

# Dell System S6000 9.14(2.9P1) Release Notes

This document contains information on open and resolved caveats, and operational information specific to the Dell Networking OS software and the S6000 platform.

**Current Release Version:** 9.14(2.9P1)

**Release Date:** 2021-02-18

**Previous Release Version:** 9.14(2.9)

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**NOTE:** This document may contain language that is not consistent with current guidelines of Dell Technologies. There are plans to update this document over subsequent releases to revise the language accordingly.

Incorrect behavior or unexpected caveats are listed as the Problem Report (PR) numbers within the appropriate sections.

**NOTE:** Customers can subscribe to caveat update reports or use the BugTrack search tool to read current information about open and closed software caveats. To subscribe or use BugTrack, visit iSupport at: <https://www.force10networks.com/CSPortal20/BugTrack/SearchIssues.aspx>. All Release Notes are available on the Software Center tab of iSupport. The link to the relevant Release Notes for each software version is next to the link for that version: <https://www.force10networks.com/CSPortal20/Software/Downloads.aspx>.

For more information on hardware and software features, commands, and capabilities, refer to the Dell Networking website at: <https://www.dellemc.com/networking>.

## Document Revision History

**Table 1. Revision History**

Date	Description
2021-02	9.14.2.9P1 - Added <a href="#">Fixed Issues</a> for the release.
2020-12	Initial release.

## New Dell Networking OS Version 9.14(2.9) Features

The following features are integrated into the Dell Networking 9.14.2 branch through this release:

None

# Changes to Default Behavior and CLI Syntax

None.

## Restrictions

- Prerequisite steps to upgrade the Dell Networking OS from earlier version to 9.14.2.0 or later:
  1. Uninstall the older version of the Open Automation (OA) package
  2. Upgrade the Dell Networking OS to 9.14.2.0 or later version
  3. Install the following OA packages from the respective upgraded version:
    - a. SmartScripts
    - b. Puppet
    - c. Open management infrastructure (OMI)
    - d. SNMP MIB

Prerequisite steps to downgrade the Dell Networking OS from 9.14.2.0 or later to the earlier version:

1. Uninstall the OA package of 9.14.2.0 or later version
2. Downgrade the Dell Networking OS to an earlier version
3. Install the respective OA package from an earlier version

For more information about installing, uninstalling and upgrading the Dell Networking OS and OA package, refer the respective *Dell System Release Notes*.

- If you downgrade the Dell Networking OS version from 9.14.2.9 to 9.11.0.0 or any older versions, the system displays the following error message even though there is no functional impact:

```
CDB boot error:      C.cdb file format
```

Before downgrading, save the current configuration and then remove the CDB files (`confd_cdb.tar.gz.version` and `confd_cdb.tar.gz`). To remove the files, use the following steps:

```
Dell#write memory
Dell#delete flash://confd_cdb.tar.gz.version
Dell#delete flash://confd_cdb.tar.gz
Dell#reload
```

- While deploying the system in the normal-reload mode in BMP configuration, use the `ip ssh server enable` command at the beginning of the startup configuration if the write memory command is used at the end of the configuration.
- REST API does not support AAA authentication.
- The following features are not available in the Dell Networking OS from version 9.7(0.0):
  - PIM ECMP
  - Static IGMP join (`ip igmp static-group`)
  - IGMP querier timeout configuration (`ip igmp querier-timeout`)
  - IGMP group join limit (`ip igmp group join-limit`)
- Half-Duplex mode is not supported.
- When FRRP is enabled in a VLT domain, no flavor of Spanning tree should concurrently be enabled on the nodes of that specific VLT domain. In essence FRRP and xSTP should not co-exist in a VLT environment.

## Supported Hardware

The following hardware is supported with this platform:

Hardware
S6000 chassis
32 40Gbps QSFP+ ports

Hardware
2 AC/DC PSUs
3 fan subsystems

## USB Error Messages

**NOTE:** If all the three fan trays are found to be empty or faulty, the system will shut down after one minute.

**NOTE:** The rear rack mounting bracket (SA-01-RMB-8) will fit only into racks with depths in the following ranges:

- 22.98 in. to 24.65 in.
- 27.86 in. to 30.34 in.

The following informational error message appear when a USB thumb drive is inserted or removed from the system. No action needs to be taken when these messages appear.

### Internal Messages

```
Dell#
Dell# umass0 at uhub3 port 1 configuration 1 interface 0
umass0: vendor 0x0930 USB Flash Memory, rev 2.00/1.10, addr 3
umass0: using SCSI over Bulk-Only
scsibus0 at umass0: 2 targets, 1 lun per target
sd0 at scsibus0 target 0 lun 0: <, USB Flash Memory, PMAP> disk removable
Dec 15 15:17:42: %S6000:0 %KERN-2-INT: umass0 at uhub3 port 1 configuration 1 interface 0
Dec 15 15:17:42: %S6000:0 %KERN-2-INT: umass0: vendor 0x0930 USB Flash Memory, rev
2.00/1.10, addr 3
Dec 15 15:17:42: %S6000:0 %KERN-2-INT: umass0: using SCSI over Bulk-Only
Dec 15 15:17:42: %S6000:0 %KERN-2-INT: scsibus0 at umass0: 2 targets, 1 lun per target
Dec 15 15:17:42: %S6000:0 %KERN-2-INT: sd0 at scsibus0 target 0 lun 0: <, USB Flash
Memory, PMAP> disk removable
sd0: 3850 MB, 966 cyl, 255 head, 32 sec, 512 bytes/sect x 7884800 sectors
Dec 15 15:17:43: %S6000:0 %KERN-2-INT: sd0: 3850 MB, 966 cyl, 255 head, 32 sec, 512
bytes/sect x 7884800 sectors
Dec 15 15:17:47: %S6000:0 %POLLMGR-2-USER_FLASH_STATE: USB flash disk inserted in
'usbflash:'
```

### Removal Messages

```
Dell#
Dell#umass0: at uhub3 port 1 (addr 3) disconnected
sd0(umass0:0:0:0): generic HBA error
sd0: detached
scsibus0: detached
umass0: detached
Dec 15 15:17:36: %S6000:0 %KERN-2-INT: umass0: at uhub3 port 1 (addr 3) disconnected
Dec 15 15:17:36: %S6000:0 %KERN-2-INT: sd0(umass0:0:0:0): generic HBA error
Dec 15 15:17:36: %S6000:0 %KERN-2-INT: sd0: detached
Dec 15 15:17:36: %S6000:0 %KERN-2-INT: scsibus0: detached
Dec 15 15:17:36: %S6000:0 %KERN-2-INT: umass0: detached
Dec 15 15:17:37: %S6000:0 %POLLMGR-2-USER_FLASH_STATE: USB flash disk removed from
'usbflash:'
```

## S6000 Upgrade Procedures: Overview

To upgrade the Dell Networking OS to the latest version, complete these steps:

- Upgrading the S6000 Dell Networking OS Image and Boot Code
- Upgrading the CPLD
- VLT Upgrade Procedure

## Upgrading the S6000 Dell Networking OS Image and Boot Code

The S6000 system is pre-loaded with default Dell Networking OS software.

**NOTE:** If you downgrade from Dell Networking OS version 9.14(2.9) to version 9.6(0.0) or any version prior to 9.6(0.0), any existing quad mode configuration on the following ports is removed: 4, 12, 20, 28, 100, 108, 116, and 124

**NOTE:** If you downgrade from Dell Networking OS version 9.14(2.9) to 9.0(2.0), remove any existing quad mode configuration from the following 40G ports: 4, 12, 20, 28, 100, 108, 116, and 124. To remove any quad mode configuration, use the `no stack-unit port portmode quad` command in CONFIGURATION mode and then save the configuration using the `write memory` command in EXEC PRIVILEGE mode.

**NOTE:**

Before upgrading the OS to version 9.14(2.9), uninstall the older version of the Open Automation package. Upgrade the OS to 9.14(2.9) and then install the latest OA package.

If you downgrade the OS from version 9.14(2.9) to an earlier version, uninstall the older OA package first. Downgrade the OS to an earlier version and then install the relevant OA package version.

### Bare Metal Provisioning

**NOTE:** If you are using Bare Metal Provisioning (BMP), refer to the Bare Metal Provisioning chapter in the Dell Networking OS Configuration Guide or the Open Automation Guide.

### Manual Upgrade Procedure

Follow these steps carefully to upgrade your S6000 systems:

1. Dell Networking recommends that you back up your startup configuration and any important files and directories to an external media prior to upgrading the system.
2. Upgrade the Dell Networking OS in flash partition A: or B:

EXEC Privilege Mode

```
upgrade system [flash: | ftp: | stack-unit <0-5 | all> | tftp: | scp: | usbflash:] [A: | B:]
```

```
Dell# upgrade system ftp: a:
Address or name of remote host []: 10.16.127.35
Source file name []: FTOS-SI-9.14.2.9.bin
User name to login remote host: ftpuser
Password to login remote host:
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
.....
.....
.....
.....
.....
.....
.....
62056018 bytes successfully copied
System image upgrade completed successfully.
```

3. In case of a stack setup, upgrade the Dell Networking OS for the stacked units.

EXEC Privilege Mode

```
upgrade system stack-unit [0-11 | all] [A: | B:]
```

If A: is specified in the command, the Dell Networking OS version present in Management unit's A: partition will be pushed to the stack units. If B: is specified in the command, the Management unit's B: will be pushed to the stack units. Upgrade of stack units can be done on individual units by specifying the unit id [0-5] or on all units by using all in the command.

```
Dell#upgrade system stack-unit all A:
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
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```

```
Image upgraded to all
Dell#
```

4. Verify the Dell Networking OS has been upgraded correctly in the upgraded flash partition.

EXEC Privilege Mode

```
show boot system stack-unit [0-5 | all]
```

```
Dell#show boot system stack-unit all

Current system image information in the system:
=====
Type           Boot Type      A                B
-----
stack-unit 0   FLASH BOOT     9.14(2.9) [boot]  9.14(2.8)
stack-unit 1   is not present.
stack-unit 2   is not present.
stack-unit 3   is not present.
stack-unit 4   is not present.
stack-unit 5   is not present.
```

5. Upgrade the S6000 Boot Flash and Boot Selector images.

EXEC Privilege Mode

```
upgrade boot [all | bootflash-image | bootselector-image] stack-unit [0-5 | all] [booted
| flash: | ftp: | scp: | tftp: | usbflash:]
```

Dell Networking OS version 9.14(2.9) requires S6000 Boot Flash image version 3.1.1.7 and Boot Selector image version 3.1.0.3. The Boot Flash and Boot Selector images can be upgraded together by selecting all in the command. If the user wishes to upgrade Boot Flash image or Boot Selector image separately, the options bootflash-image or bootselector-image needs to be given separately in the command. The booted option is used to upgrade the Boot flash and Boot Selector images to the image versions packed with the loaded Dell Networking OS image. The Boot Flash and Boot Selector image versions packed with the loaded Dell Networking OS can be found using the show os-version command in EXEC PRIVILEGE mode.

**i** **NOTE:** The Boot Flash version packed in Dell Networking OS 9.14(2.9) for S6000 system is 3.1.1.7. Upgrade of Boot Flash to version 3.1.1.7 is not mandatory for proper functioning of the system.

```
Dell#upgrade boot bootflash-image stack-unit 0 ftp:

Address or name of remote host []: 10.16.127.35
Destination file name []: FTOS-SI-9.14.2.9.bin
User name to login remote host: ftpuser
Password to login remote host:

Current Boot information in the system:
=====
Card           BootFlash      Current Version  New Version
-----
Unit0          Boot Flash     3.1.1.4          3.1.1.7

*****
* Warning - Upgrading boot flash is inherently risky and should only *
* be attempted when necessary. A failure at this upgrade may cause *
* a board RMA. Proceed with caution !                               *
*****

Proceed upgrade Boot Flash image for stack-unit 0 [yes/no]: yes

!!!!!!!
Bootflash image upgrade for stack-unit 0 completed successfully.

Dell#upgrade boot bootselector-image stack-unit 0 ftp:

Current Boot information in the system:
=====
Card           BootSelector    Current Version  New Version
-----
Unit0          Boot Selector   3.1.0.3          3.1.0.3

*****
```

```
* Warning - Upgrading boot selectors is inherently risky and should *
* only be attempted when necessary. A failure at this upgrade may *
* cause a board RMA. Proceed with caution ! *
*****
```

```
Proceed upgrade Boot Selector image for stack-unit 0 [yes/no]: yes
```

```
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Bootselector image upgrade for stack-unit 0 completed successfully.
```

6. Change the Primary Boot Parameter of the S6000 to the upgraded partition A: or B:

CONFIGURATION Mode

```
boot system stack-unit [0-5 | all] primary system: [A: | B: | tftp: | ftp:]
```

7. Save the configuration so that the configuration will be retained after a reload using write memory command.

EXEC Privilege Mode

```
write memory
```

```
Dell#write memory
!00:22:59: %STKUNIT0-M:CP %FILEMGR-5-FILESAVED: Copied running-config to
startup-config in flash by default
Dell#
```

8. Reload the unit.

EXEC Privilege Mode

```
reload
```

```
Command      : reload
Mode         : EXEC PRIVILEGE
Dell#reload
Proceed with reload [confirm yes/no]: y
00:23:50: %STKUNIT0-M:CP %CHMGR-5-RELOAD: User request to reload the chassis
```

9. Verify the S6000 has been upgraded to the Dell Networking OS version 9.14(2.9).

EXEC Privilege Mode

```
show version
```

```
Dell#show version
Dell Real Time Operating System Software
Dell Operating System Version: 2.0
Dell Application Software Version: 9.14(2.9)
Copyright (c) 1999-2020 by Dell Inc. All Rights Reserved.
Build Time: Tue Dec 15 09:27:40 2020
Build Path: /build/build03/SW/SRC
Dell Networking OS uptime is 3 minute(s)

System image file is "system://A"

System Type: S6000
Control Processor: Intel Centerton with 3 Gbytes (3203911680 bytes) of memory,
core(s) 2.

16G bytes of boot flash memory.

 1 32-port TE/FG (SI)
28 Ten GigabitEthernet/IEEE 802.3 interface(s)
25 Forty GigabitEthernet/IEEE 802.3 interface(s)
```

10. Verify that the S6000 has been upgraded to the latest Boot Flash and Boot Selector images

EXEC Privilege Mode

```
show system stack-unit [0-5]
```

```
Dell#show system stack-unit 0
-- Unit 0 --
```

```

Unit Type           : Management Unit
Status              : online
Next Boot           : online
Required Type       : S6000 - 32-port TE/FG (SI)
Current Type        : S6000 - 32-port TE/FG (SI)
Master priority     : 0
Hardware Rev        : 4.0
Num Ports           : 128
Up Time             : 3 min, 24 sec
Dell Networking OS Version : 9.14(2.9)
Jumbo Capable       : yes
POE Capable         : no
FIPS Mode           : disabled
Boot Flash          : 3.1.1.7
Boot Selector       : 3.1.0.3
Memory Size         : 3203911680 bytes
Temperature         : 37C
Voltage             : ok
Serial Number       : NA
Part Number         : 08YWFG      Rev A00
Vendor Id           : DL
Date Code           : 12152020
Country Code        : CN
Piece Part ID       : CN-08YWFG-28298-398-0104
PPID Revision       : A00
Service Tag         : BX71VS1
Expr Svc Code       : 259 518 346 57
Auto Reboot         : enabled
Burned In MAC       : 90:b1:1c:f4:9c:c0
No Of MACs          : 3

```

```

-- Power Supplies --
Unit  Bay  Status      Type   FanStatus  FanSpeed (rpm)
-----
  0     0   up             AC     up         10368
  0     1   absent

```

```

-- Fan Status --
Unit  Bay  TrayStatus  Fan0   Speed  Fan1   Speed
-----
  0     0    up          up     10031  up     10031
  0     1    up          up     10031  up     10031
  0     2    up          up     10134  up     10134

```

Speed in RPM

## SMARTSCRIPTS

To uninstall and install new SMARTSCRIPTS packages after upgrading to Dell Networking OS, refer to the Open Automation Guide.

## Upgrading the CPLD

The S6000 system with Dell Networking OS Version 9.14(2.9) requires System CPLD revision 10, Master CPLD revision 12, and Slave CPLD revision 10.

### Verify that a CPLD upgrade is required

**NOTE:** If your CPLD revisions are higher than the ones shown here, DO NOT make any changes. If you have questions regarding the CPLD revision, contact technical support.

Use the following command to identify the CPLD version:

```

Dell#show revision

-- Stack unit 0 --
S6000 SYSTEM CPLD      : 10

```

```
S6000 MASTER CPLD      : 12
S6000 SLAVE CPLD       : 10
```

Use the following command to view CPLD version that is associated with the Dell Networking OS image:

```
Dell#show os-version

RELEASE IMAGE INFORMATION :
-----
Platform      Version      Size      ReleaseTime
S-Series:SI   9.14(2.9)   62072761  Dec 15 2020 09:48:25

TARGET IMAGE INFORMATION :
-----
Type          Version      Target      checksum
runtime       9.14(2.9)   Control Processor  passed

BOOT IMAGE INFORMATION :
-----
Type          Version      Target      checksum
boot flash    3.1.1.7     Control Processor  passed

BOOTSEL IMAGE INFORMATION :
-----
Type          Version      Target      checksum
boot selector 3.1.0.3     Control Processor  passed

FPGA IMAGE INFORMATION :
-----
Card          FPGA Name    Version
stack-unit 0  S6000 SYSTEM CPLD    10
stack-unit 0  S6000 MASTER CPLD    12
stack-unit 0  S6000 SLAVE CPLD     10
```

### Upgrading the CPLD Image

- NOTE:** The upgrade `fpga-image stack-unit 0 booted` command is hidden when using the FPGA Upgrade feature in the CLI. However, it is a supported command and will be accepted when entered as documented.
- NOTE:** Ensure that the BIOS version is 3.1.0.3 or above. You can verify this version using the `show system stack-unit 0` command.

To upgrade the CPLD image on S6000, follow these steps:

- Upgrade the CPLD image.

```
EXEC Privilege Mode
upgrade fpga-image stack-unit <id> booted
```

```
Dell# upgrade fpga-image stack-unit 0 booted

Current information for the system:
=====
Card          Device Name    Current Version    New Version
-----
Unit0         S6000 SYSTEM CPLD    10                 10
Unit0         S6000 MASTER CPLD    12                 12
Unit0         S6000 SLAVE CPLD     10                 10

*****
* Warning - Upgrading FPGA is inherently risky and should
* only be attempted when necessary. A failure at this upgrade may
* cause a board RMA. Proceed with caution !
*****

Upgrade image for stack-unit 0 [yes/no]: yes
```



```
FPGA upgrade in progress!!! Please do NOT power off the unit!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Upgrade result :
=====
Unit 0 FPGA upgrade successful Unit 0. Please power cycle to take effect.
```

2. Power cycle the system physically. Switch off the system by unplugging the power chords from the REAR PSUs and wait until the PSU FAN-REAR STATUS LED is completely OFF.  
**i** **NOTE:** Do not switch on the system with PSU-REAR LED glowing AMBER.
3. Switch on the system and wait for the Dell prompt. The CPLD version can be verified using the `show revision` command.

EXEC Privilege Mode

```
show revision
```

```
Dell#show revision

-- Stack unit 0 --
S6000 SYSTEM CPLD      : 10

S6000 MASTER CPLD     : 12

S6000 SLAVE CPLD      : 10
```

**i** **NOTE:** Do not power off the system while FPGA upgrade is in progress. For any queries, contact technical support

## VLT Upgrade Procedure

Follow this procedure to upgrade the system from release 9.4(2.8) to the latest version in a VLT setup:

1. Upgrade the system-flash partition A or B with the new image on both VLT peers. On both the VLT peers, set Primary boot parameter to boot the system from upgraded system flash partition [A or B]. You can enter one of the following options: **flash** — Copies from flash file system (flash://filepath). **ftp** — Copies from remote file system (ftp://userid:password@hostip//filepath). **scp** — Copies from remote file system (scp://userid:password@hostip//filepath). **tftp** — Copies from remote file system (tftp://hostip/filepath).

EXEC Privilege Mode

```
upgrade system [flash: | ftp: | scp: | tftp: | usbflash:] [A: | B:]
```

2. Reload or power-cycle one of the VLT peers (For Example, Peer 2).

EXEC Privilege Mode

```
reload or power cycle
```

3. Wait for Peer 2 to come up; VLT adjacency will be established. (Peer 2 - new image and Peer 1 - old image).
4. Wait for the Peer 2 to bring up all VLT LAG ports. Use the command `show vlt detail` to confirm all VLT ports in the local chassis are active.

EXEC Privilege Mode

```
show vlt detail
```

5. Following upgrade, use the `write memory` command to save the running-config to memory.

EXEC Privilege Mode

```
write memory
```

6. Ensure both the nodes are now forwarding traffic.
7. When all VLT ports are active on the Peer 2, repeat steps 2 through 5 for the Peer 1.

# Documentation Corrections

This section describes the errors identified in the current release of the Dell Networking OS.

None.

## Deferred Issues

Issues that appear in this section were reported in Dell Networking OS version 9.14(2.0) as open, but have since been deferred. Deferred caveats are those that are found to be invalid, not reproducible, or not scheduled for resolution.

Deferred issues are reported using the following definitions.

Category	Description
<b>PR#</b>	Problem Report number that identifies the issue.
<b>Severity</b>	<b>S1</b> — Crash: A software crash occurs in the kernel or a running process that requires a restart of AFM, the router, switch, or process. <b>S2</b> — Critical: An issue that renders the system or a major feature unusable, which can have a pervasive impact on the system or network, and for which there is no work-around acceptable to the customer. <b>S3</b> — Major: An issue that affects the functionality of a major feature or negatively effects the network for which there exists a work-around that is acceptable to the customer. <b>S4</b> — Minor: A cosmetic issue or an issue in a minor feature with little or no network impact for which there might be a work-around.
<b>Synopsis</b>	Synopsis is the title or short description of the issue.
<b>Release Notes</b>	Release Notes description contains more detailed information about the issue.
<b>Work around</b>	Work around describes a mechanism for circumventing, avoiding, or recovering from the issue. It might not be a permanent solution.  Issues listed in the “Closed Caveats” section should not be present, and the work-around is unnecessary, as the version of code for which this release note is documented has resolved the caveat.

## Deferred S6000 9.14(2.0) Software Issues

Issues that appear in this section were reported in Dell Networking OS version 9.14(2.0) as open, but have since been deferred. Deferred caveats are those that are found to be invalid, not reproducible, or not scheduled for resolution.

The following issues have been deferred in the Dell Networking OS version 9.14(2.0):

None.


## Fixed Issues

Fixed issues are reported using the following definitions.

Category	Description
<b>PR#</b>	Problem Report number that identifies the issue.
<b>Severity</b>	<b>S1</b> — Crash: A software crash occurs in the kernel or a running process that requires a restart of AFM, the router, switch, or process. <b>S2</b> — Critical: An issue that renders the system or a major feature unusable, which can have a pervasive impact on the system or network, and for which there is no work-around acceptable to the customer. <b>S3</b> — Major: An issue that affects the functionality of a major feature or negatively effects the network for which there exists a work-around that is acceptable to the customer.

<b>Category</b>	<b>Description</b>
	<b>S4</b> — Minor: A cosmetic issue or an issue in a minor feature with little or no network impact for which there might be a work-around.
<b>Synopsis</b>	Synopsis is the title or short description of the issue.
<b>Release Notes</b>	Release Notes description contains more detailed information about the issue.
<b>Work around</b>	Work around describes a mechanism for circumventing, avoiding, or recovering from the issue. It might not be a permanent solution.  Issues listed in the “Closed Caveats” section should not be present, and the work-around is unnecessary, as the version of code for which this release note is documented has resolved the caveat.

## Fixed S6000 9.14(2.9P1) Software Issues

 **NOTE:** Dell EMC Networking OS 9.14(2.9P1) includes fixes for caveats addressed in the previous 9.14 releases. Refer to the respective release notes documentation for the list of caveats fixed in the earlier 9.14 releases.

The following caveats are fixed in Dell EMC Networking OS version 9.14(2.9P1):

### PR# 169575

<b>Severity:</b>	Sev 2
<b>Synopsis:</b>	In certain scenarios, port configuration does not take effect and you may see the <code>IFMGR-3-IFA_COMM_FAIL</code> syslog error.
<b>Release Notes:</b>	In certain scenarios, port configuration does not take effect and you may see the <code>IFMGR-3-IFA_COMM_FAIL</code> syslog error.
<b>Workaround:</b>	None

### PR# 170018

<b>Severity:</b>	Sev 1
<b>Synopsis:</b>	Ethernet packet type 0x888e is not handled, leading to a memory leak.
<b>Release Notes:</b>	Ethernet packet type 0x888e is not handled, leading to a memory leak.
<b>Workaround:</b>	None

### PR# 170024

<b>Severity:</b>	Sev 2
<b>Synopsis:</b>	On a fully scaled switch, with all ports fanned out, some ports fail to <code>OPER UP</code> after reload.
<b>Release Notes:</b>	On a fully scaled switch, with all ports fanned out, some ports fail to <code>OPER UP</code> after reload.
<b>Workaround:</b>	None

### PR# 170041

<b>Severity:</b>	Sev 2
<b>Synopsis:</b>	In certain scenarios, in a VLT environment, the switch may encounter an exception during VLT failover.

<b>Release Notes:</b>	In certain scenarios, in a VLT environment, the switch may encounter an exception during VLT failover.
<b>Workaround:</b>	None

## Fixed S6000 9.14(2.9) Software Issues

**NOTE:** Dell Networking OS 9.14(2.9) includes fixes for caveats addressed in the previous 9.14 releases. Refer to the respective release notes documentation for the list of caveats fixed in the earlier 9.14 releases.

The following caveats are fixed in Dell Networking OS version 9.14(2.9):

### PR# 169919

<b>Severity:</b>	Sev 3
<b>Synopsis:</b>	The switch may encounter a software exception due to invalid memory access on bootup.
<b>Release Notes:</b>	The switch may encounter a software exception due to invalid memory access on bootup.
<b>Workaround:</b>	None

### PR# 169921

<b>Severity:</b>	Sev 2
<b>Synopsis:</b>	Static routes are not restored when BFD is disabled at interface level.
<b>Release Notes:</b>	Static routes are not restored when BFD is disabled at interface level.
<b>Workaround:</b>	None

### PR# 169972

<b>Severity:</b>	Sev 2
<b>Synopsis:</b>	DHCPv6 <code>relay-reply</code> packet drops in the L2 VLAN when DHCPv6 relay is configured in the L3 VLAN.
<b>Release Notes:</b>	DHCPv6 <code>relay-reply</code> packet drops in the L2 VLAN when DHCPv6 relay is configured in the L3 VLAN.
<b>Workaround:</b>	None

### PR# 169984

<b>Severity:</b>	Sev 2
<b>Synopsis:</b>	The switch may encounter a software exception when running the <code>show ipv6 ospf database router</code> CLI command.
<b>Release Notes:</b>	The switch may encounter a software exception when running the <code>show ipv6 ospf database router</code> CLI command.
<b>Workaround:</b>	None


# Known Issues

Known issues are reported using the following definitions.

Category	Description
<b>PR#</b>	Problem Report number that identifies the issue.
<b>Severity</b>	<b>S1</b> — Crash: A software crash occurs in the kernel or a running process that requires a restart of AFM, the router, switch, or process. <b>S2</b> — Critical: An issue that renders the system or a major feature unusable, which can have a pervasive impact on the system or network, and for which there is no work-around acceptable to the customer. <b>S3</b> — Major: An issue that affects the functionality of a major feature or negatively effects the network for which there exists a work-around that is acceptable to the customer. <b>S4</b> — Minor: A cosmetic issue or an issue in a minor feature with little or no network impact for which there might be a work-around.
<b>Synopsis</b>	Synopsis is the title or short description of the issue.
<b>Release Notes</b>	Release Notes description contains more detailed information about the issue.
<b>Work around</b>	Work around describes a mechanism for circumventing, avoiding, or recovering from the issue. It might not be a permanent solution.  Issues listed in the “Closed Caveats” section should not be present, and the work-around is unnecessary, as the version of code for which this release note is documented has resolved the caveat.

## KnownS6000 9.14(2.9) Software Issues

The latest information related to Open Caveats is available on support site through the BugTrack search tool.

 **NOTE:** You must have a user account to access the BugTrack tool.

To use the search tool:

1. Go the Main Customer Support page: <https://www.force10networks.com/csportal20/Main/SupportMain.aspx>.
2. Log in.
3. Click the BugTrack link, located in the Quick Links menu directly below the login bar.

This takes you to the BugTrack search page: <https://www.force10networks.com/csportal20/BugTrack/SearchIssues.aspx>.

4. Enter for a specific PR or select an Dell Networking OS version, platform, severity, or category to get a list of PRs.
5. Click the Search button.
6. Click the PR number to view specific PR details.

The PR (or PRs) appears on the page below the tool.

The following caveats are open in Dell Networking OS version 9.14(2.9):

None.

## Support Resources

The following support resources are available for theS6000 system.

### Documentation Resources

This document contains operational information specific to the S6000 system.

For information about using the S6000, refer to the following documents at <http://www.dell.com/support>:

- *Installing the S6000 System*
- *Quick Start Guide*


- *Dell Networking Command Line Reference Guide for the S6000 System*
- *Dell Networking Configuration Guide for the S6000 System*

For more information about hardware features and capabilities, refer to the Dell Networking website at <https://www.dellemc.com/networking>.

For more information about the open network installation environment (ONIE)-compatible third-party operating system, refer to <http://onie.org>.

## Issues

Incorrect behavior or unexpected caveats are listed as the Problem Report (PR) numbers within the appropriate sections.


 **NOTE:** You can subscribe to issue update reports or use the BugTrack search tool to read current information about open and closed issues. To subscribe or use BugTrack, visit Dell Support at: <https://www.force10networks.com/CSPortal20/BugTrack/SearchIssues.aspx>.

## Finding Documentation

This document contains operational information specific to the S6000 system.

- For information about using the S6000, refer to the documents at <http://www.dell.com/support>.
- For more information about hardware features and capabilities, refer to the Dell Networking website at <https://www.dellemc.com/networking>.
- For more information about the open network installation environment (ONIE)-compatible third-party operating system, refer to <http://onie.org>.


## Contacting Dell

 **NOTE:** If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

Go to [www.dell.com/support](http://www.dell.com/support).

## Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.