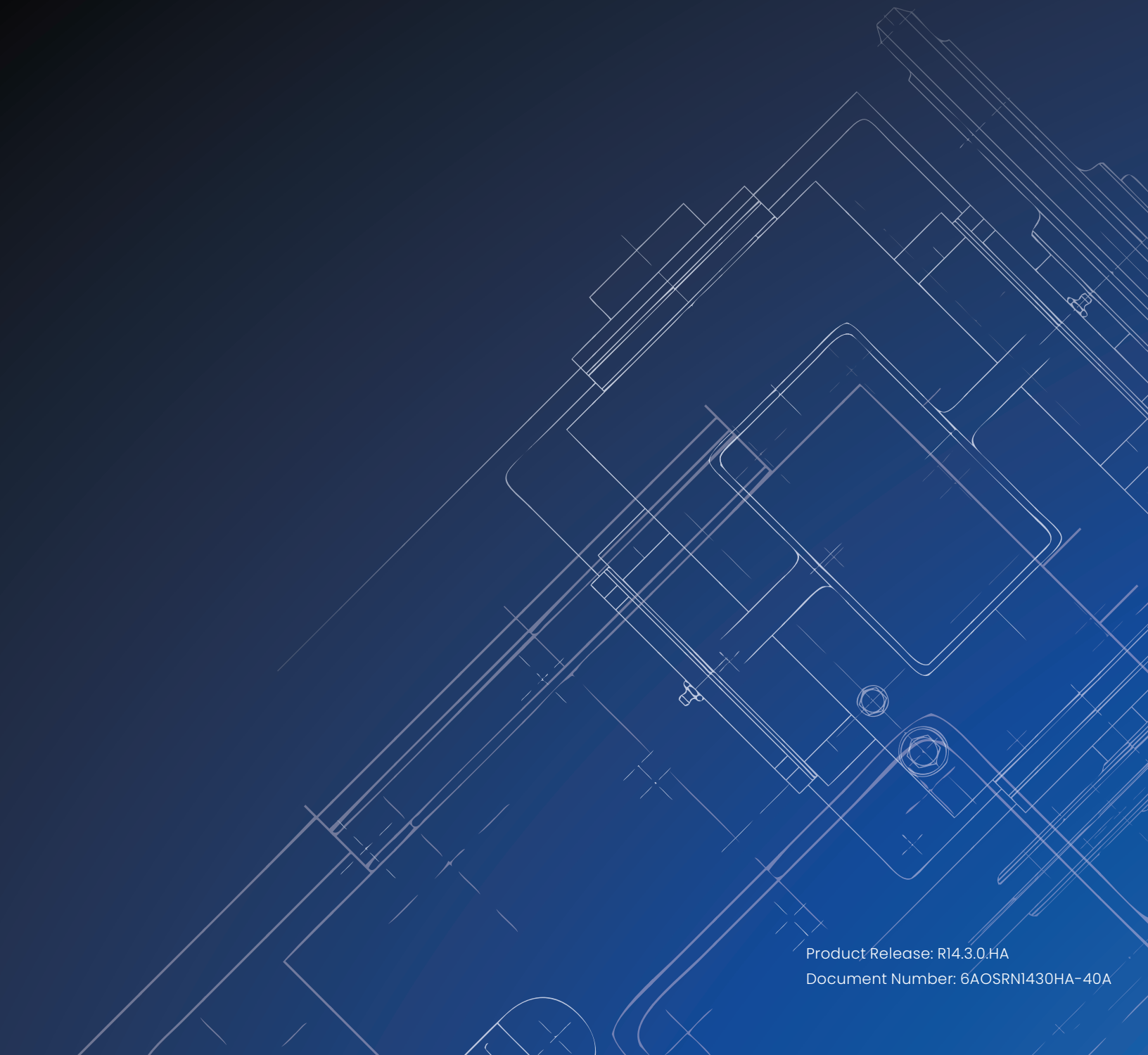
Adtran

Adtran Operating System

R14.3.0.HA Release Notes



Product Release: R14.3.0.HA

Document Number: 6AOSRN1430HA-40A

Trademark Information

To the Holder of this Document

Disclaimer of Liability

Adtran
901 Explorer Boulevard
P.O. Box 140000
Huntsville, AL 35814-4000
Phone: (256) 963-8000

Contents

Introduction

AOS version R14.3.0.HA is a major system release that introduces new features and addresses bug fixes and 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.

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 in System Notes. Additional information specific to AOS is outlined in System Notes.

Supported Platforms

Table 1 lists the platforms that are supported in AOS version R14.3.0.HA. To confirm the Boot ROM version, Telnet or console to the unit and enter the **show version** command. The Boot ROM version will be listed as **Boot ROM version XX.XX.XX**. If you need a Boot ROM upgrade, contact Adtran Technical Support (support@adtran.com or 888-423-8726) for assistance.

Table 1: Supported Platforms

Platform	Standard Feature Pack	Enhanced Feature Pack	SBC Feature Pack	Minimum Boot ROM
NetVanta 3140	✓	✓	✓	R11.5.0
NetVanta 3148	✓	✓	✓	R11.3.0.B3
NetVanta 3200/3205 (3rd Gen.)	✓	✓		17.02.01.00
NetVanta 3305 (2nd Gen.)	✓	✓		04.02.00
NetVanta 3430	✓	✓		13.03.SB
NetVanta 3430 (2nd Gen.)	✓	✓	✓	17.05.01.00
NetVanta 3448	✓	✓	✓	13.03.SB
NetVanta 3450	✓	✓		17.06.01.00
NetVanta 3458	✓	✓		17.06.01.00
NetVanta 4148	✓	✓	✓	R11.3.0.B3
NetVanta 4430	✓	✓	✓	17.04.01.00
NetVanta 4660		✓	✓	R10.10.0.B5
NetVanta 5660		✓	✓	R11.4.1.B2
NetVanta 6250		✓	✓	R10.9.0
NetVanta 6310/6330		✓	✓	A3.01.B2
NetVanta 6360		✓	✓	R11.2.0
Total Access 900 Series (3rd Gen)		✓		R13.7.0.B1
Total Access 900e Series (3rd Gen.)		✓	✓	R10.9.0

Features and Enhancements in Release R14.3.0.HA

There are no features introduced in AOS R14.3.0.HA.

Features and Enhancements in Release R14.3.0

This section highlights the major features, commands, and behavioral changes for all products running AOS version R14.3.0.

AD-257092	Added support for the new software licensing platform.
AD-246787	Added support for 3072-bit and 4096-bit RSA SSH keys. As part of this support, updates to the **ssh key regenerate** command were introduced in R14.3.0 to include the following variations: • **ssh key regenerate dsa** (regenerates the SSH DSA key) • **ssh key regenerate rsa [2048 | 3072 | 4096]** (regenerates SSH RSA key and allows for optional specification of 2048-bit, 3072-bit, or 4096-bit key lengths). • **ssh key regenrate sftp [dsa | rsa [2048 | 3072 | 4096]]** (regenerates SFTP keys and allows for optional specification of DSA or RSA keys and RSA key lengths).

Fixes

General Bug Fixes in R14.3.0.HA

This section highlights major bug fixes for all products running AOS version R14.3.0.HA.

AOS-44004	Fixed an issue in which the Link was up with optical UNI with no RX optical signal.
AOS-43993	Fixed an issue in which using the GUI to configure T1 interfaces on a Total Access 900 (3rd Gen.) resulted in a 503 error.

General Bug Fixes in R14.3.0

This section highlights major bug fixes for all products running AOS version R14.3.0.

AOS-43987	Fixed an issue in which HTTP error reports were generated when configuring QoS in the GUI on the NetVanta 3148 and 4148 devices.
AOS-43986	Fixed an issue in which a crash may have occurred when configuring QoS in the GUI on the NetVanta 3148 and 4148 devices.
AOS-43969	Fixed an issue in which the PPP client responded with a null Conf-Nak in response to a Conf-Req for EAP authentication. The PPP client now sends a Conf-Nak listing the supported authentication methods.
AOS-43939	Fixed an issue in which the AOS GUI was not functioning correctly and all left-menu sidebar navigation and configuration options were missing, as were relevant system information and other items.
AOS-43868	Fixed an issue in which a memory leak occurred when using the SFTP client.

AOS-43866	Fixed an issue in which the FTP, HTTP, HTTPS, SNMP, and Telnet servers bound sockets when disabled.
AOS-43861	Fixed an issue in which the **adGenAOSQoSClassifierDirection** OID was defined as an integer but implemented as a gauge.
AOS-43854	Backported the fix for CVE-2008-7220 in the AOS GUI.
AOS-43831	Fixed an issue in which the output of the **show int shdsl 1/1 performance-statistics 15 96** command listed a value of **N/A** for all statistics.
AOS-43830	Fixed an issue in which the current date was displayed for previous day 24-hour intervals on the interface PM counters.
AOS-43807	Fixed an issue in which a reboot may have occurred on the NetVanta 3148 and 4148 if Voice Quality Monitoring was enabled.
AOS-43726	Fixed an issue in which the **ping** command had a hard-coded MTU of **1280** for IPv6 pinging. That limit has been removed and the interface MTU settings is now honored.
AOS-43659	Fixed an issue in which slow transfer rates were seen when transferring files to the unit via SCP using the AOS SCP server.
AD-219485	Updated the output of the **show interface ppp** and the **show system-control-evc** commands to replace the **negotiated MTU** with **near-end MTU** information.

Carrier Ethernet Specific Bug Fixes in R14.3.0

This section highlights major bug fixes for all products running AOS version R14.3.0.

AOS-43342	Fixed an issue in which EVC loopback did not work if the UNI interface was down and no SFP was inserted.

Voice Specific Bug Fixes in R14.3.0

This section highlights voice specific bug fixes in AOS version R14.3.0.

AOS-43931	Fixed an issue in which a reboot could occur if VQM was enabled.

AOS-43882	Fixed an issue in which the time-to-live (TTL) value for DNS SRV records was overwritten by the TTL of A records with the same name. This issue could result in the SRV record not being refreshed before expiration, in which case, the record would drop out of the host table.
AOS-43872	Fixed an issue in which the call was abandoned with no feedback to the caller if a server rollover occurred and SIP validated failover was enabled. With the fix, the call is re-attempted on the same trunk using the server to which the user has just registered and the user will hear call progress tones as dictated by the SIP responses.
AOS-43860	Fixed an issue in which the SIP proxy may have transmitted new, in-dialog requests using UDP instead of TLS as directed by the Contact header.
AOS-43856	Fixed an issue in which SIP access classes were not applied to SIP TLS sockets.
AOS-43837	Fixed an issue in which party B was dropped and party C was placed on hold if a transfer of B to C failed. The correct behavior is for B to remain on hold and for C to be dropped. Additionally, an issue was fixed in which dial tone followed by fast busy was played once party A went off hook after the failed transfer. The correct behavior is for party A to be connected to the party on hold (party B) when going off hook after the failed transfer.
AOS-43823	Fixed an issue in which the FXS port rang continuously after Caller ID generation when an Alert-Info header for the Bellcore-dr5 distinctive ring was present in the received INVITE.

Errata

General Errata

The errata listed below exist in all products running AOS version R14.3.0.HA.

AD-255105	Traffic shaping on VLAN interfaces is not supported on the NetVanta 3148 and 4148.

AOS-43222	An SNMP walk may be unable to return some input or output QoS policies assigned to interfaces if multiple interfaces have both input and output QoS policies assigned.
AOS-42891	On the NetVanta 3148 and 4148, the output of **show power inline** lists 12 gigabit-switchports instead of 8.
AOS-42633	A reboot may occur when running line rate traffic on the NetVanta 3148 and 4148 through an interface that has an access-policy assigned that contains discard entries.
AOS-42583	On the Total Access 900 Third Generation, a remote payload loopback initiated from the DSX interface (**t1 0/2**) does not function properly.
AOS-42582	On the Total Access 900 Third Generation, the Network (**t1 0/1**) and DSX (**t1 0/2**) interfaces transmit B8ZS coded signals when configured for AMI coding.
AOS-42208	The sequence number in the TCP RST generated by the firewall when clearing a policy-session entry does not comply with RFC 793. This issue occurs when clearing a policy-session entry manually via the CLI and during failover if **ip firewall fast-nat-failover** and/or **ip firewall fast-allow-failover** are configured.
AOS-41261	Router advertisements for delegated prefixes assigned to a interface do not use the valid lifetime specified in the received IA_PD Prefix option. **Workaround**: Configure **ipv6 nd prefix named-prefix** *<prefix name> <prefix sub-bits>* for each delegated prefix assigned to the interface.
AOS-39470	Making any changes in the GUI for an Ethernet interface configured for DHCP causes the DHCP client to perform a DHCP release/renew on that interface when the changes are applied.
AOS-37915	A few legacy cellular interface commands were incorrectly removed when USB LTE support was added. The removed commands include: • **snmp trap cellular** • **snmp trap link-status** • **snmp trap threshold-ecio** • **snmp trap threshold-rssi**
AOS-37542	The NetVanta 3140 with Novatel USB 551L will dribble a small amount of lost frames with packets smaller than 512 bytes. The loss occurs in the modem. This issue is to document that the Novatel USB 551L modem will drop a small percentage (<1%) of packets. We also found these same drops occur when the 551L is connected to a laptop.

AOS-30561	If a track is configured to monitor the line protocol of an interface configured for 802.1q, the track will never go into a passing state even the interface is up. This issue does not affect the NetVanta 4660, 5660, or 6360. Workaround: Track the line protocol of the subinterface.
AOS-25916	In some command sets, the **exit** command is not visible even though it still functions properly.
AOS-20612	Speed and duplex settings are displayed with on MEF Ethernet interfaces in **show running-config verbose** command output, even though those options are not valid and cannot be configured for that type of interface.
AOS-19531	In the VQM RTP Monitoring menu, the refresh button refreshes the displayed graphic, but it also duplicates information in the lower part of the menu. In addition, when the cursor hovers over a data point, multiple instances of the same data display.
AOS-19492	In the VQM RTP Monitoring menu, the Source IPs and Interfaces menus have invisible data points that appear and display data when the cursor hovers over them. The invisible data point information duplicates a visible data point and can usually be found hidden above the visible data point.
AOS-18479	On the NetVanta 3430, the setup wizard in the GUI can freeze with a **Please Wait** message.
AOS-14421	The output of **show qos map interface***<interface>* shows **ce-vlan-id** instead of **vlan-id** and **ce-vlan-pri** instead of **cos** on products other than the NetVanta 4660.
AOS-12266	On a NetVanta 4430, information for an inserted SFP does not display correctly.
AOS-10823	Ethernet interfaces in third generation Total Access 900e units are not visible in the Data > IP Interfaces GUI menu. These interfaces are visible and can be configured from the System > Physical Interfaces menu instead.
AOS-8519	The Total Access 900e (third generation) and NetVanta 6250 send a cold start SNMP trap on reload instead of a warm start trap.
AOS-5584	On the NetVanta 6310 or 6330, if a SHDSL circuit with a detected bad splice retrains to a different line rate, the distance of the bad splice will display incorrectly.
AOS-5580	On the NetVanta 6310 or 6330, if the top level ATM interface on a SHDSL ATM NIM2 module is disabled and re-enabled, the ATM circuit will no longer be able to pass traffic. The Adtran unit must be rebooted to correct the problem.
AOS-5577	When using a T1/E1 EFM NIM2 in the NetVanta 6310 or 6330, the EFM counters do not increment as traffic passes through the device.

AOS-1653	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.
AOS-1124	VQM may show a loopback interface in the GUI when a loopback interface is not configured.
IN-25468	The **called-number** command on a demand interface does not function properly.
IN-24433	When using XAUTH with a VPN client, an AOS device requests CHAP authentication from the client but does not send a CHAP challenge payload. This can cause issues with VPN clients that expect to receive this payload.
IN-22458	On the NetVanta 6310/6330, with FFE enabled, passing traffic from the Ethernet 0/1 interface out an Ethernet NIM2 can cause the Ethernet 0/1 interface to fail. The interface is recovered with a reboot. Disabling FFE on the Ethernet 0/1 interface prevents the issue.
IN-10479	The name of a deleted IPv4 ACL cannot be used to name a new IPv6 ACL.
IN-1020	When a switchport on a NetVanta 3458 is configured for **port-security**, it does not receive BPDUs. If multiple connections between the NetVanta 3458 and another switch are made, a switching loop could occur because both ports will automatically enter a forwarding state even though the Spanning Tree protocol should cause one port to enter a blocking state.
IA-13463	The output of the command **show ethernet cfm mep local** may show an incorrect maintenance association for a MEPID if multiple maintenance associations are configured on the unit.

Carrier Ethernet Specific Errata

The following is a list of Carrier Ethernet specific errata that exist in products running AOS version R14.3.0.HA.

AOS-43266	Y.1721 Ethernet Continuity Check (ETH-CC) frames may not be sent at the configured interval if NTP is not configured or synchronized.
AOS-43265	On the NetVanta 4660, a small percentage of frames may be discarded if NTP is not configured or synchronized.
AOS-41517	The Invalid CE VLAN ID counter does not function on the GigabitEthernet 0/1 interface on the NetVanta 4660, 5660, and 6360 because GigabitEthernet 0/1 is not intended for use as a UNI interface on these platforms.
AOS-22021	The **efm-group** interface type option is missing from the **tunnel source** command on Tunnel interfaces.

Voice Specific Errata

The following is a list of voice specific errata that exist in products running AOS version R14.3.0.HA.

AOS-43991	When using the SIP proxy with NAT and media anchoring is not enabled, the media port in SDP may improperly be incremented by RTP firewall traversal when the original SDP has not been modified. This can result in a no audio condition.
AOS-41155	If a voice trunk is removed while calls are active, a reboot may occur.
AOS-37978	Enabling the SIP stack on a device allocates numerous resources. If this resource allocation fails, the device will reboot. Multiple sockets must be available and local SIP ports, typically UDP and TCP 5060, must be available as well, otherwise the resource allocation will fail and the device will reboot.
AOS-31081	When using the SIP proxy with media anchoring, VQM reports incorrect information for LocalURI, RemoteURI, and LocalCaller if a reINVITE that modifies the SDP is received from the called party during a call.
AOS-28378	The **clear sip tls session** command does not function.
AOS-24657	Issuing the command **clear voice call active** with active MGCP calls may result in a reboot.
AOS-22835	If **sip tls** is configured while **sip** is disabled, **no sip tls** must be issued before **sip** can be enabled, otherwise the following error will be displayed: %Error: Failed to modify SIP Access-class with new VRF.
AOS-22597	If a CA profile is removed while SIP TLS calls using that profile are active, BYE messages will not be sent for any of the active calls.
AOS-20871	Receiving an initial INVITE with both audio and T.38 SDP will result in the call being placed on hold.
AOS-10594	In AOS R10.4.0 and higher, modem-passthrough will fail to send a reINVITE to G.711 if the endpoint is configured with a codec-list that does not contain G.711.
AOS-10216	The command **ip mgcp qos dscp** *<value>* will not take effect until either **ip mgcp** is disabled and then re-enabled or the AOS device is reset.
AOS-7738	When the SIP server monitor clears the primary SIP server from a delayed state due to a failure of the secondary SIP server, there will be a 60-second delay until a SIP registration is attempted to the primary SIP server. This delay will not occur if the SIP server monitor is clearing the secondary SIP server from a delayed state due to a failure of the primary SIP server.

AOS-6995	On the Total Access 900e (third generation) and NetVanta 6250, SIP must be enabled in the running configuration whenever MGCP is used for voice.
AOS-1136	If an Adtran unit is configured with single call appearance mode, forwarded calls on a PRI trunk will fail.
AOS-1120	When using media anchoring, receiving a 183 Session Progress after a previous 183 on hairpinned calls can result in no early media if the SDP in the second 183 differs from the first.
AOS-1115	Echo cancellation is not enabled on three-way calls when using the local conferencing feature.
AOS-1036	With the Adtran unit set for **voice flashhook mode transparent**, the conference originator must wait for the third-party to answer before executing the flashhook to initiate the conference.
IA-8850	On the NetVanta 6310/6330 Series, if a SIP trunk is trying to register a large number of users and the registration fails, activating **debug sip trunk-registration** will cause the Telnet and console connection to become unresponsive. A reboot clears the condition.

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 R14.3.0.HA 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 R14.3.0.HA 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://supportcommunity.adtran.com.

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

MGCP is not supported on the NetVanta 6360.

As of R14.3.0 (or earlier), a valid SBC call capacity license is required for SIP B2BUA functionality on the following products:

- NetVanta 3140
- NetVanta 3148/4148

- NetVanta 4660
- NetVanta 5660
- NetVanta 6250
- NetVanta 6360
- Total Access 900e (third generation)

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://supportcommunity.adtran.com.

Warranty and Contact Information

Warranty

Warranty information can be found at:

my.adtran.com/warranty.

Contact Information

For all customer support inquiries, please contact ADTRAN Customer Care:

Contact	Support	Contact Information
Customer Care	From within the U.S. From outside the U.S.	1.888.4ADTRAN (1.888.423.8726) +1.256.963.8716
	Technical Support:	www.adtran.com/support
	Training: Email: Web:	training@adtran.com www.adtran.com/training www.adtranuniversity.com
Sales	Pricing and Availability	1.800.827.0807