



The Network Access Company

Corporate Office

Adtran, Inc.
901 Explorer Boulevard
Huntsville, AL 35806

U.S. Mail

P.O. Box 140000
Huntsville, AL 35814-4000

General Information

800 9ADTRAN
info@adtran.com
www.adtran.com

**Pre-Sales
Technical Support**

800 615-1176
application.engineer@adtran.com
www.adtran.com/support

**Post-Sales
Technical Support**

888 423-8726
support@adtran.com
www.adtran.com/support

ACES Help Desk

888 874-ACES
aces@adtran.com
www.adtran.com/support

Release Notes NetVanta 7000 Series Products

AOS Release A2.01.00
September 4, 2008

Contents

Contents.....	1
Purpose.....	2
Important Notices.....	3
Summary of New Features.....	5
Summary of Enhancements.....	7
Summary of Bug Fixes.....	8
Upgrade Instructions.....	11
Appendix A – Errata for A2.01.00.....	13
Appendix B – New and Related Documents.....	14

Purpose

AOS Release A2.01.00 provides several new features and enhancements. This release also addresses several field issues.

Release A2.01.00 is Generally Available code, meaning that it has been subjected to both Design Verification and Product Qualification testing. Results obtained during this 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 as Errata in [Appendix A](#).

A listing of available documents for this release appears in [Appendix B](#). Further configuration guides, white papers, data sheets, and other documentation may be found in ADTRAN's Knowledgebase, <http://kb.adtran.com>.

Important Notices

Recommended AOS Image location(s)

AOS images can be stored on FLASH/NONVOL as well as on CFLASH. However, it is recommended that the Primary AOS image be stored on FLASH/NONVOL and the backup image be stored on CFLASH. One reason for this is that as of AOS A2.01.00, there will no longer be enough space on FLASH/NONVOL to store 2 versions of A2.xx.xx. To copy the current image from FLASH/NONVOL to CFLASH, use the command “copy flash <filename> cflash <filename>”.

Required Polycom Phone Firmware

For this AOS version, it is necessary that your phones are running Polycom SIP version 2.1.2 for proper operation with the NetVanta 7000 Series Products.

Use the following links to access the latest Phone Firmware.

- **Polycom application version 2.1.2 and bootrom version 3.2.3 - <http://kb.adtran.com/PolycomFirmware212/Version2.1.2.zip>**
 - **This zip file contains: sip.ld, sip.cfg, and bootrom.ld**
 - **All files are necessary to upgrade the phones**

These files can also be downloaded by going to <http://www.adtran.com/support>, selecting IP Phones and Stations and then ADTRAN Branded Polycom phones. Contact ADTRAN Post Sales Technical Support if you are unable to download these files.

Note that when upgrading phone firmware you will need to place the “sip.ld”, “sip.cfg”, and “bootrom.ld” files in the default FTP Filesystem location. This would be either the root of FLASH, or the Polycom folder on CFLASH. Also, “sip.cfg” needs to be present on FLASH.

Default Configuration Changes

The following configuration items have had their default value changed

AOS Changes

- “ip rtp symmetric-filter” : changed to enabled/included in config
- “voice forward-mode [local | network]” : changed to “local “
- “voice transfer [unattended | blind]” : changed to “blind”
- Default NAT Access List name changed from “wizard-ics” to “NAT”. Public Policy Class updated to reflect this change.
- Default NAT Access List name changed from “web-acl-3” to “Admin”. Public Policy Class updated to reflect this change.

- Added Default Access List named “SIP” to allow SIP Service Provider Traffic. Access List added to Public Policy Class.
- Default Class of Service “normal_users” updated to enable the following settings:
 - “aa-dnd”: ability to activate Auto Answer Do Not Disturb
- Default Class of Service “executive_users” updated to enable the following settings:
 - “aa-dnd”: ability to activate Auto Answer Do Not Disturb
 - “aa-initiate-permit \$”: allows executive users to initiate Hands-Free Auto Answer calls to any user
 - “system-mode”: ability to change system mode

Polycom Phone “adtran-sip.cfg” Changes

- “stickyAutoLineSeize”: changed to enabled (for more information on this setting, see the [Polycom SIP 2.x Admin Guide](#) .

IP 700 Series Phone “adtran-customer.txt” Changes

- Added default “GmtOffset -600” to this file. See related documentation for how to change this offset value.

Summary of New Features

This section highlights the major features, commands and behavioral changes for AOS A2.01.00.

Added support for 2nd Generation FXO VIM

- Quad FXO – 1202691G1
- Dual FXO/FXS – 1202692G1

Voicemail attachment (WAV) to Email Notification

- In addition to email notification of Voicemail, the capability has been added to attach a WAV (8 bit PCM-encoded) file to the email notification
- The default message length is 2 minutes and the maximum configurable message length is 5 minutes.

SIP Trunking

SIP Trunking support in the NetVanta 7000 Series products is defined as the connection of a SIP trunk to a Service Provider for PSTN access.

Feature Specifications

- Max SIP Trunks = 10.
- Max Calls = 2 x Number of Users (up to 100 calls)
- Max Number of SIP Registrations = Max Number of Registered Users (50)
- Supported Soft Switches: Broadsoft (Rel 14, SP4 or later) and Metaswitch (5.1 and 6.0)

Configuration Notes

- These config items must be set to “local”: “voice feature-mode”, “voice transfer-mode”, and “voice spre-mode”

Restrictions (addressed in AOS A2.02.00)

- The AOS release A2.01.00, mandates the use of the G.729 codec for access to Auto Attendant and Voicemail over inbound SIP Trunks. G.729 should be an available and preferred codec offered in the SDP from the far end IP device. Failure to negotiate the G.729 codec would lead to call termination procedures as governed by the SIP and SDP protocols. The next release of AOS, A2.02.00, shall not mandate the G.729 availability for the Auto Attendant and Voicemail over inbound SIP trunks

Documentation

- See Appendix B

Enhanced ANI Substitution

- Enhanced ANI substitution allows for users to change both the number and the name (if the trunk supports ANI name information) of the calling party on a per-trunk basis for outbound trunks.
- An additional feature in the enhanced ANI substitution is the per-trunk configuration of ANI replacement based on DNIS. This is a one-to-one replacement that occurs on outbound trunks that support ANI. Both the name and number of the calling party are optionally affected, but it does not affect the called party information in any way.
- Although the NetVanta 6000 and 7000 Series support both the traditional and enhanced versions of ANI substitution, it is important to remember that the traditional ANI substitution is configured globally on inbound trunks, and the enhanced ANI substitution is configured on a per-trunk basis for outbound trunks

SIP Networking

SIP Trunking support in the NetVanta 7000 Series products is defined as the connection of multiple AOS Voice Products together by SIP Trunks.

Feature Specifications

- Supported Networking Devices: NetVanta 7100, NetVanta 7060, NetVanta 6355 (Proxy), Total Access 900 Series (Proxy)
- Max SIP Trunks = 10 total (service provider and networking combined).
- Max Number of SIP Registrations = Max Number of Registered Users (50) per NetVanta 7000 Series product. Phones behind the NetVanta 6355 and Total Access 900 products via SIP Proxy count as registrations on the host NetVanta 7000 Series product.

Configuration Notes

- These config items must be set to "local": "voice feature-mode", "voice transfer-mode", and "voice spre-mode"

Supported Features

- Site to Site Dialing (toll bypass).
- Access remote trunks (toll saver).
- Hands-free Auto Answer Intercom between sites.
- Remote Paging via Overhead Paging port.

Unsupported Features

- Status Groups to monitor remote users.
- Transferring voicemails between networked sites using the NetVanta 7000 Series.

Restrictions (addressed in AOS A2.02.00)

- Transfers between sites.
- Auto Attendant transferring calls between sites
- The AOS release A2.01.00, mandates the use of the G.729 codec for access to Auto Attendant and Voicemail over inbound SIP Trunks. G.729 should be an available and preferred codec offered in the SDP from the far end IP device. Failure to negotiate the G.729 codec would lead to call termination procedures as governed by the SIP and SDP protocols. The next release of AOS, A2.02.00, shall not mandate the G.729 availability for the Auto Attendant and Voicemail over inbound SIP trunks

Source and ANI Based Call Routing (SABR)

- SABR is a feature on AOS voice products that enhances call routing services by routing calls based on either source or ANI information. It also can restrict the access of certain trunks (sources) and certain users (ANI) to a configured trunk group. For example, using SABR allows faxes and modems to be limited to user-specified trunks for connections, as well as restricting the types of calls certain users are allowed to dial, while maintaining full access for others. SABR can allow certain users (hotel guests for example) to be able to only dial certain numbers out a specified trunk group (911 for example) while allowing other users (front desk personnel for example) full access to the trunk group.

Dial Plan Named Timeout

- Configuring Dial Plan Named Timeout allows the user to extend the period of time before a dial plan entry is matched by the switchboard. This will allow for 7 and 10 digit dial plan entries to co-exist on the same system without having to specify special characters for routing the calls. By default, a call is routed as soon as the calling party dials the last matching digit of a dial plan entry. With a dial plan named timeout defined and applied to a dial plan, the switchboard will wait to route the call until the defined timer has expired.

Summary of Enhancements

This section highlights the enhancements for AOS A2.01.00.

[VQM]: Packet Loss is displayed as a percentage

Enhancement Details

- Previously the Loss category was reflected as a total number of lost packets during any given call. Spikes in this graph can occur during longer phone conversations (more total packets can mean more lost packets). As this could be misleading, this was changed to reflect the percentage of Packet Loss during the call.

[Web]: Physical Port shown on User Accounts page

Enhancement Details

- The User Accounts Add/Modify/Delete Users page also shows the status of the User Accounts registration. Now it will also reflect the physical port where the phone is connected as long as the MAC address of the phone is in the MAC address table and ARP table of the NetVanta 7000 Series product.

Added the “no voice current-mode” command

Enhancement Details

- The command “voice current-mode x” can be used to change the active System Mode where “x” is “Default, Night, etc”. The command “no voice current-mode” will return the system to the Default mode when entered.

Added the “no coverage all” command

Enhancement Details

- Previously, to remove Call Coverage definitions using the Command Line Interface (CLI) you had to use “no coverage x” for each line of configured coverage. Now you can enter “no coverage all” and clear all coverage statements for the User Account.

Allow prompt interrupt during Voicemail Forward header recording

Enhancement Details

- When forwarding a Voicemail message, you are prompted to “Start recording after the tone...” to record a custom header message to be sent with the forwarded message. You can now press # during this prompt to skip the recording and proceed to the forwarding options.

Summary of Bug Fixes

This section highlights major bug fixes in AOS version A2.01.00.

Cannot detect dialtone

Issue Detail

- On some analog phone lines provided by Analog Telephone Adapters (ATAs), the FXO interface cannot detect dialtone.

With RTP Symmetric Filter enabled, AA audio can't be heard

Issue Detail

- When "ip rtp symmetric-filter is enabled, calls to the Auto Attendant can be made, but prompt audio can't be heard.

Call Appearance can remain in the reserved state

Issue Detail

- Call appearances can remain reserved in some instances during transferred calls.

Shared Line Account updates fail

Issue Detail

- If IP interfaces configured as Media Gateways use DHCP and the address changes, the system must restart notifications and subscriptions for SLA notifications. This was not happening properly.

Delay in phone FTP process

Issue Detail

- When many phones are booting and upgrading from the NetVanta 7000 Series products, some phones may not be able to download their configuration files and may require a reboot to complete.

A call cannot be parked more than once if returned

Issue Detail

- If a call is parked and returns to the phone that parked it due to the Park Timeout, it cannot be parked again.

No timeout/disconnect from voicemail

Issue Detail

- If a call rings an extension and follows coverage to voicemail but that caller has already dropped the call, the call would remain connected in the voicemail menu. With Far-End Disconnect (battery removal) provisioned on the analog line this is not an issue.

Transfers to Leave Voicemail extension (8504) fail

Issue Detail

- Attended transfers to Voicemail or Auto Attendants would fail and drop the call.

Ring Group Login/Logout Fails

Issue Detail

- When a Ring Group is defined as a 4-digit extension, but Ring Group members are 3-digit extensions, the members will not be able to login or logout of the ring group using SPRE codes *55 and *56.

Default FTP Filesystem change

Issue Detail

- When the FTP server is disabled, the default filesystem for the FTP server is changed to FLASH instead of the default of CFLASH.

Incorrect E&M Immediate signaling results in no ringback

Issue Detail

- Incoming calls to E&M Immediate Trunk Accounts will receive a wink and complete correctly. However, ringback will not be heard since a wink is not the correct signaling state.

DHCP timezone-offset option missing ability to specify minutes

Issue Detail

- The timezone-offset option would only allow configuration of hours instead of HH:MM.

Filesystem error when leaving voicemail messages

Issue Detail

- In some cases, the error "OPERATING_SYSTEM.FILESYSTEM Error converting UTF-16 filename to UTF-8 from FAT" will be reported at the CLI. The voicemail operation is not affected by this warning.

[Web]: Cannot change SLA Line Label for IP 7XX phones

Issue Detail

- The Line Label for a Shared Line Account (SLA) on an IP 7XX phone config cannot be changed. If the phone config is for a Polycom phone, the change can be made.

[Web]: Stated Class of Service operation incorrect for User Account

Issue Detail

- In User Accounts, the web interface states that the Class of Service that will be applied in all System Modes other than Default should be "Same as Default". This was not the case for all situations.

[Web]: Old Phone Config not deleted

Issue Detail

- When changing the MAC address for an existing Phone Config, the old config files were not being deleted if the box was checked to "Delete Old Config Files".

[Web]: IP 700 Series System Phonebook is created with wrong filename

Issue Detail

- The IP 700 Series system directory was being created as adtran_system.csv instead of adtran_phonebook.csv.

[Web]: Error processing IP Phone Config directories with Firefox 3.x

Issue Detail

- While the IP Phone Config page loads, a few dialog boxes pop up showing the status of the loading of the page. When Firefox 3.x is used, the directories will fail to load correctly and an error message will be given. This page loads correctly with other browsers.

[Web]: System Summary page details fail to load with Firefox 3.x

Issue Detail

- The System Summary page will load, but the contents in the General System Information section cannot be seen.

[Web]: Uploading AOS image to overwrite existing fails

Issue Detail

- When uploading an AOS image to the NetVanta 7100 via the Firmware page, if the AOS image already exists in flash it will not be overwritten. This can affect uploads where the FTP or HTTP connection is interrupted resulting in a partial AOS image being uploaded.

[Web]: PRI Calling Party Options not show in Internet Explorer 7.x

Issue Detail

- Under the PRI Interface, the Calling Party Options cannot be seen when using Internet Explorer 7. This works with IE 6.x and Firefox browsers.

Upgrade Instructions

Several steps need to be taken to assure a valid upgrade. First, save your existing configuration via the Configuration page in the web interface under Utilities (remember to include voice settings).

To Download AOS A2.01.00

Note that you will have to login and have registered a NetVanta 7000 Series product serial number in order to download firmware.

1. Go to <http://www.adtran.com> and login using your IPT Partner login.
2. If your landing page is the ADTRAN Advantage Partner Zone, click Software/Firmware Downloads and choose NetVanta Products, then NetVanta 7100.
3. If you do not have a landing page configured, click on Support and choose NetVanta Products / NetVanta 7060/7100.
4. Select Firmware Updates.

AOS Upgrade Instructions

1. Upload the AOS Image to FLASH via the Firmware page in the web interface or via FTP.
2. From the web interface, choose the new image as the Primary Firmware and click Apply.
3. (Optional) Copy previous Primary AOS image to CFLASH.
4. If using the web interface, select the Primary and Backup images from the drop-down lists and click Apply. If using the Command Line Interface in Global Configuration Mode, enter "boot system cflash NV7100A-A1-01-00-E.biz X Y verify" where "X" is the location of the backup firmware image and "Y" is the name of that firmware image.

The "verify" keyword tells the system to check the AOS image to make sure it was uploaded properly before applying it. Note that the filename may be different for other NetVanta 7000 Series products.

5. After the AOS image is applied, then click Reboot unit or enter "reload" and select "y" to save and to reload.

AOS Bootcode Details

When upgrading to AOS A2.01.00, an upgrade to the Bootcode is not required.

Appendix A – Errata for A2.01.00

The following is a list of errata that still exists in A2.01.00.

Parking a call via BLF key may result in a fast busy signal

Issue Detail

- If a call is parked via a BLF key as a 2nd call is ringing the same extension, the park will complete but a fast busy signal may be heard for 2-3 seconds as the call is being parked.

Errata Justification

- Polycom SIP version 2.2.2 resolves this issue and is being tested for approval with the NetVanta 7100.

Calls into Voicemail or Auto Attendant incorrectly record Lost Packets

Issue Detail

- The output of “show voice quality-stats” reports many lost packets on calls to Voicemail or Auto Attendant.

Errata Justification

- These statistics are inaccurate for Voicemail and Auto Attendant due to the fact that no RTP packets are sent during the silences between prompts. They do not reflect actual voice quality issues.

Reboot when cross-connecting second TDM group

Issue Detail

- If a non-contiguous tdm-group for a PRI is applied to an ISDN Group (i.e. 1-8 and 24) and you try to apply another tdm-group from the same T1 interface with the remaining channels (9-23) to a PPP or Frame Relay interface the unit may reboot.

Errata Justification

- Assigning non-contiguous tdm-groups on the same T1 interface is not supported. The reboot condition will be resolved in a future AOS Release.

Congestion may cause loss of encrypted packets for VPN

Issue Detail

- Under heavy load, the unit cannot service packets at the same rate at which they need to be encrypted for VPN tunnels. This causes the unit to drop packets. Also, input decryption errors are reported to the terminal due to encrypted packets missing in the sequence. Throughput performance is slightly affected.

[Web]: Symbols in a Line Label create a parsing error

Issue Detail

- If a symbol, for example “&” is used in an IP Phone Config as a Line Label, a parsing error will occur when trying to load the config file from the web interface of the NetVanta 7000 Series Products.

Errata Justification

- If the symbol is removed, the parsing error can be avoided.

Appendix B – New and Related Documents

The following are documents related to the new features included in this AOS Release as well as other new documents that have been recently posted to the ADTRAN Technical Support Knowledgebase.

NetVanta 7000 Series Feature Related Documents

AOS A2.01.00 Command Line Reference Guide (large file, ~13MB) –
<http://kb.adtran.com/article.asp?article=2219&p=2>

Source and ANI Based Routing (New) -
<http://kb.adtran.com/article.asp?article=2510&p=2>

NetVanta 7000 Series SIP Trunking (New) -
<http://kb.adtran.com/article.asp?article=2508&p=2>

Enhanced ANI Substitution (New) -
<http://kb.adtran.com/article.asp?article=2509&p=2>

Configuring the Auto Attendant (New) -
<http://kb.adtran.com/article.asp?article=1822&p=2>

Factory Defaulting the NetVanta 7000 Series Products (New) -
<http://kb.adtran.com/article.asp?article=2608&p=2>

Phone and NetVanta 7000 Series Related Documents

IP 700 Series Phone Configuration and Troubleshooting Guide (New) -
<http://kb.adtran.com/article.asp?article=2515&p=2>

Polycom IP Phone Configuration and Troubleshooting Guide (New) -
<http://kb.adtran.com/article.asp?article=2049&p=2>

Configuring the ADTRAN Softphone for use with the NetVanta 7100 (New) –
<http://kb.adtran.com/article.asp?article=2606&p=2>

Updating the Global Phone Directory in the NetVanta 7000 Series Products (New) -
<http://kb.adtran.com/article.asp?article=2605&p=2>

Setting the Time Zone Offset on an IP 700 Series Phone (New) -
<http://kb.adtran.com/article.asp?article=2603&p=2>

Understanding AOS Version Changes (New) -
<http://kb.adtran.com/article.asp?article=2499&p=2>

Disabling the Call Waiting Beep on Polycom Phones (New) -
<http://kb.adtran.com/article.asp?article=2494&p=2>

Enabling the Hold Reminder on ADTRAN IP 700 Series Phones (New) -
<http://kb.adtran.com/article.asp?article=2495&p=2>

Enabling the Hold Reminder on Polycom Phones (New) –
<http://kb.adtran.com/article.asp?article=2496&p=2>

Enabling the Message Waiting (MWI) Beep on Polycom Phones (New) -
<http://kb.adtran.com/article.asp?article=2497&p=2>

Enabling/Disabling Missed Calls Display on Polycom Phones (New) -
<http://kb.adtran.com/article.asp?article=2498&p=2>

For more configuration guides, installation guides, white papers and more, visit ADTRAN's knowledge base at <http://kb.adtran.com>.