



RELEASE NOTES

Switch Products
AOS version R11.7.0
June 26, 2015

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Contents

<i>Introduction</i>	4
<i>Supported Platforms</i>	4
<i>System Notes</i>	5
<i>Features and Enhancements</i>	5
<i>Fixes</i>	5
<i>Errata</i>	6
<i>Upgrade Instructions</i>	8
<i>Documentation Updates</i>	8

Introduction

AOS version R11.7.0 is a major system release that addresses customer issues that were uncovered in previous code releases.

This release is generally available code. Results obtained during internal testing have been evaluated and the code has been determined to be ready for general availability. Caveats discovered during testing but not addressed in this build are listed in [Errata on page 6](#).

A list of new or updated documents for this release appears in [Documentation Updates on page 8](#).

Configuration guides, white papers, data sheets, and other documentation can be found on ADTRAN's Support Forum, <https://supportforums.adtran.com>. The contents of these release notes will focus on the platforms listed below.

Supported Platforms

The following platforms are supported in AOS version R11.7.0. To confirm the Boot ROM version of the ADTRAN unit, Telnet or console to the unit and issue the show version command. In the command output, the Boot ROM version will be listed as Boot ROM version XX.XX.XX. If you require a Boot ROM upgrade, please contact ADTRAN Technical Support (support@adtran.com or 888-423-8726) for assistance.

Platform	Minimum Boot ROM
NetVanta 1234/1234P (2nd and 3rd Gen.)	XB.01.02
NetVanta 1235P	R10.4.0.B1
NetVanta 1238/1238P (2nd Gen. only)	XB.01.02
NetVanta 1531/1531P	R11.1.0
NetVanta 1534	17.06.03.00
NetVanta 1534 (2nd Gen.)	17.08.01.00
NetVanta 1534P (2nd Gen.)	17.09.01.00
NetVanta 1535P	17.08.01.00
NetVanta 1544/1544F	17.06.04.00
NetVanta 1544 (2nd Gen.)	17.08.01.00
NetVanta 1544P (2nd Gen.)	17.09.01.00
NetVanta 1638/1638P	18.02.01.SC

System Notes

- Beginning with AOS version 17.09.01, the syntax of certain commands was modified from previous AOS versions by either removing or adding the ip keyword. In general, when the ip keyword appears in a command, it signifies that the command is only applicable to IPv4 functionality. As more features introduce IPv6 support, the ipv6 keyword is added to signify the command is only applicable to IPv6 functionality. The ip keyword has been removed from several commands to signify that the command has both IPv4 and IPv6 functionality.

Due to this syntax change, downgrading a unit configured in AOS version R11.7.0 to a previous AOS version, could cause service disruption because the new syntax might not be recognized by the previous version. Upgrading a unit from an older AOS version to AOS version R11.7.0 will cause no service disruption because both the old and the new syntaxes are accepted. For more information on specific commands, refer to the [AOS Command Reference Guide](https://supportforums.adtran.com) available at <https://supportforums.adtran.com>.

- It is recommended that your browser's cache be cleared before viewing the GUI after an upgrade.

Features and Enhancements

This section highlights the major Switch specific features, commands, and behavioral changes in products running AOS version R11.7.0.

There are no new Switch specific features in AOS version R11.7.0.

Fixes

This section highlights major bug fixes for all products running AOS version R11.7.0.

- The **+1-Amsterdam** time zone start and end times for daylight savings time were incorrect.
- In rare cases, issuing the command **show dot11 access-point detail** on an AOS access controller caused the controller to reboot.
- When connecting to an AOS device using SSH and logging in as a user with a configured privilege level, the terminal length would set to 0.
- The output of the **show users** command did not display the correct privilege level when AAA was enabled.
- Due to changes made in R10.9.3, AOS was only able to process three unicast ARP requests per second.
- After configuring the privilege level of **exec** commands, those commands were not set to the proper privilege level unless the configuration was saved and the unit rebooted or any **no privilege** command was issued.
- The key length of generated HTTPS certificates has been increased to 2048 bits and the hashing algorithm has been changed to SHA256. Additionally, the ability to regenerate the HTTPS certificate and private key with the **http secure-server certificate regenerate** command was added.
- In rare cases, a reboot occurred when performing a traceroute.
- Some sectors on flash memory could become written excessively, causing premature wear and potentially preventing the unit from booting. This issue has been addressed and a refresh mechanism has been added to address any issues with premature wear.
- When adGenAOSnmTrackStateChgPass and adGenAOSnmTrackStateChgFail SNMP traps were sent, adGenAOSnmTrackIndex was populated with the wrong sub-ID.
- SnmpEngineboots was not incremented on a hard reboot.

- Copying a file larger than 16 MB from flash memory of an AOS device via HTTP/HTTPS (including using Auto-Link) would fail.
- Configuring a NetVanta 160's channel setting to **least-congested** did not properly adjust to the least congested channel available. NetVanta 160s now have default channel assignments, based on the dot11 interface number in the AOS controller's configuration.
- A standard access list containing a **permit** <hostname> statement would not properly match traffic from the IP address to which that hostname resolved.

This section highlights the Switch specific bug fixes in products running AOS version R11.7.0.

- Using VRRP and IGMP snooping on the same VLAN caused a memory leak that eventually caused a switch to reboot.
- SNMP traps sent from a NetVanta 1531 were sent to the wrong destination port.
- In rare cases, an ActivChassis line card could become out of sync with the rest of the ActivChassis, which caused devices connected to that line card to experience excess latency.
- In certain cases, NetVanta 160s using NetVanta 1238Ps as access controllers did not receive their full configuration when booted.

Errata

The following is a list of errata that still exist in all products running AOS version R11.7.0.

- In some command sets, the **exit** command is not visible even though it still functions properly.
- Event messages indicating a firmware upgrade was attempted may appear in the AOS event log for NetVanta 160 APs that are not being upgraded.
- Having more than two entries in a Network Monitor ICMP probe test list will display **Tracked by: Nothing** in the **show probe** command output. This is merely a display error; the probes still function correctly.
- Accessing the GUI via HTTPS may be slow.
- The current AOS implementation of DHCP message construction can result in Windows XP machines not adopting the DNS servers defined within the DHCP offer. A workaround using a numbered IP/hex option will allow the message to be constructed in a manner that Windows XP will accept. Microsoft also offers a hotfix to resolve this Windows issue.
- The **vap-reference** command will not replicate VLAN IDs for an AP unless 802.1q encapsulation has been manually enabled on the AP expecting to receive the replicated configuration.
- A large enough drift in the system clock can cause an error when the NTP server attempts to synchronize.
- EAP Identity Responses from a wireless client that do not contain an Identity field can result in the NetVanta 150 creating a malformed RADIUS packet.
- NetVanta 150s may not properly handle immediate Access-Accept responses to Access-Request messages.
- The name of a deleted IPv4 ACL cannot be used to name a new IPv6 ACL.
- The pass phrase for the Wireless Wizard does not persist across reboots.

The following is a list of Switch specific errata that exist in products running AOS version R11.7.0.

- In an ActivChassis configuration using port channels that were distributed among individual line cards, an ActivChassis would sometimes discard traffic if it was attempting to send more than 1 Gbps across the port channel.
- A switchport cannot be disabled by clearing the Enabled check box in the GUI.
- Hardware access lists cannot be used to block traffic destined for the management interface of a NetVanta 1638.
- In certain cases, NetVanta 160s using NetVanta 1238Ps as access controllers may not receive their full configuration when booted. Restarting AWCP and rebooting the NetVanta 160s resolves the issue.
- Traffic destined for devices that match static ARP entries in a Layer 3 switch will experience extra latency if a static MAC entry is not present for the same device.
- When attempting to configure a voice VLAN on a switchport already configured as a port mirror destination, the error message provided did not clearly indicate why the voice VLAN command was not accepted.
- ICMP responses from a VLAN interface on the NetVanta 1531 may be periodically latent. ICMP routed or switched through the unit is not affected.
- When running R11.1.0 boot ROM on a NetVanta 1531 and attempting to apply a backup firmware image from bootstrap, the switch will print out benign errors indicating packets are being dropped due to congestion.
- Creating a hardware ACL with the same name as a previously created and deleted IP ACL will result in the creation of an IP ACL with an implicit permit.
- Removing port channels from the configuration while an ActivChassis is under a heavy load could cause the ActivChassis to reboot.
- An ActivChassis stack is not able to pass 10 Gb of 64-byte frames over a single 10 Gb fiber link in an SFP+ XIM.
- A standard MAC ACL can be created with the same name as an existing extended MAC ACL.
- If a line card has the same VCID as another line card it cannot be added to the ActivChassis stack, and output from **show ac detail** command does not adequately point out the reason for this failure.
- On NetVanta 1638s in ActivChassis mode, spanning tree will reconverge at non-rapid spanning tree rates (about 30 seconds) if there are spanning tree topology changes in the network.
- The NetVanta 1638 cannot boot from a firmware image stored on a connected USB drive.
- If an ActivChassis line card has NetVanta APs physically attached, and the line card is removed and added back to the ActivChassis stack, the NetVanta APs will not properly indicate the AC that controls them. Bouncing the switchport on the line card or rebooting the ActivChassis master will resolve this issue.
- Legacy switch stacking cannot be configured if VLAN 2386 is created prior to enabling stacking.
- When a switchport on a NetVanta 1535P is running forced speed 100 Mbps in standard mode (not ActivReach mode), jumbo frames with size greater than 9000 bytes are dropped.
- The chassis fans in NetVanta 1544F switches oscillate at a higher frequency than expected during a period when the switch is not being heavily utilized.
- NetVanta 1500 and 1600 Series switches may not properly prioritize traffic across port channels.
- Certain OIDs in the Bridge-MIB may not return a value on AOS switches.

- L3 switch statistics incorrectly report forwarded frames when subjected to a traffic stream consisting of invalid IPv4 header checksum values. The frames are properly dropped by the switch, but the statistics counter erroneously reports frames being forwarded.
- Port mirroring on a NetVanta 1544 switch might not mirror traffic in both directions.
- The L3 Switch Header Error and Discard counters on the NetVanta 1544P (second generation) do not increment.

Upgrade Instructions

Upgrading ADTRAN products to the latest version of AOS firmware is explained in detail in the configuration guide *Upgrading Firmware in AOS*, available at <https://supportforums.adtran.com>.

Documentation Updates

The following documents were updated or newly released for AOS version R11.7.0 or later specifically for the AOS products. These documents can be found on ADTRAN's Support Forum available at <https://supportforums.adtran.com>. You can select the hyperlink below to be immediately redirected to the document.

- *[AOS Command Reference Guide](#)*