



Reload Reason History

- [Feature history, on page 1](#)

Feature history

This reference provides the feature history for reload reason history functionality.

Table 1: Feature history for reload reason history

Feature name	Release information	Feature description
Reload reason history	Cisco IOS XE 17.11.1	The reload reason history feature tracks the reasons for controller reload. This is done for the last 10 reloads. In Cisco IOS-XE 17.10.x and earlier releases, it was possible to track only the reason for the last reload.

Reload reason history

Reload reason history is a diagnostic and serviceability feature that

- records the reasons for controller reloads
- maintains a log of the last ten reload events, and
- provides access to this data through CLI commands or programmable interfaces like NETCONF/YANG.

This feature is useful for troubleshooting abnormal reboots and understanding system behavior in production environments. Cisco introduced it in IOS XE Dublin 17.11.1, enhancing previous capabilities that only recorded the last reload reason.

View reload reason history

View the history using the **show version** command and the Network Configuration Protocol (NETCONF).



Note When you reload the standby controller, the system report files are generated in the controller hard disk.

Request reload reason history using YANG

Use YANG with NETCONF and RESTCONF to provide the desired solution for automated and programmable network operations.

Procedure

Use RPC to create a NETCONF GET request for reload history data.

Example:

```
<nc:rpc xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0"
message-id="urn:uuid:da15955f-5bb7-437c-aeb5-0fc7901a1e9e">
  <nc:get>
    <nc:filter>
      <device-hardware-data
xmlns="http://cisco.com/ns/yang/Cisco-IOS-XE-device-hardware-oper">
        <device-hardware>
          <device-system-data>
            <reload-history/>
          </device-system-data>
        </device-hardware>
      </device-hardware-data>
    </nc:filter>
  </nc:get>
</nc:rpc>

<rpc-reply message-id="urn:uuid:da15955f-5bb7-437c-aeb5-0fc7901a1e9e"
xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0">
  <data>
    <device-hardware-data xmlns="http://cisco.com/ns/yang/Cisco-IOS-XE-device-hardware-oper">

      <device-hardware>
        <device-system-data>
          <reload-history>
            <rl-history>
              <reload-category>rc-rl</reload-category>
              <reload-desc>Reload Command</reload-desc>
              <reload-time>2022-11-30T01:33:44+00:00</reload-time>
              <reload-severity>normal</reload-severity>
            </rl-history>
            <rl-history>
              <reload-category>rc-crit-proc-fault</reload-category>
              <reload-desc>Critical process stack_mgr fault on rp_0_0 (rc=137), system
report at bootflash:core/Yang_Test-system-report_20221130-012929-UTC.tar.gz</reload-desc>
              <reload-time>2022-11-30T01:31:11+00:00</reload-time>
              <reload-severity>abnormal</reload-severity>
            </rl-history>
            <rl-history>
              <reload-category>rc-img-install</reload-category>
              <reload-desc>Image Install </reload-desc>
              <reload-time>2022-11-30T01:25:03+00:00</reload-time>
              <reload-severity>normal</reload-severity>
            </rl-history>
            <rl-history>
              <reload-category>rc-crit-proc-fault</reload-category>
              <reload-desc>Critical process rif_mgr fault on rp_0_0 (rc=137), system report
at bootflash:core/Yang_Test-system-report_20221130-011127-UTC.tar.gz</reload-desc>
```

```

        <reload-time>2022-11-30T01:13:08+00:00</reload-time>
        <reload-severity>abnormal</reload-severity>
    </rl-history>
</rl-history>
    <reload-category>rc-rld</reload-category>
    <reload-desc>Reload Command</reload-desc>
    <reload-time>2022-11-30T01:08:26+00:00</reload-time>
    <reload-severity>normal</reload-severity>
</rl-history>
</rl-history>
    <reload-category>rc-crit-proc-fault</reload-category>
    <reload-desc>Critical process wncmgrd fault on rp_0_0 (rc=137), system report
at bootflash:core/Yang_Test-system-report_20221130-010338-UTC.tar.gz</reload-desc>
    <reload-time>2022-11-30T01:05:23+00:00</reload-time>
    <reload-severity>abnormal</reload-severity>
</rl-history>
</rl-history>
    <reload-category>rc-rld</reload-category>
    <reload-desc>Reload Command</reload-desc>
    <reload-time>2022-11-30T01:01:09+00:00</reload-time>
    <reload-severity>normal</reload-severity>
</rl-history>
</rl-history>
    <reload-category>rc-rld</reload-category>
    <reload-desc>Reload Command</reload-desc>
    <reload-time>2022-11-30T00:57:27+00:00</reload-time>
    <reload-severity>normal</reload-severity>
</rl-history>
</rl-history>
    <reload-category>rc-rld</reload-category>
    <reload-desc>Reload Command</reload-desc>
    <reload-time>2022-11-30T00:22:34+00:00</reload-time>
    <reload-severity>normal</reload-severity>
</rl-history>
</rl-history>
    <reload-category>rc-force-switchover</reload-category>
    <reload-desc>redundancy force-switchover</reload-desc>
    <reload-time>2022-11-29T23:40:01+00:00</reload-time>
    <reload-severity>normal</reload-severity>
</rl-history>
</reload-history>
</device-system-data>
</device-hardware>
</device-hardware-data>
</data>
</rpc-reply>

```

A NETCONF GET request for reload history data is created.

What to do next

Formore information about the YANG models, see these documents:

- The Cisco IOS XE Programmability Configuration Guide at <https://www.cisco.com/c/en/us/support/wireless/catalyst-9800-series-wireless-controllers/products-installation-and-configuration-guides-list.html>
- The YANG Data Models on Github at <https://github.com/YangModels/yang/tree/main/vendor/cisco/xe>.
- Contact the Developer Support Community for NETCONF and YANG features at: <https://developer.cisco.com/>

Reload reason history verification

Verify reload history and reason details using specific commands to troubleshoot controller issues and understand system behavior.

View reload history details

To view the reload history details, use this command:

```
Device# show reload-history
```

```
Reload History:
```

```
Reload Index: 1
Reload Code: Reload
Reload Description: Reload Command
Reload Severity: Normal Reboot
Reload Time: 01:33:44 UTC Wed Nov 30 2022
```

```
Reload Index: 2
Reload Code: Critical Process Fault
Reload Description: Critical process stack_mgr fault on rp_0_0 (rc=137), system report at
bootflash:core/Yang_Test-system-report_20221130-012929-UTC.tar.gz
Reload Severity: Abnormal Reboot
Reload Time: 01:31:11 UTC Wed Nov 30 2022
```

```
Reload Index: 3
Reload Code: Image Install
Reload Description: Image Install
Reload Severity: Normal Reboot
Reload Time: 01:25:03 UTC Wed Nov 30 2022
```

```
Reload Index: 4
Reload Code: Critical Process Fault
Reload Description: Critical process rif_mgr fault on rp_0_0 (rc=137), system report at
bootflash:core/Yang_Test-system-report_20221130-011127-UTC.tar.gz
Reload Severity: Abnormal Reboot
Reload Time: 01:13:08 UTC Wed Nov 30 2022
```

```
Reload Index: 5
Reload Code: Reload
Reload Description: Reload Command
Reload Severity: Normal Reboot
Reload Time: 01:08:26 UTC Wed Nov 30 2022
```

```
Reload Index: 6
Reload Code: Critical Process Fault
Reload Description: Critical process wncmgrd fault on rp_0_0 (rc=137), system report at
bootflash:core/Yang_Test-system-report_20221130-010338-UTC.tar.gz
Reload Severity: Abnormal Reboot
Reload Time: 01:05:23 UTC Wed Nov 30 2022
```

```
Reload Index: 7
Reload Code: Reload
Reload Description: Reload Command
Reload Severity: Normal Reboot
Reload Time: 01:01:09 UTC Wed Nov 30 2022
```

```
Reload Index: 8
Reload Code: Reload
Reload Description: Reload Command
Reload Severity: Normal Reboot
Reload Time: 00:57:27 UTC Wed Nov 30 2022
```

Reload Index: 9
Reload Code: Reload
Reload Description: Reload Command
Reload Severity: Normal Reboot
Reload Time: 00:22:34 UTC Wed Nov 30 2022

Reload Index: 10
Reload Code: Fast Switchover
Reload Description: redundancy force-switchover
Reload Severity: Normal Reboot
Reload Time: 23:40:01 UTC Tue Nov 29 2022

View reason for last reload

To view reason for the last reload, use this command:

```
Device# show platform software tdl-database content ios device data
Device Current time: 04:06:04
Device boot time: 01:33:37
Software version: Cisco IOS Software [Dublin], C9800-CL Software (C9800-CL-K9_IOSXE),
Experimental Version 17.11.20221012:120806
[BLD_POLARIS_DEV_S2C_20221010_023625-1-g5ebdd5c35512:/nobackup/saikarth/polaris_relhis 103]
Copyright (c) 1986-2022 by Cisco Systems, Inc.
Compiled Wed 12-Oct-22 05:08 by saikarth
Rommon version: IOS-XE ROMMON
Last Reboot reason: Reload Command
Reboot reason severity: Normal Reboot
Unsaved configuration: * Unknown boolean *
```

Reload History:

Reload Category: Reload
Reload Description: Reload Command
Reload Severity: Normal Reboot
Reload Time: 11/30/2022 01:33:44 UTC

Reload Category: Critical Process Fault
Reload Description: Critical process stack_mgr fault on rp_0_0 (rc=137), system report at
bootflash:core/Yang_Test-system-report_20221130-012929-UTC.tar.gz
Reload Severity: Abnormal Reboot
Reload Time: 11/30/2022 01:31:11 UTC

Reload Category: Image Install
Reload Description: Image Install
Reload Severity: Normal Reboot
Reload Time: 11/30/2022 01:25:03 UTC

Reload Category: Critical Process Fault
Reload Description: Critical process rif_mgr fault on rp_0_0 (rc=137), system report at
bootflash:core/Yang_Test-system-report_20221130-011127-UTC.tar.gz
Reload Severity: Abnormal Reboot
Reload Time: 11/30/2022 01:13:08 UTC

Reload Category: Reload
Reload Description: Reload Command
Reload Severity: Normal Reboot
Reload Time: 11/30/2022 01:08:26 UTC

Reload Category: Critical Process Fault
Reload Description: Critical process wncmgrd fault on rp_0_0 (rc=137), system report at
bootflash:core/Yang_Test-system-report_20221130-010338-UTC.tar.gz
Reload Severity: Abnormal Reboot
Reload Time: 11/30/2022 01:05:23 UTC

Reload Category: Reload
Reload Description: Reload Command
Reload Severity: Normal Reboot
Reload Time: 11/30/2022 01:01:09 UTC

Reload Category: Reload
Reload Description: Reload Command
Reload Severity: Normal Reboot
Reload Time: 11/30/2022 00:57:27 UTC

Reload Category: Reload
Reload Description: Reload Command
Reload Severity: Normal Reboot
Reload Time: 11/30/2022 00:22:34 UTC

Reload Category: Fast Switchover
Reload Description: redundancy force-switchover
Reload Severity: Normal Reboot
Reload Time: 11/29/2022 23:40:01 UTC