

Release Notes for Cisco NCS 540 Series Routers, Cisco IOS XR Release 7.7.21

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Network Convergence System 540 Series Routers



Note Cisco IOS XR Release 7.7.21 is a special Extended Maintenance Release of [Cisco IOS XR Release 7.7.2](#) for Cisco NCS 540 Series routers. For more details on the Cisco IOS XR release model and associated support, see [Guidelines for Cisco IOS XR Software](#).

What's New in Cisco IOS XR Release 7.7.21

Cisco IOS XR Release 7.7.21 is a special Extended Maintenance Release for Cisco NCS 540 Series routers. There are no new Hardware or Software features introduced in this release.

For more details on the Cisco IOS XR release model and associated support, see [Guidelines for Cisco IOS XR Software](#).

Caveats

There are no caveats for this release.

IOS XR Base Images and Optional Packages

For more information on system setup and software installation process, see [System Setup and Software Installation Guide for Cisco NCS 540 Series Routers](#).

For general and ordering information see:

- [Cisco Network Convergence System 540 Fronthaul Routers Data Sheet](#)
- [Cisco Network Convergence System 540 Large Density Router Data Sheet](#)
- [Cisco Network Convergence System 540 Medium Density Routers Data Sheet](#)
- [Cisco Network Convergence System 540 Small Density Router Data Sheet](#)

To install the Cisco NCS 540 Series Routers, see [Cisco NCS 540 Router Hardware Installation Guide](#).

Release 7.7.21 Software

The following tables list the supported base images and optional packages and their corresponding file names.

- The first table lists the supported software for N540-24Z8Q2C-SYS, N540-ACC-SYS, and N540X-ACC-SYS variants.
- The second table lists the supported software for N540-24Q8L2DD-SYS, N540X-16Z4G8Q2C-A/D, N540-28Z4C-SYS-A/D, N540X-12Z16G-SYS-A/D, N540-12Z20G-SYS-A/D, N540-FH-CSR-SYS, N540X-16Z8Q2C-D and N540-FH-AGG-SYS variants.
- The third table lists the supported software for N540X-4Z14G2Q-A/D, N540X-8Z16G-SYS-A/D, N540-6Z14S-SYS-D, and N540X-6Z18G-SYS-A/D variants.

Table 1: Release 7.7.21 Software for N540-24Z8Q2C-SYS, N540-ACC-SYS, and N540X-ACC-SYS

Base Image	Filename	Description
IOS XR Base Image	ncs540-mini-x-7.7.21.iso	IOS XR mandatory base image.
USB Boot Package	ncs540-usb_boot-7.7.21.zip	Package required to perform USB Boot. Includes the same packages as the base image.
Optional Packages not included in the base image		
Package	Filename	Description
IOS XR Manageability	ncs540-mgt-1.0.0.0-7721.x86_64.rpm	Supports Extensible Markup Language (XML) Parser, Telemetry, Netconf, gRPC and HTTP server
IOS XR MPLS	ncs540-mpls-1.0.0.0-7721.x86_64.rpm ncs540-mpls-osp-1.0.0.0-7721.x86_64.rpm	Supports MPLS and MPLS Traffic Engineering (MPLS-TE)
IOS XR Security	ncs540-sec-1.0.0.0-7721.x86_64.rpm	Supports MACsec and 802.1X
IOS XR ISIS	ncs540-isis-1.0.0.0-7721.x86_64.rpm	Supports ISIS
IOS XR OSPF	ncs540-ospf-1.0.0.0-7721.x86_64.rpm	Supports OSPF
IOS XR Lawful Intercept	ncs540-li-1.0.0.0-7721.x86_64.rpm	Supports Lawful Intercept (LI)
IOS XR Multicast	ncs540-mcast-1.0.0.0-7721.x86_64.rpm	Supports Multicast
IOS XR EIGRP	ncs540-eigrp-1.0.0.0-7721.x86_64.rpm	Supports EIGRP
IOS XR LI-CTRL	ncs540-li-ctrl-1.0.0.0-7721.x86_64.rpm	Supports LI-CTRL

Table 2: Release 7.7.21 Software for N540-24Q8L2DD-SYS, N540X-16Z4G8Q2C-A/D, N540-28Z4C-SYS-A/D, N540X-12Z16G-SYS-A/D, N540-12Z20G-SYS-A/D, N540-FH-CSR-SYS, N540X-16Z8Q2C-D and N540-FH-AGG-SYS

Base Image	Filename	Description
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IOS XR Base Image	ncs540l-x64-7.7.21.iso	<p>IOS XR base image with mandatory packages.</p> <p>The base ISO image also includes the following optional packages:</p> <ul style="list-style-type: none"> • xr-bgp • xr-ipsla • xr-is-is • xr-lldp • xr-mcast • xr-mpls-oam • xr-ncs540l-mcast • xr-ncs540l-netflow • xr-netflow • xr-ospf • xr-perfmgmt • xr-track <p>These optional packages are also included in NCS540l-iosxr-7.7.21.tar.</p>
USB Boot Package	ncs540l-usb_boot-7.7.21.zip	<p>Package required to perform USB Boot.</p> <p>Includes the same packages as the base image.</p>
Optional Packages not included in the base image		
Package	Filename	Description
IOS XR Telnet (xr-telnet)	NCS540l-iosxr-7.7.21.tar	Supports Telnet
IOS XR EIGRP (xr-eigrp)	NCS540l-iosxr-7.7.21.tar	Supports EIGRP
IOS XR CDP (xr-cdp)	NCS540l-iosxr-7.7.21.tar	Supports CDP
IOS XR k9sec (xr-k9sec)	NCS540l-k9sec-rpms.7.7.21.tar	Supports 802.1X
IOS XR RIP (xr-rip)	NCS540l-iosxr-7.7.21.tar	Supports RIP

Table 3: Release 7.7.21 Software for N540X-4Z14G2Q-A/D, N540X-8Z16G-SYS-A/D, N540-6Z14S-SYS-D, and N540X-6Z18G-SYS-A/D

Base Image	Filename	Description
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IOS XR Base Image	ncs540l-aarch64-7.7.21.iso	IOS XR base image with mandatory packages. The ISO image also includes the following optional packages: <ul style="list-style-type: none"> • xr-bgp • xr-ipsla • xr-is-is • xr-lldp • xr-mcast • xr-mpls-oam • xr-ncs540l-mcast • xr-ncs540l-netflow • xr-netflow • xr-ospf • xr-perfmgmt • xr-track These optional packages are also included in NCS540l-aarch64-iosxr-optional-rpms-7.7.21.tar
USB Boot Package	ncs540l-aarch64-usb_boot-7.7.21.zip	Package required to perform USB Boot. Includes the same packages as the base image.
Optional Packages not included in the base image		
Package	Filename	Description
IOS XR Telnet (xr-telnet)	NCS540l-aarch64-iosxr-optional-rpms-7.7.21.tar	Supports Telnet
IOS XR EIGRP (xr-eigrp)	NCS540l-aarch64-iosxr-optional-rpms-7.7.21.tar	Supports EIGRP
IOS XR CDP (xr-cdp)	NCS540l-aarch64-iosxr-optional-rpms-7.7.21.tar	Supports CDP
IOS XR k9sec (xr-k9sec)	NCS540l-aarch64-k9sec-rpms.7.7.21.tar	Supports 802.1X
IOS XR RIP (xr-rip)	NCS540l-aarch64-iosxr-optional-rpms-7.7.21.tar	Supports RIP

Determine Software Version

Log in to the router and enter the **show version** command on the N540-24Z8Q2C-SYS, N540-ACC-SYS, and N540X-ACC-SYS variants:

```
RP/0/RP0/CPU0:Router#show version
Cisco IOS XR Software, Version 7.7.21
Copyright (c) 2013-2023 by Cisco Systems, Inc.
```

Build Information:

```
Built By      : deenayak
Built On     : Thu Jun 29 01:05:28 PDT 2023
Built Host   : dfd7619f5bd6
Workspace    : /auto/srcarchive16/prod/7.7.21/ncs540/ws
Version     : 7.7.21
Location     : /opt/cisco/XR/packages/
Label       : 7.7.21
```

```
cisco NCS-540 () processor
System uptime is 11 minutes
```

Log in to the router and enter the **show version** command on the N540X-16Z4G8Q2C-A/D, N540-28Z4C-SYS-A/D, N540X-12Z16G-SYS-A/D, and N540-12Z20G-SYS-A/D variants:

```
RP/0/RP0/CPU0:Router#show version
Cisco IOS XR Software, Version 7.7.21 LNT
Copyright (c) 2013-2023 by Cisco Systems, Inc.
```

Build Information:

```
Built By      : deenayak
Built On     : Thu Jun 29 06:15:03 UTC 2023
Build Host   : 21c516921b64
Workspace    : /auto/srcarchive16/prod/7.7.21/ncs5401/ws
Version     : 7.7.21
Label       : 7.7.21
```

```
cisco NCS540L (C3508 @ 1.60GHz)
cisco N540X-12Z16G-SYS-A (C3508 @ 1.60GHz) processor with 8GB of memory
Router uptime is 12 minutes
Cisco NCS 540 System with 12x10G+4x1G Cu+12x1G AC Chassis
```

Log in to the router and enter the **show version** command on the N540X-8Z16G-SYS-A/D, N540X-4Z14G2Q-A/D, N540-6Z14S-SYS-D, and N540X-6Z18G-SYS-A/D variants:

```
RP/0/RP0/CPU0:Router#show version
Cisco IOS XR Software, Version 7.7.21 LNT
Copyright (c) 2013-2023 by Cisco Systems, Inc.
```

Build Information:

```
Built By      : deenayak
Built On     : Thu Jun 29 06:15:03 UTC 2023
Build Host   : 361c132f497a
Workspace    : /auto/srcarchive16/prod/7.7.21/ncs5401-aarch64/ws
Version     : 7.7.21
Label       : 7.7.21
```

```
cisco NCS540L
cisco N540X-8Z16G-SYS-A processor with 8GB of memory
Router uptime is 4 minutes
Cisco NCS 540 Series Fixed Router 12x1G, 4xCu, 8x1/10G, AC
```

Log in to the router and enter the **show version** command on the N540-24Q8L2DD-SYS variant:

```
RP/0/RP0/CPU0:Router#show version
Cisco IOS XR Software, Version 7.7.21 LNT
Copyright (c) 2013-2023 by Cisco Systems, Inc.
```

Build Information:

```
Built By      : deenayak
Built On     : Thu Jun 29 06:15:03 UTC 2023
```

Determine Firmware Support

```

Build Host      : 21c516921b64
Workspace      : /auto/srcarchive16/prod/7.7.21/ncs5401/ws
Version        : 7.7.21
Label          : 7.7.21

cisco NCS540L (D1519 @ 1.50GHz)
cisco N540-24Q8L2DD-SYS (D1519 @ 1.50GHz) processor with 16GB of memory
Router uptime is 5 minutes
Cisco NCS540 Series, Fixed Router 2x400G, 8x50G, 24x25G Chassis

```

Log in to the router and enter the **show version** command on the N540-FH-CSR-SYS variant:

```

RP/0/RP0/CPU0:Router#show version
Cisco IOS XR Software, Version 7.7.21 LNT
Copyright (c) 2013-2023 by Cisco Systems, Inc.

```

```

Build Information:
Built By       : deenayak
Built On      : Thu Jun 29 06:15:03 UTC 2023
Build Host    : 21c516921b64
Workspace     : /auto/srcarchive16/prod/7.7.21/ncs5401/ws
Version       : 7.7.21
Label        : 7.7.21

```

```

cisco NCS540L (C3708 @ 1.70GHz)
cisco N540-FH-CSR-SYS (C3708 @ 1.70GHz) processor with 8GB of memory
Router uptime is 55 minutes
Cisco NCS 540 FH with 8xCPRI+4xCPRI/10G+8x10G+6x25G+2x100G

```

Determine Firmware Support

Use the show command in EXEC mode to view the hardware components with their current FPD version and status. The status of the hardware must be “CURRENT”; Running and Programed version must be the same. The Golden FPDs with “NEED UPGD” can be ignored, the Golden FPDs are not upgradable.

Log in to the router and enter the **show fpd package** and **show hw-module fpd** commands on the Cisco N540-24Z8Q2C-SYS, N540X-ACC-SYS, and N540-ACC-SYS variants:

```

RP/0/RP0/CPU0:Router#show fpd package
=====
                                Field Programmable Device Package
                                =====
Card Type          FPD Description          Req   SW   Min Req  Min Req
=====  =====  =====  =====  =====  =====
N540-24Z8Q2C-M    Bootloader (A)           YES   1.16  1.16     0.0
                  CPU-IOFPGA (A)           YES   0.10  0.10     0.0
                  MB-IOFPGA (A)           YES   0.27  0.27     0.0
                  MB-MIFPGA                YES   0.05  0.05     0.0
                  SATA-INTEL_240G (A)      NO    1132.00  1132.00  0.0
                  SATA-INTEL_480G (A)      NO    1132.00  1132.00  0.0
                  SATA-M500IT-MC (A)       NO     3.00   3.00     0.0
                  SATA-M500IT-MU-A (A)     NO     5.00   5.00     0.0
                  SATA-M500IT-MU-B (A)     NO     4.00   4.00     0.0
                  SATA-M5100 (A)          NO    75.00  75.00    0.0
                  SATA-M600-MCT (A)       NO     5.00   5.00     0.0
                  SATA-M600-MU (A)        NO     6.00   6.00     0.0
                  SATA-Micron (A)        NO     1.00   1.00     0.0
                  SATA-SMART-128G (A)  NO   1427.00  1427.00  0.0
                  SSFP_E1F_0              NO    13.01  13.01    0.0
                  SSFP_E1F_1              NO    13.01  13.01    0.0
                  SSFP_E1F_10             NO    13.01  13.01    0.0

```

SSFP_E1F_11	NO	13.01	13.01	0.0	
SSFP_E1F_12	NO	13.01	13.01	0.0	
SSFP_E1F_13	NO	13.01	13.01	0.0	
SSFP_E1F_14	NO	13.01	13.01	0.0	
SSFP_E1F_15	NO	13.01	13.01	0.0	
SSFP_E1F_16	NO	13.01	13.01	0.0	
SSFP_E1F_17	NO	13.01	13.01	0.0	
SSFP_E1F_18	NO	13.01	13.01	0.0	
SSFP_E1F_19	NO	13.01	13.01	0.0	
SSFP_E1F_2	NO	13.01	13.01	0.0	
SSFP_E1F_20	NO	13.01	13.01	0.0	
SSFP_E1F_21	NO	13.01	13.01	0.0	
SSFP_E1F_22	NO	13.01	13.01	0.0	
SSFP_E1F_23	NO	13.01	13.01	0.0	
SSFP_E1F_24	NO	13.01	13.01	0.0	
SSFP_E1F_25	NO	13.01	13.01	0.0	
SSFP_E1F_26	NO	13.01	13.01	0.0	
SSFP_E1F_27	NO	13.01	13.01	0.0	
SSFP_E1F_28	NO	13.01	13.01	0.0	
SSFP_E1F_29	NO	13.01	13.01	0.0	
SSFP_E1F_3	NO	13.01	13.01	0.0	
SSFP_E1F_30	NO	13.01	13.01	0.0	
SSFP_E1F_31	NO	13.01	13.01	0.0	
SSFP_E1F_4	NO	13.01	13.01	0.0	
SSFP_E1F_5	NO	13.01	13.01	0.0	
SSFP_E1F_6	NO	13.01	13.01	0.0	
SSFP_E1F_7	NO	13.01	13.01	0.0	
SSFP_E1F_8	NO	13.01	13.01	0.0	
SSFP_E1F_9	NO	13.01	13.01	0.0	
SSFP_OC3_STM1_0	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_1	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_10	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_11	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_12	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_13	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_14	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_15	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_16	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_17	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_18	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_19	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_2	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_20	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_21	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_22	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_23	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_24	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_25	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_26	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_27	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_28	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_29	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_3	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_30	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_31	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_4	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_5	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_6	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_7	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_8	NO	12.01	12.01	0.0	
SSFP_OC3_STM1_9	NO	12.01	12.01	0.0	

N540-ACC-SYS	Bootloader (A)	YES	1.16	1.16	0.0
	CPU-IOFPGA (A)	YES	0.10	0.10	0.0

Determine Firmware Support

MB-IOFPGA (A)	YES	0.27	0.27	0.0
MB-MIFPGA	YES	0.05	0.05	0.0
SATA-INTEL_240G (A)	NO	1132.00	1132.00	0.0
SATA-INTEL_480G (A)	NO	1132.00	1132.00	0.0
SATA-M500IT-MC (A)	NO	3.00	3.00	0.0
SATA-M500IT-MU-A (A)	NO	5.00	5.00	0.0
SATA-M500IT-MU-B (A)	NO	4.00	4.00	0.0
SATA-M5100 (A)	NO	75.00	75.00	0.0
SATA-M600-MCT (A)	NO	5.00	5.00	0.0
SATA-M600-MU (A)	NO	6.00	6.00	0.0
SATA-Micron (A)	NO	1.00	1.00	0.0
SATA-SMART-128G (A)	NO	1427.00	1427.00	0.0
SSFP_E1F_0	NO	13.01	13.01	0.0
SSFP_E1F_1	NO	13.01	13.01	0.0
SSFP_E1F_10	NO	13.01	13.01	0.0
SSFP_E1F_11	NO	13.01	13.01	0.0
SSFP_E1F_12	NO	13.01	13.01	0.0
SSFP_E1F_13	NO	13.01	13.01	0.0
SSFP_E1F_14	NO	13.01	13.01	0.0
SSFP_E1F_15	NO	13.01	13.01	0.0
SSFP_E1F_16	NO	13.01	13.01	0.0
SSFP_E1F_17	NO	13.01	13.01	0.0
SSFP_E1F_18	NO	13.01	13.01	0.0
SSFP_E1F_19	NO	13.01	13.01	0.0
SSFP_E1F_2	NO	13.01	13.01	0.0
SSFP_E1F_20	NO	13.01	13.01	0.0
SSFP_E1F_21	NO	13.01	13.01	0.0
SSFP_E1F_22	NO	13.01	13.01	0.0
SSFP_E1F_23	NO	13.01	13.01	0.0
SSFP_E1F_24	NO	13.01	13.01	0.0
SSFP_E1F_25	NO	13.01	13.01	0.0
SSFP_E1F_26	NO	13.01	13.01	0.0
SSFP_E1F_27	NO	13.01	13.01	0.0
SSFP_E1F_28	NO	13.01	13.01	0.0
SSFP_E1F_29	NO	13.01	13.01	0.0
SSFP_E1F_3	NO	13.01	13.01	0.0
SSFP_E1F_30	NO	13.01	13.01	0.0
SSFP_E1F_31	NO	13.01	13.01	0.0
SSFP_E1F_4	NO	13.01	13.01	0.0
SSFP_E1F_5	NO	13.01	13.01	0.0
SSFP_E1F_6	NO	13.01	13.01	0.0
SSFP_E1F_7	NO	13.01	13.01	0.0
SSFP_E1F_8	NO	13.01	13.01	0.0
SSFP_E1F_9	NO	13.01	13.01	0.0
SSFP_OC3_STM1_0	NO	12.01	12.01	0.0
SSFP_OC3_STM1_1	NO	12.01	12.01	0.0
SSFP_OC3_STM1_10	NO	12.01	12.01	0.0
SSFP_OC3_STM1_11	NO	12.01	12.01	0.0
SSFP_OC3_STM1_12	NO	12.01	12.01	0.0
SSFP_OC3_STM1_13	NO	12.01	12.01	0.0
SSFP_OC3_STM1_14	NO	12.01	12.01	0.0
SSFP_OC3_STM1_15	NO	12.01	12.01	0.0
SSFP_OC3_STM1_16	NO	12.01	12.01	0.0
SSFP_OC3_STM1_17	NO	12.01	12.01	0.0
SSFP_OC3_STM1_18	NO	12.01	12.01	0.0
SSFP_OC3_STM1_19	NO	12.01	12.01	0.0
SSFP_OC3_STM1_2	NO	12.01	12.01	0.0
SSFP_OC3_STM1_20	NO	12.01	12.01	0.0
SSFP_OC3_STM1_21	NO	12.01	12.01	0.0
SSFP_OC3_STM1_22	NO	12.01	12.01	0.0
SSFP_OC3_STM1_23	NO	12.01	12.01	0.0
SSFP_OC3_STM1_24	NO	12.01	12.01	0.0
SSFP_OC3_STM1_25	NO	12.01	12.01	0.0
SSFP_OC3_STM1_26	NO	12.01	12.01	0.0

	SSFP_OC3_STM1_27	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_28	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_29	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_3	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_30	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_31	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_4	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_5	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_6	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_7	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_8	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_9	NO	12.01	12.01	0.0

N540-PWR400-A	LIT-PrimCU-ACFW (A)	NO	0.04	0.04	0.0
	LIT-SecMCU-ACFW (A)	NO	0.07	0.07	0.0

N540-PWR400-D	LIT-PrimCU-DCFW (A)	NO	0.04	0.04	0.0
	LIT-SecMCU-DCFW (A)	NO	0.06	0.06	0.0
	SDG-PrimCU-DCFW (A)	NO	1.03	1.03	0.0
	SDG-SecMCU-DCFW (A)	NO	1.03	1.03	0.0

N540-X-24Z8Q2C-M	Bootloader (A)	YES	1.16	1.16	0.0
	CPU-IOFPGA (A)	YES	0.10	0.10	0.0
	MB-IOFPGA (A)	YES	0.27	0.27	0.0
	MB-MIFPGA	YES	0.05	0.05	0.0
	SATA-INTEL_240G (A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G (A)	NO	1132.00	1132.00	0.0
	SATA-M500IT-MC (A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A (A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B (A)	NO	4.00	4.00	0.0
	SATA-M5100 (A)	NO	75.00	75.00	0.0
	SATA-M600-MCT (A)	NO	5.00	5.00	0.0
	SATA-M600-MU (A)	NO	6.00	6.00	0.0
	SATA-Micron (A)	NO	1.00	1.00	0.0
	SATA-SMART-128G (A)	NO	1427.00	1427.00	0.0
	SSFP_E1F_0	NO	13.01	13.01	0.0
	SSFP_E1F_1	NO	13.01	13.01	0.0
	SSFP_E1F_10	NO	13.01	13.01	0.0
	SSFP_E1F_11	NO	13.01	13.01	0.0
	SSFP_E1F_12	NO	13.01	13.01	0.0
	SSFP_E1F_13	NO	13.01	13.01	0.0
	SSFP_E1F_14	NO	13.01	13.01	0.0
	SSFP_E1F_15	NO	13.01	13.01	0.0
	SSFP_E1F_16	NO	13.01	13.01	0.0
	SSFP_E1F_17	NO	13.01	13.01	0.0
	SSFP_E1F_18	NO	13.01	13.01	0.0
	SSFP_E1F_19	NO	13.01	13.01	0.0
	SSFP_E1F_20	NO	13.01	13.01	0.0
	SSFP_E1F_21	NO	13.01	13.01	0.0
	SSFP_E1F_22	NO	13.01	13.01	0.0
	SSFP_E1F_23	NO	13.01	13.01	0.0
	SSFP_E1F_24	NO	13.01	13.01	0.0
	SSFP_E1F_25	NO	13.01	13.01	0.0
	SSFP_E1F_26	NO	13.01	13.01	0.0
	SSFP_E1F_27	NO	13.01	13.01	0.0
	SSFP_E1F_28	NO	13.01	13.01	0.0
	SSFP_E1F_29	NO	13.01	13.01	0.0
	SSFP_E1F_3	NO	13.01	13.01	0.0
	SSFP_E1F_30	NO	13.01	13.01	0.0
	SSFP_E1F_31	NO	13.01	13.01	0.0
	SSFP_E1F_4	NO	13.01	13.01	0.0
	SSFP_E1F_5	NO	13.01	13.01	0.0
	SSFP_E1F_6	NO	13.01	13.01	0.0

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	SSFP_E1F_7	NO	13.01	13.01	0.0
	SSFP_E1F_8	NO	13.01	13.01	0.0
	SSFP_E1F_9	NO	13.01	13.01	0.0
	SSFP_OC3_STM1_0	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_1	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_10	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_11	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_12	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_13	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_14	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_15	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_16	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_17	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_18	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_19	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_2	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_20	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_21	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_22	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_23	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_24	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_25	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_26	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_27	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_28	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_29	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_3	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_30	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_31	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_4	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_5	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_6	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_7	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_8	NO	12.01	12.01	0.0
	SSFP_OC3_STM1_9	NO	12.01	12.01	0.0

N540X-ACC-SYS	Bootloader (A)	YES	1.16	1.16	0.0
	CPU-IOFPGA (A)	YES	0.10	0.10	0.0
	MB-IOFPGA (A)	YES	0.27	0.27	0.0
	MB-MIFPGA	YES	0.05	0.05	0.0
	SATA-INTEL_240G (A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G (A)	NO	1132.00	1132.00	0.0
	SATA-M500IT-MC (A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A (A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B (A)	NO	4.00	4.00	0.0
	SATA-M5100 (A)	NO	75.00	75.00	0.0
	SATA-M600-MCT (A)	NO	5.00	5.00	0.0
	SATA-M600-MU (A)	NO	6.00	6.00	0.0
	SATA-Micron (A)	NO	1.00	1.00	0.0
	SATA-SMART-128G (A)	NO	1427.00	1427.00	0.0
	SSFP_E1F_0	NO	13.01	13.01	0.0
	SSFP_E1F_1	NO	13.01	13.01	0.0
	SSFP_E1F_10	NO	13.01	13.01	0.0
	SSFP_E1F_11	NO	13.01	13.01	0.0
	SSFP_E1F_12	NO	13.01	13.01	0.0
	SSFP_E1F_13	NO	13.01	13.01	0.0
	SSFP_E1F_14	NO	13.01	13.01	0.0
	SSFP_E1F_15	NO	13.01	13.01	0.0
	SSFP_E1F_16	NO	13.01	13.01	0.0
	SSFP_E1F_17	NO	13.01	13.01	0.0
	SSFP_E1F_18	NO	13.01	13.01	0.0
	SSFP_E1F_19	NO	13.01	13.01	0.0
	SSFP_E1F_2	NO	13.01	13.01	0.0
	SSFP_E1F_20	NO	13.01	13.01	0.0

SSFP_E1F_21	NO	13.01	13.01	0.0
SSFP_E1F_22	NO	13.01	13.01	0.0
SSFP_E1F_23	NO	13.01	13.01	0.0
SSFP_E1F_24	NO	13.01	13.01	0.0
SSFP_E1F_25	NO	13.01	13.01	0.0
SSFP_E1F_26	NO	13.01	13.01	0.0
SSFP_E1F_27	NO	13.01	13.01	0.0
SSFP_E1F_28	NO	13.01	13.01	0.0
SSFP_E1F_29	NO	13.01	13.01	0.0
SSFP_E1F_3	NO	13.01	13.01	0.0
SSFP_E1F_30	NO	13.01	13.01	0.0
SSFP_E1F_31	NO	13.01	13.01	0.0
SSFP_E1F_4	NO	13.01	13.01	0.0
SSFP_E1F_5	NO	13.01	13.01	0.0
SSFP_E1F_6	NO	13.01	13.01	0.0
SSFP_E1F_7	NO	13.01	13.01	0.0
SSFP_E1F_8	NO	13.01	13.01	0.0
SSFP_E1F_9	NO	13.01	13.01	0.0
SSFP_OC3_STM1_0	NO	12.01	12.01	0.0
SSFP_OC3_STM1_1	NO	12.01	12.01	0.0
SSFP_OC3_STM1_10	NO	12.01	12.01	0.0
SSFP_OC3_STM1_11	NO	12.01	12.01	0.0
SSFP_OC3_STM1_12	NO	12.01	12.01	0.0
SSFP_OC3_STM1_13	NO	12.01	12.01	0.0
SSFP_OC3_STM1_14	NO	12.01	12.01	0.0
SSFP_OC3_STM1_15	NO	12.01	12.01	0.0
SSFP_OC3_STM1_16	NO	12.01	12.01	0.0
SSFP_OC3_STM1_17	NO	12.01	12.01	0.0
SSFP_OC3_STM1_18	NO	12.01	12.01	0.0
SSFP_OC3_STM1_19	NO	12.01	12.01	0.0
SSFP_OC3_STM1_2	NO	12.01	12.01	0.0
SSFP_OC3_STM1_20	NO	12.01	12.01	0.0
SSFP_OC3_STM1_21	NO	12.01	12.01	0.0
SSFP_OC3_STM1_22	NO	12.01	12.01	0.0
SSFP_OC3_STM1_23	NO	12.01	12.01	0.0
SSFP_OC3_STM1_24	NO	12.01	12.01	0.0
SSFP_OC3_STM1_25	NO	12.01	12.01	0.0
SSFP_OC3_STM1_26	NO	12.01	12.01	0.0
SSFP_OC3_STM1_27	NO	12.01	12.01	0.0
SSFP_OC3_STM1_28	NO	12.01	12.01	0.0
SSFP_OC3_STM1_29	NO	12.01	12.01	0.0
SSFP_OC3_STM1_3	NO	12.01	12.01	0.0
SSFP_OC3_STM1_30	NO	12.01	12.01	0.0
SSFP_OC3_STM1_31	NO	12.01	12.01	0.0
SSFP_OC3_STM1_4	NO	12.01	12.01	0.0
SSFP_OC3_STM1_5	NO	12.01	12.01	0.0
SSFP_OC3_STM1_6	NO	12.01	12.01	0.0
SSFP_OC3_STM1_7	NO	12.01	12.01	0.0
SSFP_OC3_STM1_8	NO	12.01	12.01	0.0
SSFP_OC3_STM1_9	NO	12.01	12.01	0.0

RP/0/RP0/CPU0:Router#show hw-module fpd

Location	Card type	HWver	FPD device	ATR Status	FPD Versions	
					Running	Programd
0/RP0	N540-ACC-SYS	1.0	MB-MIFPGA	CURRENT	0.05	0.05
0/RP0	N540-ACC-SYS	1.0	Bootloader	CURRENT	1.16	1.16
0/RP0	N540-ACC-SYS	1.0	CPU-IOFPGA	CURRENT	0.10	0.10
0/RP0	N540-ACC-SYS	1.0	MB-IOFPGA	CURRENT	0.27	0.27
0/RP0	N540-ACC-SYS	1.0	SATA-M500IT-MU-B	CURRENT	4.00	4.00
0/PM0	N540-PWR400-A	1.0	SDG-PrimMCU-ACFW	CURRENT	0.04	0.04
0/PM0	N540-PWR400-A	1.0	SDG-SecMCU-ACFW	CURRENT	0.07	0.07

Log in to the router and enter the **show fpd package** and **show hw-module fpd** commands on the Cisco N540X-16Z4G8Q2C-A/D, N540-28Z4C-SYS-A/D, N540X-12Z16G-SYS-A/D, and N540-12Z20G-SYS-A/D variants:

```
RP/0/RP0/CPU0:Router#show fpd package
```

```
=====
                                Field Programmable Device Package
                                =====
Card Type                FPD Description                Req   SW   Min Req   Min Req
=====                =====                Reload Ver   SW Ver   Board Ver
=====                =====                =====
-----
N540-12Z20G-SYS-A      ADM_FW                          YES   14.03  14.03    0.0
                        ADMConfig                       NO    1.05   1.05    0.0
                        IoFpga                          YES   2.07   2.07    0.0
                        IoFpgaGolden                    YES   2.07   2.03    0.0
                        Primary-BIOS                    YES   1.46   1.46    0.0
                        StdbyFpga                      YES   0.40   0.40    0.0
                        StdbyFpgaGolden                YES   0.40   0.40    0.0
                        TamFw                          YES   4.11   4.11    0.0
                        TamFwGolden                    YES   4.11   4.11    0.0
-----
N540-12Z20G-SYS-D      ADM_FW                          YES   14.03  14.03    0.0
                        ADMConfig                       NO    1.05   1.05    0.0
                        IoFpga                          YES   2.07   2.07    0.0
                        IoFpgaGolden                    YES   2.07   2.03    0.0
                        Primary-BIOS                    YES   1.46   1.46    0.0
                        StdbyFpga                      YES   0.40   0.40    0.0
                        StdbyFpgaGolden                YES   0.40   0.40    0.0
                        TamFw                          YES   4.11   4.11    0.0
                        TamFwGolden                    YES   4.11   4.11    0.0
-----
N540-24Q8L2DD-SYS      ADM-DBConfig                    NO    2.03   2.03    0.0
                        ADM-MBConfig                    NO    2.01   2.01    0.0
                        IoFpga                          YES   2.12   2.12    0.0
                        IoFpgaGolden                    YES   2.12   2.12    0.0
                        Primary-BIOS                    YES   4.05   4.05    0.0
                        StdbyFpga                      YES   2.59   2.59    0.0
                        StdbyFpgaGolden                YES   2.56   2.39    0.0
                        TamFw                          YES   6.05   6.05    0.0
                        TamFwGolden                    YES   6.05   6.05    0.0
-----
N540-28Z4C-SYS-A      ADM_FW                          YES   14.03  14.03    0.0
                        ADMConfig                       NO    1.05   1.05    0.0
                        IoFpga                          YES   2.07   2.07    0.0
                        IoFpgaGolden                    YES   2.07   2.03    0.0
                        Primary-BIOS                    YES   1.46   1.46    0.0
                        StdbyFpga                      YES   0.40   0.40    0.0
                        StdbyFpgaGolden                YES   0.40   0.40    0.0
                        TamFw                          YES   4.11   4.11    0.0
                        TamFwGolden                    YES   4.11   4.11    0.0
-----
N540-28Z4C-SYS-D      ADM_FW                          YES   14.03  14.03    0.0
                        ADMConfig                       NO    1.05   1.05    0.0
                        IoFpga                          YES   2.07   2.07    0.0
                        IoFpgaGolden                    YES   2.07   2.03    0.0
                        Primary-BIOS                    YES   1.46   1.46    0.0
                        StdbyFpga                      YES   0.40   0.40    0.0
                        StdbyFpgaGolden                YES   0.40   0.40    0.0
                        TamFw                          YES   4.11   4.11    0.0
                        TamFwGolden                    YES   4.11   4.11    0.0
-----
N540-FH-AGG-SYS        ADM1_Config                      NO    1.02   1.02    1.0
                        ADM2_Config                      NO    1.02   1.02    1.0
-----
```

	DpFpgaCpri	YES	0.22	0.22	0.0
	DpFpgaEth	YES	1.20	1.20	0.0
	IoFpga	YES	1.30	1.30	0.0
	IoFpgaGolden	YES	1.30	1.30	0.0
	Primary-BIOS	YES	1.33	1.33	0.0
	StdbyFpga	YES	0.46	0.46	0.0
	StdbyFpgaGolden	YES	0.46	0.46	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0

N540-FH-CSR-SYS	ADM1_Config	NO	0.09	0.09	0.0
	ADM1_Config	NO	1.01	1.01	2.0
	ADM2_Config	NO	0.09	0.09	0.0
	ADM2_Config	NO	1.01	1.01	2.0
	DpFpga	YES	0.21	0.21	0.0
	IoFpga	YES	1.30	1.30	0.0
	IoFpgaGolden	YES	1.30	1.30	0.0
	Primary-BIOS	YES	1.33	1.33	0.0
	StdbyFpga	YES	0.46	0.46	0.0
	StdbyFpgaGolden	YES	0.46	0.46	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0

N540-PWR400-A	LI-PrimMCU	NO	0.04	0.04	0.0
	LI-SecMCU	NO	0.06	0.06	0.0
	PrimMCU	NO	1.02	1.02	0.0
	SecMCU	NO	1.03	1.03	0.0

N540-PWR400-D	LI-PrimMCU	NO	0.04	0.04	0.0
	LI-SecMCU	NO	0.06	0.06	0.0
	PrimMCU	NO	1.03	1.03	0.0
	SecMCU	NO	1.03	1.03	0.0

N540-PWR750-A	EM-PrimMCU	NO	1.02	1.02	0.0
	EM-SecMCU	NO	1.03	1.03	0.0

N540-PWR750-D	EM-PrimMCU	NO	1.03	1.03	0.0
	EM-SecMCU	NO	3.01	3.01	0.0

N540X-12Z16G-SYS-A	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbyFpga	YES	0.40	0.40	0.0
	StdbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

N540X-12Z16G-SYS-D	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbyFpga	YES	0.40	0.40	0.0
	StdbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

N540X-16Z4G8Q2C-A	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0

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	StdbyFpga	YES	0.40	0.40	0.0
	StdbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

N540X-16Z4G8Q2C-D	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbyFpga	YES	0.40	0.40	0.0
	StdbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

N540X-16Z8Q2C-A	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbyFpga	YES	0.40	0.40	0.0
	StdbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

N540X-16Z8Q2C-D	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbyFpga	YES	0.40	0.40	0.0
	StdbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

```
RP/0/RP0/CPU0:Router#show hw-module fpd
Auto-upgrade:Enabled
Attribute codes: B golden, P protect, S secure
```

Location	Card type	HWver	FPD device	ATR Status	FPD Versions	
					Running	Programd
Reload Loc						
0/RP0/CPU0	N540X-12Z16G-SYS-A	1.0	ADM_FW	CURRENT	14.03	14.03
				NOT REQ		
0/RP0/CPU0	N540X-12Z16G-SYS-A	1.0	ADMConfig	CURRENT	1.05	1.05
				NOT REQ		
0/RP0/CPU0	N540X-12Z16G-SYS-A	1.0	IoFpga	CURRENT	2.12	2.12
				NOT REQ		
0/RP0/CPU0	N540X-12Z16G-SYS-A	1.0	IoFpgaGolden	B NEED UPGD		1.31
				NOT REQ		
0/RP0/CPU0	N540X-12Z16G-SYS-A	1.0	Primary-BIOS	S CURRENT	1.46	1.46
				NOT REQ		
0/RP0/CPU0	N540X-12Z16G-SYS-A	1.0	StdbyFpga	S CURRENT	0.40	0.40
				NOT REQ		
0/RP0/CPU0	N540X-12Z16G-SYS-A	1.0	StdbyFpgaGolden	BS CURRENT		0.40
				NOT REQ		
0/RP0/CPU0	N540X-12Z16G-SYS-A	1.0	TamFw	S CURRENT	4.11	4.11
				NOT REQ		
0/RP0/CPU0	N540X-12Z16G-SYS-A	1.0	TamFwGolden	BS CURRENT		4.11
				NOT REQ		

Log in to the router and enter the **show fpd package** and **show hw-module fpd** commands on the Cisco N540X-6Z18G-SYS-A/D, N540X-4Z14G2Q-A/D, N540-6Z14S-SYS-D, and N540X-8Z16G-SYS-A/D variants:

```
RP/0/RP0/CPU0:Router#show fpd package
```

```
=====
                                     Field Programmable Device Package
=====
```

Card Type	FPD Description	Req Reload	SW Ver	Min Req SW Ver	Min Req Board Ver
N540-6Z14S-SYS-D	ADMConfig	NO	5.03	5.03	0.0
	BckUp-BootLoader	YES	20.05	20.05	0.0
	IoFpga	YES	0.17	0.17	0.0
	IoFpgaGolden	YES	0.15	0.15	0.0
	Prim-BootLoader	YES	20.05	20.05	0.0
	StdbyFpga	YES	1.09	1.09	0.0
	StdbyFpgaGolden	YES	0.33	0.33	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0
N540X-4Z14G2Q-A	ADMConfig	NO	5.00	5.00	0.0
	BckUp-BootLoader	YES	20.05	20.05	0.0
	IoFpga	YES	0.17	0.17	0.0
	IoFpgaGolden	YES	0.15	0.15	0.0
	Prim-BootLoader	YES	20.05	20.05	0.0
	StdbyFpga	YES	1.09	1.09	0.0
	StdbyFpgaGolden	YES	0.33	0.33	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0
N540X-4Z14G2Q-D	ADMConfig	NO	5.00	5.00	0.0
	BckUp-BootLoader	YES	20.05	20.05	0.0
	IoFpga	YES	0.17	0.17	0.0
	IoFpgaGolden	YES	0.15	0.15	0.0
	Prim-BootLoader	YES	20.05	20.05	0.0
	StdbyFpga	YES	1.09	1.09	0.0
	StdbyFpgaGolden	YES	0.33	0.33	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0
N540X-6Z18G-SYS-A	ADMConfig	NO	5.00	5.00	0.0
	BckUp-BootLoader	YES	20.05	20.05	0.0
	IoFpga	YES	0.17	0.17	0.0
	IoFpgaGolden	YES	0.15	0.15	0.0
	Prim-BootLoader	YES	20.05	20.05	0.0
	StdbyFpga	YES	1.09	1.09	0.0
	StdbyFpgaGolden	YES	0.33	0.33	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0
N540X-6Z18G-SYS-D	ADMConfig	NO	5.00	5.00	0.0
	BckUp-BootLoader	YES	20.05	20.05	0.0
	IoFpga	YES	0.17	0.17	0.0
	IoFpgaGolden	YES	0.15	0.15	0.0
	Prim-BootLoader	YES	20.05	20.05	0.0
	StdbyFpga	YES	1.09	1.09	0.0
	StdbyFpgaGolden	YES	0.33	0.33	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0
N540X-8Z16G-SYS-A	ADMConfig	NO	5.00	5.00	0.0
	BckUp-BootLoader	YES	20.05	20.05	0.0
	IoFpga	YES	0.17	0.17	0.0
	IoFpgaGolden	YES	0.15	0.15	0.0
	Prim-BootLoader	YES	20.05	20.05	0.0
	StdbyFpga	YES	1.09	1.09	0.0

Determine Firmware Support

	StdbypfpgaGolden	YES	0.33	0.33	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0

N540X-8Z16G-SYS-D	ADMConfig	NO	5.00	5.00	0.0
	BckUp-BootLoader	YES	20.05	20.05	0.0
	IoFpga	YES	0.17	0.17	0.0
	IoFpgaGolden	YES	0.15	0.15	0.0
	Prim-BootLoader	YES	20.05	20.05	0.0
	Stdbypfpga	YES	1.09	1.09	0.0
	StdbypfpgaGolden	YES	0.33	0.33	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0

RP/0/RP0/CPU0:Router#show hw-module fpd
Attribute codes: B golden, P protect, S secure

						FPD Versions	
						=====	
Location	Card type	HWver	FPD device	ATR Status	Running	Programd	
Reload	Loc						

0/RP0/CPU0	N540X-8Z16G-SYS-A	1.0	ADMConfig	CURRENT	5.00	5.00	
NOT REQ							
0/RP0/CPU0	N540X-8Z16G-SYS-A	1.0	IoFpga	CURRENT	0.17	0.17	
0/RP0							
0/RP0/CPU0	N540X-8Z16G-SYS-A	1.0	IoFpgaGolden	B CURRENT		0.15	
0/RP0							
0/RP0/CPU0	N540X-8Z16G-SYS-A	1.0	Prim-BootLoader	CURRENT	20.05	20.05	
0/RP0							
0/RP0/CPU0	N540X-8Z16G-SYS-A	1.0	Stdbypfpga	S CURRENT	1.09	1.09	
0/RP0							
0/RP0/CPU0	N540X-8Z16G-SYS-A	1.0	StdbypfpgaGolden	BS CURRENT		0.33	
0/RP0							
0/RP0/CPU0	N540X-8Z16G-SYS-A	1.0	TamFw	S CURRENT	6.05	6.05	
0/RP0							
0/RP0/CPU0	N540X-8Z16G-SYS-A	1.0	TamFwGolden	BS CURRENT		6.05	
0/RP0							

Log in to the router and enter the **show fpd package** and **show hw-module fpd** commands on the Cisco N540-24Q8L2DD-SYS variant:

RP/0/RP0/CPU0:Router#show fpd package

```
=====
```

Field Programmable Device Package						
=====						
Card Type	FPD Description	Req Reload	SW Ver	Min Req SW Ver	Min Req Board Ver	
=====	=====	=====	=====	=====	=====	=====

N540-12Z20G-SYS-A	ADM_FW	YES	14.03	14.03	0.0	
	ADMConfig	NO	1.05	1.05	0.0	
	IoFpga	YES	2.07	2.07	0.0	
	IoFpgaGolden	YES	2.07	2.03	0.0	
	Primary-BIOS	YES	1.46	1.46	0.0	
	Stdbypfpga	YES	0.40	0.40	0.0	
	StdbypfpgaGolden	YES	0.40	0.40	0.0	
	TamFw	YES	4.11	4.11	0.0	
	TamFwGolden	YES	4.11	4.11	0.0	

N540-12Z20G-SYS-D	ADM_FW	YES	14.03	14.03	0.0	
	ADMConfig	NO	1.05	1.05	0.0	
	IoFpga	YES	2.07	2.07	0.0	
	IoFpgaGolden	YES	2.07	2.03	0.0	
	Primary-BIOS	YES	1.46	1.46	0.0	
	Stdbypfpga	YES	0.40	0.40	0.0	

	StdbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

N540-24Q8L2DD-SYS	ADM-DBConfig	NO	2.03	2.03	0.0
	ADM-MBConfig	NO	2.01	2.01	0.0
	IoFpga	YES	2.12	2.12	0.0
	IoFpgaGolden	YES	2.12	2.12	0.0
	Primary-BIOS	YES	4.05	4.05	0.0
	StdbyFpga	YES	2.59	2.59	0.0
	StdbyFpgaGolden	YES	2.56	2.39	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0

N540-28Z4C-SYS-A	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbyFpga	YES	0.40	0.40	0.0
	StdbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

N540-28Z4C-SYS-D	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbyFpga	YES	0.40	0.40	0.0
	StdbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

N540-FH-AGG-SYS	ADM1_Config	NO	1.02	1.02	1.0
	ADM2_Config	NO	1.02	1.02	1.0
	DpFpgaCpri	YES	0.22	0.22	0.0
	DpFpgaEth	YES	1.20	1.20	0.0
	IoFpga	YES	1.30	1.30	0.0
	IoFpgaGolden	YES	1.30	1.30	0.0
	Primary-BIOS	YES	1.33	1.33	0.0
	StdbyFpga	YES	0.46	0.46	0.0
	StdbyFpgaGolden	YES	0.46	0.46	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0

N540-FH-CSR-SYS	ADM1_Config	NO	0.09	0.09	0.0
	ADM1_Config	NO	1.01	1.01	2.0
	ADM2_Config	NO	0.09	0.09	0.0
	ADM2_Config	NO	1.01	1.01	2.0
	DpFpga	YES	0.21	0.21	0.0
	IoFpga	YES	1.30	1.30	0.0
	IoFpgaGolden	YES	1.30	1.30	0.0
	Primary-BIOS	YES	1.33	1.33	0.0
	StdbyFpga	YES	0.46	0.46	0.0
	StdbyFpgaGolden	YES	0.46	0.46	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0

N540-PWR400-A	LI-PrimMCU	NO	0.04	0.04	0.0
	LI-SecMCU	NO	0.06	0.06	0.0
	PrimMCU	NO	1.02	1.02	0.0
	SecMCU	NO	1.03	1.03	0.0

Determine Firmware Support

N540-PWR400-D	LI-PrimMCU	NO	0.04	0.04	0.0
	LI-SecMCU	NO	0.06	0.06	0.0
	PrimMCU	NO	1.03	1.03	0.0
	SecMCU	NO	1.03	1.03	0.0
N540-PWR750-A	EM-PrimMCU	NO	1.02	1.02	0.0
	EM-SecMCU	NO	1.03	1.03	0.0
N540-PWR750-D	EM-PrimMCU	NO	1.03	1.03	0.0
	EM-SecMCU	NO	3.01	3.01	0.0
N540X-12Z16G-SYS-A	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbbyFpga	YES	0.40	0.40	0.0
	StdbbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0
N540X-12Z16G-SYS-D	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbbyFpga	YES	0.40	0.40	0.0
	StdbbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0
N540X-16Z4G8Q2C-A	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbbyFpga	YES	0.40	0.40	0.0
	StdbbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0
N540X-16Z4G8Q2C-D	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbbyFpga	YES	0.40	0.40	0.0
	StdbbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0
N540X-16Z8Q2C-A	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbbyFpga	YES	0.40	0.40	0.0
	StdbbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0
N540X-16Z8Q2C-D	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0

StdbyFpga	YES	0.40	0.40	0.0
StdbyFpgaGolden	YES	0.40	0.40	0.0
TamFw	YES	4.11	4.11	0.0
TamFwGolden	YES	4.11	4.11	0.0

```
RP/0/RP0/CPU0:Router#show hw-module fpd
Auto-upgrade:Disabled
Attribute codes: B golden, P protect, S secure
```

Location Reload Loc	Card type	HWver	FPD device	ATR	Status	FPD Versions	
						Running	Programd
0/RP0/CPU0	N540-24Q8L2DD-SYS	3.0	ADM-DBConfig		CURRENT	2.03	2.03
	NOT REQ						
0/RP0/CPU0	N540-24Q8L2DD-SYS	3.0	ADM-MBConfig		CURRENT	2.01	2.01
	NOT REQ						
0/RP0/CPU0	N540-24Q8L2DD-SYS	3.0	IoFpga		CURRENT	2.12	2.12
0/RP0							
0/RP0/CPU0	N540-24Q8L2DD-SYS	3.0	IoFpgaGolden	B	CURRENT		2.12
0/RP0							
0/RP0/CPU0	N540-24Q8L2DD-SYS	3.0	Primary-BIOS	S	CURRENT	4.05	4.05
	N/A						
0/RP0/CPU0	N540-24Q8L2DD-SYS	3.0	StdbyFpga	S	CURRENT	2.59	2.59
0/RP0							
0/RP0/CPU0	N540-24Q8L2DD-SYS	3.0	StdbyFpgaGolden	BS	CURRENT		2.56
0/RP0							
0/RP0/CPU0	N540-24Q8L2DD-SYS	3.0	TamFw	S	CURRENT	6.05	6.05
0/RP0							
0/RP0/CPU0	N540-24Q8L2DD-SYS	3.0	TamFwGolden	BS	CURRENT		6.05
0/RP0							

Log in to the router and enter the **show fpd package** and **show hw-module fpd** commands on the Cisco N540-FH-CSR-SYS variant:

```
RP/0/RP0/CPU0:Router#show fpd package
```

Field Programmable Device Package						
Card Type	FPD Description	Req Reload	SW Ver	Min Req SW Ver	Min Req Board Ver	
N540-12Z20G-SYS-A	ADM_FW	YES	14.03	14.03	0.0	
	ADMConfig	NO	1.05	1.05	0.0	
	IoFpga	YES	2.07	2.07	0.0	
	IoFpgaGolden	YES	2.07	2.03	0.0	
	Primary-BIOS	YES	1.46	1.46	0.0	
	StdbyFpga	YES	0.40	0.40	0.0	
	StdbyFpgaGolden	YES	0.40	0.40	0.0	
	TamFw	YES	4.11	4.11	0.0	
	TamFwGolden	YES	4.11	4.11	0.0	
N540-12Z20G-SYS-D	ADM_FW	YES	14.03	14.03	0.0	
	ADMConfig	NO	1.05	1.05	0.0	
	IoFpga	YES	2.07	2.07	0.0	
	IoFpgaGolden	YES	2.07	2.03	0.0	
	Primary-BIOS	YES	1.46	1.46	0.0	
	StdbyFpga	YES	0.40	0.40	0.0	
	StdbyFpgaGolden	YES	0.40	0.40	0.0	
	TamFw	YES	4.11	4.11	0.0	
	TamFwGolden	YES	4.11	4.11	0.0	
N540-24Q8L2DD-SYS	ADM-DBConfig	NO	2.03	2.03	0.0	
	ADM-MBConfig	NO	2.01	2.01	0.0	

Determine Firmware Support

	IoFpga	YES	2.12	2.12	0.0
	IoFpgaGolden	YES	2.12	2.12	0.0
	Primary-BIOS	YES	4.05	4.05	0.0
	StdbyFpga	YES	2.59	2.59	0.0
	StdbyFpgaGolden	YES	2.56	2.39	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0

N540-28Z4C-SYS-A	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbyFpga	YES	0.40	0.40	0.0
	StdbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

N540-28Z4C-SYS-D	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbyFpga	YES	0.40	0.40	0.0
	StdbyFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

N540-FH-AGG-SYS	ADM1_Config	NO	1.02	1.02	1.0
	ADM2_Config	NO	1.02	1.02	1.0
	DpFpgaCpri	YES	0.22	0.22	0.0
	DpFpgaEth	YES	1.20	1.20	0.0
	IoFpga	YES	1.30	1.30	0.0
	IoFpgaGolden	YES	1.30	1.30	0.0
	Primary-BIOS	YES	1.33	1.33	0.0
	StdbyFpga	YES	0.46	0.46	0.0
	StdbyFpgaGolden	YES	0.46	0.46	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0

N540-FH-CSR-SYS	ADM1_Config	NO	0.09	0.09	0.0
	ADM1_Config	NO	1.01	1.01	2.0
	ADM2_Config	NO	0.09	0.09	0.0
	ADM2_Config	NO	1.01	1.01	2.0
	DpFpga	YES	0.21	0.21	0.0
	IoFpga	YES	1.30	1.30	0.0
	IoFpgaGolden	YES	1.30	1.30	0.0
	Primary-BIOS	YES	1.33	1.33	0.0
	StdbyFpga	YES	0.46	0.46	0.0
	StdbyFpgaGolden	YES	0.46	0.46	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0

N540-PWR400-A	LI-PrimMCU	NO	0.04	0.04	0.0
	LI-SecMCU	NO	0.06	0.06	0.0
	PrimMCU	NO	1.02	1.02	0.0
	SecMCU	NO	1.03	1.03	0.0

N540-PWR400-D	LI-PrimMCU	NO	0.04	0.04	0.0
	LI-SecMCU	NO	0.06	0.06	0.0
	PrimMCU	NO	1.03	1.03	0.0
	SecMCU	NO	1.03	1.03	0.0

N540-PWR750-A	EM-PrimMCU	NO	1.02	1.02	0.0

	EM-SecMCU	NO	1.03	1.03	0.0
N540-PWR750-D	EM-PrimMCU	NO	1.03	1.03	0.0
	EM-SecMCU	NO	3.01	3.01	0.0
N540X-12Z16G-SYS-A	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbypFpga	YES	0.40	0.40	0.0
	StdbypFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0
N540X-12Z16G-SYS-D	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbypFpga	YES	0.40	0.40	0.0
	StdbypFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0
N540X-16Z4G8Q2C-A	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbypFpga	YES	0.40	0.40	0.0
	StdbypFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0
N540X-16Z4G8Q2C-D	ADM_FW	YES	14.03	14.03	0.0
	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbypFpga	YES	0.40	0.40	0.0
	StdbypFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0
N540X-16Z8Q2C-A	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbypFpga	YES	0.40	0.40	0.0
	StdbypFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0
N540X-16Z8Q2C-D	ADMConfig	NO	1.05	1.05	0.0
	IoFpga	YES	2.07	2.07	0.0
	IoFpgaGolden	YES	2.07	2.03	0.0
	Primary-BIOS	YES	1.46	1.46	0.0
	StdbypFpga	YES	0.40	0.40	0.0
	StdbypFpgaGolden	YES	0.40	0.40	0.0
	TamFw	YES	4.11	4.11	0.0
	TamFwGolden	YES	4.11	4.11	0.0

RP/0/RP0/CPU0:Router#show hw-module fpd
Auto-upgrade:Enabled

Attribute codes: B golden, P protect, S secure

Location Reload Loc	Card type	HWver	FPD device	ATR	Status	FPD Versions =====	
						Running	Programd
0/RP0/CPU0 NOT REQ	N540-FH-CSR-SYS	1.0	ADM1_Config		CURRENT	0.09	0.09
0/RP0/CPU0 NOT REQ	N540-FH-CSR-SYS	1.0	ADM2_Config		CURRENT	0.09	0.09
0/RP0/CPU0 0/RP0	N540-FH-CSR-SYS	1.0	DpFpga		CURRENT	0.21	0.21
0/RP0/CPU0 0/RP0	N540-FH-CSR-SYS	1.0	IoFpga		CURRENT	1.30	1.30
0/RP0/CPU0 0/RP0	N540-FH-CSR-SYS	1.0	IoFpgaGolden	B	NEED UPGD		1.23
0/RP0/CPU0 0/RP0	N540-FH-CSR-SYS	1.0	Primary-BIOS	S	CURRENT	1.46	1.46
0/RP0/CPU0 0/RP0	N540-FH-CSR-SYS	1.0	StdbyFpga	S	CURRENT	0.46	0.46
0/RP0/CPU0 0/RP0	N540-FH-CSR-SYS	1.0	StdbyFpgaGolden	BS	NEED UPGD		0.43
0/RP0/CPU0 0/RP0	N540-FH-CSR-SYS	1.0	TamFw	S	CURRENT	6.05	6.05
0/RP0/CPU0 0/RP0	N540-FH-CSR-SYS	1.0	TamFwGolden	BS	CURRENT		6.05
0/PM0 NOT REQ	N540-PWR400-A	0.0	PrimMCU		CURRENT	1.02	1.02
0/PM0 NOT REQ	N540-PWR400-A	0.0	SecMCU		CURRENT	1.03	1.03
0/PM1 NOT REQ	N540-PWR400-A	0.0	PrimMCU		CURRENT	1.02	1.02
0/PM1 NOT REQ	N540-PWR400-A	0.0	SecMCU		CURRENT	1.03	1.03

Important Notes

Supported Transceiver Modules

For more information on the supported transceiver modules, see [Transceiver Module Group \(TMG\) Compatibility Matrix](#). In the **Begin your Search** search box, enter the keyword NCS540 and click **Enter**.

Upgrading Cisco IOS XR Software

Cisco IOS XR Software is installed and activated from modular packages, allowing specific features or software patches to be installed, upgraded, or downgraded without affecting unrelated processes.

The upgrade document for N540-24Z8Q2C-SYS, N540X-ACC-SYS, and N540-ACC-SYS variants is available along with the software image in *NCS540-docs-7.7.21.tar* file.

The upgrade document for N540-28Z4C-SYS-A/D, N540-12Z20G-SYS-A/D, N540X-12Z16G-SYS-A/D, N540X-16Z4G8Q2C-A/D, N540-24Q8L2DD-SYS, N540-FH-AGG-SYS, N540X-16Z8Q2C-D, and N540-FH-CSR-SYS variants is available along with the software image in *NCS540l-docs-7.7.21.tar* file.

The upgrade document for N540X-4Z14G2Q-A/D, N540X-8Z16G-SYS-A/D, N540-6Z14S-SYS-D, and N540X-6Z18G-SYS-A/D variants is available along with the software image in *NCS540l-aarch64-docs-7.7.21.tar* file.



Note Quad configurations will be lost when you perform a software downgrade on Cisco NCS 540 Routers that support quad configurations from IOS XR Release 7.5.1 onwards to a release prior to IOS XR Release 7.5.1 due to a non-backward compatibility change. The lost configuration can be applied manually after the downgrade.

Production Software Maintenance Updates (SMUs)

A production SMU is a SMU that is formally requested, developed, tested, and released. Production SMUs are intended for use in a live network environment and are formally supported by the Cisco TAC and the relevant development teams. Software bugs identified through software recommendations or Bug Search Tools are not a basis for production SMU requests.

For information on production SMU types, refer the [Production SMU Types](#) section of the *IOS XR Software Maintenance Updates (SMUs)* guide.

Related Documentation

The most current Cisco NCS 540 router documentation is located at the following URL:

<https://www.cisco.com/c/en/us/support/routers/network-convergence-system-540-series-routers/products-installation-and-configuration-guides-list.html>

