

Dell EMC Networking N1100 / N1500 / N2000 / N2128PX-ON / N3000E-ON / N3132PX-ON Series Switches

Dell EMC Networking 6.7.1.27 / 6.7.1.57 Firmware Release Notes

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System Firmware Version 6.7.1.27 / 6.7.1.57



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Introduction

This document provides specific information for the Dell Networking N3132PX-ON/N2128PX-ON/N3000E-ON/N2000/N1500/N1100-ON Series switches firmware version 6.7.1.27/ 6.7.1.57

It is recommended that this release note be thoroughly reviewed prior to installing or upgrading of this product.

Global Support

For information regarding the latest available firmware, release note revisions, or additional assistance, please visit support.dell.com.

Firmware Version Specifications

Firmware Image Name	Version Number	Release Date
N1100v6.7.1.27.stk	6.7.1.27	Aug 2025
N1500v6.7.1.27.stk	6.7.1.27	Aug 2025
N2100Stdv6.7.1.27.stk	6.7.1.27	Aug 2025
N3100Advv6.7.1.57.stk	6.7.1.57	Aug 2025
N2000Stdv6.7.1.27.stk	6.7.1.27	Aug 2025
N3000Advv6.7.1.57.stk	6.7.1.57	Aug 2025
N3000N3100Advv6.7.1.57.itb	6.7.1.57	Aug 2025

****N2100Stdv6.7.1.27.stk – N2128PX-ON Only Stack (8 Units stack) or Standalone**

****N3100Advv6.7.1.57.stk – N3132PX-ON Only stack with full functionality(12 Units stack and 4K active VLANs)**

****N2000Stdv6.7.1.27.stk - N2000 Series Only stack(Max 8 units stack) or Standalone**

****N3000Advv6.7.1.57.stk – N3048EP-ON, N3024ET-ON, N3048ET-ON Only Stack or Standalone**

****N3000N3100Advv6.7.1.57.itb – N3000E-ON and N3132PX-ON Mixed Stack**

*** Please read “Supported Firmware Functionality” section below for details of firmware images.

** Please read “Firmware Downgrade” section below for details of firmware images.

Version Numbering Convention					
Version number					Description
Dell Networking Series	6	7	1	27/ 57	Four-part version number
				↑	Denotes a patch release version.
			↑		Denotes a scheduled maintenance release version.
		↑			Denotes a scheduled major release of the product software.
	↑				Denotes the series release version.

IMPORTANT: Dell EMC Networking N4000 and N3000 Series switches are not supported from 6.6.0.2 feature release onwards. Will continue supporting these platforms on 6.5.x.x patch releases with bug fixes.

NOTE: Mixed Stacking support for N2000 and N2100 series switches is not supported from 6.7.0.4 feature release onwards. The platforms are supported in homogenous stack and as standalone.

NOTE: HiveAgent is not supported from 6.7.0.4 release onwards.

Supported Firmware Functionality

For more details regarding all the supported firmware features and functionality, please refer to the Dell Networking N1100-ON, N1108EP-ON, N1500, N2000, N2128PX-ON, N3000E-ON and N3132PX-ON CLI Reference Guide and the Dell Networking N1100-ON, N1500, N2000, N2128PX-ON, N3000E-ON and N3132PX-ON Series User's Configuration Guide.

Firmware Upgrade

Dell Networking N3000E/N2000 series switches support firmware version 6.0.1.3 or higher (6.7.1.27/6.7.1.57). If an N3000/N2000 switch has an earlier version of firmware (for example, 6.0.0.7), download the latest firmware release version from support.dell.com and upgrade the switch. It is recommended that the latest version of switch firmware (6.7.1.27/6.7.1.57) be used as it contains multiple bug fixes and enhancements.



IMPORTANT: Upgrading N3000E-ON & N3132PX-ON Series switches from 6.6.x.x to 6.6.3.46 and later will go through file-system auto recovery if its required. This recovery routine will be activated after copying the image version 6.6.3.46 and later to the backup partition and then entering "boot system backup" command from CLI. The file-system auto recovery is required to fix ECC errors, and it takes almost 8 to 10 minutes to complete. Please DO NOT attempt reload (or) power-cycle the switch while auto recovery process is ongoing. Switch will reload on its own post completion of recovery on all member units in the stack. The file system auto recovery is a onetime process when upgrading the switch to 6.6.3.46 and later for the very first time and subsequent firmware upgrades will follow the regular upgrade procedure. Upgrade resulted in both partitions getting upgraded, so backup image will also get upgraded along with active image.



IMPORTANT: Dell EMC Networking N3132PX-ON/N2128PX-ON/N3000E-ON/N3200 / N2200 / N2000 / N1500 / N1100-ON Series switches do not support firmware version 6.6.2.0/6.6.2.30. This release has been pulled out from our support site. Upgrading N2000 and N3000E-ON switches to firmware version 6.6.2.0/6.6.2.30 and then updating CPLD with this version may result in an inoperable switch. It is recommended to download and upgrade N-Series switches to 6.6.2.5 /6.6.2.35 or later code.



IMPORTANT: Prior upgrading a mixed-stack of N2000 and N2128PX-ON switches using "itb" image from version 6.6.0.17 and older directly to version 6.6.2.x, it's required to do an intermediate upgrade of this stack to version 6.6.0.21 (or later in 6.6.0.x version) first before upgrading to a 6.6.2.x release.



IMPORTANT: Prior upgrading a **mixed-stack** of N3000E-ON and N3132PX-ON switches using "itb" image from version **6.6.0.47 and older** directly to version **6.6.2.x**, it is required to do an intermediate upgrade of this stack to version **6.6.0.51** first before upgrading to a 6.6.2.x release. The 6.6.0.51 upgrade contains a partition size change that is required for mixed stacking to be functional in the 6.6.2.x release.



IMPORTANT: New CPLD version 20 is available for N2000 Series switches as part of firmware version 6.6.0.24. After upgrading switches to version 6.6.0.24 and later, the CPLD can be updated manually via CLI command 'update cpld' on stack master and/or standalone switches. To update CPLD on stack members, execute 'update cpld <unit-id>' command from stack master by selecting the member unit. Please DO NOT power cycle the switch when CPLD update is in progress. Switch will reset on its own after CPLD update completes and new CPLD version will take effect after switch boot-up. Verify new CPLD version with the command 'show version <unit-id>' from CLI after switch reboots. If switches are already running the latest CPLD version 20, please DO NOT attempt to update CPLD again. Updating CPLD v20 over v20 may result in an inoperable switch and require power cycle to recover the switch.

■ IMPORTANT: If you want to disable HiveAgent, use the below commands on the switch console

```
console#configure
console(config)#eula-consent hiveagent reject
```

- HiveAgent application has been upgraded to a newer version 1.1.29.0 in 6.6.3.0 release for N1100-ON, N1500, N2128PX-ON, N3132PX-ON, N2000 and N3000E-ON switches. To ensure that new HiveAgent application (without HiveManager online) is properly installed in the switch, the following commands must be run before upgrading to 6.6.3.16 from a 6.5.x.x release. Below steps are not applicable for customers managing their switches via HiveManager.

```
console#application stop hiveagent
console#delete user-apps/ah_ha.conf_s
Delete user-apps/ah_ha.conf_s ? (y/n) y
console#delete user-apps/hiveagent_pr_s
Delete user-apps/hiveagent_pr_s ? (y/n) y
console#delete user-apps/ah_ha.conf
Delete user-apps/ah_ha.conf ? (y/n) y
console#delete user-apps/hiveagent_pr
Delete user-apps/hiveagent_pr ? (y/n) y
console#delete user-apps/hiveagent
Delete user-apps/hiveagent ? (y/n) y
```

In a stacked switch, delete “ah_ha.conf_s”, “hiveagent_pr_s”, “ah_ha.conf”, “hiveagent_pr” and “hiveagent” files under “user-apps” directory of all the member switches from binshell mode using “devshell binsh” command.

Hiveagent is not supported from feature release 6.7.0.4/6.7.0.34 onwards. Please delete hiveagent using above mentioned procedure before proceeding with upgrade to 6.7.0.4/6.7.0.34 or later releases.

Administrators upgrading Dell Networking N3000E-ON switches MUST follow the instructions documented in the [Upgrading Dell EMC Networking N3000E-ON Switches to Version 6.7.1.40\(Advanced\).pdf](#) in the firmware .zip file. It is strongly recommended that you save your current configuration when upgrading your firmware. Failure to follow the procedures described in that document when upgrading from 6.x.x.x firmware may result in an inoperable switch!

Administrators upgrading Dell Networking N2000 series switches MUST follow the instructions documented in the [Upgrading Dell EMC Networking N2000 Series Switches from Version 6.x.x.x to 6.7.1.27.pdf](#) in the firmware .zip file. It is strongly recommended that you save your current configuration when upgrading your firmware. Failure to follow the procedures described in that document when upgrading from 6.x.x.x firmware may result in an inoperable switch!

Administrators upgrading Dell Networking N1500 series switches MUST follow the instructions documented in the [Upgrading Dell EMC Networking N1500 Series Switches from Version 6.x.x.x to 6.7.1.27.pdf](#) in the firmware .zip file. It is strongly recommended that you save your current configuration when upgrading your firmware. Failure to follow the procedures described in that document when upgrading from 6.x.x.x firmware may result in an inoperable switch!

- **IMPORTANT:** Below Dell Networking N1524P and N1548P switches with HW revision of 3 and later require firmware version 6.3.2.4 or later (6.7.1.27) and cannot be downgraded to earlier 6.1.x.x/6.2.x.x/6.3.x.x releases. Dell Networking N1524P and N1548P switches with HW revision of 3 can be stacked with N1500 series switches with HW revision of 2 or older. If N1500 Series unit with HW Rev.3 is to be deployed as a member within a stack of N1500 Series switches with HW revision of 2 or older, the entire stack will be required to run 6.3.2.4 or later (6.7.1.27). The “show version” CLI command output will help to identify the hardware version of the switch.

Part Numbers for Dell Networking N1500 Series (HW Rev. 3)	P/N
Dell Networking N1524P	4605M
Dell Networking N1548P	3WY51

Dell EMC Networking N3132PX-ON switches support firmware version 6.3.5.4 or higher (6.6.0.45). If an N3132PX-ON switch has an earlier version of firmware (for example, 6.3.6.4), download the latest firmware release version from support.dell.com and upgrade the switch. It is recommended that the latest version of switch firmware (6.7.1.27) be used as it contains multiple fixes and feature enhancements.

Administrators upgrading Dell EMC Networking N3132PX-ON switches from 6.3.6.x or 6.5.0.x version of firmware MUST follow the instructions documented in the [Upgrading Dell EMC Networking N3132PX-ON Switches to Version 6.6.2.39\(Advanced\).pdf](#). It is strongly recommended to backup current switch configuration before upgrading the firmware. Failure to follow the procedures described in that document when upgrading from 6.3.6.x or 6.5.0.x firmware may result in an inoperable switch!

IMPORTANT: After upgrading N3132PX-ON to firmware version 6.3.6.x, a boot code update is required. Boot code update must be done via the serial console. The latest boot code version available for N3132PX-ON series switches is “1.0.0.23”. Administrators upgrading N3132PX-ON series switches MUST follow the boot-code update instructions documented in [Upgrading Dell EMC Networking N3132PX-ON Switches to Version 6.7.1.40\(Advanced\) .pdf](#).

IMPORTANT: Dell EMC Networking N3132PX-ON switches with HW revision of 4 and later require firmware version 6.3.6.6 or later (6.6.0.45) and cannot be downgraded to earlier 6.3.x.x releases. Dell Networking N3132PX-ON switches with HW revision of 4 can be stacked with N3132PX-ON series switches with HW revision of 3 or older. If N3132PX-ON Series unit with HW Rev.4 is to be deployed as a member within a stack of N3132PX-ON Series switches with HW revision of 3 or older, the entire stack will be required to run 6.3.6.6 or later. The “show version” CLI command will help to identify the Switch Hardware version of the switch. Administrators upgrading Dell EMC Networking N2128PX-ON series switches firmware MUST follow the instructions documented in the [Upgrading Dell EMC Networking N2128PX-ON Switches to Version 6.7.1.27.pdf](#). It is strongly recommended to backup current switch configuration before upgrading the firmware. Failure to follow the procedures described in that document when upgrading firmware may result in an inoperable switch!

IMPORTANT: Dell EMC Networking N2128PX-ON switches with HW revision of 4 and later require firmware version 6.3.6.6 or later (6.6.0.15) and cannot be downgraded to earlier 6.3.x.x releases. Dell Networking N2128PX-ON switches with HW revision of 4 can be stacked with N2128PX-ON series switches with HW revision of 3 or older. If N2128PX-ON Series unit with HW Rev.4 is to be deployed as a member within a stack of N2128PX-ON Series switches with HW revision of 3 or older, the entire stack will be required to run 6.3.6.6 or later. The “show version” CLI command will help to identify the Switch Hardware version of the switch.

IMPORTANT: If you want to disable HiveAgent, use the below commands on the switch console
 console#configure
 console(config)#eula-consent hiveagent reject

Mixed Stacking – N3132PX-ON with N3000E-ON Series, N2128PX-ON with N2000 Series

Dell EMC Networking N3132PX-ON switches can be mixed stack with N3000E-ON Series switches of up to 12 units. Mixed stack of N3132PX-ON and N3000E supports 4K active VLANs configurable in the range 1-4093 and does not support MMRP/MVRP. Dell EMC Networking N3132PX-ON switches has an expansion slot to install optional stacking module with two mini-SAS stack ports. Dell EMC Networking N3000E Series switches are available with two fixed mini-SAS stack ports.

Administrators configuring mixed stack with N3132PX-ON and N3000E Series switches MUST follow the instructions documented in the [Upgrading Dell EMC Networking N3132PX-ON Switches to Version 6.7.1.21 \(Advanced\).pdf](#). It is strongly recommended to backup current switch configuration before forming mixed stacking.

Dell EMC Networking N2128PX-ON switches can be mixed stack with N2000 Series switches of up to 8 units. Dell EMC Networking N2000 and N2128PX-ON switches are available with two fixed mini-SAS stack ports.

Administrators configuring mixed stack with N2128PX-ON and N2000 Series switches MUST follow the instructions documented in the [Upgrading Dell EMC Networking N2128PX-ON Switches to Version 6.7.1.27.pdf](#). It is strongly recommended to backup current switch configuration before forming mixed stacking.

Mixed stacking support for N2128PX-ON with N2000 series switches is not available from feature release 6.7.0.4/6.7.0.34 onwards. These platforms are supported in homogenous stack and as standalone.

Firmware Downgrade

NOTE: After upgrading N3000E-ON & N3132PX-ON switches to version [6.6.3.46 and later](#), downgrade to any older firmware versions is not recommended. Especially N3000E-ON switches with HW Rev 6 and above should NOT be downgraded to the older firmware version 6.6.3.44 and below as it may corrupt the file system and the only option to recover the switches would be to load the firmware via ONIE. If there is any requirement to downgrade firmware to older release on N3000E-ON platforms, please contact DELL technical support for assistance.

- NOTE:** Downgrading N2000 Series switches from firmware version 6.7.1.27 with the updated CPLD version 15, 17 or 20 (Verify CPLD Version with the command “show version” from CLI) to any prior 6.x.x.x version with CPLD version 13 can be done **ONLY** by downgrading via interim FW version B.6.3.2 (N3000_N2000vB.6.3.2.stk). This interim firmware image is bundled with the release files. With interim FW image version B.6.3.2 running, the switches **MUST** be downgraded to the CPLD version 13 first before downgrading to any 6.x.x.x version. **Downgrading N2000 switches from 6.7.1.27 to any prior firmware version directly without downgrading the CPLD version to 13 first may result in an inoperable switch.** It is possible to downgrade the switches from 6.7.1.27 without interim image if switches not updated to CPLD version 15, 17 or 20 (if switches are still running with CPLD version 13). file.
- NOTE:** New HW Revision of N1524P and N1548P switches (HW Rev. 3) contain a new PoE controller which requires a firmware version 6.3.2.4 and later (6.5.3.7). Firmware version 6.5.3.7 is backward compatible with the earlier HW version of switches (HW Rev 1 and HW Rev 2). But firmware downgrade of 6.3.2.3 or earlier releases is restricted on newer HW Rev. 3 switches. If N1500 Series stack contains a new HW Rev. 3 switch as the member, the stack will not be allowed to downgrade to a version 6.3.2.3 or earlier.
- NOTE:** Firmware version 6.7.0.4/6.7.0.34 runs OpenSSH version 8.0 and is backward compatible with OpenSSH 7.5 in 6.6.3.x release. However, if SSH server is configured on 6.7.0.x release and then firmware is downgraded to previous releases, RSA keys need to be regenerated. If RSA keys are first generated in 6.6.3.x, then during the downgrade from 6.7.0.4 to 6.6.3.x the additional step of RSA key generation is not mandatory.

Boot Code Downgrade

Never downgrade the boot code! The 6.7.1.27 boot code supports all earlier versions of firmware and never needs downgrading.

Hardware Supported

- Dell Networking N3048EP-ON, N3024ET-ON, N3024EF-ON, N3024EP-ON and N3048ET-ON Ethernet Switch
- Dell Networking N2048P, N2048, N2024P, N2024 Ethernet Switch
- Dell Networking N1524 Ethernet Switch
- Dell Networking N1524P Ethernet Switch
- Dell Networking N1548 Ethernet Switch
- Dell Networking N1548P Ethernet Switch
- Dell Networking N1100 Ethernet series Switch
- Dell Networking N3132PX-ON Ethernet series Switch
- Dell Networking N2128PX-ON Ethernet series Switch

Added Functionality in this Release

This section contains a list of features added in this release that are new for at least one switch listed in the Hardware Supported section above.

Release 6.7.1.27 / 6.7.1.57

- No added functionality in this release

Release 6.7.1.26 / 6.7.1.56

- OpenSSH upgraded to 9.8p1 and OpenSSL upgrade to 3.1.6
- No added functionality in this release

Release 6.7.1.24 / 6.7.1.54

- No added functionality in this release

Release 6.7.1.23 / 6.7.1.53

- No added functionality in this release

Release 6.7.1.22 / 6.7.1.52

- No added functionality in this release

Release 6.7.1.21 / 6.7.1.51

- No added functionality in this release

Release 6.7.1.20 / 6.7.1.50

- No added functionality in this release

Release 6.7.1.17 / 6.7.1.47

- No added functionality in this release

Release 6.7.1.15 / 6.7.1.45

- No added functionality in this release

Release 6.7.1.13 / 6.7.1.43

- No added functionality in this release

Release 6.7.1.10 / 6.7.1.40

- No added functionality in this release

Release 6.7.1.9 / 6.7.1.39

- No added functionality in this release

Release 6.7.1.8 / 6.7.1.38

- SNMP MIB updated with addition two private MIB agentDot1xAuthTxPeriod and agentDot1xAuthenticatorPortConfigTable

Release 6.7.1.6 / 6.7.1.36

- No added functionality in this release

Release 6.7.1.4 / 6.7.1.34

- OpenSSL upgraded from 1.1.1i to 1.1.1l
- No other added functionality in this release

Release 6.7.1.1 / 6.7.1.31

- Web support for ONIE upgrade on stack
- Added support to locate unit using beacon LED from web UI also.
- RADIUS attribute-87 support in the CoA messages
- RADIUS attribute-8, Framed-IP-Address, for a client to be read from the IPDT table if available when the DHCP snooping tables fails to provide the same.
- Added display of inherited FEC setting for the interface in CLI
- Added debug SNMP packet command for dumping the Rx/Tx SNMP packet
- Allow RSA/DSA key generation from DHCP/USB-auto install scripts
- New commands added to clear ipv6 statistics and clear ipv6 route counters in VRFs
- New command to clear RADIUS CoA statistics

Release 6.7.0.4 / 6.7.0.34

- IPv6 VRF support with Linux master device implementation
- Added ERSPAN to support mirroring across a routed network
- Cisco ISE integration / Downloadable ACLs
- Wake on LAN to wake dormant PCs by sending magic packet
- MAC notification to notify about the stations learned or aged out
- HTTPS Redirect URL
- Upgrade ONIE across stack
- Terminate Telnet session after 3-failed login attempts
- MAC request format to have password parameter
- Captive Portal enhancements
- Port breakout interop issues and AN
- IPv4 VRF improvements with Linux master device implementation
- Spanning Tree BPDUs on MAB Authenticated ports
- OpenSSL 1.1.1 version to address vulnerabilities
- Removed Racial and Non-Inclusive words from documentation and CLI strings. Some CLI strings, which are in conformance with standards, remain.

Release 6.6.3.16 / 6.6.3.46

- No added functionality in this release

Release 6.6.3.15 / 6.6.3.45

- Not applicable for N1100, N1500, N2000, N3000E-ON, N2128PX-ON, N3132PX-ON platforms.

Release 6.6.3.14 / 6.6.3.44

- No added functionality in this release

Release 6.6.3.12 / 6.6.3.42

- No added functionality in this release

Release 6.6.3.10 / 6.6.3.40

- No added functionality in this release

Release 6.6.3.8 / 6.6.3.38

- No added functionality in this release

Release 6.6.3.6 / 6.6.3.36

- DHCP pinhole feature disabled by default. Added CLI to enable it if needed.
- Please check the CLI Reference Guide Update section for details

Release 6.6.3.3 / 6.6.3.33

- No added functionality in this release

Release 6.6.3.0 / 6.6.3.30

- Enhance the existing HTTP redirect-URL to allow HTTPS URLs also
- 1000BASE-ZX transceiver support

Release 6.6.2.9 / 6.6.2.39

- No added functionality in this release

Release 6.6.2.5 / 6.6.2.35

- Added support for N1108EP-ON
- G.8032 Ethernet_Ring_Protection support for N1500
- VLAN Port Security, port MAC locking to limit the MAC addresses learned on a particular VLAN
- Establish an outbound connection to a remote SSH server from the switch console

Release 6.6.0.24 / 6.6.0.54

- No added functionality in this release

Release 6.6.0.23 / 6.6.0.53

- No added functionality in this release

Release 6.6.0.21 / 6.6.0.51

- Updated the PHY FW for PHY84846 to 1.09

Release 6.6.0.15 / 6.6.0.45

- No added functionality in this release

Release 6.6.0.13 / 6.6.0.43

- No added functionality in this release

Release 6.6.0.10 / 6.6.0.40

- No added functionality in this release

Release 6.6.0.7 / 6.6.0.37

- No added functionality in this release

Release 6.6.0.2 / 6.6.0.32

- Implementation of IEEE 802.1X-2010 specification.
- Dynamic ACLs per session with Redirect-ACLs and URL-Redirect support.
- CoA support to handle RADIUS attributes - 64, 65, 81, Port-bounce, Port-shutdown and Port-reauthenticate.

- Critical Data-VLAN support.
- RADIUS Server load balancing.
- RADIUS Server dead actions.
- Net SNMP Agent
- VRRPv3 Support
- IP-SLA
- uRPF
- Private-VLAN trunk port
- SCP Server
- IPDT (IP Device Tracking)
- RADIUS Assigned Trunk mode support
- Authentication-Open Support
- BGP 4 byte ASN Support
- BGP Graceful Restart
- IPv6 PBR

Release 6.5.3.7 / 6.5.3.37

- No added functionality in this release

Release 6.5.3.6 / 6.5.3.36

- No added functionality in this release

Release 6.5.3.4 / 6.5.3.34

- No added functionality in this release

Release 6.5.3.3 / 6.5.3.33

- No added functionality in this release

Patch Release 6.5.2.18 / 6.5.2.48

- No added functionality in this release

Patch Release 6.5.2.17 / 6.5.2.47

- No added functionality in this release

Patch Release 6.5.2.15 / 6.5.2.45

- No added functionality in this release

Patch Release 6.5.2.9 / 6.5.2.39

- No added functionality in this release

Release 6.5.2.5 / 6.5.2.35

- Added Dynamic ACLs support for dot1x clients in auto-mode.
- Added support for Diffserv policies and ACLs active on same interface/direction.
- Added support for LLDP group addresses (01:80:c2:00:00:0e, 01:80:c2:00:00:03 and 01:80:c2:00:00:00)

- Added support for RADIUS accounting messages to include Framed IPv4/IPv6 addresses.
- Added CLI commands to configure delay in sending RADIUS accounting start messages
- Added support for LLDP messages to include and transmits port PVID by default.
- Added HiveAgent support for N3048EP-ON, N3024ET-ON, N3024EF-ON, N3024EP-ON N3048ET-ON

Patch Release 6.5.1.6

- No added functionality in this release

Patch Release 6.5.1.5

- No added functionality in this release

Patch Release 6.5.1.3

- No added functionality in this release

Release 6.5.1.1

- Added mixed stacking support - N3132PX-ON with N3000 Series Switches.
- Added mixed stacking support – N2128PX-ON with N2000 Series Switches.
- Added CLI command “default <interface-id>” to reset the interface configuration to default.
- Added CLI command “show interfaces trunk <interface-id>” to display active trunk interface information.
- Allow redistribution of IPv6-BGP originated routes.
- 802.1x enhancements
 - Allow Voice VLAN traffic regardless of 802.1X port authentication status.
 - Support to allow the administrator to access to the voice VLAN when RADIUS servers are not reachable (Critical voice VLAN)
 - Assign RADIUS supplied VLAN to client in monitor mode
- Diffserv Enhancements
 - Allow class-map to refer to ACL
 - Add the 'match-any' class-map type
 - Add new protocol fields
- Support CHAP for accounting of MAB
- Added support for 32 Multicast groups to be defined to an RP statement

Release 6.3.3.14

- No added functionality in this release

Patch Release 6.3.3.11

- No added functionality in this release

Patch Release 6.3.3.10

- No added functionality in this release

Patch Release 6.3.3.9

- No added functionality in this release

Release 6.3.3.8

- No added functionality in this release

Patch Release 6.3.2.7

- No added functionality in this release

Patch Release 6.3.2.6

- No added functionality in this release

Patch Release 6.3.2.4

- No added functionality in this release

Release 6.3.2.3

- No added functionality in this release

Patch Release 6.3.1.13

- No added functionality in this release

Patch Release 6.3.1.11

- No added functionality in this release

Release 6.3.1.8

- BGP neighbor CLI command is augmented with if-default-present option
- IP route summary CLI command enhanced to display number of routes advertised with RFC5549 support
- CLI command “show hiveagent status” now displays more information
- DHCP client API now allows to fetch Option-43

Patch Release 6.3.0.19

- No added functionality in this release

Patch Release 6.3.0.18

- No added functionality in this release

Patch Release 6.3.0.16

- No added functionality in this release

Patch Release 6.3.0.15

- No added functionality in this release

Patch Release 6.3.0.10

- No added functionality in this release

Patch Release 6.3.0.9

- No added functionality in this release

Patch Release 6.3.0.6

- No added functionality in this release

Release 6.3.0.3

- RFC5549 support for MP-BGP Peers on N3000 (BGP image) and N4000 switches
- Extended community support for VRF route filtering
- Added uPOE support and enabled 4-pair power feed on N3024P and N3048P switches
- Python script support
- Added RADIUS and TACACS Key Encryption Support
- Added RSPAN support on trunk port
- Hybrid OpenFlow 1.0/1.3 implementation on N2000, N3000 and N4000 switches
- SRED support on N1500 switches
- Syslog RFC5424 support
- Recovery on Error-disabled interfaces
- Added OSPF and VRRP support to N2000 switches
- Loop Protection (subset of CTP) for detection of network loops
- ACL numbering and ACL hit counters
- Additional RADIUS attributes (attribute 6, 8, 25, 31) support
- Display source interfaces in SNMP Traps and Syslog messages
- IPv6 address support for SNMP
- BFD for OSPF
- Integrate OpEN applications, SupportAssist and HiveAgent
 - SupportAssist is on by default and can be turned off via CLI configuration changes (“eula-consent support-assist reject” and “no application installs SupportAssist”). SupportAssist operates by periodically reporting switch identity (service tag and serial number), configuration, logs, status, and diagnostic information to an external SupportAssist server operated by Dell, Inc. Information is logged periodically on the SupportAssist server. For instructions how to configure SupportAssist and more information on the SupportAssist license agreement refer to the N-Series User Guide and N-Series CLI guide

Patch Release 6.2.7.6

- No added functionality in this release

Patch Release 6.2.7.4

- No added functionality in this release

Release 6.2.7.2

- No added functionality in this release

Patch Release 6.2.6.9

- No added functionality in this release

Patch Release 6.2.6.8

- Added loopback interface support, which was removed in Release 6.2.1.6 for N2000 switches.

Release 6.2.6.6

- Added lower-case dot1x MAB username/password support to radius-server
- Added ssh public key authentication support
- Added TLSv1.0 as HTTPS protocol by default and disabled SSLv2 and SSLv3 by default

Release 6.2.5.3

- Added N1500 Ethernet Switch

Release 6.2.1.6

- Added Sticky MAC – Port-Security
- Support configuration of AdvLinkMTU, and include option MTU in Router Advertisement Message
- Added support for character ‘.’ (period) in the hostname
- Kernel updates and SSL version upgrade to 1.0.1.m

Release 6.2.0.5

- BGPv4 (N3000 and N4000 switches only through CLI)
- VRF-Lite (N3000 and N4000 switches only through CLI)
- Audio/Video Bridging (N4000 switches only through CLI)
 - IEEE 802.1as Timing and Synchronization
 - IEEE 802.1ak Multiple VLAN Registration Protocol (MVRP)
 - IEEE 802.1ak Multiple Multicast Registration Protocol (MMRP)
 - IEEE 802.1Qat Multiple Stream Reservation Protocol (MSRP)
- RADIUS Change of Authorization (COA)
- IPv6 Router Advertisement (RA) Guard
- MLAG Enhancements - Virtual MAC address per MLAG domain
- Bidirectional Forwarding Detection (BFD) (N3000 and N4000 switches only through CLI)
- IP unnumbered VLAN interfaces
- Support Explicit Congestion Notification (ECN) capability
- Support to configure storm-control action
- Display PIM protocol statistics and multicast forwarding cache
- Link debounce hysteresis on physical interface link loss.
- Buffers command to configure CPU thresholds for messages

Release 6.1.2.4

- No added functionality in this release

Release 6.1.1.7

- No added functionality in this release

Release 6.1.0.6

- No added functionality in this release

Release 6.1.0.1

- STP-PV and RSTP-PV protocol support

- Added storm control “action” support for broadcast and multicast streams

Release 6.0.1.3

- Support POE+ for N3048P/N3024P/N2048P/N2024P switches
- DHCPv6 Snooping/IPv6 Source Guard
- 100FX transceivers are supported (only supported on N30xx series)
- Command to configure Single Rate Three Color Marking (srTCM) is available

Release 6.0.0.8

- MLAG
- Remote SPAN
- Policy Based Routing/Forwarding
- Tiered Authentication
- IPv4/IPv6 ACL Enhancements
- Per Port Flow Control
- Source Specific Multicast support
- Load Statistics
- Full Memory Core dump
- Remote Packet Capture
- Added support for LAG flap counters
- Logging Enhancements
- Enhanced Ping and Traceroute feature
- Serial access to remote members in a stacking environment
- Ability to enable or disable stack ports
- Give option to encrypt TACACS and RADIUS keys
- Ability to track stack path in the stacking environment
- Support packet capture of CPU packets with Wireshark decode
- Protect U-boot access with password

Changed Functionality in this Release

This section contains commentary on significant differences from previous releases of firmware on Dell Networking Series switches, e.g., the N1100 / N1500 / N2000 / N2128PX-ON / N3000E-ON / N3132PX-ON series switches. Dell Networking series switches closely conform to networking industry standard operational capabilities and administrative interfaces. The differences below should be studied carefully as attempting to configure or operate the Dell Networking switches in the same manner as previous releases of firmware for Dell Networking N1500/N2000/N1100/N2128PX-ON/N3132PX-ON series switches may lead to unexpected results.

Release 6.7.1.27 / 6.7.1.57

- No changed functionality in this release

Release 6.7.1.26 / 6.7.1.56

- OpenSSH upgraded to 9.8p1 and OpenSSL upgrade to 3.1.6
- No added functionality in this release

Release 6.7.1.24 / 6.7.1.54

- No changed functionality in this release

Release 6.7.1.23 / 6.7.1.53

- No changed functionality in this release

Release 6.7.1.22 / 6.7.1.52

- No changed functionality in this release

Release 6.7.1.21 / 6.7.1.51

- No changed functionality in this release

Release 6.7.1.20 / 6.7.1.50

- No changed functionality in this release

Release 6.7.1.17 / 6.7.1.47

- No changed functionality in this release

Release 6.7.1.15 / 6.7.1.45

- No changed functionality in this release

Release 6.7.1.13 / 6.7.1.43

- No changed functionality in this release

Release 6.7.1.10 / 6.7.1.40

- No changed functionality in this release

Release 6.7.1.9 / 6.7.1.39

- No changed functionality in this release

Release 6.7.1.8 / 6.7.1.38

- No changed functionality in this release

Release 6.7.1.6 / 6.7.1.36

- No changed functionality in this release

Release 6.7.1.4 / 6.7.1.34

- No changed functionality in this release

Release 6.7.1.1 / 6.7.1.31

- “show interfaces advanced firmware” command now expects the interface as mandatory parameter for which the details need to be displayed. This command now displays PHY firmware version for applicable interfaces and not restricted to 10G and 40G interfaces.

- SNTP key can now be configured upto a max length of 16.
- A larger number of configured and dynamic ACLs (900) are now supported with fewer rules (512) per ACL.
- Limit on configuring a maximum number rule for Management ACL is increased from 64 to 128.
- The limit on the maximum number of BGP update groups for advertising BGP outbound routes is increased from 10 to 20.

Release 6.6.3.16 / 6.6.3.46

- No changed functionality in this release

Release 6.6.3.15 / 6.6.3.45

- Not applicable for N1100, N1500, N2000, N3000E-ON, N2128PX-ON, N3132PX-ON platforms.

Release 6.6.3.14 / 6.6.3.44

- No changed functionality in this release

Release 6.6.3.12 / 6.6.3.42

- No changed functionality in this release

Release 6.6.3.10 / 6.6.3.40

- No changed functionality in this release

Release 6.6.3.8 / 6.6.3.38

- No changed functionality in this release

Release 6.6.3.6 / 6.6.3.36

- DHCP pinhole feature disabled by default. Added CLI to enable it if needed.

Release 6.6.3.3 / 6.6.3.33

- No changed functionality in this release

Release 6.6.3.0 / 6.6.3.30

- No changed functionality in this release

Release 6.6.2.9 / 6.6.2.39

- No changed functionality in this release

Release 6.6.2.5 / 6.6.2.35

- No changed functionality in this release

Release 6.6.0.24 / 6.6.0.54

- No changed functionality in this release

Release 6.6.0.23 / 6.6.0.53

- No changed functionality in this release

Release 6.6.0.21 / 6.6.0.51

- No changed functionality in this release

Release 6.6.0.17 / 6.6.0.47

- No changed functionality in this release

Release 6.6.0.15 / 6.6.0.45

- No changed functionality in this release

Release 6.6.0.13 / 6.6.0.43

- Added AES128 cipher support under SNMP CLI command syntax

Release 6.6.0.10 / 6.6.0.40

- No changed functionality in this release.

Release 6.6.0.7 / 6.6.0.37

- No changed functionality in this release.

Release 6.6.0.2 / 6.6.0.32

- Reduced maximum stack size of N2000 and N2128PX-ON Series Switches to 8 units.
- Dot1x feature complies with IEEE 802.1x-2010 standard.
- Added IP-SLA track options support to “ip route” command.
- Removed insecure ciphers (3DES and AES128) from SNMP CLI command syntax.

Release 6.5.3.7 / 6.5.3.37

- No changed functionality in this release.

Release 6.5.3.6 / 6.5.3.36

- No changed functionality in this release.

Release 6.5.3.4 / 6.5.3.34

- No changed functionality in this release.

Release 6.5.3.3 / 6.5.3.33

- No changed functionality in this release.

Patch Release 6.5.2.18 / 6.5.2.48

- No changed functionality in this release.

Patch Release 6.5.2.17 / 6.5.2.47

- No changed functionality in this release.

Patch Release 6.5.2.15 / 6.5.2.45

- No changed functionality in this release.

Patch Release 6.5.2.9 / 6.5.2.39

- No changed functionality in this release.

Release 6.5.2.5 / 6.5.2.35

- RADIUS Attribute 25 is not included in Access-Request to interop with ISE. Only included in Accounting messages if received in Access-Accept.
- Deprecated CLI command “lldp transmit-tlv” in favor of “lldp tlv-select” to select the TLVs to be transmitted in LLDP message.
- Upgraded OPENSSH to openssh-7.5p1 version.
- CLI command “show version” now displays bootcode version – N3000E-ON switches only.
- Updated new boot-code version for N1500, N3132PX-ON, N2128PX-ON and N3000E-ON switches.
- Added HiveAgent support for N3048EP-ON, N3024ET-ON, N3024EF-ON, N3024EP-ON N3048ET-ON

Patch Release 6.5.1.6

- No changed functionality in this release.

Patch Release 6.5.1.5

- No changed functionality in this release.

Patch Release 6.5.1.3

- No changed functionality in this release.

Release 6.5.1.1

- Allow MAC addresses in both upper and lower cases in CLI commands usage.
- Added IP-subnet support with snmp-server configuration command.
- Improved “show” commands for spanning-tree, UDLD, IPv6 OSPF SPF timer, interfaces trunk modes.
- Modified PoE power masks settings for Class and Dynamic modes.
- Show iscsi sessions” command is deprecated
- Support for Attribute 1 (username) with group-size, separator and lower/upper case definition
- Syslog and ‘show logging’ now print readable severity levels
- SSH Key length is now 2048

Release 6.3.3.14

- Removed Weak SSH MAC algorithms: hmac-md5, hmac-md5-96, hmac-md5-96-etm, hmac-sha1-96, hmac-sha1-96-etm
- Supported SSH Ciphers: aes128-ctr, aes192-ctr, aes256-ctr, chacha20-poly1305
- Supported SSH MAC algorithms: hmac-sha1, hmac-sha1-etm, umac-64-etm, umac-128-etm, umac-64, umac-128, hmac-ripemd160-etm, hmac-ripemd160, hmac-ripemd160
- Updated HiveAgent application v1.1.10.0 for N2000, N3000 and N1500 Series Switches.
- Updated PoE FW version to 211_3 for N1500 Series Switches.
- Updated N1500 Series boot-code version to “U-Boot 2012.10-00241-g6df783f (Nov 01 2017 - 15:14:44)”

Patch Release 6.3.3.11

- No changed functionality in this release.

Patch Release 6.3.3.10

- No changed functionality in this release.

Patch Release 6.3.3.9

- No changed functionality in this release.

Release 6.3.3.8

- No changed functionality in this release.

Patch Release 6.3.2.7

- No changed functionality in this release.

Patch Release 6.3.2.6

- No changed functionality in this release.

Patch Release 6.3.2.4

- Updated PoE FW version to 188_1 for N1500 PoE switches.

Release 6.3.2.3

- Removed weak ciphers support: **arcfour**, **arcfour128**, **arcfour256**, **aes256-cbc**, **aes192-cbc**, **aes128-cbc**, **twofish-cbc**, **blowfish-cbc**, **3des-cbc**.
- Required to use latest SSH client (terminal emulators) which supports ciphers: **aes128-ctr**, **aes192-ctr**, **aes256-ctr**, **chacha20-poly1305**.

Patch Release 6.3.1.13

- Updated HiveAgent application version 1.0.2.0 for N2000, N3000 and N1500 switches.

Patch Release 6.3.1.11

- No changed functionality in this release.

Release 6.3.1.8

- No changed functionality in this release

Patch Release 6.3.0.19

- No changed functionality in this release.

Patch Release 6.3.0.18

- No changed functionality in this release.

Patch Release 6.3.0.16

- No changed functionality in this release.

Patch Release 6.3.0.15

- Disabled loop-protect (keep-alive) feature by default.
- Updated HiveAgent application version 2.68 is available on N2000, N3000 and N1500 switches.

Patch Release 6.3.0.10 (Only applicable to N1500 Series)

- HiveAgent application is available on N1500 switches.

Patch Release 6.3.0.9

- HiveAgent application is enabled by default at startup on N2000 & N3000 switches.
- HiveAgent application is not available on N1500 switches. It will be in the next official release.
- SupportAssist application is disabled on startup. Recommend keeping SupportAssist application disabled until next patch release.
- HiveAgent application has been upgraded to a newer version 2.62 in this release for N2000 and N3000 switches.

Patch Release 6.3.0.6

- HiveAgent and SupportAssist applications are disabled on startup in this release. Recommend to keep these two applications disabled until next patch release.

Release 6.3.0.3

- Port MAC locking
- Weak Ciphers are turned off
- Checking supported radius service-type attribute and if the service-type as specified by the RADIUS server is an unsupported, the challenge is considered as Access-Reject and a Failure message is sent to the client as per RFC.
- Maximum number of MLAGs supported is 64 for all N-Series switches.

Patch Release 6.2.7.6

- No changed functionality in this release.

Patch Release 6.2.7.4

- No changed functionality in this release.

Release 6.2.7.2

- No changed functionality in this release.

Patch Release 6.2.6.9

- No changed functionality in this release.

Patch Release 6.2.6.8

- Added loopback interface support, which was removed in Release 6.2.1.6 for N2000 switches.

Release 6.2.6.6

- Kernel updates and SSL version upgrade to 1.0.1.o
- PoE Controller firmware updated to 265_1 for N2000 and N3000 PoE switches.

Release 6.2.1.6

- Kernel updates and SSL version upgrade to 1.0.1.m

Release 6.2.0.5

- Change allowed monitor sessions from one to four to be configured
- Moved the “port security” commands from interface command tree to interface switchport command tree

- Updated MAC access-list commands
- Improved “show spanning-tree” commands

Release 6.1.2.4

- No changed functionality in this release

Release 6.1.1.7

- No changed functionality in this release

Release 6.1.0.6

- Improved fan noise level for N3000/N2000 series switches.
- Updated PoE controller firmware version to 263_75 for N2000 & N3000 PoE switches.

Release 6.1.0.1

- Modified DVLAN tunnel UI to enable QinQ tunneling on customer edge (CE) interfaces.

Release 6.0.1.3

- PoE commands for N3000/N2000 PoE switches with PoE controller.
- Modified CLI to configure system wide MTU for all interfaces for all frame types.
- Enhanced IP route commands to display all connected and configured routes under one command.

Release 6.0.0.8

- Enhanced multicast commands to align with Industry Standard CLI
- Increased maximum number of iSCSI Sessions to 252
- Increased maximum number of units stackable to 12 for the N4000 and 8100
- Increased maximum number of VLAN's supported to 4k
- Increased maximum number of static routes supported from 512 to 1024
- Increased maximum number of dot1x clients per port to 64
- Enhanced “show interface status” to display default VLAN participation
- Enhanced show tech-support, show version

Issues Resolved

The following issues from previous releases have been corrected. The issues listed here may have been discovered on any of the switches listed on the title page.

Release 6.7.1.27/ 6.7.1.57

Summary	User Impact	Resolution	Affected Platforms
Incorrect naming pattern of predefined ACLs applied via Radius. [NEE-11490]	Instead of ACL name append, DACL via radius appear as IP-STATIC-IN- <number>	Fixed this issue. Now the ACL name will appear instead of number IP-STATIC-IN- <acl-name>	All Platforms
Dynamic ARP Inspection ACL Rules FAIL to save in Web GUI. [NEE-11578]	Dynamic ARP Inspection ACL Rules FAIL to save in Web GUI	Fixed this issue	All Platforms
SHA1 Deprecated Setting for SSH. [NEE-11874]	User can't enable or disable HostKeyAlgorithms	Added CLI and SNMP support for ssh host key algorithm configuration	All Platforms

IPv4 Permit every ACL combined with IPv6 Deny every ACL causes interfaces to enter a detached state after a system reboot. [NEE-11972]	While configuring an IPv4 "permit every" ACL combined with an IPv6 "deny every" ACL results in interfaces (unit) going into a detached state after rebooting the switch.	The application ACL code was corrected to properly classify the IPv6 ACL by setting the appropriate ACL type flags	All Platforms
Extremely high Interface counters. [NEE-11353]	Some interfaces have extremely high counters (close to max 2 ⁶⁴)	Port speed change in latest SDK clears the counters internally for few silicons and leads to integer overflow in application counters which is fixed now.	All Platforms

Release 6.7.1.26/ 6.7.1.56

Summary	User Impact	Resolution	Affected Platforms
CVE-2020-14145. [NEE-9737]	Security scanners might report system vulnerable to CVE	Fixed with openSSH and openssl upgrade (9.8p1, OpenSSL 3.1.6)	All Platforms
CVE-2011-1473 & CVE-2011-5094. [NEE-10462]	Security scanners might report system vulnerable to CVE	Fixed with openSSH and openssl upgrade (9.8p1, OpenSSL 3.1.6)	All Platforms
CVE-2024-6387 [Internal]	Security scanners might report system vulnerable to CVE	Fixed with OpenSSH Upgrade	All Platforms
"Accounting delay-start" is not sent in accounting start packet, when client IP address is in "in-active" state in IPDT table. [Internal]	"accounting delay-start" will not send accounting start packet, when client IP is in "in-active" state in IPDT table	Fixed this issue	All Platforms
Use of SDK detach command causing N3248PXE HW crash	No user impact as this command is used during Engineering debug	Fixed this crash issue	All Platforms

Release 6.7.1.24/ 6.7.1.54

Summary	User Impact	Resolution	Affected Platforms
DNSE/N3200/6.7.1.20 - aaa accounting delay does not work.[NEE-9732]	After adding cmd "aaa accounting delay-start extended-time", sometime Customer noticed the "aaa accounting delay" which is enabled by default does no longer work.	If frame IP is not found then we will wait until the configured delay time and then we will send the accounting request else if frame IP is found then we will send the accounting request immediately.	All Platforms
DNSE/6.7.1.52 - N3048EP-ON - Dot1x authentication Failure with end Host.[NEE-9771]	If order and priority are configured as Dot1x/MAB. EAPoL Start received should trigger a dot1x auth and not MAB, which is happening sometime in customer's case.	In some corner cases, when EAPoL start is received, the current method is not getting reset to none, Hence the next method pickup is always failing. Fixed the same	All Platforms
DNSE/N2048P/6.7.1.17 - N2000 Out of system buffers seen and observed traffic issue (via code walk).[NEE-9555]	There is a memory leak in dot1x context in very corner case.	We have added a probable fix via code walk as unable to reproduce the issue.	All Platforms

Release 6.7.1.23/6.7.1.53

Summary	User Impact	Resolution	Affected Platforms
DNSE/N2224X/6.8.1.0 - onie-fw-update command fails to update the firmware from OS06 and throws error	If customer wants to upgrade the ONIE to new version, It throws error	Size id new onie-fw is larger compared to older one, hence the issue, fixed the same.	All Platforms
DNSE/N3224T/6.7.1.21/MIB file dot1xAdvanced.my import fail.[NEE-9347]	dot1xAdvanced.my MIB file import fail	Updated dot1xAdvanced.my was not present in table, added the same	All Platforms
DNSE/N3200/6.7.1.21 - agent-addr: of SNMPv1 trap is set to 250.251.252.253 instead of vlan interface ip address.[NEE-9342]	SNMP v1 trap packet invalid agent address (250.251.252.253 instead of vlan interface ip), may confuse used to to identify the origin of SW	updated client address is not taken from config file, fixed the same.	All Platforms
DNSE/N1548/6.7.1.21 - Syslog messages not following RFC standards (RFC3164 and RFC5424).[NEE-9273]			All Platforms
DNSE/6.8.1.2-Sflow config miss is seen while upgrading from 6.7.1.21 to 6.8.1.2 image.[Internal]	Sflow config miss is seen while upgrading from 6.7.1.21 to 6.8.1.2 image.	Sflow destination owner string is not added in running-config if we give the owner key word with multiple words. Fixed the same	All Platforms
DNSE/65.4.19 - MLAG - VPC Secondary Po interface goes to "Disable" "Discarding" state when Po interface to ToR goes down on VPC.[NEE-8682]	Because of SYNC issue, MLAG - VPC Secondary Po interface goes to "Disable" "Discarding" state when Po interface to ToR goes down on VPC Primary	Fixed the MLAG SYNC issue	All MLAG supported Platforms
DNSE/N3132PX/6.7.1.40 - BGP neighbor advertised-routes output is not correct.[NEE-8214]	Display issue with "show ip bgp neighbors <> advertised-routes	Fixed the same	All Platforms
Disable stacking atp/RPC timeout debug trace to flash by default as default enabled caused some crash.[Internal]	Default Stack log collection sometime crashed the HW	Disable stacking atp/RPC timeout debug trace collection by default	All Platforms
Switch crashes in DHCP client packet processing[Internal]	In some cases, when switch received a DHCPv6 SOLICIT packet on the service port, crashed	Fixed the validation issue on service-port for DHCPv6 SOLICIT packet	All Platforms
MAB attribute 2 command with 64 char length not retained after save and reload, Due to this MAB authentication fails.[Internal]	Incorrect string length passed issue.	Incorrect string length passed issue, fixed the same.	All Platforms

Release 6.7.1.22 / 6.7.1.52

Summary	User Impact	Resolution	Affected Platforms
DNSE/N3200 - OSPF Message "IP[unitMgrTask]: rto.c(2557) 125125 %% ERR RTO failed to modify route to <IP address> <subnet mask>, add it instead" filling log messages as warning.[NEE-8941]	Sometime Error message below observed "IP[unitMgrTask]: rto.c(2557) 125125 %% ERR RTO failed to modify route to , add it instead"	This observed in Routing table component when it wants to modify a route's nexthop. So not an error message, so reduce the priority	All Platforms
DNSE/N3248X-ON/6.6.3.6/ERR truncating integer value > 32 bits after the switch ran for 497+ days.[NEE-8948]	Log buffer (and syslog) will get full with this message when SNMP OID for system up time is called after system ran for 497+ days.	Move severity level from ERROR to DEBUG	All Platforms

DNSE/6.7.1.17/HTTPS certificate management issue.[NEE-8718]	Certificates names are not renamed properly internally	Renamed the certificated properly internally	All Platforms
DNSE/N1500 - lldpRemManAddrTable (OID 1.0.8802.1.1.2.1.4.2) Not Returning On Firmware 6.6.x And Later.[NEE-8827]	OID lldpRemManAddrTable will not returning output on Firmware 6.x and latest	Network byte order issues, fixed the same	All Platform
DNSE/N1500/6.7.1.20/MAC MOVE observed in PVST.[NEE-8895]	MAC is learned from ISDP packet	Added new rule to "not learn MAC from ISDP packets"	All Platforms
DNSE/N2200/6.8.1.0/Mab authentication fails when Mab request format attribute 2 is configured on the switch.[NEE-8981]	Attribute 2 support for PAP was not present, so PAP with attribute 2 will not work.	Added support of attribute 2 for PAP	All Platforms
DNSE/N3248X-ON - Crash of management unit impacts OSPF communication.[NEE-8982]	Users may see that OSPF interface configuration for network IF type is lost after reboot.	Timing issue and fixed the same	All Platforms
DNSE/N1500 - Multiple crash (Task Name: EmailAlert) occurring on different switch.[NEE-8992]	Crash sometime observed when logging EmailAlert is configured over TLS	Fixed the crash	All Platforms
N3248X-ON - Multiple switch crashes impact switch functionality .[NEE-9043]	Sometime observed stacking instability with snmpbulk call	Fixed the snmpbulk walk issue as it internally create larger packet size	All Platforms
DNSE/6.7/6/8 - OS6 - Local user login with "Admin Profile" when radius/tacacs failure condition.[FIELD-Sales]	After reload, user login with "Admin Profile" in local will not work	Running configuration is missing configured privilege command, hence not working after reload.	All Platforms

Release 6.7.1.21 / 6.7.1.51

Summary	User Impact	Resolution	Affected Platforms
Authentication failure when same state attribute of previous user-login is being used. [NEE-8665]	Issue with state (24) attribute in ClearPass server where after User-1 login and logs out and then User-2 logs in and log out then when User-3 login and it failed because of previous info is not getting cleared properly.	Fixed by properly resetting the attributes before authenticating the users.	All Platforms
N3048EP/TACACS-based SSH login fails intermittently. [NEE-8512]	SSH login fails intermittently after few days if there are continuous SSH sessions opening without proper closing of the session.	Fixed the stale entry issue in case of SSH login failure or not properly closed	All Platforms
Radius server configured with hostname does not authenticate domain user access to switch. [NEE-8626]	When radius server is configured with its hostname, the radius server does not authenticate the user to access the switch.	DNS resolution initially fails when the RADIUS host is configured, fixed the same.	All Platforms
"Unable to remove" logs while station movement is happening. [NEE-8549]	Below logs will be observed if dot1x client move frequently across ports. "Duplicate client 00:00:00:33:22:41 detected on interface Gi1/0/1 (intIfNum 1). Unable to remove"	Added the log message to generate the logs if client cleanup fails when duplicate client detected.	All Platforms
Vulnerability CVE-2022-40303 [NEE-8694]	OS6 release is impacted by CVE-2022-40303	Added the patch for CVE-2022-40303	All Platforms
After removing a dynamic LAG member from CLI, the "L" remains in the LAG membership port in GUI. [NEE-8436]	WebUI display issue with no traffic impact	Addressed display issue.	All Platforms

Release 6.7.1.20 / 6.7.1.50

Summary	User Impact	Resolution	Affected Platforms
N2248PX-ON Stack - Frequent (every 1 minute) re-authentication of dot1x clients irrespective of session-timeout (9600 seconds) set from serve. [NEE-Internal]	When the client gets authenticated and gets disconnected immediately, accounting session time is showing larger value.	Fixed such that, accounting session time is zero if the client gets authenticated and gets disconnected immediately. Also, if MAC MOVE across dot1x enabled port happens, INFO level logs will be observed.	All Platforms
SSH Weak MAC Algorithms (hmac-sha1 & hmac-sha1-etm@openssh.com). [NEE-8511]	Weak MAC Algorithms (hmac-sha1 & hmac-sha1-etm) gets advertised	Added a CLI option enable/disable weak MAC algorithms (hmac-sha1 & hmac-sha1-etm and TLS1.0 and TLS1.1 etc	All Platforms
Vulnerability CVE-2002-20001 regarding Diffie-Hellman Key Agreement Protocol. [NEE-8280]	Switches have vulnerability CVE-2002-20001 regarding Diffie-Hellman Key Agreement Protocol.	Added a CLI option enable/ disable cipher suite as per customer's need	All Platforms
N2048P/Stack sends TCN after upgrade without any link flap. [NEE-8559]	If BPDU guard was enabled and edge port receives a BPDU, the port would be shutdown	Fixed this behavior. TCNs are generated on edge ports. It is advised to enable BPDU guard on the device which has edge ports configured to avoid devices connected to edge ports from accidentally participating in the network topology.	All Platforms

Release 6.7.1.17 / 6.7.1.47

Summary	User Impact	Resolution	Affected Platforms
Dynamic ACL doesn't work when the ACL name has all lowercase. Works fine when ACL name has at least one uppercase. [NEE-8310]	If customer use cisco av-pair instead of filter id and if the ACL name has substring like permit or deny keyword without upper case, issue observed.	Modified the code to distinguish AV pair content as either ACL rule or name when it has permit or deny keyword.	All Platforms
OSPF doesn't show the correct neighbor states as BDR and DROther. [NEE-8141]	Sometime OSPF may land in incorrect OSPF neighbor state for BDR and DR.	Fixed in initialize issue where sometimes it uses default network type without checking existing values in centralize database.	All Platforms

Release 6.7.1.15 / 6.7.1.45

Summary	User Impact	Resolution	Affected Platforms
6.7.1.10 - N-Series - SNMP trap does not egress out of switch after reboot if source-interface is configured. [NEE-8153]	SNMP trap is not egressing out after switch reboot if "snmp-server source-interface" is configured either loopback interface or VLAN interface.	If configured source interface is not active during config applied, issue observed. Fixed by adding interface config to	All Platforms

		snmpd.config only if interface is active and up.	
6.7.1.9 - N-Series - Radius server usage "login" issue. [NEE-Internal]	If two RADIUS Servers configured - one for "login" and other one for "authmgr" with different names specified to radius servers, then if login request comes first it is successful and MAB authentication comes later fails and vice versa.	Fixed by posting the message to appropriate server and server is selected based on the usage type by using server name index.	All Platforms
6.7.1.9 - N3248P-ON - Stack master crash with "DHCPV6_snoop" task. [NEE-8204]	Reception of malformed DHCPV6 packets could result in the code accessing data beyond the packet length and can cause this type of crash.	Improved the code by adding extra missing check and validate the packet length before accessing/searching for different types of option codes in the IPV6 packet fields.	All Platforms
N1548P/6.7.1.1 - VoIP phones randomly become inaccessible. [NEE-7950]	With "voice-vlan override" and periodic re-auth enabled, there is some corner case where VoIP phone access can fail.	AuthMgr and internal table database get "out of sync" and prevent further authorization of voice clients, fixed the same.	All Platforms
6.7.1.13 - N-Series - SNMP Trap value is in incorrect format for MAC Move notification. [NEE-8285]	While sending snmp trap for mac notification vlanId and interface number values are displaying in reverse order.	Modified the code to not use host byte order and use network byte order.	All Platforms
6.7.1.14 - N2248PX-ON - MAC Address learning not happening on ports post 6.7.1.14 upgrade. [NEE-8348]. 6.7.1.14 - N2248PX-ON - Uplink port-channel interface is down post upgrading to 6.7.1.14 [NEE-8346].	After upgrading to 6.7.1.14 image, if any port flaps or remove/insert of cable from a working port, port will move to STP blocked state with discard learning if authMgr is disabled globally.	Missed to update a flag when port moved to DOWN state which supposed to be in sync with port's admin and link state. Fixed the same.	All Platforms

Release 6.7.1.13 / 6.7.1.43

Summary	User Impact	Resolution	Affected Platforms
Switch unreachable after removing VLAN. [FIELD-8196]	Deleting a VLAN from an interface configured as promiscuous trunk, promiscuous trunk setting is being removed from the hardware even when the port has mappings intact for other available VLANs.	Check the interface config for the VLAN being deleted and if it has mappings/associations that have VLANs still available in the system, do not remove promiscuous trunk properties from the hardware.	All Platforms
FTP file transfer fails when using \$ in password with FileZilla FTP server. [FIELD-8059]	While sending the plaintext password value to FTP server, if \$ symbol is used, symbol \ would be added - which leads to password incorrect on FileZilla server as Linux 4.12 onwards accepting special characters without \	Fixed the special character handling part in file transfer.	All Platforms
Delay or no-authentication with dot1x clients post upgrade to 6.7.1.39 from 6.6. [FIELD-8132]	ClearPass and NPS Servers mandates the state attribute in the authentication request, which causes failure if it's	Fixed the behavior of state attribute is being reused.	All Platforms

	reused as part of re-authentication.		
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Release 6.7.1.10 / 6.7.1.40

Summary	User Impact	Resolution	Affected Platforms
Switch sends untagged voice-vlan packets leads to connectivity issue. [FIELD-7598, FIELD-7786]	Sometime phones will have connectivity issue as they will not be part of voice-vlan after LLDP network TLV exchange.	Fixed by adding a check to confirm the participation and tagging of particular voip client in that VLAN.	All Platforms
Stack & Standalone - "Port-security mac-address sticky" causing MAC conflict against Router gateway's MAC address. [FIELD-6768]	With port-security, overwriting of static MAC address is allowed in the same VLAN and if there is any loop, it is getting added as sticky if sticky MAC is configured in the port where it is received because of loop.	If there is a packet with MAC address which is static in other port, will raise a trap for violations if port-security is configured.	All Platforms
N2224X/6.7.1.6 - With STP as PVST TCN log is generated when a port in portfast mode flaps. [FIELD-7996]	Topology change detection will be noticed on 'portfast' configured interfaces upon link flap. There is no functionality impact.	Added BPDU guard status in addition to port's admin status to not send trap in portfast mode.	All Platforms
6.7.1.4 - N1148P-ON and N22xx - Printer reachability (ping failure) after upgrading to 6.7.1.4 code. [FIELD-7674, FIELD-7974]	Packet drop or port flap observed with some partners due to change in "Green mode EEE" parameters.	Fixed the EEE (energy efficiency parameters).	N11xx
GUI Startup-Configuration download to switch is not performing syntax verification. [FIELD-7970]	Startup and backup configuration with invalid commands is written to flash when copied to switch through web GUI.	Script validation status is taken care before writing to flash.	All Platforms
6.7.1.9 - STP port states inconsistency on IP phone connected ports. [FIELD-8031]	RPVST state machine would be restarted on edge ports due to change in tagging configuration when port has voice-vlan configured.	Prevent State Machine restart on edge ports when vlan tagging property is altered.	All Platforms
6.7.1.9 - Service policy fails to get applied on the interface. [FIELD-8070]	Rules applied for DiffServ is bit mapped, so each rule per port consume lot of TCAMs and leads to no resource availability.	Added bitmap fix if same diffServ applies to more ports, so optimize the resource.	All Platforms
6.7.1.8 - N32xx - Unable to perform SNMP operations for dot1xAuthTxPeriod and dot1xAuthServerTimeout OID's on stack member ports. [Internal]	SNMP operations for dot1xAuthTxPeriod and dot1xAuthServerTimeout OID's on stack member ports.	Fixed the issue in stacking case	All Platforms

Release 6.7.1.9 / 6.7.1.39

Summary	User Impact	Resolution	Affected Platforms
VRRP preempt delay timer does not work according to the configured value. [FIELD-7695]	VRRP preempt delay timer does not work according to the configured value because of conversion issue.	Use the conversion factor as seconds instead of centi-seconds for preempt-delay time calculations.	All Platforms
6.7.1.4/6.7.1.6 - IPv6 communication stops working after upgrading from 6.7.1.1. [FIELD-7765]	Network hosts (mostly server nodes) may stop communicating via IPv6 on the network if mrouter port is present/configured.	Fixed interop issue between mrouter port logic and ipv6 reserved mcast packet.	All Platforms
6.7.1.6 - N1548P - MAB authentication fails for supplicants connected to Ports 1-24 post station-	In dual silicon logic, when ports are dot1x/MAB authenticated,	Added the Port control to lift	N1148x and N1548x

move from unmanaged switch. [FIELD-7755]	station movement may not get triggered in a stacking scenario.	packets for l2 mac move in internal high stack-port scenario.	
6.7.x.x MIB OID (1.3.6.1.2.1.105.1.3.1.4.1) returns power consumption in milliwatts instead expected output in watts. [FIELD-7779]	Power consumption output returns in milliwatts instead expected output in watts.	Fixed the conversion logic.	All Platforms
ZTP not working via inband management interface as "interface vlan 1/ip address dhcp" no longer exist in the default config. [FIELD-7780]	ZTP not working via inband management interface as "interface vlan 1/ip address dhcp" for L3 switch which has support of service-port.	Added below logic: If service-port is UP and got the IP address via DHCP, then do not config "ip address dhcp" on inband VLAN 1 interface. b) If service-port is not present (in L2 HWs) or if service-port is present but either "down" or "UP (without IP address)"; then have config "ip address dhcp" on VLAN 1 routing interface.	All Platforms with service-port support
"ipv6 dhcp snooping" vlan list gets truncated in running config. [FIELD-7798]	"ipv6 dhcp snooping" vlan list gets truncated in running config.	Fixed the length field issue with string concatenation operation.	All Platforms

Release 6.7.1.8 / 6.7.1.38

Summary	User Impact	Resolution	Affected Platforms
6.7.1.1 - N-Series - Obsolete Dot1x MIB OIDs without replacement [FIELD-7527]	In netsnmp code starting from 6.6.x.x onwards, agentDot1xAuthTxPeriod and agentDot1xAuthServerTimeout are obsoleted	Added these two OIDs as part of private MIB	All Platforms
6.7.1.6 - DNI - N1108EP-ON - Old CPLD version is bundled with 6.7.1.6 [FIELD-DNI]	Old CPLD version 12 was present instead of version 13	Added version 13 CPLD code for N1108EP-ON	N1108EP-ON
6.7.1.4 - N1100 - USB device is not mounted/detected after upgrade from 6.4.2.8. [FIELD-7639, FIELD-7775]	USB detection fails on N11xx platform after kernel upgrade in the latest image	Fixed the USB detection issue	N11xx
N1548P/6.7.1.4/Frequent MAC Moves with 6.7.1.4. Not seen with earlier codes. [FIELD-7693]	MAC learn in blocking port from CDP packet is causing the MAC MOVE	Fixed the wrong typo in MACRO	N15xx
6.6.3.x - "show users login-history" output is not syncing with SNTp date & time. [FIELD-7532]	Due to different timer used between CLI and SNTp, login-history is not syncing with SNTp date & time	Used the same timer for both CLI and SNTp	All Platforms
6.7.1.1/OSPF Default route not being installed in the routing table. [FIELD-7694]	Sometime due to mismatch in path type, OSPF is not adding default route into main routing table	Fixed the same	All Platforms
SNMP-Discovery-fix: 6.7.1.4 - SNMPv3 Polling fails via user account with the non-default engine-id change. [FIELD-7672]	SNMP discovery process issue as it is not as per rfc3414 (section 4)	Fixed the code flow to support it	All Platforms
No output shown in "show crypto key pubkey-chain ssh" when pubkey-chain configured with ECDSA key	No output shown in "show crypto key pubkey-chain ssh" when pubkey-chain configured with ECDSA key	Added the supported command	All Platform

Release 6.7.1.6 / 6.7.1.36

Summary	User Impact	Resolution	Affected Platforms
Potential CDP flood causing "insufficient bandwidth alarm" on connected IP Phones [FIELD-7510].	In some configuration sequence like ""disable ISDP on port ==> disable globally ==> enable locally ==> enable globally"", there is a CDP flood as port does not terminate the CDP packet.	Fixed the system policy which was not invoked properly in this configuration scenario.	All Platforms
Switch crashes with "ipMapForwardingTask" task at regular interval when there is /32 route and ARP broadcast (255.255.255.255) reaches with proxy-arp enabled [FIELD-7521].	If switch has /32 route and broadcast ARP request (255.255.255.255) reaches when proxy-arp is enabled, the switch will crash.	Fixed the crash in radix best match lookup tree.	All Platforms
SNMP requests with multiple OIDs within the same request for interfaces above 1/0/21 returns "No Such Instance" [FIELD-7594].	SNMP get requests with multiple parameters won't get response for ifmib beyond certain OIDs.	Implemented the deprecated parameters for OIDs ifOutQLen and ifSpecific in the MIB.	All Platforms
Network issue when one of units in stack went to down if LAG members are present across the units. [FIELD-7569].	In stacking case if the member unit is powered off, LAG member port is not removed from HW. Traffic was still forwarded to the LAG member port present in the member unit.	Ensured that the member port gets deleted from master unit HW table when member unit is shutdown.	All Platforms
N2128PX-ON - High fan speed issue [FIELD-7571].	When temperature fluctuates, FAN-1 runs at high speed.	Fixed FAN-1 high speed issue in box service component.	N21xx

Release 6.7.1.4 / 6.7.1.34

Summary	User Impact	Resolution	Affected Platforms
Console/SSH/Telnet went unresponsive on multiple N3048EP switches [FIELD-6703, FIELD-6223].	If customer has login authentication & exec authorization via Radius server config, there is chance of memory leak and leads to management access issue like telnet, SSH and console access.	Added fix for management access memory leak, so that no issue with management access after this fix.	All Platforms
Private vlan translation missing in hardware table after reloading [FIELD-6488].	In private LAN configuration mode, sometime after reloading, private VLAN translation missed (did not retain PVLAN config) in HW table and will cause the traffic issue.	Wrong macro is used for copying secondary VLAN MASK information where few bits of the VLAN mask are left out sometimes. Fixed the same.	All Platforms
Query regarding PSU date-time from "show system power" output [FIELD-6650].	In stacking case, for member unit, PSU date-time field from "show system power" output always shows master unit uptime.	Buffer used to store the data/time for "show system power" was wrongly accessing master unit info. Fixed the same.	All Platforms
Private VLAN traffic via promiscuous port stopped working post reload [FIELD-7159].	In private LAN configuration mode, sometime VLAN traffic via promiscuous port stopped working as switch did not retain PVLAN configuration in HW table.	Wrong macro is used for copying secondary VLAN MASK information, so after reloading, sometimes few bits of the VLAN mask are left out. Fixed	All Platforms

		the same in the code.	
Error message noticed on switch logs when POE devices are connected has no clarity [FIELD-6499].	Message like “ERR Cmd with msgId(25) failed. rc(10)” in log message is not a proper log to understand.	Modified the error message in the user readable format.	All PoE Platforms
DNSE/6.6 - N-Series - OpenSSL Vulnerabilities in 6.7.1.1 (CVE-2022-3711 and CVE-2022-3712).	Both (CVE-2022-3711 and CVE-2022-3712) to 6.7.1.1.	Upgraded openssl to 1.1.1l	All Platforms
6.7.0.4 - SSH Pubkey Fingerprints Do Not Show in Switch Output [FIELD-7287].	The output of 'show crypto key pubkey-chain ssh' is empty despite pubkey is being configured on switch and working.	Not passing the correct arguments in sprint. Fixed the same.	All Platforms

Release 6.7.1.1 / 6.7.1.31

Summary	User Impact	Resolution	Affected Platforms
MAB authentication failure for supplicants via unmanaged switch [PSE035425] MAC Move (.1x feature) Support for 802.1x MAC Station movement on N-Series Hosts should be able to move across ports within a switch on the same or different VLAN without restriction, as if they had moved to a port on another switch. [FR4087]	Hosts should be able to move across ports within a switch on the same or different VLAN without restriction, as if they had moved to a port on another switch.	Supported this MAC MOVE feature in dot1x.	All Platforms

Release 6.6.3.17 / 6.6.3.47

Summary	User Impact	Resolution	Affected Platforms
Console/SSH/Telnet went unresponsive on multiple N3048EP switches [FIELD-6703, FIELD-6223].	If customer has login authentication & exec authorization via Radius server config, there is chance of memory leak and leads to management access issue like telnet, SSH and console access.	Added fix for management access memory leak, so that no issue with management access after this fix.	All Platforms
MAC address inconsistency (MAC MOVE) observed without traffic in stacking environment in some scenario [Field-6423].	MAC MOVE observed without traffic with LAG if packet ingress with one side LAG and other side physical port and if ARP get learned for this MAC through physical port. Will impact traffic.	Fixed the MAC move issue by fixing MAC sync issue with sdk shadow table.	All Platforms
private vlan translation missing in hardware table after reload [Field-6488]	In private LAN configuration mode, sometime after reload, private VLAN translation missed (did not retain PVLAN config) in HW table and will cause the traffic issue	Wrong macro is used for copying secondary VLAN MASK information where few bits of the VLAN mask are left out sometime, fixed the same	All Platforms
Query regarding PSU date-time from “show system power” output [FIELD-6650]	In stacking case, for member unit, PSU date-time field from “show system power” output always shows master unit uptime.	Buffer used to store the data/time for “show system output” was wrongly accessing master unit info, fixed the same.	All Platforms
Error message noticed on switch logs when POE devices are connected has no clarity. [FIELD-6499]	Message like “ERR Cmd with msgId(25) failed. rc(10)” in log message is not a proper log to understand.	Modified the error message in the user readable format.	All PoE Platforms
Private VLAN traffic via promiscuous port stopped working post reload [FIELD-7159]	In private LAN configuration mode, sometime VLAN traffic via promiscuous port stopped working as switch did not retain	Wrong macro is used for copying secondary VLAN MASK information, so after	All Platforms

	PVLAN configuration in HW table.	reloading, sometime few bits of the VLAN mask are left out sometime, fixed the same in the code.	
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Release 6.6.3.16 / 6.6.3.46

Summary	User Impact	Resolution	Affected Platform
Upgrade to 6.6.2.x, 6.6.3.x fails with ECC errors in N30xx-EP box with FLASH. [FIELD-6319, FIELD-6727]	N3000E-ON with certain flash type and/or HW Rev.6 exhibits ECC errors on bootup due to ECC strength mismatch.	<p>Fixed filesystem ECC strength issue via recovery logic.</p> <ol style="list-style-type: none"> 1) After downloading image version 6.6.3.46 to backup partition and entering "boot system backup" command from CLI, the recovery logic will look for the flash types MT29F32G08AB AAAP, MT29F8G08ABACA and/or HW Rev. 6, then perform file-system recovery. For other HW variants, it will just set the FLAGS as needed in recovery logic. 2) This recovery logic triggers on each unit (both N3000E-ON & N3132PX-ON) in the stack and it's applicable to standalone unit as well. 3) The ECC recovery logic will set a flag "recovery_done" at U-boot and create a file "recovery_done" under /mnt/fastpath directory as well. This flag at uboot and file under /mnt/fastpath directory will be created as part of recovery process on N3000E-ON and N3132PX-ON switches. 4) This recovery process will take up from 8 	N3000E-ON & N3132PX-ON

		<p>to 10 mins to complete. This recovery will be done only once and it will not occur in the future firmware upgrade attempts.</p> <p>5) Once recovery script trigger with "boot system backup", please do not reload (or) power-cycle the switch. Switch will reload on its own post completion of recovery.</p> <p>6) Also it is recommended not to downgrade after upgrade to 6.6.3.16 as it may cause file system corruption with N3000E-ON revision 6 and above. Please look into downgrade Note section for details.</p>	
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Release 6.6.3.14 / 6.6.3.44

Summary	User Impact	Resolution	Affected Platforms
Newly created user account is required to change the password on every login. [FIELD-6360]	Password expired, changed the password and it's required to change the password on every login attempt with that user.	Present time is going behind password time stamp because of HW and kernel clock mismatch. Used same clock source to fetch both.	ALL Platform
DHCP and ARP packets are forwarded between hosts in isolated VLAN after enabling DHCP snooping and ARP inspection. [FIELD-6469]	Enabling DHCP snooping and ARP inspection can cause DHCP and ARP traffic to leak between hosts in an isolated secondary VLAN.	Fixed DHCP packets leaking between hosts in an isolated secondary VLAN.	ALL Platform
Link-dependency configuration (add or remove) is not saved to startup-config. [FIELD-6594]	In a corner case, the Link-dependency configuration (add or remove) is not saved into the startup-config	Added condition to save the "link-dependency" from running config to startup-config.	ALL Platform
The "private-vlan mapping" commands return "interfaces fail to be configured" error. [FIELD-6592]	In a corner case, the error condition hits in CLI when mapping private-vlans under port-channel interface.	When trunk mapping commands are removed, the associated entry with that primary vlan index will be	ALL Platform

		deleted.	
Port-security sticky learns MAC address of IP Phone against Data-VLAN and Voice-VLAN. [FIELD-5532, FIELD-5683]	Switch-port port-security sticky learns MAC address of IP Phone against Data-VLAN and Voice-VLAN	Fixed issue with MAC address learning when CDP packet is received.	All platform
Multi-domain-Multi-host mode is not working as expected – Stale entry with NULL MAC observed. [Internal]	NULL MAC entry in the switch (00:00:00:00:00:00) is not allowing more clients to be accepted in the database.	Added appropriate checks to avoid the null mac entry in the authentication clients table.	ALL platform
1G SFP LX Optics on 10G Port is down with 6.6.3.42, the link came up with 6.6.3.40. [FIELD-6759]	Link will not be UP if 1G SFP is inserted into 10G port. This issue happens on 6.6.3.42 image.	SDK bug exposed with other fix, for 1G AN on quadra28 PHY used with N32xx, re-timing of PHY must be set, along with that AN must be restarted.	ALL platform
Timeout observed while accessing POE related SNMP OIDs. [Part of FIELD-5530, FIELD-6250, FIELD-6298]	Timeout observed while accessing few PoE related SNMP OID.	Being a slow path access in HW, it is taking time. Cached properly.	ALL platform
Reconciliation failed for db PORT_DB (2), error code -11' errors observed after stack failover. [Internal]	Cosmetic error without any functionality impact	Addressed the error log message issue.	ALL platform
N2200/S-Series - UDLD/FEFD compatibility issue and port-channel interface keep flapping. [FIELD-6770]	Customer will observe UDLD not working in case of LAG but working fine with physical port.	Fixed the logic in HW abstraction layer to handle LAG case.	ALL platform

Release 6.6.3.12 / 6.6.3.42

Summary	User Impact	Resolution	Affected Platforms
Stack Master crash when single dot1x session assigned with redirect-acl and redirect URL. [FIELD-6583]	Stack Master crash if we configure redirect-acl and redirect URL without certificate generated.	Fixed the crash, so crash is not observed even with wrong config.	All platform
N-Series - CoA action (reauth/port-bounce) from Cisco ISE as part of device-profiling activity fails. [FIELD-6562]	Attribute - 87 not supported, if COA request come with option 87, it fails	Added support for Attribute 87 as a session identifier in the DAS component as per the RFC 5176.	All platform
Request to automate "crypto key generate rsa" as part of DHCP/USB auto-install process (BMP). [FIELD-6581]	DHCP/USB auto-install with crypto key generate command failed	Added fix for DHCP/USB auto-install with crypto key generate command	ALL Platform
After failover in 3+ unit stack, some ports in member unit moved from 10G/1G auto to 1G/100MB auto. [FIELD-6423]	Only member unit, not master or standby unit UP ports will move from 10G or 1G auto to 1G or 100MB auto after failover.	Fixed this failover issue	ALL platform
Unicast flooding due to missing MACs in the "l2 show". [FIELD-6363]	Temporary flooding will be observed in stacking case because of wrong MAC age out	Fixed the MAC age out issue and now MAC age out is native unit(where MAC learn) dependent	ALL Platform

Release 6.6.3.10 / 6.6.3.40

Summary	User Impact	Resolution	Affected Platforms
VOIP device connected to downstream DUT is shown in "show isdp neighbors". [FIELD-6244]	downstream devices is shown in "show isdp neighbors"	ISDP policies were not applied properly, fixed the	All platform

		same	
Port-Channel with port-security enabled, member interfaces go inactive after peer host/switch reload. [FIELD-5917]	member interface on switch goes inactive, while the member interface on switch 1 (mgmt) remains UP along with the LG in PML is enabled	Issue with PML/port-security and LAG together in the config. Fix the interdependency issue	All platform
Radius authentication fails with hostname configured as radius server. [FIELD-6099]	RADIUS servers configured with hostname with non-default server name/group will not get resolved, So use IP address instead	RADIUS servers configured with hostname with non-default server name/group was not handled in the code, added the fix for the same	All platform
Multicast streams gets stopped after few minutes. [FIELD-5809]	If routing interface is configured, Multicast streams will not work even in L2 domain	L2 SSM, RPF checks is disabled but still validating the USP info, leading to failure if incoming port is routing interface.	All platform
Switch crash@isdptask. [Field-6164]	In very corner case, there is a chance of ISDP task crash because of segmentation error	There is a logic miss where chance of NULL pointer access in ISDP task context, so can lead to crash. Fixed the same	All platform
Multicast error messages when the source or receiver devices are rebooted. [Field-6187]	Logs like below appear DAPI: Command (245) DAPI_CMD_ROUTING_INTF_MCAST_PORT_ADD not supported in this build	side effect to IGMP and Multicast SSM feature in L2 with a change to SSM logic.	All platform
Option 82 Cosmetic Log Errors. [FIELD-6317, FIELD-6318]	After upgrade the switch from 6.6.0.37 to 6.6.3.36, below error may get observed "IP_HELPER[IpHelperTask]: relay_main.c(1584) 77630 %% NOTE DHCP relay configured to insert option 82, but option not found in message returned from server 0.0.0.0"	Removed the log as it has no more significance with the introduction of Server-override and Link-select options.	All platform
N3048ET-ON - ECC Errors - Revert fix for 8-bit bit ECC. [FIELD-5881, FIELD-5882]	With 6.6.3.8, some N30xxEP switch may observe ECC error during reboot or upgrade to 6.6.3.8 and forced to go for backup image	Issue with N30xxEP with new MT29F8G08ABAC A flash	N3024 EP and N3048EP with flash MT29F8G08ABAC A
Switchport private-vlan trunk command has been removed and re-added after restart to allow traffic. [FIELD-6345]	After configuring private-vlans, it may need to remove and re-add the private-vlan trunk command on PO2 to get traffic to pass out of switch.	After the reload vlan routing interface is down when private vlan's are configured on the interface, hence notification is missing, fixed the same	All platform

Release 6.6.3.8 / 6.6.3.38

Summary	User Impact	Resolution	Affected Platforms
Dell qualified optics is displayed as invalid transceiver in syslog. [FIELD-5705]	Customer qualified optics if they are not compliance will standard, will be displayed as invalid	If SFP standard check failed, then check customer supported/validated optics.	All platform

VRRP track IP route configuration not getting synced with the running config. [Field-5806]	Unable to see the "vrrp track ip route" configuration in the show run or show vrrp. It is just the display issue.	New API is added to fetch the default track IP route	All platform
N3048ET-ON - ECC Errors. [FIELD-5881, FIELD-5882]	No functional impact but box with FLASH MT29F8G08ABACA will have some ECC error during reboot.	MT29F8G08ABACA need 8-bit ECC, so added the same	N30xxEP
Configuration cosmetic issue in when deleting member ports in LAG. [FIELD-5977]	Remove and add using GUI interface may not work	Fixed the GUI page	All platform
DNSE/6.6.3.3 - N-Series - Critical Voice-VLAN is not working as expected with multiple radius-servers configured. [FIELD-6014]	1) With multiple radius-servers configured (let one for auth and another for login) - If somehow radius-server communication got break, it marks radius-server as dead with the usage "authmgr". But the radius-server is not marked as dead with the usage "login". Here if authentication happens, the phone MAB session is terminated and not moved into "Critical voice vlan" with multiple radius servers configured 2) Trying to authenticate with the critical vlan then see that authmgr traces shows that critical vlan is working as expected but method shows "mab" which is wrong. Display issue 3) Specific scenario happens if radius-server is marked dead right at the time of client re-authentication happens, "Client xxx was not a voice client" like log will get observed and confuse the customer.	All these 3-scenario got fixed	All platform
Stack member reboot while running TDR test. [FIELD-5774]	Sometime Cable TDR test may split the stack if run continuously	Give a special priority to RPC message generated for PHY APIs related to TDR test	All platform
[Re-authentication behavior with switch-port configured with "override authentication". [FIELD-DNSE]	Voice_vlan_override with reauth has some issue	Fixed Voice vlan override and reauth inter communication	All Platform
"Failed to power up spare pair" keeps showing up in syslog. [FIELD-6054]	When PD requests to enable spare pair via LLDP, log observed. No functional impact	Do not advertise PSE four pair as supported via LLDP if HW has no support it	All Platform
EAP failures due to LLDP timing issue with Avaya IP Phone. [FIELD-6117]	EAP failures due to LLDP timing issue with Avaya IP Phone as Phone reboots. No issue with cisco phone	On a LLDP timeout, voice-vlan will remove its entry only if the entry was not created by authentication	All Platform
Switch losses its BGP password after reload [FIELD-6118]	BGP password with more than 15 characters has the issue	Fixed the BGP password buffer issue	All Platform
N-Series - HiveAgent version upgrade to 1.1.29.0. [FIELD-6205]	Old HA 1.1.18.0 version is present before 6.6.3.8 image	Upgrade to 1.1.29.0 version	All Platform

Release 6.6.3.6 / 6.6.3.36

Summary	User Impact	Resolution	Affected Platforms
N-Series - Radius authentication is not working with "radius server" configured with hostname. [FIELD-DNSE, FIELD-5714, CS00011021204]	Unable to send authentication requests to radius server when configured using the Host Name.	Now we can use DNS name instead of IP address for radius server	All Platform
N1124T-ON/N1108T-ON - HW and CPLD Version is "0" after upgrading to 6.6.3.2 [FIELD-DNSE, FIELD-5934, CS00011383434]	HW and CPLD Version is "0" after upgrading to 6.6.3.2 on non-PoE N11xx switch	Fixed the code so that version information will be updated properly	N11xx non_PoE switches
"Copy Parameters From" option to Copy LLDP Config from GUI does not work [FIELD-5463, CS00010937128]	Trying to configure the LLDP using "Copy Parameters FROM" option (Switching->LLDP->Configuration->Show All) to copy from one port to other ports is now working.	JS file content not taken care to copy parameters from one port to another port, fixed the same	All platform
N-Series - RADIUS Accounting interim and stop packets doesn't include Framed IP address even though Attribute 8 is configured [FIELD-5765, CS00011320233]	RADIUS Accounting interim-update and stop packets are not including Attribute 8 Framed IP address even though it is configured	After fix, now framed IP address shows in Accounting Start packets, Interim and stop packets.	All Platform
Cannot specify "loginSessionStartStopTrap" in snmp-server filter [Field-5762, CS00011325478]	If Customer want to suppress the loginSessionStartStopTrap using snmp-server filter, it fails with the message "Incorrect input!"	Now this issue is fixed, so traps will get generated for loginSessionStartStopTrap	All Platform
N3132PX-ON - Boot-code is downgraded to version 1.0.22 after updating boot-code with 6.6.3.x [FIELD-DNSE, CS00011383411]	N3132PX-ON - Boot-code is downgraded to version 1.0.22 after updating boot-code with 6.6.3.x. It supposed to be "U-Boot 2012.10-svn1713 (Aug 27 2018 - 10:03:03) - ONIE 4.29.1.6 - Bristol N3132PX version=v1.0.23". No user impact as such.	Updated boot-code to 1.0.23, so now boot-code version on FW v6.6.3.34 - U-Boot 2012.10-svn1713 (Aug 27 2018 - 10:03:03) - ONIE 4.29.1.6 - Bristol N3132PX version=v1.0.23	N31xx specific
All ports are in "Detach" state after upgrading to 6.6.3.30 [FIELD-5859, CS00011437921]	Max vlan creation (if vlans more than 4088) will lead to USL sync issues due to which ports will not be enabled after reload, so will be in detached state.	Now after fix, we can configure upto MAX VLANs supported and port will be Up without any issue.	N31xx, N21xx, N20xx and N30xx.
N-Series - VoIP Phones are rebooting constantly with "switchport voice vlan override-authentication" [FIELD-5969, CS00011568791]	N-Series - VoIP Phones are rebooting constantly with "switchport voice vlan override-authentication"	If override is enabled, if the client is deleted from auth mgr and added again. There is one corner case where client adding and deleting and re-adding continued in a loop. Fixed the same	All Platform
N3048EP-ON Stack crash with dot1x/mab "Out of system buffers" issue [FIELD-5859, CS00011594105]	There is a corner case where When the client stops the response to the 802.1X request id, there is a buffer leak. If issue repeat, there is chance of crash because of lack in memory/	When the client stops the response to the 802.1x/MAB request id, code expect to release the earlier buffer. In this flow, there is corner	All Platform

		cased missed. Added the same.	
High CPU, authentication issues and very sluggish management [FIELD-5861, FIELD-DNSE, CS00011454317, CS00011603267]	With reload, if there is high DHCPv6, DHCP packet and other IPv6 multicast traffics in network, CU is going high and lead to other control packets drop/unprocessed.	DHCP pinhole enabled by default which sometime cause high CPU if there is flood in DHCPv6, DHCP packets and other IPv6 multicast traffics, so disable it by default	All Platform
N2248PX-ON - Stack master crash with "radius_task" crash [FIELD-DNSE, CS00011616776]	With accounting enabled, there is chance of crash because of radius_task because of memory corruption	Identified the reason for memory corruption with addition for support to attribute 8 and fixed the same	All Platform
N3048EP-ON - Stack master crash with "cpuUtilMonitorTask" [FIELD-5856, CS00011236933]	With DNS, there is a UDP active sockets where in corner case, fd value reset without closing the socket. So, at the end the box crash because of out of socket	We have fixed the issue where we properly reset the socket fd value only after closing the socket	All Platform
DHCP snooping binding database gets changed when a MAC address moves to another port [FIELD-5702, CS00011225368]	Customer wants to enable Protection Against DHCP Snooping Database Attacks using Port security.	Now we have tied-up the port security feature with DHCP snooping. So -> Existing snooping entries are not removed if a static MAC binding is moved to a different port.	All Platform
Multicast streams gets stopped after few minutes [FIELD-5809, CS00011441334]	IGMPv3 reports with exclude option has the issue. If there is a include option in the IGMPv3 report from the receiver, no issue	Added the fix as now image should work with both IGMPv3 include and exclude option	All Platform
N3048EP-ON - Stack master crashes with "nim_t" task [FIELD-5894, CS00011479321]	Repeated STP convergence and re-convergence occurs due to expiry of spanning-tree timers depending on the number of BPDUs being transmitted and received per second. This results in frequent TCNs floating in the topology and crash.	Modified the logic, so that Switch send one BPDU when root port agrees to the received new root information as part of state machine	All Platform
N2248PX-ON - Switch sends "EAP failure" as there is no response to "Request, TLS EAP" but with different EAP type and same ID [FIELD-EJ, CS00011594285]	There is one corner case where EAP failure is resultant of the access-reject. Here Radius server is sending Access-Reject as it received incorrect Request-Id	When the EAPoL start is received, the request Identifier in EAPoL req-Id should be incremented. Since the same is not incremented, the radius is treating the same as exchange of earlier conversation and rejecting. We have fixed the issue	All Platform

Release 6.6.3.3 / 6.6.3.33

Summary	User Impact	Resolution	Affected Platforms
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Voice VLAN assignment is not working on dot1x capable IP Phone (Avaya) [FIELD-5649, CS00011161496]	When dot1x and authentication open is enabled, in Multi-Domain-Multi-Host mode, sometime client doesn't put in the voice vlan when authentication triggers. Also, Voice VLAN assignment may not working on dot1x capable Avaya IP Phone (interop issue)	Modified the functionality to trigger the dot1x authentication first and if fails then it provides access to the client with open authentication. Also did some cleanup	All Platform
N-Series - Port-security sticky learns MAC address of IP Phone against Data-VLAN and Voice-VLAN [FIELD-5532, FIELD-5683, CS00011032974]	Switch-port port-security sticky learns MAC address of IP Phone against Data-VLAN and Voice-VLAN	MAC address is learned when CDP packet is received. Fixed the issue	All platform
Monitor capture remote feature doesn't work on 6.6.0.x/6.6.2.x; but works in 6.5.[FIELD-5610, CS00011136730]	Remote capture setting will not work	Fixed the socket clear issue	All Platform
DHCP Option-82 (with value "Missing") is included in the relayed packets by default [FIELD-5713, CS00011229984]	Some server if receive packet without value option, will reply with option-82 and switch will ignore these packets	DHCP Clients are not getting IP address assigned	All Platform
N2200 - EAPOL Start packet received from dot1x client (VoIP Phone) affecting the existing active Voice VLAN client [FIELD-EJ, CS00011249299]	When switch receives the EAPOL pkt from the authenticated voip client and authentication is failed as it considers it as another client and we have one voip is restricted	If switch receives the eapol pkt from the authenticated client then considering like as a re-authentication	All Platform
6.6.2.x/F-5742/Traffic being routed incorrectly when OOB interface is up [Field-5742, CS00011276650]	Ping to the routed ip takes a different route through OOB instead of the default inband vlan.	Fixed the kernel issue	N3000 specific
Stack master logs show incorrect date [FIELD-5643, FIELD-5517, CS00011043002]	When the time zone adjustment is a negative value, the result is wrapped around, leaving a very large number	Changed the variable that saves the timezone value to a signed integer	All Platforms
Private-VLAN - ARP does not work on promiscuous trunk port [FIELD-5671, CS00011193922]	Issue is seen when the switch with private vlan configuration is rebooted	Clash between dot1ad and other Metro components like dot3ah, dot1ag(CFM) and dvlan (q-in-q) is removed	All Platforms

Release 6.6.2.9 / 6.6.2.39

Summary	User Impact	Resolution	Affected Platforms
MAC MOVE causes traffic loss [FIELD-5207, CS00010600296]	After upgrading MAC address is learned on ports in blocked state causing traffic loss	Corrected rule for blocked ports	All Platforms
Error log log "voip_control.c(181) 83930 %% INFO VOIP mode on interface Po1 is disabled. Control frames will not be processed" [DNSE, CS00010725088]	Info message being logged as an error	Corrected severity of this message	All Platforms
VLAN interface fails to complete the DHCP renewal process and stay at "Down" state [DNSE, CS00010632503]	When performing a "renew dhcp vlan 1" and "relase dhcp vlan1" continuously, VLAN interface goes into DOWN state	Corrected renew timer problem	All Platforms
MAB authentication stops working after message - %% WARN mabTimerStart: Could not Start the MAB_SERVER_AWHILE timer [FIELD-5340, FIELD-5427, CS00010761869]	Disabling MAB on an interface may impact the mab timers on other interfaces.	Corrected MAB register check	All Platforms
VRRP - Ping to Virtual Secondary IP drops [FIELD-5182, CS00010756062]	Ping traffic to VRRP VIP drops when the secondary IP addresses is	Corrected adding VRRP	All Platforms

	configured	VIP secondary address to the ARP table	
Dot1x client is placed into "Guest VLAN" with both 802.1x capable IP Phone and PC on the same port (with multi-domain) [FIELD-5300, CS00010853575]	Dot1x client is authenticated in Guest-Vlan if Unauth-VLAN and Guest-VLAN are configured to be the same VLAN. If Both configured to different VLAN then dot1x client is un-authenticated VLAN only.	Correct authentication check for guest VLAN.	All Platforms
SSH Client's Source-IP of failure login attempt is not available in the syslog [DNSE, CS00010848927]	SSH Client's Source-IP of failure login attempt is not available in the syslog	Correcting logging error when sending to a syslog server	All Platforms
Stack ports are not coming with 7m DAC cable after upgrading [FIELD-5392, FIELD-5409, CS00010824126]	Stack port HW configuration is causing data transfer errors	Corrected HW configuration error	N11xx
Loud fan noise and fan error [FIELD-5483, CS00010992712]	Fan state in PoE switch is showing failure and FAN noise is very high	Corrected fan initialization sequence	N11xx
Route-map support is removed in 6.6.2.x release causing config-migration failure [FIELD-DNSE, CS00011072217]	Feature removed due to DNSE request	Restored feature	N20xx N21xx

Release 6.6.2.5 / 6.6.2.35

Summary	User Impact	Resolution	Affected Platforms
Switch with MLAG, messages "MAC moving for entry type 9 to type 1" [Field-5192, CS00010599599]	Mac movement and Mac entry-type change in the same log message is causing the confusion	Created two messages, one for each condition	All Platforms
Unable to configure IP addresses, logs indicate Max routes reached [FIELD-5179, CS00010565731]	Unable to configure IP addresses, logs indicate Max routes reached	Modified OSPF to update Best Route Clients	All Platforms
Insert/Deletes/Drops Logs are occurring frequently and intermittent phones resets [FIELD-5286, FIELD-5273, CS00010688644]	Confusing trap log :traputil.c(721) 16854628 %% NOTE Inserts: 137354 Deletes: 0 Drops: 0 Ageouts :1	Modified message to provide a better understanding of the condition	All Platforms
Switches are bricked after rebooting post CPLD update with 6.6.2.0 code [FIELD-5367, FIELD-5368, CS00010799189]	Upgrading the CPLD to the version in the 6.6.2.0 release will render the switch inoperable	Replaced corrupted CPLD image	N20xx N30xx
Switch in boot loop after upgrading from 6.5.2.35 to 6.6.2.30 [FIELD-5370, CS00010804313]	Switch crashes on boot if an addin card is present in the switch	Corrected addin card enumeration	N30xx N31xx
Some CISCO Phones can't power up switch is upgraded to 6.6.2.30 [Field-5378, CS00010808504]	Switch is unable to power legacy phones	Restored legacy phone power profile	All PoE platforms
Removal of Loopback interface support causing config migration failure after upgrading to 6.6.2 [FIELD-DNSE, CS00010819758]	Loopback feature is not functioning	Corrected tunnel problem that blocked loopback feature	All Platforms. Not applicable for N11xx and N15xx.

Release 6.6.0.24 / 6.6.0.54

Summary	User Impact	Resolution	Affected Platforms
Media in Fiber slots showing "unknown" after few days [FIELD-4848, CS00010067343]	Incorrect transceiver status. Could cause false negative status.	Corrected transceiver status query	All Platforms

Unable to set the ACL match rule to a class if ACL has more than one Rule [FIELD-4883, CS00010139205]	Switch runs out of ACL match rules	Increased rules from 6 to 32	N11xx
Configuring description for a port from GUI causes the port to go down [FIELD-4987, CS00010323786]	Port goes down, when configuring description name in GUI	Corrected handling of new duplex fields	N20xx N30xx
Error in GUI when trying to delete or edit vlan while the monitor session configuration is present [FIELD-5037, CS00010386529]	Error message in GUI when trying to delete or edit vlan while the monitor session configuration is present	Corrected check for VLAN components	All Platforms
VLAN interface fails to release/renew dhcp address [FIELD-5068, CS00010414469]	VLAN interface fails to release/renew dhcp address	Corrected conflict between release timer and DHCP release request	All Platforms
Intermittent ping loss to switch causing video application to fail over [FIELD-4870, CS00010237720]	Intermittent ping loss to switch	Corrected Ping issue in Linux Kernel	N15xx
Switch doesn't reply with agreement BPDU for the proposal BPDU in RPVST mode [FIELD-4977, CS00010282531]	Switch does not reply with agreement BPDU for the proposal BPDU in RPVST mode	Corrected STP timer issue	All Platforms
Port Speed Changes When Config Applied from GUI [FIELD-5163, CS00010536633]	When configuring interface via the GUI, if port Speed is Auto and "Apply" is selected without changing anything, then port will go down and statically set speed	Corrected handling or new port speed fields	N20xx N15xx

Release 6.6.0.23 / 6.6.0.53

Summary	User Impact	Resolution	Affected Platforms
VIP not pinging and inter-vlan routing not working [FIELD-4227, CS00009153007]	VRRP - VIP not pinging and inter-vlan routing not working	Corrected VRRP MAC address issue	All Platforms
SNMP walk on "ipNetToPhysicalTable" is not giving any output for entry in "show ipv6 neighbours". [Internal]	The ipNetToPhysicalTable does not return all IPv6 entries.	Corrected retrieval of IPv6 entries	All Platforms
DHCP Packets are flooding on ingress interface with "authentication enable" set [FIELD-4975, CS00010338047]	If source and destination MAC of a packet is learnt on the same interface, the packet ingressing the interface is sent out on the same interface resulting in packet loop	Corrected packet forwarding issue	All Platforms
Users unable to login when TACACS server is set to priv-lvl-1 [FIELD-4990, CS00010319607]	SSH login authentication is not working with level 1 user.	Corrected additional SSH issue	All Platforms

Release 6.6.0.21 / 6.6.0.51

Summary	User Impact	Resolution	Affected Platforms
dot1x port going to the wrong guest/no-response VLAN [FIELD-4522, CS9575660]	After logged off windows pc client is still authenticated in unauthenticated VLAN	Corrected logoff response	All Platforms
Added log when MAB client authentication is cleared due to inactivity timer [Internal]	Added log when MAB client authentication is cleared due to inactivity timer	N/A	All Platforms
Switch crash during issuing commands [FIELD-4863, CS10113622]	Switch crash during issuing commands	Corrected deadlock in dot1x commands	All Platforms
Kernel route gets added in the routing table causing traffic disruption [FIELD-4844, CS10064130]	The default gateway is not installed in the Kernel and the connectivity is lost	Corrected issue adding kernel routes	All Platforms
SrcIP (other than ANY) in RACL/DACL is replaced with client IP address [Internal]	Radius server request occasionally changes ACLs	Corrected problem with Radius server requests	All Platforms
Add support for ipAddressTable &	Add support for ipAddressTable &	Add support for	All

ipNetToPhysicalTable [FIELD-4737, CS9873715]	ipNetToPhysicalTable	ipAddressTable & ipNetToPhysicalTable	Platforms
Missing dot1x port parameters on the GUI [FIELD-4555, CS9644854]	Switching -> Network Security -> Dot1x Authentication -> Authentication -> Detail	Added missing parameters	N15XX
Switch stack went unresponsive and nim_t crash [FIELD-5018, CS10354048]	Switch stack went unresponsive and nim_t crash	Corrected deadlock in dot1x commands	All Platforms
Client IP in ACL does not change if there are multiple ACLs [Internal]	SrcIP match does not change for the Redirect ACL once the IP goes away from the client	Corrected problem with updating Src IP	All Platforms
Redirect ACL rules get deleted when reprogramming with no Src IP address for the client [Internal]	Redirect ACL rules get deleted when reprogramming with no Src IP address for the client	Corrected problem with first ACL rule	All Platforms
DHCP packet forwarding does not consider max users on the port [Internal]	Clients get DHCP IP even after port max-user limit has been reached	Corrected max user check	All Platforms
Handle rules with duplicate rule numbers in DACL [Internal]	If RADIUS sends ACL rules with duplicate rules numbers, the ACL should be rejected	Corrected Radius ACL rule check	All Platforms
Deny rule in redirect ACL is not letting the traffic to the HW instead it is dropped [Internal]	deny rules in Redirect ACLs should permit matching packets instead of dropping them.	Corrected Redirect rule	All Platforms
MAB authenticated device cannot communicate [Field-4820, CS10049102]	MAB authenticated device cannot communicate	Corrected VLAN assignment issue	N11XX

Release 6.6.0.17 / 6.6.0.47

Summary	User Impact	Resolution	Affected Platforms
Missing dot1x port parameters on the GUI after upgraded to 6.6.0.13 [FIELD-4555, CS9644854]	Port parameters table is not showing in Switching->network security->Dot1x authentication->authentication page when we upgrade from 6.5.4.x to 6.6.0.x	Corrected web page handlers	N15XX
SNMPv3 traps are sent by the switch but not processed by the trap receiver. [FIELD-4589, CS9699512]	SNMPv3 traps are sent by the switch but not processed by the trap receiver	Corrected trap data issue	All
Crash dump logs are incomplete	Crash dump logs are incomplete	Corrected crash dump	All
Port channel hashing black hole traffic [Field-4725, CS9882032]	Unable to reach IP clients through a port channel	Corrected port channel hashing problem	All
Management Access-list not Functioning Correctly [FIELD-4677, CS9818158]	Management access-list is not functioning with physical interface option	ACLs are supported on VLANs and not physical ports or port channels. Removed CLI option.	All
CoA feature is not working with "ERR Timestamp issue. Packet discarded" [PSE-PoC, CS9823420]	Difference in Radius and switch clock caused rejection of COA from Radius server	Added enhanced timer functionality	All
SSH enable password can be exposed if ssh client includes a remote command	The "****" characters meant to hide the password do not hide the password	Corrected SSH password handling	All
Missing VLAN tag from switch-port causing IP Phone to reject DHCP Offer packet [FIELD-4636, FIELD-4783, CS9875140]	Switch will not send voice vlan tagged traffic to the phone	Corrected Voice VLAN problem	All
Compellent replication failure [FIELD-4830,	SolarFlare PHY causes ECC error	Change to handle	N2XX

CS10046486]	causing packets to drop	SolarFlare PHY data problem	N3XX copper only
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Release 6.6.0.15 / 6.6.0.45

Summary	User Impact	Resolution	Affected Platforms
Half Duplex option not present in WebUI dropdown under port configuration [FIELD-4315, CS9227962]	Unable to set half duplex settings in WebUI	Added support to the web page	N15xx
SNMP Traps for LinkDOWN events shows incorrect content [FIELD-4397, CS9396101]	Incorrect operational state of the port when traps are set, even when the cable has been removed from the port	Corrected trap error	All
BGP MD5 authentication doesn't work [FIELD-4302, CS9218257]	BGP MD5 authentication doesn't work	Applied kernel fix	N3xxx
IP Helper UDP destination port range in WebUI is not correct (1-65535), it should be 0 - 65535 [Field-4379, CS9337280]	IP Helper UDP destination port range in GUI is incorrect 1-65535 - should be 0 - 65535	Corrected range value	All
WebUI green-mode disable does not work [FIELD-4392, CS9331164]	Unable to disable the green ethernet EEE admin mode with default EEE tx-idle-time as 34	Corrected Green-Mode disable issue	All

Release 6.6.0.13 / 6.6.0.43

Summary	User Impact	Resolution	Affected Platforms
Unable to Ping/Telnet management IP (VLAN 154) with multicast traffic on the same VLAN [CS8566096, FIELD-3918]	Unable to Ping/Telnet management IP (VLAN 154) with multicast traffic on the same VLAN	Corrected routing to CPU for processing	All
HiveAgent Certificate upgrade N1100/N1500/N2000/N2100/N3000/N3000E/N3132 [CS9249896]	Upgrade Hiveagent to version 1.1.29.0	Upgrade Hiveagent to version 1.1.29.0	All
Unexpected additional characters show for OID: .1.3.6.1.4.1.674.10895.3000.1.2.100.1.0 [CS9227198, FIELD-4319]	When fetching the switch info, it's displaying the junk characters with switch name.	Corrected string length problem	All
Crash dump output gets truncated due to stack debug dumps	Crash dump output gets truncated due to stack debug dumps	Corrected file write size limit problem	All
Asset tag field value not retained after switch reload [CS9238760, FIELD-4325]	Configured asset tag does not retain after switch reboot	Corrected asset tag initialization error	N11xx N21xx N31xx
Devshell command to check the supported ciphers and mac is missing [CS9253824]	Add command to display SSH server supported ciphers and MAC algorithms	Added command to display supported ciphers.	All
Higher level ciphers not available in SNMP [CS9239501, FIELD-4321]	Missing higher cipher level support for SNMP	Added AES128 support for SNMP	All

Release 6.6.0.10 / 6.6.0.40

Summary	User Impact	Resolution	Affected Platforms
LEDs on ports 12 and 13 lit with no cable inserted when ports 5 and 6 are populated. [FIELD-4164, CS8969844]	POE controller port mappings were wrong for some front panel ports causing the wrong LED to illuminate	Corrected port map	N11xxP
Updated PoE controller firmware	Updated PoE controller firmware	Updated PoE controller firmware	N11xxP
Match statement with community-list disappears from route-map after a reload [FIELD-4160, CS8919589]	Match statement with community-list disappears from route-map after a reload – not seen in the running-config	Corrected order in the startup-config	All Platforms

Stack went unresponsive intermittently and recovered on its own [FIELD-4143, CS8902088]	Stack went unresponsive intermittently and recovered on its own	Corrected problem gathering information on disconnected units	All Platforms
Crash dump output getting truncated due to stack debug dumps [Internel]	Crash dump output is being truncated	Adjusted crash dump file size limit	All Platforms

Release 6.6.0.7 / 6.6.0.37

Summary	User Impact	Resolution	Affected Platforms
Stack member goes unresponsive or resets frequently. [FIELD-3617, CS7624486]	ATP timeouts and lost stacking keep-alive packets resulting in stack instability	Additional buffers allocated to accommodate high priority stacking packets	All Platforms
Stack Master becomes unstable with CPU timeouts causing management interruptions and authentication issues. [FIELD-3176, FIELD-3538, CS6078844]	ATP timeouts and lost stacking keep-alive packets resulting in stack instability	Additional buffers allocated to accommodate high priority stacking packets	All Platforms
Stack instability issue and ATP/RPC logs on console. [FIELD-3869, CS8295367]	ATP timeouts and lost stacking keep-alive packets resulting in stack instability	Additional buffers allocated to accommodate high priority stacking packets	All Platforms
Issue configuring LAG member interfaces via WebUI [FIELD-3900, CS8361572]	Interface is not being removed from LAG with Delete operation	Corrected Web page operations	All Platforms
Interface is not being removed from LAG with Delete operation. [FIELD-3918, CS8566096]	Non-active interface is not being removed from LAG with Delete operation	Corrected LAG delete for non-active physical ports	All Platforms
WebUI - Dynamic ARP Inspection page is missing [FIELD-4035, CS8701166]	Dynamic ARP Inspection page is missing	Corrected feature check which then enabled the web page	All Platforms
Unable to remove SNTP server configuration with name contains underscore. [FIELD-3976, CS8591205]	SNTP server is not deleting if server name contains underscore special character.	Corrected check for underscore	All Platforms
Switch hangs when attempt to login with multiple radius-servers (with DNS names) configured [FIELD-3991, CS8639126]	Switch hangs when attempt to login with multiple radius-servers (with DNS names) configured	Corrected setting DNS entry to active	All Platforms
Series switches have trail Z even if timezone is specified [CS8468039]	N-Series switches have trail Z even if timezone is specified	Changed trailing z to only be present if the time is displayed in UTC	All Platforms
Switch stops forwarding traffic [FIELD-4044, CS8708090]	Switch stops forwarding traffic	Corrected deadlock between forwarding tasks	All Platforms
TCP SACK Vulnerabilities [FIELD-3922, CS8433605]	CVE-2019-11477, CVE-2019-11478	Added patches to mitigate CVE issues	All Platforms
PoE error warnings Failed to power up spare pair Gi1/0/x [FIELD-3971, CS8629241]	Message: Failed to power up spare pair Gi1/0/1	Added UPoE functionality for LLDP	All PoE platforms
Some of the MAC movement messages has additional FFFFFFFF in MAC addresses [FIELD-3518, CS7304375]	MAC address displayed incorrectly in log	Corrected display of unsigned value	All Platforms
VLAN membership page does not get loaded [FIELD-2523, CS3745446]	VLAN membership page is not loading.	Corrected Web page template error	N11XX
MAC Address movement logging & traps [FIELD-SBI, CS5541938]	MAC movement message from debug logging level	Improved the MAC movement notification	All Platforms

		messages with the actual interface IDs	
DHCP Client fails to get IP address assigned with dot1x mac-based authenticated port. [FIELD-3104, FIELD-3619, CS5837205]	Client MAC entry is not deleted from member units after the client is disconnected	Corrected MAC entry event	All Platforms
Random crashes on nim_t and lockups [FIELD-2715, CS4474679]	Error messages "Unexpectedly received End TLV for VLAN instance index(46). Messages received are out of order"	Corrected data reset problem when messages across the stack are received out of order	All Platforms
Stack Master becomes unstable with CPU timeouts causing management interruptions and authentication issues [FIELD-3176, FIELD-3538, CS6078844]	Error messages "Unexpectedly received End TLV for VLAN instance index(46). Messages received are out of order"	Corrected data reset problem when messages are received out of order	All Platforms
Switch stops forwarding the traffic with MAC table full and ARP hash collision logs [FIELD-3266, CS6307800]	Switch stops forwarding IPv6 traffic with MAC table full and ARP hash collision logs	Corrected IPv6 HW table update	All Platforms
SNMP table 1.3.6.1.2.1.17.7.1.2.2 OID returns unexpected character [FIELD-3327, CS6466035]	Occasionally dot1qTpFdbStatus gets set to null when doing a snmpwalk.	Corrected status entry check	All Platforms
Stack member crashes with bcmATP-RX and memory errors [FIELD-3472, CS7098608]	Stack member crashes with bcmATP-RX and Memory errors.	Corrected stack message receive problem	All Platforms
System LED reports a non-critical error [FIELD-3573, CS7472237]	Occasionally a false RPS detection is processed during boot-up, system LED reports a non-critical error	Increased retry count if RPS error is detected	N15XX
MAC address not learned on specific port (with/without EEE enabled) [FIELD-3591, FIELD-3581, CS7533743]	MAC address learning is not consistent and port shows link-up with no receive traffic	Adjusted Autoneg negotiation between MAC and PHY	N20XX N30XX N21XX N31XX
Radius key length > 48 bytes results in failed login (SSH/Telnet) authentication [FIELD-3614, CS7611458]	SSH authentication is not working if radius key length is more than 48	Increased MD5 buffer and Password buffer length to support maximum Radius secret key length	All Platforms
Unable to power Zipline Ethernet device [FIELD-3605, CS7666321]	Certain legacy devices are being reported as an illegal class	Modified processing so these devices will be treated as class 0 devices	N15XXP N20XXP N30XXP
BGP Peer switches not learning primary path with stale ARP entries [FIELD-3528, CS7725354]	ARP entries are not aged from the ARP table when added by Linux. Linux entries are duplicate entries and not needed	Modified ARP update to account for Linux entries	All Platforms
Stack LED is off on Stack Master [FIELD-3658, CS7727848]	Occasionally Stack Master LED is not getting set properly to reflect it as master in the stack.	Increased read count to increase accuracy of CPLD read	N15XX
Dot1x/MAB stopped working with "RADIUS: could not get buffer" message [FIELD-DNSE, CS8065917]	Occasionally Radius server is receiving an incorrect IP address when connected to the OOB port	Modified address initialization for OOB port	All Platforms
DHCP clients not getting IP address assigned. [FIELD-DNSE, CS8144819]	DHCP packets are being dropped for LAGs, DHCP pinholeing not looking up unicast MAC correctly	Correct issue with DHCP across LAGs, and FDB lookup	All Platforms
Port-channel load-balancing failure [FIELD-3838, CS8222791]	Load balancing problem over HiGig port and stack ports	Modified HASH setup for RTAG7 hashing	All Platforms
snoopTask and pimsmMapTask causes high CPU when default vlan is configured as bsr-candidate [FIELD-3876, CS8348233]	snoopTask and pimsmMapTask causes high CPU when default vlan is configured as bsr-candidate	Modified bootstrap processing for PIM	All Platforms

VRRP VIP MAC not being learned on certain VLANs on BACKUP site [FIELD-3904, CS8362413]	VRRP VIP MAC not being learned on certain VLANs on BACKUP site	Corrected initialization for VRRP Backup site	All Platforms
After reload of stack standby, if another member unit is reloaded, ports of that member go to Detach state [internal]	After reload of stack standby, if another member unit is reloaded, ports of that member go to Detach state	Only reinitialize port resources if the stack master is reloaded	All Platforms
With DHCP snooping enabled, DHCP packets received on trusted port are sent back on the same port on routing VLAN [internal]	With DHCP snooping enabled, DHCP packets received on trusted port are sent back on the same port on routing VLAN	Corrected check for DHCP and incoming router interfaces	All Platforms

Release 6.5.3.7 / 6.5.3.37

Summary	User Impact	Resolution	Affected Platforms
Stack member crash and stack stability issues [FIELD-3372, FIELD-3678, FIELD-3299, FIELD-3372, FIELD-3423, FIELD-3436, FIELD-3699, CS7624486, CS7828371, CS6913078, CS6369121]	Stack stability issues were caused by a thread lockup under certain conditions.	Redesigned tasks to avoid the conflict.	All Platforms
Unable to power Zipline Ethernet device [FIELD-3605, CS7666321]	Certain legacy devices are being reported as an illegal class	Modified processing so these devices will be treated as class 0 devices	N15XXP N20XXP N30XXP
STP BPDU were sent out on STP disabled interfaces [FIELD-3620, CS7669741]	During failover, STP BPDU were sent out on STP disabled interfaces	Added additional checks for disabled ports	All Platforms
Web Application Vulnerable to Clickjacking [FIELD-3501, CS2499610]	Web Application Vulnerable to Clickjacking	Applied the fix	All Platforms
Switch fails to boot after loading OS6 image from ONIE [FIELD-3631, CS7693103]	Switch fails to boot after loading OS6 image from ONIE	Modified environment variable for u-boot	N3048EP-ON
Inconsistent behavior with dynamic vlan assignment with force auth [FIELD-3621, CS7709597]	Inconsistent behavior with dynamic vlan assignment with force auth	Corrected data initialization problem	All Platforms
Radius key length > 48 bytes results in failed login (SSH/Telnet) authentication [FIELD-3614, CS7611458]	SSH authentication is not working if radius key length is more than 48	Increased MD5 buffer and Password buffer length to support maximum Radius secret key length	All Platforms
Switch stops forwarding the traffic with MAC table full and ARP hash collision logs [FIELD-3266, CS6307800]	On occasion, IPv6 global host address do not get removed from the HW table	Corrected IPv6 address removal issue	All Platforms

Release 6.5.3.6 / 6.5.3.36

Summary	User Impact	Resolution	Affected Platforms
Some of the MAC movement messages has additional FFFFFFFF in MAC addresses [FIELD-3518, CS7304375]	MAC address 0007.430C.9551 is presented as 0007.430C.FFFFFFFF9551	Corrected display of MAC addresses	All Platforms
Radius based SSH login fails with multiple radius-servers configured. [FIELD-3508, CS7248785]	Radius based SSH login fails with multiple radius-servers configured	Corrected initialization of server usage type	All Platforms
SNMP table 1.3.6.1.2.1.17.7.1.2.2 OID returns unexpected character [FIELD-3327, CS6466035]	Occasionally dot1qTpFdbStatus gets set to null when doing a snmpwalk.	Corrected status entry check	All Platforms
DHCP Client fails to get IP address assigned with dot1x mac-based authenticated port. [FIELD-3104, FIELD-3619, CS5837205]	Client MAC entry is not deleted from member units after the client is disconnected	Corrected MAC entry event	All Platforms

When the port is removed from the port-channel, it goes to STP block state. [FIELD-2841, CS7521149]	Dynamic LAG interfaces, when removed from the LAG, would not bring up the physical interfaces STP state to forwarding resulting in traffic drop	Corrected dynamic LAG release	All Platforms
Trying to free buffer at address 0xa1f3b72c (descriptor at 0xa1f3b728) that has already been freed. [FIELD-3533, CS7418559]	Double buffer free during radius processing	Corrected double buffer free issue	All Platforms
Authentication fails after a reload when radius server name is configured with FQDN. [FIELD-3525, CS7315474]	DNS resolution fails when radius-server trying to resolve the IP address after reloading.	Resolve the DNS hostname first before marking the radius-server as active.	All Platforms
Crash at umWorkerTask [FIELD-3545, CS7408145]	Crash at umWorkerTask	Corrected PVST race condition	All Platforms
Hosts loses multicast stream abruptly after some time. [FIELD-3563, CS7454416]	Hosts registered for multicast group do not receive data from source after host connected ports shut/no shut	Corrected data initialization issue after shut/no-shut	All Platforms
Keepalive doesn't work as expected [FIELD-3558, CS7421534]	Keepalive doesn't detect loops when Dot1x is enabled, and ports are authenticated through dot1x	Checking for Loop packets and allowing them to application.	All Platforms
DHCP snooping entry is lost when there is release and renew. [Internal]	DHCP snooping entry is lost when there is release and renew.	Corrected DHCP snooping release renew issue	All Platforms
ATP-RPC message stability enhancement [Internal]	Stability enhancement for StatsAppTask	Added stability enhancement.	All Platforms

Release 6.5.3.4 / 6.5.3.34

Summary	User Impact	Resolution	Affected Platforms
IP Source verify table not populated [FIELD-3407, CS6890940]	DHCP Snooping bindings are not formed even though clients are getting IP address.	Corrected storing of both IPv4 and IPv6 config in snooping table.	All Platforms
Patch for CVE-2018-15473 [FIELD-3442, CS6968140]	CVE-2018-15473 reported against OpenSSH code	Applied SSH patch	All Platforms
Enable MTDOOPS feature by default on bootup [CS6969596]	Enable MTDOOPS feature by default on bootup	Added CLI to enable/disable MTDOOPS.	N40XX
Stack member crashes with bcmATP-RX and memory errors [FIELD-3472, CS7098608]	Stack member crashes with bcmATP-RX and Memory errors.	Corrected stack message receive problem	All Platforms
Stack master crashes with ipMapForwardingTask. [FIELD-3455, CS7031343]	Stack master crashes with ipMapForwardingTask	Corrected buffer free problem	All Platforms
Improvement of backTrace [internal]	Improvement of backTrace	Increased the reliability of stack backtrace.	N40XX
Improve the "debug crashlog" logging [internal]	Improve the "debug crashlog" logging	Change to correct stack crash log	All Platforms

Release 6.5.3.3 / 6.5.3.33

Summary	User Impact	Resolution	Affected Platforms
Downloadable ACLs are not taking effect when transition from Static ACL [CS5437780]	Port is becoming the part of Static and DACL from RADIUS when "dot1x initialize" command is used in the transition from DACL to Static	Corrected Dot1x initialization issue when ACLs are used	All Platforms
After initiate failover, the stack console goes unresponsive with "logging console 7" is enabled. [CS5439096]	Control plane loss observed with max stack after initiate failover though active links are available in port-channel connected between stack and partner.	Corrected OSPF problem in a stacking environment	All Platforms

Configuration load error "no switchport port-security violation protect" after upgrade [CS5921429]	"no switchport port-security violation protect" command under all interfaces causing issue on bootup and script getting aborted	Corrected display of command in running-config	All Platforms
SNMP table 1.3.6.1.2.1.17.7.1.2.2 OID returns unexpected character [FIELD-3327, CS6466035]	Snmpget for dot1qFdbStatus is failing for the entries which are learned via dot1x	Corrected retrieval of status	All Platforms
Rebooting switch after config 8+ ACL lead to ports in DETACH state [FIELD-3333, CS6520532]	Rebooting switch after config 8+ ACL lead to ports in DETACH state	Corrected insertion of ACL	All Platforms
Switch stops forwarding traffic on its own and console goes unresponsive when attempt to capture logs [CS6339342]	Switch stops forwarding traffic and eventually locks up when attempting to capture debug logs including "show running" or "show tech"	Corrected problem retrieving boot version	All Platforms
SSH using Public Key authentication fails [FIELD-3190, CS6234512]	SSH login is not successful with public-key when privilege separation is enabled	Corrected privilege separation mode	All Platforms
Stack master crash with "nim_t" task periodically [FIELD-3299, FIELD-3372, CS6369121]	Seeing "ATP time-out to CPU" error prints and with this error prints	Corrected ATP timeout problem during MAC address station movement	All Platforms
Security Check reported TCP Timestamp & Weak Signature Algorithm Vulnerabilities [FIELD-3349, CS6620243]	Security scanner reported vulnerability that switch uses TCP timestamps and therefore allows to compute the up-time	Disabled TCP timestamp	All Platforms
Crash with Task Name:bcmDISC is seen after reload with the specific configuration [Internal]	Crash with Task Name:bcmDISC is seen after reload with the specific configuration	Corrected mutex collision between stack members	All Platforms
Stack Master becomes unstable with CPU timeouts causing management interruptions and authentication issues [FIELD-3176, CS6078844]	Unexpectedly received End TLV for VLAN instance index. "Messages received are out of order" are printed to the console in a loop	Corrected TLV data problem	All Platforms
dev broad_l2_dot1x.c related debug commands seen [CS6835238]	Debug messages seen on the console	Removed debug messages	All Platforms
Switch port 1 stops getting IP address assigned dynamically sometimes [Internal]	Switch port1 is occasionally not able to obtain the address via DHCP.	Corrected data initialization problem.	All Platforms

Patch Release 6.5.2.18 / 6.5.2.48

Summary	User Impact	Resolution	Affected Platforms
IP Phone on dot1x enabled port drops 20 to 30 seconds after initialization. [FIELD-3209, CS6218881]	Data VLAN is being removed when only dot1x unaware devices are present.	Modified check to allow dot1x unaware devices to remain in the data VLAN	All Platforms
Some lines of startup-config are missed out when copied to TFTP server [FIELD-3192, CS6161169]	TFTP client has issue supporting TFTP servers which doesn't support RFC 2347 and RFC 2348. It allows the segment size to be negotiated.	Made segment size allowance for servers which doesn't support these RFCs.	All Platforms
Mandatorily adding the "remove-private-as" neighbor statements to VRF's [FIELD-FEDERAL, CS6270871]	The "remove-private-as" neighbor statements to VRF's as default.	Removed "remove-private-as" from default display	All Platforms
Unable to configure BGP Neighbor with specific IP addresses [FIELD-3281, CS6328995]	Unable to configure BGP Neighbor with specific set of IP addresses	Corrected IP byte order problem	All Platforms
MLAG Ports Down on VPC Secondary after Power Cycle [FIELD-3193, CS6155318]	The VPC interfaces become admin disabled	Corrected control message processing	All Platforms

Excessive multicast traffic hitting CPU causes ARP issue [FIELD-3202, CS6219076]	Unregistered multicast packets are flooding to CPU and causes the ARP issue	Decreased the minimum CPU rate-limit to 5 from 100	All Platforms
General mode "tagged VLAN" is not removed from "show interface switchport" command when configured in interface range mode	After removing tagged VLAN membership from a range of interlaces in general mode, the show command still shows the same tagged VLAN membership details in "show interface switchport" command.	Corrected command output	All Platforms

Patch Release 6.5.2.17 / 6.5.2.47

Summary	User Impact	Resolution	Affected Platforms
MAB authentication stops working randomly [FIELD-KLA, CS6633866]	MAB authentication stops working randomly. Required to change the port-control mode to force-auth and then back to mac-based to recover.	Initialize the variable used for retrieving the current auth method, so that if does not get set to random values.	All Platforms

Patch Release 6.5.2.15 / 6.5.2.45

Summary	User Impact	Resolution	Affected Platforms
Switch reboots unexpectedly without crashlog [FIELD-2989, FIELD-2675, CS5185018, CS5309718, CS5921429]	Switch resets on its own without providing the crash code	Added MTDOOPS functionality to save the Linux crash code	N40XX
WebUI LAG membership page is blank [FIELD-3070, CS5460626]	WebUI LAG membership page does not load	Corrected problem inhibiting page from loading	N40XX
SNMP traps are not sent specifically to IP address 10.0.0.58 [FIELD-3078, CS5492201]	SNMP traps are not being sent for a specific IP address (10.0.0.58) as host.	Corrected ASCII conversion for value 58 which is a colon terminating the address	All Platforms
DACL warning log messages regarding filter-id attribute [CS5872734]	DACL warning log messages regarding filter-id attribute even though DACL is not enabled.	Modified check for filter attribute	All Platforms
Radius server with usage type 802.1X is moving to dead when server is unreachable. When radius-server becomes reachable, it is not processing DOT1X requests.	Radius server marked as dead is not processing requests even sever becomes reachable again.	Corrected check for dead server	All Platforms
Random crashes on nim_t and lockups- Boxs optimization [Field-2715, CS4474679]	Random crashes on nim_t and lockups- Boxs optimization	Adjusted transport timeout value to better work with the stack	All Platforms
10G Uplink ports goes down when execute "show tech" command from console [FIELD-3171, CS6050905]	Transceiver removed logs are generated (on 4th port of 10G ports) when show tech-support is executed	Corrected data structure problem	N15XX
Ports connected to Dell printers stopped receiving traffic and dot3ad_helper.c errors [FIELD-3141, CS5871399]	At rare error scenario where DOT3AD timer function is triggered by SIM timer task for LAG indexes. <187> Aug 15 11:44:14 AshlandCF_Stack_N3048P-7 DOT3AD[unitMgrTask]: dot3ad_helper.c(317) 4561 %% ERR Cannot get USP for index 59	Corrected conflict between Dot3ad and Dot1x process	All Platforms
All dot1x sessions are re-authenticated after stack failover causing service interruption to clients [CS6019962]	Dot1x sessions are re-authenticating post stack failover.	Corrected node deletion problem after failover	All Platforms

Switch management goes unresponsive when attempt to access "IPSG Binding Summary" page via WebUI [FIELD-3140, CS5860538]	Switch management goes unresponsive when attempt to access "IPSG Binding Summary" page via WebUI.	Corrected problem inhibiting page from being displayed	All Platforms
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Patch Release 6.5.2.9 / 6.5.2.39

Summary	User Impact	Resolution	Affected Platforms
IP Phone resets every hour when dot1x reauthentication enabled with the default reauthentication period of 3600 seconds [FIELD-3096, CS5754107]	IP Phone resets and cause phone service interruption every hour.	Addressed the logic passing of radius-server usage parameter.	All Platforms
Dot1x authenticated client PC fails to reach the network and failed to get IP address assigned. [FIELD-3104, CS5837205]	Loss of network connectivity after stack failover followed by dot1x initialization for dot1x clients.	Addressed rules for blocking and unblocking clients	All Platforms
Under voltage detection warning and log shows VIN=1.25V [FIELD-2846, FIELD-2851, FIELD-2852, CS4789696]	Under-voltage warning events are observed on console	Corrected read for under-voltage events	N20XXP N30XXP
PSU failure logs [FIELD-2868, CS4971583]	PSU failure, removal/insertion logs are generated randomly.	Corrected read for PSU failure	N15XXP
Switch goes thermal shutdown [FIELD-2995, FIELD-2949, FIELD-3072, CS5237423]	Switch is undergoing thermal shutdown even when box is operating at normal temperature range	Corrected read for temperature events	N20XX N30XX
Switch reboots on its own without crash log [FIELD-2989, CS5185018]	Power controller failed to initialize causing silent reboot/crashes.	Updated power controller initialization parameters	N40XX
SNMPSET MIB OID “.1.3.6.1.4.1.674.10895.5000.2.6132.1.1.1.2.9.1.4.” fails with commitFailed [FIELD-2980, CS5186162]	MIB OID is not explicitly described.	Updated MIB description with the directions on how to use.	All Platforms
Switch crashes with "hapiMcAsyncTask" task [FIELD-3002, CS5241581]	Random switch crashes with the "hapiMcAsyncTask" task	Corrected task lockup	All Platforms
ARP responses dropped (not reaching CPU) after ARP timeout expires for end hosts [FIELD-2972, CS5158072]	ARP responses dropped (not reaching CPU for processing)	Corrected rule for mirrored ports	All Platforms
Out of memory causing SSH failure, crypto-key generate failure and switch goes unresponsive after write. [FIELD-3006, CS5178704]	Invalid user login IDs generates an invalid trap and caused a memory leak when displayed.	Corrected invalid traps for user login IDs.	All Platforms
Failed to remove IPSG binding for IP on interface from hardware. [FIELD-3034, CS5373126]	Loss of network traffic with the log "Failed to remove IPSG binding for IP on interface from hardware".	Modified IPSG entry removal check	All Platforms
Improve packet RX processing on stackable switch platforms [Internal]	Improvements needed to increase the reliability of the stacked switches.	Improved processing of ATP buffers transferred between stack members	All Platforms
Standalone switch crashes with "osapiTimer" task [FIELD-3031, CS5327765]	Standalone switch crashes with "osapiTimer" task	Corrected race condition with a timer	All Platforms
MAC Address movement logging & traps [CS5541938]	MAC address movement logs are with debug severity and seen when debug logging is enabled	Updated logs with port IDs and set debug level to 5.	All Platforms

Release 6.5.2.5 / 6.5.2.35

Summary	User Impact	Resolution	Affected Platforms
Information about auto corrected parity errors [CS3889030, FIELD-2547]	When parity errors were auto corrected, the log messages did not indicate the	Addressed by changing the wording to indicate	N4000

	same. The messages only mention about the error but not about the correction.	the correction is done.	
N15XX CPLD image included in all releases is not correct. Do not update the CPLD. CPLD images shipped from the factory are correct and current.	The will be fail to come to readiness and must the returned to correct.	Bundled with correct CPLD version. No need to update the CPLD	N1500

Release 6.5.1.6

Summary	User Impact	Resolution	Affected Platforms
Access-Request packet with two "Service-Type-6" attributes for MAB authentication [FIELD-2956, CS5081272]	Clearpass Radius-server is rejecting the radius-request packet sent for MAB client with two "Service-Type" attributes - LOGIN(1) and CALL-CHECK(10).	Addressed by sending only "CALL-CHECK(10)" service type attribute for MAB Clients.	All
MAB authentication issue with "switchport voice vlan override-authentication" config [FIELD-2957, CS5095367]	When configuring override-auth with auth order mab dot1x then mab and voice vlan getting triggering at the same time and client is authenticating with both voice vlan and MAB.	Corrected multiple authentication issue.	All
CoA Disconnect-Request failure with the errors "Unsupported-Service" and "Session-Context-Not-Found" [CS5215354]	Disconnect request not processed if the request contains "Calling-Station-ID" and "Acct-Session-Terminate-Cause" attributes	Updated list of supporting attributes	All
dot1x clients not getting authenticated using certificates with Cisco ISE 2.3 [FIELD-2978, CS5182273]	Authentication failures when attribute-25 is sent in access-request packets.	Disabled "attribute-25" by default	All
STP flaps in the network and the port channel diagnostically disabled [CS2502043]	Uplinkfast is not working when root port shut/no shut and loop is not removed, as a result traffic is looping continuously	Modified STP to consider VLAN ID before altering ports STP role/state	All
Debug messages can be uniform while copying running config via GUI and CLI [CS4728527]	Uploaded file name is showing differently in the debug logs when we upload running config from switch to TFTP server	Altered messages to be the same.	All
WebUI error when configuring summer time for zone "AEDT" [FIELD-2827, CS4736318]	Configuration is not able to save when start and end months in descending order in summertime with recurring.	Corrected problem with time comparison	All
General mode tagged VLANs not removed from "show interface switchport" command [FIELD-2884, CS4926824]	After removing tagged vlan membership from an interlace in general mode, show command still shows same tagged vlan membership details in "show interface switchport" command	Corrected tagged VLAN ID comparison in CLI command	All
Random ports down with PHY status as "Not Supported" after upgrade [FIELD-2940, CS5066801]	Reset logic for Switch was not complete causing multiple issues.	Modified reset logic for HW version 4 switches	N40xx
Switch crashed and rebooted continuously [FIELD-2823, CS4728966]	Reset logic for Switch was not complete causing multiple issues.	Modified reset logic for HW version 4 switches	N40xx
Updated HiveAgent to version 1.1.13	Updated HiveAgent to version 1.1.13	Updated HiveAgent to version 1.1.13	N15XX N20XX N30XX
Speed and Duplex settings removed after reboot [FIELD-3028, CS5305348]	"speed 1000" command is not retained after save and reload	Modified check on speed on duplex settings	All
Accounting-Stop message is missing when dot1x client disconnected [FIELD-2939, CS5062833]	When Port is Down or Disabled, Logical port auth method is getting reset.	Corrected port down processing	All

Temporarily disable cpld update for N1500 Series switches [CS5265790]	N15xx CPLD provided in the new FP releases is faulty. CPLD version shipped from the factory is good	Disable updating of the CPLD until correct CPLD image is available.	N15xx
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Patch Release 6.5.1.5

Summary	User Impact	Resolution	Affected Platforms
Communication drops when IP source guard is enabled [CS4724244, FIELD-2796]	Ping is dropped after enabling ip source guard on the interface	Modified IPSC rule to allow all IP traffic	All
Under voltage detection warning and log shows VIN=1.25V [CS4789696, FIELD-2846, FIELD-2851, FIELD-2852]	Under-voltage warning events are observed	Corrected monitoring of PSU voltage values	N3048P
Switch goes unresponsive and sometimes crashes in boot-loop with "fp_main_task" [FIELD-2945]	Occasional power loss to the switching fabric causing switch hang/boot-loop.	Adjusted power threshold. Changed NCP81111 initialization sequence to increase OCP threshold to address occasional power loss to the switching fabric.	N4000
Switch crash with "dot1s_task" with PVLAN config [CS5008091, FIELD-2912]	Switch crash when attempt to configure the spanning-tree mode as "rapid-pvst" with PVLAN config.	Corrected PVLANsd PVST creation issue.	All
Temperature state change reported between normal and warning levels [CS5046741]	When temperature increases from 40 to 45 degree Celsius, temperature warning logs are generated which are not required	Updated switch temperature table	N4000
Random SSH Access failure [CS4983290, FIELD-2902]	opensshd process is getting terminated, preventing any further SSH connections to the switch.	Corrected SSH process restart	All
Null MAC for gateway in ARP table causing routing issues [CS5024642, FIELD-2951]	Unable to resolve ARP and other protocol traffic with system buffer is exhausted.	Corrected system buffer leak issue.	All
Switch incorrectly sets the next hop for OSPF external forwarding address [CS4844353, FIELD -2849]	At certain conditions, the switch incorrectly sets the next hop for OSPF external forwarding address.	Corrected update of OSPF next-hop address	All
Dot1x clients on stack member lose connectivity during re-authentication for dynamic vlan assignment [CS4885756, FIELD-2859]	Intermittent traffic loss when VLANs assigned dynamically at the time of dot1x-reauthentication.	Corrected re-authentication issue for dynamic vlan assignment.	All

Patch Release 6.5.1.3

Summary	User Impact	Resolution	Affected Platforms
Multicast error logs [CS2780734, FIELD-2325]	Error message "IPv4 Multicast Control Packet Transmission Failed."	Corrected error check that caused this message.	All
Weak SSH MAC Algorithms Enabled [CS4288087, FIELD-2663]	Add command to display SSH server supported ciphers and MAC algorithms	Added command to display supported ciphers.	All
err-disable cause for interface(s) are not showing without configuring the recovery globally. [CS4615666, FIELD-2783]	err-disable cause for interface(s) are not showing without configuring the recovery globally.	Modified err-disable state even if "recovery cause" is not configured.	All
Switch crashes during extended traffic hour test [CS4606797]	Crash is observed during extended traffic hour test	Corrected data locking issue.	All

LACP negotiation occasionally creates loop [CS4524900, FIELD-2761]	Port number change in the LACPDU from certain partner switches cause LACP negotiation to fail.	Altered port count algorithm to accommodate this occurrence.	All
DSCP value stripped for packets egress-out of port in stack member unit [CS4528654, FIELD-2731]	DSCP value stripped for packets egress-out on stack member on which fail over was initiated.	Addressed stack failover issue.	All
Loss of management on stack of 5 units [CS4369859, FIELD-2691]	Loss of management on stack of 5 units using in-band management.	Addressed Radius server delayed response issue	All
IPv6 RA not advertised [CS4697764, FIELD-2814]	IPv6 RA's are not sent out of the switch after running for days	Addressed RA minimum spacing check	All
IPv6 DHCP Relay not working [CS4615729, FIELD-2781]	Relay will not work after disabling and then enabling ipv6 unicast-routing globally	Addresses initialization issue after disable	All
Set log level to debugging for "dot1sBpduReceive(): Discarding the BPDU, since it is an invalid BPDU type" messages [CS4736875, FIELD-2752]	Invalid BPDU log appears on the console when a LLDP BPDU is received with 01:80:c2:00:00:00 Group address.	Non-actionable messages moved to debug level severity.	All
Port doesn't join back LAG after it is shut/no shut [CS4646002, FIELD-2791]	10G Port not participating in LAG when operating at 1G speed.	Addressed PHY speed issue	All

Release 6.5.1.1

Summary	User Impact	Resolution	Affected Platforms
Weak MAC algorithms. [CS3311625, CS4288087, FIELD-2433]	Below weak MAC algorithms needs to be removed: hmac-md5, hmac-md5-96, hmacmd5-96-etm@openssh.com , hmac-sha196, hmac-sha1-96-etm@openssh.com	Removed weak MAC algorithms identified by scanners.	All
Switch is not powering up KEM connected to Cisco 8800/8851 Phone. [CS4035716, FIELD-2598]	Keyboard Expansion Module attached to Cisco8851 IP Phone is not getting powered up when switch is in dynamic or class power management mode.	Allocated the actual requested power from phone with KEM with the new PoE mask settings.	All
R-PVST "show spanning-tree vlan" command output formatting issue. [CS4415230]	CLI command output formatting issue	Corrected the CLI output format.	All
R-PVST blocks ports directly connected between two VLANs [CS4265753, FIELD-2664]	All interfaces in access-mode are in discard state when there is a loopback.	Addressed by considering the priorities and instances for STP convergence.	All
With Port mac locking, multiple MAC addresses appears as dynamically learned but not all of them listed. [CS4062579, FIELD-2609]	The learned entries count and actual entries are not in sync	Added consistency checks	All

Release 6.3.3.14

Summary	User Impact	Resolution	Affected Platforms
WebUI shows N3000 as supported switch type for stacking with N2000 [CS3197160, FIELD-2397]	N2000 and N3000 switches can't be stacked together in 6.3.x releases.	Corrected validation check	N20XX N30XX
"show dot1x authentication-history Gix/x/x" output not chronologically sorted [CS2886787, FIELD-2348]	The output of CLI command "show dot1x authentication-history Gix/x/x" not chronologically sorted	Addressed sorting issue	All Platforms
Range command is not working to configure the Sticky Mac feature. [CS3186903]	The "switchport port-security mac-address sticky" CLI command is not available in the range command as specified in the User Guide.	Addressed deficiency in the range command	All Platforms

Err-disable cause is not reported in the "show interfaces" output. [CS3314800, FIELD-2438]	Display issue of Err-disable cause.	Addressed display issue	All Platforms
CVE-2016-10011 and CVE-2016-1907 [CS3311625, FIELD-2433]	Switches vulnerable to CVE-2016-10011 and CVE-2016-1907	Applied patch to address CVEs.	All Platforms
Stack member crashes with "tap_monitor_task" [CS4124022, FIELD-2627]	Switch crashes while trying to fetch the port info of the unit which is disconnected from the stack abruptly.	Added check before getting port info.	All Platforms
CoA bounce on one port is causing other ports also to bounce. [Internal]	Other ports are impacted when CoA bounce on one port.	Addressed port bouncing issue.	All Platforms
Error "Couldn't delete egress object 100063 from Hw, rv=-10" resulting in connectivity issues. [Internal]	In stacking environment, if multicast clients on the member and new ARPs are being learned, the entries in 'l3 egress table' will go out of sync and the new hosts in the member unit start getting IP traffic with all zero DST MAC	Addressed ARP synchronization across a stack.	All Platforms
Weak MAC algorithms [CS3311625, CS4288087, FIELD-2433]	Below weak MAC algorithms needs to be removed: hmac-md5, hmac-md5-96, hmac-md5-96-ctm@openssh.com , hmac-sha1-96, hmac-sha1-96-ctm@openssh.com	Removed weak MAC algorithms identified by scanners.	All Platforms
Script causes switch lockup via Telnet if in-band ports are used [CS2502248]	emWeb sessions (CLI, SSH, XUI) goes unresponsive if a large configuration is applied through a telnet session and part of that configuration changes the inband IP address used for that session.	Addressed updating of configuration issue.	All Platforms
SYSLOG is flooded with the log messages "broad_tx.c(388) 19241629 %% hapiBroadTxLplist: No TX ports given" [Internal]	Flooding of SYSLOG messages with TX performance impact.	Addressed message flooding issue.	All Platforms
With RPVST mode, some ports are not receiving traffic after shut and no shutdown due to "Helix4 CML programming in _soc_l2x_frozen_cml_save()". [Internal]	Randomly ports are not receiving traffic after shut and no shutdown with STP mode configured as RPVST.	Addressed initialization issue	All Platforms
Optics inserted/removed messages logged for uplink ports when no optics are present [CS3816802]	Randomly "Optics inserted/removed" logs without any SFP inserted/removed on ports configured to use as stack ports.	Corrected PHY register initialization issue	N15XX
Copying (config) files via SNMPSET commands not working as expected [CS3809336, FIELD-2529]	agentTransferUploadDataType value of the snmpagentTransferUploadFilenameSet is giving commitFailed Error	Corrected Failed error.	All Platforms
Unable to reach BGP installed route with the route addition failed messages "ipmap.c(4762) 1241 %% IPv4 route addition failed in hardware" [CS3835221, FIELD-2541]	The ECMP multipath route will not be properly added to the hardware.	Addressed routing issue	All Platforms
snmp-server host configuration results console lockup [Internal]	"snmp-server" command with invalid strings results console unresponsive.	Addressed string input issue	All Platforms
NAND Flash ECC issue [CS3892120]	Nand driver fix for different issues like erased page with bitflips problem, ECC correction status, etc.	Patched boot code and kernel.	N15XX
Switch crashes at DHCPv4 Client Task & error failed to read conflicting ARP packet from stack [CS3955334, FIELD-2566]	DHCP packets with option 43 from windows server 2016 domain controller is causing crash.	Addressed special characters in community name	All Platforms
No more than 64 ports can be added to LAG in stack [CS3978682, FIELD-2572]	No more than 64 ports can be added to port-channel interface in stack.	Addressed max LAG limit value	N15XX
Duplicate lldp entries are observed during port swap which is ending up in multiple protocol functionality failure [CS3972794]	LLDP entries are not deleted and TTL value does not get decremented even though the LLDP packets are not received from peer switch.	Corrected LLDP timer entry update issue.	All Platforms
VRF Route leaking stops working after every 6 days [CS4035767, FIELD-2597]	IP Forward buffers are getting exhausted from pool when ping is initiated across VRF hosts.	Corrected memory leak	All Platforms
Stack member crashes at umWorkerTask [CS4080761, FIELD-2616]	Stack member crashes at umWorkerTask	Corrected NULL pointer issue	All Platforms

Optimize memory utilization [CS3937486, FIELD-2567]	Optimize memory utilization in RPC calls	Addresses RPC call memory usage	N3000 N4000
Stack master console unresponsive when attempt to SSH [CS3475707, FIELD-2451]	The support-assist file "sa.tmp" size causing console to be unresponsive	Addressed large sa.tmp file issue	N15XX N20XX N30XX
Asset-tag not retained after reload [CS4079876, FIELD-2615]	Asset tags are not retrieved from all the stack members	Corrected Asset tag initialization	N20XX N30XX
ipv6 negate commands applied incorrectly in the config causing errors on bootup [CS4099993, FIELD-2620]	ipv6 negate commands applied incorrectly in the config causing errors on bootup	Addressed extra carriage-return issue	All Platforms
Class-based Power Management is Reserving Too Much Power [CS4154168, FIELD-2633]	Class mode, all ports get allocated with 16.4W irrespective of selected class and it has limitation of powering up maximum number of PDs connected simultaneously	Changed PoE controller settings.	N15XXP N20XXP N30XXP
"Bad rc" messages during switch boot-up [CS4208000]	"Bad rc" messages during switch boot-up	Addressed system boot-up initialization issue	All Platforms
Require RFC compliance for log messages in N-Series with IP address [CS4228703]	Log message format is not strictly adhering to RFC3164	Modified log message to comply RFC.	All Platforms
Switch crashes immediately after PC plugged-in with MAB Authentication [CS4210833, FIELD-2657]	Switch crashes with dot1xTask crash when receiving an accept packet with no attributes.	Addressed no attribute issue	All Platforms
Wrong next hop in the route table after removing VLAN config [CS4237545]	Static routes are pointing to wrong next-hops when next-hop is a VLAN interface and vlan interfaces are removed and re-added in a specific sequence.	Addressed static route issue with VLAN interface.	All Platforms
CLI show command display issue when keepalive(CTP) enabled [CS4027729]	Displays invalid loop detect status when keepalive is enabled	Addressed display issue	All Platforms
Randomly switch ports are into "detach" mode [CS3869632, FIELD-2542]	SIM/NIM HPC callback operations holding up ATP RX causing switch ports into "detach" mode.	Addressed SIM/NIM processing issue	All Platforms
Stack members (Master and Standby) unresponsive [CS4018185, FIELD-2591]	Stack members goes unresponsive when emWeb task's telnet context is NULL	Addressed NULL context issue	All Platforms
R-PVST blocks ports directly connected between two VLANs [CS4265753, FIELD-2664]	R-PVST blocks ports directly connected between two VLANs	Addressed ingress BPDU MAC address issue in Access mode	All Platforms
Add new PoE mask settings and upgraded PoE firmware [CS4154168, FIELD-2633]	Require new PoE mask settings for all N-Series PoE switches and upgraded PoE firmware to 211_3 for N1500 Series.	Add new PoE mask settings and upgrade PoE firmware	N15XXP N20XXP N30XXP
Boot code update fails and HW and CPLD version showing 0 [CS4407389, FIELD-2703]	U-boot update fails for BGP image running on N3000 Series switch.	Addressed u-boot upgrade issue	N30XX
Switch reports false power supply failure [CS4105789, FIELD-2592]	Switch reports false power supply failure	Improved UnderVoltage event handling	N20XX N30XX
Update HiveAgent to version 1.1.10	Require HiveAgent v1.1.10 to limit the frequency console logging of HA messages.	Updated HiveAgent to v1.1.10	N15XX N20XX N30XX
IPv6 PIM-SM (S,G) entries are not formed when source/Data is connected to master and Joins (*,G) are received on member. [CS4470989]	IPv6 PIM-SM (S,G) entries are not formed when source/Data is connected to master and Joins (*,G) are received on member.	Addressed mismatch between SW and HW tables.	All Platforms
Switches crashes with task "LOG" when syslog server configured and running multicast traffic. [Internal]	Switches crashes with task "LOG" when syslog server configured and running multicast traffic.	Addressed LogError issue.	All Platforms

Patch Release 6.3.3.11

Summary	User Impact	Resolution	Affected Platforms
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N3000 - Random 10G uplink ports failure [CS3013966, FIELD-2370, FIELD-2587]	10G uplink ports (Te1/0/1-2) goes down with Optics and/or DAC cable at very rare circumstances.	Addressed via PHY reset when random link down detected.	N20XX N30XX
Switch is not powering up KEM connected to Cisco 8800/8851 Phone. [CS4035716, FIELD-2598]	Keyboard Expansion Module attached to Cisco8851 IP Phone is not getting powered up when switch is in dynamic or class power management mode.	Allocated the actual requested power from phone with KEM.	N20XXP N30XXP N15XXP

Patch Release 6.3.3.10

Summary	User Impact	Resolution	Affected Platforms
Network loop is not detected in the stack member unit with keep-alive (CTP) configured [CS3679876, FIELD-2491]	Keep alive packets received over stack-links are dropped due to port bitmap zero drop condition.	Addressed Keep-alive packet drop issue.	All Platforms
SNMP Trap is not generated for port-security violation when dynamic count is increased [CS3174830, FIELD-2441]	SNMP Trap is not generated for violation when port-security dynamic count is increased.	Addressed dynamic count trap issue.	All Platforms
Interface flap when port configuration made via WebUI [CS3207403, FIELD-2409]	Link flaps when selecting apply button from port configuration page in the WebUI.	Corrected setting of port configuration values.	All Platforms
Password with special character '!' requires to be configured within the quotes [CS3249710, FIELD-2422]	Configuring user account password with special character '!' without quotes not accepted.	Added support for the special '!' character in the password.	All Platforms
Combination of DHCP-snooping, VLAN MAC-association and dynamic-arp-inspection not working as expected [CS3281937, FIELD-2421]	DHCP reply messages are forwarded to the existing snooping entry interface when there is movement from an untrusted to a trusted port.	Addressed port movement issue.	All Platforms
sFlow polling can't be configured from global configuration mode [CS3348448, FIELD-2447]	sFlow polling can't be configured from global configuration mode	Addressed configuration mode issue for sFlow.	All Platforms
Switch crashes with the task - hapiBroadBfdCtrlTask. [CS3420569, FIELD-2458]	Switch crashes while handling BFD PDU Receive Process.	Corrected BFD PDU processing issue.	All Platforms

Patch Release 6.3.3.9

Summary	User Impact	Resolution	Affected Platforms
Loss of communication on certain VLANs which affected hard wired desktops and Access-Points [CS3615836, CS3652534]	L3 routing traffic on certain VLANs affected when switch authenticates its own L3 MAC as supplicant MAC in a loop condition.	Added a check to discard packets with src MAC as switch L3 MAC, when dot1x is enabled.	All Platforms
SFPs are not recognized properly after upgrading to firmware version to 6.3.2.7 with CPLD v15 [CS3085430, FIELD-2377, FIELD-2463]	The "show interfaces transceiver properties" command shows incorrect optics details with CPLD version 15.	Addressed this issue in new CPLD version 17.	N30XX
IPv6 Ping output misaligned [CS3283915, FIELD-2427]	Carriage return character is missing while printing the responses for IPv6 ping.	Modified IPv6 ping output	All Platforms
Switch console unresponsive when removing NTP server via WebUI with DNS config exists. [CS3103027, FIELD-2380]	When trying to access dynamic host name mapping table from UI with some set of entries, it results in a switch console unresponsive.	Addressed corrupted character string in the web data.	All Platforms
Switches reporting "fan failure" logs/alarms periodically [CS3168883, FIELD-2399, FIELD-2414, FIELD-2432, FIELD-2443]	Switches are reporting fan failure alarms/logs at 5500 RPM with lower temperature.	Modified fan speed mapping	N15XX

With port security configured, multiple MAC addresses appears as dynamically learned but not all of them listed [CS3294887, FIELD-2426]	Higher operational dynamic count than the number of entries actually learned in FDB on that interface causing issue.	Corrected retrieval of FDB dynamic entry counter	All Platforms
BGPV6 Route Installation issue [CS3300818, FIELD-2428]	Next hop not installed for routes received from Quagga iBGP peer.	Addressed iBGP error.	All Platforms
OSPF Route table resets after uplink port-channel member interface goes down [CS3598463]	STP states are not converging properly on partner switch with MLAG on the uplink side when redundancy link fails.	Addressed RSTP convergence issue.	All Platforms
No multicast S,G entry built after link failover [CS3350349, FIELD-2446]	Multicast traffic stops forwarding to the end clients upon link fail-over.	Addressed route adding problem during failover	All Platforms

Release 6.3.3.8

Summary	User Impact	Resolution	Affected Platforms
VoIP Phones, PCs & APs connectivity lost with NULL MAC as destination address. [CS3416999]	IP packets sent out with all zeros DST MAC resulting in connectivity issues.	Added code to check IDs for duplicate egress entries before install.	All Platforms
"nim_t" crashes on stack members with flooding of IGMP join/leave messages. [CS3495434]	Lot of RPC calls adds delay to the processing of messages and causing NIM timeout crashes.	Modified code to send RPC calls only for affected ports in the VLAN.	All Platforms
Stack master crashes with "tap_monitor_task" and "hapiMcAsyncTask" [CS3545592]	Stack master crashes when snooping and multicast message queue are full.	Addressed by reducing multiple RPC calls.	All Platforms
Slow management access with "bcmRX" task consuming high CPU. [CS3534848]	Switch crashes due to NIM timeout in Snooping task.	Modified code to generate calls only for changed ports.	All Platforms
Stack member's ARP table is not updated occasionally for dot1x authenticated clients. [CS3416999, FIELD-2460]	End devices like., VoIP Phones, PCs & Access-Points connected across stack members are lost connectivity.	Addressed ARP sync up issue across stack members.	All Platforms
Stack master crash with task "dot1xTask". [FIELD-2378, FIELD 2340]	Stack master crashes with the task "dot1xTask"	Replaced SDK RPC calls with HPC RPC.	All Platforms
Stack master crash with task "nim_t" [CS3223556, FIELD-2405,2406,2407,2413,2420,2425]	Stack master crashes with the task "nim_t"	Use different semaphore to create correlator for posting messages from different components to NIM task.	All Platforms
Stack master crash with task "udldTask". [FIELD-2429]	Stack master crashes with the task "udldTask"	Replaced SDK RPC calls with HPC RPC to avoid memory corruption.	All Platforms
TACACS auth failover to local takes longer without honoring the timeout. [FIELD-2096]	TACACS auth failover to local takes longer without honoring the timeout	Corrected socket configuration problem	All Platforms
SNMPSet is not removing the port from the vlan with dot1qVlanStaticEgressPort mib. [FIELD-2208]	Unable to remove interface VLAN tag/untag configuration via SNMP MIB OID Set.	Corrected MIB error	All Platforms
Duplicate ICMPv6 packets when VLAN interface has two IPv6 addresses. [FIELD-2087]	ICMPv6 redirects are always enabled by default and no way to disable them.	Corrected ICMPv6 redirect problem	All Platforms
BGP password shows as raw string in show commands output.	Encrypted password need to be shown in all BGP show commands.	Corrected BGP password display issue.	N30XX

Unable to configure port speed 10,100 to any port through WebUI. [FIELD-2210, 2359]	Error when attempt to set the speed 10,100 from WebUI.	Corrected error in setting port speed via WebUI.	All Platforms
Support-Assist application is still running even when "eula-consent support-assist reject" is present in the configuration.	Support-Assist application is not stopping even with "eula-consent support-assist reject" in the running-config.	Corrected support-assist stop check error.	All Platforms
Duplicating VRRP ADV when egress out of the stack [FIELD-2232, 2475]	VRRP packets are getting duplicated when it egresses out from the switch stack.	Corrected VRRP issue when IGMP snooping is enabled	All Platforms
Corrupted PIM packet when sending large multicast packets [CS2502879]	Corrupted PIM packet when sending large multicast packets	Corrected packet egress problem	All Platforms
IPv6 routing table is not populating correctly intermittently after switch reload. [CS2502853]	Kernel routes are getting installed for the connected routes after switch reload and the ipv6 interfaces are in tentative state.	Corrected IP Stack error	All Platforms
Start-of-block heap corruption	Problem resulting in heap memory corruption	Corrected memory allocation issue.	All Platforms
Loss of multicast packets in PIM-SM network [CS2502882]	Traffic loss when IGMPv2 Join and Leave messages are sent continuously in quick succession.	Corrected data endian issue	All Platforms
DHCP snooping entries not getting populated for intervlan scenario [PSE036800]	Binding entry is getting removed if a DHCP ack packet with infinity lease time is received	Corrected infinite lease time error.	All Platforms
Removed IP Interface VLAN 1 is recovered after switch reload [FIELD-2247]	If service-port is not available on a switch, the default VLAN is created overriding the user configuration in startup-config	Corrected default VLAN startup problem	All Platforms
Switch crash after overnight traffic stress test [CS2502861]	Switch crashes after traffic stress test overnight.	Corrected IPv6MapProcessing deadlock	All Platforms
Add "show spanning-tree active" command as part of show tech-support	Add "show spanning-tree active" command as part of show tech-support	Added requested command	All Platforms
Default power-management mode is class instead of dynamic [FIELD-2273]	Customers are experiencing issues powering up PDs with the Class mode	Changing default power management mode to dynamic	N15XXP
Storm-control action trap logs are displayed for several hours even after shutdown interface. [FIELD-2271]	Storm-control action trap logs are shown for several hours even after respective interface is shutdown.	Corrected a storm-control counter polling problem	All Platforms
The "show system power" and cpldTest outputs for power supply status needs to be corrected. [FIELD-2257]	- The "show system power" output shows PSU details as "RPS" - Debug command shows incorrect status for power supply status register (0x09)	Corrected PSU description and CPLD output.	N20XX N30XX
Radius-server "usage" command option not working as expected [FIELD-2285]	The dot1x requests are being sent to a radius server even though the switch is not configured for dot1x usage.	Check the usage of a radius entry before sending the radius packet.	All Platforms
Multicast hardware entries are not cleared after initiate failover	Snooping application is applying checkpointed data on non-existent interfaces after a failover. This is resulting in stale entries in hardware	Corrected checkpointed data check	All Platforms
Power inline detection "dot3at" option is missing [CS2503222]	The PoE controller only supports two type of detection, namely "dot3at" and "dot3at+legacy"	- Include "dot3at" detection option - Remove "legacy-only" option	N15XX
Radius dynamic-author Server-key is not encrypted [FIELD-2303]	Radius dynamic-author Server-key is always shown in clear-text.	Corrected encryption check	All Platforms
OSPF route removed from routing table but not from OSPF database causing routing loop [FIELD-2300]	OSPF database and Route table are not in Sync causing routing loops	Corrected OSPF route flush error	All Platforms
10Gbe link staying down after peer-switch reload [FIELD-2274]	10Gbe link staying down after peer-switch reload	Corrected port addressing issue.	N1548P

1G SFP fiber link issue [FIELD-2276]	10Gbe link staying down after peer-switch reload	Corrected port addressing issue.	N1548P
Switch crash while adding config [PSE036711 / FIELD-2322]	Switch crashes during bootup	Corrected uninitialized data	All Platforms
Continuous OSPFv3 Proto Crash on stack master [CS2708936]	Continuous OSPFv3 Proto Crash on stack master	Corrected OSPF race condition	All Platforms
The log messages "support only for single asic boxes" upon executing "show interface utilization" command [FIELD-2331]	"support only for single asic boxes" messages logged on executing "show interface utilization"	Corrected message display issue	All Platforms
Switch goes unresponsive with traffic impact [FIELD-2374]	Unresponsive switch when running-config file created and propagated across stack on every config change	Corrected running config file usage across the stack	All Platforms
Unable to configure key if accounting server is configured as hostname instead of IP address.	The server name and type (V4 or DNS) were not accounted for properly	Corrected key handling error	All Platforms
Issue adding IPv6 ACL prefix longer than 15 characters [FIELD-2345]	Issue adding IPv6 ACL prefix longer than 15 characters	Corrected Max character length	All Platforms
Add 10G SFP+ BiDi Optics (SFP-DELL-BIDI-D/U-10GB-60KM) support [PSE029562]	Add 10G SFP+ BiDi Optics (SFP-DELL-BIDI-D/U-10GB-60KM) support	Added 10G BiDi optics support	All Platforms
Support for Finisar 40G-SM4 optics [CS2500950]	Support for Finisar 40G-SM4 optics	Added SM4 QSFP support	All Platforms
Stack master "nim_t" crash after overnight script [CS2919302]	NIM crash observed with long run tests.	Corrected deadlock	All Platforms
Switch crashes due to nim_t [FIELD-2336]	Switch crashes due to NIM timeout.	Corrected deadlock	All Platforms
OSPF stuck in Exstart state after sonicwall firewall(HA mode) failover [FIELD-2362]	If OSPF neighborhood with same router-id moved from one router to another without link flap (using a switch), the switch gets stuck in Exstart state and discards DDB packets from neighbor.	Corrected OSPF issue when moving neighbor	All Platforms
NAND flash fix for ECC issues	NAND fix for different issues like erased page with bitflips problem, ECC correction status etc.	Patched boot code and kernel	N20XX N30XX
Multicast Error logs in the switch	Candidate-RP advertisements are failing Tx due to NULL dest-addr causing error logs on the console	Corrected NULL value error	All Platforms
Stack master crash with kernel panic [CS2874301]	Stack master crash with kernel panic after overnight traffic stress test.	Add Kernel patches	All Platforms
MAC Learning is failed when the try to learn the MAC on a port for the first time which is already learned on another port	MAC address needs to be present in hardware while adding it back with modified parameters.	Corrected MAC address table handling	All Platforms
Wrong FTP password sent when \$ symbol are part of password typed. [FIELD-2354]	Linux shell provides command substitution for these \$ and \$\$ shell variables.	Corrected shell substitution issue.	All Platforms
DCB - TSA Strict Priority [CS3064905]	Storage controller is expecting to see a TSA of "Strict Priority" when a Traffic Class has a 0% bandwidth definition	TSA default set to Strict Priority	N40XX
Stack crashed with Task Name: dot1xTask [FIELD-2378]	Stack crashed with Task Name: dot1xTask	Corrected NULL pointer problem	All Platforms
Invalid card index in "show supported cardtype"	CPU card is displayed as the first entry	Corrected display	N40XX
Random stack members become unresponsive [CS3101544]	'dot1qTask' crash seen stack after random reboots & failovers performed on stack units	Corrected RPC data corruption issue	All Platforms
Number of entries in FDB are not matching with number of clients in dot1x.	FDB entry for the client mac on port pvid gets deleted	Corrected FDB indexing error	All Platforms
Couldn't get WRED stats "show interfaces traffic" output. [CS3127065]	WRED is not supported on N15XX platform.	Corrected message to reflect unsupported	N15XX
Delay in write Operation [FIELD-2255]	Flash access for saving the config on master and to stack members causing slow response times observed on CLI.	Added improvements in configuration propagation	All Platforms

Switch crashes with task “dnsRxTask” [FIELD-2355]	Invalid fd value for FD_SET leads to switch crash with task “dnsRxTask”	Corrected by skip processing invalid fd value.	All Platforms
Radius Attribute 27 not being used during dot1x [FIELD-2306]	The re-auth timer configured from the RADIUS server will not be used.	Corrected endian issue.	N20XX N30XX
Stack master goes unresponsive with dot1x, port-security enabled [CS3175417]	Observed kernel panic while running script to do shut/no-shut interfaces with traffic and dot1x clients connected.	Applied applicable kernel patch	N20XX N30XX

Patch Release 6.3.2.7

Summary	User Impact	Resolution	Affected Platforms
Null MAC entries in the ARP table with PFC config [CS2502701]	Null MAC entries in the ARP table causing traffic drop for affected end hosts.	Corrected error in packet forwarding rule when multiple paths exist.	N40XX
Switch hangs after neighbor-switch reloads manually [FIELD-2286]	Switch goes unresponsive when peer-switch reloads at certain condition.	Corrected deadlock between ARP and PBR components.	All Platforms
Multicast frame is being looped on MLAG peer link [FIELD-2310]	Multicast traffic flood on MLAG peer link	Corrected multicast flooding rule.	All Platforms
Stack member crashes with task “tRpcsrv.01000” [FIELD-2193]	Switch crashes with task “tRpcsrv.01000” and reboots eventually.	Corrected deadlock condition	All Platforms
MLAG primary unit crashes with the task “emWeb” [FIELD-2319]	MLAG Primary unit crashes with Port-channel number greater than 64 in MLAG configuration.	Corrected MLAG port numbering problem.	N40XX N30XX N20XX
Fan speed oscillations causing more noise with no-change in temperature [PSE036984, FIELD-2299]	Default fan speed of 7000 RPM at lower temperature causing more fan noise.	Set default fan speed to 5500 RPM to reduce the noise.	N15XX
Issue learning MAC addresses dynamically in certain vlan [FIELD-2261, FIELD-2323, FIELD-2327]	Dynamic MAC addresses are not learnt under certain VLAN occasionally.	Corrected problem with stale MAC addresses	All Platforms

Patch Release 6.3.2.6

Summary	User Impact	Resolution	Affected Platforms
K- Kernel route listed under 'show ip route' output. [FIELD-2214]	Kernel routes are installed as the default route occasionally.	Restricted the default routes to not include kernel routes	All Platforms
Invalid transceiver logs for "10GBASE-ZR" optics with Dell P/N "TY5FM" [FIELD-2206]	Invalid transceiver logs are generated for Dell qualified valid SFP+ TY5FM.	Corrected the error traversing valid transceiver table.	All Platforms
PC doesn't receive IP address from DHCP after boot when DVA is enabled [FIELD-2215]	Unable to generate IP address on windows desktop client which is configured with dot1x authentication and DHCP.	Corrected the error when flushing stale data.	All Platforms
Switch is not handling dot1x authentication every time when configured with MAB auth. [FIELD-2088]	Dot1x authentication is occasionally failing when configured with MAB.	Corrected session termination so next attempt will work.	All Platforms
Problems with OSPF on devices attached to N-Series switches with K-route present. [FIELD-2214]	Problems with OSPF on devices attached to N-Series switches with K route present	Corrected error when OSPF data is transferred across a stack.	All Platforms
Continuous multicast table errors although there are only 66 entries [FIELD-2264]	Continuous multicast table errors although there are only 66 entries.	Corrected error in handling VLAN ID when IGMP Snooping timer expires.	All Platforms
Traffic loss through port-channel when DCB configured [FIELD-2242]	Traffic loss through port-channel when DCB/PFC is configured	Corrected error in packet forwarding	N40XX

		rule when multiple paths exist.	
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Patch Release 6.3.2.4

Summary	User Impact	Resolution	Affected Platforms
DHCP doesn't work properly when portchannel is in place [PSE037997]	IP Phones are not getting IP address from DHCP server via port-channel interface.	Corrected LAG membership issue	All Platforms
Failed to power up spare pair Gi1/0/1 error message every few seconds [CSP1126873]	Continuous logs when uPoE capable PD connected to the switch interface: 188> Feb 7 07:12:07 DellSwitchN3024p-1 POE[poeAppTask]: poe_control.c(3468) 530 %% Failed to power up spare pair Gi1/0/1	Added check for four pair PoE and not advertising PSE four pair as supported via LLDP.	N30XXP N20XXP N15XXP
Null MAC entries in ARP table at the core-switch for end hosts reachable via port-channel interface. [CSP1135150]	ARP packets drop for VLAN tagged traffic from/to end hosts with priority 3 received on an interface which is a member of LAG.	Corrected LAG membership issue.	All Platforms
PSU failures reported on multiple switches [FIELD-2234, 2249,2205, 2284]	Reporting PSU failures without any functional impact.	Added retry logic to reset PSU failure HW flag.	N30XXP
New PoE FW Update for N15XXP switch [CSP1132203]	Require new firmware version 188_1 to support new PoE controller.	Updated PoE controller FW version to 188_1.	N15XXP

Release 6.3.2.3

Summary	User Impact	Resolution	Affected Platforms
Switch crash with tasks "cmgrInsertTask" on master and "umWorkerTask" on member. [PSE034317]	Switch crash observed on clear config.	Corrected data write race condition.	All Platforms
Link-dependency feature not working as expected in a stack. [PSE035092]	link-dependency is not working properly in a stacked environment	Corrected event handling error.	All Platforms
SNMP OID value of "lldpLocPortDesc" & "ifDescr" [PSE036193]	Value returned does not follow RFC standards. As per LLDP mib description, the value of "lldpLocPortDesc" should be the same as "ifDescr".	Corrected format.	All Platforms
Removal of Weak Ciphers in 6.3.0.3 [PSE031242]	Disabled RC4 for secure HTTP connection and not (arcfour) in SSH.	Removed weak ciphers namely arcfour,arcfour128, arcfour256 and all CBC related ciphers.	All Platforms
Switch crashed while configuring syslog via WebUI. [PSE037321]	Switch crashed while configuring syslog via web user interface.	Corrected GUI data error.	All Platforms
DHCPv6 is not working properly if "ipv6 dhcp snooping" is enabled. [PSE035352]	DHCPv6 clients are not getting the address if "ipv6 dhcp snooping" is enabled	Corrected packet parsing error.	All Platforms
Ports are not learning MAC addresses when port-security is enabled. [PSE033964]	Ports are not learning MAC addresses when port-security is enabled.	Corrected error state handler	All Platforms
Hiveagent & SupportAssist applications are running even though the respective eula-consent is rejected. [PSE035155]	Hiveagent & SupportAssist applications are running even though the respective eula-consent is rejected.	Corrected error in eula-consent check	N30XX N20XX N15XX
Pruned error logs seen after upgrading the switch. [PSE034571]	Once the file size limit is reached, the switch shows the prune messages with "WARNING" log level.	Changed the log message level to "Debug"	All Platforms
Executing CLI commands 'clear ip mroute *' and 'show ip igmp proxy-service' causes switch crash. [PSE037213]	Executing CLI command 'clear ip mroute *' and 'show ip igmp proxy-service' causes switch crash.	Corrected multicast data initialization issue.	N30XX N20XX
Issues with File Upload via HTTP [PSE035447]	Files cannot be uploaded using HTTP transfer method when the session to the switch GUI is via a hostname instead of switch IP address	Corrected HTTP session permission error.	All Platforms

Switch crashes upon executing 'write' command. [PSE035721, PSE034299]	nvStoreSave calls unitMgrPropagateOpenApps multiple times causing the switch crash.	Corrected function call error.	All Platforms
Switch crashes with task "tCkptSvc". [PSE036051]	Switch crashes pointing to authmgr, endian issue in Authmgr checkpoint code	Corrected endian issue with encoded length.	All Platforms
"show interfaces traffic" command output shows "Couldn't get WRED stats". [PSE035952]	The output of CLI command "show interfaces traffic" shows "Couldn't get WRED stats".	Added functionality to retrieve WRED stats.	All Platforms
Laptop connected behind the phone fails to get authenticated after a shut/no-shut. [PSE034363]	After configuring "authentication enable" globally, authentication order is mandated to interface level. With the default order, the dot1x process is not going on.	Corrected error in authentication order list.	All Platforms
Stack member (standby) drop leading to split brain scenario [PSE036490]	While performing initiate failover, the manger rebooted	Corrected an error when writing the Config across the stack.	All Platforms
Next hop of a N2 route is incorrectly pointing to the Self VLAN IP address [PSE037910]	Next hop of a N2 route is incorrectly pointing to the Self VLAN IP address	Corrected problem in router LSA creation.	All Platforms
Passwords aging 365 makes the user to change the pwd in every login sequence [FIELD-2083]	Passwords aging 365 makes the user to change the pwd in every login sequence	Corrected timezone defect when calculating expiration time.	All Platforms
Stack master crashes with "bcmATP-RX" when joining member units [FIELD-2084]	Stack master crash "bcmATP-RX" when joining stack member units	Corrected problem with local variable.	All Platforms
Poor VOIP quality due to VLAN and Port-channel interface flap [PSE036595]	The Dot1s Helper does not kick in on stack member units resulting in a STP convergence issues and port flaps	Corrected timing problem with Dot1s events.	All Platforms
Management access-class console-only command doesn't block Telnet/SSH/HTTP access [PSE036794]	Th in-band management access via Telnet/SSH/HTTP is not blocked when management access-class console-only configured.	Corrected active check error	All Platforms
Issue with SSH OpenAPIs - "openapiUserDelete" unable to delete [CSP1116686]	"openapiUserDelete" unable to delete the first user entry using openAPI "openapiUserSet", but it is able to delete second user onward	Corrected processing error on User Delete.	All Platforms
Logging email alert doesn't work when Mercury server is used as email server [PSE034689]	Logging email alert doesn't work when Mercury server is used as email server	Changed default advertisement to HELO until EHLO is fully implemented.	All Platforms
Edge port going to discarding state [PSE037712]	Port enters PVID Inconsistent state and stays in that state forever until a correct SSTP BPDU is received.	Corrected processing of port restoration paths.	All Platforms
Ports 1 to 8 goes down abruptly [PSE028608]	Ports are going down randomly when I2C transaction fails	Corrected I2C transaction abort handling	N30XX N20XX
Stack master crashes with "nim_t" task every 2-3 days [PSE037976]	Stack master crashes with "nim_t" task every 2-3 days	Corrected deadlock between IPMAP and DHCP component	All Platforms
Did not delete NHOP egress object msg [CSP1076263]	LOG message did not convey the action to be taken and the state of the switch	Change the log message.	All Platforms
'USL Control Task' Crash observed on member unit when performed clear config after configuring DHCP [CSP1090884, CSP1098977]	'USL Control Task' Crash observed on member unit when performed clear config after configuring DHCP	Corrected error in saving configuration.	All Platforms
Port-security violation mac details not flushing after shut/no shut [CSP1080432]	Port-security violation mac details not flushing after shut/no shut	Corrected error flushing violation database.	All Platforms
Stack member lockup after overnight script [CSP1096342, CSP1116686]	Lockup in vr_agent causing stack member unresponsive.	Corrected memory leak in VR_AGENT	All Platforms

PVST shows some vlans in forwarding state and port in disable role [CSP1076467]	PVST shows some vlans in forwarding state and port in disable role	Corrected error freeing PVST instances when a VLAN is removed.	All Platforms
Switch console unresponsive while running regression testing in Test Automation Suite [CSP1108714]	Handling in emWeb task leads to switch console unresponsive.	Corrected timeout handling in emWeb	All Platforms
"show ip route static" CLI command output shows Invalid flag [CSP1102785]	Unable to get the unit/slot/port for the statically configured routes	Corrected output for this command	All Platforms
Stack shows Config Change immediately after Reload even though there is no change [CSP1076721]	Stack shows Config Change immediately after Reload even though there is no change	Corrected error in resetDataChanged handler.	All Platforms
Interface utilization correct until near 90 to 100 percent line rate [CSP1085701]	"Percent_Utilization Counters" incrementing is not in sync with configured load interval.	Corrected utilization counter	All Platforms
Switch does not encrypting the BGP password, it shows raw string in its running configuration [CSP1082744]	Switch does not encrypt the BGP password, it shows raw string in its running configuration	Corrected display of encrypted passwords	N30XX N40XX
IPv6 address family added to bgp dynamic neighbor configuration incorrectly. [CSP1081569]	IPv6 address family added to bgp dynamic neighbor configuration incorrectly	Corrected problem with checking adv-intervals based on root-AS	N30XX N40XX
The switchdrv process in uninterruptible sleep state followed by SIGSEGV [CSP1091845]	The switchdrv process in uninterruptible sleep state followed by SIGSEGV(crash).	Corrected invalid iSCSI packet check.	All Platforms
Client printing wrong SupportAssist server variable [CSP1085257]	The message printed out contains the wrong variable name	Corrected error message	All Platforms
TTL vlaue for iBGP message is being set to 64 instead of 255 [CSP1092251]	As per industry standards, TTL value for iBGP should be 255.	Corrected BGP TTL value	N30XX N40XX
Error message seen in the log upon reload of switches. [CSP1120145]	Remove the string "icos" in the log message.	Corrected error message	All Platforms
'spanning-tree mst 0 cost 30400' doesn't change the cost for instance 0. [CSP1066547, CSP1098932]	The 'spanning-tree' mode is not displaying properly in the show spanning tree output.	Corrected output	All Platforms
HiveAgent and SupportAssist applications doesn't start up by default because of temp folder in user-apps directory. [CSP1090247, CSP1113096]	HiveAgent and SupportAssist applications are not starting by default.	Corrected error in installation process	All Platforms
PBR stops working after reload [CSP988812]	PBR stops working after reload	Corrected rule affecting PBR	All Platforms
Mac address table entries do not age [CSP1098562]	After sending random source/dest mac addresses through looped ports, the command clear MAC address command did not clear all the MAC addresses.	Corrected contention when the same MAC address is sent in through two ports	All Platforms
SNMP Logs the following message: "MGMT_ACAL[SNMPTask]: macal_api.c(872)1264%%macalRuleAction Get():List" during SNMPWalk. [FIELD-2202]	Log messages appear on the console during SNMP walk on dellLanMngIfGroup.	Corrected string length error.	All Platforms
SVI doesn't come up if you give a static IP if it previously had DHCP configuration [CSP1112324]	SVI doesn't come up if you give a static IP if it previously had DHCP configuration.	Corrected problem setting static IP address	All Platforms
OSPF_APP Crash [CSP1115193]	Memory leak in OSPF causing the 'OSPF_APP' process crash	Corrected OSPF memory leak	All Platforms
Logging email alerts getting "Failed to remove to-addr" error while removing the to-address for both message type [CSP1123535]	Removes the "to-address" for both message urgent and non-urgent message types.	Corrected error assigning to-addr	All Platforms
Serviceability improvements for debugging dead-lock conditions.[CSP1110979]	Serviceability improvements for debugging dead-lock with stack traces.	Serviceability improvements	All Platforms
service-acl config is not retained after save and reload. [CSP 1110979]	There is a limitation in CLI to allow the service-acl command to be invoked only once	Corrected CLI error	All Platforms

The transceiver type plugged-in is not detected properly due to i2c errors and affects dynamic port programming [CSP1123536]	The transceiver type plugged in is not detected properly due to i2c errors and affects dynamic port programming	Corrected I2C error handling for this issue.	All Platforms
"ipMapForwardingTask" crash when route table is filled with max routes and spanning tree is enabled/disabled. [CSP1123541]	"ipMapForwardingTask" crash when route table is filled with max routes and spanning tree is enabled/disabled.	Corrected route table semaphore block.	All Platforms
Help string missing for DAPI_CMD_SYSTEM_MIRRORING_RS PAN_VLAN_MODIFY_DAPI command [CSP 1123539]	Help string missing for DAPI_CMD_SYSTEM_MIRRORING_RSPAN_VLAN_MODIFY_DAPI command used during debug.	Corrected help string.	All Platforms
Crash with "OSPFv3 Proto" task, while performing the clear config with 5k IPv4 and 3k IPv6 routes [CSP1123538]	Crash with "OSPFv3 Proto" task, while performing the clear config with 5k IPv4 and 3k IPv6 routes.	Corrected OSPF route table error.	All Platforms
Crash observed when DHCP tracing is enabled [CSP1123537]	Crash observed when DHCP tracing is enabled	Corrected Conflict Table clear issue.	All Platforms
IPv6 route table header has duplicate fields. [CSP1111578]	IPv6 route command shows duplicate headers	Corrected header error.	All Platforms
Observed endian Issue on pimStaticRPRPAddress MIB [CSP1123478]	The group address and static rp address having endian issues.	Corrected endian issue.	All Platforms
Implement Get New port status request to PoE controller to get counter values for debugging purpose [CSP1123542]	Implemented two debugging commands for PoE controller.	New PoE debugging commands	N30XX N20XX N15XX
After upgrading, receiving user application errors on stack members [PSE037225]	Message “ Unable to stop SupportAssist application”. No functional impact.	Changed message level to debug	All Platforms
PoE stopped working on unit-2 in the stack. [CSP1115942]	When PD detection failed for a particular interface, trap is not generated with the interface details.	Corrected trap generation issue.	N30XXP N20XXP N15XXP
LAG interface config via WebUI doesn't take effect in running-config [PSE035159]	WebUI shows an error while trying to remove LAG from the trunk after configuring the promiscuous mode on any port	Corrected WebUI script error.	All Platforms

Patch Release 6.3.1.13

Summary	User Impact	Resolution	Affected Platforms
Switch crashes at lldpTask when it receives LLDP packet with TLV length of 75. [PSE036768]	Switch crashes at lldpTask when it receives LLDP packet with TLV length of 75.	Corrected packet length check	All Platforms
Switch crashes with "ARP Timer" task [PSE036473]	Switch crashes with “ARP Timer” task	Corrected the mirroring configuration issue	All Platforms
Switch crashes with “ARP Timer” & “emWeb” tasks. [PSE037185]	Switch crashes with “ARP Timer” and “emWeb” tasks.	Corrected the mirroring config.	All Platforms
Missing SNMP OIDs. [CSP1085660]	Missing OID elements in Dell_ITA.Rev_1_1.my mib: envMonSupplyCurrentPower, envMonSupplyAveragePower, envMonSupplyAvgStartTime	Added OIDs in SNMP MIB	All Platforms
VLAN Configuration is missing after save and reload. [PSE032494, PSE035915]	VLAN configuration ("interface vlan <id> <index>") in the running-config with the internal index maintained by DOT1Q component causing this issue.	Corrected the design so that the index was not needed.	All Platforms
Unable to copy files from tftp server to application area of the switch. [CSP1071696]	Destination file copy option is not available.	Added <destination-file> option to application file option in copy command	All Platforms
SSH stops responding after few weeks [PSE037453, PSE037246, PSE036993, PSE037018, PSE037343, PSE037375, PSE037439, PSE037613]	Large number of DNS lookup failures leads to console and/or open-apps like SSH hang.	Corrected error in DNS lookup counter.	All Platforms

Stack master crashes with "SNMPTraptask" and "TrapTask" when flapping interface for few minutes [CSP1108189, CSP1108121]	Switch crashes with "SNMP Traptask" and "Traptask" in the stacked environment.	Corrected error accessing shared data.	All Platforms
Switch lockup after 10 days of runtime on the 12 unit stack. [CSP1111824, CSP1111885, CSP1108518, CSP1107646]	Switch locks up and split from the stack after few days of system uptime.	Implemented XLP errata fix for PCIe bus data errors.	N4XXX
Username "hivemanager" shows in the running config after upgrading the switch from 6.2.6.6 to 6.3 [PSE037200]	HiveAgent application is adding the user-account "hivemanager" in the running configuration after FW upgrade to 6.3.	Fixed by updating to new HiveAgent version 1.0.2	N3XXX N2XXX N15XX
Out of band interface takes an incorrect gateway IP address. [PSE036522]	The gateway address of the out-of-band interface is taking the next hop of default route.	Corrected interference from GDB.	N4XXX

Patch Release 6.3.1.11

Summary	User Impact	Resolution	Affected Platforms
Global Health Status is abnormal [PSE023158, PSE031417, PSE029457, PSE026063, PSE030951]	Incorrect status when PSU's are in various stats of use (with Single and 2 PSUs insert/remove, ON/OFF condition)	Changed PSU update function to provide the correct status.	All Platforms
SSH vendor code debug enabled. [CSP1105757]	Serviceability for SSH with additional debugging enabled.	Added serviceability for SSH	All Platforms
6 unit stack, reloading any member causes topology errors and stack freeze. [PSE036686]	Occasionally on a large stack, stack members can fail when DCB/PFC is enabled.	Corrected PFC routes across the stack	All Platforms
40G interface is negotiating at 1G speed after upgrading from 6.2.7.2 to 6.3.1.8. [PSE036550]	Occasionally the fixed 40G interface links up at 1G speed with QSFP expansion card installed.	Corrected auto-negotiation for 40G port.	N4XXX
NCP81111 register initialization changes [CSP1096029]	Occasional power loss to the switching fabric.	Adjusted power threshold	N4XXX
iSCSI traffic is getting routed out of the layer 2 interfaces. [PSE036261, PSE036958]	iSCSI traffic is getting routed out of the layer 2 interfaces.	Corrected iSCSI routing problem	All Platforms
Switch is not assigning the IP addresses for a particular DHCP pool. [PSE036155]	Switch is not assigning the IP addresses for a particular DHCP pool due to DHCP table space exhausted.	Corrected DHCP table allocation issue.	All Platforms
IP Address Conflict issue on VRRP failover. [PSE034760]	Linux stack generates grat_arp for VRRP_IP with physical interface MAC address, which is incorrect and causes forwarding issues on hosts.	Corrected gratuitous ARP problem in the Linux stack	All Platforms
Stack master unresponsive and required power-cycle. [CSP1097867]	Switch console hangs due to errors on the PCIe bus.	Changed the configuration of PCIe bus to remove the errors	N4XXX

Release 6.3.1.8

Summary	User Impact	Resolution	Affected Platforms
Console hang when trying to access "mac addresses table" page after adding an entry in "bridge multicast group" from GUI.[PSE030280]	Console hang when trying to access "mac addresses table" page after adding an entry in "bridge multicast group" from GUI.	Corrected error on "mac addresses table" page	All platforms
Switch is showing error messages for OpenFlow groups when issued "Clear config" command [CSP1065546]	Switch is showing the error messages for OpenFlow groups when issued "Clear config" command.	Corrected error in deleting OpenFlow groups	All platforms
Error "SSH server error: (22) out of range for 'SSH Port'" [PSE031066]	User is not able to set SSH port number as 22 from CLI.	Corrected port validation error.	All platforms

OSPFV3 Stack Master crash [CSP1069156]	OSPFv3 causes the switch to crash in certain cases if OSPFv3 routes have the same binary pattern for addresses with different prefix lengths.	Corrected node address check	All platforms
Unable to add IPV6 route with multiple next hops.[CSP1041429]	Unable to add IPV6 route with multiple next hops.	Corrected issue when adding new next hop route	All platforms
Stack member drop [PSE031167,PSE031778]	Allowing devshell command from connect mode causing switch crash at certain scenarios	Corrected restriction handling	All platforms
SFP-100M-FX part number 9DN5J does not activate link in N Series [PSE030727]	Dynamic port programming is not enabled on ports 1 to 22 (Non-combo ports)	Corrected issues with ports 1-22	N3xxF
Unable to configure day-light savings for EU/USA timezone. [PSE031862]	Selecting refresh button displays an error instead of populating the values.	Corrects retrieval of start and end values	All platforms
Error when enabling the non-recurring summer time status if start and end values are same [PSE029984]	Error when enabling the non-recurring summer time status if start and end values are same	Corrects retrieval of start and end values	All platforms
Add a cli command which will allow checking for "Service type" from RADIUS messages optional [PSE034082]	Added new CLI commands: {no}radius attribute 6 mandatory in global mode and {no}attribute 6 mandatory in radius config mode	Added CLI commands	All platforms
Ports are down with "Detach" state after boot-up. [CSP1033379]	Switch ports in detached state when a RPC error occurred between master and member	Corrected handling of RPC error	All platforms
Interfaces are down and detach state after stack failover. [CSP1065160]	Switch ports in detached state when a RPC error occurred between master and member after failover	Corrected handling of RPC error	All platforms
Stack member crash with dot1xTask [PSE032508]	Stack member crash with dot1xTask	Corrected issues when copying zero length data.	All platforms
Stack member (standby) keeps crashing. [PSE032552, PSE034076]	DNS code can crash when adding or deleting internal timers	Corrected threading issue in accessing time	All platform
Packet loss observed on 1G port-channel and member interfaces are inactive after stack failover [PSE032560]	Port channel member interfaces are not behaving in an NSF like manner	Corrected speed change problem	All platforms
Monitor session configuration stops working after switch reload [PSE030984]	If more than 1 monitor sessions are created and the switch is rebooted, only 1 session works after reload.	Corrected in monitor database	All platforms
Storm-control doesn't work without applying action command [PSE027441]	Receive Packets Discarded does not increment when storm control rate is set for multicast, broadcast and unicast.	Added the "Increment counter for policy Discards" to the counter	All platforms
IPv6 sFlow Malformed packets [CSP1047773]	Malformed packets in sflow datagram with ipv6	Corrected packet length calculation	All platforms
Front panel temperature LED randomly showing RED (over temperature) [PSE032998]	Front panel Temperature LED for the unit randomly gives RED ALARM	Corrected issue in thermal update function	N15XX
Switch console "ATP RX: Failed to alloc" messages [PSE033238]	Observed "ATP RX: Failed to alloc" messages on switch console	Corrected output of unneeded message	All platforms
Error in CLI 'show supported cardtype' command output [CSP1045245]	CID begins with 2 in CLI 'show supported cardtype' command output instead of 1	Corrected numbering of CID	N4XXX
MSTP not converging because not able to add non-existent vlan to MSTP instance [PSE033630]	Error while adding non existed vlan to MST instance and the error displayed is not appropriate	Corrected error message to be accurate	All platforms
CVE-2016-0777 & CVE-2016-0778 [PSE033733]	Roaming vulnerabilities	Applied patch to specific vulnerabilities	All platforms

Support Assist memory leak [CSP1052619]	Support Assist memory leak	Corrected release of memory	All platforms
Exponential-backoff algorithm doesn't work when KoD packet is received [PSE033791]	The switch will not respond properly to KoD packets with kiss codes "INIT", "STEP", "DENY", RSTR" and "RATE". and implementation of 'retry after poll interval' for kiss code "NULL"	Corrected problem in backoff algorithm	All platforms
High CPU Usage when LLMNR packets received from Windows hosts [PSE033754]	Observed high CPU Usage when LLMNR packets reaching switch CPU from Windows hosts	Corrected system rule for LLMNR packets	All Platforms
Switch crash with emWeb task [PSE033806]	emWeb crash when executing show snmp command.	Corrected string length issue in SNMP command	All Platforms
OSPF interface cost is not recalculated after interface bandwidth is changed [PSE033777]	When VLAN interface bandwidth is changed, the OSPF cost doesn't change, unless switch is reloaded or interface is flapped.	Corrected error in assigning OSPF cost after change.	All Platforms
Removing power from ports connecting two PoE switches back to back. [PSE033179]	If any other PSE is connected to the PoE switch and PSE is injecting voltage to ports, then switch will deny power to PDs if new PDs are connected to the switch.	Corrected PoE controller setting.	N3XXXXP N2XXXXP N15XXXXP
MSTP not converging because not able to add non-existent vlan to MSTP instance [PSE033909]	MSTP not converging because not able to add non-existent vlan to MSTP instance	Corrected check for non-existent VLAN.	All Platforms
CLI command “show interfaces switchport” does not display proper output [PSE029714,PSE033986]	“show interfaces switchport” CLI command does not display proper output	Corrected Buffer issue in formatting output.	All Platforms
Routing issue, null address in ARP table after VLAN manipulation [PSE033945]	Routing issue, null address in ARP table after VLAN manipulation	Corrected VLAN configuration issue on stack failover	All Platforms
Switch crashes due to out of system buffers [PSE033559]	Switch crashes with NIM component timeout.	Corrected data locking issue.	All Platforms
Switch crashes due to VRRPdaemon & nim_t tasks [PSE033862]	Switch crashes with NIM component timeout.	Corrected data locking issue.	All Platforms
Stack crashes with "hapiRxTask" while routing unicast and multicast traffic	Stack crashes with "hapiRxTask" while routing unicast and multicast traffic	Corrected data locking issue.	All Platforms
Stack member dropping tagged packets destined to HSRP virtual IP	Stack member dropping tagged packets destined to HSRP virtual IP	Corrected System multicast rule.	All Platforms
OpenSSL vulnerabilities [PSE034144]	CVE-2016-2107, CVE-2016-2105, CVE-2016-2106, CVE-2016-2109, CVE-2016-2176	Applied Patches for specific vulnerabilities.	All Platforms
Configuring speed under interface causes switch to lockup [CSP1066600]	Configuring speed under interface causes switch to lockup	Corrected data locking issue.	All Platforms
Executing “dev binsh” from connect mode is crashing the switch in certain scenarios [PSE031167,PSE031778]	Executing “dev binsh” is not supported in connect mode	Corrected check to not allow in connect mode.	All Platforms
Static routes are not getting loaded to routing table[PSE034340]	Configured static routes are not getting loaded if the router is in Host mode.	Corrected route validation to allow static routes	All Platforms
Default hashing algorithm (7) in [port-channel leads to packet drop issue [PSE033587]	Packet drops with default hashing on port-channel interface with members across stack units	Corrected hash control for default algorithm 7	N2XXX N3XXX
System LED in GUI is RED [PSE033872]	System LED in GUI is displayed as RED.	Corrected LED initialization issue.	N15XX
RSA Public keys failed to load after switch reboot with “key” comment at the end [PSE034511]	RSA Public keys failed to load after switch reboot with “key” comment at the end	Corrected comment handling problem	All Platforms
HiveAgent v2.78	Upgrade to HiveAgent v2.78	Upgraded HiveAgent	N15XX N2XXX N3XXX

Stack port not joining intermittently upon reload and failover [PSE034096]	Occasionally 10G ports configured as stack-ports (Te1/0/3-4) do not link up during reload and failover	Corrected local fault handling error during initialization	N15XX
SSH session being locked for brief period causing issue in config push via hivemanager [CSP1046713]	The SSH session lockup is causing issues in config push from Hive-Manager.	Correct session close issue.	All Platforms
Switch crash with "emWeb" task when configuring ip unnumbered loopback interfaces [CSP1078885]	emWeb crash when configuring ip unnumbered loopback interfaces if there is an existing MCAST configuration on the interface	Corrected loop back interface numbering issue	All Platforms
Port not participating in default vlan after deleting existing vlan [CSP1057643]	Port not participating in default vlan after deleting existing vlan	Corrected VLAN delete issue.	All Platforms
Switch console log "2/0/47 Port programming failed with error 0x1...." [CSP1076720]	Switch console log "2/0/47 Port programming failed with error 0x1...."	Corrected issue using 100M transceivers. Corrected remote procedure call timeout issue which caused this message.	N2XXX N3XXX
Support-Assist: System Uploads occurring every 7 hours, not 7 days. Check is every hour; not every Day [CSP1076720, CSP1080126]	Support-Assist: System Uploads occurring every 7 hours, not 7 days. Check is every hour; not every Day	Corrected Support-Assist upload intervals	All Platforms
SSH stops working after some time [PSE035315,PSE034624,PSE035139, PSE035707,PSE035839]	Occasionally SSH session would lock up and not allow access.	Corrected access method to user manager.	All Platforms
Stack firmware upgrade and downgrade fail [CSP1071258]	When upgrading firmware stack would split or firmware would not be propagated to member units	Corrected SNTP system clock update while FW is being upgraded.	N2XXX N3XXX
Slow switch response and slowness in attaching ports after initiating fail over [PSE034236, PSE034774]	A lot of SFPs do not have the Diagnostic EEPROM implemented. Due to this issue, the performance of the access to those SFPs will be very poor.	Checking for Diag EEPROM. If not available will not read.	N2XXX N3XXX N4XXX
nim-t & cmgrInsertTask crash observed while enabling spanning tree [CSP1075333]	NIM task crashes seen when toggling spanning-tree on the stack	Corrected spanning tree message issue across the stack.	All Platforms
Traffic is forwarded out of PVST blocked port [PSE034751]	Traffic is learnt across the PVST blocked and non-blocked ports, due to network re-convergence leading to disruption in traffic.	Corrected issue setting PVST blocked port.	All Platforms
Stack member dropped leading split brain scenario [PSE035510]	In the stacking environment, when HG cables are removed and reinserted unit is not joining the stack. It is acting as individual unit.	Corrected stack port lock issue.	All platforms
Stack member crash (Stk Mgr Task) [CSP1088107]	Crash due to invalid memory access exceptions.	Corrected memory corruption issue.	All platforms
Stack member crash with continuous master failover. [CSP1088103]	Crash due to invalid memory access exceptions.	Corrected memory corruption issue.	All platforms
Member interface failed to join Port-channel after stack failover [PSE034668]	After basic port channel operations or unit reload, sometimes the members do not get attached back to the pc like they should.	Corrected port speed issue on stack failover.	N20XX N30XX N40XX
10G interface with "speed 1000" configuration fails to join port-channel interface. [PSE035724]	After basic port-channel operations or unit reload, the members do not get attached back to the port-channel interface occasionally.	Corrected port speed issue on stack failover.	N20XX N30XX N40XX

Full memory dump is not generated for Coredump [CSP1093029]	Full memory dump is not generated for Coredump	Corrected memory dump issue for coredump.	All platforms
Improve packet RX processing on Stackable platforms. [CSP1093028, PSE035358]	Stack communication were occasionally starved for buffers.	Increased the number of Stack communication buffers.	N40XX
Kernal patch for "fix cipso packet validation when !NETLABEL" [CSP1086050]	IP Stack can hang when packets with an invalid destination address are directed to the OOB port.	Corrected packet validation issue.	N40XX
Switch crashed multiple times [PSE034996]	Switch crashed due to memory corruption	Corrected memory corruption issue.	All platforms
UDLD-root ports are moving to Bidirectional with non-udld enabled root bridge [CSP1076927]	UDLD-root ports are moving to Bidirectional with non-udld enabled root bridge	Corrected BPDU validation issue.	All platforms
Switch goes unresponsive at certain scenarios on both stack and standalone setup.[PSE035457,PSE035574,PSE035579,PSE035622,PSE035721,PSE035809,PSE035843,PSE035848,PSE035862,PSE035869,PSE035871,PSE035953,PSE035984,PSE036016,PE036033,PSE036034]	Switch goes unresponsive at certain scenarios and split from the stack. Requires power-cycle to recover from issue state.	Tuned system initialization values	N40XX HW Rev.4
Switch crash loop with "fp_main_task" [PSE034177,PSE034367,PSE034968,PSE035189,PSE035487,PSE035511,PSE035624,PSE035710, PSE035751, PSE035795]	Switch crashes with the task "fp_main_task" until manual power-cycle.	Tuned system initialization values	N40XX HW Rev.4

Patch Release 6.3.0.19

Summary	User Impact	Resolution	Affected Platforms
1G Copper SFP link failure (on 10G port) [PSE035371]	10G Ports with 1G SFP optics (without EEPROM diagnostics implemented) fails to link UP on bootup. Also, the switch performance with those SFPs are affected.	Added a check for diagnostic EEPROM.	N40XX N30XX N20XX
Enabling RSPAN monitor session affects traffic over reflector-port [PSE035259]	RSPAN does not correctly monitor VLANs	Corrected RSPAN mirrored traffic handling.	All platforms

Patch Release 6.3.0.18

Summary	User Impact	Resolution	Affected Platforms
ACL Wildcard Mask Issue [PSE034858]	Configured wildcard mask for ACL reverted in opposite order like a subnet mask affecting the traffic.	Corrected issue with wildcard mask order.	All platforms

Patch Release 6.3.0.16

Summary	User Impact	Resolution	Affected Platforms
Packet loss observed on 1G port-channel. [PSE032560]	1G interfaces can experience packet loss when a stack member reloaded or after a stack failover.	Corrected issue with dynamic port config of 1G port	N4XX

Interfaces are down and detach state after stack failover	Interfaces can experience an down or detached state when a stack member is reloaded or after a stack failover.	Corrected issue with dynamic port configuration of 1G port	N4032 and N4064
SSH session being locked for brief period causing issue in config push via hivemanager	SSH session being locked for brief period causing issue in config push via hivemanager	Corrected a problem in the channel close operation.	All platforms
Setting port to access mode vlan 1 causes the switch to lose default gateway	Setting port to access mode vlan 1 causes the switch to lose default gateway	Corrected problem in configuring VLAN setting	All platforms
Configuring the speed settings causes switch to lockup	Applying any speed settings on an interface causes the switch console to hang.	Corrected issue with port configuration.	All platforms

Patch Release 6.3.0.15

Summary	User Impact	Resolution	Affected Platforms
Switch may randomly experience a loss in link state on sets of 8 ports. For example, ports 1 to 8 or ports 9 to 16, and so on. [PSE028608]	When these ports go down, flapping is required to get the ports up. In some cases, reloading is required.	Corrected an I2C write cycle for the CPLD.	N2XXX N3XXX
In certain scenarios, the default hashing algorithm (7) for port-channel leads to packet drop. [PSE033587,PSE033632]	In certain scenarios, the default hashing algorithm (7) for port-channel leads to packet drop.	Corrected a VLAN tag issue in the RTAG7 hash.	All platforms
Switch displays the following message on the console in a stacked environment: Unable to get access to POE controller. [PSE033448]	Switch displays the following message on the console in a stacked environment: Unable to get access to POE controller.	Corrected an issue with terminating the PoE read task.	N2XXXP N3XXXP
Unable to change the port speed using the WebUI. [PSE033416]	On the WebUI the Switching-> PortConfiguration-> Port Detail-> "Admin Port Speed" pull down menu has all options missing.	Corrected list handler for that page.	All platforms
Interfaces go to D-Down state instead of STP BLK state. [PSE033357]	Loop-protect and STP running concurrently causes this issue.	Disabled the loop-protect feature by default.	All platforms
The iSCSI configuration option is missing from the Web GUI. [PSE033235]	The iSCSI configuration option is missing from the Web GUI.	Corrected an issue with enabling iSCSI.	All platforms
When portfast and BPDU-protection are used on edge ports, excessive TCNs and MAC address flush happen. [PSE033089]	When portfast and BPDU-protection are used on edge ports, excessive TCNs and MAC address flush happen.	Corrected a race condition during topology changes.	All platforms
Traffic does not resume after upgrading the OS and removing RSPAN configuration. [PSE032515]	Reflector port should continue to run STP and other protocols, and VLAN membership should exist for the reflector port. But when port mirroring configuration is restored during startup, VLAN membership is removed from the reflector port	Corrected an issue in identifying reflector port.	All platforms
When loopguard feature is enabled, the system learns MAC addresses and passes traffic when in discarding state. [PSE032982]	Port state transitions are still being honored when the port is in loop inconsistent state.	Corrected issue during port transitions.	All platforms

A DHCP client receives a different IP address from the DHCP server after PXE boot process. [PSE032914]	Existing lease is not re-used when the Client-ID option is used, resulting in a NAK.	Corrected an issue with option 61.	All platforms
The "terminal monitor" does not work on the first Telnet/SSH session. [PSE033702]	The "terminal monitor" command does not have any effect on the first Telnet/SSH session.	Corrected an issue when selecting between the serial port and telnet session.	All platforms
In certain scenarios, the first IGMP membership report from IPTV is dropped. [PSE029342]	IGMP traffic is delayed on the member of the stack.	Adjusted the CoSQ priority for multicast traffic.	All platforms
RSPAN mirrored packets are double tagged at the destination port. [PSE032515]	While RSPAN VLAN tag should be removed at the destination port, it is not removed.	Added remove-rspan-tag option for monitor session destination port.	All platforms
SNMPWalk Response for MIB "1.3.6.1.4.1.674.10895.3000.1.2.100.6" shows "0.0.0.0" address. [PSE032484]	SNMPWalk Response for MIB "1.3.6.1.4.1.674.10895.3000.1.2.100.6" shows "0.0.0.0" address.	Corrected an issue with SNMPWalk.	All platforms
Green ethernet does not respond to network interface manager (NIM) causing NIM timeout and crash.	Green ethernet does not respond to network interface manager (NIM) causing NIM timeout and crash.	Corrected an issue in green Ethernet checkpoint.	All platforms
When the IP address lease time expires on VLAN 1, the system stops sending DHCP requests if the DHCP server is not reachable. [PSE032357]	VLAN 1 goes down until manual intervention.	Corrected an issue in request for lease renewal.	All platforms
Under certain scenarios, fan modules fail.	The "show system fan" command shows fan status as "OK" even if one of the fan goes to failure state.	Corrected an issue in fan status state machine	N4XXX

Patch Release 6.3.0.10 (Only applicable for N1500 Series switches)

Summary	User Impact	Resolution	Affected Platforms
HiveAgent application is not running on N1500 Series switches	HiveAgent application is not running after switch boot-up	Corrected the hiveagent binary	N15xx

Patch Release 6.3.0.9

Summary	User Impact	Resolution	Affected Platforms
Dot1x clients fail to access the network after re-authentication. [PSE032563]	This issue happens in a stacked environment when a dot1x client is re-authenticated.	Corrected data overwrite issue in a stacked environment.	All platforms
The switch experiences a spontaneous reboot. [PSE032544]	The switch occasionally crashes during an SNMP walk if a trap is generated.	Corrected an SNMP race condition.	All platforms
Under certain scenarios, the switch is non-responsive to management access (SSH/Console). [PSE032994]	Lost switch management access (SSH/Console).	Corrected by protecting the affected area using semaphore.	All platforms
The "show port-security all" command does not display the output properly.	Columns on the "show port-security all" command are not correct.	Corrected column labels	All platforms

The last violation MAC address is not listed in the "show port-security all" command output when the port is shutdown. [PSE033087]	The "switchport port-security shutdown" command is enhanced to include the last violation MAC address.	Enhanced the "switchport port-security violation shutdown" command	All platforms
PVST debug logs are not displayed after upgrading to 6.3.[PSE033049]	PVST TCNs and state change logs are not displayed after upgrade to 6.3.	Corrected output from these commands.	All platforms

Patch Release 6.3.0.6

Summary	User Impact	Resolution	Affected Platforms
The nim_t task process crashes the stack member when the snooping component does not respond to NIM. [PSE032481,PSE031499,PSE031171]	The nim_t task process crashes the stack member when the snooping component does not respond to NIM.	Corrected Semaphore block issue that caused NIM to detect a blocked component.	All Platforms
Stack master unit crashing issuing some 'show' CLIs [PSE031255]	"show ip igmp snooping groups" show command throw exception when displaying long list of ports.	Corrected the issue, The command now successfully displays large number of ports.	All platforms
User cannot modify the existing non-default Captive Portal configuration using the GUI. [PSE030762]	1) Cannot select Non-default configuration from the drop-down. 2) Unable to edit the default configuration. 3) Unable to create new configuration from the add page.	Corrected issue indexing web page tables.	N2XX N3XX
In certain scenarios, the switch reports "Failed to find requested group data in check point DB,family 1" error. [PSE030553]	The system displays the following two error messages in the console: 1.Invalid uport calculated from the BCM uport. 2. Failed to find requested group data in check point DB,family 1.	Corrected the error.	N4XX
GVRP is flushing the dynamic VLANs every few seconds. [PSE031203]	Dynamic VLANs learned through GVRP are deleted every few seconds.	Corrected GVRP initialization error in learned VLANs.	All platforms
In certain scenarios, enabling UDLD causes the interfaces to move to the D-Down state within a span of few minutes. [PSE029168]	In certain scenarios, enabling UDLD shuts down interfaces on boot up.	Corrected the race condition during UDLD initialization.	All platforms
In a stack environment, the system experiences connectivity issues when the member ports get detached from or attached to the port channel interface. [PSE027667 ,PSE031449]	System displays the following error message in the console :“failed to set the DTAG mode”. System also experiences connectivity issues on Port channel interface.	Corrected the issue in LAG port initialization.	All platforms
In certain scenarios, PVST does not work properly on some ports after reload. [PSE030302]	After a port flap event, the state of the port changes to the disabled state even if the port is up.	Corrected the port data issue when the port flaps.	All platforms
After a stack failover, the static routes fail to install properly. [PSE031737]	After a stack failover, the static routes fail to install properly.	Corrected an issue during DHCP initialization after stack failover.	All platforms
10G SFP+ BiDi optics operates only with 1Gb speed. [PSE029562]	Unqualified 10G SFP+ BiDi optics operates only with 1Gb speed.	Allow unqualified 10G optics to link at 10G rate.	N4XX
System response to the show commands is slow due to i2c access present in the SFP/QSFP optics. [PSE026498, PSE027362]	System response to the show commands is slow due to i2c access present in the SFP/QSFP optics.	Moved transceiver static data reads to the initialization sequence.	All platforms
Switch hangs after executing the reload command from GUI or CLI. [PSE029568, PSE031120]	Switch hangs after executing the reload command from GUI or CLI.	Corrected the power controller initialization.	N4XX
Switch crashed during SNMP walk. [PSE032191]	Switch crashes when the snmp-bulkget command is executed.	Corrected the error in SNMP.	All platforms

Switch crashes when IPv6 OPSF is enabled and acts as an ABR. [PSE032096]	Switch crashes when IPv6 OPSF is enabled and acts as an ABR for more than two areas.	Corrected the new route add initialization error.	All platforms
Fan failures are reported on the switch. [PSE031998]	Fan failures are reported on the switch.	Corrected the issue with driver to read the fan status accurately.	N2XX N3XX
The stack member reboots and the RLINK Tunnel Src: alloc failed error appears.	The stack member reboots and the RLINK Tunnel Src: alloc failed error appears.	Corrected buffer allocation for stack messages.	All platforms
Running configuration is not being propagated to the stack units under certain stack fail over scenarios. [PSE032305]	Running configuration is not being propagated to the stack units under certain stack fail over scenarios.	Corrected buffer allocation for stack messages.	All platforms
Stack member crashes due to the bcmATP-RX software exception.	Stack member crashes due to the bcmATP-RX software exception.	Corrected the invalid memory access issue.	All platforms
OMNM reports SNMP ifTable issue.	The ifTable data returned has ifType 'other' for port channels and VLAN interfaces. This results in these interfaces not being picked up by OMNM.	Corrected ifTable type values	All platforms
SSH session does not close on exit at client side (MAC and Linux devices).	After closing the CLI SSH session the connection to the Web server is lost.	Corrected the issue with closing socket.	All platforms

Release 6.3.0.3

Summary	User Impact	Resolution	Affected Platforms
Switch unresponsive with "speed auto" config under ten gigabit interface. [PSE030350]	If the speed is set to auto under the ten gigabit interface and when link comes up, switch goes unresponsive while executing CLI commands	Corrected auto-negotiation issue	All Platforms
Switch does not send ETS Recommendation TLV when in DCBX version IEEE or Auto mode. [BITS257876]	DCBX - some devices require Recommendation TLV in addition to Configuration TLV for successful negotiation	Added capability to send Recommendation TLV	All Platforms
Link does not activate with SFP-100M-FX part number 9DN5J. [PSE030727]	Link does not activate with SFP-100M-FX part number 9DN5J	Added validation	All Platforms
OSPF routes are not added to routing table if nbr rtr-id is Class-D or Class-E. [PSE029932]	Switch is not updating the routing table if the routes are received from the neighbor with class-D or class-E router-id	Corrected validation issue	All Platforms
CPU spikes with invalid BPDU type errors. [PSE030050]	CPU spikes when processing a BPDU with a port id of 0	Corrected issue in BPDU validation.	All Platforms
Destination port of a monitor session becomes a member of vlan 0. [PSE030126]	Show command is displaying zero as VLAN membership.	Corrected Display to not show VLAN information which is invalid for monitor ports.	All Platforms
PBR stops working after reload. [PSE029635]	PBR stops working after reload when the default route is added	Corrected HW rule for the default route	All Platforms
Master-unit learns the MAC address on a STP-blocked port of the Standby-unit. [PSE030226]	Mac addresses are being learnt on the port even though it is in disabling state.	Corrected issue in syncing MAC address tables across the stack	All Platforms
Bridge Multicast Group Add produces error message at times. [PSE030280]	The switch may return error: Failed to set 'NLS ERROR' with 'Add' error occurred FILTER_MISSING	Corrected error in validation MAC address types	All Platforms
OSPF wrong DR and BDR info displayed on neighbors. [PSE030279]	Command show ip ospf neighbor does not show the correct state on Broadcast Multi-access Network	Corrected error in displaying neighbor state	All Platforms

Patch Release 6.2.7.6

Summary	User Impact	Resolution	Affected Platforms
When a dot1x client is reauthenticated, supplicants fail to access the network.	When a dot1x client is re-authenticated, supplicant is deleted from the list.	Final fix that is scalable to large installations will be available in the 6.3.x.x	All Platforms
The destination port of a monitor session becomes a member of VLAN 0.	The show interfaces tengigabitethernet and show interfaces status command outputs display incorrect VLAN information if port mirroring is configured on a port as destination.	Corrected the display of VLAN information.	All Platforms
PBR stops working after reload.	PBR stops working after reload when a default route is deleted or added.	Corrected an issue modifying default route.	All Platforms
CPU usage goes high when the device receives invalid BPDUs from a server.	CPU usage goes high when the device receives BPDUs with port ID as 0.	Corrected issue in validating port ID.	All Platforms
The master stack unit learns MAC addresses on an STP-blocked port of the standby unit.	The master stack unit learns MAC addresses on an STP-blocked port of the standby unit.	Corrected MAC address flush when a port is disabled.	All Platforms
The system may display an error message when a bridge multicast group is added using the web GUI.	The system may display the following error message when a bridge multicast group is added using the web GUI. Failed to set 'NLS ERROR' with 'Add' error occurred FILTER_MISSING	Corrected an error when formatting MAC address.	All Platforms
The system displays "Unable to get Max Power Value" error message frequently.	The system reports the PSU status shows as "Failure" even though switch is running properly.	Corrected the issue.	N2XX N3XX
The show ip ospf neighbor output displays wrong OSPF DR and BDR details.	The system displays the interface state instead of the neighbor state.	Corrected the issue when displaying the neighbor state.	All Platforms
The system does not add the routes advertised by other routers having router IDs with Class D or Class E IP addresses.	Router IDs with Class D and Class E IP address are not supported.	Provided support for class D and class E.	All Platforms
Under certain scenarios, the stack failovers randomly and the stack unit is not accessible through Console.	The unit is not accessible through console, but traffic is unaffected.	Fixed the kernel issue.	N4XX
The system displays an error message when trying to configure the SSH port as 22.	Unable to configure 22 as the SSH port number.	Added port 22 as a valid port.	All Platforms
In a dot1x MAB setup, dynamic vlan assignment is not learned by the upstream router.	In a dot1x MAB setup, dynamic vlan assignment is not learned by the upstream router.	Corrected a VLAN issue.	N15XX

Patch Release 6.2.7.4

Summary	User Impact	Resolution	Affected Platforms
Under certain scenarios, the system experiences a software exception when Accounting is configured.	When the system performs authorization using a RADIUS server, the system experiences a software exception. This happens only when the system has already tried to access the secondary RADIUS accounting server which is not configured.	Corrected an issue in validating the accounting server.	All Platforms
The show interfaces switchport command does not display the output properly.	When more than 18 entries are added to the allowed VLAN list, the "show interfaces switchport" command output is garbled.	Corrected the formatting issue.	All Platforms
Under certain stacking scenarios, the RADIUS task experiences a software exception when dot1x is used.	Under certain stacking scenarios, the RADIUS task experiences a software exception when dot1x is used.	Corrected the parameter error in the RADIUS configuration task.	All Platforms
Under certain dot1x and MAB scenarios, EAP-MD5 authentication	Under certain dot1x and MAB scenarios, EAP-MD5 authentication fails occasionally	Corrected a RADIUS attribute issue.	All Platforms

fails when Clear Pass Policy Manager is used as RADIUS server.	when Clear Pass Policy Manager is used as RADIUS server.		
The summertime configuration does not take effect when the start and the end years are different.	The summertime configuration does not take effect when the start and the end years are different.	Corrected an error when checking for recurring summer time.	All Platforms
The system displays the following error message: radius_api.c(1941) 444 radiusServerSourceIPGet(): Failed to find server	The system displays the following error message: radius_api.c(1941) 444 radiusServerSourceIPGet(): Failed to find server	Corrected an initialization error.	All Platforms
The device does not learn the MAC address of the voice vlan when LLDP MED Network Policy is applied on Polycom phones.	The device does not learn the MAC address of the voice vlan when LLDP MED Network Policy is applied on Polycom phones.	Corrected the LLDP-MED TLV policy flag.	All Platforms
When trying to download the image using the GUI , download fails.	When trying to download the image using the GUI , download fails.	Corrected an error in text termination at the end of file.	All Platforms
Fiber link with SFP transceiver between N4032F and N1548 flaps with auto negotiation enabled.	When an SFP transceiver is used on a 10Gbe port between N1524 and N4032F, the link flaps continuously with auto negotiation enabled.	Corrected an error in populating the SFP data.	N4XXX
PFC packets get duplicated when exiting a device connected in a ring topology.	PFC packets get duplicated when exiting a device connected in a ring topology.	Corrected an error in identifying the PFC-selected port.	N4XXX

Release 6.2.7.2

Summary	User Impact	Resolution	Affected Platforms
Packet loss is observed while pinging an OOB interface.	When initiating ping traffic to an OOB interface from a Linux PC, around 1% to 3% of packet loss is observed.	Updated Kernel with OOB port update.	N4XXX
The "show supported switchtype" command lists N2000 as a supported switch in an N3000 stack.	The "show supported switchtype" command lists N2000 as a supported switch in an N3000 stack.	Corrected validation check for supported switches.	N3XXX and N2XXX
While unconfiguring IPv6 hop-limit, the system displays an error message.	While unconfiguring IPv6 hop-limit, the system does not accept the configuration and displays an error message.	Corrected an error in hop-limit calculation.	All Platforms
When TACACS timeout is configured as one second , login timeout occurs.	When TACACS timeout is configured as one second , login timeout occurs.	Corrected the error in resetting timeout.	All Platforms
After a stack failover, configuration loss occurs.	When a member unit is removed from a stack immediately after the management unit is removed, configuration loss occurs.	Corrected the configuration update.	All Platforms
Enabling UDLD shuts the ports down and changes port state to D-Disable.	Enabling UDLD shuts the ports down and changes port state to D-Disable.	Corrected data exchange between partners.	All Platforms
The switch crashes when the "do show running-config interface te x/y/z all" command is used.	The switch crashes when the "do show running-config interface te x/y/z all" command is used.	Corrected the display of large command paging.	All Platforms
DHCP Relay uses incorrect source port number.	DHCP Relay agent incorrectly uses 68 as the source port.	Changed source/destination ports to 67/67.	All Platforms
N-series goes to u-boot after customers select "Option 13" from Boot-Menu.	The boot-menu "option 13" reformats the flash but does not restore the firmware files causing the switch to stop at "uboot" on reset.	Removed the boot menu "Option 13" until the firmware restore feature is fixed.	All Platforms
The power management mode is Class by default.	The default power management mode causes issues in powering up certain PoE devices.	Changed the default power management mode from Class to Dynamic.	N3XXXP N2XXXP
The system displays the following error message: "broad_hpc_drv.c(4428) 1396 %% unit 0 PORT_CBL_TABLE entry 0 parity error"	The system displays the following error message: " broad_hpc_drv.c(4428) 1396 %% unit 0 PORT_CBL_TABLE entry 0 parity error"	Applied the change based on hardware errata.	N4XX
Under certain circumstances, the system crashes when PVST is enabled.	Under certain circumstances, the system crashes when PVST is enabled.	Corrected a data corruption issue.	All Platforms

Patch Release 6.2.6.9

Summary	User Impact	Resolution	Affected Platforms
Device does not forward the DHCP offer to the clients with Intel NIC.	The stack does not forward the DHCP offers to the clients with an Intel NIC.	Corrected DHCP binding error.	All Platforms
MAC errors and jabbers reported on all active switch ports.	"Received packets dropped > MTU" and "Internal MAC Rx Errors" counters are not correctly counting packets > MTU size.	Corrected counts for the "Received packets dropped > MTU" and "Internal MAC Rx Errors" counters	All Platforms
Terminal monitor command doesn't have any effect for the first telnet/ssh session	Terminal monitor command doesn't have any effect for the first telnet/ssh session	Corrected SSH session index problem.	N20XX N30XX
Stack member crash "pimsmMapTask"	Stack member crash in the "pimsmMap" task	Corrected buffer free error.	All Platforms
Discrepancy in displaying show ip ospf database output	"show ip ospf database external <ls-id>" command output shows only one LSA even though there are multiple LSA's (with different paths) available.	Corrected search for additional ls-ids.	N20XX N30XX
ATP RX: Failed to alloc for reassem error messages after upgrading switch firmware	Observed "ATP RX: Failed to alloc for reassem" errors in stacking environment.	Corrected buffer overwrite issue.	All Platforms
IP Helper not forwarding all DHCP DISCOVER packets to the Server.	Switch drops dhcp discover packets with stale value in the packet buffer of relay task.	Corrected DHCP packet drop issue	All Platforms
Stack set up as DHCP relay and clients takes long time to get an IP address.	Switch drops dhcp discover packets with stale value in the packet buffer of relay task.	Corrected DHCP packet drop issue	All Platforms
Switch is logging Invalid uport messages	LOG messages are displayed on the console for the severity level Informational	Corrected error logging level for these messages	All Platforms
SNMP queries crashes the switch management, but traffic unaffected	CLI stops responding when "show running" command is executed after the snmpget operation on OID "1.3.6.1.4.1.674.10895.3000.1.2.100.6.0"	Corrected error in evaluation of this OID.	All Platforms
do1qVlanStaticTable not being populated correctly	SNMP Requests do1qVlanStaticTable (1.3.6.1.2.1.17.7.1.4.3) not being populated correctly.	Corrected error in reporting MIB values	All Platforms
Switch has periodic routing issues after every reload.	Switch has periodic routing issues after every reload.	Corrected priority issue between the default route and the service port	All Platforms
Client do not get the IP address if the DHCP snooping is enabled on the server vlan	Client does not get the IP address if DHCP snooping is enabled on the server vlan	Corrected VLAN check on incoming DHCP packets	All Platforms
Packet drops over port-channel interface on stack failover	During failover, PVST reconciliation error logs are observed in the new Manager unit causing the check pointed data to be flushed and dropped	Corrected BPDU check after failover	All Platforms

Patch Release 6.2.6.8

Summary	User Impact	Resolution	Affected Platforms
Switch freezes when reboot function from boot menu is used	While using reboot option from boot menu the switch can freeze requiring a power on reset.	Corrected reboot logic.	N4XXX
Stack reboots continuously with port-channel in general mode	Occasionally the stack will reload when a port-channel is configured in general mode	Corrected buffer overrun when general mode is set.	N20XX N30XX
Storm-control does not work without action command	Receive Packets Discarded does not increment when storm control rate is set for multicast,broadcast and unicast.	Corrected issue with receive packet counter	All Platforms
"show isdp neighbors" output shows all downstream switches as neighbors	"show isdp neighbors" command output shows downstream neighbor switches as ISDP neighbors instead of showing only the directly connected neighbors.	Corrected error in ISDP event handler.	All Platforms

Switch becomes unreachable after receiving an ICMP redirect packet	Switch becomes unreachable after receiving an ICMP redirect packet from a different sub-net.	Corrected error in rule for next-hop.	All Platforms
Encrypted string is shown for simple mode. encrypted string should be shown only when mode is encrypt.	Encrypted string is shown for simple mode. It should be shown in clear text.	Corrected condition on displaying clear text.	All Platforms
VLAN ID is added to the allowed vlans list after it is removed	VLAN ID is added to the allowed vlans list after it is removed from the configuration	Corrected VLAN removal issue.	All Platforms
SSH locks up every 2 days	Occasionally, SSH will achieve a condition where it will lock up every 2 days when accessed by a Dell OME Server.	Corrected a race condition in SSH	All Platforms
Switch drops RIP routes with .255 final octet and /32 mask	RIP component drops subnet zero and all-ones subnet routes learned from neighbor.	Modified RIP to support subnet zero and all-ones subnet routes.	All Platforms
Some SFPs fail to link UP	Fiber transceivers that report as unknown won't link-up	Fiber transceivers that report as unknown will be considered 1G SFP.	All Platforms
ISDP neighbors are not updated even if packets are received	ISDP neighbors are not updated due to packet length validation failure, even if packets are received	Corrected error in packet receive function.	All Platforms
Switch is not sending snmp trap notifications for UP/DOWN status on loopback interfaces	When a loopback interface status changes, SNMP traps are not being sent	Enabled SNMP traps for loopback interfaces.	N20XX

Release 6.2.6.6

Summary	User Impact	Resolution	Affected Platforms
web timeout (HTTPS) does not depend on exec-timeout configuration	https web sessions are getting logged-out/timed-out even though web sessions are active.	Corrected use of configured timer values	All Platforms
SNMP MIB Walk OID "1.3.6.1.4.1.674.10895.3000.1.2.100" returns URL http://0.0.0.0	snmpwalk always gives the URL as http://0.0.0.0	Corrected retrieval of OID value.	All Platforms
dot1x mac based authentication, clients behind phones can't forward traffic	When phone moved to another port dot1x lost track of it.	Corrected issue with adding new port information	All Platforms
MLAG/LACP issue "Error allocating buffer pools for the received dot3ad data message"	Port channel flapping after some up-time, when multiple VPC's are enabled on the switch.	Corrected MLAG packet format error.	N40XX N30XX N20XX
Switchport is not removed from unauth VLAN even after passing dot1x authentication.	After switchport is authenticated, the port still remains in the list of unauthenticated ports	Corrected port authentication update.	All Platforms
IPv6 Multicast not filtered by MLAG Peer-Link	IPv6 Multicast (mDNSv6) not filtered by MLAG Peer-Link	Corrected conflicting rules for MLAG peer-link egress	N40XX N30XX N20XX
Front panel 10G SFP ports are flapping while inserting the plug-in module	Hot swapping the plug-in module results in a front panel port flap	Updated the WC40 driver	N30XX
Front 10G ports goes down when 10G SFP extension module is removed from the slot	Hot swapping the plug-in module results in the loss of the front panel ports	Corrected port probe error	N30XX
Ports flapping when port-channel membership is being modified via WebUI	Ports flapping when port-channel membership is being modified via WebUI	Corrected update of port-channel information when using the WebUI	All Platforms
dot1x unauth-vlan not working with authentication order enabled	When connected client on switch interface fails authentication, the port is not put in UNAUTH-VLAN but it keeps trying to authenticate endlessly.	Corrected internal index error.	N30XX N20XX
Aastra 6725IP phone not getting power when connected to switch	Aastra 6725IP phone not getting power when connected to switch	Updated PoE controller firmware	N30XXP N20XXP

PoE interoperability issue with D-Link PoE Splitter	Unable to power on D-Link POE splitter due to under load	Updated PoE controller firmware	N30XXP N20XXP
Dot1x authentication issues	Occasionally, the he radius communication will fail, resulting in failure of authentication mechanism, and network connectivity.	Corrected buffer overflow issue.	N30XX N20XX
CDC RX FIFO entry 45 ECC error seen	Erroneous ECC errors seen because SolarFlare PHYs insert an additional preamble byte into the stream	Changed HW configuration to make switch more tolerant to PHY errors.	N40XX
Ping to VRRP Virtual IP with payload size more than 1473 is failing	Ping to VRRP Virtual IP with payload size more than 1473 is failing because of fragmented Ping packets.	Allow fragmented ping packets.	All Platforms
stack when issuing 'show' CLI causing his ping to timeout	On a stack when issuing a 'show' CLI command the ping times out when ip routing is turned off.	Corrected routing in CPU when IP routing is turned off.	All Platforms
Multiple vulnerabilities (CVE-2011-3389, CVE-2013-2566 and CVE-2015-2808)	Presence of weak and vulnerable ciphers causing the vulnerabilities to be reported during the Nessus Scan.	Applied patches for these reported issues	All Platforms
IPv6 neighbor solicitation multicast not distributed to non-management stack members	Traffic Loss is seen on IPv6 Neighbor solicitation packets on the member of the stack	Increased the COS priority for ICMPv6 traffic	All Platforms
Switch crashes or hangs after multiple SSH session retries on switch	Switch crashes or hangs after multiple SSH session retries on switch	Corrected internal data issue when SSH session is retried.	All Platforms
BGP AS Number Range (Unassigned by IANA)	IANA reserved AS Numbers can be used. IANA has revised the reserved AS numbers range.	Updated range of IANA reserved AS numbers.	N40XX N30XX
show buffers command shows incorrectly spaced or garbled output via telnet/SSH	show buffers command shows incorrectly spaced or garbled output via telnet/SSH	Corrected formatting issue	All Platforms
Observed "LLDP entry delete failed" log messages	Expecting more verbose information of LLDP error messages.	Added the MAC address and interface number to the existing log message	All Platforms
Switch stack unresponsive with mcastMapTask crash logs	Switch crash in mcastMapTask process	Corrected internal data error.	All Platforms
Layer3 interface (vlans) stays down when stack master is powered off abruptly	Layer 3 interfaces are not in sync between the units and the master when the master is powered off	Corrected master and unit sync issue	All Platforms
RSTP BPDU packet dropped if hello timer mismatch	RSTP BPDU packet dropped if hello timer mismatch	Corrected hello timer mismatch by honoring the peer switch configuration in the range of 1 to 2 seconds.	All Platforms
Stacked and running RPVST is often unable to learn GARP address after failover.	Stacked and running RPVST is often unable to learn GARP address after failover.	Corrected internal stale data check	All Platforms
ip ospf and rip authentication encrypt string is showing in clear-text	ip ospf and rip authentication encrypt string is showing in clear-text	Encrypted authentication string	All Platforms
UNH-IPv6-USGv6 Interoperability and Basic Conformance failures	Conformance failures will result in interoperability issues with other vendor equipment	Applicable kernel patches applied and MTU changes done	N30xx N40xx
Prefix-list command does not permit use of "/" slash notation -error message text	The ability to use "/" notation to quantify the number of consecutive bits in the mask for prefix lists is missing.	CLI command enhanced to accept prefix length and network mask	All Platforms
Packet drop when removing default route	Traffic loss for about 5millisecond duration	Excluded host entry cleanup for default route	All Platforms

Radius thru SSH line fails the 1st connection	User need to enter the credentials twice	Corrected a deadlock on socket resource	All platforms
"show spanning-tree active" does not say this is the root	Information displayed is not consistent for all instances	Corrected the display root info for each instance	All Platforms
Disable SSL Version 2 and 3 Protocols and user TLS1.0 or higher	SSL2.0 & SSL3.0 suffer from several cryptographic flaws. An attacker may be able to exploit these flaws	CLI Command "ip http secure-protocol" allows to configure the desired protocol.	All Platforms
Incorrect info in 'show port-security dynamic <info>' CLI Command	The number of dynamic addresses learned are reported erroneously	Checks were added to prevent unconditional counter increments.	All Platforms
USL error messages making switch console unresponsive when ARP cache tests are run	This issue is seen when ARP cache is full at high ARP reply rate	Corrected mass ARP entries aged out process	All Platforms
Issues with Port-Security (Sticky MAC) with voice VLAN when connected to phone and PC	Sticky MAC entry for Voice VLAN is not added	Issue with packet padding is fixed	All Platforms
Supported 1G optics are reported as Not Supported	Some supported Dell part numbers are reported as not supported	Supported list of 1G transceivers are now considered as supported parts.	All Platforms
Port-security violation is not logged for ports with Sticky MAC enabled	No notification about the Violation	Violation trap is now logged	All Platforms
switch stack takes a very long time to respond for any sh commands	The command which retrieves optics data requires too much dedicated CPU cycles.	Removed The commands which retrieve optics data from the show tech-support command	All Platforms
Switch crashes or hangs after multiple SSH session retries on switch	Switch crashes or hangs after multiple SSH session retries on switch	Corrected web handling of SSH sessions.	All Platforms
Incorrect Dynamic MAC Address-table entry for Data-VLAN	Source MAC address from LLDP frames learned in bridge address table	Corrected internal LLDP policy issue.	All Platforms
Banner is not displayed in running configuration after a reboot	Banner is not displayed in running configuration after a reboot	Corrected check for system reload.	All Platforms
Auth doesn't fails when wrong/no password entered at enable prompt	Auth doesn't fail when wrong or no password is entered at the enable prompt	Corrected password initialization parameter error.	All Platforms
Stack member crash "hapiMcAsyncTask" and "hapiRxTask"	Stack member crash "hapiMcAsyncTask" and "hapiRxTask"	Corrected table index problem.	All Platforms

Release 6.2.1.6

Summary	User Impact	Resolution	Affected Platforms
WebUI timeout (HTTPS) does not depend on exce-timeout configuration	WebUI (HTTPS) sessions are getting logged-out/timed-out even though web sessions are active because of hard timeout.	Added CLI commands to allow the hard timeout to be changed.	All Platforms
Port-Security VoIP/PC issue	The source MAC address from LLDP frames learned in bridge address table	Corrected issue that caused learning	All Platforms
VoIP phones assigned to wrong VLAN	VoIP phones will be assigned to wrong VLAN, as the search for the ISDP entry for the interface index will yield incorrect results.	Corrected an issue searching for VLAN tree.	All Platforms
IPv6 connectivity failure after stack member failure on N4064F stack	When switch failover, IPv6 Neighbor solicitation(NS) packets are dropped	Corrected IPv6 Neighbor solicitation packet drop issue.	N40XX
Routing issue, null address in ARP table after VLAN manipulation	NULL MAC entries being present in ARP table learned on a wrong VLAN	Corrected ARP hand-off after failover	All Platforms
ARP entries with 0000.0000.0000 mac-address	NULL MAC entries being present in ARP table learned on a wrong VLAN	Corrected ARP hand-off after failover	All Platforms

Stack master unit crashing issuing some 'show' CLIs	"show ip igmp snooping groups" command throws an exception when displaying long list of ports.	Corrected page pagination issue. All Platforms	All Platforms
ARP resolution not happening for iSCSI traffic when iSCSI optimization is enabled	ARP response packets are being dropped for iSCSI traffic.	Corrected control traffic identification issue.	All Platforms
Ports on VLAN with PVST/RPVST disabled not learning MAC addresses after reboot	Ports on a VLAN where PVST/RPVST is disabled are not learning MAC addresses after a switch reboot	Corrected VLAN initialization issue.	All Platforms
SNMP MIB Walk OID "1.3.6.1.4.1.674.10895.3000.1.2.100" returns URL http://0.0.0.0	SNMP get of productIdentificationURL is zero IP address	Corrected data retrieval issue for this OID.	All Platforms
Switch not sending snmp trap notification for UP/DOWN status on loopback interfaces	UP/DOWN trap events on loopback interfaces are not supported on the N2XXX switch.	Removed associated CLI commands on the N2XXX switch.	N20XX
Receive and transmit packets dropped > MTU counters increasing	VLAN tagged frames size(1519 to 1522) are reported as dropped on trunk ports	Corrected counter bug.	All Platforms
Interop issues found during testing for USGv6 Basic, Address Architecture, SLAAC and IPv6 Ready Logo Core	User may run into few interop issues and non-conformances	Added MTU configuration and upgraded kernel to support the interop	All Platforms
Dot1x mac based authentication, clients behind phones can't forward traffic after clients moved between ports.	Dot1x application and hardware maintains different MAC entries when PCs moved from one port to the other behind phones and this in turn leads to traffic loss	Corrected dot1x application issue.	All Platforms
N3000 - Front 10G ports goes down when 10G SFP extension module is removed from the slot	10G ports on front-panel of N3000 switch goes down when SFP+ module is hot plugged out.	Corrected port initialization issue.	N30xx
Dell 1G SFP LX Optics (PN# FTRJ1319P1BTL) is showing as N/A in CLI command output.	Dell 1G LX Optics is showing as N/A when ran "show interfaces transceiver" CLI command.	Added transceiver to table of supported transceivers.	N40XXF N20XXF N30XXF
"show vlan" output does not match "show dot1x clients" for assigned vlan	Inconsistent information displayed in show commands	Corrected the processing of COA messages and vlan assignment on the logical interfaces.	All Platforms

Release 6.2.0.5

Summary	User Impact	Resolution	Affected Platforms
VLAN 1 IP address/mask from easy setup wizard not saved in configuration.	VLAN configuration is not applied with CLI wizard.	Corrected error with data being over written.	All Platforms
Global Health Status is abnormal	SNMP MIB (productStatusGlobalStatus) - System with a single Power Supply, which is powered up, should be reported as OK rather than NON-CRITICAL.	Corrected check for power supply status.	All Platforms
User password length is not checked when using the Easy Setup Wizard.	User could enter password that ends up being truncated.	Corrected check for password length	All Platforms
port-channel goes down when primary link is restored	When the 10G port is shutdown, other 10G port flaps.	Updated error in pre-emphasis setting.	All N30XX All N20XX
Temperature sensor read failure, POE Controller X error message in log.	Temperature sensor read failure, POE Controller X log message only appears during reboot/reload process and will not appear again once box is stable	Corrected timing issue during system boot-up.	N30XXP N20XXP
Debug logs prints a wrong message.	Says the "New user has been added" when it is not.	Corrected user creation error.	All Platforms
Inconsistent error message b/w Web GUI and CLI for GARP Join Timer	The GUI is producing a different message from the CLI.	Corrected the error message to be the same as the CLI.	All Platforms
OpenSSH vulnerability	OpenSSH vulnerability	Applied OpenSSH patches	All Platforms

Unable to enable/disable HTTPS from web.	Unable to enable/disable HTTPS from web. Error is thrown.	Corrected web page error	All Platforms
Port display & config error when configuring bridge multicast group with Web UI	Problem when navigating "Switching >Multicast Support>Bridge Multicast Groups"	Corrected multicast display function.	All Platforms
MLAG SNMP MIB Walk result is incomplete for "agentVpcPeerMember StatusTable"	MLAG SNMP MIB Walk result is incomplete for "agentVpcPeerMemberStatusTable"	Corrected error in reporting status table information.	All Platforms
Port security CLI output error	"Dynamic Address Count" of port security configured interface won't reduce.	Corrected error in updating this count.	All N30XX All N20XX
Strange behavior on VLAN 1	Host interfaces are flooding unicast traffic in VLAN even if FDB entry is learned.	Corrected check for entry in FDB.	All Platforms
VRRP issue	The switch does not appear to be updating ARP table when switching back to standby	Corrected error in updating ARP entry status	All Platforms
PCI DSS Compliance	medium strength SSL ciphers and insecure renegotiation of TLS / SSL	Applied patches for both these issues.	All Platforms
Ports down with PHY status as Not Supported	Randomly ports are showing not supported and debug output shows that external PHYs are not getting attached to the switch	Corrected CPLD reset function.	All N40XX
Console LED issue	Console LED green in GUI even with no console cable attached to it.	Corrected function returning console cable status	All N30XX All N20XX
IP address range issue with DHCP Snooping	When configuring static DHCP snooping entries, if IP address fourth octets were higher than 223 then it is not accepting and it throws invalid parameter error.	Corrected range check on IP address	All N30XX All N20XX
GVRP issues	GVRP registration-forbid is not working if there are two interfaces b/w GVRP client and Server	Corrected error in check for forbidden interfaces	All Platforms
SNMP traps with wrong agent-address	SNMP agent address is not shown in the SNMPv1 trap. The agent-addr field value shows zeroes in trap PDU.	Corrected error in retrieving address	All Platforms
SSH public key authentication doesn't work	Once a user logs-in via SSH service, CLI falls back to unprivileged mode.	Corrected public key initialization error.	All Platforms
SNTP server address issue	Error shown while adding SNTP server address if fourth octet address range is from 224-239 from web.	Corrected range check on IP address	All N30XX All N20XX
Static IP Routing Issue	Route is not added in the ip stack and hence the route lookup leads to the default route.	Corrected error in updating the route.	All N40XX
Switch stops responding to Serial console, Telnet, SSH and WebUI	User will not have access serial console, SSH, telnet sessions	Corrected error in releasing management access.	All Platforms
IPv6 DHCP address assignment doesn't work while IPv6 MLD snooping is enabled	IPv6 DHCP address assignment doesn't work while IPv6 MLD snooping is enabled	Corrected packet length check.	All Platforms
Firmware upgrade failure with "can't write fw_env to flash" error message.	New Firmware is not being saved in flash memory	Corrected error in saving FW update to flash memory.	All N30XX All N20XX
Port-channel misconfigured after firmware update	Upon firmware update, Port-channel does not include all interfaces.	Corrected port channel validation check.	All Platforms
Port-channel misconfigured after reloading the switch	Upon reload update, Port-channel does not include all interfaces.	Corrected port channel validation check.	All Platforms

Release 6.1.2.4

Summary	User Impact	Resolution	Affected Platforms
Wrong "Bind IP subnet to VLAN" mapping displayed via GUI	All VLANs showing as "1" when performing any sorting or navigating to the next page on: Switching > VLAN > Bind IP to Subnet: Show All	Corrected VLAN data update issue.	All 6.1 supported platforms
WebUI displays only 64 port-channels for VLAN membership, even though Port-channel IDs over 64 configured.	WebUI displays only 64 port-channels for VLAN membership. More than 64 Port-channel ID's exist in the switch configuration.	Corrected problem displaying VLAN IDs with port-channel IDs over 64.	All 6.1 supported platforms
Private VLAN association breaks after reboot	Private VLAN association configuration is not retained after reboot	Corrected issue applying PVLAN configuration	All 6.1 supported platforms
Tagged frames are reported as dropped on trunk ports	VLAN tagged frames sizes from 1519 to 1522 are reported as dropped on trunk ports	Corrected the calculation of dropped counter for trunk ports.	All 6.1 supported platforms
SNMP walk returned in reverse order	SNMP OID Walk of the object "lldpRemManAddrIfSubtype" is returned in reverse order	Corrected Endian issue with this OID.	All 6.1 supported platforms
"Dependent port cannot be a member port of another group" error when configuring a dependency group	When using WebUI to "add" a port or configure "depends-on" port on an existing link-dependency group, an error message will pop up and the entire link-dependency group is deleted	Corrected link dependency conflict issue.	All 6.1 supported platforms
IF-MIB ifSpeed OIDs populated only for master unit ports	N20XX/N30XX platform is not handling the interface speed status correctly for the ifSpeed OID	Corrected speed status error for member ports in the stack.	N20XX/N30XX
PoE interface power down condition when connected to another PoE switch.	Error "TRAPMGR[122383956]: traputil.c(740) 506162 %% PoE: Gi1/0/24 power down (Overload Condition)" when N30xxP/N20xxP switch connected to another PoE switch.	Corrected "Main Power Supply Absent" informational message as "Main Power Signature Absent"	N20xxP/N30xxP
Logs are filled with the output stating "Copy of running configuration to backup unit complete"	Logs are filled with "Copy of running configuration to backup unit complete"	Corrected issue when saving the DHCP configuration.	All 6.1 supported platforms
Stack not able to enable OSPF	Issue with OSPF area 0 configured on loopback interfaces after save and reload.	Corrected checks for loopback interface	All 6.1 supported platforms
STP status of a physical port bound to a port-channel interface changes from DSC to Forward after adding VLAN	After adding a VLAN, the STP status of the physical interfaces bound to the port-channel interface is transitioned from discarding to forwarding state	Corrected check for LAG interfaces.	All 6.1 supported platforms
ifSpeed table shorter than the rest of IF-MIB tables	ifSpeed object returns entries only for physical interfaces. Logical interfaces are not included.	Corrected problem which prevented logical interfaces from being included.	All 6.1 supported platforms
'show passwords result' causes switch to crash	When passwords with errors were entered, the 'show passwords result' command would crash.	Corrected issue when retrieving the password value.	All 6.1 supported platforms
SVI down after stack failover.	After stack failover the SVI is down	Corrected check for VLAN interfaces on stack failover.	All 6.1 supported platforms
VoIP & 802.1x issue	The phones are being placed in the wrong VLAN occasionally while the phone is being booted and going through the authentication process	Corrected race condition between VoIP and 802.1x authentication	All 6.1 supported platforms
"dot1x timeout supp-timeout" option is missing.	"dot1x timeout supp-timeout" option is missing for N-Series platform.	Corrected issue that caused the "dot1x timeout supp-timeout"	All 6.1 supported platforms

		command to not be available.	
PVST/R-PVST mode sends BPDUs on spanning-tree disabled ports	Disabling STP on a port and then changing the STP mode globally causes BPDUs to be sent on spanning tree disabled ports.	Corrected port state check	All 6.1 supported platforms
startup-config backup via SNMP	Script to transfer "startup-config" file from the switch to the TFTP server fails.	Corrected file type error.	All 6.1 supported platforms
SNMP Requests not working as expected	While trying to retrieve the MIB object "dot1qVlanStaticUntaggedPorts" with default configuration, the switch is returning all zero's for VLAN 1 for all ports.	Corrected port display value error.	All 6.1 supported platforms
CDC/ECC Errors on the switch console	When a burst of 81 byte packets are presented to the switch the RX FIFO which is 4 bytes deep can overflow causing packet drops and the CDC RX FIFO error message.	Changed RX FIFO timing.	N20XX/N30XX
VOIP phone not receiving IP from correct VLAN	VOIP Phones are not getting a correct IP address for the Voice VLAN from the DHCP server. L2Relay not working correctly with the error displayed in the log file "<187> Sep 11 04:38:16 172.22.0.70-1 IP_HELPER[138717076]: relay_main.c(576) 62652 %% Received an invalid udp relay pkt from interface V15 Src ip 0.0.0.0: Src port 68 Dst ip 0.0.0.0: Dst port 67 len 312"	Corrected handling of Endianness issues which caused the drop of DHCP discover packets.	All 6.1 supported platforms
Certificate fields populated with cached values on Web UI	Certificate fields populated with previous certificate values on Web UI	Provided checks for required fields.	All 6.1 supported platforms
Cannot add SNTP server if fourth octets IP address is range of 224-239.	Cannot add SNTP server if fourth octets IP address is in the range of 224-239.	Corrected error in validating IP address.	All 6.1 supported platforms
IPv6 DHCP address assignment doesn't work while IPv6 MLD snooping is enabled	IPv6 DHCP address assignment doesn't work while IPv6 MLD snooping is enabled	Corrected check for DHCP address packet length.	All 6.1 supported platforms
Clearpass Filters are not applied to switch interface(s) occasionally.	If a filter is defined using Class Maps, Policy Maps and Service Policies on a ClearPass RADIUS server, the filter on the switch for the specific authentication port is not applied.	Corrected filter update issue on dot1x re-authentication.	All 6.1 supported platforms
Radius communication issues when switch configured with the radius source-ip address.	Radius source-ip parameter causes authentication to fail.	Corrected "radius source-ip" address validation error.	All 6.1 supported platforms
Error when trying to add dhcp option 42	DHCP server option 42 support was not available when DHCP server was integrated.	Added DHCP server option 42 support.	All 6.1 platforms
RADIUS authorized clients were removed from authorized VLAN.	RADIUS authorized clients were removed from authorized VLAN.	Corrected Dot1x re-authentication issue on stacked switches	All 6.1 supported platforms
POODLE vulnerability in SSLv3	The Padding Oracle On Downgraded Legacy Encryption (POODLE) vulnerability allows a man-in-the-middle attacker to decrypt cipher-text.	Disabled SSLv3. TLS support is available	All 6.1 supported platforms

Release 6.1.1.7

Summary	User Impact	Resolution	Affected Platforms
When applying ACL to VLAN interface PBR stops working	Route-maps are taking higher priority than ACL's when applied on the same interface.	Corrected ACL priority	All 6.1 supported platforms
Random FAN and PMBUS errors	PMBUS Write failure and FAN state change related logs are flooding the console.	Corrected power monitor bus communication issue	All 6.1 supported platforms
During initiate stack failover, multicast traffic	Loss of multicast traffic during stack failover.	Corrected Multicast sync error	All 6.1 supported platforms

loss is seen for longer time and also few log messages are observed on the console			
IGMP snooping/flooding implementation across the range	When a static mrouter is defined and the link goes down, flooding occurs.	Corrected flooding issue regardless of link state	All 6.1 supported platforms
Power negotiation fails with Cisco 9971 IP Phone	Cisco 9971 IP Phone fails to power up attached devices like USB camera when using PoE power negotiation.	Corrected error in Power TLV handling.	All 6.1 supported platforms
QinQ feature does not work after reload of individual units or Stack Reload.	QinQ feature is not working on LAG ports after reload of individual units or Stack Reload or Stack unit reload.	Corrected LAG initialization problem	All 6.1 supported platforms
Switch crash with emweb_main task	Occasionally switch crashes with emweb_main task	Corrected memory leak issue.	All 6.1 supported platforms
No way to enable IGMP globally from CLI, can only enable IGMP globally from GUI.	IGMP is enabled by the switch when needed. The option to enable it on the GUI is an error.	Removed the option from the GUI.	All 6.1 supported platforms
traffic-shape minimum bandwidth configuration issue	Traffic-shape minimum bandwidth is 64 kbps but CLI displays the traffic shape minimum bandwidth as 0 kbps	Corrected traffic-shape minimum bandwidth value	N4032/N4032F
"show ip igmp membership" command shows incorrect messaging about "ip igmp" command	There is no such command "ip igmp"	Corrected the message.	N20XX/N30XX
Customer complaints on N2000 fan noise	Current fan/temperature table runs fans at speeds higher than necessary resulting in more noise.	Changed fan speed profile.	N20XX/N30XX
Switch crashes intermittently with tArpCallback & IpHelperTask tasks	Occasionally switch crashes with tArpCallback & IpHelperTask tasks due to corrupted packets	Corrected IP header length check.	All 6.1 supported platforms
VLAN1 down after assigning static IP address	When try to assign a static IP address to dhcp enabled interface and giving "no ip address", the interface state goes down.	Corrected static IP address check	All 6.1 supported platforms
GS_REFCLK Input termination is not enabled	Switching fabric GS_REFCLK Input termination issue	Applied Errata fix for GS_REFCLK Input termination	N20XX/N30XX
Stack's management IP can't be pinged after stack failover	Loss of stack's management IP address after failover	Corrected static and dynamic route initialization.	N20XX/N30XX
SNMP MIB for Power Supply and Fan Tray info of all units in the stack	The power-supply and fan info should be shown for all stack members while executing SNMP MIB Walk and not just the master.	Added index to allow unit selection.	All 6.1 supported platforms
Port Channel member links are flapping up and down	Dynamic Port Channel member links are flapping frequently	Corrected LACP BPDU issue	All 6.1 supported platforms
OpenSSL SSLTLS MITM vulnerability CVE-2014-0224	OpenSSL vulnerability CVE-2014-0224	Applied OpenSSL suggested fix	All 6.1 supported platforms
Switch crashes when PBR with MAC ACL is applied on the VLAN routing interface	Switch crashes when PBR with MAC ACL is applied on the VLAN routing interface	Corrected ACL processing issue	All 6.1 supported platforms
PBR: ACL associated to a VLAN interfaces display the message on the console.	ACL associated to a VLAN interfaces displays the message below: "<188> Jun 27 06:47:29 10.130.178.162-1 ACL[105366052]: acl_mac_api.c(2533) 4631 %% Access groups are not supported when configured on the same interface as a PBR route map. ", when	Corrected ACL error message processing issue	All 6.1 supported platforms

	the VLAN interface is already associated with the route-map.		
Hapi dvlan notification handler is trying to configure customer ports in legacy mode	In legacy DVLAN mode, some ports are getting configured as neither customer nor service provider ports which is not supported in legacy mode.	Corrected legacy mode issue.	All 6.1 supported platforms
Dell 1G SFP PN# GF76J is showing as N/A in CLI command output.	Dell 1G SFP PN# GF76J is showing as N/A when ran "show interfaces transceiver" CLI command.	Added transceiver to table of supported transceivers.	N40XXF N20XXF N30XXF
Continuous LACP flap on Dell Force10 switches when used with N-series MLAG implementation	User might see the LACP SM not converging for ports connected to secondary MLAG device	Corrected secondary MLAG device issue	All 6.1 supported platforms
PBR: IP Precedence is not working when we delete and re-configure route-map	There is a chance that route-map might not be applied properly on vlan interface if vlan acl is present on the same interface.	Corrected ACL validation issue	All 6.1 supported platforms
Console hang on enabling "ip routing" with PBR rule and ACL rule applied on same VLAN interface.	User might observe console hang on enabling "ip routing" with PBR rule and ACL rule applied on same VLAN interface.	Corrected VLAN validation for route-map.	All 6.1 supported platforms
Traffic is forwarding to a routing interface even though PBR rule is not applied on that interface	Traffic is forwarding to a routing interface even though PBR rule is not applied on that interface	Corrected PBR rule error	All 6.1 supported platforms
Switch DTL crash	Observed switch DTL crash	Corrected DTL memory problem.	All 6.1 supported platforms
Stack showing memory errors on members 8-11	Observed "ATP RX: Failed to alloc for reassem" in stacking environment.	Increased the ATP buffers size.	All 6.1 supported platforms
When default route is present, the default next-hop option of PBR fails	PBR policy fails due to group allocation failure.	Correct group allocation error.	All 6.1 supported platforms
Configured 10G ports return to default configuration after power on reboot.	Irrespective of 10G port is configured as 1G+forced or 1G+auto, after reload or hot plugin, port is getting set to 1G + auto.	Corrected configuration initialization issue.	All 6.1 supported platforms

Release 6.1.0.6

Summary	User Impact	Resolution	Affected Platforms
Issues powering up POE devices on certain switch port interfaces.	When dot13af and legacy mode is enabled and the first 12/24 switch ports are in error status, the last 12/24 ports are stay off.	Fixed high port powering issue by updating the PoE controller firmware version to 263_75. Please wait for few minutes for PoE controller firmware update to complete on switch boot-up. You will see the below log messages on switch boot-up after switch firmware upgrade. <187> Jun 17 04:51:57 172.25.136.215-1 POE[144021428]: hpc_poe_pwrdsne.c(6733) 582 %% PoE firmware controller upgrade started. PoE will be re-enabled when upgrade completes. Note: this could take a few minutes. <187> Jun 17 04:53:44 172.25.136.215-1 POE[144021428]: hpc_poe_pwrdsne.c(6852) 623	N2xxxP/N3xxxP

		%% PoE firmware upgraded to 263_75 <187> Jun 17 04:53:44 172.25.136.215-1 POE[144021428]: hpc_poe_pwdnsne.c(6854) 624 %% PoE firmware controller upgrade completed. PoE is enabled and ready for use	
Fan noise level improvements	User experiences high fan noise level with N2000 and N3000 series switches.	Optimized the fan noise level.	N2000/N3000

Release 6.1.0.1

Summary	User Impact	Resolution	Affected Platforms
Switch fails to load startup-configuration after hard power cycle	If user makes changes to configuration, saves configuration to startup-configuration file and then within a short period of time (60 seconds or so depending on configuration file size) removes power from the system, the startup-configuration file will be empty and configuration will be lost.	Startup-configuration file is saved immediately when copy command is issued and console prompt does not return until save is complete.	N2xxx/N3xxx
Multicast traffic loss at irregular interval for two group ranges	Traffic loss for few groups at random interval of time	Fixed the timing issue where the expiry is processed before the timer is updated.	All 6.1.0 supported platforms
Auto-negotiation capabilities of combo ports were getting reset to '0'	Combo ports on a stack member will not link up after rebooting the member in a stack.	Error codes are handled correctly while getting auto-negotiation capabilities	All 6.1.0 supported platforms
Need support for dot1q tunnel mode configuration per port and per port ether type configuration	When user configures dvlan tunnel mode on a port, that port gets configured as service provider port and all other ports would become customer ports	When user configures dot1q tunnel mode on an interface, only that interface would be set as customer port	All 6.1.0 supported platforms
DOT3AD helper sending LACP PDUs even though LAG is down	Dynamic LAG will be up on partner, even though it does not exist in DUT.	stop sending LACP PDUs for LAG interface upon receipt of detach event	All 6.1.0 supported platforms
"Login time" stamp does not match the switch clock	"show users login-history" doesn't show the correct login time	Modify CLI to convert the given raw time to UTC	All 6.1.0 supported platforms
802.1x authentications fails for EAP type PEAP(protected EAP) on N2xxx/N3xxx platform	Authentication fails for 802.1x users using EAP type PEAP	EAP packet length computation corrected and used only for first fragment while inserting the AVP's	N2xxx/N3xxx
Fiber Combo Port LED on partner switch reports 'DOWN' after an initiate Failover on a stack	Wrong indication of the LED reporting port down.	Fixed code such that LED microprocessor to react to linkscan callback only for ports that it manages.	N3024F
Access list name is getting truncated in the web interface	If the Access list name has a '-' character the name is not displayed properly	Fixed the java script on web page	All 6.1.0 supported platforms
DCPDP packets are not transmitted every one second	MLAG Peer Detection continuously flaps	Fixed the logic to send DCPDP packet every one second	All 6.1.0 supported platforms
Web interface freezes when trying to view VLAN membership	VLAN membership web page cannot be accessed. After accessing the VLAN membership web page, the browser will hang and the browser must be restarted to access the web interface again	Fixed the java script on web page	N4032/N4032F
VoIP VLAN reply not being sent via CDP/ISDP	VOIP phones won't receive Voice VLAN configuration from switch if there is an ISDP entry on a port ID which is one port less from VOIP phone connected port.	Corrected Voice VLAN indexing problem.	All 6.1.0 supported platforms
OOB packet loss after upgrading firmware	After upgrading the switch firmware OOB port can occasionally experience packet loss.	Corrected timing issue with OOB port driver	N4xxx

Certificate fields populated with cached values	When entering SSL certificates via GUI the second certificate values are populated from cached values.	Corrected GUI initialization issue.	N4xxx
Unable to reconfigure standard SSH port	User is not able to delete the configured SSH port number.	Corrected SSH port validation.	All 6.1.0 supported platforms
SNTP KoD packet stops time synchronization	The switch will not respond properly to KoD packets with INIT or STEP codes.	Corrected back off time problem	All 6.1.0 supported platforms

Release 6.0.1.3

Summary	User Impact	Resolution	Affected Platforms
Traffic loss due to IGMP join expiry for some of the groups over lag	Periodic multicast packet loss when active lag port is on a member unit	Prioritizing the PIM join/prune messages as they were dropped when bursts of messages were received	All 6.0.1 supported platforms
IPMC deletes fail which can cause subsequent IPMC inserts to also fail.	During failovers, when ports are down a condition might cause subsequent IPMC inserts to also fail	Enhanced the lookup and delete procedures.	All 6.0.1 supported platforms
MAC address learning fails after secondary MLAG Reboot on setup running MSTP	There will be traffic loss if the port on which the STP status is not updated properly is on traffic path	Primary to send proper STP updates to secondary.	All 6.0.1 supported platforms
802.1p priority value discarded & reset to default value for ICMPv6 packets	Priority value in the vlan tag gets reset to default value by snooping application	Fixed the snooping application to retain the priority	N3000/N2000 platforms
Failure to change the port-channel mode on MLAG (primary/secondary) device	Port channel mode changes from dynamic/static may fail or port state may move to discarding.	MLAG port databases handling is corrected	All 6.0.1 supported platforms
On stack configured with more than 2 units, the PBR traffic fails to fall back to immediate next-hop after initiating failover	There may not be traffic loss but the policy is not applied.	Proper checks on ether types for mac acl and ip acls.	All 6.0.1 supported platforms
LAG membership detail page fails to display configured max 126 Dynamic LAGs	All the needed information is not displayed on the page.	Fixed the javascript to properly handle the XML tags	N4000/PC-81xx switches
Fixed Speed 100 does not work on combo ports	Link will not come up operationally.	Corrected the MDIX setting for combo ports	All platforms that support combo ports
Failure to revert to port default speed after clear configuration.	Clear config should clear and revert to defaults.	Order of the interface state checks corrected	All 6.0.1 supported platforms
Stack port numbering in software was not consistent with physical numbering on the switch	Mismatch exists between the physical numbering and ports displayed in CLI.	unit and port data base reworked according to HW spec updates	N3000 platforms

Release 6.0.0.8

Summary	User Impact	Resolution	Affected Platforms
SCCP protocol functionality is not working when you have data and voice going through the same link	Voice call clarity is poor if both data and voice data are going through the same link	Prioritization of data packets is based on layer 4 port of data session. Updated protocol to identify layer 4 port based on SCCP based phone models.	All 6.0 supported platforms

H323 protocol functionality is not working when you have data and voice going through the same link	Voice call clarity is poor if both data and voice data are going through the same link	Update code to install hardware rules properly	All 6.0 supported platforms
Switch reports PSU/FAN failure because of under-Voltage Input power	Switch reports PSU/FAN failure because of under-Voltage Input power	Raise an error only if four consecutive read cycles indicate that there is an under voltage input power.	N40xx series only
Ping to VRRP master IP would fail when there is an unresolved data traffic flooding the CPU	Ping to VRRP master IP fails.	When it transitions to VRRP Master, the Virtual IP and Virtual MAC addresses need to be added as a local host entry to the hardware. These results in prioritizing the packets coming to CPU destined to VRIP.	All 6.0 supported platforms
Incorrect statistics displayed under "show logging email statistics" command	"No of email Failures so far" in command "show logging email statistics" is incrementing even if there are no failures.	Added a check to communicate with the logging email server only if we have any log messages to be sent.	All 6.0 supported platforms
The following fields in the output of "show interface counters <interface-id>" are misleading when you have MTU set to non-default value. a) Received Oversize Packets b) Transmitted Oversize Packets	User thinks that the packets are getting dropped at the egress interface	Rename the fields so that it reflects the counter values against correct fields there by enhancing user experience.	All 6.0 supported platforms
Some special Characters are not allowed for TACACS key while adding a TACACS server in WEB.	Only alphanumeric characters can be used for TACACS keys while adding a TACACS server from web interface.	Enhanced validation to accept all printable characters from web interface.	All 6.0 supported platforms
Error message is displayed, when configuring SNMP community through web using chrome browser	Failed to configure SNMP community through web using chrome browser, if addition of SNMP community is followed by deletion of SNMP community	Delete SNMP community related entries and target tags so that additional of SNMP community goes through.	All 6.0 supported platforms
RP Group Mapping Summary: Detail is not getting updated in webpage under both ip and ipv6 pim.	1. "RP Group Mapping Summary: Detail" page doesn't display the current configuration. 2. "Expiry Time" and "Next CRP Advertisement" fields are not displayed for non BSR entries.	Updated web object handlers to display the missing fields.	All 6.0 supported platforms
Switch is seeing 2 query messages even though partner has sent only one. This happens only if the receiving interface is on the stack member	No functional impact, but switch sees two messages for every one message sent from partner, if the receiving port is on the stack member	Updated switch settings so that only one copy is sent to CPU of the stack master	All 6.0 supported platforms
When maximum neighbor capacity is reached, it's picking up the old entry randomly and replacing it.	Unexpected routing behavior when maximum neighbor capacity is reached.	Add validation such that no new neighbors are entertained if the router maximum neighbor capacity is reached.	All 6.0 supported platforms
IPMapForwardingTask and Interrupt Thread crashing switch	Random crashes are occurring in the IPMapForwardingTask	Resolved VRRP semaphore deadlock.	All 6.0 supported platforms
VRRP causing switch crash and loss of management	Same issue as: IPMapForwardingTask and Interrupt Thread crashing switch	Resolved VRRP semaphore deadlock.	All 6.0 supported platforms

Stack member unit crash with task "hapiMcAsyncTask"	Random crashes are occurring in the "hapiMcAsyncTask"	Corrected failover issue with multicast routes	All 6.0 supported platforms
stack member reboots with task bcmRPC	Random crashes are occurring in the bcmRPC task.	Corrected problem when all RPC buffers are exhausted.	All 6.0 supported platforms
GUI showing medium temp, while the CLI was showing good temp	GUI showing medium temp, while the CLI was showing good temp	Corrected temperature value issue when displaying temperature in the GUI.	All 6.0 supported platforms

CLI Reference Guide Update

Release 6.7.1.1/ 6.7.1.31

➤ Added new CLI commands

○ **debug snmp packet**

In privileged exec mode, this command enables to track SNMP packets received and transmitted by the switch.

[no] debug snmp packet

The debug tracing is disabled by default and the command will restart the SNMP process running on the switch.

○ **clear ip route counters**

clear ip route counters [vrf vrf-name]

clear ipv6 route counters [vrf vrf-name]

In privileged exec mode, use the commands to clear the IPv4/IPv6 route counters useful for debugging for a virtual router. With no vrf argument the counters for the default router is cleared. The route counters are displayed under show ip route summary command.

○ **clear radius dynamic-author statistics**

Use the clear radius dynamic-author statistics command to clear CoA statistics for dynamic-author server and client.

clear radius dynamic-author statistics server | client [< ip-address | ipv6-address | hostname>]

Server : Specifying this parameter will clear all the DAS statistics

Client : Specifying this parameter will clear client statistics for all clients

Client <ip-address | ipv6-address | hostname> : This will clear statistics to the client identified by the parameter.

➤ Modified CLI commands

○ **show interfaces**

The existing display command is enhanced to display forward-error-correction and Physical FEC status as additional fields

- **show interfaces advanced firmware**

The interface needs to be specified as a mandatory parameter to display the firmware version of the PHY for a port with upgradable firmware

- **show ip http server status**

The java mode field has been removed from this display command

- **show ip http server secure status**

The display command now includes an additional field “DH Key Exchange” whether it is enabled or disabled

- **Show radius statistics**

Command options to display CoA statistics are added to this existing command. CoA specific statistics displayed under show aaa servers authentication name <server-name> have moved to this command output.

Release 6.6.3.6

➤ Added new CLI commands for DHCP pinhole feature check

DHCP pinhole feature will allow the DHCP packet bypass the unauth port. This feature will allow the client to get the IP address if needed before actual authentication. It is something like a 1st stage auth for some client which need IP to do basic config and loading (like FW loading etc) and then go for actual authentication.

Interface Config Commands

```
{no}authentication allow-unauth dhcp
```

Default: no authentication allow-unauth dhcp

Release 6.5.1.1

Deprecated Commands

The following commands are deprecated:

Global Config Commands

The **voice vlan** command tree is deprecated in favor of **switchport voice vlan** (no other changes)

The **radius-server** command tree is deprecated in favor of **radius server**. Other changes are as listed below.

show iscsi sessions is deprecated from all switch models and the documentation.

iscsi target port is removed from all switch models and the documentation.

iscsi aging time is removed from all switch models and the documentation.

Interface Config Commands

The **voice vlan ...** syntax is deprecated in favor of **switchport voice vlan ...**

Voice vlan auth disable is deprecated in favor of **switchport voice vlan override-authentication**.

Voice vlan auth enable is deprecated in favor of **no switchport voice vlan override-authentication**.

power inline high-power is removed from all switch models and the documentation. The switch defaults to high-power mode.

dot1x mac-auth-bypass is deprecated in favor of the **mab** command.

The **radius-server ...** syntax is deprecated in favor of **radius server**.

Release 6.3.1.8

➤ **Added new CLI commands for Radius Attribute-6 (Service-Type) check**

{no}radius attribute 6 mandatory in global mode

{no}attribute 6 mandatory in radius config mode

Patch Release 6.3.0.15

- Added new option "remove-rspan-tag" to "monitor session 1 destination interface <intf num> remove-rspan-tag" CLI command.

Patch Release 6.3.0.6

➤ **Enterprise Voice VLAN Configuration With QoS**

Step 5 - Configure the switch to tell the IP phone to use VLAN 25 and 802.1p priority 5 for voice traffic.

```
console(config-if-Gi1/0/10)#voice vlan 25
```

or

```
console(config-if-Gi1/0/10)#voice vlan dot1p 5
```

The voice vlan 25 and the voice vlan dot1p 5 are currently mutually exclusive

Release 6.3.0.3

There is a new CLI Reference Manual for 6.3.0.3.

➤ **switchport port-security**

In the following interface configuration mode command, the maximum dynamic entries is 600 and the maximum static entries is 100:

```
switchport port-security [mac-address { sticky | [sticky] mac-address vlan
{vlan-id}}] | dynamic value | maximum value | violation {protect |
shutdown}}
```

➤ **enable password**

“The ! character must be surrounded by double quotes so that it won’t be used as a comment character.” should be added to the password description.

➤ **tacacs-server key encrypted**

Requires a 256 character length encrypted key. Alternatively, use the corresponding unencrypted key command to enter a pass phrase.

➤ **key encrypted (TACACS server command mode)**

Requires a 256 character length encrypted key. Alternatively, use the corresponding unencrypted key command to enter a pass phrase.

- Document shows vrf maximum routes to be 4294967295 on page 1705. Should say 8160.
- On page 2014 “802.1AF” should be “802.3AF”.
- CLI Reference (page 1149) mentions “show ip route configured” command as deprecated but the command is retained to view the inactive configured routes
- The following note has to be added to the “show power inline” command on page 1536 for additional clarity.

Get Power Supply Parameters API from the PoE controller returns the “Total Power Consumed” value in Watts. For this reason, Total Power Consumption value displayed in the CLI might not exactly match the sum of power in milliwatts consumed by various Power Devices.

The example command to display the power inline details for the single port also need to be corrected as below:

```
console#show power inline gigabitethernet 1/0/1 detailed
```

Port	Powered Device			State	Priority	Status	Class	Power[mW]
Gil/0/1				auto	Low	Searching	Unknown	
	Limit	Power	High Power					
Port	Type	Limit	Mode					
Gil/0/1	User	32000	Enabled					
Overload Counter..... 0								
Short Counter 0								
Denied Counter..... 0								
Absent Counter..... 0								
Invalid Signature Counter..... 131								
Output Volts..... 0								
Output Current..... 0								
Temperature..... 39								

User's Configuration Guide Updates

The following table lists issues found in the User's Configuration Guide after publication:

Release 6.7.1.15

Form 6.7.1.1 release onwards, we mandate that if VoIP clients has partial tunnel attributes configured at server side like "Tunnel-type" and "Tunnel-Medium-Type" but not all and switch has "authentication dynamic-vlan enable" configured, then it will fail to authenticate even if it receives VLAN information via network TLV. This is because switch expect VLAN assignment via radius and radius do not have all attributes configured (like "Tunnel-Private-Group-ID" is missing here) for this client, so switch rejects it. If there is no tunnel attribute configured, then authentication will work for VoIP clients if it receives VLAN information via LLDP network TLV exchange.

From 6.7.1.1 onwards, make sure that either all tunnel attributes are configured or none at server side. Partial tunnel attributes configured at server side is considered configuration error at server side.

Release 6.6.2.9

An errata exists in the User Configuration Guide v6.6.3 pp. 593 and prior versions. The corrected text reads as follows:

For example, one might enter the following information:

- 00-00-02-A2— Enterprise number 674. It should be written from left to right. The number 674 in hexadecimal notation is 00 00 02 a2
- 0a — Data Length (10 decimal)
- 05 — Sub option code 5
- 08 — Sub option length (08 decimal)
- Conversion of the file name from ACSII to hexadecimal "host.cfg" - 68-6F-73-74-46-63-66-67

Release 6.6.0.2/6.6.0.32

Port mirroring via ACL is not supported in the out-bopund direction. This is a limitation of the HW.

Mixed mode of 10GBaseT transceivers to RJ-45 port is not supported.

A number of scale parameters in Appendix A are incorrect for the N2000/N2100-ON Series switches. The correct values are listed here:

Max physical units per stack	8
Max physical ports per stack	424
Number of MAC addresses supported	24576
Number of 802.1X clients per stack	1696
Number of sFlow samplers	424
Number of sFlow pollers	424
Voice VLAN number of devices	424

Release 6.3.1.11

The below temperature range, hysteresis and reporting needs to be documented in the user guide for N4000 Series.

- 0 - 40 degree is Normal temperature range; After adding hysteresis as 4 degrees, the range will be 0 to 44.
- 45 - 70 degree is Warning temperature range; After adding hysteresis as 4 degrees, the range will be 45 to 74.
- 75 - 85 degree is Critical temperature.
- Above critical (85 and above), shutdown the switch due to high temperature.

FAN speed settings are subdivided the NORMAL and WARNING levels as below:

- 0 - 44 degree is normal range and there are two sublevel here:
 - Below 30 degree temperature, the FAN runs on 7000 RPM
 - From 30 to 44 degree temperature, the FAN runs on 10000RPM
- 45 to 74 degree is warning range and there are below two sublevel :
 - From 45 to 59 degree temperature, the FAN runs on 13000 RPM
 - From 60 to 74 degree temperature, the FAN runs on 16000 RPM.
- 75 to 85 degree is critical range and the FAN runs on 19000 RPM
- Above critical level (> 85 degree), the switch will shutdown.

Release 6.3.0.3

There is a new User's Configuration Guide for 6.3.0.3,

- There is contradictory information on the requirement to reboot the switch after the insertion of an new module in expansion slots:

"Hot-swap is supported on the N3000/N4000 switch modules. However, the switch must be rebooted for the new module to be recognized after it is inserted."

"Each plug-in module has two ports. The plug-in modules include hot-swap support, so you do not need to reboot the switch after you install a new module."

Conclusion: The switch does not need to be rebooted unless a module has never been in the expansion module slot or the module type has changed.
- On page 1685 - "SupportAssist Package XYZ or later to be installed" should be updated as "SupportAssist Package to be installed"
- On pages 1271 and 1276 – In example configuration below, a wildcard mask of 0.0.0.255 should be used.


```
console(config)#router ospf vrf red
console(Config-router-vrf-red)#network 192.168.0.0 0.0.0.255 area 0
```

Known Issues

The following are all the outstanding known issues from the current and previous releases. The issues listed here may have been discovered on any of the switches listed on the title page.

Release 6.7.1.22/6.7.1.52

Description/Summary	User Impact	Workaround
Logging email not working properly with security TLSv1	Sometime user may get delay/miss in email alert.	Until fix, customer can use Logging email without security TLSv1 or may miss some email alerts.
If priv-aes128 password or priv-aes128-key is configured in 6.5, after migration this config is missing if we migrate between 6.5.4.x(old snmp) to 6.6/6.7/6.8 code (snmp research)	User will loss this configuration in migration from 6.5.x to 6.6 or latest. No issue if migrate from 6.6 to above	Customer need to reconfigure as due to character length difference between these two codes and can't be taken care in migration being a key
MAB attribute 2 command with exact 64 char length not retained after save and reload, Due to this MAB authentication fails.	MAB attribute 2 command with exact 64 has the issue.	Please use MAB attribute 2 command with less than 64 char

Release 6.7.1.21/6.7.1.51

Description/Summary	User Impact	Workaround
If multiple radius servers are configured with its hostname, the radius server does not authenticate domain user access to the switch	Server does not authenticate domain user access to the switch	Use IP address instead of hostname (for at least one server out of 2). Or Configure 'deadtime' interval
MLAG - VPC Secondary Po interface goes to "Disable" "Discarding" state when Po interface to ToR goes down on VPC Primary	Issue observed if VLAN-1 is not part of Port channel interface.	Add vlan 1 to the Port channel. Else workaround to disable and enable global VPC connection after issue observed

Release 6.7.1.20/6.7.1.50

Description/Summary	User Impact	Workaround
RPVST is running on secondary VLANs, after removing and adding secondary VLANS.	Low: As in field customer will not remove and add secondary VLAN frequently	After vlan delete (eg-159) we should use "no spanning tree vlan 159" and then create vlan 159 and configure secondary vlan and then configure "spanning tree vlan 159".
Traffic not getting hashed across lag members when connected across stack in N15xx.	When Lag is across stack, PKTs will go through the ports in master unit only.	None: SDK issue, once fix for SDK is done, will add it to the image. GH2 specific silicon issue.

Release 6.7.1.17/6.7.1.47

Description/Summary	User Impact	Workaround
---------------------	-------------	------------

With Image 6.7.1.x, sometime OSPF was stuck in ExStart state. To recover from such scenarios, adjacency should be flapped once	Sometime OSPF was stuck in ExStart state and adjacency will not form correctly	Adjacency should be flapped once using command like clear neighbor, OSPF disable/enable etc.
With image 6.7.1.17, OSPF will not work after CLI command “clear ip ospf configuration” and reconfigure as OSPF, adjacency will not form. Only work after “clear config”	Low impact: As in field, customer should not use “clear ip ospf configuration”	Use “clear config” and reply config instead of “clear ip ospf configuration” command

Release 6.7.1.6/6.7.1.36

Description/Summary	User Impact	Workaround
N2k/N4k/N2200/6.7.1.x/6.6.3.x/Show users login-history is not syncing with Sntp date & time [FIELD-7532]	Low impact: Only display issue after one or two days “user login history” output is getting rollover to few minutes ahead of Sntp time.	None: There is no functional impact

Release 6.7.1.4/6.7.1.34

Description/Summary	User Impact	Workaround
Unable to configure PVLAN on all available interfaces in trunk mode (private-vlan association trunk) [FIELD-7240].	After 20 interfaces, we will get error as resource limit. So, max. of 20 is supported.	Use HOST mode instead of trunk mode.
snoopTask crash after clear config with static and dynamic mrouter port.	Sometime, Clear config will crash the HW with static mrouter port created and dynamic port learned.	Avoid clear config.
Duplicate packets are flooded out of ports in vlan, if we receive VRRP traffic from port connected to member and mrouter is present.	Duplicate PKTs received, no user impact as such.	Disable IGMP snooping if not needed.

Release 6.7.1.1 /6.7.1.31

Description/Summary	User Impact	Workaround
When SNMP walk is initiated with higher repeat count some packets will run into fragmentation issue and may be dropped. This will result in timeout.	Low SNMP Manager need to reinitiate with lower repeat count when responses timeout.	Recommend to use a smaller repeat count in the SNMP request.
The number of ACLs are increased in this release and if there are more than 500 ACLs configured and an SNMP walk with default timeout is initiated, aclRuleStatus object may timeout.	Low Walk need to be reinitiated with higher non-default timeout .	Recommend using a larger timeout value to avoid timeouts with the walk on this object.
agentSwitchIntfArpEntry table doesn't return all ARP entries on few platforms.	Low Alternate MIB available.	Use ipNetToPhysicalTable standard MIB instead of private

MIB.

Release 6.7.0.4 / 6.7.0.34

Description/Summary	User Impact	Workaround
Delay in display of command output for "show authentication clients all" when large number of rules (more than 64) are being applied as part of DACL during client authentication. Also, when the client is assigned an IP address by DHCP and rules need to replace src ip "any" with the IP address.	Low No functional impact, delay in the display of the entries.	Where possible, consider static ACLs or static bindings for the client to avoid churn.
In the case of overlapping BGP neighbors (same neighbor configured across multiple VRF instances) the passwords need to match on both the ends. In cases where the password is not configured in one VRF, the session in other VRF for the overlapping neighbor will still come up even when password is configured only on one end. The kernel patch for TCP_M5SIG on VRF mdev is available in latest kernels 5.6	Low Typically, password is configured on both the ends. Authentication is not mandatory between the network switches. Some protocols like VRRP version 3 have stopped support for authentication mechanisms between the switches.	None needed. The session shall be established.
On N1500 series switches, show interfaces transceiver properties skips display of interfaces configured in stack mode	Low This is legacy behavior and trying to fetch these properties have unwanted side effects of display of unwanted messages	None. There is no functional impact.
On N1108 EP-ON switch, POE PD ports 9 and 10 deliver power even when administratively shutdown.	Low This is HW behavior. The MAC level shutdown does not prevent delivering power on the ports	Use command power inline never to stop delivering power.
There is a limit of Per VLAN spanning tree (PVST) instances to 64. If the number VLANs exceed this limit, RSTP is preferred. Where not feasible, spanning tree is disabled on other VLANs. All those VLANs will be mapped to one instance and ports part of those disabled VLANs will be placed in manual forwarding. In such configuration, port may not be placed in forwarding after failovers.	Low This is not very typical configuration to run spanning tree selectively.	Use shut/no-shut on the interfaces or disable/enable spanning-tree.
Secondary address addition is not allowed when there is no primary address. When primary is configured as Dynamic, during reload the address is not available and	Low Issue only seen with secondary static IP	Use static IP for both primary and secondary IP. Or reconfigure

hence the addition of static secondary IP fails.	configured when a dynamic method for primary IP is opted.	secondary IP once the primary IP is assigned on every reload.
When BGP template is used with remote-as configuration, the template config is applied to the neighbor dynamically learned. In this scenario, running config captures this as additional line and in the next reboot the neighbor comes up as static.	Low Issue seen only when template are used and dynamic neighbor learning is enabled and remote-as is included in the template.	Not to include remote-as config in the template or configure neighbor activate for the static config to full take effect

Release 6.6.3.14/6.6.3.44

Description/Summary	User Impact	Workaround
ARP packets are forwarded between hosts in isolated VLAN after enabling ARP inspection	Very Low	Disable ARP inspection

Release 6.6.3.12/6.6.3.42

Description/Summary	User Impact	Workaround
SNMP operations like BulkGet and snmpwalk when run with short timeout values may result in operation timeout. [FIELD-5530]	Low	Try the operation with larger timeout value. Here increasing the interval between each request may not help. Please increase the timeout on a query (around 20 seconds).
Sometime Log observed: Reconciliation failed for db PORT_DB(2), error code - 11' errors observed after stack failover.	None	Just a log, no user impact.

Release 6.6.3.10/6.6.3.40

Description/Summary	User Impact	Workaround
HW N3024 EP and N3048EP with flash MT29F8G08ABACA, observe ECC error during reboot/reload during u-boot phase.	No Functional impact	None

Release 6.6.3.6

Description/Summary	User Impact	Workaround
For some optics, N1148T-ON/6.6.0.24 - 10G port does not negotiate automatically with a 1G transceiver using.	Medium	If optics gets detected properly as 1G, switch will configure it as "Speed auto 1000" automatically.

Issue is N11xx specific.		If there is any issue with optics detection/property-read , it will not do proper config , so put it in 10G forced (as default) and we need to manually configure it as "Speed auto 1000" as workaround.
Monitor session is not working after stack boot-up if source port is LAG, required to disable and enable monitor session mode	Low	After reload, mirror config initialization is going first and then LAG config, so mirror on LAG is not working fine. So it is required to disable and enable monitor session mode as workaround.

Release 6.6.3.3

Description/Summary	User Impact	Workaround
SNMP operations like BulkGet and snmpwalk when run with short timeout values may result in operation timeout. [FIELD-5530, CS00011045572]	Low	Try the operation with larger timeout value
Mirrored traffic is tagged in the egress direction [FIELD-5737, CS00011261913]	Medium	Silicon limitation on N100 and N1500 switches. The ingress packets – untagged, the egress packets get tagged.
Switch is not sending VVID in LLDP network TLV when port is unauthenticated [Internal]	Low	None

Release 6.6.3.0

Description/Summary	User Impact	Workaround
The auto-negotiation is not supported on SFP28 ports for 25G DAC connections on N3248PXE	Low	Use forced 25G speed for DAC connection
VRRP - Ping to Virtual Secondary IP drops [FIELD-5182, CS00010756062]	Ping traffic to VRRP VIP drops when the secondary IP addresses is configured	None
Unable to Ping/Telnet management IP (VLAN 154) with multicast traffic on the same VLAN [FIELD-3918, CS00008566096]	Unable to ping as MDNS/LLMNR packets are coming to CPU	Use appropriate CPU rate limits
VLAN interface fails to complete the DHCP renewal process and stay at "Down" state When performing a “renew dhcp vlan 1” and “release dhcp vlan1” continuously [DNSE, CS00010632503]	Low. Continuous execution of commands is not common.	None
Error log log "voip_control.c(181) 83930 %% INFO VOIP mode on interface Po1 is disabled. Control frames will not be processed" [DNSE, CS00010725088]	Several log messages fill the logging buffers.	None

MAC addresses learned on blocker ports cause MAC MOVE and results in traffic loss [FIELD-5207, CS00010600296]	High. Results in traffic loss	None
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Release 6.6.2.5 / 6.6.2.35

Summary	User Impact	Workaround	Affected Platforms
Firmware upgrade through TFTP may fail on the N20xx switches after upgrade to 6.6.2.5	This limited to the N20xx switches. All other switches successfully upgrade through TFTP	Use SCP to download FW	N20xx

Release 6.6.0.17 / 6.6.0.47

Description/Summary	User Impact	Workaround
Deprecated OIDs: ipAddrTable ipNetToMediaTable ipRouteTable	Use OIDs: ipAddressTable ipNetToPhysicalTable inetCidrRouteTable	None
Error when trying to configure sFlow on >5 interfaces.	To Avoid the burden on the CPU, System can poll only 5 interfaces per second. For every 1 second increment in the polling interval that is to be configured, the number of allowed interfaces that can be configured increases by 5.	None
Management access-list is not functioning with physical interface option	Port based routing is not supported in PowerConnect platforms. SW management ACLs won't work with physical ports or port-channels. It will only work on VLAN interfaces. Options related to physical ports and port-channels have been removed.	None
CoA feature is not working with "ERR Timestamp issue. Packet discarded"	Support for RFC 5176 was added. Due to this enhancement, the time difference should not be more than (+150 to -150) between the switch and server as the accepted window of 300 seconds (+/- 150) drift from the local timestamp is accommodated.	None

Release 6.6.0.2 / 6.6.0.32

Description/Summary	User Impact	Workaround
ARP entries installed with default timeout before IPDT is enabled need to age out for IPDT to start tracking	There will be a delay before the devices are tracked by IP device tracking component for ARP entries that exist before the feature is enabled.	clear arp-cache. To be fixed in future release
When VRRPv3 is enabled with IPv6 VR which has a Link-local address a onetime unwanted message is noticed on the console	No the message indicates failure to add route as it already exists. Unwanted message on the console at default level.	Enable log at INFO level gives information on failure to add route that already exists.

Patch Release 6.5.3.6

Description/Summary	User Impact	Workaround
Radius server not selected based on usage type, when Radius servers are configured with different group names	When using one radius server with type 802.1x and another with type login, authentication occasionally fails.	None. To be fixed in a future release.

	This is a legacy issue from previous builds.	
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Patch Release 6.5.2.15

Description/Summary	User Impact	Workaround
Configuration load error "no switchport port-security violation protect" after upgrade	When upgrading to release 6.5.2.x, a configuration error may appear if the command " no snmp-server enable traps port-security " was already part of the config.	When upgrading to 6.5.2.x remove the command " no snmp-server enable traps port-security " and readd it after the upgrade is complete.

Release 6.5.2.5

Description/Summary	User Impact	Workaround
show mac address-table count might not display correct value when several entries are learnt across MLAG peer interfaces after clear counters	Tracking the count of mac address-table as a summary is limited. The commands to list the entries works fine.	Use the commands to display and arrive at the count
Even upon disabling dot1x globally, the show dot1x interface <> command output reflect the operational mode as Authorized from previous log-on [CS5540491]	No functional impact only cosmetic display issue. If dot1x clients are transmitting EAPOL messages periodically (with dot1x globally disabled), the state of dot1x interface stays at "Authorized" state. As soon as dot1x client disabled or interface shut/no-shut, the dot1x state is moved to N/A from Authorized.	disable and enable dot1x client.

Patch Release 6.5.1.6

Description/Summary	User Impact	Workaround
Radius server "attribute 25" non-default configuration is not shown in running config	No functional impact.	None. To be fixed in the future release.

Patch Release 6.5.1.5

Description/Summary	User Impact	Workaround
N15XX CPLD image included in all releases is not correct. Do not update the CPLD. CPLD images shipped from the factory are correct and current.	The will be fail to come to readiness and must the returned to correct.	There is no need to update the CPLD. To be fixed in the 6.5.2 release.

Patch Release 6.5.1.3

Description/Summary	User Impact	Workaround
Configuration error after upgrading N2128PX stack from 6.5.0.2 to 6.5.1.1 and later.	With the new switch types included, the member unit types have been changed in Release 6.5.1.1. This causes the configuration of the stack to be incorrect. Not fixed in 6.5.1.3	Switch type values migrate from N2128PX: 1(old)====> 5(new) N3132PX: 1(old)====>7(new) Perform below steps before upgrading the switch to 6.5.1.1: 1) Load the 6.5.1.1 image to backup 2) Activate the backup image using "#boot system backup " command 3) Edit the startup configuration and edit the member/slot type

		<p>value as defined in 6.5.1.x as below from Linux shell.</p> <p>Below example to change the switch type from 1 to 5 for N2128PX-ON:</p> <pre> /***** member 1 5 ! N2128PX-ON member 2 5 ! N2128PX-ON *****/ </pre> <p>4) Steps to edit:</p> <ol style="list-style-type: none"> 1) Go to Linux shell Console#dev binsh 2) Edit the slot and member command in the startup-configuration and save the same. # vi startup-config # exit value = 0 = 0x0 check again using "vi startup-config" if all member/slot configuration were updated properly. 3) Reload the stack and "do not save the config before reload" Console#reload Management switch has unsaved changes. Are you sure you want to continue? (y/n) y
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Release 6.5.1.1

Description/Summary	User Impact	Workaround
Session time is resetting during initiate fail over for client connected to stack member	Low. Re-authentication or termination of client will be delayed	If the session needs to be terminated early, administrator should consider CoA disconnect
Port is a member of both configured vlan and radius assigned vlan after removing the port from static lag	Low. This happens only when you create a VLAN, create a LAG and let it participate on the radius created VLAN and then delete the LAG.	Use make static and then remove the VLAN using no vlan command
OID is not increasing while performing the snmpwalk operation on agentSwitchIntfIpHelperDiscard	Low: Walk itself will not fail but specific options of walk to have OIDs incrementing will have problem.	Use -Cc option when performing snmpwalk

Release 6.3.3.14

Description/Summary	User Impact	Workaround
IPv6 PIM – S,G entry can occasionally become corrupt when a port carrying Multicast traffic flaps	Identified as a missing route when using the "show ipv6 mroute summary" command with IPV6 configuration. If port configured as RP flaps, S,G entry will get missed, leading to traffic drop	Have redundant path, such as, if IPV6 multicast is configured, make the RP a LAG, so that one port flap will not cause the loss of the RP. [Will be fixed in future release]

Release 6.3.3.8

Description/Summary	User Impact	Workaround
N1500 – Periodic fan failure messages after firmware upgrade to 6.3.2.7. [FIELD-2432, FIELD-2414, FIELD-2399, FIELD-2443]	After upgrading to 6.3.2.7, the fan-failure event logs are seen periodically with system LED flashing RED and turning to the normal solid green.	None. Required to clear logs manually and no functional impact with these failure events. Will address this issue in our upcoming release.

		[Fixed in version 6.3.3.9]
N3000 - Random 10G uplink ports failure [FIELD-2370]	10G uplink ports (Te1/0/1-2) goes down with DAC cable and/or optics at very rare circumstances (1 Out of 100 reloads of the peer switch).	Required switch reload to recover the ports from failure. [Fixed in version 6.3.3.11]

Known Restrictions and Limitations**Release 6.7.1.22 / 6.7.1.52**

Description	User Impact
N15xx port do not support 1G + fixed speed and it as per IEEE standard. Autoneg is must for port to work on 1G speed.	If partner device is looking for 1G+ fixed, will not work
N15xx and N11xx has no support of V6 relay and v6 server	V6 relay and server functionality will not work
Public SNMP items (sysUpTime, hrSystemUptime etc) which rollover after 497 days as it has standard limitation as it is used 32bit variable.	Being a public OID, can't do much. So customer will get rollover value after 497+ days and log below will indicate the same I7_ns_mibs.c(2568) 11887839 %% DEBUG truncating integer value > 32 bits

Release 6.7.1.17 / 6.7.1.47

Description	User Impact
Maximum Rapid PVST interface instance in N11xx and N15xx is 640 . Other HW variants support 1024 PVST instance	Customer if use/create more than 640 RPVST instance in HW like N15xx or N11xx , they will observe side effect like role of some instance showing as Disable on some vlan and spanning-tree will not working properly. Other HWs supports 1024 instance Workaround: None

Release 6.7.1.10 / 6.7.1.40

Description	User Impact
Do not support both dot1x and GVRP work together on same VLAN	VLAN learned via GVRP will have issues after the same dynamic VLAN learned by dot1x on other ports. Workaround: Use Different VLAN

Release 6.7.1.4 / 6.7.1.34

Description	User Impact
MDNS/LLMNR traffic is not flooded in vlan if mrouter port is present in that VLAN, getting only forwarded to mrouter port on that VLAN.	LLMNR packet may not get received on all ports in a VLAN if there is IGMP query on same VLAN where LLMNR PKTs are getting sent with snooping enabled.

Release 6.7.0.4 / 6.7.0.34

Description	User Impact
The ping to local interface IP in another VRF, via leaked connected route does not work.	Low. This is current linux kernel limitation. Workaround. None

Release 6.6.3.12 / 6.6.0.42

Description	User Impact
Limitation: On a Switch access port in Multi-Auth mode, Single-Host and Multi-Domain modes, data client is allowed access only if it's VLAN matches the port's access VLAN. VLAN being assigned should be equal to the access port's access VLAN". Else we will get error like below ERR Gix/0/x is configured in access mode with VLAN 1. VLAN membership change to 100 is not allowed.	Low. HW Specific: ALL Workaround: Use general mode if you want radius assigned VALN differed from ports configured Access VLAN

Release 6.6.3.10 / 6.6.0.40

Description	User Impact
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<p>Limitation: BGP Outbound Group max is 10 as</p> <p>So customer may observe BGP Outbound routes not advertised when more than 10+ neighbors established with error log as</p> <pre><147> Mar 17 16:16:12 PFO-TV-DSW-01-1 BGP[BGP_Protocol]: bgpupdgroup.c(1053) 74479 %% ERR [VRF ""] No more available BGP IPv4 outbound update groups.</pre>	<p>Low. When BGP configured, customer will not able to have more than 10 Outbound route group</p> <p>HW Specific : ALL BGP supported HWs</p> <p>Workaround: None</p>
<p>Known Behavior change: In 6.6 release onwards, the “authentication enable” configured globally expects each interface to be authorized unless its set to “force-authorized” mode.</p>	<p>None: user just need to configured force-authorized on ports where auth is not needed if “authentication enable” globally</p> <p>HW Specific : None</p> <p>Workaround: None</p>

Release 6.6.3.3 / 6.6.0.33

Description	User Impact
Mirrored traffic is tagged in the egress direction and it is a silicon limitation with both N15xx and N11xx.	<p>Low. Tag will get added in packets mirrored in egress direction.</p> <p>HW Specific : N11xx and N15xx</p> <p>Workaround: None</p>

Release 6.6.0.7 / 6.6.0.37

Description	User Impact
When using the no form of the command "priority extend trust" command: "no priority extend trust", the number of ports are restricted to 288 ports based on the design of the hardware and it's limitations.	<p>Medium. Large stacks will not be able to accommodate all 576 ports.</p> <p>Workaround:</p> <p>None</p>

Release 6.6.0.2 / 6.6.0.32

Description	User Impact
Enabling OSPF on VRRP enabled interface can result in OSPF adjacency issues due to VRRP Master/Backup transitions	<p>Low</p> <p>Workaround:</p> <p>Disable OSPF on VRRP enabled interface</p>
USB auto config takes a long time for 15XX platform due to limitation with slower access communicating on SPI-to-USB (MAX3421E) part	<p>Low</p> <p>Workaround</p> <p>None</p>

Release 6.5.2.15

Description	User Impact
The N15XX was identified incorrectly in the documentation as supporting ECN. This is not the case as the HW for this switch does not support ECN	<p>Low</p> <p>Workaround:</p> <p>None</p>

Release 6.5.2.5

Description	User Impact
After switch power up, some PoE ports may take longer to start delivering power depending on the device configuration and depending on need for LLDP messages	<p>Low</p> <p>Workaround:</p> <p>None</p>

to be exchanged so that the final power can be applied to the port	
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Release 6.5.1.1

Description/Summary	User Impact	Workaround
Non-mirrored traffic flows through RSPAN reflector-port despite the VLAN explicitly disassociated from the port.	Unintended traffic is being forward via RSPAN reflector-port as mac address is not aging out with continuous traffic.	Clear mac-address-table and avoid disassociating VLAN from the reflector-port.
RSPAN traffic mirroring stops after shut/no-shut the reflector-port in RPVST mode.	Mirrored traffic stops forwarding via reflector-port.	Disable and re-enable the monitor session to restore the mirrored traffic via reflector-port.

Release 6.3.3.14

Description	User Impact
Switch displays insufficient memory error when attempt to create more than 48 VRF instances on N4000 Series and 12 VRF instances on N3000 Series.	High - Maximum number of supported VRF instances are limited to 32 for N4000 Series and 12 for N3000 Series due to memory constraints. Updated 6.5.1.1 documentation with this constraints. Workaround: None

Release 6.3.2.7

Description	User Impact
If MLAG peer switches running two different firmware version, the processing of ACK messages via peer-link could be different and it will be causing continuous switch reboot on its own.	High Workaround: MLAG Primary and Secondary switches should be running the same firmware version.

Release 6.3.2.3

Description	User Impact
Terminal emulators (for example., SecureCRT, PuTTY..etc) which supports ONLY arcfour and CBC related ciphers, the SSH connection to the switch will not be established with an error "Key exchange failed. No compatible cipher. The server supports these ciphers: aes128-ctr, aes192-ctr, aes256-ctr, chacha20-poly1305@openssh.com" as these ciphers identified as weak.	Medium. Workaround: Disabled all weak CBC & arcfour related ciphers to avoid the vulnerability CVE-2008-5161. So terminal emulators should be updated to the latest version which supports strong ciphers.

Release 6.3.1.13

Description	User Impact
The maximum limit of SSH-Public-key Users are 5. If we attempt to configure more than 5 users with the public-key authentication, it will show an error message "Error:Could not set the SSH-Public Key Mode".	Low Workaround: None.

Release 6.3.1.8

Description	User Impact
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<p>“New root port elected (when UplinkFast feature is enabled) would have its cost set to 1 which was not the case earlier. And the feature would work as expected when the ports' default costs are not altered”. so, when root port is shutdown, the next elected root port's cost is set to 1.</p> <p>As FastUplink feature automatically changes the priority to a higher value to prevent the switch from becoming root bridge, changing spanning-tree priority on the switch for a specific VLAN when the feature is enabled results in disabling the feature for that VLAN.</p>	<p>Low</p> <p>Workaround: None. This is a clarification of how the Uplinkfast feature functions.</p>
<p>Mixed Media over a port channel/LAG is not supported.</p>	<p>Low</p> <p>Workaround: None. Using a mixture of copper and fiber links in a port-channel or LAG will cause latency issues and packet drops. It's allowed to configure mixed media as members of port-channel, but it's not recommended.</p>

Release 6.3.0.15

Description	User Impact
<p>When one of the PoE switch ports is fed power from the external source (mostly from other POE switch) and all other ports in the same switch will not be powered UP. At this condition, you can power the affected ports by setting the mask 0x1F with the value 0. The default of that mask is 1, so to let the user know one of the ports is being fed by external power source.</p>	<p>Low</p> <p>Workaround: Use debug command "dev hpcPwrdsinePoeMsgIndividualMaskSet(0,0x1f,0)" to set the mask 0 and then unplug & plug PD (Powered Devices).</p>

Release 6.3.0.3

Description	User Impact
<p>Count of the number of routes advertised with RFC5549 are not displayed in the ip route summary command output</p>	<p>Low</p> <p>Workaround None.</p>
<p>As crash dump retrieval is not reliable on the front panel ports, N20xx/N15xx series switches do not allow configuring tftp server for the core dump via “exception” CLI command.</p>	<p>Low</p> <p>Workaround Configuring USB for copying the coredump is recommended and documented.</p>
<p>“OFPBAC_BAD_OUT_PORT” error in reponse to “OFPT_FLOW_MOD” message.</p>	<p>Low</p> <p>If ports from slot cards are used in the flow additions the mapping might result in improper index and user may notice BAD_PORT in the error messages.</p> <p>Workaround Use front panel ports only.</p>
<p>Config-migration may fail across 2 different images for N30xx switches</p>	<p>Low</p> <p>All the configuration may not be applied while switching between BGP and non-BGP supported build combinations of N30xx.</p> <p>Workaround Save the required configuration before upgrading the build.</p>
<p>References to “hiveagent” may be noticed in log messages and output of “show application” command.</p>	<p>Low</p> <p>This is a reference to a cloud manager feature to be enabled in upcoming release.</p> <p>Workaround If debug hiveagent log messages are distracting, user can permanently disable this application by using the “eula-consent hiveagent reject” command and save configuration.</p>

References to “Support-Assist” may be noticed in the log messages and output of “show application” command.	Low Workaround If debug log messages are distracting, user can permanently disable the application by using the “eula-consent support-assist reject” command and save configuration.
<p>DHCP Snooping binding database not populated when feature enabled on one VLAN</p> <p>The DHCP snooping table will not be updated unless it is enabled on both the VLANs in the topology. The reason being, the DHCP snooping task will only snoop packets received on an interface but not the packets transmitted out of the interface.</p> <p>For example, when snooping is enabled only on VLAN 2, it will only snoop DHCP_DISCOVER, DHCP_REQUEST packets, as these are the only packets received on the interface in VLAN 2 from the client connected to that port. So the snooping task will never know if a DHCP address was leased to the client and hence the table will never get updated. On the contrary, when it is enabled on VLAN 1 as well, the DHCP snooping task will be able to snoop both OFFER and ACK packets from the server, and hence when ACK packet is received it will update the snooping table appropriately with the binding entry.</p> <p>Hence the reason why user can notice the binding entry only when it is enabled on both the VLANs</p>	<p>Low</p> <p>Workaround Recommend configuring DHCP snooping on both server and client side VLANs.</p>
<p>Message “TRAPMGR[122383956]: traputil.c(740) 506162 %% PoE: Gi1/0/24 power down (Overload Condition)” is an information message and does not indicate an error on the switch.</p> <p>Message “<189> Sep 4 15:02:51 192.168.11.84-1 TRAPMGR[112324196]: traputil.c(740) 434847 %% PoE: Gi1/0/2 power down (Main Power Signature Absent)” is an information message and does not indicate an error on the switch.</p>	<p>Low</p> <p>Workaround Both messages are informational and not error messages.</p>

Release 6.2.5.3

Description	User Impact
When data traffic need to be routed by CPU are send at higher rate, CPU can handle maximum of 50 packets per second	<p>Low</p> <p>Workaround None</p>
HW link scan for fast detection of link failures is not enabled in the firmware.	<p>Low</p> <p>The link scan is not user configurable parameter. Not able to enable HW link scan will impact NSF metrics</p> <p>Workaround None.</p>

Release 6.2.0.5

Description	User Impact
Transceiver information is not available when a Fiber Ethernet port is configured as a stack port.	Low Fiber ports that are configured as Ethernet ports will provide transceiver information. When the ports are configured as stack ports there currently is no mechanism to reveal the transceiver information for that port. This is working as currently designed. Workaround None. This will be considered for a future enhancement.
Erasing backup image takes 180-300 seconds on N4000/8100 switches	Low Normal copy commands only erase as much as is required for the new image but "erase backup" takes longer as the entire partition gets erased. Workaround Use copy commands and overwrite the old images
When N4000/8100 switches are stacked using copper stack link, PFC frames are not being received on the stack link	Low Issue seen only with PHY 84834. Workaround Fiber 10G/40G stack links

Release 6.1.0.6

Description	User Impact
CPLD Update on Stacked switches.	Low CPLD update using the command (update cpld) will take at least 3 minutes to complete and then reboot the switch. Also, the CPLD update command from Master unit in the stack will update the CPLD code only in the Master switch. User has to update the CPLD code on other members of the stack individually. Workaround None

Release 6.1.0.1

Description	User Impact
When PBR route maps and ACLs are configured on the same interface, ACL rules are treated as lower precedence than PBR.	Medium Even though ACLs are configured with higher priority, PBR rules are processed first. Workaround: None – PBR route maps and ACL access-groups should not be configured on the same interface as they have potential to interfere with each other.
PBR route map counters are not incremented	Not all PBR route maps are configured in the hardware. The system optimizes away route maps whose decision logic always results in falling through to the next route map. This includes deny ACLs in permit route maps and all ACLs in deny route maps. PBR counters are not incremented for “fall-through” ACLs in the above route maps. Workaround: None
The maximum detection limit for storm-control is 2Gbps. Rates configured in excess of this limit will not detect traffic exceeding for the configured type. This limitation applies to all types of storm-control and includes broadcast, multicast and unknown unicast.	Low A 2 Gbps will cover a wide variety of situations where storm control is likely to be deployed (at the edge of the network), including all 1G links. Workaround Add a rate-limit ACL with the appropriate limit. ACLs can be configured to log or drop exceeds traffic.

Release 6.0.1.3

Description	User Impact
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The max packet size for traceroute is limited to 39936 and size is limited to 13000 for ping. This applies to configuration from CLI, WEB and SNMP. Standard MIB as per RFC 2925 specifies the value as 65507 but snmpset will fail if a value above 39936 for traceroute and above 13000 for is configured.	<p>Low</p> <p>Ping and Traceroute are used only during trouble shooting</p> <p>Workaround</p> <p>Use the values actually supported and not MIB specified max values.</p>
Legacy phones that support only 10BaseT without auto-negotiation require a fixed speed 10BaseT connection. When such phones are connected to POE interface of switch, the device is powered up but the interface stays down.	<p>Low</p> <p>Recent IP phone designs support 10m/100m/1G speed with auto-negotiation.</p> <p>Workaround</p> <p>Use the speed command on the switch connecting the device and set the interface to the required speed.</p>

Release 6.0.0.8

Description	User Impact
Downgrade to 5.1 and prior versions of code may cause the 5.1 code to crash if any EEE configuration is present in the startup configuration. This is a limitation of the 5.1 code.	<p>Medium</p> <p>Switch will reboot after downgrade.</p> <p>Workaround</p> <p>When the switch reboots after the crash, boot into the 6.0 code contained in the backup image. Remove all non-default EEE configurations from the startup configuration prior to downgrade.</p>
<p>A link flap is observed on the partner if the link is connected to OOB port of the switch and switch is reloaded.</p> <p>The link is brought up during the U-boot stage in order to load the image from U-boot prompt.</p>	<p>Low</p> <p>The link flap is observed once on the partner switch</p> <p>Workaround</p> <p>Shutdown the link on the partner before reloading the switch, if the partner switch is very sensitive to link flaps</p>
Link up during U-boot stage observed when SFP+ DAC cable is plugged into SFP ports. But, the port will enter diag-disable state after console prompt up.	<p>Low</p> <p>This is a negative scenario where SFP+ DAC cable is inserted in SFP ports and link up is observed for a short duration during U-boot state. SFP+ transceivers are NOT supported in SFP ports.</p> <p>Workaround</p> <p>Remove the SFP+ DAC cable and use the no shut command to re-enable the port.</p>
40G port on N40xx series switches fails to link up when you insert the following transceivers along with cable into the switch (0MV31,RF2MY). This issue happens only when the other end of cable is connected to the partner switch.	<p>Moderate</p> <p>QSFP ports on the switch are not operational.</p> <p>Workaround</p> <p>Reboot the switch to recover the failed QSFP ports.</p>
Use of DCPDP is not recommended in 6.0 firmware. Upon peer link failure DCPDP (if Enabled) will transition the roles of MLAG peer devices to "none" and bring DOWN the MLAG interfaces on both MLAG peer devices.	<p>Upon peer link failure DCPDP (if enabled) will transition the roles of MLAG peer devices to none and bring DOWN the MLAG interfaces on both MLAG peer devices. This MLAG peers recover once the peer link is UP.</p>

End of Release Notes