



RELEASE NOTES

NetVanta 7000 Series Products
AOS version R11.3.0.HA
August 19, 2014

Trademarks

Any brand names and product names included in this manual are trademarks, registered trademarks, or trade names of their respective holders.

To the Holder of the Manual

The contents of this manual are current as of the date of publication. ADTRAN reserves the right to change the contents without prior notice.

In no event will ADTRAN be liable for any special, incidental, or consequential damages or for commercial losses even if ADTRAN has been advised thereof as a result of issue of this publication.

Toll Fraud Liability

Be advised that certain security risks are inherent in the use of any telecommunications or networking equipment, including but not limited to, toll fraud, Denial of Service (DoS) attacks, loss or theft of data, and the unauthorized or illegal use of said equipment. ADTRAN OFFERS NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, REGARDING THE PREVENTION, DETECTION, OR DETERRENCE OF TOLL FRAUD, NETWORKING ATTACKS, OR UNAUTHORIZED, ILLEGAL, OR IMPROPER USE OF ADTRAN EQUIPMENT OR SOFTWARE. THEREFORE, ADTRAN IS NOT LIABLE FOR ANY LOSSES OR DAMAGES RESULTING FROM SUCH FRAUD, ATTACK, OR IMPROPER USE, INCLUDING, BUT NOT LIMITED TO, HUMAN AND DATA PRIVACY, INTELLECTUAL PROPERTY, MATERIAL ASSETS, FINANCIAL RESOURCES, LABOR AND LEGAL COSTS. Ultimately, the responsibility for securing your telecommunication and networking equipment rests with you, and you are encouraged to review documentation regarding available security measures, their configuration and implementation, and to test such features as is necessary for your network.

ADTRAN Technical Support Community

For information on installing and configuring ADTRAN products, visit the ADTRAN Support Community, <https://supportforums.adtran.com>.



Pre-Sales Technical Support

(888) 423-8726
application.engineer@adtran.com

Corporate Office

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

Post-Sales Technical Support

(888) 423-8726
support@adtran.com

Copyright © 2014 ADTRAN, Inc.
All Rights Reserved.

Contents

<i>Introduction</i>	4
<i>Supported Platforms</i>	4
<i>Hardware Requirements and Limitations</i>	4
<i>Software Requirements and Limitations</i>	6
<i>Important Notices</i>	7
<i>System Notes</i>	8
<i>Features and Enhancements</i>	9
<i>Fixes</i>	9
<i>Errata - System Management</i>	10
<i>Errata - Call Control</i>	10
<i>Errata - Audio</i>	11
<i>Errata - Endpoint</i>	11
<i>Errata - Data</i>	12
<i>Upgrade Instructions</i>	12
<i>Documentation Updates</i>	12

Introduction

AOS version R11.3.0.HA 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 - System Management on page 10*.

A list of new or updated documents for this release appears in *Documentation Updates on page 12*.

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

Supported Platforms

The following platforms are supported in AOS version R11.3.0.HA.

- NetVanta 7100 – IP Communication Platform
- NetVanta 7060 – IP PBX

For a list of the software and firmware requirements, refer to the table in *Minimum Software or Firmware Required for Interoperability on page 6*.

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.

Hardware Requirements and Limitations

In an effort to maximize customer experience, whenever possible and applicable, ADTRAN will advertise the minimum hardware requirements for running the recommended software versions. While ADTRAN strives to support the newer software revisions on existing hardware, due to CPU, RAM, and other hardware limitations, it may not always be possible. In such instances, customers are advised to upgrade the hardware (including phones, NetVanta 7000 Series chassis, and accompanying networking gear) while upgrading their software, because performance issues and erratic behavior could cause certain product features to become nonfunctional. ADTRAN provides field advice whenever possible in these cases. Resellers and customers are advised to periodically check with ADTRAN Technical Support and field staff for these advisories, especially when upgrading to newer software revisions.

NetVanta 7100 Hardware

New features included with any AOS release warrant some attention before use by the customers, specifically the choice of the hardware platform on which the new AOS version will be installed.

There have been two revisions of NetVanta 7100 hardware. These are denoted by different part numbers: 1200796L1 (older) and 1200796E1 (newer). Beginning with AOS release A2.04, ADTRAN does not recommend using newer AOS versions on the older 1200796L1 units. These units continue to be field

worthy and would continue to perform as expected for their useful lifetime on software revisions prior to A2.04. However, due to differences in hardware, some or all of the new features might not be supported on the older hardware (1200796L1).

The 1200796L1 is explicitly NOT recommended for use for the following features or firmware releases:

- For any firmware release R10.x or higher
- Support for greater than 50 users. DSP resources were increased on 1200796E1 units, allowing additional TDM to IP conversions. The user limit on the 1200796L1 remains unchanged.
- SIP trunks that require the NetVanta 7100 to perform transcoding. This conversion is required if the SIP trunk provider does not support G.729.
- Use of the Echo Return Loss (ERL) tool.

While there are no further known constraints for other features at this time, keep updated on any future advisory by ADTRAN. The recommended hardware for the AOS A2.05 and later features is 1200796E1. Contact your ADTRAN representative about the options available to you if you have a 1200796L1 unit, and want to use a newer release.

IP Phone Models

Beginning with release A4.x, the legacy Polycom phones (IP 430, IP 501, IP 601 and IP 4000) do not support all the features available in the current AOS and phone firmware releases. Customers could experience sluggish behavior on these older generation phones when used in conjunction with newer software releases. If you experience sluggish behavior after an upgrade, contact ADTRAN Technical Support for a solution. This could involve either upgrading the phone hardware (to the equivalent newer generation phone, such as IP 450, IP 550, IP 650, or IP 6000) or scaling back the feature load on the legacy phones.

ADTRAN branded VVX phones (model names ADTRAN VVX 300, ADTRAN VVX 310, ADTRAN VVX 400, ADTRAN VVX 410, ADTRAN VVX 500, and ADTRAN VVX 600) work with NetVanta 7000 series AOS release version R10.8.0 and beyond without requiring an additional license key purchase. The equivalent Polycom branded phones will not work with release R10.8.0. If you are currently using the equivalent Polycom branded phones with the NetVanta 7000 series, you will need to either remain on a pre-R10.8 release version or use the ADTRAN branded version of the VVX phones until a licensing mechanism can be added to allow the use of Polycom branded VVX models.

The rest of the Polycom family of supported IP end points continue to remain unaffected. Either an ADTRAN branded model or the equivalent Polycom branded models of these IP phones can be used with R10.8 and beyond. See the following table to determine AOS release R10.8 compatibility with ADTRAN and Polycom branded phone models.

Table 1. Release R10.8 Phone Compatibility

Model	Part #	Compatibility with AOS Release R10.8 and Beyond
ADTRAN VVX 300	1200853G1	Yes
ADTRAN VVX 310	1200853G1#GB	Yes
ADTRAN VVX 400	1200854G1	Yes
ADTRAN VVX 410	1200854G1#GB	Yes

ADTRAN VVX 500	1202856G1	Yes
ADTRAN VVX 600	1200856G1	Yes
Polycom branded VVX 300, 310, 400, 410, 500, and 600	Multiple	No. R10.7 is the last supported AOS version for these phones.
ADTRAN branded and equivalent Polycom branded SoundPoint IP 321, 331, 335, 450, 550, 560, and 670	Multiple	Yes. There are no restrictions when using these models.
ADTRAN branded and equivalent Polycom branded SoundStation IP 5000, 6000, and 7000.	Multiple	Yes. There are no restrictions when using these models.

Software Requirements and Limitations

This section defines the recommended firmware/software versions necessary for the related aspects of the NetVanta Unified Communications solution.

AOS Firmware Image Storage

AOS firmware images can be stored on flash/non-volatile random access memory (NVRAM) as well as on CompactFlash® memory. However, it is recommended that the primary firmware image be stored on flash/NONVOL and the backup firmware be stored on CompactFlash.

To copy the current image from flash/NVRAM to CompactFlash, use the **copy flash <filename> cflash <filename>** command.

Required AOS Bootcode Version

When upgrading to AOS version R11.3.0.HA, an upgrade to bootcode version A2.06.B1.01 is required. Check the table in [Minimum Software or Firmware Required for Interoperability on page 6](#) to verify you have the required minimum Boot ROM. Contact ADTRAN Technical Support for this bootcode version and instructions for loading it.

Minimum Software or Firmware Required for Interoperability

Product or Phone Model	Minimum Software or Firmware	Minimum Boot ROM
Remote NetVanta 7000 Series (when networking to another 7000 series device)	A4.10 or later	A2.06.B1.01
NetVanta 6355/Total Access 900(e) Series	A2.06 or later	-
NetVanta UC Server (as part of BCS)	UCS 5.0.1	Not applicable
ADTRAN IP 706/IP 712 phones	R2.3.0	2.1.0
Polycom IP 321/IP 331 phones	3.2.7	4.1.2b
Polycom IP 335, IP 450, IP 550/560, IP 650/670, IP 5000, IP 6000, IP 7000 phones	3.2.7	4.1.2b

Legacy Polycom IP 430, IP 501, IP 601, IP 4000 phones	3.1.8	4.1.2b
---	-------	--------

These files can be downloaded from <http://www.adtran.com/support>, select **Software Downloads**, and choose the appropriate phone model from the **IP 700 Series**. Contact ADTRAN Post Sales Technical Support at (888) 423-8726 or email: support@adtran.com, if you are unable to download these files.

Important Notices

The following important notices are provided in addition to the previous *Supported Platforms, Hardware Requirements and Limitations*, and *Software Requirements and Limitations* sections to ensure successful deployment.

Upgrades to AOS version R10.8.0 and Later

Beginning with AOS version R10.8.0, the syntax of certain commands was modified from previous AOS versions (such as AOS R10.5.x, R10.7.x) 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 NetVanta 7000 Series product configured in AOS version R10.8.0 or higher to a previous AOS version (such as AOS R10.5.x, R10.7.x), 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 R10.8.0 or later will not cause service disruption because both the old and the new syntaxes are accepted. **It is recommended that a full copy (data and voice settings) of the configuration be saved prior to upgrading to AOS R10.8.0 and above.** This can be done from the **Utilities > Configuration** page in the GUI.

For more information on specific commands, refer to the *AOS Command Reference Guide* available at <https://supportforums.adtran.com>.

Please note that the NetVanta 7000 series does not support IPv6 at this time. If you envision needing any IPv6 features natively on the NetVanta 7000 series, then contact your ADTRAN representative with your request. In general, we recommend using an IPv6 capable ADTRAN router with the NetVanta 7000 series for any IPv6 features.

Notice of Defined Voicemail File Limit

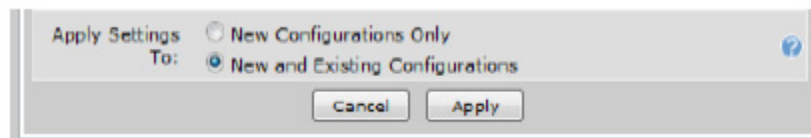
The NetVanta 7000 Series products can maintain a maximum of 3000 voicemails per system. The implementation of voicemail message expiration allows the system to remain within the defined limit. Upgrading the CompactFlash card to a larger card is not supported and will not result in more voicemail storage. Should you need to replace a failed CompactFlash card, contact ADTRAN Technical Support for assistance.

Updates to Web Interface Pages

On occasion, changes are made to web pages in the NetVanta 7000 Series web interface that may require files in the browser cache to be purged. This can be done in most browsers by deleting the browsing history or by pressing Ctrl-F5 in most cases.

Considerations Before Upgrading Related to SPRE Code Support for SLA

1. Local SPRE code dialing from an SLA requires phone dial plan changes. After upgrading to R10.6.0 software, newly created phone configurations will have the proper dial plan settings applied. For upgrade cases where SLA was already configured on an existing phone, the dial plans will be modified to support this new functionality. Please review the changes under the IP Phone configuration page and regenerate the phone configurations by using the admin login and browse to Voice>IP Phone Globals>Default Settings>, select “New and Existing Configurations” and select Apply.



2. SPRE code dialing from an SLA could interfere with existing configurations if SPRE codes were used on SLA's prior to this release. Please review your configuration to determine if SPRE codes were allowed prior to the upgrade (check SLA dial plans) and if so, you will need to configure the following command **voice spre-mode override <*xx>** using the appropriate codes in place of **xx**.

System Notes

This section outlines known caveats for AOS version R11.3.0.HA.

- The **match ani** command used for ANI substitution will match on the received ANI prior to any global ANI substitutions. The **match ani** command used for adding or substituting diversion headers will match on the modified ANI after the global ANI substitutions are applied.
- During conferences that use the conference bridge in UC Server, when one member in a conference places the call on hold, music may stream to all members that have joined the conference.
- The Configuration Successfully Saved dialog box does not appear when saving the configuration from the System Summary GUI menu.
- Caller ID does not display on pickup *52xxxx*.
- The Personal Phone Manager's User Status monitoring list may return the list from the previous user's browser session if more than one user shares the desktop browser. The workaround is to delete all cookies and restart the browser.
- Calls with caller IDs that contain special characters can be disconnected when placed on hold by an Advatel IP Console.
- Adding a T1/E1 link to an existing Multilink PPP bundle using the GUI causes the PPP link to bounce when applied. The PPP link will go down and immediately recover; however, some packets could be lost. To work around this issue, a T1/E1 can be added using the CLI, and the link will stay up while the addition is applied.
- Calls using the G.729 CODEC are limited to 25 calls for E1 PRI.
- FindMe-FollowMe treats all calls from the auto attendant as internal calls.
- SNOM M3 phones do not support attended transfer at this time. This and other caveats will be documented in a future configuration guide for using the SNOM phones with the NetVanta 7000 Series.
- On the IP Phone Configs page, the list of Associated Accounts for each phone is displayed in numerical order rather than the order configured on the phone keys. The accounts are displayed in the correct order when editing a phone.

- Inserting a CompactFlash card into the device while it is powered on will result in a reboot.
- Auto-link client traffic can negatively impact performance because it is not discarded when call volume is heavy.
- Polycom 450 configuration files for versions prior to R10 are not correctly updated when changing firmware versions.

Features and Enhancements

This section highlights major features, commands, and behavioral changes in AOS version R11.3.0.

- The ability to upload and apply NetVanta 6355 firmware was added to the NetVanta 7100 GUI. In previous AOS releases, the NetVanta 6355 firmware could only be applied from bootstrap mode.

Fixes

This section highlights major bug fixes in AOS version R11.3.0.HA.

- When configured with a user role PRI, if the local exchange sent progress indicator #2 (PI2) to indicate the presence of inband audible ringback on a SIP to PRI call, a 183 Session Progress with SDP was not sent on the SIP call leg.

This section highlights major bug fixes in AOS version R11.3.0..

- Attempting to retrieve an active call on a SLA via the "held-call-pickup" number would reboot the NV7100.
- If the received caller ID number from a FXO interface was greater than 11 digits, the caller ID string would be corrupted. The full 23 digits specified in ANSI T1.403.03-1998 are now handled properly.
- Attempting to retrieve a call using the park retrieval SPRE code on a Simple Remote Phone resulted in no audio if internal music on hold was configured.
- When modifying an existing SIP trunk using the GUI, the transport mode of the trunk was changed from UDP to TCP, breaking communication on that trunk.
- On a FXO to SIP call upon receipt of a 18x response with SDP, the talk path was opened in both directions when it should have only been opened in the SIP to FXO direction.
- Simultaneously upgrading firmware on multiple VVX phones caused the system to run out of memory and reboot.
- Memory allocation for certain output streams in AOS, including ones for sending email, was allocating more memory than was needed.
- VVX phones that had firmware files upwards of 30 MB caused excessive memory consumption when simultaneous downloads of firmware were performed via FTP.
- The algorithm for memory allocation specifically for sending email has been scaled back so that sending an email takes longer but consumes less memory to accomplish the task.
- There was a leak of memory anytime the VXML engine was activated and deactivated (AA, VM, CQ, FMFM).
- There was a leak of memory anytime a music on hold player change was made.
- There was needless memory consumption by the ring options, music of hold, and system timing subsystems.

- The Email Action on the VM Settings tab in the GUI could not be set for operator or ring groups.
- Users were able to bypass Forced Account Codes by dialing the external number without the trunk access code.
- When viewing the call queue Membership Status in the Personal Phone Manager, the call queue sorting order would reset after updating or auto-refreshing the GUI.
- When using Internet Explorer 9 or earlier, the Apply button on the Voice > IP Phone Globals > Default Settings tab would not function.

Errata - System Management

The following is a list of System Management errata that still exist in AOS version R11.3.0.HA.

- The flash memory of the NetVanta 7100 FLASH may reach a state where it cannot be read properly.
Workaround: Enter the command **copy startup-config backup** from the CLI.
- If an IP address is not configured on ETH 0/0, the DHCP client cannot be enabled through the GUI.
Workaround: Use the CLI to enable the DHCP client on ETH 0/0.
- The NetVanta 7100 and NetVanta 6355 platforms will fail to reset QoS map statistics for applied QoS maps when the **clear counters** command is executed.
- When a description is configured on an FXO interface, the information dialog boxes for the progress of the ERL tool do not function correctly even though the ERL tool runs successfully.
- The Shared Line Accounts GUI menu incorrectly displays a configuration option for Codec Outbound Group. This is not a valid configuration option.
- Auto-link client traffic may negatively impact performance because it is not being discarded under heavy call volume.

Errata - Call Control

The following is a list of Call Control errata that still exist in AOS version R11.3.0.HA.

- Successive reINVITE SIP messages to place a call on hold will be rejected with a 400 Bad Request response if incoming music-on-hold is enabled on the SIP trunk.
- Inbound calls from Megapath (Broadsoft) SIP trunks fail to be delivered by FindMe-FollowMe to external numbers. Calls roll to next Call Coverage item after being answered at the external number.
Workaround: Enable Ringback Only and disable the Accept option in the FindMe-FollowMe configuration for the call to external party to be successful.
- Call coverage set to internal will still allow calls to be routed out an external trunk.
- Caller ID may not be correctly sent when an SLA/SCA call is transferred to an extension.
- transport=TCP is incorrectly included in the Contact header on a UDP SIP trunk.
- FindMe-FollowMe fails with Single Number Reach service in NetVanta BCS.
- When a voice user is configured for an empty caller ID number, the name is also not transmitted.
- When configuring call coverage, setting the Ring Extension to Never results in a three-second delay delivering voice traffic to the ADTRAN phone.
- SLA accept/reject templates do not affect calls sent using the SLA.

- An assisted transfer over a SIP trunk to a call queue results in a disconnect. Workaround: Configure **transfer-mode network** on the SIP trunk.
- Intermittent inbound calls on SLA lines ring indefinitely without the switchboard routing the call. Workaround: Enable blind-dial for each analog trunk account.
- Transferring a call from an external SIP trunk back out the same trunk via an auto attendant action results in a failure to populate the SDP portion of the SIP message in either the INVITE or the ACK message. **Workaround:** Set the transfer mode to network on the SIP trunk for this call flow to be successful.
- T.38 FAX call tests fail after T1 PRI loss and system timing shifts. **Workaround:** A reboot is required to clear the condition.

Errata - Audio

The following is a list of Audio errata that still exist in AOS version R11.3.0.HA.

- An external call from an analog phone may result in choppy hold music when placed on hold by the analog phone.
- A received SLA call that is answered and then attended transferred to a remote party will have one-way audio.
- If a Simple Remote Phone calls a user with FindMe-FollowMe configured as **ringback only**, **ring external**, and **press to accept**, the remote phone user will not hear audio. **Workaround:** Disable **ringback-only** in the FindMe-FollowMe configuration for the called user.
- Hairpinned calls may fail to have audio after transfer.
- When local packet capture completes and while it is being exported, voice quality may be adversely affected.
- During an internal SIP-to-SIP call, if the caller places the called party on hold, then the called party places the caller on hold, when the caller retrieves the called party from hold both parties will experience no audio.
- If a SIP extension is blind transferred out an analog FXO trunk, noise is sometimes introduced in the audio.
- A call placed to a remote user that uses G.711 Ulaw or G.711 Alaw will result in one-way audio if the call is routed out a trunk that contains a CODEC list. **Workaround:** Remove the codec-list from the SIP trunk account for the audio to work correctly.

Errata - Endpoint

The following is a list of Endpoint errata that still exist in AOS version R11.3.0.HA.

- A user account already registered (with a static registration or through the hot desk feature) to an IP phone may log into another hot desk phone. This causes the new hot desk phone to become the *active* phone for that user account. The original IP phone is no longer registered to that user account.
- Bria soft phones registered through a SIP security port always display in the Suspect list.

Errata - Data

The following is a list of Data errata that still exist in AOS version R11.3.0.HA.

- A hostname entry in an ACL can 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 hostname when creating an ACL.

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>. Firmware upgrades are available on the *Support/Software Downloads* section of the ADTRAN website at <http://www.adtran.com>.

Documentation Updates

The following documents were updated or newly released for AOS version R11.3.0.HA 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*