

Customer Release Notes

VSP Operating System Software

Software Release 7.1.5.0

November 2019

INTRODUCTION:

This document provides specific information for version 7.1.5.0 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/

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.

PLATFORMS SUPPORTED:

Virtual Services Platform 4000 Series

- Virtual Services Platform VSP 4850GTS
- Virtual Services Platform VSP 4850GTS-PWR+
- 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 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 your networks have Zero Touch Fabric (ZTF) enabled or the ISIS L1 area is **00.1515.fee1.900d.1515.fee1.900d**.

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 Future 8.x
 - 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 not 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
 - 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:

- Check the ISIS manual area (`show isis manual-area`).
- 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 7.1.3.0, 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 to 7.1.3.0, 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” for software release 7.1.0, available at <https://www.extremenetworks.com/support/release-notes> for details regarding Known Limitations.

FILE NAMES FOR THIS RELEASE:

Virtual Services Platform 4000 Series

File Name	Module or File Type	File Size (bytes)
VOSS4K.7.1.5.0.tgz	Release 7.1.5.0 archived software distribution	143912722
VOSS4K.7.1.5.0_mib.zip	Archive of all MIB files	1119108
VOSS4K.7.1.5.0_mib.txt	MIB file	7417835
VOSS4K.7.1.5.0_mib_sup.txt	MIB file	1464280
VSP4000v711_HELP_EDM_gzip.zip	EDM Help file	3960940
VOSS4K.7.1.5.0.md5	MD5 Checksums	578
VOSS4K.7.1.5.0.sha512	SHA512 Checksums	1538

Virtual Services Platform 7200 Series

File Name	Module or File Type	File Size (bytes)
VOSS7K.7.1.5.0.tgz	Release 7.1.5.0 archived software distribution	104550190
VOSS7K.7.1.5.0_mib.zip	Archive of all MIB files	1119108
VOSS7K.7.1.5.0_mib.txt	MIB file	7417835
VOSS7K.7.1.5.0_mib_sup.txt	MIB file	1275181
VOSSv711_HELP_EDM_gzip.zip	EDM Help file	3960940
VSP7K.7.1.5.0.md5	MD5 Checksums	572
VOSS7K.7.1.5.0.sha512	SHA512 Checksums	1532

Virtual Services Platform 8000 Series

File Name	Module or File Type	File Size (bytes)
VOSS8K.7.1.5.0.tgz	Release 7.1.5.0 archived software distribution	160045638
VOSS8K.7.1.5.0_mib.zip	Archive of all MIB files	1119108
VOSS8K_7.1.5.0_mib.txt	MIB file	7417835
VOSS8K.7.1.5.0_mib_sup.txt	MIB file	1275181
VOSSv711_HELP_EDM_gzip.zip	EDM Help file	3960940
VSP8K.7.1.5.0.md5	MD5 Checksums	572
VOSS8K.7.1.5.0.sha512	SHA512 Checksums	1532

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.7.1.5.0.tgz
software activate VOSS4K.7.1.5.0.GA
```

or

```
software add VOSS7K.7.1.5.0.tgz
software activate VOSS7K.7.1.5.0.GA
```

or

```
software add VOSS8K.7.1.5.0.tgz
software activate VOSS8K.7.1.5.0.GA
```

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

Software Version 3.0.0.0, 3.0.1.0, 3.1.0.0, 3.1.0.2, 3.1.0.3, 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, 7.1.3.0 and 7.1.4.0 for VSP 4850GTS platforms

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, 7.1.3.0 and 7.1.4.0 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, 7.1.3.0 and 7.1.4.0 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, 7.1.3.0 and 7.1.4.0 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, 7.1.3.0 and 7.1.4.0

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, 7.1.3.0 and 7.1.4.0 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, 7.1.3.0 and 7.1.4.0 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, 7.1.3.0 and 7.1.4.0 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**

VLACP Flap Dampening support for Virtual Services Platform 4000 Series Platforms only.

See the following documents for information on VLACP Flap Dampening:

- [Configuring Link Aggregation, MLT, SMLT and vIST for VOSS](#)
- [Command Line Interface Commands Reference for VOSS](#)

Old Features Removed From This Release

None.

Problems Resolved in This Release

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-14157	High CPU utilization, after software upgrade, caused by SNMP task(tSnmpTmr)
VOSS-14457	Remove printf that may cause console hang.
VOSS-14683	Add diagnostic logs as upgrade proceeds and collect coredump if upgrade fails.
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-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-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-15106	Using EDM, select multiple ports, edit General and last change shows all zeros
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-15219	Node may hang after coredump occurs that require power cycle to recover.
VOSS-15308	Node becomes hung when snmp-server engine-id command executed with empty password.

VOSS-15320	Show ip route shows route nexthops as UNKNOWN-ERROR if ip alternative route is disabled
VOSS-15334	Invalid ISIS LSP length caused node reset.
VOSS-15356	Status of DirectBroadcastEnable not properly represented in EDM
VOSS-15384	VLACP FD commands should only be saved in config file for VSP4000
VOSS-15418	Fix stack corruption code.
VOSS-15651	show certificate cert-type online-subject-cert command displayed self-signed certificate information.
VOSS-15660	Temperature traps are not generated.
VOSS-15683	show vlacp interface gig vid shows nothing.

OUTSTANDING ISSUES:

Please see "Release Notes for VSP Operating System" for software release 7.1.0 available at <https://www.extremenetworks.com/support/release-notes> for details regarding Known Issues.

KNOWN LIMITATIONS:

Please see "Release Notes for VSP Operating System" for software release 7.1.0 available at <https://www.extremenetworks.com/support/release-notes> for details regarding Known Limitations.

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

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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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