

Customer Release Notes

VSP Operating System Software

Software Release 8.0.7.0

November 2019

INTRODUCTION:

This document provides specific information for version 8.0.7.0 of agent software for the VSP Operating System Software.

The purpose of this version is to address customer and internally found software issues.

Extreme Networks recommends that you thoroughly review this document prior to installing or upgrading this product.

For the latest firmware versions, visit the download site at:
www.extremenetworks.com/support/

NEW IN THIS RELEASE:

A consistency check was added to prevent configuration of VRRP VIRD 37 or 38 when DVR is enabled and vice versa.

IMPORTANT NOTES BEFORE UPGRADING TO THIS RELEASE:

If upgrading systems from either release 4.2.1.0 or release 4.2.1.1 that have ISIS enabled link(s) configured with HMAC-MD5 authentication, then you need to perform the procedure described in the section **SPECIAL INSTRUCTIONS FOR UPGRADING FROM PREVIOUS RELEASES** in order to avoid potential network connectivity loss.

If upgrading systems running 4.1.X releases which also have TACACS+ enabled, refer to the section **SPECIAL INSTRUCTIONS FOR UPGRADING FROM PREVIOUS RELEASES** for upgrade instructions.

If upgrading systems running 6.0.x releases or older, refer to the section **SPECIAL INSTRUCTIONS FOR UPGRADING FROM PREVIOUS RELEASES** for instructions about the need to step-through a 6.1.x release prior to going to 7.1.x release.

UPGRADE CONSIDERATION WHEN UPGRADING TO 8.0.7.0 FROM PREVIOUS RELEASE:

If you have a vlan X with vrrp instance of 37 provisioned and functional on a node running with several other vlans with dvr enabled, upon upgrade to 8.0.7.0 VRRP configuration for instance 37 is removed from that vlan X. This would cause traffic loss for those devices of that vlan X. Recommend renumbering the vrrp instance ids to other than 37 and 38 on that Vlan before upgrading.

DVR uses the same multicast addresses as vrrp id 37 and 38 for its DVR controller and leaf implementation.

PLATFORMS SUPPORTED:

Virtual Services Platform 4450 Series

Virtual Services Platform VSP 4450GSX-PWR+
 Virtual Services Platform VSP 4450GSX-DC
 Virtual Services Platform VSP 4450GTS-DC
 Virtual Services Platform VSP 4450GTX-HT-PWR+

Virtual Services Platform 7200 Series

Virtual Services Platform VSP 7254XSQ
 Virtual Services Platform VSP 7254XTQ

Virtual Services Platform 7400 Series

Virtual Services Platform VSP 7432CQ
 Virtual Services Platform VSP 7400-48Y-8C

Virtual Services Platform 8000 Series

Virtual Services Platform 8200
 Virtual Services Platform 8400

SPECIAL INSTRUCTIONS FOR UPGRADING FROM PREVIOUS RELEASES:

1. The following procedure should be followed when upgrading systems running one of the following two releases, 4.2.1.0 or 4.2.1.1 which also have ISIS enabled links with HMAC-MD5 authentication on:

Disable ISIS authentication throughout the network a system at a time, a link at a time by disabling it on either side of each link, ensuring the link is stable before moving to the next. When a system has been reconfigured free of ISIS HMAC-MD5 authentication in all of its links, save the configuration file and perform the upgrade to release 4.2.3.0 or greater. After all these systems have been upgraded to release 4.2.3.0 or greater, you may re-enable authentication a system at a time, a link at a time and save the configuration file in each of the involved systems.

Example:

```
VSP:1(config)#interface gigabitethernet x/y
VSP:1(config-if)#no isis hello-auth
VSP:1(config-if)#save config
VSP:1(config-if)# PERFORM THE UPGRADE
VSP:1(config)#interface gigabitethernet x/y
VSP:1(config-if)# isis hello-auth type hmac-md5 key <keyname> [key-id
<keyed>]
VSP:1(config-if)#save config
```

2. The following procedure should be followed when upgrading systems running 4.1.X releases which also have TACACS+ enabled on:

When you upgrade from VOSS 4.1.X to VOSS 4.2 or a higher release, the TACACS+ host configurations will be lost. After the upgrade, the TACACS+ host configurations will not take effect so you must reconfigure them. After you make the configurations, you must save the changes on the device. You should also save the configuration to a file to retain the configuration settings.

3. Upgrading DVR configurations from releases 6.0.1.1 and earlier to 6.0.1.2 and beyond.
 - a. All DVR nodes must be upgraded to the same release.
 - b. All DVR leaves should be upgraded first.

4. Upgrading from releases 6.0.x and earlier
 - a. Direct upgrade from 6.0.x or earlier releases to 7.x releases is not supported.
 - b. Please upgrade to a 6.1.x release first (Release 6.1.6.0 or higher is recommended). Then upgrade to the desired 7.x release (Release 7.1.1.0 or higher recommended).

Review items 5, 6, and 7 if the ISIS L1 area is `00.1515.fee1.900d.1515.fee1.900d`, `00.0000.0000` or all zero's.

5. Legacy ZTF Procedures for Releases 7.0.0.0 - 7.1.2.0, 8.0.0.0, 8.0.1.0, and 8.0.5.0
 - a. Boot with factory-defaults fabric.
 - b. ISIS manual-area set to `00.0000.0000`, Dynamically Learned Area (DLA) displayed as `00.0000.0000` and ISIS enabled with other parameters.
 - c. HELLO PDUs not sent.
 - d. Listen on active ISIS interfaces for ISIS HELLO with non-zero Area ID. Zeros of any length up to 13 bytes are considered a zero value.
 - e. When an ISIS HELLO with a non-zero Area ID is received, use that area ID as the DLA and start sending HELLO with DLA on all ISIS interfaces.
 - f. DLA set and displayed as learned in the previous step.
 - g. Saving the configuration will save into the configuration file `manual-area 00.0000.0000`.
 - h. Boot with the saved configuration. The ZTF procedures are triggered. ISIS interfaces in passive mode not sending ISIS HELLOs. Only process incoming ISIS HELLO with non-zero Area ID.

Note: You can reach the fourth step by manually configuring the ISIS/SPBM with a manual-area equal to 0 (all values of 0, regardless of the length of zeros, are considered the same) and enabling ISIS.

6. Modified ZTF Procedures for Releases 7.1.3.0+ and 8.0.6.0+
 - a. Boot with factory-defaults fabric
 - b. ISIS manual-area set to `00.1515.fee1.900d.1515.fee1.900d`, Dynamically Learned Area (DLA) is blank and ISIS enabled with other parameters.
 - c. HELLO PDUs not sent
 - d. Listen on active ISIS interfaces for ISIS HELLO with and Area ID not equal to `00.1515.fee1.900d.1515.fee1.900d`.
 - e. When an ISIS HELLO with an Area ID not equal to `00.1515.fee1.900d.1515.fee1.900d` is received, use that Area ID as the DLA and start sending HELLO with DLA on all ISIS interfaces.
 - f. DLA set and displayed as learned in the previous step.
 - g. Saving the configuration file will save into the configuration file `manual-area 00.1515.fee1.900d.1515.fee1.900d`.
 - h. Boot with the saved configuration. ZTF procedures are triggered. ISIS interfaces in passive mode not sending ISIS HELLO's, only processing incoming ISIS HELLO with an Area ID note equal to `00.1515.fee1.900d.1515.fee1.900d`.

Note: You can reach the fourth step by manually configuring the ISIS/SPBM with a manual-area equal to `00.1515.fee1.900d.1515.fee1.900d` and enabling ISIS.

7. Migration to a Release supporting Modified ZTF such as 7.1.3.0+ or 8.0.6.0+
- a. From Pre-ZTF feature Release such as 6.1.6.0

The following considerations should be taken into account when upgrading to this release from a pre-ZTF release:

- i. Check the ISIS manual area (show isis manual-area).
- ii. Determine if the manual area equals 00.1515.fee1.900d.1515.fee1.900d.
- iii. This is a normal Area ID before the upgrade. After the upgrade, ZTF procedures, as previously described, will be triggered.
 - If the existing behavior is desired, the ISIS manual area used in the network needs to be changed to a different value. Note, if ISIS is the management network used to get to the node, it will not form an ISIS adjacency after the upgrade and not join the network. This will isolate the node. The changes to the manual area within the topology should be made before any upgrades are performed.

- b. From a Release Running Legacy ZTF such as 7.1.2.0

The following considerations should be taken into account when upgrading to a release supporting Modified ZTF from a Legacy ZTF release.

- Check the ISIS manual area (show isis manual-area).
- Determine if the manual area equals 00.0000.0000 or is a 00 of any length.
- This Area ID triggered the ZTF procedures before the upgrade. After the upgrade, ZTF procedures, as previously described, will NOT be triggered.
- If the existing behavior is desired, replace the value of ISIS manual area with 00.1515.fee1.900d.1515.fee1.900d. Note, if ISIS is the management network used to get to the node, it will not form an ISIS adjacency after the upgrade and not join the network. This will isolate the node. The change should be made before the upgrade.
- Determine if the manual area equals 00.1515.fee1.900d.1515.fee1.900d.
 - This is a normal Area ID before the upgrade. After the upgrade to a release implementing
- Modified ZTF, the ZTF procedures, as previously described, will be triggered.
- If this is not desired, replace the value of ISIS manual area with a different value. Note, if ISIS is the management network used to get to the node, it will not form an ISIS adjacency after the upgrade and not join the network. This will isolate the node. The change should be made before the upgrade.

NOTES FOR UPGRADE:

Please see "Release Notes for VSP Operating System Software (VOSS)" for software release 8.0 available at <https://www.extremenetworks.com/support/release-notes> for details regarding Known Limitations.

FILE NAMES FOR THIS RELEASE:

Virtual Services Platform 4450 Series

File Name	Module or File Type	File Size (bytes)
VOSS4K.8.0.7.0.sha512	SHA512 Checksums	1385
VOSS4K.8.0.7.0.md5	MD5 Checksums	521
VOSS4K.8.0.7.0.tgz	Release 8.0.7.0 archived software distribution	123,608,002
VOSS4K.8.0.7.0_mib.zip	Archive of all MIB files	1,145,481
VOSS4K.8.0.7.0_mib.txt	MIB file	7,593,483
VOSS4K.8.0.7.0_mib_sup.txt	MIB file	1,528,108
VOSSv805_HELP_EDM_gzip.zip	EDM Help file	4,108,500
restconf_yang.tgz	YANG model	506,020

Virtual Services Platform 7200 Series

File Name	Module or File Type	File Size (bytes)
VOSS7K.8.0.7.0.sha512	SHA512 Checksums	1385
VOSS7K.8.0.7.0.md5	MD5 Checksums	521
VOSS7K.8.0.7.0.tgz	Release 8.0.7.0 archived software distribution	137,750,362
VOSS7K.8.0.7.0_mib.zip	Archive of all MIB files	1,145,481
VOSS7K.8.0.7.0_mib.txt	MIB file	7,593,483
VOSS7K.8.0.7.0_mib_sup.txt	MIB file	1,331,178
VOSSv805_HELP_EDM_gzip.zip	EDM Help file	4,108,500
restconf_yang.tgz	YANG model	506,020

Virtual Services Platform 7400 Series

File Name	Module or File Type	File Size (bytes)
VOSS7400.8.0.7.0.sha512	SHA512 Checksums	1404
VOSS7400.8.0.7.0.md5	MD5 Checksums	540
VOSS7400.8.0.7.0.tgz	Release 8.0.7.0 archived software distribution	247,006,016
VOSS7400.8.0.7.0_mib.zip	Archive of all MIB files	1,145,481
VOSS7400.8.0.7.0_mib.txt	MIB file	7,593,483
VOSS7400.8.0.7.0_mib_sup.txt	MIB file	1,339,532
VOSS7400v800_HELP_EDM_gzip.zip	EDM Help file	4,088,502
restconf_yang.tgz	YANG model	506,020
TPVM_7400_8.0.7.0.img	Third Party Virtual Machine (TPVM)	1,677,066,240
purview_7400_8.0.7.0.ova	Purview Engine Virtual Appliance	1,778,386,432

Virtual Services Platform 8000 Series

File Name	Module or File Type	File Size (bytes)
VOSS8K.8.0.7.0.sha512	SHA512 Checksums	1385
VOSS8K.8.0.7.0.md5	MD5 Checksums	521
VOSS8K.8.0.7.0.tgz	Release 8.0.7.0 archived software distribution	123,608,002
VOSS8K.8.0.7.0_mib.zip	Archive of all MIB files	1,145,481
VOSS8K.8.0.7.0_mib.txt	MIB file	7,593,483
VOSS8K.8.0.7.0_mib_sup.txt	MIB file	1,528,108
VOSSv805_HELP_EDM_gzip.zip	EDM Help file	4,108,500
restconf_yang.tgz	YANG model	506,020

Note about image download:

Ensure images are downloaded using the binary file transfer. Perform MD5 checksum check on downloaded files to ensure file integrity.

Check that the file type suffix is “.tgz” and the image names after download to device match those shown in the above table. Some download utilities have been observed to append “.tar” to the file name or change the filename extension from “.tgz” to “.tar”. If file type suffix is “.tar” or file name does not exactly match the names shown in above table, rename the downloaded file to the name shown in the table above so that the activation procedures will operate properly.

Load activation procedures:

```
software add VOSS4K.8.0.7.0.tgz
software activate VOSS4K.8.0.7.0.GA
```

or

```
software add VOSS7K.8.0.7.0.tgz
software activate VOSS7K.8.0.7.0.GA
```

or

```
software add VOSS7400.8.0.7.0.tgz
software activate VOSS7400.8.0.7.0.GA
```

or

```
software add VOSS8K.8.0.7.0.tgz
software activate VOSS8K.8.0.7.0.GA
```

VERSION OF PREVIOUS RELEASE:**Virtual Services Platform 4000 Series**

Software version 4.0.0.0, 4.0.0.1, 4.0.0.2, 4.0.0.3, 4.1.0.0, 4.1.0.1, 4.2.0.0, 4.2.0.1, 4.2.1.0, 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 8.0.0.0, 8.0.1.0, 8.0.5.0, 8.0.5.1, 8.0.6.0, and 8.0.6.1 for VSP 4450GSX platform

Software Version 4.0.50.0 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 8.0.0.0, 8.0.1.0, 8.0.5.0, 8.0.5.1, 8.0.6.0, and 8.0.6.1 for VSP 4450GSX DC and VSP 4450GTS DC platforms

Software Version 4.0.40.0, 4.1.0.0, 4.1.0.1, 4.2.0.0, 4.2.0.1, 4.2.1.0 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 8.0.0.0, 8.0.1.0, 8.0.5.0, 8.0.5.1, 8.0.6.0, and 8.0.6.1 for VSP 4450GTX-HT-PWR+ platform

Virtual Services Platform 7200 Series

Software Version 4.2.1.0, 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 8.0.0.0, 8.0.1.0, 8.0.5.0, 8.0.5.1, 8.0.6.0, and 8.0.6.1

Virtual Services Platform 7400 Series

Software Version 8.0.1.0, 8.0.5.0 and 8.0.5.1 for VSP7432CQ platform

Software Version 8.0.5.0 and 8.0.5.1 for VSP-7400-48Y-8C platform

Virtual Services Platform 8000 Series

Software Version 4.0.0.0, 4.0.1.0, 4.0.1.1, 4.0.1.2, 4.0.1.3, 4.0.1.4, 4.1.0.0, 4.1.0.1, 4.2.0.0, 4.2.0.1, 4.2.1.0, 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 8.0.0.0, 8.0.1.0, 8.0.5.0, 8.0.5.1, 8.0.6.0, and 8.0.6.1 for VSP8200 platform

Software Version, 4.2.0.0, 4.2.0.1, 4.2.1.0, 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 8.0.0.0, 8.0.1.0, 8.0.5.0, 8.0.5.1, 8.0.6.0, and 8.0.6.1 for VSP8404 platform

Software Version, 5.3.0.0, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 8.0.0.0, 8.0.1.0, 8.0.5.0, 8.0.5.1, 8.0.6.0, and 8.0.6.1 for VSP8404c platform

COMPATIBILITY:

This software release is managed with Enterprise Device Manager (EDM), which is integrated into the agent software.

CHANGES IN THIS RELEASE:

New Features in This Release

None.

Old Features Removed From This Release

None.

Problems Resolved in This Release

VOSS-12932	Improve convergence time for bounce or SMLT with large number of VLANs.
VOSS-13537	Attempting to redistribute a BGP route into ISIS as an external route with a route-map containing a match community xyz clause, then that route is getting redistributed into ISIS to the peer device even if the match fails.

Problems Resolved in This Release	
VOSS-13850	Switch reboot after memory usage reached 95%.
VOSS-14089	COP-SW INFO VIST peer mac xx:xx:xx:xx:xx:xx is learnt on non-IST port, Pointing record back to IST port reports incorrect non-VIST port.
VOSS-14095	Change log for ICMP needfrag reply MTU size exceeded, next hop MTU size: x to include the source IP and the required MTU.
VOSS-14148	DVR Controller-Leaf link bounce, results in missing GRT default route.
VOSS-14157	High CPU utilization, after software upgrade, caused by SNMP task(tSnmpTmr).
VOSS-14211	For configurations using brouter interfaces as the FE tunnel endpoints: if the node learns about a non-direct route (say a default route) that encompasses the tunnel endpoint prior to the direct interface coming up the logical ISIS adjacency will fail to establish.
VOSS-14457	Prevent console driver hang.
VOSS-14478	Config loss after reboot when MSTP-Fabric Connect Multi-homing is enabled in SPBM.
VOSS-14604	Add autopology nmm-table support for devices: VSP7432CQ, VSP7400-48Y-8C, VSP4900-24P, VSP4900-48P, XA1440, XA1480
VOSS-14662	After load-license command ran it appears like license not saved.
VOSS-14683	Improve exception handling during upgrade.
VOSS-14719	When port is configured as tagged and Egress-VLANID is used alongside Tunnel-Private-Group-ID attribute, the tagging is taken from port level. Egress-VLANID is overwriting port level tagging only to tagged value not otherwise.
VOSS-14821	Inconsistency observed between CLI and EDM output for nexthopevrfid name in the routing table of EDM.
VOSS-14835	Custom banner displayed after SSH user authenticates.
VOSS-14880	untag-port-default-vlan port command not effective upon enabling EAPoL on a port. added consistency check preventing EAPoL from overriding 'untag-port-default-vlan' port command.
VOSS-14912	SNMP may stop working after VOSS upgrade from v7.0.0.0 to v7.1.2.0 or later releases.
VOSS-14943	Core dump after IGMP config changes when more than one IGMPv3 members joining same group on same port and explicit host tracking is enabled.
VOSS-14986	WD Reset after deletion of DVR enabled VLAN.
VOSS-14991	The QOS Egress shaper rate cannot exceed the port capability when trying to configure 10G port to shape to 8G.
VOSS-15091	VSP is not assigning a value to the IP Identification field on ISIS packets.
VOSS-15119	Mirrored packets might be not seen on the second mirroring destination port.
VOSS-15129	I2 tracetree-vclan command is disabled.
VOSS-15154	ARP entries stop forming over time. Resources leaked when host route add fails because an inclusive local route exists.
VOSS-15292	QSFP28-SR4-100G connected to server, not coming up when shut/no-shut or when the box is rebooted until FEC is set manually again
VOSS-15300	EDM: Certificate subject country allows more than 2 characters.
VOSS-15308	Chassis becomes hung when snmp-server command executed.
VOSS-15320	route nexthops being reported as UNKNOWN-ERROR.

Problems Resolved in This Release	
VOSS-15334	Do not process invalid ISIS LSP record.
VOSS-15546	Status of "DirectBroadcastEnable" not properly represented in EDM.
VOSS-15547	Using EDM, select multiple ports, edit General and last change shows all zeros.
VOSS-15651	"show certificate cert-type online-subject-cert" displays self-signed certificate Information.
VOSS-15660	Temperature traps are not being generated.
VOSS-15383	"show vlacp interface gigabitethernet vid" doesn't return anything.
VOSS-15393	Crash due to out of memory.
VOSS-15520	VSP7400 platforms only, LLDP packets can be bridged onto L2VSN.
VOSS-15726	Devices Outside of Fabric Network Unable To Reach SMLT Client Behind VSP IST Peer During DVR Fail Over.

OUTSTANDING ISSUES:

Please see "Release Notes for VSP Operating System Software (VOSS)" for software release 8.0 available at <https://www.extremenetworks.com/support/release-notes> for details regarding Known Limitations.

KNOWN LIMITATIONS:

Please see "Release Notes for VSP Operating System Software (VOSS)" for software release 8.0 available at <https://www.extremenetworks.com/support/release-notes> for details regarding Known Limitations.

Regular cleanup of unneeded files on USB drives is recommended to minimize possibility of USB corruption when a system is reset, shut down, or power is lost.

DOCUMENTATION CORRECTIONS:

For other known issues, please refer to the product release notes and technical documentation available at: <https://www.extremenetworks.com/support/documentation>.

GLOBAL SUPPORT

By Phone: +1 800-998-2408 (toll-free in U.S. and Canada)

For the toll-free support number in your country:
www.extremenetworks.com/support/

By Email: support@extremenetworks.com

By Web: www.extremenetworks.com/support/

By Mail: Extreme Networks, Inc.
6480 Via Del Oro
San Jose, CA 95119

For information regarding the latest software available, recent release note revisions, or if you require additional assistance, please visit the Extreme Networks Support website.

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