



General Troubleshooting

This chapter provides procedures for troubleshooting the most common problems encountered when operating the NCS 1014 chassis. To troubleshoot specific alarms, see the [Alarm Troubleshooting](#) chapter. If you cannot find what you are looking for, contact Cisco Technical Support (1 800 553-2447).

- [Capture Logs, on page 1](#)
- [Using Onboard Failure Logging, on page 2](#)

Capture Logs

When troubleshooting NCS 1014 issues, your technical support representative needs certain information about the situation and the symptoms that you are experiencing. To speed up the problem isolation and resolution process, collect the necessary data before you contact your representative.

To collect all debugging information, perform these steps:

Step 1 **show logging**

Displays the contents of the logging buffers. You can also view details of FPD upgrade failures.

Example:

```
RP/0/RP0/CPU0:ios# show logging
Fri Nov 26 15:03:48.886 UTC
Syslog logging: enabled (0 messages dropped, 0 flushes, 0 overruns)
  Console logging: Disabled
  Monitor logging: level debugging, 0 messages logged
  Trap logging: level informational, 0 messages logged
  Buffer logging: level debugging, 1025 messages logged

Log Buffer (2097152 bytes):

RP/0/RP0/CPU0:Nov 25 16:40:28.533 UTC: syslogd[155]: %SECURITY-XR_SSL-6-INFO : XR SSL info: Setting
  fips register
RP/0/RP0/CPU0:Nov 25 16:40:36.323 UTC: cfgmgr-rp[120]: %MGBL-CONFIG-7-INTERNAL : Configuration Manager
  was unable to find subtree for 'sh_p_service_role_daemon' partition. : cfgmgr-rp : (PID=2522) :
-Traceback= 7f1be3f92420 7f1be4bdd0c6 7f1be4bdd208 7f1be4bd74a4 7f1be4bd7e45 7f1be4bdb972 7f1be4bd7f0e
  55e025a46170 55e025a42429 55e025a3168f
RP/0/RP0/CPU0:Nov 25 16:40:36.457 UTC: aib[291]: Registering with IM
RP/0/RP0/CPU0:Nov 25 16:40:36.661 UTC: cma_partner[350]: Packet received on undiscovered module 160
RP/0/RP0/CPU0:Nov 25 16:40:37.113 UTC: ifmgr[142]: platform_pfi_ifh_get_if_alloc_info: Setting pic
```

```
.....
.....
```

Step 2 **show tech-support ncs1014**

Creates a .tgz file that contains the dump of the configuration and show command outputs. This file provides system information for the Cisco Technical Support.

Example:

```
RP/0/RP0/CPU0:ios# show tech-support ncs1014
Fri Nov 26 15:05:28.996 UTC
++ Show tech start time: 2021-Nov-26.150529.UTC ++
Fri Nov 26 15:05:30 UTC 2021 Waiting for gathering to complete
.....
Fri Nov 26 15:10:38 UTC 2021 Compressing show tech output
Show tech output available at 0/RP0/CPU0 :
/harddisk:/showtech/showtech-ncs1014-2021-Nov-26.150529.UTC.tgz
++ Show tech end time: 2021-Nov-26.151040.UTC ++
```

Step 3 **show tech-support install**

Collects the Cisco support file for the installation information. By default, the output of this command is saved on the NCS 1014 hard disk in a file with .tgz extension. Similarly, other show-tech-support commands can be used to gather data for a specific area.

Example:

```
RP/0/RP0/CPU0:N112#show tech-support install
++ Show tech start time: 2023-Dec-07.062636.UTC ++
Thu Dec 7 06:26:37 UTC 2023 Waiting for gathering to complete
.....
Thu Dec 7 06:32:48 UTC 2023 Compressing show tech output
Show tech output available at 0/RP0/CPU0 :
/harddisk:/showtech/showtech-N112-install-2023-Dec-07.062636.UTC.tgz
++ Show tech end time: 2023-Dec-07.063258.UTC ++
```

Using Onboard Failure Logging

Onboard Failure Logging (OBFL) collects and stores boot, environmental, and critical hardware data in the nonvolatile flash memory of the CPU controller card. This information is used for troubleshooting, testing, and diagnosis if a failure or other error occurs. This data provides improved accuracy in hardware troubleshooting and root cause isolation analysis. The data collected includes field-replaceable unit (FRU) serial number, OS version, total run time, boot status, temperature and voltage at boot, temperature and voltage history, and other board specific errors.

```
show logging onboard {fmea | inventory | temperature | uptime | voltage}
```

Displays OBFL data.

Example:

The following example shows the *uptime* information.

```
sysadmin-vm:0_RP0# show logging onboard uptime

OBFL Uptime Information For : 0/RP0
```

* indicates incomplete time-sync while record was written
 ! indicates time reset backwards while system was running

 UPTIME CARD INFORMATION

```
Entity Name           : Value
-----
Previous Chassis SN   : CAT2311B0C5
Current Chassis SN    : CAT2311B0CM
Previous R/S/I        : 0/0/0
Current R/S/I         : 0/0/0
Write Interval        : 15 (min)
First Power On TS     : 07/30/2019 07:33:56
Last Erase TS         : --/--/---- --:--:--
Rack Change Count     : 8
Slot Change Count     : 8
```

 UPTIME INFORMATION

Start Time (UTC)	End Time (UTC)	Card Uptime info
mm/dd/yyyy hh:mm:ss	mm/dd/yyyy hh:mm:ss	Weeks.Days.Hrs.Min.Sec
10/28/2021 12:23:17	11/14/2021 21:09:18	2.3.8.46.1
11/14/2021 21:09:18	11/18/2021 16:31:15	0.3.19.21.57
11/18/2021 16:31:15	11/18/2021 21:10:35	0.0.4.39.20
11/18/2021 21:10:35	11/19/2021 12:40:39	0.0.15.30.4
11/19/2021 12:40:39	11/19/2021 14:16:10	0.0.1.35.31
11/19/2021 14:16:10	11/22/2021 11:49:20	0.2.21.33.10
11/22/2021 11:49:20	11/22/2021 22:51:48	0.0.11.2.28
11/22/2021 22:51:48	11/23/2021 17:17:41	0.0.18.25.53
11/24/2021 21:22:12	11/24/2021 23:11:16	0.0.1.49.4
11/24/2021 23:11:16	11/24/2021 23:39:49	0.0.0.28.33
11/24/2021 23:39:49	11/25/2021 15:25:32	0.0.15.45.43
11/25/2021 15:25:32	11/25/2021 16:10:05	0.0.0.44.33
11/25/2021 16:10:05	11/25/2021 16:25:08	0.0.0.15.3
11/25/2021 16:25:08	11/25/2021 16:37:18	0.0.0.12.10
11/25/2021 16:37:18	11/26/2021 15:08:27	0.0.22.31.9

OBFL Uptime Information For : 0/SC0

* indicates incomplete time-sync while record was written
 ! indicates time reset backwards while system was running

 UPTIME CARD INFORMATION

```
Entity Name           : Value
-----
Previous Chassis SN   : -----
Current Chassis SN    : CAT2311B0CM
Previous R/S/I        : -/-/-
Current R/S/I         : 0/1/0
Write Interval        : 15 (min)
First Power On TS     : 06/07/2019 08:52:42
Last Erase TS         : --/--/---- --:--:--
Rack Change Count     : 0
Slot Change Count     : 0
```

 UPTIME INFORMATION

Start Time (UTC)	End Time (UTC)	Card Uptime info
mm/dd/yyyy hh:mm:ss	mm/dd/yyyy hh:mm:ss	Weeks.Days.Hrs.Min.Sec

```
10/24/2021 05:48:29 | 10/24/2021 06:27:51 | 0.0.0.39.22
10/24/2021 06:27:51 | 10/24/2021 07:05:24 | 0.0.0.37.33
10/24/2021 07:05:24 | 10/26/2021 23:43:32 | 0.2.16.38.8
10/26/2021 23:43:32 | 10/26/2021 23:55:49 | 0.0.0.12.17
10/26/2021 23:55:49 | 10/27/2021 00:09:49 | 0.0.0.14.0
10/27/2021 00:09:49 | 10/27/2021 00:16:08 | 0.0.0.6.19
10/27/2021 00:16:08 | 10/27/2021 23:37:51 | 0.0.23.21.43
10/27/2021 23:37:51 | 10/27/2021 23:50:33 | 0.0.0.12.42
11/24/2021 21:22:12 | 11/24/2021 23:11:16 | 0.0.1.49.4
11/24/2021 23:11:16 | 11/24/2021 23:39:49 | 0.0.0.28.33
11/24/2021 23:39:49 | 11/25/2021 15:25:32 | 0.0.15.45.43
11/25/2021 15:25:32 | 11/25/2021 16:10:05 | 0.0.0.44.33
11/25/2021 16:10:05 | 11/25/2021 16:25:08 | 0.0.0.15.3
11/25/2021 16:25:08 | 11/25/2021 16:37:18 | 0.0.0.12.10
11/25/2021 16:37:18 | 11/26/2021 15:09:27 | 0.0.22.32.9
```
