

K.15.18.0006 Release Notes

Abstract

This document contains supplemental information for the K.15.18.0006 release.



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1 K.15.18.0006 Release Notes

Description

This release note covers software versions for the K.15.18 branch of the software.

Version K.15.18.0006 is the initial build of Major version K.15.18 software. K.15.18.0006 includes all enhancements and fixes in the K.15.17.0003 software, plus the additional enhancements and fixes in the K.15.18.0006 enhancements and fixes sections of this release note.

Product series supported by this software:

- HP 3500 & 3500 yl Switch Series
- HP 5400 zl & 8200 zl Switch Series
- HP 6200yl Switch Series
- HP 6600 Switch Series

Important information

To avoid damage to your equipment, do not interrupt power to the switch during a software update.

Version history

All released versions are fully supported by HP, unless noted in the table.

Version number	Release date	Based on	Remarks
K.15.18.0006	2015-08-15	K.15.17.0003	Initial release of the K.15.18 branch. Released, fully supported, and posted on the web.
K.15.17.0007	2015-06-22	K.15.17.0006	Please see the K.15.17.0007 release note for detailed information on the K.15.17 branch. Released, fully supported, and posted on the web.
K.15.17.0006	n/a	K.15.17.0005	Never released.
K.15.17.0005	2015-05-11	K.15.17.0004	Released, fully supported, but not posted on the web.
K.15.17.0004	2015-04-23	K.15.17.0003	Released, fully supported, but not posted on the web.
K.15.17.0003		K.15.16.0004	Initial release of the K.15.17 branch. Never released.
K.15.16.0009	2015-06-16	K.15.16.0008	Please see the K.15.16.0009 release note for detailed information on the K.15.16 branch. Released, fully supported, and posted on the web.
K.15.16.0008	2015-04-17	K.15.16.0007	Released, fully supported, and posted on the web.
K.15.16.0007	n/a	K.15.16.0006	Never released.
K.15.16.0006	2015-02-06	K.15.16.0005	Released, fully supported, and posted on the web.

Version number	Release date	Based on	Remarks
K.15.16.0005	2014-11-21	K.15.16.0004	Released, fully supported, and posted on the web.
K.15.16.0004	2014-10-30	K.15.15.0006	Initial release of K.15.16. Released, but not posted on the web.

Products supported

This release applies to the following product models:

Product number	Description
J9470A	HP 3500-24 Switch
J9471A	HP 3500-24-PoE Switch
J9472A	HP 3500-48 Switch
J9473A	HP 3500-48-PoE Switch
J8692A	HP 3500yl-24G-PWR Intelligent Edge Switch
J8693A	HP 3500yl-48G-PWR Intelligent Edge Switch
J9310A	HP 3500yl-24G-PoE+ Switch
J9311A	HP 3500yl-48G-PoE+ Switch
J8697A	HP 5406zl Intelligent Edge Switch
J9642A	HP 5406zl Switch with Premium SW
J8698A	HP 5412zl Intelligent Edge Switch
J9643A	HP 5412 zl Switch with Premium Software
J8699A	HP 5406zl-48G Intelligent Edge Switch
J8700A	HP 5412zl-96G Intelligent Edge Switch
J9447A	HP 5406zl-48G-PoE+ Switch
J9448A	HP 5412zl-96G-PoE+ Switch
J9533A	HP 5406-44G-PoE+/2XG-SFP+ v2 zl Switch
J9532A	HP 5412-92G-PoE+/2XG-SFP+ v2 zl Switch
J9539A	HP 5406-44G-PoE+/4G-SFP v2 zl Switch
J9540A	HP 5412-92G-PoE+/4G-SFP v2 zl Switch
J9866A	HP 5406 8p 10GBASE-T 8p 10GbE SFP+ v2 zl Switch with Premium Software
J8992A	HP 6200yl-24G-mGBIC Switch
J9263A	HP 6600-24G Switch
J9264A	HP 6600-24G-4XG Switch
J9265A	HP 6600-24XG Switch
J9451A	HP 6600-48G Switch
J9452A	HP 6600-48G-4XG Switch
J9475A	HP 8206zl Switch

Product number	Description
J9640A	HP 8206 v2 zl Switch with Premium Software
J8715A, J8715B	HP 8212zl Switch
J9091A	HP 8212zl Switch with fan tray
J9641A	HP 8212 v2 zl Switch with Premium Software
J9638A	HP 8206-44G-PoE+/2XG v2 zl Switch with Premium Software
J9639A	HP 8212-92G-PoE+/2XG v2 zl Switch with Premium Software

Compatibility/interoperability

The switch web agent supports the following operating system and web browser combinations:

Operating System	Supported Web Browsers
Windows XP SP3	Internet Explorer 7, 8 Firefox 12
Windows 7	Internet Explorer 9, 10 Firefox 24 Chrome 30
Windows 8	Internet Explorer 9, 10 Firefox 24 Chrome 30
Windows Server 2008 SP2	Internet Explorer 8, 9 Firefox 24
Windows Server 2012	Internet Explorer 9, 10 Firefox 24
Macintosh OS	Firefox 24

Minimum supported software versions

NOTE: If your switch or module is not listed in the below table, it runs on all versions of the software.

Product number	Product name	Minimum software version
J9546A	HP 8-port 10GBase-T v2 zl Module	K.15.04.0002
J9310A	HP 3500yl-24G-PoE+ Switch	K.15.02.0004
J9311A	HP 3500yl-48-PoE+ Switch	K.15.02.0004
J9312A	HP 2-Port SFP+/2-Port CX4 10GbE yl Module	K.15.02.0004
J9534A	HP 24-port 10/100/1000 PoE+ v2 zl Module	K.15.02.0004
J9535A	HP 20-port 10/100/1000 PoE+ / 4-port SFP v2 zl Module	K.15.02.0004
J9536A	HP 20-port 10/100/1000 PoE+ / 2-port 10-GbE SFP+ v2 zl	K.15.02.0004
J9537A	HP 24-port SFP v2 zl Module	K.15.02.0004
J9538A	HP 8-port 10-GbE SFP+ v2 zl Module	K.15.02.0004

Product number	Product name	Minimum software version
J9547A	HP 24-port 10/100 PoE+ v2 zl Module	K.15.02.0004
J9548A	HP 20-port Gig-T / 2-port 10-GbE SFP+ v2 zl Module	K.15.02.0004
J9549A	HP 20-port Gig-T / 4-port SFP v2 zl Module	K.15.02.0004
J9550A	HP 24-port Gig-T v2 zl Module	K.15.02.0004
J9637A	HP 12-port Gig-T / 12-port SFP v2 zl Module	K.15.02.0004
J9475A	HP 8206zl Switch Base System	K.14.34
J9307A	HP 24-Port 10/100/1000 PoE+ zl Module	K.14.34
J9308A	HP 20-Port 10/100/1000 PoE+/4-port MiniGBIC zl Module	K.14.34
J9478A	HP 24-port 10/100 PoE+ zl Module	K.14.34
J9447A	HP 5406zl-48G-PoE+ Switch	K.14.34
J9448A	HP 5412zl-96G-PoE+ Switch	K.14.34
J9470A	HP 3500-24 Switch	K.14.31
J9471A	HP 3500-24-PoE Switch	K.14.31
J9472A	HP 3500-48 Switch	K.14.31
J9473A	HP 3500-48-PoE Switch	K.14.31
J9451A	HP Switch 6600-48G	K.14.24
J9452A	HP Switch 6600-48G-4XG	K.14.24
J9263A	HP Switch 6600-24G	K.14.03
J9264A	HP Switch 6600-24G-4XG	K.14.03
J9265A	HP Switch 6600-24XG	K.14.03
J9154A	HP ONE Services zl Module	K.13.51
J9051A, J9052A	HP Wireless Edge Services zl Module, HP Redundant Wireless Services zl Module	K.12.43
J8715A, J8715B	HP Switch 8212zl Base System	K.12.31
J8993A, J8994A	Premium Features on Series 3500yl and 5400zl Switches	K.11.33
J8706A	HP Switch 5400zl 24p Mini-GBIC Module	K.11.33
J8708A	HP Switch 5400zl 4p 10-GbE CX4 Module	K.11.33
J8992A	HP Switch 6200yl-24G-mGBIC	K.11.33
J8694A	HP Switch 3500yl 2p 10GbE X2 + 2p CX4 Module	K.11.17

Enhancements

This section lists enhancements found in the K.15.18 branch of the software. Software enhancements are listed in reverse-chronological order, with the newest on the top of the list. Unless otherwise noted, each software version listed includes all enhancements added in earlier versions.

NOTE: The number preceding the enhancement description is used for tracking purposes.

Version K.15.18.0006

Distributed Trunking

CR_0000167270 This feature allows PIM Sparse Mode and Distributed Trunking to work simultaneously.

Instrumentation Monitor

CR_0000164159 This feature enhances switch instrumentation and diagnostic capability.

IP Directed Broadcast

CR_0000145338 This feature enhances the security of the "IP Directed Broadcast" feature by denying traffic that is not specified within the configured access list.

OpenFlow

CR_0000173444 This feature allows the user to enable source and destination MAC Group tables in the OpenFlow pipeline.

CR_0000173447 This feature supports OpenFlow matching traffic based upon L4 information.

Port Filters

CR_0000142989 This feature provides granularity beyond Source Port filtering by allowing traffic exclusive to a specific VLAN to be forwarded.

Routing

CR_0000168848 This feature adds MD5 authentication to RIPv2 routing to enhance security.

Security Vulnerability

CR_0000161421 This feature provides support compliance for the cryptographic algorithm Suite B of US NIST (National Institute Standard and Technology).

TFTP

CR_0000156362 This feature allows both TFTP and SSH to be enabled in a switch concurrently.

Fixes

This section lists released builds that include fixes. Software fixes are listed in reverse-chronological order, with the newest on the top of the list. Unless otherwise noted, each software version listed includes all fixes added in earlier versions.

NOTE: The number that precedes the fix description is used for tracking purposes.

Version K.15.18.0006

10-GbE

CR_0000153118 When a 10G port is reset or when the port speed switches from 10 Gbps to 1 Gbps, or vice versa, the port may start dropping packets, flood packets, or packets received on the port may be corrupted. The latter condition may eventually cause the module or stack member to crash with a message similar to the following:

```
Software exception in ISR at interrupts_ahs.c:4087
```

```
-> Too many HPP ints: 00040000
```

This problem only affects 10G Ethernet ports on 3800 series switches and ports 1, 2, 4, 7, and 8 on the J9546A and J9546A version 2 modules.

802.1X

CR_0000164489 802.1X re-authentication period works if the client connects after the switch is booted. If, however, the switch reboots while clients are connected, it authenticates initially, but no re-authentication occurs.

Authentication

CR_0000156072 When generating a self-signed certificate or Certificate Sign Request (CSR) in the web interface, the software incorrectly allows the use of non-ANSI characters. When the CLI is used, the action is not allowed and an error message is displayed.

BGP

CR_0000138230 When BGP has equal cost routes but one route is preferred due to a higher configured weight, the outputs of `show ip bgp` and `show ip route` show that the router uses the wrong route.

BPDU Protection

CR_0000124429 A port can receive a high volume of spanning tree BPDUs when there is a loop in the connected network. This fix prevents the switch CPU from being overwhelmed by limiting the rate at which those BPDUs are sent to the CPU. For more information, see the *Advanced Traffic Management Guide* for your switch.

Certificate Manager

CR_0000156165 Basic Constraint Extension `pathLenConstraint` support added to Certificate Manager. In software versions 15.14 and later, support was added for Trust Anchor (TA) certificates which allow a user to sign intermediate Trust Anchor certificates or an end entity certificate. In section 4.2.1.9, RFC 5820 defines a Basic Constraint Extension named `pathLenConstraint` as the field that defines "(...) the maximum number of non-self-issued intermediate certificates that may follow this certificate in a valid certification path. (...) A `pathLenConstraint` of zero indicates that no non-self-issued intermediate CA certificates may follow in a valid certification path. Where it appears, the `pathLenConstraint` field MUST be greater than or equal to zero. Where `pathLenConstraint` does not appear, no limit is imposed." Support for the `pathLenConstraint` has been added to the software. It can be set to the maximum value of 3 because the software supports up to 3 intermediate certificates. When it is set to 0, it can only sign an end entity certificate and not another intermediate certificate.

CLI

CR_0000136134 After issuing the command `no ip ssh cipher <cipher_option>`, the entry is listed twice in the output of `show run`.

CR_0000145812 A new command `tcp-push-preserve` is added. This command is enabled by default, and causes TCP packets with the "push" flag to be sent before other packets in the queue. Note that high concentrations of TCP packets with push flags under certain conditions can destabilize your network. Use the **no** form of this command to disable the feature.

CR_0000154706 When a user configures a blackhole route for an IPv4 or IPv6 address and then attempts to configure that same IP address as a VRRP virtual IP address, the invalid configuration will be rejected with the error message `Cannot configure a reject/blackhole route as backup virtual-ip-address`. When the configuration order is reversed by first configuring the IP address as VRRP virtual IP address and then the blackhole route, the configuration is incorrectly permitted by the configuration parser.

CR_0000156237 When a user has enabled Spanning Tree in the CLI and configured a protocol version other than the default MSTP, the CLI Menu does not allow the user to modify Spanning Tree parameters. The menu will indicate that the switch requires a reboot. When the switch is actually rebooted the same problem will be present after the reboot.

CR_0000161668 After a user has changed the Spanning Tree Protocol Version to RPVST in the CLI Menu, the switch will prompt the user to save the configuration and reboot the system to activate the changes. However, after saving and rebooting, those messages will continue to be displayed.

CR_0000170477 A user can successfully log in using the default username (manager/operator), even if a custom username is configured.

CR_0000172046 The commands `show lldp info local-device` and `show lldp info remote-device` may fail to display the correct information [Chassis ID] when the switch is standalone or connected to any remote device.

CR_0000174064 The Management and Configuration Guides shows a CLI command of `(no) lldp config <port-no> dot3TlvEnable poeplus_config`, but the CLI is using `(no) lldp config <port-no> dot3TlvEnable poe_config`. The CLI was changed to match the documentation, which better describes the action.

Command Authorization

CR_0000160066 The `listen-port` help command has changed: `[no] listen-port <PORT-NUM>`. Specify the TCP port on which the OpenFlow agent of the switch listens for incoming connections from an OpenFlow controller. Default port number is 6633.

Counters

CR_0000141119 The output of `show ip counters` is incorrect when routing is enabled for IP, IPv6, or multicasts.

CR_0000149229 The "Route changes" counter in the output of `show ip rip` increments with every RIP update the router receives, even if there are no route changes.

CPU Utilization

CR_0000153428 With high volumes of routed IPv6 traffic, switch CPU utilization might remain at high levels for long periods of time. This issue is most prevalent with v1 zl modules.

Crash

CR_0000137552 With OSPF enabled, if one switch has jumbo frames enabled but the link partner does not, the switch might reboot unexpectedly with a message similar to `Software exception at block.c:1158 -- in 'SIGIO Task', task ID = 0xa94f800 -> Routing Stack: Assert Failed`.

CR_0000142381 When the BGP configuration includes a non-default weight and the `redistribute connected` command, the switch might reboot unexpectedly with a message similar to `Software exception at hwBp.c:218 -- in 'fault_handler', task ID = 0xa5df1c0 -> MemWatch Trigger: Offending task 'eRouteCtrl'. Offending IP=0xedde38`. This issue was introduced with CR_0000138230.

CR_0000143067 Under extremely heavy traffic loads, repeated port toggling might cause the switch to reboot unexpectedly with a message similar to `Software exception at bgp_tsi.c:361 -- in 'eRouteCtrl', task ID = 0xa95fcc0 -> Routing Stack: Assert Failed`.

CR_0000149153 When an exceptionally large amount of IP Address Manager (IPAM) output is generated by the output of `show tech all` and captured using the `copy command-output` CLI command, the system may crash with the following message:

```
NMI event SW:IP=0x00147168 MSR:0x02029200 LR:0x00120f7c
```

```
cr: 0x44000400 sp:0x04d60f30 xer:0x00000000
```

```
Task='mSess3' Task ID=0x4d59728
```

CR_0000155066 The switch may reboot unexpectedly with a Software Exception message similar to: `Software exception at stackingFile.c:2224 -- in 'mStackDatWriter',`

task ID = 0x3c953b00 -> Internal Error ID: 6382d706) when a lot of TFTP file transfers to an external TFTP server have occurred.

CR_0000159125 When a system has Distributed Trunking enabled, a crash may occur when a packet with an incorrect flag is received on the ISC port. Instead of dropping the packet, the software attempts to process the packet which triggers a crash similar to the following:

Health Monitor: Invalid Instr Misaligned Mem Access

HW Addr=0x0065d2f8 IP=0x65d2f8 Task='tDevPollTx' Task ID=0xa9f9700
sp:0x2ecc828 lr:0x6081c0

msr: 0x02029200 xer: 0x20000000 cr: 0x48000800

CR_0000159764 Due to an unknown trigger, a switch may reboot with a message similar to the following:

NMI event HW:IP=0x0151dec4 MSR:0x02029200 LR:0x0151e468

cr: 0x20000800 sp:0x02f01460 xer:0x20000000

Task='tDevPollRx' Task ID=0xaa28000

CR_0000162148 When an OSPFv3 NSSA area is changed to a stub area, the switch may reboot unexpectedly with a message similar to the following: ospf3_ls.c:3748 -- in 'eRouteCtrl', task ID = 0xa9e7080-> Routing Stack: Assert Failed.

CR_0000166340 An SNMP crash occurs during PCM discovery on 2620 and 2650, if an Avaya phone is connected to the switch that advertises an organizational OUI value 00-00-00 (all zeros), or any neighbor entry contains an all zero OUI type TLV, during walkmib on the switch.

Workaround: Change the lldp admin status to txOnly on the link that is connected to the specific Avaya phone.

CR_0000168194 The switch may restart with an error message similar to the following during a session logout, kill, or timeout:

Software exception crash at multMgmtUtil.c:151 -- in 'mOobmCtrl', task ID = 0x13b15e00-> Internal error.

<p style="margin: 0in 0in 0pt;">

<p style="margin: 0in 0in 0pt;">

CR_0000170286 When a module is inserted into or removed from a switch with a large number of VLANs and ports, port configuration for every port is updated, leading to an unexpected switch reboot. To address this, the burst of logs is throttled.

CR_0000170693 Enabling HP Network Protector on the VAN SDN Controller and receiving DNS traffic causes packet buffer depletion in the switch and eventually can lead to PIM module reboot.

CR_0000174081 In some cases, a module may reboot when a non-fatal error is reported. The fix for this is to reboot the module only in the case of a fatal interrupt. For non fatal interrupt, the switch must drop the corrupted packet.

Display Issue

CR_0000140830 When **terminal length** is changed from the default of 24, the config file display is truncated, and the outputs of show logging and show interfaces might be interleaved in the output of show tech all.

CR_0000167906 When the alert log is sorted by date/time, items are sorted (erroneously) alphabetically by day of the week, rather than day of the month.

Distributed Trunking

CR_0000165004 If Distributed Trunking keep-alive has been configured, and later the switch is rebooted, the ISC link between the DT pair becomes unstable, or goes down. Symptoms include

blocked traffic, layer 2 loops, or duplicate packets. A temporary workaround for this issue is to reconfigure the DT keep-alive (but not reboot).

CR_0000168368 When the Distributed Trunk link is lost between the DTS primary switch and a distributed trunk device (DTD), the communication between the DTS primary and a distributed trunk device (DTD) or any hosts of DTD are also lost. This issue also causes loss of communication between DTD local hosts and any destinations whose path is the DTS-primary. Communication issues remain until the DT link is back online, AND, the other DT-link is disabled/re-enabled.

IPv6

CR_0000140467 The switch does not generate an event log message when IPv6 Neighbor Discovery (ND) detects a duplicate address.

CR_0000164057 IPv6 counters are displayed very slowly while executing the `show ip counters` command.

Workaround: Add the interface example `show ip counters vlan X'` returns display information at normal speed.

CR_0000172573 Configuring a port for IPv6 ra-guard and adding the port to a new or existing trunk results in the generic error message `Operation failed on Port X##: General error`. The fix for this provides a more meaningful error message.

Latency

CR_0000129743 When the switch receives a high volume of traffic for unknown destinations, the resulting ARPs sent by the switch in combination with other incoming traffic the switch must process can cause latency and dropped packets. In this situation, the event log might report `IpAddrMgr: IPAM Control task delayed due to slave message queues too full`.

Link

CR_0000169819 When the switch is configured for Rapid-PVST (RPVST), any changes to port path cost takes effect properly. However, when the port is disabled and then re-enabled, the port path cost applied and also advertised to neighbors changes to the default path cost.

LLDP

CR_0000157298 When a PD sends an LLDP-MED TLV to a switch port in which the PD uses the invalid value of 0 Watts, the switch software will actually apply the invalid 0 Watts. This will cause the PD to reboot every time it transmits the 0 Watts in the TLV. The switch may log overcurrent warnings (`00562 oirtsL oirt <port ID> PD Overcurrent indication`.) as the PD is already drawing power over the port when the software applies 0 Watts power. The value of 0 Watts in the TLV will henceforth be rejected with the error `Invalid power value 0 deciWatts received from MED PD on port <port ID>`.

Logging

CR_0000147833 Some RMON events are not correctly defined for VRRP, which causes the switch to report an error such as `system: Unknown Event ID 776` when those events occur.

CR_0000149891 When a user disables layer 3 on a VLAN, the event log message might state that layer 3 was disabled for the wrong VLAN.

CR_0000150244 Some RMON events are not correctly defined for fault-finder (FFI), SSL, and virus throttling, which causes the switch to report an error such as `system: Unknown Event ID 776` when those events occur.

CR_0000155070 The Alert-Log filter criteria does not work as expected when a substring is used as a filter.

Management

CR_0000149727 In some situations with multiple TELNET and/or SSH sessions established, the switch does not accept additional management sessions even if some of the existing ones are killed, responding with the message *Sorry*, the maximum number of sessions are active. Try again later.

Module Fault

CR_0000149727 When a chassis is rebooted, one or more modules may not be correctly initialized and suffer from an HSL Fatal error. When the problem occurs, Event Log messages such as the following will be logged:

```
00375 chassis: Slot J Downloading
00376 chassis: Slot J Download Complete
00374 chassis: Slot J Failed to boot-timeout- (AGENT_FAILED)
00375 chassis: Slot J Downloading
00376 chassis: Slot J Download Complete
00274 chassis: Slot J HSL0 Fatal ff8003f2: Task=eDevIdle Task
ID=0x1b1fe6c0 IP=0x1c5cd88
```

The same module may require multiple initialization attempts before it is properly booted up. Once the initialization of the affected module has succeeded, the module will operate normally.

Multicast

CR_0000138817 When a multicast stream is sent to a reserved multicast address, a General Query might not be forwarded by the switch, causing clients to be dropped from the multicast stream.

Nonstop Switching

CR_0000133990 After a management module failover of an 8200zl switch configured for Nonstop switching, one or more of the following issues might be observed:

- . The output of `show system fans` displays `Fan Failed` for all fans.
- . The output of `show system power-supply` displays `Not Present` for all power supply slots.
- . The output of `walkmib hpicfsensortable` displays `hpicfSensorIndex.0 = 0` repeatedly.
- . Pressing the "LED Mode" button has no effect (the mode selection does not change).

OpenFlow

CR_0000163370 Violation of OpenFlow requirement that if the match field `OXM_OF_IP_DSCP` is used the `ETH TYPE` must be `0x0800` or `0x86dd`.

CR_0000170635 On the CLI, typing `openflow <tab>` shows the valid parameters and descriptions. The optional parameter `ip-control-table-mode` help text has been corrected to read `Include IP control table in the OpenFlow packet processing pipeline. [Deprecated]`. Please see `'openflow instance <INSTANCE-NAME> pipeline-model`.

CR_0000170688 When enabling HP NetworkProtector on the VAN SDN Controller, the switch loses packet buffers until they are depleted and eventually the switch stops functioning and loses management access

OSPF

CR_0000137616 When the switch is configured as an OSPF neighbor, and the neighbor changes time, OSPF adjacency will temporarily drop.

CR_0000149413 The SPF counter for OSPFv3 increments for link-state updates even if there is no topology change.

CR_0000155425 When a high volume of Link State Acknowledgements are flooded to an OSPFv2 neighbor the adjacency may go down because OSPF Hello packets are dropped.

CR_0000160814 When a user reconfigures an OSPFv3 area from stub or normal to NSSA without rebooting the router or restarting the OSPFv3 protocol, the ASBR status is not updated on the OSPFv3 router when it becomes an NSSA ABR. Likewise, when the area is reconfigured from NSSA to stub or normal, the ASBR status is also not updated and the router will continue to act as if it is still an ASBR.

Due to the incorrect ASBR status, the route advertisements are not correct, which results in routes being installed on routers in an area when they should not be or routes not being advertised when they should have been.

CR_0000161636 When OSPF v3 is used, incorrect route calculations on the ABR by the switch result in symptoms such as multiple routes in RIB, and incorrect route selections based on preference settings (In case of cost and distance, the lower value is more preferred). Rebooting the ASBR may temporarily resolve the issue.

Packet Buffers

CR_0000170693 Enabling HP Network Protector on the VAN SDN Controller and receiving DNS traffic causes packet buffer depletion in the switch and eventually can lead to PIM module reboot.

Port Connectivity

CR_0000161856 If `ip igmp static-group <group-address>` is added to the switch configuration for any VLAN, then upon a warm or cold reboot of the switch, the switch does not establish a link on any Ethernet ports. This issue is also present on stand-alone 2920, with stacking disabled.

QinQ

CR_0000156782 A switch populated with zl v1 modules and configured for **qinq mixedvlan** mode might not pass customer traffic across an S-VLAN.

CR_0000156812 A switch configured for **qinq mixedvlan** mode does not allow an untagged port to be removed from a C-VLAN and placed in an S-VLAN.

CR_0000162179 When attempting to remove a configuration line from a QoS policy, the switch returns `commit failed`. The customer cannot delete the line and has to reload the configuration to recover. Occurs when multiple policies are configured.

QoS

CR_0000172606 The Web UI can now display a port range when setting QoS. Previously the Web UI displayed only the first port in the range.

RADIUS

CR_0000149657 Configuration of multiple RADIUS servers via SNMP fails if a “create and wait” mechanism is used.

Rate Limiting

CR_0000148906 Enabling outbound rate limiting on port causes adjacency loss and prevents OSPF hellos from being transmitted. If the rate-limit is removed the switch forms adjacencies again.

Routing

CR_0000148889 The host cache list structure for certain routes has changed to improve lookup performance.

CR_0000155524 Data traffic that is forwarded by the default route is routed in software after the ARP cache has been cleared by the command `clear arp`. Software routing can cause an increased latency and CPU utilization level.

CR_0000160655 When a VACL is applied to VLAN X, if a host on VLAN X then pings the switch agent's IP address for VLAN Y, the agents response IP address is also applied to the VACL, and hosts will become unreachable.

CR_0000162176 Under stress conditions, the switch sometimes enters a state where it does not send an ARP to a particular destination and it becomes unreachable on the customer network.

Workaround/Proof of issue: Initiate a ping from the switch to the unreachable destination to restore connectivity to that destination through this switch.

CR_0000174881, CR_0000176140 The switch does not initiate an ARP request to the next hop IPv4 address for routed IPv4 traffic entering a VLAN that has a Routed Access List (RACL) applied using the commands `vlan vid ip access-group identifier in` or `vlan vid ip access-group identifier out`. As a result, the IPv4 routed traffic will not reach its destination because the switch did not create an ARP entry in the switch ARP Table for the next hop IPv4 address which is required to route the traffic. The issue may be intermittent because there could be other sources trying to reach the same next hop IPv4 address which will result in creating an ARP entry. Due to the ARP age-out time of 20 minutes, the issue may reoccur after 20 minutes. For example, if the routed IPv4 traffic also enters the switch via a VLAN that does not have RACL or if you ping it from the affected switch. Pinging from the switch to the unreachable IPv4 destination address will temporarily resolve the reachability issue; however, the issue may reoccur after the APR age-out expire or after invoking the CLI command `clear arp`.

Example of an IPv4 inbound RACL configuration that could encounter this issue for packets routed through the switch:

```
ip access-list extended "102"
10 permit ip 0.0.0.0 255.255.255.255 0.0.0.0 255.255.255.255
exit
ip routing
ip route 0.0.0.0 0.0.0.0 192.168.0.1
vlan 10
name "VLAN10"
untagged A1
ip access-group "102" in
ip address 10.0.0.1 255.255.255.0
exit
vlan 20
name "VLAN20"
untagged A2
ip address 192.168.0.100 255.255.255.0
exit
```

Example of an IPv4 outbound RACL configuration that could encounter this issue for packets routed through the switch:

```
ip access-list extended "102"
10 permit ip 0.0.0.0 255.255.255.255 0.0.0.0 255.255.255.255
exit
ip routing
```



```

ip route 0.0.0.0 0.0.0.0 192.168.0.1
vlan 10
untagged A1
ip address 10.0.0.1 255.255.255.0
exit
vlan 20
name "VLAN20"
untagged A2
ip access-group "102" out
ip address 192.168.0.100 255.255.255.0
exit

```

sFlow

CR_0000168606 The switch continues to send incorrect sFlow datagrams for non-existent ports after removing the module associated with these ports.

SNMP

CR_0000156209 When a configuration file is downloaded to the switch in which the SNMP community name string for unrestricted access is something other than 'unrestricted', the software will reset the access-level to the default 'restricted.' Although it is expected behavior to default to 'restricted' when the string 'unrestricted' is not precisely matched, the software has been modified to allow the use of both lower and upper-case characters in the word 'unrestricted' when parsing a downloaded configuration file.

CR_0000160352 The string value for the temperature sensor's instance of the object entPhysicalName (.1.3.6.1.2.1.47.1.1.1.7) is incorrectly set to "Chassis." It should return "Chassis Temperature."

SSH

CR_0000159714 The output of the `display device` command over SSH displays incorrectly as a misaligned single line of output, due to no carriage returns between multiple lines. This occurs more frequently if the terminal width is set > 80 characters, when SSH senses the terminal settings on login.

CR_0000165393 When the SSH client has a keepalive mechanism configured that requires a response from the SSH server on the switch, the SSH client will terminate the session after the first keepalive packet is transmitted. This happens because the switch drops the client's keepalive packet due to an incorrect packet length calculation.

This issue has been observed using an openSSH client with the `ServerAliveInterval` configured and the parameter `'want_reply'` enabled.

SSL

CR_0000162587 SSL Security vulnerability due to 56 bit DES-CBC-SHA. Due to security vulnerability the cipher DES-CBC-SHA is now unavailable.

Stacking

CR_0000152463 After updating Management Stack Members to some versions of X.15.08.0001 or newer software, the Member switches will mistakenly display an additional two configuration lines of SNMPv3 configuration in the running-config if `snmp-server hosts` `snmp-server host` is configured on the Commander.

CR_0000170433 In a stacked configuration, if the macauth password is set to a password of exactly 16 characters (max length) and configuration saved, when the stack reboots, the member switch hangs during reboot.

CR_0000169998 VLAN port configuration changes made in the menu interface persist and cannot be reversed at the CLI. **Workaround:** Reset the switch, reset the module, or power cycle the switch.

Switch Initialization

CR_0000149065 When the switch is rebooted, one module takes about 10 seconds longer to come online than the other modules.

CR_0000169998 VLAN port configuration changes made in the menu interface persist and cannot be reversed at the CLI. **Workaround:** Reset the switch, reset the module, or power cycle the switch.

TACACS

CR_0000177904 When more than one TACAS server is configured and all are not reachable, failover to local authentication does not occur. **Workaround:** Configure single TACAS server with failover to local authentication. Use Radius servers and authentication.

Transceivers

CR_0000163290 Some SR J9150A and LRM J9152A transceivers show as NON-HP with K.15.07 and W.15.07 software.

UDP

CR_0000172405 When UDP broadcast traffic is sent to a switch with UDP forwarder configured, an unexpected reboot occurs with a message similar to `Software exception at alloc_free.c:825 -- in 'mUDPFCtrl', task ID = 0x1deb0800 -> buf already freed by 0x1DEB0800, op=0x00160002Buffer:`

VRRP

CR_0000169624 VRRP virtual ping fails in a QinQ mixed-mode configuration.

Web GUI

CR_0000172729 When a VLAN is created with a name containing an apostrophe, the Web GUI troubleshooting pages appear to be blank.

Web Management

CR_0000149099 When Spanning Tree Protocol (STP) is enabled via the Web user interface, "mstp" is shown as the default STP mode, and "mstp" is displayed as the operational mode after the user enables STP and saves the change. However, the command line interface shows that the switch operates in "rpvst" mode. **Workaround:** From the Web user interface, use the dropdown menu to explicitly select "mstp" from the dropdown options, then save the change.

CR_0000160654 When 51 or more VLANs are configured on the switch, the web interface does not display any VLAN under the **VLAN Management** and **Multicast IGMP** tabs.

Issues and workarounds

PoE

CR_0000174858 When high voltage input (750 - 1000V) is detected on a PoE+ RJ port, a bad FET HW failure is triggered by the switch and affected ports are powered down.

Workaround: Rebooting or power cycling the switch should recover the PoE controller and re-enable the affected ports.

Routing

CR_0000174012 Applying BPG route-map with set “weight” while there is more than one path could result in possible system reboot or hang. **Workaround:** Apply BPG route-map with set “local-pref” instead of using set “weight”.

Spanning Tree

CR_0000176573 A warning message may be incorrectly displayed asking the user to reboot the switch when accessing the Spanning Tree page through the switch menu’s user interface.

Workaround: Disregard the warning message or use the switch CLI for spanning tree configuration.

Upgrade information

Upgrading restrictions and guidelines

K.15.18.0006 uses BootROM K.15.30. If your switch has an older version of BootROM, the BootROM will be updated with this version of software.

For more information about BootROM, see the *HP Switch Software Management and Configuration Guide* for your switch.

- ① **IMPORTANT:** During the software update, the switch will automatically boot twice. The switch will update the primary BootROM, then reboot, and then update the secondary BootROM. After the switch flash memory is updated and the final boot is initiated, no additional user intervention is needed. Do not interrupt power to the switch during this important update.

Table 1 BootROM updates

If your software version is:	Your next step should be:
K.11.11 through K.12.29 (BootROM K.11.00 - K.11.03)	Update and reload into software version K.12.31 or K.12.62
K.12.31 through K.13.55 (BootROM K.12.12 - K.12.14)	Update and reload into software version K.13.58 or K.13.68
K.13.58 or newer (BootROM K.12.17 or newer; use <code>show flash</code> command)	Update directly into software version K.15.18.0006 (BootROM K.15.30)

Contacting HP

For additional information or assistance, contact HP Networking Support:

www.hp.com/networking/support

Before contacting HP, collect the following information:

- Product model names and numbers
- Technical support registration number (if applicable)
- Product serial numbers
- Error messages
- Operating system type and revision level
- Detailed questions

HP security policy

A Security Bulletin is the first published notification of security vulnerabilities and is the only communication vehicle for security vulnerabilities.

- Fixes for security vulnerabilities are not documented in manuals, release notes, or other forms of product documentation.
- A Security Bulletin is released when all vulnerable products still in support life have publicly available images that contain the fix for the security vulnerability.

To find security bulletins:

1. Go to the HP Support Center website at www.hp.com/go/hpsc.
2. Enter your product name or number and click **Go**.
3. Select your product from the list of results.
4. Click the **Top issues & solutions** tab.
5. Click the **Advisories, bulletins & notices** link.

To initiate a subscription to receive future HP Security Bulletin alerts via email, sign up at: www4.hp.com/signup_alerts

Related information

Documents

To find related documents, see the HP Support Center website:

www.hp.com/support/manuals

- Enter your product name or number and click **Go**. If necessary, select your product from the resulting list.
- For a complete list of acronyms and their definitions, see *HP FlexNetwork Technology Acronyms*.

Related documents

The following documents provide related information:

- *HP Switch Software Access Security Guide K/KA/KB.15.18*
- *HP Switch Software Advanced Traffic Management Guide K/KA/KB.15.18*
- *HP Switch Software Basic Operation Guide*
- *HP Switch Software IPv6 Configuration Guide K/KA/KB.15.18*
- *HP Switch Software Management and Configuration Guide K/KA/KB.15.18*
- *HP Switch Software Multicast and Routing Guide K/KA/KB.15.18*

Websites

- Official HP Home page: www.hp.com
- HP Networking: www.hp.com/go/networking
- HP product manuals: www.hp.com/support/manuals
- HP download drivers and software: www.hp.com/networking/software
- HP software depot: www.software.hp.com
- HP education services: www.hp.com/learn

Documentation feedback

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