



Cisco Nexus 3000 Series BIOS Software Release Notes

This document describes the significant issues, other than security vulnerability-related issues, that directly involve Cisco Nexus 3000 Series and Cisco Nexus 3100 Series switches and typically require an upgrade, workaround, or other customer action. Use this document in combination with documents listed in the *Obtaining Documentation and Submitting a Service Request* section.

[Table 1](#) shows the online change history for this document.

Table 1. Online History Change

Date	Description
December 16, 2016	Created Nexus 3000 Series BIOS Software Release Notes

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Products Affected

Table 2 shows the list of products affected.

Table 2. Products Affected

Product	Hardware
Cisco Nexus 3000 Series switch	N3K-C3048TP-1GE
Cisco Nexus 3000 Series switch	N3K-C3064PQ-10GX
Cisco Nexus 3100 Series switch	N3K-C3132Q-40GX
Cisco Nexus 3100 Series switch	N3K-C3172PQ-10GE
Cisco Nexus 3100 Series switch	N3K-C3172TQ-10GT

Open Caveats

To follow the bug ID link below and see detailed bug information, you must be a [registered](#) customer and you must be logged in.

[Table 3](#) shows the open caveats.

Table 3. DDTs

Open Caveats	Description
CSCvb64127 (only registered customers)	Cisco Nexus 3000 and 3100 Series switches may fail to upgrade with 7.0(3) images with MD5Sum mismatch error.

Problem Description

A BIOS incompatibility issue has been discovered on the Cisco Nexus 3000 and 3100 Series switches listed in Table 2. When you upgrade these switches from Cisco NX-OS Release 6.0(2)U6(8) or an earlier release to Cisco NX-OS Release 7.0(x), an MD5 mismatch error might occur and leave the switch at the loader prompt.

Background

Only the switches in [Table 2](#) that have a 2G and 4G eUSB flash with more than 48 sectors or track disk geometry are impacted. Cisco NX-OS Releases 7.0(3)I2(x), 7.0(3)I4(x), and 7.0(3)I5(1) are bundled with a BIOS image that does not recognize this disk geometry and generates an "Unable to load" MD5 mismatch error.

The affected images are 7.0(3)I2(1) to 7.0(3)I2(4), 7.0(3)I3(1), 7.0(3)I4(1) to 7.0(3)I4(4), and 7.0(3)I5(1). If the switch is running any of these images already, it is not affected because the disk geometry is less than or equal to 48 sectors. No further action is required.

Problem Symptom

All the following three conditions needs to be met to experience the issue:

- This issue is seen only on N3K-C3064PQ-10GX, N3K-C3132Q-40GX, N3K-C3172TQ-10GT, N3K-C3172PQ-10GE, N3K-C3048TP-1GE
- The switch is running Cisco NX-OS Release 6.0(2)U6(x) or an earlier release and you want to upgrade to Cisco NX-OS Release 7.0(x).
- The switch has a eUSB flash with greater than 48 sectors per track. To verify, run the following command (to get to bash prompt you have to enable **feature bash**). Also bash feature is supported only as of 6.0(2)U6(x) release).

```
switch (config)# run bash fdisk -l /dev/sda | grep sectors

161 heads, 63 sectors/track, 1038 cylinders
(Switches that list higher than 48 sectors or tracks are affected.)
```

Workaround or Solution

In order to resolve this issue, you must perform an intermediate BIOS upgrade (*nxos-n3kbios.bin*) before upgrading to one of the impacted releases listed above. To do so, follow these steps:

- a) Copy the BIOS image *nxos-n3kbios.bin* to boot flash.
- b) Run the following command on the switch that runs Cisco Nexus Release 6.0(2)U6 or higher. This command upgrades only the BIOS image. It does not reload the switch.


```
Switch# install all nxos bootflash:nxos-n3kbios.bin bios
```
- c) After the BIOS is upgraded, delete the *nxos-n3kbios.bin* image from boot flash using command “delete bootflash:nxos-n3kbios.bin”.
- d) Follow the normal upgrade procedure to upgrade the switch to the above impacted releases. For more information about upgrade procedure, refer to the appropriate [Cisco Nexus 3000 Series Switches Release Notes](#).

To recover an impacted switch that is in loader prompt on which an upgrade was already attempted, follow this procedure:

- a) Downgrade the switch to 6.0(2)U6(x) by booting images using TFTP from loader prompt

Enter the following command at the loader prompt. If the switch is in a boot cycle, press Ctrl + L to enter the loader prompt.

```
loader>set ip ipaddress netmask
loader>set gw gateway_ipaddress
loader>boot tftp://tftp_server_ip/nxos.7.0.3.Ix.y.bin (boot 7.0.x release via tftp boot from loader)
Switch#write erase
Switch#write erase boot
Switch#copy current_config startup-config
Switch#install all kickstart bootflash:n3000-uk9-kickstart.6.0.2.U6.x.bin system
bootflash:n3000-uk9.6.0.2.U6.x.bin no-save bios-force (downgrade to 6.0.(2)U6(x))
```

- b) Upgrade the switch from 6.0(2)U6(x) to 7.0.x

Upgrade and Downgrade Guidelines

- The only supported method of upgrading is **install all** from Release 6.0(2)U6(1) due to the need to upgrade the BIOS. Without the Release *nxos-n3kbios.bin* BIOS, the 7.0.(x) image will not load on the impacted Nexus 3000 switches listed in [Table 2](#).
- The **no-save** option is now required to downgrade from Release 7.x to Release 6.x. The **bios-force** is a hidden option that is only available on Cisco Nexus 3000 Series switches that are running 7.x releases.
- If you upgrade from a Cisco NX-OS release that does not support the CoPP feature to a release that does support the CoPP feature, you must run the setup utility after the upgrade to enable CoPP on the device.

Upgrade Matrix

This section provides information on upgrading Cisco Nexus 3000 and 3100 Series switches to Cisco NX-OS Release 7.0.(x)

Note: Beginning with this release, kickstart and system images are no longer used to install the Cisco NX-OS software image on Cisco Nexus 3000 and 3100 Series switches. Instead, a single binary image is used (for example, nxos.7.0.3.I2.3.bin). To install the software, you would use the **install all nxos bootflash:nxos.7.0.3.I2.3.bin** command.

From	To	Limitations	Recommended Procedure
6.0(2)U6(3)	7.0(3)I2(2x) and later	None	<p>Install all and fast reload are the only upgrade methods supported because of a BIOS upgrade requirement.</p> <p>Warning: Make sure that you store the pre-Release, 6.0(2)U6(3)'s configuration file.</p> <p>For more information, see the Cisco Nexus 3000 Series NX-OS Software Upgrade and Downgrade Guide, Release 7.x.</p>
6.0(2)U6(2) or earlier	7.0(3)I2(2x) and later	First, upgrade to Cisco NX-OS Release 6.0(2)U6(3).	<p>Install all and fast reload are the only upgrade methods supported because of a BIOS upgrade requirement.</p> <p>For more information, see the Cisco Nexus 3000 Series NX-OS Software Upgrade and Downgrade Guide, Release 7.x.</p>

Related Documentation

Documentation for the Cisco Nexus 3000 Series Switch is available at the following URL:

http://www.cisco.com/en/US/products/ps11541/tsd_products_support_series_home.html

We recommend that you view the field notice for this release to see if your software or hardware platforms are affected. You can find field notice at the following URL:

- <http://www.cisco.com/c/en/us/support/docs/field-notices/642/fn64233.html>

Documentation for the Cisco Nexus 3000 Series NX-OS Software Upgrade and Downgrade Guides are available at the following links:

- [Cisco Nexus 3000 Series NX-OS Software Upgrade and Downgrade Guide, Release 7.x](#)
- [Cisco Nexus 3000 Series NX-OS Software Upgrade and Downgrade Guide, Release 6.x](#)

New Documentation

No new documentation for this release.

Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to nexus3k-docfeedback@cisco.com. We appreciate your feedback.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly What's New in Cisco Product Documentation, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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