



RELEASE NOTES

NetVanta 7000 Series Products
AOS version R10.9.2
January 3, 2014

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Introduction

AOS version R10.9.2 is a maintenance release that also 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 9*.

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 R10.9.2.

- 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 R10.9.2, 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
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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.

Default Firewall Configuration Changes

Changes were made to the default firewall configuration to increase security of voice platforms when connected to the Internet. These changes can impact remote phones and SIP trunking applications, but do not impact local phones on the NetVanta 7000 Series.

- In AOS versions A2.01.00 through A2.03.00.SC, the default Public access control policy (ACP) allowed SIP traffic (destined for UDP port 5060) inbound. For AOS A2.04.00.SC and above, this traffic is no longer allowed by the factory default configuration. Instead, the installer is required to selectively customize the Public ACP to allow SIP traffic from remote sites and SIP trunking providers.
- Units that were shipped with AOS versions through A2.03.00.SC contain a default configuration that allows inbound SIP traffic (destined for UDP port 5060). These configurations should be modified before

deployment. Guidelines for this configuration are given in the [NetVanta 7000 Series Security Guide](#) available from the ADTRAN Support Community, <https://supportforums.adtran.com>.

Notice of Defined Voicemail File Limit

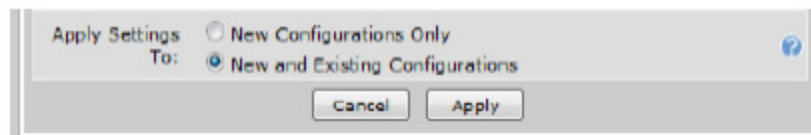
The NetVanta 7000 Series products can maintain a maximum of 3000 voicemails per system. The implementation of voicemail message expiration allows the system to remain within the defined limit. Upgrading the CompactFlash card to a larger card is not supported and will not result in more voicemail storage. 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 R10.9.2.

- 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.
- 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 work around 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.

Features and Enhancements

No new features or enhancements were included in this release.

Fixes

This section highlights major bug fixes in AOS version R10.9.2.

- The installation wizard would incorrectly disable DHCP in the Polycom phone configuration files.
- In a transfer scenario, if a SIP Refer was received with a null Called Party Number a reboot would occur.
- Adding a description to a status group on the status groups page of the web GUI may have resulted in a 503 Server Error.
- An error was presented when adding a SIP Identity (or alias) to a User Account that began with the Trunk Access Code (TAC).
- DNS queries created by an AOS device could be sent using source port UDP 4500, which could have prevented responses from being properly received if "ip crypto" is enabled.
- Email notification could have failed when TLS was required by the mail server.
- Attempts to ring external numbers through FindMe-FollowMe would fail and disconnect the caller if the press-to-accept option was disabled.
- Monitoring user status in the Personal Phone Manger could have caused high CPU conditions.
- Assigning the language on the Default Settings tab under IP Phone Globals GUI menu would not change the language for Polycom SoundPoint IP phones.

Errata - System Management

The following is a list of System Management errata that still exist in AOS version R10.9.2.

- When creating a new user in the GUI, DID numbers and aliases are not saved if the Edit Config button is pressed followed by the Apply button.
- After a pickup group has been created, the pickup extension and description cannot be modified.
- When using Internet Explorer 9 or earlier, the Apply button on the Voice > IP Phone Globals > Default Settings tab will not function. **Workaround:** Use Internet Explorer 10, Firefox, Chrome, or Safari to apply changes on this GUI page.

- In certain scenarios, external calls going to voicemailacct don't generate an SMDR log, which indicates the call has ended.
- GUI pages will not correctly load when TCP port 556 is used for the connection to the HTTP server.
- When a simple remote phone user calls their voice mailbox, the user will always be asked for a mailbox number even when configured for password only.
- The Shared Line Accounts GUI menu incorrectly displays a configuration option for Codec Outbound Group. This is not a valid configuration option.
- The GUI incorrectly states that System Mode coverage can be set to Busy, when in actuality it would use the Default Mode coverage.
- The System Summary GUI menu is not displayed when the NetVanta 7100 is running NetVanta 6355 firmware.
- The platform displays as **unknown** in the GUI when the NetVanta 7100 is running NetVanta 6355 firmware.
- 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 R10.9.2

- 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.
- Caller ID may not be correctly sent when an SLA/SCA call is transferred to an extension.
- 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.
- transport=TCP is incorrectly included in the Contact header on a UDP SIP trunk.
- SLA accept/reject templates do not affect calls sent using the SLA.
- Call coverage set to internal will still allow calls to be routed out an external 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.
- An assisted transfer over a SIP trunk to a call queue results in a disconnect. **Workaround:** Configure **transfer-mode network** on the SIP trunk.
- If an assisted transfer is performed to a virtual user which coverages to an external number that starts with the Trunk Access Code digit, the system will incorrectly strip 2 digits before routing the call.
- Inbound calls are not correctly routed to a SIP identity when configured on an auto attendant.
- 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 R10.9.2

- A received SLA call that is answered and then attended transferred to a remote party will have one-way audio.
- An external call from an analog phone may result in choppy hold music when placed on hold by the analog phone.
- Extended coverage paths may cause transcoding to fail with a SIP trunk.
- 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 being transferred.
- 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.

Errata - Interface

The following is a list of Interface errata that still exist in AOS version R10.9.2

- An E&M Wink trunk does not correctly send dialed digits.

Errata - Endpoint

The following is a list of Endpoint errata that still exist in AOS version R10.9.2

- Bria soft phones registered through the SIP security port always show up in the Suspect list.
- 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.

Errata - Data

The following is a list of Data errata that still exist in AOS version R10.9.2

- 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 R10.9.2 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*