Release Notes – Rev. A

OmniSwitch 2260, 2360

Release 5.2R2

These release notes accompany AOS Release 5.2R2. These release notes provide important information on individual software features and hardware modules. Since much of the information in these release notes is not included in the hardware and software user manuals, it is important that you read all sections of this document before installing new hardware or loading new software.

Contents

Related Documentation

These release notes should be used in conjunction with OmniSwitch AOS Release 5.2R2 User Guides. The following are the titles of the user guides that apply to this release.

- OmniSwitch 2260/2360 Hardware User Guide
- OmniSwitch 2260/2360 AOS Release 5.2R2 CLI Reference Guide
- OmniSwitch 2260/2360 AOS Release 5.2R2 WebView Guide

System Requirements

Memory Requirements

The following are the standard shipped memory configurations. Configuration files and the compressed software image, including web management software images, are stored in the flash memory.

Platform	SDRAM	Flash
OS2260	512 MB	512 MB
OS2360	1 GB	512 MB

UBoot and FPGA Requirements

The software versions listed below are the MINIMUM required, except where otherwise noted. Switches running the minimum versions, as listed below, do not require any UBoot or FPGA upgrades. Use the '**show hardware-info**' command to determine the current versions.

Switches not running the minimum version required should upgrade to the latest UBoot or FPGA that is available with this release available from Service & Support.

OmniSwitch 2260/2360 – AOS Release 5.2.16.R02 (GA)

Hardware	Minimum UBoot	Current UBoot	Minimum FPGA
OS2260	5.1.8.R01	5.2.2.R02	0.5
OS2360	5.1.8.R01	5.2.2.R02	0.6
OS2360-U24X/U48X	5.2.8.R01	5.2.2.R02	0.2
Notes: - Uboot 5.2.2.R02 is optional to support Gowin CPLD firmware upgrade.			

Prerequisites

- The OmniSwitch 2260/2360 products do not contain a real-time clock.
- It is recommended to use NTP to ensure time synchronization.
- When the switch is reset, the switch will boot up from an approximation of the last known good time.
- When the switch is powered off it cannot detect the time left in the powered off state. When it boots up it will have the same time as when the switch was last powered off.

Licensed Features

The table below lists the licensed features in this release and whether or not a license is required for the various models.

	OmniSwitch 2x60
	Description
License	
OS2x60-SW-PERF-10G	Performance software license allowing the default 1G SFP uplink ports to operate at 10G speed. This license is only offered for the China market.
OS2x60-SW-PERF-AR	Performance software license allowing the configurations about routing protocols. This license is only offered for OS2360 switch family.

New Supported Hardware

Supported Transceivers

Previously Supported Transceivers (5.1R1/5.1R2/5.2R2/5.2R2)	OS2260	OS2360
SFP-1G-T - Fixed speed 1000Base-T Gigabit Ethernet Transceiver (SFP). Supports category 5, 5E, and 6 copper cabling up to 100m. SFP works only at 1000 Mbit/s speed and full-duplex mode.	Supported	Supported
SFP-GIG-T - 1000BaseT Gigabit Ethernet Transceiver (SFP MSA). SFP works at 1000 Mb/s speed and full duplex mode.	Supported	Supported
SFP-GIG-SX - 1000Base SX Gigabit Ethernet optical transceiver (SFP MSA).	Supported	Supported
SFP-GIG-LX - 1000Base LX Gigabit Ethernet optical transceiver (SFP MSA).	Supported	Supported
SFP-GIG-LH40 - 1000Base LH Gigabit Ethernet optical transceiver (SFP MSA). Typical reach of 40 km on 9/125 µm SMF.	Supported	Supported
SFP-GIG-LH70 - 1000Base LH Gigabit Ethernet optical transceiver (SFP MSA). Typical reach of 70 km on 9/125 µm SMF.	Supported	Supported
SFP-10G-T - 10-Gigabit copper transceiver (SFP+). Supports category 6a/7 cabling copper cabling up to 30m.	Supported (X-models)	Supported
SFP-10G-SR - 10 Gigabit optical transceiver (SFP+). Supports multimode fiber over 850 nm wavelength (nominal) with an LC connector. Typical reach of 300 m.	Supported (X-models)	Supported
SFP-10G-LR - 10 Gigabit optical transceiver (SFP+). Supports single mode fiber over 1310 nm wavelength (nominal) with an LC connector. Typical reach of 10 km.	Supported (X-models)	Supported
OS2x60-CBL-60CM - 1/10G direct attached uplink copper cable (60 cm, SFP+).	Supported	Supported
OS2x60-CBL-1M - 1/10G direct attached uplink copper cable (1 m, SFP+).	Supported	Supported
OS2x60-CBL-3M - 1/10G direct attached uplink copper cable (3 m, SFP+)	Supported	Supported
Note: SFP-GIG-T is not supported on SFP+ ports.		

New Supported Software Features

The following software features are being introduced in this release, subject to the feature exceptions and problem reports described later in these release notes.

5.2R2 Feature Summary

Feature	Platform
Sflow	OS2260/OS2360

Sflow

The OS2260/OS2360 models support the Sflow feature for network monitoring.

Unsupported Software Features

Commands for these features may exist on the switch but are currently not supported. Support in an upcoming release is planned.

5.2R2 Unsupported Feature Summary

Feature	Platform
N/A	N/A

Open Problem Reports and Feature Exceptions

The problems listed here include problems known at the time of the product's release.

System / General / Display

CR	Description	Workaround
CRAOS5X-72	SFP-10G-T transceiver has a single sided link (link down switch side and link up peer end side) when peer end is 1G, not auto-negotiating to peer end speed.	Manually configure the SFP-10G-T to 1G speed.
CRAOS5X-65	A fake link-up will be observed when inserting the SFP-GIG-T/SFP-1G-T transceiver without a cable on SFP+ port.	Manually configure the SPF+ port to 1G speed when the SFP-GIG-T/SFP-1G-T inserted.
CRAOS5X-142	When any user MAC is learned as Filtering on an UNP port, if traffic for the same MAC is received on another port then the MAC on the second port gets learned without being trapped to software.	To avoid learning of a Filtering MAC on another UNP port, disable the default VLAN configured on the UNP port.
CRAOS5X-162	When any client MAC is learned on a LPS enabled port, if the same MAC is received on a non-LPS port on another chassis in a VC, the MAC gets learned as expected, but the previous MAC entry on the LPS port is not deleted until the next aging cycle occurs.	There is no known workaround at this time.
CRAOS5X-221	When 128 clients do 802.1x re-authentication at the same time multiple times, 1 or 2 clients may fail the authentication.	Remove the clients and authenticate the clients again.
CRAOS5X-307	CLI timeout due to "update fpga-cpld cmm all" take long time.	If fpga/cpld firmware upgrade is needed, use "update fpga-cpld cmm 1/x" command to upgrade fpga/cpld by single chassis.

Technical Support

Alcatel-Lucent technical support is committed to resolving our customer's technical issues in a timely manner. Customers with inquiries should contact us at:

Region	Phone Number
North America	800-995-2696
Latin America	877-919-9526
European Union	+800 00200100 (Toll Free) or +1(650)385-2193
Asia Pacific	+65 6240 8484

Email: ebg_global_supportcenter@al-enterprise.com

Internet: Customers with service agreements may open cases 24 hours a day via the support web page at: myportal.al-enterprise.com. Upon opening a case, customers will receive a case number and may review, update, or escalate support cases on-line. Please specify the severity level of the issue per the definitions below. For fastest resolution, please have hardware configuration, module types and version by slot, software version, and configuration file available for each switch.

Severity 1 - Production network is down resulting in critical impact on business—no workaround available.

Severity 2 - Segment or Ring is down or intermittent loss of connectivity across network.

Severity 3 - Network performance is slow or impaired—no loss of connectivity or data.

Severity 4 - Information or assistance on product feature, functionality, configuration, or installation.

Third Party Licenses and Notices

Legal Notices applicable to any software distributed alone or in connection with the product to which this document pertains, are contained in files within the software itself located at: **/flash/foss**.

Appendix A - Specifications

Login Specifications		
	OS2260	OS2360
Login Methods	Telnet, SSH, HTTP, SNMP	
Number of concurrent Telnet sessions	6	
Number of concurrent SSH sessions	8	
Number of concurrent HTTP (WebView) sessions	4	
CMM Specifications		
	OS2260	OS2360
Compact Flash Memory	512MB	512MB
RAM Memory	512MB	1GB
Maximum Length of File Names (in Characters)	255	
Maximum Length of Directory Names (in Characters)	255	
Maximum Length of System Name (in Characters)	32	
User Database Specifications		
	OS2260	OS2360
Maximum number of alphanumeric characters in a username	63	
Maximum number of alphanumeric characters in a user password	30	
Maximum number of local user accounts	50	
NTP Specifications		
	OS2260	OS2360
Maximum number of NTP servers per client	12	
Maximum number of associations	512	
Source Learning Specifications		
	OS2260	OS2360
Maximum number of learned MAC addresses	16K	32K
VLAN Specifications		
	OS2260	OS2360
Maximum VLANs per Switch	64	1024
Spanning Tree Specifications		

	OS2260	OS2360
Maximum VLAN Spanning Tree instances	100	100
Maximum VLAN Spanning Tree instances (MSTI)	4	8
Static / Dynamic Link Aggregation Specifications		
	OS2260	OS2360
Maximum number of link aggregation groups	8	16
Maximum number of ports per link aggregate group	4	8
IPv4 Specifications		
	OS2260	OS2360
Maximum ARP entries	1K	
Maximum router interfaces per system	8	24
Maximum router interfaces per VLAN	8	8
Maximum Static Routes	2	32
UNP Specifications		
	OS2260	OS2360
Number of 802.1x or UNP users per chassis	128	
Learned Port Security		
	OS2260	OS2360
Minimum number of learned MAC addresses allowed per LPS port	1	
Maximum number of learned MAC addresses allowed per LPS port	1000	
Maximum number of filtered MAC addresses allowed per LPS port	100	
Maximum number of configurable MAC address ranges per LPS port	1	
Port Mirroring / Monitoring		
	OS2260	OS2360
Mirroring Sessions Supported	3	
Monitoring Sessions Supported	1	
Virtual Chassis		
	OS2260	OS2360
Maximum number of physical switches in a Virtual Chassis	1	8
Valid chassis identifier	1	1-8
Maximum number of Virtual Fabric Link peers per chassis	0	2

VFL Supported Port Types	N/S	SFP/SFP+
Sflow		
	OS2260	OS2360
Receiver/Sampler/Polling Instances	2	2

Appendix B - Upgrade Instructions

These instructions document how to upgrade the AOS images on an OmniSwitch. The steps should be performed in order:

1. **Download the Upgrade Files** - Go to the Service and Support website and download and unzip the upgrade files for the appropriate model and release. The archives contain the following:
    - OS2260 – Aros.img
    - OS2360 – Taos.img

2. **FTP the Upgrade Files to the Switch** - FTP the image files to the *Running* directory of the switch you are upgrading. The image files and directory will differ depending on your switch and configuration.

3. **Upgrade the Image File** - Follow the steps below to upgrade the image files by reloading the switch from the Running directory.

```
OS2360-> reload from working no rollback-timeout

Confirm Activate (Y/N) : y

This operation will verify and copy images before reloading.

It may take several minutes to complete....
```

4. **Verify the Software Upgrade** - Log in to the switch to confirm it is running on the new software. This can be determined from the **show microcode** command.

```
OS2360-> show microcode

/flash/working

Package           Release                Size       Description

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Taos.img           5.2.16.R02             62807088  Alcatel-Lucent OS


OS2360-> show running-directory

CONFIGURATION STATUS

Running CMM              : MASTER-PRIMARY,

CMM Mode                 : VIRTUAL-CHASSIS MONO CMM,

Current CMM Slot         : CHASSIS-1 A,

Running configuration    : WORKING,

Certify/Restore Status   : CERTIFY NEEDED

SYNCHRONIZATION STATUS

Running Configuration    : NOT SYNCHRONIZED
```

Note: If there are any issues after upgrading the switch can be rolled back to the previous certified version by issuing the **reload from certified no rollback-timeout** command.

5. **Certify the Software Upgrade** - After verifying the software and that the network is stable, use the following commands to certify the new software by copying the Running directory to the Certified directory.

```
OS2360-> copy running certified flash-synchro
```

Optional Uboot Upgrade

Note: AOS must be upgraded prior to performing a Uboot upgrade.

1. Download and extract the upgrade archive from the Service & Support website. In addition to the AOS images, the archive may also contain a Uboot file, for example.

- u-boot.5.1R02.1.tar.gz

2. FTP (Binary) the file to the **/flash** directory on the primary CMM.

3. If desired, a Uboot upgrade can then be performed, for example:

```
-> update uboot cmm all file /flash/u-boot.5.1R02.1.tar.gz

Starting CMM ALL UBOOT Upgrade

Please wait...

CMM 1/1

u-boot-ppc_2040.bin: OK

U-boot successfully updated

Successfully updated
```

4. Once complete, a reboot is required.

Appendix C – Fixed Problem Reports

The following problem reports were closed in this release.

CR/PR NUMBER	Description
CRVA-977	**Summary:** LDAP policy server is not loaded after switch reboots. **Explanation:** Fix will be available from AOS 5.2 02 GA.
CRAOS5X-248	**Summary:** Not allow same source port in different sessions. **Explanation:** Fix will be available from AOS 5.2 02 GA.
CRAOS5X-244	**Summary:** AOS 5.x - Preventive Maintenance project - add the Chassis ID in the log generated for DDM. **Explanation:** Fix will be available from AOS 5.2R02 GA.
CRAOS5X-247	**Summary:** AOS 5.x - Preventive Maintenance project - add the Chassis ID/Fan ID in the log generated for fan issue. **Explanation:** Fix will be available from AOS 5.2R02 GA.
CRAOS5X-246	**Summary:** AOS 5.x - Preventive Maintenance project - add the Chassis ID in the log generated for Power Supply issue. **Explanation:** Fix will be available from AOS 5.2R02 GA.
CRAOS5X-245	**Summary:** Add the Chassis ID and Slot ID in the log generated for LANPOWER in Fault or Denied State. **Explanation:** Fix will be available from AOS 5.2R02 GA.
CRAOS5X-251	**Summary:** Fixed for ipv6 interface can not be enabled when vrrp is not ready **Explanation:** Fix will be available from AOS 5.2R02 GA.
CRAOS5X-259	**Summary:** OS2260 - lpGetNextChassisSlotPort 890: i > MAX_VC_CHASSIS_ID No valid Chassis/Slot/Port found0. **Explanation:** Fix will be available from AOS 5.2R02 GA.

CRAOS5X-277	**Summary:** ALE 8038 IP-phone UNP-classified in DATA vlan instead of voice. **Explanation:** Fix will be available from AOS 5.2R02 GA.
CRAOS5X-265	**Summary:** OS2260 will age out multicast group although there are queriers. **Explanation:** IGMP query message cannot be sent out on OS2x60-48/P48/P48X port #2 or OS2260-10/P10 port #1. Fix will be available from AOS 5.2R02 GA.
CRAOS5X-270	**Summary:** There is inconsistent between webview and switch cli about the vrrp interval configuration. **Explanation:** On Webview, the Advertsing Interval field must be a number from 1 to 255. On CLI, the number is from 1 to 25500. Fix will be available from AOS 5.2R02 GA.
CRAOS5X-279	**Summary:** Failed to add static LPS mac directly. **Explanation:** Fix will be available from AOS 5.2R02 GA.
CRAOS5X-285	**Summary:** Fail to set ingress/egress depth for QoS with 2260-10/P10. **Explanation:** Fix will be available from AOS 5.2R02 GA.
CRAOS5X-297	**Summary:** Storm control does not work accurately. **Explanation:** Fix will be available from AOS 5.2R02 GA.
CRAOS5X-299	**Summary:** The interface ingress burst cann't config on 2260-P10. **Explanation:** Fix will be available from AOS 5.2R02 GA.