



Perform Preliminary Checks

After successfully logging into the console, you must perform some preliminary checks to verify the default setup. If any setup issue is detected, take corrective action before making further configurations.



Note The output of the examples in the procedures is not from the latest software release. The output will change for any explicit references to the current release.

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Verify Status of Hardware Components

To verify the status of all the hardware components installed on NCS 1004, perform the following procedure.

Before you begin

Ensure that all the required hardware components are installed on NCS 1004. For installation details, see *Cisco Network Convergence System 1004 Hardware Installation Guide*.

Procedure

Step 1 **show platform**

When you execute this command from the Cisco IOS XR EXEC mode, the status of Cisco IOS XR is displayed.

Example:

```
RP/0/RP0/CPU0:ios# show platform
```

```
Wed Mar  4 06:21:26.929 UTC
```

Node	Type	State	Config state
0/0	NCS1K4-LC-FILLER	PRESENT	NSHUT
0/1	NCS1K4-1.2T-K9	OPERATIONAL	NSHUT
0/2	NCS1K4-1.2TL-K9	OPERATIONAL	NSHUT
0/3	NCS1K4-LC-FILLER	PRESENT	NSHUT
0/RP0/CPU0	NCS1K4-CNTRLR-K9 (Active)	IOS XR RUN	NSHUT
0/FT0	NCS1K4-FAN	OPERATIONAL	NSHUT
0/FT1	NCS1K4-FAN	OPERATIONAL	NSHUT
0/FT2	NCS1K4-FAN	OPERATIONAL	NSHUT
0/PM0	NCS1K4-AC-PSU	OPERATIONAL	NSHUT
0/PM1	NCS1K4-AC-PSU	OPERATIONAL	NSHUT
0/SC0	NCS1004	OPERATIONAL	NSHUT

```
RP/0/RP0/CPU0:ios# show platform
```

```
Thu May  7 10:03:03.394 UTC
```

Node	Type	State	Config state
0/0	NCS1K4-1.2T-K9	OPERATIONAL	NSHUT
0/1	NCS1K4-OTN-XP	OPERATIONAL	NSHUT
0/2	NCS1K4-OTN-XP	OPERATIONAL	NSHUT
0/3	NCS1K4-OTN-XP	OPERATIONAL	NSHUT
0/RP0/CPU0	NCS1K4-CNTRLR-K9 (Active)	IOS XR RUN	NSHUT
0/FT0	NCS1K4-FAN	OPERATIONAL	NSHUT
0/FT1	NCS1K4-FAN	OPERATIONAL	NSHUT
0/FT2	NCS1K4-FAN	OPERATIONAL	NSHUT
0/PM0	NCS1K4-DC-PSU	OPERATIONAL	NSHUT
0/PM1	NCS1K4-DC-PSU	OPERATIONAL	NSHUT
0/SC0	NCS1004	OPERATIONAL	NSHUT

- a) If Cisco IOS XR is not operational, no output is shown in the result. In this case, verify the state of service domain router (SDR) on the node using the **show sdr** command in Cisco IOS XR mode.

The following example shows sample output of the **show sdr** command in Cisco IOS XR mode.

```
RP/0/RP0/CPU0:ios# show sdr
```

```
Wed Mar  4 06:23:16.143 UTC
```

Type	NodeName	NodeState	RedState	PartnerName
NCS1K4-LC-FILLER	0/0	PRESENT		N/A
NCS1K4-1.2T-K9	0/1	OPERATIONAL		N/A
NCS1K4-1.2TL-K9	0/2	OPERATIONAL		N/A
NCS1K4-LC-FILLER	0/3	PRESENT		N/A
RP	0/RP0/CPU0	IOS XR RUN	ACTIVE	NONE
NCS1K4-CNTRLR-K9	0/RP0	OPERATIONAL		N/A
NCS1K4-FAN	0/FT0	OPERATIONAL		N/A
NCS1K4-FAN	0/FT1	OPERATIONAL		N/A
NCS1K4-FAN	0/FT2	OPERATIONAL		N/A
NCS1K4-AC-PSU	0/PM0	OPERATIONAL		N/A
NCS1K4-AC-PSU	0/PM1	OPERATIONAL		N/A
NCS1004	0/SC0	OPERATIONAL		N/A

```
RP/0/RP0/CPU0:ios# show sdr
```

```
Thu May  7 10:50:08.651 UTC
```

Type	NodeName	NodeState	RedState	PartnerName
NCS1K4-1.2T-K9	0/0	OPERATIONAL		N/A
NCS1K4-OTN-XP	0/1	OPERATIONAL		N/A
NCS1K4-OTN-XP	0/2	OPERATIONAL		N/A
NCS1K4-OTN-XP	0/3	OPERATIONAL		N/A
RP	0/RP0/CPU0	IOS XR RUN	ACTIVE	NONE
NCS1K4-CNTRLR-K9	0/RP0	OPERATIONAL		N/A
NCS1K4-FAN	0/FT0	OPERATIONAL		N/A

NCS1K4-FAN	0/FT1	OPERATIONAL	N/A
NCS1K4-FAN	0/FT2	OPERATIONAL	N/A
NCS1K4-DC-PSU	0/PM0	OPERATIONAL	N/A
NCS1K4-DC-PSU	0/PM1	OPERATIONAL	N/A
NCS1004	0/SC0	OPERATIONAL	N/A

Step 2 admin

Enters System Admin EXEC mode.

Example:

```
RP/0/RP0/CPU0:ios# admin
```

Step 3 show platform

Displays information and status of each node in the system.

Example:

```
sysadmin-vm:0_RP0# show platform
Wed Mar 4 06:24:46.700 UTC+00:00
Location Card Type HW State SW State Config State
-----
0/0 NCS1K4-LC-FILLER PRESENT N/A NSHUT
0/1 NCS1K4-1.2T-K9 OPERATIONAL N/A NSHUT
0/2 NCS1K4-1.2TL-K9 OPERATIONAL N/A NSHUT
0/3 NCS1K4-LC-FILLER PRESENT N/A NSHUT
0/RP0 NCS1K4-CNTRLR-K9 OPERATIONAL OPERATIONAL NSHUT
0/FT0 NCS1K4-FAN OPERATIONAL N/A NSHUT
0/FT1 NCS1K4-FAN OPERATIONAL N/A NSHUT
0/FT2 NCS1K4-FAN OPERATIONAL N/A NSHUT
0/PM0 NCS1K4-AC-PSU OPERATIONAL N/A NSHUT
0/PM1 NCS1K4-AC-PSU OPERATIONAL N/A NSHUT
0/SC0 NCS1004 OPERATIONAL N/A NSHUT

sysadmin-vm:0_RP0# show platform
Thu May 7 10:58:09.331 UTC+00:00
Location Card Type HW State SW State Config State
-----
0/0 NCS1K4-1.2T-K9 OPERATIONAL N/A NSHUT
0/1 NCS1K4-OTN-XP OPERATIONAL N/A NSHUT
0/2 NCS1K4-OTN-XP OPERATIONAL N/A NSHUT
0/3 NCS1K4-OTN-XP OPERATIONAL N/A NSHUT
0/RP0 NCS1K4-CNTRLR-K9 OPERATIONAL OPERATIONAL NSHUT
0/FT0 NCS1K4-FAN OPERATIONAL N/A NSHUT
0/FT1 NCS1K4-FAN OPERATIONAL N/A NSHUT
0/FT2 NCS1K4-FAN OPERATIONAL N/A NSHUT
0/PM0 NCS1K4-DC-PSU OPERATIONAL N/A NSHUT
0/PM1 NCS1K4-DC-PSU OPERATIONAL N/A NSHUT
0/SC0 NCS1004 OPERATIONAL N/A NSHUT
```

Verify that all the components of NCS 1004 are displayed in output. The software state and the hardware state must be in the OPERATIONAL state. The various hardware and software states are:

Hardware states:

- OPERATIONAL—Node is operating normally and is fully functional.
- POWERED_ON—Power is on and the node is booting up.
- FAILED—Node is powered on but has encountered an internal failure.
- PRESENT—Node is in intermediate state in the boot sequence.

- POWERED_OFF—Power is off and the node cannot be accessed.

Software states:

- OPERATIONAL—Software is operating normally and is fully functional.
- SW_INACTIVE—Software is not completely operational.

Step 4 show inventory

Displays details of the physical entities of NCS 1004 along with the details of QSFPs when you execute this command in Cisco IOS XR EXEC mode.

Example:

```
RP/0/RP0/CPU0:ios# show inventory
Wed Mar  4 05:10:17.107 UTC
NAME: "0/0", DESCR: "Network Convergence System 1004 Filler"
PID: NCS1K4-LC-FILLER, VID: V01, SN: N/A

NAME: "0/1", DESCR: "NCS1K4 12x QSFP28 2 Trunk C-Band DWDM card"
PID: NCS1K4-1.2T-K9, VID: V00, SN: CAT2250B0AE

NAME: "0/1-Optics0/1/0/2", DESCR: "Cisco 100G QSFP28 AOC Pluggable Optics Module"
PID: QSFP-100G-AOC3M  , VID: V03, SN: INL22262339-A

NAME: "0/1-Optics0/1/0/4", DESCR: "Cisco 100GE QSFP28 SR4 Pluggable Optics Module"
PID: QSFP-100G-SR4-S, VID: V03, SN: AVF2219S16U

NAME: "0/1-Optics0/1/0/5", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S, VID: V02, SN: JFQ2145701U

NAME: "0/1-Optics0/1/0/6", DESCR: "Cisco 100GE QSFP28 SR4 Pluggable Optics Module"
PID: QSFP-100G-SR4-S, VID: ES1, SN: AVF1925G012

NAME: "0/1-Optics0/1/0/7", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S, VID: V02, SN: JFQ2145706N

NAME: "0/1-Optics0/1/0/8", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4, VID: V01, SN: JFQ19026014

NAME: "0/1-Optics0/1/0/9", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S, VID: V02, SN: OPM220518HS

NAME: "0/1-Optics0/1/0/10", DESCR: "Cisco 100G QSFP28 SM-SR Pluggable Optics Module"
PID: QSFP-100G-SM-SR, VID: V02, SN: INL21490043

NAME: "0/1-Optics0/1/0/11", DESCR: "Cisco 100G QSFP28 CWDM4 Pluggable Optics Module"
PID: QSFP-100G-CWDM4-S , VID: V01, SN: JFQ211930JL

NAME: "0/1-Optics0/1/0/12", DESCR: "Cisco 100G QSFP28 CWDM4 Pluggable Optics Module"
PID: QSFP-100G-CWDM4-S, VID: V02, SN: JFQ2210801H

NAME: "0/2", DESCR: "NCS1K4 12x QSFP28 2 Trunk L-Band DWDM card"
PID: NCS1K4-1.2TL-K9  , VID: V00, SN: CAT2337B0S4

NAME: "0/2-Optics0/2/0/2", DESCR: "Cisco 100G QSFP28 AOC Pluggable Optics Module"
PID: QSFP-100G-AOC3M, VID: V03, SN: INL22262332-A

NAME: "0/2-Optics0/2/0/4", DESCR: "Cisco 100G QSFP28 SM-SR Pluggable Optics Module"
PID: QSFP-100G-SM-SR, VID: V02, SN: FNS22070HWF

NAME: "0/2-Optics0/2/0/5", DESCR: "Cisco 100G QSFP28 SM-SR Pluggable Optics Module"
```

```

PID: QSFP-100G-SM-SR, VID: V02, SN: SPT2225302D

NAME: "0/2-Optics0/2/0/6", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S, VID: V02, SN: FNS22310Z1X

NAME: "0/2-Optics0/2/0/8", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4, VID: V01, SN: FNS20520R8Z

NAME: "0/2-Optics0/2/0/9", DESCR: "Cisco 100G QSFP28 AOC Pluggable Optics Module"
PID: QSFP-100G-AOC3M, VID: V03, SN: INL23312282-A

NAME: "0/2-Optics0/2/0/10", DESCR: "Cisco 100G QSFP28 AOC Pluggable Optics Module"
PID: QSFP-100G-AOC3M, VID: V03, SN: INL23312282-B

NAME: "0/2-Optics0/2/0/11", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S, VID: V02, SN: FNS23080LKF

NAME: "0/3", DESCR: "Network Convergence System 1004 Filler"
PID: NCS1K4-LC-FILLER, VID: V01, SN: N/A

:
:
:

RP/0/RP0/CPU0:ios# show inventory
Thu May  7 11:05:13.211 UTC
NAME: "0/0", DESCR: "NCS1K4 12x QSFP28 2 Trunk C-Band DWDM card"
PID: NCS1K4-1.2T-K9      , VID: V00, SN: CAT2237B25A

NAME: "0/0-Optics0/0/0/2", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4      , VID: V01, SN: FNS2333080E

NAME: "0/0-Optics0/0/0/3", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4      , VID: V01, SN: FNS23330801

NAME: "0/0-Optics0/0/0/4", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4      , VID: V01, SN: FNS21140GZK

NAME: "0/0-Optics0/0/0/6", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4      , VID: V01, SN: FNS233209CN

NAME: "0/0-Optics0/0/0/10", DESCR: "Cisco 40GE QSFP+ LR4 Pluggable Optics Module"
PID: QSFP-40G-LR4        , VID: V02, SN: FNS23110TYD

NAME: "0/1", DESCR: "NCS1K4 4xDD,8xQSFP28,2xCFP2 DCO OTNXponder"
PID: NCS1K4-OTN-XP        , VID: V00, SN: CAT2352B007

NAME: "0/1-Optics0/1/0/0", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4      , VID: V01, SN: FNS2333080J

NAME: "0/1-Optics0/1/0/1", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4      , VID: V01, SN: FNS23330806

NAME: "0/1-Optics0/1/0/2", DESCR: "Cisco 4x10GE QSFP+ MLR Pluggable Optics Module"
PID: ONS-QSFP-4X10-MLR   , VID: V01, SN: INL21010391

NAME: "0/1-Optics0/1/0/4", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
PID: QSFP-40G-SR4        , VID: V03, SN: JFQ20332007

NAME: "0/1-Optics0/1/0/5", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
PID: QSFP-40G-SR4        , VID: V03, SN: JFQ20332088

NAME: "0/1-Optics0/1/0/6", DESCR: "Cisco 4x10GE QSFP+ MLR Pluggable Optics Module"
PID: ONS-QSFP-4X10-MLR   , VID: V01, SN: INL21010471

```

```

NAME: "0/1-Optics0/1/0/7", DESCR: "Cisco 4x10GE QSFP+ MLR Pluggable Optics Module"
PID: ONS-QSFP-4X10-MLR , VID: V01, SN: INL21010376

NAME: "0/2", DESCR: "NCS1K4 4xDD,8xQSFP28,2xCFP2 DCO OTNXponder"
PID: NCS1K4-OTN-XP , VID: V00, SN: CAT2352B015

NAME: "0/2-Optics0/2/0/0", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4 , VID: V01, SN: FNS20360V1R

NAME: "0/2-Optics0/2/0/4", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
PID: QSFP-40G-SR4 , VID: V03, SN: JFQ21502017

NAME: "0/2-Optics0/2/0/5", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
PID: QSFP-40G-SR4 , VID: V03, SN: JFQ202120DY

NAME: "0/3", DESCR: "NCS1K4 4xDD,8xQSFP28,2xCFP2 DCO OTNXponder"
PID: NCS1K4-OTN-XP , VID: V00, SN: CAT2352B00A

NAME: "0/3-Optics0/3/0/0", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4 , VID: V01, SN: FNS23320BS3

NAME: "0/3-Optics0/3/0/4", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
PID: QSFP-40G-SR4 , VID: V03, SN: AVP2217S09L

NAME: "0/3-Optics0/3/0/5", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
PID: QSFP-40G-SR4 , VID: V03, SN: AVP2107S0RZ

NAME: "0/RP0", DESCR: "Network Convergence System 1004 Controller"
PID: NCS1K4-CNTRLR-K9 , VID: V01, SN: CAT2323B0SG
:
:
:
:
NAME: "0/PM1", DESCR: "Network Convergence System 1004 DC Power Supply Unit"
PID: NCS1K4-DC-PSU , VID: V01, SN: POG2308CT4W

```

Verify Software Version

NCS 1004 is shipped with the Cisco IOS XR Software preinstalled. Verify that the latest version of the software is installed. If a newer version is available, perform a [system upgrade](#). This system upgrade installs the newer version of the software and provide the latest feature set on NCS 1004.

To verify the version of Cisco IOS XR Software running on NCS 1004, perform the following procedure.

Procedure

show version

Displays the software version and details such as system uptime.

Example:

```

RP/0/RP0/CPU0:ios# show version
Wed Feb 10 19:35:38.274 IST
Cisco IOS XR Software, Version 7.3.2
Copyright (c) 2013-2021 by Cisco Systems, Inc.

```

```
Build Information:
  Built By      : ingunawa
  Built On     : Tue Feb  9 11:45:12 PST 2021
  Built Host   : iox-lnx-068
  Workspace    : /auto/iox-lnx-068-san1/prod/7.3.2/ncs1k/ws
  Version     : 7.3.2
  Location     : /opt/cisco/XR/packages/
  Label       : 7.3.2
```

```
cisco NCS-1002 () processor
System uptime is 3 hours 37 minutes
```

What to do next

Verify the software version to determine whether system upgrade is required. If the upgrade is required, see the [Perform System Upgrade and Install Feature Packages](#) chapter.

Verify Firmware Version

The firmware on various hardware components of NCS 1004 must be compatible with the installed Cisco IOS XR image. Incompatibility may cause the NCS 1004 to malfunction.

To verify the firmware version, perform the following procedure.

Procedure

Step 1 show hw-module fpd

```
RP/0/RP0/CPU0:ios# show hw-module fpd
Fri Nov 26 14:53:27.188 UTC
```

```
Auto-upgrade:Disabled
```

Location	Card type	HWver	FPD device	ATR Status	FPD Versions	
					Running	Programd
0/0	NCS1K4-OTN-XPL	3.0	LC_CPU_MOD_FW	CURRENT	75.10	75.10
0/0	NCS1K4-OTN-XPL	7.0	LC_DP_MOD_FW	CURRENT	3.10	3.10
0/0	NCS1K4-OTN-XPL	2.0	LC_QSFPDD_PORT_11	CURRENT	61.2013	61.2013
0/0	NCS1K4-OTN-XPL	2.0	LC_QSFPDD_PORT_9	CURRENT	61.2013	61.2013
0/1	NCS1K4-OTN-XP	2.0	LC_CPU_MOD_FW	CURRENT	75.10	75.10
0/1	NCS1K4-OTN-XP	7.0	LC_DP_MOD_FW	CURRENT	3.10	3.10
0/1	NCS1K4-OTN-XP	2.0	LC_QSFPDD_PORT_11	CURRENT	61.2013	61.2013
0/1	NCS1K4-OTN-XP	2.0	LC_QSFPDD_PORT_9	CURRENT	61.2013	61.2013
0/RP0	NCS1K4-CNTLR-K9	5.0	CSB_IMG	S CURRENT	0.200	0.200
0/RP0	NCS1K4-CNTLR-K9	5.0	TAM_FW	CURRENT	36.08	36.08
0/RP0	NCS1K4-CNTLR-K9	1.14	BIOS	S CURRENT	5.30	5.30
0/RP0	NCS1K4-CNTLR-K9	5.0	CPU_FPGA	CURRENT	1.14	1.14
0/PM1	NCS1K4-AC-PSU	0.1	PO-PrimMCU	CURRENT	2.70	2.70
0/SC0	NCS1004	2.0	BP_FPGA	CURRENT	1.25	1.25
0/SC0	NCS1004	2.0	XGE_FLASH	CURRENT	18.04	18.04

Displays firmware information of various hardware components of NCS 1004 in the Cisco IOS XR EXEC mode.

In the previous output, some of the significant fields are:

- FPD Device—Name of the hardware component such as FPD, CFP, and so on.
- ATR—Attribute of the hardware component. Some of the attributes are:
 - B—Backup Image
 - S—Secure Image
 - P—Protected Image
- Status—Upgrade status of the firmware. The different states are:
 - CURRENT—The firmware version is the latest version.
 - NOT READY—The firmware of the FPD is not ready for upgrade.
 - NEED UPGD—A newer firmware version is available in the installed image. We recommended that upgrade be performed.
 - UPGD PREP—The firmware of the FPD is preparing for upgrade.
 - RLOAD REQ—The upgrade is completed, and the card requires a reload.
 - UPGD DONE—The firmware upgrade is successful.
 - UPGD FAIL—The firmware upgrade has failed.
 - UPGD SKIP—The upgrade is skipped because the installed firmware version is higher than the version available in the image.
 - Running—Current version of the firmware running on the FPD.

Step 2 show fpd package

Use the **show fpd package** command to display the FPD image version available with this software release for each hardware component.

```
RP/0/RP0/CPU0:ios# show fpd package
Fri May  8 05:11:47.819 UTC
```

```
=====
                                Field Programmable Device Package
                                =====
Card Type          FPD Description          Req   SW   Min Req  Min Req
                    Reupload Ver   SW Ver   Board Ver
=====
NCS1004-K9         BP_FPGA (A)              NO    1.25  1.25    0.0
                    XGE_FLASH (A)           YES   18.04 18.04    0.0
-----
NCS1K4-1.2T-K9     LC_CPU_MOD_FW (A)       YES   75.10 75.10    0.0
                    LC_OPT_MOD_FW (A)       YES   1.25  1.25    0.0
-----
NCS1K4-1.2T-L-K9   LC_CPU_MOD_FW (A)       YES   75.10 75.10    0.0
                    LC_OPT_MOD_FW (A)       YES   1.25  1.25    0.0
-----
NCS1K4-1.2TL-K9    LC_CPU_MOD_FW (A)       YES   75.10 75.10    0.0
                    LC_OPT_MOD_FW (A)       YES   1.25  1.25    0.0
-----
NCS1K4-2-QDD-C-K9 LC_CPU_MOD_FW (A)       YES   75.10 75.10    0.0
```


	LC_OPT_MOD_FW (A)		YES	1.26	1.26	0.0
NCS1K4-2KW-AC	PO-PrimCU (A)		NO	2.70	2.70	0.0
	PO-PrimCU (A)		NO	2.70	2.70	0.1
NCS1K4-AC-PSU	PO-PrimCU (A)		NO	2.70	2.70	0.0
	PO-PrimCU (A)		NO	2.70	2.70	0.1
NCS1K4-CNTLR	BIOS (A)		YES	5.30	5.30	1.5
	CSB_IMG		YES	0.200	0.200	0.0
NCS1K4-CNTLR-B-K9	BIOS (A)		YES	5.30	5.30	1.0
	CSB_IMG		YES	0.200	0.200	0.0
NCS1K4-DC-PSU	PO-PrimCU (A)		NO	1.12	1.12	0.0
	PO-PrimCU (A)		NO	1.12	1.12	0.1
NCS1K4-OTN-XP	LC_CFP2_PORT_0 (A)		NO	0.00	0.00	0.0
	LC_CFP2_PORT_0 (A)	NO	1.00	1.00	1.0	
	LC_CFP2_PORT_0 (A)		NO	1.52	1.52	2.0
	LC_CFP2_PORT_1 (A)		NO	0.00	0.00	0.0
	LC_CFP2_PORT_1 (A)		NO	1.00	1.00	1.0
	LC_CFP2_PORT_1 (A)		NO	1.52	1.52	2.0
	LC_CPU_MOD_FW (A)		YES	75.10	75.10	0.0
	LC_DP_MOD_FW (A)		YES	3.10	3.10	1.0
	LC_DP_MOD_FW (A)		YES	11.10	11.10	2.0
	LC_DP_MOD_FW (A)		YES	11.10	11.10	3.0
	LC_DP_MOD_FW (A)		YES	1.10	1.10	4.0
	LC_DP_MOD_FW (A)		YES	3.10	3.10	7.0
	LC_DP_MOD_FW (A)		YES	1.10	1.10	8.0
	LC_QSFPDD_PORT_11 (A)		NO	0.00	0.00	0.0
	LC_QSFPDD_PORT_11 (A)		NO	61.2013	61.2013	1.0
	LC_QSFPDD_PORT_11 (A)		NO	61.2013	61.2013	2.0
	LC_QSFPDD_PORT_9 (A)		NO	0.00	0.00	0.0
	LC_QSFPDD_PORT_9 (A)		NO	61.2013	61.2013	1.0
	LC_QSFPDD_PORT_9 (A)		NO	61.2013	61.2013	2.0
NCS1K4-OTN-XPL	LC_CFP2_PORT_0 (A)		NO	0.00	0.00	0.0
	LC_CFP2_PORT_0 (A)	NO	1.00	1.00	1.0	
	LC_CFP2_PORT_0 (A)		NO	1.52	1.52	2.0
	LC_CFP2_PORT_1 (A)		NO	0.00	0.00	0.0
	LC_CFP2_PORT_1 (A)		NO	1.00	1.00	1.0
	LC_CFP2_PORT_1 (A)		NO	1.52	1.52	2.0
	LC_CPU_MOD_FW (A)		YES	75.10	75.10	0.0
	LC_DP_MOD_FW (A)		YES	3.10	3.10	1.0
	LC_DP_MOD_FW (A)		YES	11.10	11.10	2.0
	LC_DP_MOD_FW (A)		YES	11.10	11.10	3.0
	LC_DP_MOD_FW (A)		YES	1.10	1.10	4.0
	LC_DP_MOD_FW (A)		YES	3.10	3.10	7.0
	LC_DP_MOD_FW (A)		YES	1.10	1.10	8.0
	LC_QSFPDD_PORT_11 (A)		NO	0.00	0.00	0.0
	LC_QSFPDD_PORT_11 (A)		NO	61.2013	61.2013	1.0
	LC_QSFPDD_PORT_11 (A)		NO	61.2013	61.2013	2.0
	LC_QSFPDD_PORT_9 (A)		NO	0.00	0.00	0.0
	LC_QSFPDD_PORT_9 (A)		NO	61.2013	61.2013	1.0
	LC_QSFPDD_PORT_9 (A)		NO	61.2013	61.2013	2.0
NCS1K4-TESTUNIT	LC_CPU_MOD_FW (A)		YES	0.01	0.01	0.0

What to do next

Upgrade all the FPDs using the **upgrade hw-module location all fpd all** command in the Cisco IOS XR EXEC mode. After upgrade is completed, the Status column shows RLOAD REQ if the software requires reload.

If Reload is required

If the FPGA location is 0/RP0, use the **admin hw-module location 0/RP0 reload** command. This command reboots only the CPU. As a result, traffic is not impacted. If the FPGA location is 0/0, use the **admin hw-module location all reload** command. This command reboots the chassis. As a result, traffic is impacted. After the reload is completed, the new FPGA runs the current version.



Caution The upgrade of OTNXP LC_DP_MOD_FW and LC_OPT_MOD_FW FPDs affect traffic. Hence, you must perform this upgrade during a maintenance window.

If Firmware Upgrade Fails

If firmware upgrade fails, use the **show logging** command to view the details and upgrade the firmware again using the above commands.



Note You can upgrade the firmware version of power modules, only when both the power modules are present and powered on.

Verify Management Interface Status

To verify the management interface status, perform the following procedure.

Procedure**show interfaces mgmtEth *instance***

Displays the management interface configuration.

Example:

```
RP/0/RP0/CPU0:ios# show interfaces MgmtEth 0/RP0/CPU0/0
Wed Mar  4 06:13:12.381 UTC
MgmtEth0/RP0/CPU0/0 is up, line protocol is up
  Interface state transitions: 1
  Hardware is Management Ethernet, address is b026.80ff.d870 (bia b026.80ff.d870)
  Internet address is 10.127.60.184/24
  MTU 1514 bytes, BW 1000000 Kbit (Max: 1000000 Kbit)
    reliability 255/255, txload 0/255, rxload 0/255
  Encapsulation ARPA,
  Full-duplex, 1000Mb/s, CX, link type is autonegotiation
  loopback not set,
  Last link flapped 1d23h
  ARP type ARPA, ARP timeout 04:00:00
  Last input 00:00:00, output 00:00:00
  Last clearing of "show interface" counters never
```

```

5 minute input rate 1368000 bits/sec, 193 packets/sec
5 minute output rate 95000 bits/sec, 194 packets/sec
 6447256 packets input, 3947875102 bytes, 0 total input drops
 0 drops for unrecognized upper-level protocol
Received 661276 broadcast packets, 271649 multicast packets
 0 runts, 0 giants, 0 throttles, 0 parity
 0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
7190033 packets output, 3906991430 bytes, 0 total output drops
Output 0 broadcast packets, 0 multicast packets
 0 output errors, 0 underruns, 0 applique, 0 resets
 0 output buffer failures, 0 output buffers swapped out
 1 carrier transitions

```

```

RP/0/RP0/CPU0:ios# show interfaces MgmtEth 0/RP0/CPU0/0
Fri May 8 04:40:41.519 UTC
MgmtEth0/RP0/CPU0/0 is up, line protocol is up
  Interface state transitions: 1
  Hardware is Management Ethernet, address is dc8c.37c3.e1a8 (bia dc8c.37c3.e1a8)
  Internet address is 10.105.57.103/25
  MTU 1514 bytes, BW 1000000 Kbit (Max: 1000000 Kbit)
    reliability 255/255, txload 0/255, rxload 0/255
  Encapsulation ARPA,
  Full-duplex, 1000Mb/s, CX, link type is autonegotiation
  loopback not set,
  Last link flapped 1d04h
  ARP type ARPA, ARP timeout 04:00:00
  Last input 00:00:00, output 00:00:00
  Last clearing of "show interface" counters never
  5 minute input rate 106000 bits/sec, 140 packets/sec
  5 minute output rate 108000 bits/sec, 139 packets/sec
    7303357 packets input, 696872907 bytes, 0 total input drops
    0 drops for unrecognized upper-level protocol
  Received 40679 broadcast packets, 41523 multicast packets
    0 runts, 0 giants, 0 throttles, 0 parity
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
  7231570 packets output, 740818886 bytes, 0 total output drops
  Output 0 broadcast packets, 0 multicast packets
  0 output errors, 0 underruns, 0 applique, 0 resets
  0 output buffer failures, 0 output buffers swapped out
    MgmtEth0/RP0/CPU0/0 is up, line protocol is up

```

In the previous output, the management interface is administratively down.

You can also use the **show interfaces summary** and **show interfaces brief** commands in the Cisco IOS XR EXEC mode to verify the management interface status.

The following example shows sample output from the **show interfaces summary** command.

```

RP/0/RP0/CPU0:ios# show interfaces summary
Wed Mar 4 06:14:52.995 UTC
Interface Type          Total    UP      Down    Admin Down
-----
ALL TYPES                4        2       0       2
-----
IFT_ETHERNET            3        1       0       2
IFT_NULL                 1        1       0       0
-----

RP/0/RP0/CPU0:ios# show interfaces summary
Fri May 8 04:43:57.355 UTC
Interface Type          Total    UP      Down    Admin Down
-----
ALL TYPES                6        5       0       1
-----
IFT_LOOPBACK            2        2       0       0
-----

```

```
IFT_ETHERNET      3      2      0      1
IFT_NULL          1      1      0      0
```

The following example shows sample output from the **show interfaces brief** command.

```
RP/0/RP0/CPU0:ios# show interfaces brief
Wed Mar  4 06:15:51.689 UTC
```

Intf Name	Intf State	LineP State	Encap Type	MTU (byte)	BW (Kbps)
Nu0	up	up	Null	1500	0
Mg0/RP0/CPU0/0	up	up	ARPA	1514	1000000
Mg0/RP0/CPU0/1	admin-down	admin-down	ARPA	1514	1000000
Mg0/RP0/CPU0/2	admin-down	admin-down	ARPA	1514	1000000

```
RP/0/RP0/CPU0:ios# show interfaces brief
Fri May  8 04:44:41.558 UTC
```

Intf Name	Intf State	LineP State	Encap Type	MTU (byte)	BW (Kbps)
Lo0	up	up	Loopback	1500	0
Lo1	up	up	Loopback	1500	0
Nu0	up	up	Null	1500	0
Mg0/RP0/CPU0/0	up	up	ARPA	1514	1000000
Mg0/RP0/CPU0/1	admin-down	admin-down	ARPA	1514	1000000
Mg0/RP0/CPU0/2	up	up	ARPA	1514	1000000

What to do next

If the management interface is administratively down, perform the following steps:

- Check the Ethernet cable connection.
- Verify the IP configuration of the management interface. For details on configuring the management interface, see [Configure Management Interface](#).
- Verify whether the management interface is in the no shut state using the **show running-config interface mgmtEth** command.

The following example shows sample output from the **show running-config interface mgmtEth** command.

```
RP/0/RP0/CPU0:ios#show running-config interface mgmtEth 0/RP0/CPU0/0
Wed Mar  4 06:17:33.833 UTC
interface MgmtEth0/RP0/CPU0/0
  ipv4 address dhcp
  !

RP/0/RP0/CPU0:ios#show running-config interface mgmtEth 0/RP0/CPU0/0
Fri May  8 04:46:29.582 UTC
interface MgmtEth0/RP0/CPU0/0
  ipv4 address 10.105.57.103 255.255.255.128
  !
```

In the previous output, the management interface is in the no shut state.

Verify Alarms

You can view the alarm information using the **show alarms** command.

Procedure

```
show alarms [ brief [ card | rack | system ] [ location location ] [ active | history ] | detail
[ card | rack | system ] [ location location ] [ active | clients | history | stats ] ]
```

Displays alarms in brief or detail.

Example:

```
RP/0/RP0/CPU0:ios# show alarms brief card location 0/RP0/CPU0 active
```

```
Wed Mar 4 06:10:55.959 UTC
```

```
-----
Active Alarms
-----
```

Location	Severity	Group	Set Time	Description
0/1 Need Upgrade Or Not In Current State	Major	FPD_Infra	03/02/2020 07:09:04 UTC	One Or More FPDs
0/2 Need Upgrade Or Not In Current State	Major	FPD_Infra	03/03/2020 14:27:33 UTC	One Or More FPDs
0/2 HundredGigECtrlr0/2/0/9 - Carrier Loss On The LAN	Major	Ethernet	03/03/2020 20:33:33 UTC	
0/2 Improper Removal	Critical	Controller	03/03/2020 20:34:05 UTC	Optics0/2/0/3 -
0/2 OPUK Client Signal Failure	NotAlarmed	OTN	03/03/2020 20:34:08 UTC	ODU40/2/0/0/2 -
0/2 OPUK Client Signal Failure	NotAlarmed	OTN	03/03/2020 20:34:05 UTC	ODU40/2/0/1/2 -

```
RP/0/RP0/CPU0:ios# show alarms brief card location 0/RP0/CPU0 active
```

```
Fri May 8 04:46:29.582 UTC
```

```
-----
Active Alarms
-----
```

Location	Severity	Group	Set Time	Description
0/2 Path Monitoring Alarm Indication Signal	NotReported	OTN	05/07/2020 14:25:05 UTC	ODU20/2/0/0/2/3 -
0/2 - Path Monitoring Alarm Indication Signal	NotReported	OTN	05/07/2020 14:25:05 UTC	ODU2E0/2/0/0/2/4
0/1 Path Monitoring Alarm Indication Signal	NotReported	OTN	05/07/2020 14:24:41 UTC	ODU20/1/0/0/2/3 -

```

0/1          NotReported OTN          05/07/2020 14:25:03 UTC    ODU20/1/0/1/11/3
- Path Monitoring Alarm Indication Signal

0/1          NotReported OTN          05/07/2020 14:25:03 UTC    ODU2E0/1/0/1/11/4
- Path Monitoring Alarm Indication Signal

0/3          NotReported OTN          05/07/2020 14:24:41 UTC    ODU20/3/0/0/2/3 -
Path Monitoring Alarm Indication Signal

0/3          NotReported OTN          05/07/2020 14:24:41 UTC    ODU2E0/3/0/0/2/4
- Path Monitoring Alarm Indication Signal

0/1          Major          Ethernet          05/07/2020 14:24:41 UTC    TenGigECtrlr0/1/0/4/1
- Remote Fault

```

Note In the maintenance mode, all the alarms are suppressed and the **show alarms** command will not show the alarms details. Use the **show controllers *controllertype R/S/I/P*** command to view the client and trunk alarms.

Verify Environmental Parameters

The **show environment** command displays the environmental parameters of NCS 1004.

To verify that the environmental parameters are as expected, perform the following procedure.

Procedure

Step 1 admin

Enters System Admin EXEC mode.

Example:

```
RP/0/RP0/CPU0:ios# admin
```

Step 2 show environment [all | altitude | fan | power | voltages | current | temperatures] [location | location]

Displays the environmental parameters of NCS 1004.

Example:

The following example shows sample output of the **show environment** command with the **fan** keyword.

```

sysadmin-vm:0_RP0# show environment fan
Wed Mar  4 05:36:33.678 UTC+00:00
=====
                Fan speed (rpm)
Location      FRU Type          FAN_0   FAN_1
-----
0/FT0         NCS1K4-FAN          7020    6930
0/FT1         NCS1K4-FAN          6780    6690
0/FT2         NCS1K4-FAN          6810    6720

0/PM0         NCS1K4-AC-PSU       25376   24352

```

```

0/PM1          NCS1K4-AC-PSU          11200  11232

sysadmin-vm:0_RP0# show environment fan
Thu May  7  11:47:11.490 UTC+00:00
=====
                        Fan speed (rpm)
Location      FRU Type          FAN_0  FAN_1
-----
0/FT0        NCS1K4-FAN          11070  11070
0/FT1        NCS1K4-FAN          11220  11040
0/FT2        NCS1K4-FAN          11250  11070

0/PM0        NCS1K4-DC-PSU       12624  12576

0/PM1        NCS1K4-DC-PSU       24704  25312

```

The following example shows sample output of the **show environment** command with the **temperatures** keyword.

```

sysadmin-vm:0_RP0# show environment temperatures location 0/RP0
Wed Mar  4  05:44:51.221 UTC+00:00
=====
Location  TEMPERATURE          Value  Crit Major Minor Minor Major  Crit
          Sensor              (deg C) (Lo) (Lo) (Lo) (Hi) (Hi) (Hi)
-----
0/RP0
          TEMP_LOCAL              32    -10   -5    0    55   65   70
          TEMP_REMOTE1            32    -10   -5    0    55   65   70
          TEMP_CPU_DIE             31    -10   -5    0    75   80   90

```

```

sysadmin-vm:0_RP0# show environment temperatures location 0/RP0
Thu May  7  11:50:23.172 UTC+00:00
=====
Location  TEMPERATURE          Value  Crit Major Minor Minor Major  Crit
          Sensor              (deg C) (Lo) (Lo) (Lo) (Hi) (Hi) (Hi)
-----
0/RP0
          TEMP_LOCAL              36    -10   -5    0    55   65   70
          TEMP_REMOTE1            36    -10   -5    0    55   65   70
          TEMP_CPU_DIE             37    -10   -5    0    75   80   90

```

The following example shows sample output of the **show environment** command with the **power** keyword.

```

sysadmin-vm:0_RP0# show environment power
Wed Mar  4  05:45:35.640 UTC+00:00
=====
CHASSIS LEVEL POWER INFO: 0
=====
Total output power capacity (N + 1)      : 2000W + 0W
Total output power required              : 910W
Total power input                        : 456W
Total power output                       : 407W

Power Group 0:
=====
Power  Supply  -----Input-----  -----Output---  Status
Module  Type      Volts  Amps  Volts  Amps
=====
0/PM0   2kW-AC    0.0    0.0    0.0    0.0  FAILED or NO PWR

Total of Power Group 0:                0W/ 0.0A          0W/ 0.0A

Power Group 1:
=====
Power  Supply  -----Input-----  -----Output---  Status

```

```

Module      Type      Volts      Amps      Volts      Amps
=====
0/PM1      2kW-AC    227.8      2.0      12.0      33.9      OK

Total of Power Group 1:      456W/ 2.0A      407W/ 33.9A

```

```

Location     Card Type           Power           Power           Status
              Allocated        Used
              Watts           Watts
=====
0/0          NCS1K4-LC-FILLER    0              -              RESERVED
0/1          NCS1K4-1.2T-K9     260            101            ON
0/2          NCS1K4-1.2TL-K9    260            168            ON
0/3          NCS1K4-LC-FILLER    0              -              RESERVED
0/RP0       NCS1K4-CNTRLR-K9   55             -              ON
0/FT0       NCS1K4-FAN         100            -              ON
0/FT1       NCS1K4-FAN         100            -              ON
0/FT2       NCS1K4-FAN         100            -              ON
0/SC0       NCS1004             35             -              ON

```

```

sysadmin-vm:0_RP0# show environment power
Thu May 7 11:55:13.388 UTC+00:00

```

```

=====
CHASSIS LEVEL POWER INFO: 0
=====

```

```

Total output power capacity (N + 1)      : 2000W + 0W
Total output power required              : 1670W
Total power input                        : 1007W
Total power output                       : 956W

```

```

Power Group 0:

```

```

Power      Supply      -----Input-----      -----Output---      Status
Module     Type           Volts      Amps      Volts      Amps
=====
0/PM0     2kW-DC         50.3      20.0      12.1      79.0      OK

Total of Power Group 0:      1006W/ 20.0A      956W/ 79.0A

```

```

Power Group 1:

```

```

Power      Supply      -----Input-----      -----Output---      Status
Module     Type           Volts      Amps      Volts      Amps
=====
0/PM1     2kW-DC         1.3       0.6       0.0       0.0       FAILED or NO PWR

Total of Power Group 1:      1W/ 0.6A          0W/ 0.0A

```

```

Location     Card Type           Power           Power           Status
              Allocated        Used
              Watts           Watts
=====
0/0          NCS1K4-1.2T-K9     260            194            ON
0/1          NCS1K4-OTN-XP      340            182            ON
0/2          NCS1K4-OTN-XP      340            153            ON
0/3          NCS1K4-OTN-XP      340            160            ON
0/RP0       NCS1K4-CNTRLR-K9   55             -              ON
0/FT0       NCS1K4-FAN         100            -              ON
0/FT1       NCS1K4-FAN         100            -              ON
0/FT2       NCS1K4-FAN         100            -              ON
0/SC0       NCS1004             35             -              ON

```

The following example shows sample output of the **show environment** command with the **voltages** keyword.

sysadmin-vm:0_RP0# show environment voltages location 0/RP0

Wed Mar 4 05:47:24.668 UTC+00:00

```

=====
Location  VOLTAGE          Value  Crit Minor Minor  Crit
          Sensor          (mV)  (Lo) (Lo) (Hi) (Hi)
-----
0/RP0
ADM1266_VH1_12V          12028  10800 11040 12960 13200
ADM1266_VH3_3V3           3306   3036  3135  3465  3564
ADM1266_VH4_2V5           2492   2300  2375  2625  2700
ADM1266_VP1_1V8           1801   1656  1710  1890  1944
ADM1266_VP2_1V2           1201   1104  1140  1260  1296
ADM1266_3V3_STAND_BY     3293   3036  3135  3465  3564
ADM1266_VP4_3V3_CPU      3301   3036  3135  3465  3564
ADM1266_VP5_2V5_CPU      2494   2300  2375  2625  2700
ADM1266_VP6_1V8_CPU      1797   1656  1710  1890  1944
ADM1266_VP7_1V24_VCCREF  1236   1140  1178  1302  1339
ADM1266_VP8_1V05_CPU     1045    966   997  1102  1134
ADM1266_VP9_1V2_DDR_VDDQ 1196   1104  1140  1260  1296
ADM1266_VP10_1V0_VCCRAM  1074    500   650  1300  1400
ADM1266_VP11_VNN         882    400   550  1300  1400
ADM1266_VP12_VCCP        1068    300   450  1300  1400
ADM1266_VP13_0V6_VTT     599    552   570   630   648
ADM1293_DB_5V0           5007   4600  4750  5250  5400
ADM1293_DB_3V3           3305   3036  3135  3465  3564
ADM1293_DB_5V0_USB_0     5007   4000  4500  5500  6000
ADM1293_DB_5V0_USB_1     5017   4000  4500  5500  6000
ADM1293_MB_5V0_PMOD0     5062   4600  4750  5250  5400
ADM1293_MB_5V0_PMOD1     5032   4600  4750  5250  5400
ADM1293_MB_2V5_PLL       2483   2300  2375  2625  2700
    
```

sysadmin-vm:0_RP0# show environment voltages location 0/RP0

Thu May 7 11:57:18.650 UTC+00:00

```

=====
Location  VOLTAGE          Value  Crit Minor Minor  Crit
          Sensor          (mV)  (Lo) (Lo) (Hi) (Hi)
-----
0/RP0
ADM1266_VH1_12V          11961  10800 11040 12960 13200
ADM1266_VH3_3V3           3306   3036  3135  3465  3564
ADM1266_VH4_2V5           2487   2300  2375  2625  2700
ADM1266_VP1_1V8           1795   1656  1710  1890  1944
ADM1266_VP2_1V2           1198   1104  1140  1260  1296
ADM1266_3V3_STAND_BY     3301   3036  3135  3465  3564
ADM1266_VP4_3V3_CPU      3299   3036  3135  3465  3564
ADM1266_VP5_2V5_CPU      2489   2300  2375  2625  2700
ADM1266_VP6_1V8_CPU      1788   1656  1710  1890  1944
ADM1266_VP7_1V24_VCCREF  1233   1140  1178  1302  1339
ADM1266_VP8_1V05_CPU     1046    966   997  1102  1134
ADM1266_VP9_1V2_DDR_VDDQ 1200   1104  1140  1260  1296
ADM1266_VP10_1V0_VCCRAM  1039    500   650  1300  1400
ADM1266_VP11_VNN         850    400   550  1300  1400
ADM1266_VP12_VCCP        1056    300   450  1300  1400
ADM1266_VP13_0V6_VTT     600    552   570   630   648
ADM1293_DB_5V0           4998   4600  4750  5250  5400
ADM1293_DB_3V3           3315   3036  3135  3465  3564
ADM1293_DB_5V0_USB_0     4998   4000  4500  5500  6000
ADM1293_DB_5V0_USB_1     5047   4000  4500  5500  6000
ADM1293_MB_5V0_PMOD0     5044   4600  4750  5250  5400
ADM1293_MB_5V0_PMOD1     5026   4600  4750  5250  5400
ADM1293_MB_2V5_PLL       2515   2300  2375  2625  2700
    
```

What to do next

Environment parameter anomalies are logged in the syslog. As a result, if an environment parameter displayed in the **show environment** command output is not as expected, check the syslog using the **show logging** command. The syslog provides details on any logged problems.

Verify Inventory

The **show inventory** command displays details of the hardware inventory of NCS 1004.

To verify the inventory information for all the physical entities, perform the following procedure.

Procedure**Step 1** **show inventory**

Displays the details of NCS 1004 when you execute this command in the Cisco IOS XR EXEC mode.

Example:

```
RP/0/RP0/CPU0:ios# show inventory
Wed Mar  4 05:10:17.107 UTC
NAME: "0/0", DESCR: "Network Convergence System 1004 Filler"
PID: NCS1K4-LC-FILLER, VID: V01, SN: N/A

NAME: "0/1", DESCR: "NCS1K4 12x QSFP28 2 Trunk C-Band DWDM card"
PID: NCS1K4-1.2T-K9, VID: V00, SN: CAT2250B0AE

NAME: "0/1-Optics0/1/0/2", DESCR: "Cisco 100G QSFP28 AOC Pluggable Optics Module"
PID: QSFP-100G-AOC3M , VID: V03, SN: INL22262339-A

NAME: "0/1-Optics0/1/0/4", DESCR: "Cisco 100GE QSFP28 SR4 Pluggable Optics Module"
PID: QSFP-100G-SR4-S, VID: V03, SN: AVF2219S16U

NAME: "0/1-Optics0/1/0/5", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S, VID: V02, SN: JFQ2145701U

NAME: "0/1-Optics0/1/0/6", DESCR: "Cisco 100GE QSFP28 SR4 Pluggable Optics Module"
PID: QSFP-100G-SR4-S, VID: ES1, SN: AVF1925G012

NAME: "0/1-Optics0/1/0/7", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S, VID: V02, SN: JFQ2145706N

NAME: "0/1-Optics0/1/0/8", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4, VID: V01, SN: JFQ19026014

NAME: "0/1-Optics0/1/0/9", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S, VID: V02, SN: OPM220518HS

NAME: "0/1-Optics0/1/0/10", DESCR: "Cisco 100G QSFP28 SM-SR Pluggable Optics Module"
PID: QSFP-100G-SM-SR, VID: V02, SN: INL21490043

NAME: "0/1-Optics0/1/0/11", DESCR: "Cisco 100G QSFP28 CWDM4 Pluggable Optics Module"
PID: QSFP-100G-CWDM4-S , VID: V01, SN: JFQ211930JL

NAME: "0/1-Optics0/1/0/12", DESCR: "Cisco 100G QSFP28 CWDM4 Pluggable Optics Module"
PID: QSFP-100G-CWDM4-S, VID: V02, SN: JFQ2210801H

NAME: "0/2", DESCR: "NCS1K4 12x QSFP28 2 Trunk L-Band DWDM card"
```

```
PID: NCS1K4-1.2TL-K9 , VID: V00, SN: CAT2337B0S4

NAME: "0/2-Optics0/2/0/2", DESCR: "Cisco 100G QSFP28 AOC Pluggable Optics Module"
PID: QSFP-100G-AOC3M, VID: V03, SN: INL22262332-A

NAME: "0/2-Optics0/2/0/4", DESCR: "Cisco 100G QSFP28 SM-SR Pluggable Optics Module"
PID: QSFP-100G-SM-SR, VID: V02, SN: FNS22070HWF

NAME: "0/2-Optics0/2/0/5", DESCR: "Cisco 100G QSFP28 SM-SR Pluggable Optics Module"
PID: QSFP-100G-SM-SR, VID: V02, SN: SPT2225302D

NAME: "0/2-Optics0/2/0/6", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S, VID: V02, SN: FNS22310Z1X

NAME: "0/2-Optics0/2/0/8", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4, VID: V01, SN: FNS20520R8Z

NAME: "0/2-Optics0/2/0/9", DESCR: "Cisco 100G QSFP28 AOC Pluggable Optics Module"
PID: QSFP-100G-AOC3M, VID: V03, SN: INL23312282-A

NAME: "0/2-Optics0/2/0/10", DESCR: "Cisco 100G QSFP28 AOC Pluggable Optics Module"
PID: QSFP-100G-AOC3M, VID: V03, SN: INL23312282-B

NAME: "0/2-Optics0/2/0/11", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S, VID: V02, SN: FNS23080LKF

NAME: "0/3", DESCR: "Network Convergence System 1004 Filler"
PID: NCS1K4-LC-FILLER, VID: V01, SN: N/A

NAME: "0/RP0", DESCR: "Network Convergence System 1004 Controller"
PID: NCS1K4-CNTRLR-K9, VID: V00, SN: CAT2231B069

NAME: "0/SC0", DESCR: "Network Convergence System 1004 Chassis"
PID: NCS1004, VID: V00, SN: CAT2231B192

NAME: "Rack 0", DESCR: "Network Convergence System 1004 Chassis"
PID: NCS1004, VID: V00, SN: CAT2231B192

NAME: "0/FT0", DESCR: "Network Convergence System 1004 Fan"
PID: NCS1K4-FAN, VID: V00, SN: CAT2231B2GL

NAME: "0/FT1", DESCR: "Network Convergence System 1004 Fan"
PID: NCS1K4-FAN, VID: V00, SN: CAT2231B2H4

NAME: "0/FT2", DESCR: "Network Convergence System 1004 Fan"
PID: NCS1K4-FAN, VID: V00, SN: CAT2231B2GW

NAME: "0/PM0", DESCR: "Network Convergence System 1004 AC Power Supply Unit"
PID: NCS1K4-AC-PSU, VID: V00, SN: POG2221CL1V

NAME: "0/PM1", DESCR: "Network Convergence System 1004 AC Power Supply Unit"
PID: NCS1K4-AC-PSU, VID: V00, SN: POG2221CL04

RP/0/RP0/CPU0:ios# show inventory
Thu May 7 11:37:33.960 UTC
NAME: "0/0", DESCR: "NCS1K4 12x QSFP28 2 Trunk C-Band DWDM card"
PID: NCS1K4-1.2T-K9 , VID: V00, SN: CAT2237B25A

NAME: "0/0-Optics0/0/0/2", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4 , VID: V01, SN: FNS2333080E

NAME: "0/0-Optics0/0/0/3", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
PID: ONS-QSFP28-LR4 , VID: V01, SN: FNS23330801

NAME: "0/0-Optics0/0/0/4", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
```

PID: ONS-QSFP28-LR4 , VID: V01, SN: FNS21140GZK

NAME: "0/0-Optics0/0/0/6", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
 PID: ONS-QSFP28-LR4 , VID: V01, SN: FNS233209CN

NAME: "0/0-Optics0/0/0/10", DESCR: "Cisco 40GE QSFP+ LR4 Pluggable Optics Module"
 PID: QSFP-40G-LR4 , VID: V02, SN: FNS23110TYD

NAME: "0/1", DESCR: "NCS1K4 4xDD,8xQSFP28,2xCFP2 DCO OTNXponder"
 PID: NCS1K4-OTN-XP , VID: V00, SN: CAT2352B007

NAME: "0/1-Optics0/1/0/0", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
 PID: ONS-QSFP28-LR4 , VID: V01, SN: FNS2333080J

NAME: "0/1-Optics0/1/0/1", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
 PID: ONS-QSFP28-LR4 , VID: V01, SN: FNS23330806

NAME: "0/1-Optics0/1/0/2", DESCR: "Cisco 4x10GE QSFP+ MLR Pluggable Optics Module"
 PID: ONS-QSFP-4X10-MLR , VID: V01, SN: INL21010391

NAME: "0/1-Optics0/1/0/4", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
 PID: QSFP-40G-SR4 , VID: V03, SN: JFQ20332007

NAME: "0/1-Optics0/1/0/5", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
 PID: QSFP-40G-SR4 , VID: V03, SN: JFQ20332088

NAME: "0/1-Optics0/1/0/6", DESCR: "Cisco 4x10GE QSFP+ MLR Pluggable Optics Module"
 PID: ONS-QSFP-4X10-MLR , VID: V01, SN: INL21010471

NAME: "0/1-Optics0/1/0/7", DESCR: "Cisco 4x10GE QSFP+ MLR Pluggable Optics Module"
 PID: ONS-QSFP-4X10-MLR , VID: V01, SN: INL21010376

NAME: "0/2", DESCR: "NCS1K4 4xDD,8xQSFP28,2xCFP2 DCO OTNXponder"
 PID: NCS1K4-OTN-XP , VID: V00, SN: CAT2352B015

NAME: "0/2-Optics0/2/0/0", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
 PID: ONS-QSFP28-LR4 , VID: V01, SN: FNS20360V1R

NAME: "0/2-Optics0/2/0/4", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
 PID: QSFP-40G-SR4 , VID: V03, SN: JFQ21502017

NAME: "0/2-Optics0/2/0/5", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
 PID: QSFP-40G-SR4 , VID: V03, SN: JFQ202120DY

NAME: "0/3", DESCR: "NCS1K4 4xDD,8xQSFP28,2xCFP2 DCO OTNXponder"
 PID: NCS1K4-OTN-XP , VID: V00, SN: CAT2352B00A

NAME: "0/3-Optics0/3/0/0", DESCR: "Cisco QSFP-100G-LR4 Pluggable Optics Module"
 PID: ONS-QSFP28-LR4 , VID: V01, SN: FNS23320BS3

NAME: "0/3-Optics0/3/0/4", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
 PID: QSFP-40G-SR4 , VID: V03, SN: AVP2217S09L

NAME: "0/3-Optics0/3/0/5", DESCR: "Cisco 40GE QSFP+ SR4 Pluggable Optics Module"
 PID: QSFP-40G-SR4 , VID: V03, SN: AVP2107S0RZ

NAME: "0/RP0", DESCR: "Network Convergence System 1004 Controller"
 PID: NCS1K4-CNTLR-K9 , VID: V01, SN: CAT2323B0SG

NAME: "0/RP0-SFP-Port", DESCR: "Cisco SFP Pluggable Optics Module"
 PID: SFP-GE-S , VID: V01, SN: FNS15512KVG

NAME: "0/SC0", DESCR: "Network Convergence System 1004 4 line card slots"
 PID: NCS1004 , VID: V01, SN: CAT2323B0DC

```

NAME: "Rack 0", DESCR: "Network Convergence System 1004 4 line card slots"
PID: NCS1004          , VID: V01, SN: CAT2323B0DC

NAME: "0/FT0", DESCR: "Network Convergence System 1004 Fan"
PID: NCS1K4-FAN      , VID: V01, SN: CAT2325B1NW

NAME: "0/FT1", DESCR: "Network Convergence System 1004 Fan"
PID: NCS1K4-FAN      , VID: V01, SN: CAT2324B0Z6

NAME: "0/FT2", DESCR: "Network Convergence System 1004 Fan"
PID: NCS1K4-FAN      , VID: V01, SN: CAT2324B0Z8

NAME: "0/PM0", DESCR: "Network Convergence System 1004 DC Power Supply Unit"
PID: NCS1K4-DC-PSU   , VID: V01, SN: POG2310CT00

NAME: "0/PM1", DESCR: "Network Convergence System 1004 DC Power Supply Unit"
PID: NCS1K4-DC-PSU   , VID: V01, SN: POG2308CT4W

```

Step 2 admin

Enters System Admin EXEC mode.

Example:**Step 3 show inventory**

Displays inventory information for all the physical entities of NCS 1004.

Example:

```

sysadmin-vm:0_RP0# show inventory
Wed Mar  4 05:27:26.231 UTC+00:00

Name: Rack 0          Descr: Network Convergence System 1004 Chassis
PID: NCS1004          VID: V00          SN: CAT2231B192

Name: 0/0             Descr: Network Convergence System 1004 Filler
PID: NCS1K4-LC-FILLER VID: V01          SN: N/A

Name: 0/1-Optics0/1/0/2 Descr: Cisco 100G QSFP28 AOC Pluggable Optics Module
PID: QSFP-100G-AOC3M  VID: V03          SN: INL22262339-A

Name: 0/1-Optics0/1/0/4 Descr: Cisco 100GE QSFP28 SR4 Pluggable Optics Module
PID: QSFP-100G-SR4-S  VID: V03          SN: AVF2219S16U

Name: 0/1-Optics0/1/0/5 Descr: Cisco 100G QSFP28 LR4-S Pluggable Optics Module
PID: QSFP-100G-LR4-S  VID: V02          SN: JFQ2145701U

Name: 0/1-Optics0/1/0/6 Descr: Cisco 100GE QSFP28 SR4 Pluggable Optics Module
PID: QSFP-100G-SR4-S  VID: ES1          SN: AVF1925G012

Name: 0/1-Optics0/1/0/7 Descr: Cisco 100G QSFP28 LR4-S Pluggable Optics Module
PID: QSFP-100G-LR4-S  VID: V02          SN: JFQ2145706N

Name: 0/1-Optics0/1/0/8 Descr: Cisco QSFP-100G-LR4 Pluggable Optics Module
PID: ONS-QSFP28-LR4   VID: V01          SN: JFQ19026014

Name: 0/1-Optics0/1/0/9 Descr: Cisco 100G QSFP28 LR4-S Pluggable Optics Module
PID: QSFP-100G-LR4-S  VID: V02          SN: OPM220518HS

Name: 0/1-Optics0/1/0/10 Descr: Cisco 100G QSFP28 SM-SR Pluggable Optics Module
PID: QSFP-100G-SM-SR  VID: V02          SN: INL21490043

Name: 0/1-Optics0/1/0/11 Descr: Cisco 100G QSFP28 CWDM4 Pluggable Optics Module

```

```

PID: QSFP-100G-CWDM4-S      VID: V01      SN: JFQ211930JL
Name: 0/1-Optics0/1/0/12   Descr: Cisco 100G QSFP28 CWDM4 Pluggable Optics Module
PID: QSFP-100G-CWDM4-S      VID: V02      SN: JFQ2210801H
Name: 0/1                   Descr: NCS1K4 12x QSFP28 2 Trunk C-Band DWDM card
PID: NCS1K4-1.2T-K9        VID: V00      SN: CAT2250B0AE
Name: 0/2-Optics0/2/0/2   Descr: Cisco 100G QSFP28 AOC Pluggable Optics Module
PID: QSFP-100G-AOC3M      VID: V03      SN: INL22262332-A
Name: 0/2-Optics0/2/0/4   Descr: Cisco 100G QSFP28 SM-SR Pluggable Optics Module
PID: QSFP-100G-SM-SR      VID: V02      SN: FNS22070HWF
Name: 0/2-Optics0/2/0/5   Descr: Cisco 100G QSFP28 SM-SR Pluggable Optics Module
PID: QSFP-100G-SM-SR      VID: V02      SN: SPT2225302D
Name: 0/2-Optics0/2/0/6   Descr: Cisco 100G QSFP28 LR4-S Pluggable Optics Module
PID: QSFP-100G-LR4-S      VID: V02      SN: FNS22310Z1X
Name: 0/2-Optics0/2/0/8   Descr: Cisco QSFP-100G-LR4 Pluggable Optics Module
PID: ONS-QSFP28-LR4      VID: V01      SN: FNS20520R8Z
Name: 0/2-Optics0/2/0/9   Descr: Cisco 100G QSFP28 AOC Pluggable Optics Module
PID: QSFP-100G-AOC3M      VID: V03      SN: INL23312282-A
Name: 0/2-Optics0/2/0/10  Descr: Cisco 100G QSFP28 AOC Pluggable Optics Module
PID: QSFP-100G-AOC3M      VID: V03      SN: INL23312282-B
Name: 0/2-Optics0/2/0/11  Descr: Cisco 100G QSFP28 LR4-S Pluggable Optics Module
PID: QSFP-100G-LR4-S      VID: V02      SN: FNS23080LKF
Name: 0/2                   Descr: NCS1K4 12x QSFP28 2 Trunk L-Band DWDM card
PID: NCS1K4-1.2TL-K9      VID: V00      SN: CAT2337B0S4
Name: 0/3                   Descr: Network Convergence System 1004 Filler
PID: NCS1K4-LC-FILLER     VID: V01      SN: N/A
Name: 0/RP0                 Descr: Network Convergence System 1004 Controller
PID: NCS1K4-CNTRLR-K9     VID: V00      SN: CAT2231B069
Name: 0/FT0                 Descr: Network Convergence System 1004 Fan
PID: NCS1K4-FAN           VID: V00      SN: CAT2231B2GL
Name: 0/FT1                 Descr: Network Convergence System 1004 Fan
PID: NCS1K4-FAN           VID: V00      SN: CAT2231B2H4
Name: 0/FT2                 Descr: Network Convergence System 1004 Fan
PID: NCS1K4-FAN           VID: V00      SN: CAT2231B2GW
Name: 0/PM0                 Descr: Network Convergence System 1004 AC Power Supply Unit
PID: NCS1K4-AC-PSU        VID: V00      SN: POG2221CL1V
Name: 0/PM1                 Descr: Network Convergence System 1004 AC Power Supply Unit
PID: NCS1K4-AC-PSU        VID: V00      SN: POG2221CL04
Name: 0/SC0                 Descr: Network Convergence System 1004 Chassis
PID: NCS1004              VID: V00      SN: CAT2231B192

sysadmin-vm:0_RP0# show inventory
Thu May 7 11:40:11.150 UTC+00:00

Name: Rack 0                Descr: Network Convergence System 1004 4 line card slots
PID: NCS1004                VID: V01      SN: CAT2323B0DC

```

Name: 0/0-Optics0/0/0/2 PID: ONS-QSFP28-LR4	Descr: Cisco QSFP-100G-LR4 Pluggable Optics Module VID: V01 SN: FNS2333080E
Name: 0/0-Optics0/0/0/3 PID: ONS-QSFP28-LR4	Descr: Cisco QSFP-100G-LR4 Pluggable Optics Module VID: V01 SN: FNS23330801
Name: 0/0-Optics0/0/0/4 PID: ONS-QSFP28-LR4	Descr: Cisco QSFP-100G-LR4 Pluggable Optics Module VID: V01 SN: FNS21140GZK
Name: 0/0-Optics0/0/0/6 PID: ONS-QSFP28-LR4	Descr: Cisco QSFP-100G-LR4 Pluggable Optics Module VID: V01 SN: FNS233209CN
Name: 0/0-Optics0/0/0/10 PID: QSFP-40G-LR4	Descr: Cisco 40GE QSFP+ LR4 Pluggable Optics Module VID: V02 SN: FNS23110TYD
Name: 0/0 PID: NCS1K4-1.2T-K9	Descr: NCS1K4 12x QSFP28 2 Trunk C-Band DWDM card VID: V00 SN: CAT2237B25A
Name: 0/1-Optics0/1/0/0 PID: ONS-QSFP28-LR4	Descr: Cisco QSFP-100G-LR4 Pluggable Optics Module VID: V01 SN: FNS2333080J
Name: 0/1-Optics0/1/0/1 PID: ONS-QSFP28-LR4	Descr: Cisco QSFP-100G-LR4 Pluggable Optics Module VID: V01 SN: FNS23330806
Name: 0/1-Optics0/1/0/2 PID: ONS-QSFP-4X10-MLR	Descr: Cisco 4x10GE QSFP+ MLR Pluggable Optics Module VID: V01 SN: INL21010391
Name: 0/1-Optics0/1/0/4 PID: QSFP-40G-SR4	Descr: Cisco 40GE QSFP+ SR4 Pluggable Optics Module VID: V03 SN: JFQ20332007
Name: 0/1-Optics0/1/0/5 PID: QSFP-40G-SR4	Descr: Cisco 40GE QSFP+ SR4 Pluggable Optics Module VID: V03 SN: JFQ20332088
Name: 0/1-Optics0/1/0/6 PID: ONS-QSFP-4X10-MLR	Descr: Cisco 4x10GE QSFP+ MLR Pluggable Optics Module VID: V01 SN: INL21010471
Name: 0/1-Optics0/1/0/7 PID: ONS-QSFP-4X10-MLR	Descr: Cisco 4x10GE QSFP+ MLR Pluggable Optics Module VID: V01 SN: INL21010376
Name: 0/1 PID: NCS1K4-OTN-XP	Descr: NCS1K4 4xDD,8xQSFP28,2xCFP2 DCO OTNXponder VID: V00 SN: CAT2352B007
Name: 0/2-Optics0/2/0/0 PID: ONS-QSFP28-LR4	Descr: Cisco QSFP-100G-LR4 Pluggable Optics Module VID: V01 SN: FNS20360V1R
Name: 0/2-Optics0/2/0/4 PID: QSFP-40G-SR4	Descr: Cisco 40GE QSFP+ SR4 Pluggable Optics Module VID: V03 SN: JFQ21502017
Name: 0/2-Optics0/2/0/5 PID: QSFP-40G-SR4	Descr: Cisco 40GE QSFP+ SR4 Pluggable Optics Module VID: V03 SN: JFQ202120DY
Name: 0/2 PID: NCS1K4-OTN-XP	Descr: NCS1K4 4xDD,8xQSFP28,2xCFP2 DCO OTNXponder VID: V00 SN: CAT2352B015
Name: 0/3-Optics0/3/0/0 PID: ONS-QSFP28-LR4	Descr: Cisco QSFP-100G-LR4 Pluggable Optics Module VID: V01 SN: FNS23320BS3
Name: 0/3-Optics0/3/0/4 PID: QSFP-40G-SR4	Descr: Cisco 40GE QSFP+ SR4 Pluggable Optics Module VID: V03 SN: AVP2217S09L
Name: 0/3-Optics0/3/0/5 PID: QSFP-40G-SR4	Descr: Cisco 40GE QSFP+ SR4 Pluggable Optics Module VID: V03 SN: AVP2107S0RZ
Name: 0/3	Descr: NCS1K4 4xDD,8xQSFP28,2xCFP2 DCO OTNXponder

```

PID: NCS1K4-OTN-XP          VID: V00          SN: CAT2352B00A
Name: 0/RP0-SFP-Port        Descr: Cisco SFP Pluggable Optics Module
PID: SFP-GE-S              VID: V01          SN: FNS15512KVG
Name: 0/RP0                 Descr: Network Convergence System 1004 Controller
PID: NCS1K4-CNTRLR-K9      VID: V01          SN: CAT2323B0SG
Name: 0/FT0                 Descr: Network Convergence System 1004 Fan
PID: NCS1K4-FAN            VID: V01          SN: CAT2325B1NW
Name: 0/FT1                 Descr: Network Convergence System 1004 Fan
PID: NCS1K4-FAN            VID: V01          SN: CAT2324B0Z6
Name: 0/FT2                 Descr: Network Convergence System 1004 Fan
PID: NCS1K4-FAN            VID: V01          SN: CAT2324B0Z8
Name: 0/PM0                 Descr: Network Convergence System 1004 DC Power Supply Unit
PID: NCS1K4-DC-PSU         VID: V01          SN: POG2310CT00
Name: 0/PM1                 Descr: Network Convergence System 1004 DC Power Supply Unit
PID: NCS1K4-DC-PSU         VID: V01          SN: POG2308CT4W
Name: 0/SC0                 Descr: Network Convergence System 1004 4 line card slots
PID: NCS1004               VID: V01          SN: CAT2323B0DC

```

In the previous output, the significant fields are:

- PID—Physical model name of the chassis or node.
- VID—Physical hardware revision of the chassis or node.
- SN—Physical serial number of the chassis or node.

Verify Context

The **show context** command displays core dump context information of NCS 1004.

Procedure

Step 1 **show context**

Displays the core dump context information of NCS 1004 when you execute this command in the Cisco IOS XR EXEC mode.

Example:

```
RP/0/RP0/CPU0:ios# show context
Mon Sep 27 17:21:59.219 UTC
```

```
node: node0_RP0_CPU0
-----
```

```
No context
```

The command output is empty during system upgrade.

Step 2 **admin**

Enters System Admin EXEC mode.

Step 3 **show context**

Displays the core dump context information of NCS 1004.

Example:

```
sysadmin-vm:0_RP0# show context
Mon Sep 27 17:22:19.351 UTC+00:00
*****
Location : 0/RP0
*****
No context
```

Verify Core Files

The **run** command checks for core files of NCS 1004.

Procedure

Step 1 **run****Example:**

```
RP/0/RP0/CPU0:ios# run
Mon Sep 27 17:29:11.163 UTC
[xr-vm_node0_RP0_CPU0:~]$cd /misc/disk1/
[xr-vm_node0_RP0_CPU0:/misc/disk1]$ls -lrt *.tgz
```

Step 2 **admin**

Enters System Admin EXEC mode.

Step 3 **run****Example:**

```
sysadmin-vm:0_RP0# run
Mon Sep 27 17:31:10.365 UTC+00:00

[sysadmin-vm:0_RP0:~]$cd /misc/disk1/
[sysadmin-vm:0_RP0:~]$ls -lrt *.tgz
```
