RELEASE NOTES

Switch Products
AOS version R11.8.0
September 1, 2015

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Introduction

AOS version R11.8.0 is a major system release that adds new features and 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 R11.8.0. 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/1238P (2nd and 3rd Gen.)	XB.01.02
NetVanta 1235P	R10.4.0.B1
NetVanta 1238 (2nd Gen.)	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 1550-24/1550-24P/1550-48/1550-48P	BVS1.0
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 R11.8.0 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 R11.8.0 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* 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 features, commands, and behavioral changes for all products running AOS version R11.8.0.

- Added support for software licensing in AOS to allow for more flexible addition of features to both new and existing hardware platforms.

This section highlights the major Switch specific features, commands, and behavioral changes in products running AOS version R11.8.0.

- Added storm control functionality to NetVanta 1531 and NetVanta 1550 Series switches.

Fixes

This section highlights major bug fixes for all products running AOS version R11.8.0.

- Quotation marks around an SNMP view name that contained spaces were not preserved in in the running and startup configurations.
- When pasting text into the CLI, commands that followed an empty line were corrupted.
- In rare cases, a reboot occurred when using TACACS+.

This section highlights the Switch specific bug fixes in products running AOS version R11.8.0.

- When subjected to a broadcast storm, NetVanta 1550 Series switches became unresponsive and would not recover until rebooted.
- A NetVanta 1638 could not control a NetVanta 160 successfully if there was a large amount of multicast traffic received on a VLAN interface.
- A switchport could not be disabled in the GUI by deselecting the **Enabled** check box.
- When trying 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.

Errata

The following is a list of errata that still exist in all products running AOS version R11.8.0.

- Upgrading to R11.7.0 or R11.8.0 can cause NetVanta 150 APs to lose their static RF channel assignments.
- If NetVanta 160 APs using the 802.11bgn radios are configured with the **least-congested** RF channel setting, upgrading them to R11.7.0 or R11.8.0 will statically set their RF channel to a non-recommended value. It is recommended that all 802.11bgn VAPs be configured with RF channels 1, 6, or 11.
- In rare cases, AOS devices configured to email exception reports will reboot when they attempts to email an exception report to a SMTP server that supports STARTTLS.
- 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.
- 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 R11.8.0.

- The idle process on a NetVanta 1638, visible with the command **show processes cpu**, is named **procnto-600-,** rather than **Idle**, like other AOS platforms.
- The active CPU process load percentages on a NetVanta 1531, visible via the command **show processes cpu**, do not properly add up to 100 percent.
- Attempts to remove a switchport from a port channel using the GUI present an error message. Switchports can be removed from a port channel via the CLI without issue.
- 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.
- When rebooting a NetVanta 1531 or 1550, a software watchdog error will display immediately prior to the reboot, indicating the watchdog application has crashed. This does not cause a functional problem.
- Hardware access lists cannot be used to block traffic destined for the management interface of a NetVanta 1638.
- 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.

- 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 R11.8.0 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*

