RELEASE NOTES

Switch Products
AOS version R11.4.1
September 22, 2014

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Introduction

AOS version R11.4.1 is a maintenance 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 R11.4.1. 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 R11.4.1 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 R11.4.1 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 in all products running AOS version R11.4.0.

- Added the ability to set route tags in routing protocols and route maps.
- Added OSPF distribute lists to filter prefixes redistributed out of OSPF and to prevent routes learned by OSPF from being used in the route table or redistributed into other routing protocols.

This section highlights the major Switch specific features, commands, and behavioral changes in products running AOS version R11.4.0.

- Added a ProServices section to the GUI that allows ProCare and ProCloud customers to easily connect to ADTRAN's ProServices systems.
- Added the ability for AOS switches to initiate a secure SSH tunnel to a Linux server that can be used to allow remote access from the Linux server to the switches. This SSH tunnel must be initiated from the switch.

Fixes

This section highlights major bug fixes for all products running AOS version R11.4.0.

- When using the privilege levels feature, some engineering level commands were also made accessible.
- On the NetVanta 1531, 4660, 6250, 6360, and Total Access 900e (third generation), flash to flash file copies initiated via the console port would take longer than the same copy initiated via Telnet or SSH.
- Attempting to configure the privilege level for all commands in a command set containing commands without a **no** version resulted in an error.
- The **verify-file** command provided different output when run via the console port than when run via Telnet or SSH.
- If **aaa authentication enable default enable** was configured and no enable password was configured, if you issued the **disable** command followed by the **enable** command you were prompted for the enable password even though no password was configured.

- The **tacacs-server timeout** command had no effect until the TCP session to the TACACS+ server had been established.

- If the firmware filename received by auto-config matched the currently applied firmware filename, the auto-config process would restart every 60 seconds.

- When using Auto-Link to connect to n-Command MSP, a slow memory leak occurred.

- If a firmware transfer from n-Command MSP failed, the partial firmware file was not deleted from the file system.

This section highlights the Switch specific bug fixes in products running AOS version R11.4.1

- An ActivChassis could have failed to update L3 switching tables if the backup switch failed.

This section highlights the Switch specific bug fixes in products running AOS version R11.4.0.

- In certain versions of AOS, accessing the System Summary page in a NetVanta 1638 caused a 503 Service Unavailable response.

- The VoIP wizard did not function correctly when using Internet Explorer 9 or earlier.

- Regularly polling the NetVanta 1544 for bridge MIB info via SNMP caused a memory leak and eventually caused the switch to reboot.

- The command **show eps** was available in switches that did not support EPS.

Errata

The following is a list of errata that still exist in all products running AOS version R11.4.1.

- In some command sets, the **exit** command is not visible even though it still functions properly.

- Rebooting a NetVanta 160 after editing an associated MAC access list causes the AP to transmit SSID **Wireless11**.

- Configuring a NetVanta 160's channel setting to **least-congested** may not properly adjust to the least congested channel available.

- The **show interface dot11ap** *<number>* command may show an incorrect radio channel for a NetVanta 160.

- Copying a file larger than 20 MB from flash memory of an AOS device via HTTP can cause the AOS device to reboot.

- The GUI of a NetVanta device acting as a wireless access controller can not display the software currently running on a connected access point.

- An AOS device may print an event message in the CLI reporting a successful NetVanta 160 software upgrade, even if the upgrade has failed.

- A host name entry in an ACL may fail to resolve to the correct IP address even though the router's host table reflects the correct IP address. Workaround: Use IP addresses instead of a host name when creating an ACL.

- 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 displays **Tracked by: Nothing** in the **show probe** command output. This is only a display error; the probes still function correctly.

- Accessing the GUI via HTTPS may be slow.

- Wi-Fi multimedia (WMM), configured with the command **qos-mode wmm,** does not function properly on NetVanta 150 Access Points.

- WEP encryption does not function properly on NetVanta 160s.

- The current AOS implementation of DHCP message construction may result in Windows XP machines not adopting the DNS servers defined in 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.

- The VLAN ID for an access point cannot be changed using the GUI.

- EAP Identity responses from a wireless client that do not contain an Identity field can result in a malformed RADIUS packet created by the NetVanta 150.

- NetVanta 150s might 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.

- Browsing to the Switchports menu from the Port Security menu on the NetVanta 1335 WiFi GUI results in a 503 Service Unavailable error.

- 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 R11.4.1.

- In R11.1.0, when attempting to apply a backup firmware image to a NetVanta 1531 from bootstrap, the switch will print out benign errors indicating packets are being dropped due to congestion.

- The ActivChassis feature can only be disabled via the CLI.

- Removing port channels from the configuration of an ActivChassis device while under a heavy load can cause the ActivChassis device to reboot.

- When configured with two port channels, each with greater than two members, one of the port channels may not evenly distribute traffic sent over the aggregated link.

- A NetVanta 1638 will occasionally print out the following message when booting: **HTTP_CLIENT CONNECT_TO_HTTP_SERVER errorCode 251**. This does not cause a functional problem.

- 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 can not 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 some NetVanta PoE switches oscillate at a higher frequency than expected during periods when the switch is not being heavily utilized.
- NetVanta 1500 and NetVanta 1600 Series switches may not properly prioritize traffic across port channels.
- Certain OIDs in the Bridge-MIB may not return a value on a second generation NetVanta 123X switch.
- 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.
- A VLAN interface for a VLAN that is not accessed by other switchports will not be advertised by GVRP.
- Switch platforms count input discards on the ingress interface when receiving 802.3x pause frames.
- In certain instances, an SFP port on a NetVanta 1544 will not function with RAD MiRiCi-E3T3 SFPs.
- Port mirroring on a NetVanta 1544 switch may not mirror traffic in both directions.
- The L3 Switch Header Error and Discard counters on the NetVanta 1544P (second generation) do not increment.
- Booting a second generation NetVanta 1534 or a NetVanta 1535P that is acting as an access controller for more than 20 directly connected NetVanta 160 Access Points can cause some of the Access Points to pull incomplete configuration data from the NetVanta switch.

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 R11.4.1 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*