0.7159_623.20230310174758.bin
PID:7159
```

```
2023/03/10 17:47:59.925149151 {btman_R0-0}{255}: [utm_wq] [6412:17298]: (note): Inline sync,
 enqueue BTF message flags:0x1, PID:17298
BTF:/tmp/rp/trace/droputil_R0-0.7159_622.20230310174708.bin
2023/03/10 17:47:59.932633561 {btman_R0-0}{255}: [utm_wq] [6412]: (note): utm delete
/tmp/rp/trace/droputil_R0-0.7159_622.20230310174708.bin
2023/03/10 17:48:48.937338685 {btman_R0-0}{255}: [utm_main] [6412]: (note): Inserted UTF(2)
 HT(old):droputil_R0-0[13] lnode /tmp/rp/trace/droputil_R0-0.7159_624.20230310174848.bin
PID:7159
2023/03/10 17:48:49.937053442 {btman_R0-0}{255}: [utm_wq] [6412:17298]: (note): Inline sync,
 enqueue BTF message flags:0x1, PID:17298
BTF:/tmp/rp/trace/droputil_R0-0.7159_623.20230310174758.bin
<output truncated>
```

```
device#show logging profile all
Logging display requested on 2023/03/10 18:39:56 (UTC) for Hostname: [BRU-C9K-153-05],
Model: [C9300-24T], Version: [17.03.05], SN: [FOC24140R40], MD_SN: [FOC2415U0XX]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis 1 ...

2023/03/10 18:32:54.755987 {IOSRP_R0-0}{1}: [iosrp] [22736]: (info):  *Mar 10 18:32:54.755:
 %SYS-6-TTY_EXPIRE_TIMER: (exec timer expired, tty 1 (10.68.217.91)), user cisco
2023/03/10 18:32:54.756076 {IOSRP_R0-0}{1}: [iosrp] [22736]: (info):  *Mar 10 18:32:54.756:
 %SYS-6-LOGOUT: User cisco has exited tty session 1(10.68.217.91)
2023/03/10 18:33:03.948149 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Job
 1023 SAUtilityMeasurementJob, Matching 1023 SAUtilityMeasurementJob
2023/03/10 18:33:03.948170 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Find
 the Job for removal 0x7FC0BD9A99F0
2023/03/10 18:33:03.948179 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Found
 the element for removal 0x7FC0BD9BF288 ->0x7FC0BD9BD5A8
2023/03/10 18:33:03.948185 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Removinging Job SAUtilityMeasurementJob 0x7FC0BE3EF590, leaf 0x7FC0ADA357A0
2023/03/10 18:33:03.948191 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Attaching Job SAUtilityMeasurementJob to Exec Queue Head
2023/03/10 18:33:03.948197 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Executing from Queue, Job SAUtilityMeasurementJob (20)
2023/03/10 18:33:03.948214 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Setting
 SAUtilityMeasurementJob IN PROGRESS False to True
2023/03/10 18:33:03.948221 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-utility measurement start
2023/03/10 18:33:03.948227 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/10 18:33:03.948244 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/10 18:33:03.948251 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/10 18:33:03.948271 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/10 18:33:03.948277 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/10 18:33:03.948283 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/10 18:33:03.948303 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/10 18:33:03.948310 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/10 18:33:03.948315 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - started
2023/03/10 18:33:03.948321 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/10 18:33:03.948327 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/10 18:33:03.948333 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/10 18:33:03.948339 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
```

```
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/10 18:33:03.948345 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant[0], numEndPoints: 0
2023/03/10 18:33:03.948350 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant[1], numEndPoints: 0
2023/03/10 18:33:03.948385 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant list built successfully, numGrant:
2, numEndPoints: 0
2023/03/10 18:33:03.948391 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/10 18:33:03.948397 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/10 18:33:03.948403 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/10 18:33:03.948409 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
```

show logging profile wireless

To display the logs for a specific profile, use the **show logging profile wireless** command in privileged EXEC or user EXEC mode.

show logging profile wireless

Syntax Description

This command has no keywords or arguments.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Everest 16.5.1a	This command was introduced.

Usage Guidelines

Ensure that you enable internal keyword using the **show logging profile wireless internal** command to get the trace output.

Without the **internal** keyword, only customer curated logs are displayed.

The following example shows how to display logs for the wireless profile.

```
Device# show logging profile wireless
Logging display requested on 2023/03/13 09:07:09 (UTC) for Hostname: [FABRIEK], Model:
[C8300-1N1S-4T2X], Version: [17.12.01], SN: [FDO24190V85], MD_SN: [FDO2451M13G]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis local ...
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2023/03/13 08:57:34.084609935 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless level info' SUCCESS 2023/03/13
 08:57:31.376 UTC
2023/03/13 09:07:03.562290152 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless internal ' SUCCESS 2023/03/13
 08:58:51.922 UTC
============================================================
======= Unified Trace Decoder Information/Statistics ======
============================================================
----------------- Decoder Input Information ---------------
============================================================
 Num of Unique Streams .. 1
 Total UTF To Process ... 1
 Total UTM To Process ... 55410
 UTM Process Filter .....
cpp_cp,fman_fp,fman_rp,fman-rp,fman-fp,fed,mobilityd,mspd,odm_proxy,rogued,rm,repm,wncd,wncmgrd,wncd_x,IOSRP,smd,odm,wstatsd,linux-iosd-image,wncloudm,locationd
```

```
 MRST Filter Rules ...... 24
============================================================
----------------- Decoder Output Information --------------
============================================================
 First UTM TimeStamp ............... 2023/03/13 08:13:19.321653302
 Last UTM TimeStamp ................ 2023/03/13 09:07:08.462269864
 UTM [Skipped / Rendered / Total] .. 55408 / 2 / 55410
 UTM [ENCODED] ..................... 2
 UTM [PLAIN TEXT] .................. 0
 UTM [DYN LIB] ..................... 0
 UTM [MODULE ID] ................... 0
 UTM [TDL TAN] ..................... 0
 UTM [APP CONTEXT] ................. 0
 UTM [MARKER] ...................... 0
 UTM [PCAP] ........................ 0
 UTM [LUID NOT FOUND] .............. 0
 UTM Level [EMERGENCY / ALERT / CRITICAL / ERROR] .. 0 / 0 / 0 / 0
 UTM Level [WARNING / NOTICE / INFO / DEBUG] ....... 0 / 2 / 0 / 0
 UTM Level [VERBOSE / NOISE / INVALID] ............. 0 / 0 / 0
============================================================
```

The following example example shos how to display logs for the wireless profile

```
Device# show logging profile wireless
Logging display requested on 2023/03/13 09:18:51 (UTC) for Hostname: [BRU-C9K-153-05],
Model: [C9300-24T], Version: [17.03.05], SN: [FOC24140R40], MD_SN: [FOC2415U0XX]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis 1 ...

2023/03/13 09:18:03.943258 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Job
 1023 SAUtilityMeasurementJob, Matching 1023 SAUtilityMeasurementJob
2023/03/13 09:18:03.943280 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Find
 the Job for removal 0x7FC0BE3E8CE0
2023/03/13 09:18:03.943300 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Found
 the element for removal 0x7FC0BD9BEAA8 ->0x7FC0BD9BE878
2023/03/13 09:18:03.943307 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Removinging Job SAUtilityMeasurementJob 0x7FC0BD9A7C40, leaf 0x7FC0ADA357A0
2023/03/13 09:18:03.943313 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Attaching Job SAUtilityMeasurementJob to Exec Queue Head
2023/03/13 09:18:03.943319 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Executing from Queue, Job SAUtilityMeasurementJob (20)
2023/03/13 09:18:03.943325 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Setting
 SAUtilityMeasurementJob IN PROGRESS False to True
2023/03/13 09:18:03.943342 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-utility measurement start
2023/03/13 09:18:03.943349 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/13 09:18:03.943355 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/13 09:18:03.943361 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/13 09:18:03.943367 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/13 09:18:03.943373 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/13 09:18:03.943398 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/13 09:18:03.943405 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/13 09:18:03.943411 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
```

```
2023/03/13 09:18:03.943417 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - started
2023/03/13 09:18:03.943423 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/13 09:18:03.943429 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/13 09:18:03.943434 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/13 09:18:03.943440 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/13 09:18:03.943446 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant[0], numEndPoints: 0
2023/03/13 09:18:03.943490 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant[1], numEndPoints: 0
2023/03/13 09:18:03.943497 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant list built successfully, numGrant:
2, numEndPoints: 0
2023/03/13 09:18:03.943503 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/13 09:18:03.943509 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/13 09:18:03.943515 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/13 09:18:03.943521 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/13 09:18:03.943527 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Checking 0
tag[regid.2017-03.com.cisco.advantagek9,1.0_bd1da96e-ec1d-412b-a50e-53846b347d53] handle[1]
 utility[0x7FC0B1BDA340]
2023/03/13 09:18:03.943533 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-process append measurement
2023/03/13 09:18:03.943538 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Returning NULL for item   8
2023/03/13 09:18:03.943586 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-There are 1 Raw Udi's and 1 Unique Udi's
2023/03/13 09:18:03.943593 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/13 09:18:03.943599 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/13 09:18:03.943605 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
<output truncated>
```

show logging profile wireless end

To specify log filtering end location timestamp for filtering, use the **show logging profile wireless end timestamp** command.

show logging profile wireless end timestamp *time-stamp*
show logging profile wireless end timestamp time-stamp

Syntax Description

time-stamp	The timestamp to end the filtering. For example, 2023/02/10 14:41:50.849.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Usage Guidelines

Ensure that you enable internal keyword using the **show logging profile wireless internal** command to get the trace output.

Without the **internal** keyword, only customer curated logs are displayed.

Examples

The following example shows how to specify log filtering start/end location timestamp for filtering:

```
Device# show logging profile wireless internal start timestamp "2018/07/16 23:09:52.541"
end timestamp "2018/07/16 23:19:52.671" to-file test

excuting cmd on chassis 1 ...
Files being merged in the background, result will be in /bootflash/test log file.
Collecting files on current[1] chassis.
Decoding files:
btrace decoder:         number of files: [48]   number of messages: [5736]
         2018-07-16 23:23:51.451 - btrace decoder processed 17%
         2018-07-16 23:23:51.585 - btrace decoder processed 34%
         2018-07-16 23:23:51.832 - btrace decoder processed 52%
         2018-07-16 23:23:52.108 - btrace decoder processed 69%
         2018-07-16 23:23:52.138 - btrace decoder processed 87%
         2018-07-16 23:23:52.222 - btrace decoder processed 98%
```

show logging profile wireless filter

To specify filter for logs, use the **show logging profile wireless filter** command.

\

show logging profile wireless filter { **interface** | **ipv4** | **ipv6** | **mac** | **ra** | **string** | **uuid** }

Syntax Description

interface	Selects logs with specific interface app context.
ipv4	Selects logs with specific IPv4 address app context.
ipv6	Selects logs with specific IPv6 address app context.
mac	Selects logs with specific MAC app context.
string	Selects logs with specific string app context.
uuid	Selects logs with specific Universally Unique Identifier (UUID) app context.
ra	Selects the radioactive logs.

Command Default

None

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Everest 16.5.1a	This command was introduced.

Usage Guidelines

Ensure that you enable internal keyword using the **show logging profile wireless internal** command to get the trace output.

Without the **internal** keyword, only customer curated logs are displayed.

The following example shows how to specify filter for logs:

```
Device# show logging profile wireless filter mac ECE1.A9DA.0CE0
excuting cmd on chassis 1 ...
Collecting files on current[1] chassis.
Total # of files collected = 28
Decoding files:

/harddisk/tracelogs/tmp_trace/nmspd_pmanlog_R0-0.3187_0.20171107021702.bin: DECODE(22:0:22:1)
/harddisk/tracelogs/tmp_trace/rrm_pmanlog_R0-0.6868_0.20171107021710.bin: DECODE(22:0:22:1)
/harddisk/tracelogs/tmp_trace/repm_pmanlog_R0-0.5836_0.20171107021708.bin: DECODE(24:0:24:1)
/harddisk/tracelogs/tmp_trace/rogued_pmanlog_R0-0.6232_0.20171107021708.bin: DECODE(22:0:22:1)
/harddisk/tracelogs/tmp_trace/fman_fp_F0-0.1940_1.20171107030724.bin: DECODE(5736:0:5736:5)
/harddisk/tracelogs/tmp_trace/mobilityd_pmanlog_R0-0.388_0.20171107021659.bin:
DECODE(22:0:22:1)
```

```
/harddisk/tracelogs/tmp_trace/odm_proxy_pmanlog_R0-0.4237_0.20171107021704.bin:
DECODE(21:0:21:1)
/harddisk/tracelogs/tmp_trace/mobilityd_R0-0.1045_0.20171107021729.bin: DECODE(141:0:141:17)
/harddisk/tracelogs/tmp_trace/odm_R0-0.4371_0.20171107021707.bin: DECODE(36:0:36:5)
/harddisk/tracelogs/tmp_trace/fman_fp_image_pmanlog_F0-0.1439_0.20171107021700.bin:
DECODE(27:0:27:1)
/harddisk/tracelogs/tmp_trace/odm_pmanlog_R0-0.3944_0.20171107021704.bin: DECODE(21:0:21:1)
/harddisk/tracelogs/tmp_trace/smd_R0-0.7893_0.20171107021753.bin: DECODE(397:0:397:16)
/harddisk/tracelogs/tmp_trace/fman_rp_R0-0.29955_0.20171107021745.bin: DECODE(4771:0:4771:20)
/harddisk/tracelogs/tmp_trace/nmspd_R0-0.3536_0.20171107021733.bin: DECODE(16:0:16:6)
/harddisk/tracelogs/tmp_trace/rrm_bg_R0-0.7189_0.20171107021739.bin: DECODE(119:0:119:15)
/harddisk/tracelogs/tmp_trace/fman_rp_pmanlog_R0-0.29615_0.20171107021654.bin:
DECODE(22:0:22:1)
/harddisk/tracelogs/tmp_trace/odm_proxy_R0-0.4595_0.20171107021705.bin: DECODE(13:0:13:6)
/harddisk/tracelogs/tmp_trace/wncmgrd_pmanlog_R0-0.9422_0.20171107021715.bin:
DECODE(22:0:22:1)
/harddisk/tracelogs/tmp_trace/IOSRP_R0-0.23248_2.20171107035525.bin: DECODE(7:0:7:0)
/harddisk/tracelogs/tmp_trace/wncd_pmanlog_R0-0.9085_0.20171107021714.bin: DECODE(31:0:31:1)
/harddisk/tracelogs/tmp_trace/rogued_R0-0.6521_0.20171107021735.bin: DECODE(65:0:65:13)
/harddisk/tracelogs/tmp_trace/repm_R0-0.6183_0.20171107021710.bin: DECODE(93:0:93:6)
2017/11/07 03:55:14.202 {wncd_x_R0-0}{1}: [apmgr-capwap-join] [9437]: UUID: 1000000000a5a,
 ra: 15, (info): ece1.a9da.0ce0 Radio slot entries created during join for: Radio Slot: 1,
 Radio Type: 2 Radio Sub Type: 0, Band Id: 1
2017/11/07 03:55:14.202 {wncd_x_R0-0}{1}: [apmgr-capwap-join] [9437]: UUID: 1000000000a5a,
 ra: 15, (info): ece1.a9da.0ce0 Radio slot entries created during join for: Radio Slot: 0,
 Radio Type: 1 Radio Sub Type: 0, Band Id: 0
2017/11/07 03:55:14.202 {wncd_x_R0-0}{1}: [apmgr-db] [9437]: UUID: 1000000000a5a, ra: 15,
(info): ece1.a9da.0ce0 AP association tag record is not found. Associate default tags to
the AP
2017/11/07 03:55:14.202 {wncd_x_R0-0}{1}: [apmgr-db] [9437]: UUID: 1000000000a5a, ra: 15,
(info): ece1.a9da.0ce0 AP Tag information: Policy Tag - default-policy-tag Site Tag -
default-site-tag RF Tag - default-rf-tag
2017/11/07 03:55:14.202 {wncd_x_R0-0}{1}: [apmgr-db] [9437]: UUID: 1000000000a5a, ra: 15,
(info): ece1.a9da.0ce0 Operation state of AP changed to: Registered
2017/11/07 03:55:14.204 {wncd_x_R0-0}{1}: [capwapac-smgr-srvr] [9437]: UUID: 1000000000a5a,
 ra: 15, (info): Session-IP: 90.90.90.22[51099] Mac: ece1.a9da.0ce0 Join processing complete.
 AP in joined state
2017/11/07 03:55:14.210 {wncmgrd_R0-0}{1}: [hl-core] [9739]: UUID: 1000000000a5c, ra: 15,
(debug): Radio information changed for AP ece1.a9da.0ce0 but hyperlocation method is detected
 as unknown and will not be used for L1 scan list query to CMX.
```

show logging profile wireless fru

To specify field-replaceable unit (FRU) specific commands, use the **show logging profile wireless fru** command.

show logging profile wireless fru

Syntax Description

0	SM-Inter-Processor slot 0
1	SM-Inter-Processor slot 1
F0	Embedded-Service-Processor slot 0
FP	Embedded-Service-Processor
R0	Route-Processor slot 0
RP	Route-Processor

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Usage Guidelines

Ensure that you enable internal keyword using the **show logging profile wireless internal** command to get the trace output.

Without the **internal** keyword, only customer curated logs are displayed.

Examples

The following example shows how to specify FRU specific commands:

```
Device# show logging profile wireless fru switch standby R0
Logging display requested on 2023/03/13 07:39:11 (UTC) for Hostname: [BRU-C9K-153-05],
Model: [C9300-24T], Version: [17.03.05], SN: [FOC24140R40], MD_SN: [FOC2415U0XX]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
Unicasting cmd: chassis 1 route-processor 0

2023/03/13 07:29:23.629642 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless fru 0' FAILURE 07:29:23
UTC Mon Mar 13 2023
2023/03/13 07:29:32.483351 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless fru switch' FAILURE
07:29:32 UTC Mon Mar 13 2023
2023/03/13 07:33:03.935762 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Job
 1023 SAUtilityMeasurementJob, Matching 1023 SAUtilityMeasurementJob
2023/03/13 07:33:03.935782 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Find
 the Job for removal 0x7FC0BD9A7E20
```

```
2023/03/13 07:33:03.935805 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Found
 the element for removal 0x7FC0BD9BD5A8 ->0x7FC0BD9BF640
2023/03/13 07:33:03.935812 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Removinging Job SAUtilityMeasurementJob 0x7FC0BE3EFB30, leaf 0x7FC0ADA357A0
2023/03/13 07:33:03.935833 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Attaching Job SAUtilityMeasurementJob to Exec Queue Head
2023/03/13 07:33:03.935839 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Executing from Queue, Job SAUtilityMeasurementJob (20)
2023/03/13 07:33:03.935845 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Setting
 SAUtilityMeasurementJob IN PROGRESS False to True
2023/03/13 07:33:03.935859 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-utility measurement start
2023/03/13 07:33:03.935865 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/13 07:33:03.935872 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/13 07:33:03.935877 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/13 07:33:03.935883 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/13 07:33:03.935889 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/13 07:33:03.935895 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/13 07:33:03.935901 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/13 07:33:03.935906 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/13 07:33:03.935923 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - started
2023/03/13 07:33:03.935929 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/13 07:33:03.935935 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/13 07:33:03.935945 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/13 07:33:03.935953 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/13 07:33:03.935959 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant[0], numEndPoints: 0
2023/03/13 07:33:03.935965 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant[1], numEndPoints: 0
2023/03/13 07:33:03.935970 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant list built successfully, numGrant:
2, numEndPoints: 0
2023/03/13 07:33:03.935976 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/13 07:33:03.936003 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/13 07:33:03.936010 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/13 07:33:03.936016 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
```

show logging profile wireless internal

To select all the logs, use the **show logging profile wireless internal** command.

show logging profile wireless internal

Syntax Description

This command has no arguments or keywords.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Usage Guidelines

Ensure that you enable internal keyword using the **show logging profile wireless internal** command to get the trace output.

Without the **internal** keyword, only customer curated logs are displayed.

Examples

The following example shows how to display all the logs:

```
Device #show logging profile wireless internal
Logging display requested on 2023/03/13 07:47:30 (UTC) for Hostname: [BRU-C9K-153-05],
Model: [C9300-24T], Version: [17.03.05], SN: [FOC24140R40], MD_SN: [FOC2415U0XX]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis 1 ...

2023/03/13 07:37:33.213009 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless fru switch active instance
 ' FAILURE 07:37:33 UTC Mon Mar 13 2023
2023/03/13 07:38:04.219243 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless fru switch active' FAILURE
 07:38:04 UTC Mon Mar 13 2023
2023/03/13 07:38:09.775467 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless fru switch active ' FAILURE
 07:38:09 UTC Mon Mar 13 2023
2023/03/13 07:38:21.523864 {fman_fp_F0-0}{1}: [fman] [21369]: (note): Got test request from
 gold server
2023/03/13 07:38:21.523873 {fman_fp_F0-0}{1}: [fman] [21369]: (note): Sending gold response
 msg 29453, test 14, result 1
2023/03/13 07:38:21.523891 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled tx ok
2023/03/13 07:38:21.523892 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled done msg
2023/03/13 07:38:21.523894 {fman_fp_F0-0}{1}: [fman] [21369]: (note): fmanfp gold got new
test req, with req id 14, msg id = 29453
2023/03/13 07:38:21.524058 {fman_fp_F0-0}{1}: [fman] [21369]: (note): success, err obj NOT
 found.
2023/03/13 07:38:21.524059 {fman_fp_F0-0}{1}: [fman] [21369]: (note): Sending gold response
 msg 29453, test 14, result 1
2023/03/13 07:38:21.524067 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled tx ok
2023/03/13 07:38:21.524068 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled done msg
```

```
2023/03/13 07:38:21.524270 {fman_fp_F0-0}{1}: [fman] [21369]: (note): Got test request from
 gold server
2023/03/13 07:38:21.524272 {fman_fp_F0-0}{1}: [fman] [21369]: (note): Sending gold response
 msg 29454, test 15, result 1
2023/03/13 07:38:21.524283 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled tx ok
2023/03/13 07:38:21.524283 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled done msg
2023/03/13 07:38:21.524284 {fman_fp_F0-0}{1}: [fman] [21369]: (note): fmanfp gold got new
test req, with req id 15, msg id = 29454
2023/03/13 07:38:21.524420 {fman_fp_F0-0}{1}: [fman] [21369]: (note): success, err obj NOT
 found.
2023/03/13 07:38:21.524421 {fman_fp_F0-0}{1}: [fman] [21369]: (note): Sending gold response
 msg 29454, test 15, result 1
2023/03/13 07:38:21.524427 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled tx ok
2023/03/13 07:38:21.524428 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled done msg
2023/03/13 07:38:21.524605 {fman_fp_F0-0}{1}: [fman] [21369]: (note): Got test request from
 gold server
2023/03/13 07:38:21.524607 {fman_fp_F0-0}{1}: [fman] [21369]: (note): Sending gold response
 msg 29455, test 16, result 1
2023/03/13 07:38:21.524617 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled tx ok
2023/03/13 07:38:21.524618 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled done msg
2023/03/13 07:38:21.524619 {fman_fp_F0-0}{1}: [fman] [21369]: (note): fmanfp gold got new
test req, with req id 16, msg id = 29455
2023/03/13 07:38:21.524754 {fman_fp_F0-0}{1}: [fman] [21369]: (note): success, err obj NOT
 found.
2023/03/13 07:38:21.524755 {fman_fp_F0-0}{1}: [fman] [21369]: (note): Sending gold response
 msg 29455, test 16, result 1
2023/03/13 07:38:21.524761 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled tx ok
2023/03/13 07:38:21.524762 {fman_fp_F0-0}{1}: [fman] [21369]: (note): marshalled done msg
2023/03/13 07:38:25.492553 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless fru switch active 0'
SUCCESS 07:38:25 UTC Mon Mar 13 2023
```

The following example shows how to display all the logs:

```
Device# show logging profile wireless internal
Logging display requested on 2023/03/13 08:58:51 (UTC) for Hostname: [FABRIEK], Model:
[C8300-1N1S-4T2X], Version: [17.12.01], SN: [FDO24190V85], MD_SN: [FDO2451M13G]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis local ...
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2023/03/13 08:48:56.203638311 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless to-file' FAILURE 2023/03/13
08:48:56.202 UTC
2023/03/13 08:49:52.077502587 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless to-file mylog.txt' SUCCESS
2023/03/13 08:49:52.075 UTC
2023/03/13 08:50:55.161355814 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless to-file mylog 12' FAILURE
2023/03/13 08:50:55.159 UTC
2023/03/13 08:51:33.810030189 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless reverse ' SUCCESS 2023/03/13
08:51:27.690 UTC
2023/03/13 08:53:08.782896142 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless module dbal ' SUCCESS 2023/03/13
 08:53:08.257 UTC
2023/03/13 08:57:34.084609935 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless level info' SUCCESS 2023/03/13
 08:57:31.376 UTC
============================================================
```

```
======= Unified Trace Decoder Information/Statistics ======
============================================================
----------------- Decoder Input Information ---------------
============================================================
 Num of Unique Streams .. 1
 Total UTF To Process ... 1
 Total UTM To Process ... 52029
 UTM Process Filter .....
qp_cp,fman_fp,fman_rp,fman-rp,fman-fp,fed,mobilityd,mspd,odm_proxy,rogued,rm,repm,wncd,wncmgrd,wncd_x,IOSRP,smd,odm,wstatsd,linux-iosd-image,wncloudm,locationd

 MRST Filter Rules ...... 24
============================================================
----------------- Decoder Output Information ---------------
============================================================
 First UTM TimeStamp ............... 2023/03/13 08:13:19.321653302
 Last UTM TimeStamp ................ 2023/03/13 08:58:50.044495790
 UTM [Skipped / Rendered / Total] .. 52023 / 6 / 52029
 UTM [ENCODED] ..................... 6
 UTM [PLAIN TEXT] .................. 0
```

show logging profile wireless level

To select logs above a specific level, use the **show logging profile wireless level** command.

show logging profile wireless level { **debug** | **error** | **info** | **notice** | **verbose** | **warning** }

Syntax Description

debug	Selects the debug-level trace messages.
error	Selects the error-level trace messages.
info	Selects the informational-level trace messages.
notice	Selects the notice-level trace messages.
verbose	Selects the verbose-level trace messages.
warning	Selects the warning-level trace messages.

Command Default

The default tracing level for all modules is **notice**.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Usage Guidelines

- Ensure that you enable internal keyword using the **show logging profile wireless internal** command to get the trace output. Without the **internal** keyword, only customer curated logs are displayed.
- Trace level determines the types of traces outputted. Each trace message is assigned a trace level. If the trace level of a process or its module it set at a greater than or equal to level as the trace message, the trace messag is displayed otherwise, it is skipped. For example, the default trace level is **Notice** level, so all traces with the **Notice** level and below the **Notice** level are included while the traces above the **Notice** level are excluded.

Examples

The following example shows how to select logs above a specific level:

```
Device# show logging profile wireless level notice
Logging display requested on 2023/03/13 08:00:47 (UTC) for Hostname: [BRU-C9K-153-05],
Model: [C9300-24T], Version: [17.03.05], SN: [FOC24140R40], MD_SN: [FOC2415U0XX]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis 1 ...

2023/03/13 07:58:04.437001 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless internal' SUCCESS 07:58:04
 UTC Mon Mar 13 2023
2023/03/13 07:59:55.365574 {IOSRP_R0-0}{1}: [iosrp] [22736]: (note):  *Mar 13 07:59:55.365:
 %SEC_LOGIN-5-LOGIN_SUCCESS: Login Success [user: cisco] [Source: 10.68.219.145] [localport:
```

```
 22] at 07:59:55 UTC Mon Mar 13 2023
2023/03/13 08:00:33.338004 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless level debug' SUCCESS
08:00:33 UTC Mon Mar 13 2023
```

The following example shows how to select logs above a specific level:

```
Device# show logging profile wireless level info
Logging display requested on 2023/03/13 08:57:31 (UTC) for Hostname: [FABRIEK], Model:
[C8300-1N1S-4T2X], Version: [17.12.01], SN: [FDO24190V85], MD_SN: [FDO2451M13G]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis local ...
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2023/03/13 08:48:56.203638311 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless to-file' FAILURE 2023/03/13
08:48:56.202 UTC
2023/03/13 08:49:52.077502587 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless to-file mylog.txt' SUCCESS
2023/03/13 08:49:52.075 UTC
2023/03/13 08:50:55.161355814 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless to-file mylog 12' FAILURE
2023/03/13 08:50:55.159 UTC
2023/03/13 08:51:33.810030189 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless reverse ' SUCCESS 2023/03/13
08:51:27.690 UTC
2023/03/13 08:53:08.782896142 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless module dbal ' SUCCESS 2023/03/13
 08:53:08.257 UTC
============================================================
======= Unified Trace Decoder Information/Statistics ======
============================================================
----------------- Decoder Input Information ---------------
============================================================
 Num of Unique Streams .. 1
 Total UTF To Process ... 1
 Total UTM To Process ... 47422
 UTM Process Filter .....
cpp_cp, fman_fp, fman_rp, fman-rp, fman-fp, fed, mobilityd, mspd, odm_proxy, rogued, rm, repm, wncd, wncmgrd, wncd_x, IOSRP, smd, odm, wstatsd, linux-iosd-image, wncloudm, locationd

 MRST Filter Rules ...... 336
============================================================
----------------- Decoder Output Information ---------------
============================================================
 First UTM TimeStamp ............... 2023/03/13 08:13:19.321653302
 Last UTM TimeStamp ................ 2023/03/13 08:57:28.983753618
 UTM [Skipped / Rendered / Total] .. 47417 / 5 / 47422
 UTM [ENCODED] ..................... 5
 UTM [PLAIN TEXT] .................. 0
 UTM [DYN LIB] ..................... 0
 UTM [MODULE ID] ................... 0
 UTM [TDL TAN] ..................... 0
 UTM [APP CONTEXT] ................. 0
 UTM [MARKER] ...................... 0
 UTM [PCAP] ........................ 0
 UTM [LUID NOT FOUND] .............. 0
 UTM Level [EMERGENCY / ALERT / CRITICAL / ERROR] .. 0 / 0 / 0 / 0
 UTM Level [WARNING / NOTICE / INFO / DEBUG] ....... 0 / 5 / 0 / 0
 UTM Level [VERBOSE / NOISE / INVALID] ............. 0 / 0 / 0
============================================================
```

show logging profile wireless module

To select logs for specific modules, use the **show logging profile wireless module** command.

show logging profile wireless module *module-name*

Syntax Description

module-name	List the module names separated by commas or space. For example, dbal, tdllib or "dbal tdllib".

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Usage Guidelines

Ensure that you enable internal keyword using the **show logging profile wireless internal** command to get the trace output.

Without the **internal** keyword, only customer curated logs are displayed.

The following example shows how to select logs for specific modules:

```
Device# show logging profile wireless module dbal
Logging display requested on 2023/03/13 08:53:08 (UTC) for Hostname: [FABRIEK], Model:
[C8300-1N1S-4T2X], Version: [17.12.01], SN: [FDO24190V85], MD_SN: [FDO2451M13G]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis local ...
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

============================================================
======= Unified Trace Decoder Information/Statistics ======
============================================================
----------------- Decoder Input Information ---------------
============================================================
 Num of Unique Streams .. 1
 Total UTF To Process ... 1
 Total UTM To Process ... 45244
 UTM Process Filter .....
cpp_cp, fman_fp, fman_rp, fman-rp, fman-fp, fed, mobilityd, mspd, odm_proxy, rogued, rrm, rsm, wncd, wncmgrd, wncd_x, IOSRP, smd, odm, wstatsd, linux-iosd-image, wncloudm, locationd

 MRST Filter Rules ...... 24
============================================================
----------------- Decoder Output Information --------------
============================================================
 First UTM TimeStamp ............... 2023/03/13 08:13:19.321653302
 Last UTM TimeStamp ................ 2023/03/13 08:53:05.793309753
 UTM [Skipped / Rendered / Total] .. 45244 / 0 / 45244
 UTM [ENCODED] ..................... 0
 UTM [PLAIN TEXT] .................. 0
```

```
 UTM [DYN LIB] ..................... 0
 UTM [MODULE ID] ................... 0
 UTM [TDL TAN] ..................... 0
 UTM [APP CONTEXT] ................. 0
 UTM [MARKER] ...................... 0
 UTM [PCAP] ........................ 0
 UTM [LUID NOT FOUND] .............. 0
 UTM Level [EMERGENCY / ALERT / CRITICAL / ERROR] .. 0 / 0 / 0 / 0
 UTM Level [WARNING / NOTICE / INFO / DEBUG] ....... 0 / 0 / 0 / 0
 UTM Level [VERBOSE / NOISE / INVALID] ............ 0 / 0 / 0
============================================================
```

show logging profile wireless reverse

To view logs in reverse chronological order, use the **show logging profile wireless reverse** command.

show logging profile wireless reverse

Syntax Description

This command has no arguments or keywords.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Usage Guidelines

Ensure that you enable internal keyword using the **show logging profile wireless internal** command to get the trace output.

Without the **internal** keyword, only customer curated logs are displayed.

The following example shows how to view logs in reverse chronological order:

```
Device# show logging profile wireless reverse
Logging display requested on 2023/03/13 08:18:40 (UTC) for Hostname: [BRU-C9K-153-05],
Model: [C9300-24T], Version: [17.03.05], SN: [FOC24140R40], MD_SN: [FOC2415U0XX]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis 1 ...

2023/03/13 08:18:14.945968 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAOpModelJob-platform policy not available.
2023/03/13 08:18:14.945682 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAOpModelJob-platform policy not available.
2023/03/13 08:18:14.945339 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAOpModelJob-platform policy not available.
2023/03/13 08:18:14.944594 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Setting
 SAOperationalModelJob IN PROGRESS False to True
2023/03/13 08:18:14.944588 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Executing from Queue, Job SAOperationalModelJob (37)
2023/03/13 08:18:14.944582 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Attaching Job SAOperationalModelJob to Exec Queue Head
2023/03/13 08:18:14.944575 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Removinging Job SAOperationalModelJob 0x7FC0BD9B3860, leaf 0x7FC0ADA35838
2023/03/13 08:18:14.944555 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Find
 the Job for removal 0x7FC0BD9A68E0
2023/03/13 08:18:14.944536 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Job
 1023 SAOperationalModelJob, Matching 1023 SAOperationalModelJob
2023/03/13 08:18:13.964201 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAStorage-Get
Sys Data from PI Success
2023/03/13 08:18:13.962069 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAStorage-Attempt
 to release Write Lock.
2023/03/13 08:18:13.946593 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAStorage-Attempt
 to obtain Write Lock.
```

```
2023/03/13 08:18:13.946586 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAStorage-Writing
 to the Path <TS>/currentRUMReports.rum
2023/03/13 08:18:13.946562 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAStorage-Writing
 TS: ChkPt SmartAgentHaMethodTsPath, tsErasedOccurred False, numTsPaths 1
2023/03/13 08:18:13.946553 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAStorage-DeQueueing a TS Group currentRUMReports.rum
2023/03/13 08:18:13.944890 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAStorage-Initial
 TS Queue size 1 rc NoError(0)
2023/03/13 08:18:13.944884 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilRepSave-Setting SAUtilityReportsSaveJob IN PROGRESS True to False
2023/03/13 08:18:13.944874 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAUtilRepSave-nextQ
 0x7FC0BE3EBFD0, for job SAUtilityReportsSaveJob jobData 0x7FC0BD9BD420, tcId 1023
2023/03/13 08:18:13.944867 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilRepSave-Successfully start job SAOperationalModelJob timer leaf 1 Seconds
2023/03/13 08:18:13.944814 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilRepSave-Attach job SAOperationalModelJob to XDM Leaf 0x7FC0ADA35838
2023/03/13 08:18:13.944808 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilRepSave-JobFlag 0x111 not having the right prerequeset 0x02 for 0x20
2023/03/13 08:18:13.944802 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (ERR): SAUtilRepSave-Tenant
 1023 Job SAOperationalModelJob, attached flag set, but not in list
2023/03/13 08:18:13.944787 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAUtilRepSave-About
 to Attach SAOperationalModelJob
2023/03/13 08:18:13.944781 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilRepSave-Scheduling Sending the oper model notification for job name
SAUtilityReportsSaveJob
2023/03/13 08:18:13.944775 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilRepSave-Successfully start job SAUtilityReportsSaveJob timer leaf 3600 Seconds
2023/03/13 08:18:13.944760 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilRepSave-Attach job SAUtilityReportsSaveJob to XDM Leaf 0x7FC0ADA312C0
2023/03/13 08:18:13.944754 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilRepSave-JobFlag 0x115 not having the right prerequeset 0x02 for 0x20
2023/03/13 08:18:13.944748 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (ERR): SAUtilRepSave-Tenant
 1023 Job SAUtilityReportsSaveJob, attached flag set, but not in list
2023/03/13 08:18:13.944724 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAUtilRepSave-About
 to Attach SAUtilityReportsSaveJob
2023/03/13 08:18:13.944718 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilRepSave-commit reports to storage from reportsaveCB: Success
2023/03/13 08:18:13.944682 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAUtilRepSave-RUM
 report commit: Success
2023/03/13 08:18:13.944164 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilRepSave-Queueing Up TS Group currentRUMReports.rum 0x7FC0BD9A68E0
2023/03/13 08:18:13.944158 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAUtilRepSave-erase
 1, force 1, anyChgd 1
```

```
Device# show logging profile wireless reverse ?
  |     Output modifiers
  <cr>  <cr>

FABRIEK#show logging profile wireless reverse
Logging display requested on 2023/03/13 08:51:27 (UTC) for Hostname: [FABRIEK], Model:
[C8300-1N1S-4T2X], Version: [17.12.01], SN: [FDO24190V85], MD_SN: [FDO2451M13G]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis local ...
=============================================================
 UTM Level [VERBOSE / NOISE / INVALID] ............. 0 / 0 / 0
 UTM Level [WARNING / NOTICE / INFO / DEBUG] ....... 0 / 5 / 0 / 0
 UTM Level [EMERGENCY / ALERT / CRITICAL / ERROR] .. 0 / 0 / 0 / 0
 UTM [LUID NOT FOUND] ............... 0
 UTM [PCAP] ......................... 0
 UTM [MARKER] ....................... 0
 UTM [APP CONTEXT] ................. 0
```

```
 UTM [TDL TAN] ..................... 0
 UTM [MODULE ID] ................... 0
 UTM [DYN LIB] ..................... 0
 UTM [PLAIN TEXT] .................. 0
 UTM [ENCODED] ..................... 5
 UTM [Skipped / Rendered / Total] .. 44439 / 5 / 44444
 Last UTM TimeStamp ................ 2023/03/13 08:51:26.723961142
 First UTM TimeStamp ............... 2023/03/13 08:13:19.321653302
============================================================
----------------- Decoder Output Information --------------
============================================================
 MRST Filter Rules ...... 24
 UTM Process Filter .....
cpp_cp,fman_fp,fman_rp,fman-rp,fman-fp,fed,mobilityd,mspd,odm_proxy,rogued,rrm,repm,wncd,wncmgrd,wncd_x,IOSRP,smd,odm,wstatsd,linux-iosd-image,wncloudm,locationd

 Total UTM To Process ... 44444
 Total UTF To Process ... 1
 Num of Unique Streams .. 1
============================================================
----------------- Decoder Input Information ---------------
============================================================
======= Unified Trace Decoder Information/Statistics ======
============================================================
2023/03/13 08:50:55.161355814 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless to-file mylog 12' FAILURE
2023/03/13 08:50:55.159 UTC
2023/03/13 08:49:52.077502587 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless to-file mylog.txt' SUCCESS
2023/03/13 08:49:52.075 UTC
2023/03/13 08:48:56.203638311 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless to-file' FAILURE 2023/03/13
08:48:56.202 UTC
2023/03/13 08:44:04.543044606 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless start last 455' SUCCESS
2023/03/13 08:43:52.478 UTC
2023/03/13 08:43:36.172434464 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless start' FAILURE 2023/03/13
08:43:36.170 UTC

Found 1 UTF Streams
Unified Decoder Library Init .. DONE
```

show logging profile wireless start

To specify log filtering start location, use the **show logging profile wireless start** command.

show logging profile wireless start { **last** | **marker** | **timestamp** }

Syntax Description

last	Display the logs since last event.
marker	The marker to start filtering from. It must match with previously set marker
timestamp	The timestamp for filtering. for example, "2023/02/10 14:41:50.849".

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Usage Guidelines

Ensure that you enable internal keyword using the **show logging profile wireless internal** command to get the trace output.

Without the **internal** keyword, only customer curated logs are displayed.

Examples

The following example shows how to specify log filtering from a specific marker:

```
Device# show logging profile wireless start marker global
Logging display requested on 2023/03/13 08:57:50 (UTC) for Hostname: [BRU-C9K-153-05],
Model: [C9300-24T], Version: [17.03.05], SN: [FOC24140R40], MD_SN: [FOC2415U0XX]

Start marker [global] at timestamp ["2023/03/10 14:12:41.685027" UTC] found
executing cmd on chassis 1 ...

2023/03/10 14:12:41.686658 {smd_R0-0}{1}: [btrace] [0]: (mark): global
2023/03/10 14:12:41.690920 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.217.91@vty0:user=cisco cmd: 'set logging marker global' SUCCESS 14:12:41 UTC Fri Mar
 10 2023
2023/03/10 14:12:57.134650 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.217.91@vty0:user=cisco cmd: 'show logging marker global' FAILURE 14:12:57 UTC Fri Mar
 10 2023
2023/03/10 14:18:03.930420 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Job
 1023 SAUtilityMeasurementJob, Matching 1023 SAUtilityMeasurementJob
2023/03/10 14:18:03.930440 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Find
 the Job for removal 0x7FC0BE3EC110
2023/03/10 14:18:03.930464 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Found
 the element for removal 0x7FC0BD9BED80 ->0x7FC0BD9BD260
2023/03/10 14:18:03.930471 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Removinging Job SAUtilityMeasurementJob 0x7FC0BD9A6430, leaf 0x7FC0ADA357A0
2023/03/10 14:18:03.930489 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
```

```
SAMsgThread-Attaching Job SAUtilityMeasurementJob to Exec Queue Head
2023/03/10 14:18:03.930495 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAMsgThread-Executing from Queue, Job SAUtilityMeasurementJob (20)
2023/03/10 14:18:03.930501 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note): SAMsgThread-Setting
 SAUtilityMeasurementJob IN PROGRESS False to True
2023/03/10 14:18:03.930519 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-utility measurement start
2023/03/10 14:18:03.930526 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/10 14:18:03.930532 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/10 14:18:03.930538 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/10 14:18:03.930544 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/10 14:18:03.930549 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/10 14:18:03.930555 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/10 14:18:03.930561 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/10 14:18:03.930567 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/10 14:18:03.930583 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - started
2023/03/10 14:18:03.930589 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/10 14:18:03.930595 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/10 14:18:03.930601 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/10 14:18:03.930607 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/10 14:18:03.930613 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant[0], numEndPoints: 0
2023/03/10 14:18:03.930619 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant[1], numEndPoints: 0
2023/03/10 14:18:03.930624 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Prepare grant request struct - grant list built successfully, numGrant:
2, numEndPoints: 0
2023/03/10 14:18:03.930630 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[1], n[3]
2023/03/10 14:18:03.930654 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[2], n[2]
2023/03/10 14:18:03.930660 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[5], n[1]
2023/03/10 14:18:03.930666 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Get Handle List: next_id[6], n[0]
2023/03/10 14:18:03.930672 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-Checking 0
tag[regid.2017-03.com.cisco.advantagek9,1.0_bd1da96e-ec1d-412b-a50e-53846b347d53] handle[1]
 utility[0x7FC0B1BDA340]
2023/03/10 14:18:03.930678 {IOSRP_R0-0}{1}: [smart-agent] [22736]: (note):
SAUtilMeasurement-process append measurement
 --More--
```

The following example shows how to specify log filtering from the last event:

```
Device# show logging profile wireless start last 455
Logging display requested on 2023/03/13 08:43:52 (UTC) for Hostname: [FABRIEK], Model:
[C8300-1N1S-4T2X], Version: [17.12.01], SN: [FDO24190V85], MD_SN: [FDO2451M13G]
```

```
Displaying logs from the last 0 days, 0 hours, 7 minutes, 35 seconds
executing cmd on chassis local ...
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2023/03/13 08:40:29.117013228 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'enable' SUCCESS 2023/03/13 08:40:24.272 UTC
2023/03/13 08:41:00.611072184 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless switch ' FAILURE 2023/03/13
08:41:00.609 UTC
2023/03/13 08:41:17.724209224 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless ' SUCCESS 2023/03/13 08:41:14.335
 UTC
2023/03/13 08:43:36.172434464 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'show logging profile wireless start' FAILURE 2023/03/13
08:43:36.170 UTC
============================================================
======= Unified Trace Decoder Information/Statistics ======
============================================================
----------------- Decoder Input Information ---------------
============================================================
 Num of Unique Streams .. 1
 Total UTF To Process ... 1
 Total UTM To Process ... 41218
 UTM Process Filter .....
qpp_cp,fman_fp,fman_rp,fman-rp,fman-fp,fed,mobilityd,mspd,odm_proxy,rogued,rm,repm,wncd,wncmgrd,wncd_x,IOSRP,smd,odm,wstatsd,linux-iosd-image,wncloudm,locationd

 MRST Filter Rules ...... 24
============================================================
----------------- Decoder Output Information --------------
============================================================
 First UTM TimeStamp ............... 2023/03/13 08:13:19.321653302
 Last UTM TimeStamp ................ 2023/03/13 08:43:51.407251687
 UTM [Skipped / Rendered / Total] .. 41214 / 4 / 41218
 UTM [ENCODED] ..................... 4
 UTM [PLAIN TEXT] .................. 0
 UTM [DYN LIB] ..................... 0
 UTM [MODULE ID] ................... 0
 UTM [TDL TAN] ..................... 0
 UTM [APP CONTEXT] ................. 0
 UTM [MARKER] ...................... 0
 UTM [PCAP] ........................ 0
 UTM [LUID NOT FOUND] .............. 0
 UTM Level [EMERGENCY / ALERT / CRITICAL / ERROR] .. 0 / 0 / 0 / 0
 UTM Level [WARNING / NOTICE / INFO / DEBUG] ....... 0 / 4 / 0 / 0
 UTM Level [VERBOSE / NOISE / INVALID] ............. 0 / 0 / 0
============================================================
```

show logging profile wireless switch

To specify the switch to look for logs, use the **show logging profile wireless switch** command.

show logging profile wireless switch { *<switch-nmber>* | **active** | **standby** }

Syntax Description

Chasis-number	The chasis number.
active	Selects the active instance.
standby	Selects the standby instance.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Usage Guidelines

Ensure that you enable internal keyword using the **show logging profile wireless internal** command to get the trace output.

Without the **internal** keyword, only customer curated logs are displayed.

Examples

The following example shows how to specify the chassis number to look for logs:

```
Device# show logging profile wireless switch 1
Logging display requested on 2023/03/13 08:31:03 (UTC) for Hostname: [BRU-C9K-153-05],
Model: [C9300-24T], Version: [17.03.05], SN: [FOC24140R40], MD_SN: [FOC2415U0XX]

Displaying logs from the last 0 days, 0 hours, 10 minutes, 0 seconds
executing cmd on chassis 1 ...

2023/03/13 08:23:38.572830 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless reverse' SUCCESS 08:23:38
 UTC Mon Mar 13 2023
2023/03/13 08:23:47.635492 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless switch' FAILURE 08:23:47
 UTC Mon Mar 13 2023
2023/03/13 08:28:58.495768 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless switch 11' SUCCESS 08:28:58
 UTC Mon Mar 13 2023
2023/03/13 08:29:05.679730 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless switch 3' SUCCESS 08:29:05
 UTC Mon Mar 13 2023
2023/03/13 08:29:12.043540 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless switch 4' SUCCESS 08:29:12
 UTC Mon Mar 13 2023
2023/03/13 08:29:23.347112 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless switch 4 active ' FAILURE
 08:29:23 UTC Mon Mar 13 2023
```

```
2023/03/13 08:29:44.820050 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless switch active' SUCCESS
08:29:44 UTC Mon Mar 13 2023
2023/03/13 08:30:22.698250 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless switch standby metadata
' SUCCESS 08:30:22 UTC Mon Mar 13 2023
2023/03/13 08:30:36.009511 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless switch standby to-file'
FAILURE 08:30:36 UTC Mon Mar 13 2023
2023/03/13 08:30:49.762440 {IOSRP_R0-0}{1}: [parser_cmd] [14504]: (note): id=
10.68.219.145@vty0:user=cisco cmd: 'show logging profile wireless switch standby reverse'
SUCCESS 08:30:49 UTC Mon Mar 13 2023
```

show logging profile wireless to-file

To decode files stored in disk and write the output to a file, use the **show logging profile wireless to-file** command.

show logging profile wireless to-file *output-file-name*

Syntax Description

output-file-name	Output file name. File with this name will be created in the flash/bootflash/crashinfo/harddisk memory.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Usage Guidelines

Ensure that you enable internal keyword using the **show logging profile wireless internal** command to get the trace output.

Without the **internal** keyword, only customer curated logs are displayed.

Examples

The following example shows how to decode files stored in disk and write the output to a file:

```
Device# show logging profile wireless to-file mylog.txt
excuting cmd on chassis 1 ...
Files being merged in the background, result will be in /bootflash/mylog.txt log file.

Device#
Device#dir bootflash:mylog.txt
Directory of bootflash:/mylog.txt

   39  -rw-          1698598  Oct 31 2017 05:29:11 +00:00  mylog.txt

7897796608 bytes total (3338383360 bytes free)
```

show logging profile sdwan

To view messages logged by binary trace for Cisco-SD-WAN-specific processes and process modules, use the **show logging profile sdwan** command in the privileged EXEC mode. The messages are displayed in chronological order.

show logging profile sdwan
[{ **extract-pcap to-file** *path* | [**end timestamp** *ts*] [**module** *name*] [**internal**] [**start** { **last** { *n* { **days** | **hours** | **minutes** | **seconds** } **clear boot** } | **timestamp** *ts* } [**end** { **last** { *n* { **days** | **hours** | **minutes** | **seconds** } **clear boot** } | **timestamp** *ts* }]] [**level** *level*] [**fru** *slot*] [{ **reverse** | [{ **trace-on-failure** | **metadata** }] [**to-file** *path*] }] }]

Syntax Description

extract-pcap to-file *path*	Extracts pcap data to a file.
end timestamp *ts*	Shows logs up to the specified timestamp.
module *name*	Selects logs for specific modules.
internal	Selects all logs.
start{ **last** { *n* {**days** | **hours** | **minutes** | **seconds**} | **clear** | **boot**} | **timestamp** *ts*}[**end**{ **last** { *n* {**days** | **hours** | **minutes** | **seconds**} | **clear** | **boot**} | **timestamp** *ts*}]	Shows logs collected between the specified start and end times.
level *level*	Shows logs for the specified and higher levels.
fru *slot*	Shows logs from a specific FRU.
reverse	Shows logs in reverse chronological order.
to-file *path*	Decodes files stored in disk and writes output to file.
trace-on-failure	Shows the trace on failure summary.
metadata	Shows metadata for every log message.

Command Default

None

Command Modes

Privileged EXEC

Command History

Release	Modification
Cisco IOS XE Release 17.4.1a	Command support introduced for select Cisco SD-WAN processes.

Usage Guidelines

Table 2: Supported Cisco SD-WAN Daemons

Cisco SD-WAN Daemons	Supported from Release
• fpmd • ftm • ompd • vdaemon • cfgmgr	Cisco IOS XE Release 17.4.1a

Example

The following example shows a truncated output of the **show logging profile sdwan start last boot internal** command. From the timestamps, we can see that the messages are shown in a chronological order.

```
Device# show logging profile sdwan start last boot internal
Logging display requested on 2020/11/18 18:59:16 (UTC) for Hostname: [Device], Model:
[ISR4451-X/K9], Version: [17.04.01], SN: [FOC23125GHG], MD_SN: [FGL231432EQ]

Displaying logs from the last 1 days, 10 hours, 0 minutes, 20 seconds
executing cmd on chassis local …
.
.
.
2020/11/20 10:25:52.195149 {vdaemon_R0-0}{1}: [misc] [10969]: (ERR): Set chassis-number -
ISR4451-X/K9-FOC23125GHG in confd
2020/11/20 10:25:52.198958 {vdaemon_R0-0}{1}: [misc] [10969]: (ERR): Root-CA file exists -
 Set it in CDB
2020/11/20 10:25:52.200462 {vdaemon_R0-0}{1}: [vipcommon] [10969]: (debug): chasfs
property_create success sw-vip-vdaemon-done
2020/11/20 10:25:52.201467 {vip_confd_startup_sh_R0-0}{1}: [btrace_sh] [6179]: (note):
INOTIFY /tmp/chassis/local/rp/chasfs/rp/0/0/confd/ CREATE sw-vip-vdaemon-done
2020/11/20 10:25:52.202184 {vip_confd_startup_sh_R0-0}{1}: [btrace_sh] [6179]: (note):
INOTIFY /tmp/chassis/local/rp/chasfs/rp/0/0/confd/ CLOSE_WRITE-CLOSE sw-vip-vdaemon-done
2020/11/20 10:25:52.238625 {vdaemon_R0-0}{1}: [vipcommon] [10969]: (debug):
[/usr/sbin/iptables -w -A LOGGING -m limit --limit 5/m -j LOG --log-prefix "iptables-dropped:"
 --log-level 6] exited with ret: 2, output: iptables v1.8.3 (legacy): Couldn't load match
`limit':No such file or directory
2020/11/20 10:25:52.242402 {vdaemon_R0-0}{1}: [vipcommon] [10969]: (debug):
[/usr/sbin/ip6tables -w -A LOGGING -m limit --limit 5/m -j LOG --log-prefix
"ip6tables-dropped:" --log-level 6] exited with ret: 2, output: ip6tables v1.8.3 (legacy):
 Couldn't load match `limit':No such file or directory
2020/11/20 10:25:52.254181 {vdaemon_R0-0}{1}: [misc] [10969]: (ERR): Error removing
/usr/share/viptela/proxy.crt
2020/11/20 10:25:52.692474 {vdaemon_R0-0}{1}: [confd] [10969]: (ERR): Flags=1, device-type=1,
 vbond-dns=0, domain-id=0, site-id=0, system-ip=0, wan-intf=0, org-name=0, cert-inst=0,
root-cert-inst=0, port-offset=0, uuid=0
2020/11/20 10:25:52.692486 {vdaemon_R0-0}{1}: [confd] [10969]: (ERR): Returning 0
.
.
.
2020/11/20 10:26:24.669716 {fpmd_pmanlog_R0-0}{1}: [btrace] [14140]: (note): Btrace started
 for process ID 14140 with 512 modules
2020/11/20 10:26:24.669721 {fpmd_pmanlog_R0-0}{1}: [btrace] [14140]: (note): File size max
 used for rotation of tracelogs: 8192
```

```
.
.
.
2020/11/20 10:26:25.001528 {fpmd_R0-0}{1}: [fpmd] [14271]: (note): FPMD BTRACE INIT DONE
2020/11/20 10:26:25.001551 {fpmd_R0-0}{1}: [vipcommon] [14271]: (note): Vipcommon btrace
init done
2020/11/20 10:26:25.001563 {fpmd_R0-0}{1}: [chmgr_api] [14271]: (note): Chmgr_api btrace
init done
2020/11/20 10:26:25.022479 {ftmd_pmanlog_R0-0}{1}: [btrace] [14364]: (note): Btrace started
 for process ID 14364 with 512 modules
2020/11/20 10:26:25.022484 {ftmd_pmanlog_R0-0}{1}: [btrace] [14364]: (note): File size max
 used for rotation of tracelogs: 8192
2020/11/20 10:26:25.022484 {ftmd_pmanlog_R0-0}{1}: [btrace] [14364]: (note): File size max
 used for rotation of TAN stats file: 8192
2020/11/20 10:26:25.022485 {ftmd_pmanlog_R0-0}{1}: [btrace] [14364]: (note): File rotation
 timeout max used for rotation of TAN stats file: 600
2020/11/20 10:26:25.022590 {ftmd_pmanlog_R0-0}{1}: [btrace] [14364]: (note): Boot level
config file [/harddisk/tracelogs/level_config/ftmd_pmanlog_R0-0] is not available. Skipping
2020/11/20 10:26:25.022602 {ftmd_pmanlog_R0-0}{1}: [btrace] [14364]: (note): Setting level
 to 5 from [BINOS_BTRACE_LEVEL_MODULE_BTRACE_SH]=[NOTICE]
2020/11/20 10:26:25.037903 {fpmd_R0-0}{1}: [cyan] [14271]: (warn): program path package
name rp_security does not match .pkginfo name mono
2020/11/20 10:26:25.038036 {fpmd_R0-0}{1}: [cyan] [14271]: (note): Successfully initialized
 cyan library for /tmp/sw/rp/0/0/rp_security/mount/usr/binos/bin/fpmd with
/tmp/cyan/0/mono.cdb
2020/11/20 10:26:26.206844 {ftmd_R0-0}{1}: [tdllib] [14517]: (note): Flag tdlh stale epoch
 for all tdl handles
2020/11/20 10:26:26.206853 {ftmd_R0-0}{1}: [tdllib] [14517]: (note): Detect newly epoch
file generated: /tmp/tdlresolve/epoch_dir/active, new epoch:
/tmp/tdlresolve/epoch_dir//2020_11_20_10_23_8925.epoch
2020/11/20 10:26:26.206866 {ftmd_R0-0}{1}: [tdllib] [14517]: (note): epoch file read
/tmp/tdlresolve/epoch_dir//2020_11_20_10_23_8925.epoch
2020/11/20 10:26:26.334529 {plogd_R0-0}{1}: [plogd] [5353]: (debug):   Sending: facility
16. %Cisco-SDWAN-RP_0-CFGMGR-4-WARN-300001: R0/0: CFGMGR: Connection to ftm is up
2020/11/20 10:26:26.334580 {plogd_R0-0}{1}: [plogd] [5353]: (debug):   Sending: facility
16. %Cisco-SDWAN-Atlantis-B4-FTMD-4-WARN-1000007: R0/0: FTMD: Connection to TTM came up.
p_msgq 0x564c7606bc30 p_ftm 0x564c7514d8b0
2020/11/20 10:26:26.335175 {IOSRP_R0-0}{1}: [iosrp] [15606]: (warn):  *Nov 20 10:26:26.335:
 %Cisco-SDWAN-RP_0-CFGMGR-4-WARN-300001: R0/0: CFGMGR: Connection to ftm is up
.
.
.
```

show logging profile sdwan internal

To view messages logged by binary trace for Cisco-SD-WAN-specific processes and process modules, use the **show logging profile sdwan internal** command in the privileged EXEC mode. The messages are displayed in chronological order.

show logging profile sdwan internal

Syntax Description

end timestamp *ts*	Shows logs up to the specified timestamp.
start{ **last** { *n* {**days** | **hours** | **minutes** | **seconds**} | **clear** | **boot**} | **timestamp** *ts*}[**end**{ **last** { *n* {**days** | **hours** | **minutes** | **seconds**} | **clear** | **boot**} | **timestamp** *ts*}]	Shows logs collected between the specified start and end times.
level *level*	Shows logs for the specified and higher levels.
fru *slot*	Shows logs from a specific FRU.
reverse	Shows logs in reverse chronological order.
to-file *path*	Decodes files stored in disk and writes output to file.
trace-on-failure	Shows the trace on failure summary.
metadata	Shows metadata for every log message.

Command Default

None

Command Modes

Privileged EXEC

Command History

Release	Modification
Cisco IOS XE Release 17.4.1a	Command support introduced for select Cisco SD-WAN processes.

Usage Guidelines

Table 3: Supported Cisco SD-WAN Daemons

Cisco SD-WAN Daemons	Supported from Release
• fpmd • ftm • ompd • vdaemon • cfgmgr	Cisco IOS XE Release 17.4.1a

Example

```
Device# show logging profile sdwan internal start last boot
Logging display requested on 2023/03/17 20:24:21 (UTC) for Hostname: [FABRIEK], Model:
[C8300-1N1S-4T2X], Version: [17.12.01], SN: [FDO24190V85], MD_SN: [FDO2451M13G]

Displaying logs from the last 0 days, 11 hours, 43 minutes, 34 seconds
executing cmd on chassis local ...
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2023/03/17 08:40:49.204368658 {binos_R0-0}{255}: [btrace_sh] [7615]: (note): Device mode
is autonomous
2023/03/17 08:40:49.207063476 {binos_R0-0}{255}: [btrace_sh] [7615]: (note): Device mode
is autonomous
2023/03/17 08:40:49.222900086 {binos_R0-0}{255}: [btrace_sh] [7615]: (note): Image is unified
2023/03/17 08:40:49.227106778 {binos_R0-0}{255}: [btrace_sh] [7615]: (note): Image allows
controller mode
2023/03/17 08:40:49.227163533 {binos_R0-0}{255}: [btrace_sh] [7615]: (note): continue in
AUTONOMOUS mode
2023/03/17 08:40:49.348891716 {binos_R0-0}{255}: [btrace_sh] [7615]: (note): setting device
 mode to autonomous in rommon
2023/03/17 08:40:49.349197442 {binos_R0-0}{255}: [btrace_sh] [7615]: (note): setting device
 mode to autonomous in chasfs
2023/03/17 08:40:51.145357889 {iosrp_R0-0}{255}: [btrace] [3693]: (note): Btrace started
for process IOSRP ID 3693 with 446 modules
2023/03/17 08:40:51.145360439 {iosrp_R0-0}{255}: [btrace] [3693]: (note): File size max
used for rotation of tracelogs: 1048576
2023/03/17 08:40:51.145360722 {iosrp_R0-0}{255}: [btrace] [3693]: (note): File size max
used for rotation of TAN stats file: 1048576
2023/03/17 08:40:51.145360907 {iosrp_R0-0}{255}: [btrace] [3693]: (note): File rotation
timeout max used for rotation of TAN stats file: 600
2023/03/17 08:40:51.145361152 {iosrp_R0-0}{255}: [btrace] [3693]: (note): Bproc Name:IOSRP
 pman:0
2023/03/17 08:40:51.145469793 {iosrp_R0-0}{255}: [btrace] [3693]: (note): Boot level config
 file [/harddisk/tracelogs/level_config/IOSRP_R0-0] is not available. Skipping
2023/03/17 08:40:51.145480353 {iosrp_R0-0}{255}: [btrace] [3693]: (note): module init:
(iosrp), huffman code len=27, code: 0x1d.86.bf.00.00.00.00.00.00.00.00.00.00.00.00
2023/03/17 08:40:51.358147091 {iosrp_R0-0}{255}: [btrace] [3693]: (note): module init:
(syshw), huffman code len=38, code: 0x03.74.87.8a.20.00.00.00.00.00.00.00.00.00.00
2023/03/17 08:40:51.358352395 {iosrp_R0-0}{255}: [syshw] [3693]: (ERR): syshw build device:
 could not add register 5 dev: /sys/bus/platform/devices/cpld/phys_slot_number (No such
file or directory) due to No such file or directory
2023/03/17 08:40:51.358372681 {iosrp_R0-0}{255}: [syshw] [3693]: (ERR): syshw build device:
 could not add register 7 dev: /sys/bus/platform/devices/cpld/reg_rp_sku_register (No such
 file or directory) due to No such file or directory
2023/03/17 08:40:51.358507185 {iosrp_R0-0}{255}: [btrace] [3693]: (note): module init:
(flash), huffman code len=28, code: 0x3d.90.78.80.00.00.00.00.00.00.00.00.00.00.00
2023/03/17 08:40:51.359001716 {iosrp_R0-0}{255}: [flash] [3693]: (note):
Neptune/Radium/Thallium platform detected - use NEPTUNE/RADIUM/THALLIUM flash offset values
2023/03/17 08:40:51.359019217 {iosrp_R0-0}{255}: [flash] [3693]: (note): Flashlib: using
native flash read/writes
2023/03/17 08:40:51.364902464 {iosrp_R0-0}{255}: [btrace] [3693]: (note): module init:
(prelib), huffman code len=32, code: 0xfe.96.c7.a8.00.00.00.00.00.00.00.00.00.00.00
2023/03/17 08:40:51.369704568 {iosrp_R0-0}{255}: [btrace] [3693]: (note): module init:
(thpool), huffman code len=34, code: 0xcf.1f.de.ee.00.00.00.00.00.00.00.00.00.00.00
2023/03/17 08:40:51.370335191 {iosrp_R0-0}{255}: [btrace] [3693:14198]: (note): module init:
 (services), huffman code len=40, code: 0x05.d1.91.45.08.00.00.00.00.00.00.00.00.00.00
2023/03/17 08:40:51.379647650 {iosrp_R0-0}{255}: [chasfs] [3693]: (ERR): property open:
property console does not exist: /tmp/chassis/local/rp/chasfs/rp/console
2023/03/17 08:40:52.210928762 {iosrp_R0-0}{255}: [btrace] [3693]: (note): module init:
(evlib), huffman code len=29, code: 0x53.36.3d.40.00.00.00.00.00.00.00.00.00.00.00
2023/03/17 08:40:52.246163846 {plogd_R0-0}{255}: [btrace] [4760]: (note): Btrace started
```

```
for process plogd ID 4760 with 512 module

2023/03/17 08:40:52.246167612 {plogd_R0-0}{255}: [btrace] [4760]: (note): File size max
used for rotation of tracelogs: 131072
2023/03/17 08:40:52.246168032 {plogd_R0-0}{255}: [btrace] [4760]: (note): File size max
used for rotation of TAN stats file: 131072
2023/03/17 08:40:52.246168329 {plogd_R0-0}{255}: [btrace] [4760]: (note): File rotation
timeout max used for rotation of TAN stats file: 600
2023/03/17 08:40:52.246168702 {plogd_R0-0}{255}: [btrace] [4760]: (note): Bproc Name:plogd
 pman:0
2023/03/17 08:40:52.246332428 {plogd_R0-0}{255}: [btrace] [4760]: (note): Boot level config
 file [/harddisk/tracelogs/level_config/plogd_R0-0] is not available. Skipping
2023/03/17 08:40:52.246334622 {plogd_R0-0}{255}: [plogd] [4760]: (note): Starting plogd
from /tmp/sw/rp/0/0/rp_security/mount/usr/binos/bin/plogd as pid 4760
2023/03/17 08:40:52.246423255 {plogd_R0-0}{255}: [btrace] [4760]: (note): module init:
(evlib), huffman code len=29, code: 0x53.36.3d.40.00.00.00.00.00.00.00.00.00.00.00
2023/03/17 08:40:52.246615549 {plogd_R0-0}{255}: [btrace] [4760]: (note): module init:
(services), huffman code len=40, code: 0x05.d1.91.45.08.00.00.00.00.00.00.00.00.00.00
2023/03/17 08:40:52.246738253 {plogd_R0-0}{255}: [btrace] [4760]: (note): module init:
(cyan), huffman code len=30, code: 0x43.74.97.20.00.00.00.00.00.00.00.00.00.00.00
2023/03/17 08:40:52.246802268 {plogd_R0-0}{255}: [cyan] [4760]: (warn): program path package
 name rp_security does not match .pkginfo name mono
<output truncated>
```

show log file

To display the log files in bootflash:, crashinfo:, flash:, harddisk:, or webui:, use the **show log file** command.

show log file

Syntax Description

This command has no arguments or keywords.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Examples

This example shows how to display binary encoded logs on the /harddisk/tracelogs directory:

```
# show log file flash:tracelogs/wncmgrd_R0-0.31953_1984.20171030025730.bin

excuting cmd on chassis 1 ...
Decoding files:

2017/10/30 02:57:30.189 {wncmgrd_R0-0}{1}: [hl-core] [31953]: UUID: 1000000042b94, ra: 15,
 (debug): AP ece1.a9da.0ce0 is detected as unknown and is ignored for L1
2017/10/30 02:57:30.190 {wncmgrd_R0-0}{1}: [hl-core] [31953]: UUID: 1000000042b95, ra: 15,
 (debug): AP ece1.a9da.0ce0 is detected as unknown and is ignored for L1
2017/10/30 02:57:30.655 {wncmgrd_R0-0}{1}: [capwapac-srvr] [31953]: UUID: 1000000042b9d,
ra: 15, (info): MAC: ece1.a9da.0ce0  IP:90.90.90.244[51099], Discovery Request received
2017/10/30 02:57:30.655 {wncmgrd_R0-0}{1}: [capwapac-srvr] [31953]: UUID: 1000000042b9d,
ra: 15,
```

monitor logging

To monitor log generation in real-time for a process or a profile, use the **monitor logging** command in privileged EXEC or user EXEC mode.

monitor logging

Syntax Description

This command has no arguments or keywords.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Examples

This example shows how to monitor logs for a device:

```
Device# monitor logging
Displaying traces starting from 2023/03/13 13:54:44.000000.  If no traces are present, the
 command will wait until one is.
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2023/03/13 13:55:02.400420159 {btman_R0-0}{255}: [utm_main] [6459]: (note): Inserted UTF(2)
 HT(old):droputil_R0-0[13] lnode /tmp/rp/trace/droputil_R0-0.7048_399.20230313135502.bin
PID:7048
2023/03/13 13:55:03.400515639 {btman_R0-0}{255}: [utm_wq] [6459:17299]: (note): Inline sync,
 enqueue BTF message flags:0x1, PID:17299
BTF:/tmp/rp/trace/droputil_R0-0.7048_398.20230313135402.bin
2023/03/13 13:55:03.405782937 {btman_R0-0}{255}: [utm_wq] [6459]: (note): utm delete
/tmp/rp/trace/droputil_R0-0.7048_398.20230313135402.bin
2023/03/13 13:55:04.830270054 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'enable' SUCCESS 2023/03/13 13:55:01.824 UTC
2023/03/13 13:55:14.147669445 {btman_R0-0}{255}: [utm_main] [6459]: (note): Inserted UTF(1)
 HT(new):in_telnetd_R0-0[15] lnode /tmp/rp/trace/in_telnetd_R0-0.17897_0.20230313135514.bin:56
 PID:17897
2023/03/13 13:55:14.385316198 {btman_R0-0}{255}: [utm_main] [6459]: (note): Inserted UTF(1)
 HT(new):brelay_R0-0[11] lnode /tmp/rp/trace/brelay_R0-0.18013_0.20230313135514.bin:52
PID:18013
2023/03/13 13:55:14.602737720 {btman_R0-0}{255}: [utm_main] [6459]: (note): Inserted UTF(1)
 HT(old):utd_R0-0[8] lnode /tmp/rp/trace/utd_R0-0.18072_0.20230313135514.bin PID:18072
2023/03/13 13:55:52.416339579 {btman_R0-0}{255}: [utm_main] [6459]: (note): Inserted UTF(2)
 HT(old):droputil_R0-0[13] lnode /tmp/rp/trace/droputil_R0-0.7048_400.20230313135552.bin
PID:7048
2023/03/13 13:55:53.416432464 {btman_R0-0}{255}: [utm_wq] [6459:17299]: (note): Inline sync,
 enqueue BTF message flags:0x1, PID:17299
BTF:/tmp/rp/trace/droputil_R0-0.7048_399.20230313135502.bin
2023/03/13 13:55:53.438909953 {btman_R0-0}{255}: [utm_wq] [6459]: (note): utm delete
/tmp/rp/trace/droputil_R0-0.7048_399.20230313135502.bin
<output truncated>
```

monitor logging filter

To specify filter for monitorin logs, use the **monitor logging** command.

monitor logging filter { **interface** | **ipv4** | **ipv6** | **mac** | **ra** | **string** | **uuid** }

Syntax Description

interface	Selects logs with specific interface app context.
ipv4	Selects logs with specific IPv4 address app context.
ipv6	Selects logs with specific IPv6 address app context.
mac	Selects logs with specific MAC app context.
string	Selects logs with specific string app context.
uuid	Selects logs with specific Universally Unique Identifier (UUID) app context.
ra	Selects the radioactive logs.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Examples

The following example show how to specify filter for monitoring logs.

```
Device# monitor logging filter mac ECE1.A9DA.0CE0
Device# monitor logging filter uuid 0x1f00000000014
```

monitor logging level

To monitor logs above a specific level, use the **monitor logging level** command.

monitor logging level { **debug** | **error** | **info** | **notice** | **verbose** | **warning** }

Syntax Description

debug	Selects the debug-level trace messages.
error	Selects the error-level trace messages.
info	Selects the informational-level trace messages.
notice	Selects the notice-level trace messages.
verbose	Selects the verbose-level trace messages.
warning	Selects the warning-level trace messages.

Command Default

The default tracing level for all modules is **notice**.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Examples

The following example shows how to monitor logs above a specific level.

```
Device# monitor logging level debug
```

monitor logging metadata

To display metadata for every log message, use the **monitor logging metadata** command.

monitor logging metadata

Syntax Description

This command has no arguments or keywords.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

The following example show how to view the metadata of a log message.

```
#monitor logging metadata
Displaying traces starting from 2023/03/13 16:14:38.000000.  If no traces are present, the
 command will wait until one is.
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2023/03/13 16:14:45.726520594 {iosrp_R0-0}{255}: [iosrp] [3816]: (note):  *Mar 13
16:14:45.726: %SEC_LOGIN-5-LOGIN_SUCCESS: Login Success [user: admin] [Source: 10.68.219.145]
 [localport: 23] at 16:14:45 UTC Mon Mar 13 2023
2023/03/13 16:14:50.707027420 {btman_R0-0}{255}: [utm_main] [6384]: Message type: 0, Flags:
 0x4 [ TAC ], LUID: 1499fee71564e6679f585021b0d556fe98b60007, UUID: 0, ra: 0 (note): Inserted
 UTF(2) HT(old):droputil_R0-0[13] lnode
/tmp/rp/trace/droputil_R0-0.7083_514.20230313161450.bin PID:7083
2023/03/13 16:14:51.706580987 {btman_R0-0}{255}: [utm_wq] [6384:17368]: Message type: 0,
Flags: 0x4 [ TAC ], LUID: f93d6ec90236d75c9dd60da9a0021ac8645c0004, UUID: 0, ra: 0 (note):
 Inline sync, enqueue BTF message flags:0x1, PID:17368
BTF:/tmp/rp/trace/droputil_R0-0.7083_513.20230313161400.bin
2023/03/13 16:14:51.715837324 {btman_R0-0}{255}: [utm_wq] [6384]: Message type: 0, Flags:
0x4 [ TAC ], LUID: e284a7bb15a631e5236149d09c16335330c10006, UUID: 0, ra: 0 (note): utm
delete /tmp/rp/trace/droputil_R0-0.7083_513.20230313161400.bin
2023/03/13 16:15:07.678586985 {btman_R0-0}{255}: [utm_main] [6384]: Message type: 0, Flags:
 0x4 [ TAC ], LUID: 1499fee71564e6679f585021b0d556fe98b60007, UUID: 0, ra: 0 (note): Inserted
 UTF(2) HT(old):in_telnetd_R0-0[15] lnode
/tmp/rp/trace/in_telnetd_R0-0.9365_0.20230313161507.bin PID:9365
<output truncated>
```

monitor logging process-helper

To monitor log generation in real-time for a process or a profile, use the **monitor logging** command in privileged EXEC or user EXEC mode.

monitor logging process-helper process-name

Syntax Description

process-name	You can choose a certain process for which the logs need to be monitored. Example: **bt-logger**, **btrace-manager**, **ios**, **dbm**, **logger**, and so on.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Examples

The following example shows how to monitor logs for a specific process.

```
Device# monitor logging process-helper ios
Displaying traces starting from 2023/03/13 16:38:08.000000.  If no traces are present, the
 command will wait until one is.
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2023/03/13 16:38:13.126431871 {iosrp_R0-0}{255}: [parser_cmd] [3793]: (note): id=
10.68.219.145@vty0:user= cmd: 'enable' SUCCESS 2023/03/13 16:38:09.727 UTC
```

monitor logging

To monitor logs for a profile, use the **monitor logging** command.

monitor logging profile *profile-name*

Syntax Description

profile

- **all**: Displays the logs for all processes.
- **file**: Displays the logs for a specific profile file (bootflash:, crashinfo:, flash:, harddisk:, or webui:).
- **hardware-diagnostics**: Displays the logs for the hardware-diagnostics specific processes
- **install**: Displays the logs for Install-specific processes.
- **netconf-yang**: Displays the logs for netconf-yang specific processes.
- **restconf**: Displays the logs for restconf-specific processes.
- **sdwan**: Displays the logs for SDWAN-specific processes.
- **wireless**: Displays the logs for Wireless-specific processes.

Command Default

None.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.x	This command was introduced.

Examples

This examples shows how to monitor logs for the process **wireless**.

```
Device# monitor logging profile wireless
Displaying traces starting from 2023/03/13 17:14:42.000000.  If no traces are present, the
 command will wait until one is.
Unified Decoder Library Init .. DONE
Found 1 UTF Streams

2023/03/13 17:14:50.019699421 {iosrp_R0-0}{255}: [iosrp] [3816]: (note):  *Mar 13
17:14:50.019: %SEC_LOGIN-5-LOGIN_SUCCESS: Login Success [user: admin] [Source: 10.68.219.145]
 [localport: 23] at 17:14:50 UTC Mon Mar 13 2023
```