



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 7100

AOS Release A1.02.00
April 14th, 2008

Contents

Contents.....	1
Purpose.....	2
Important Notices	3
Summary of New Features.....	5
Summary of Enhancements	5
Summary of Bug Fixes	6
Upgrade Instructions	8
Appendix A – Errata for A1.02.00.....	9
Appendix B – Related Documents	11

Purpose

AOS Release A1.02.00 provides several new features and enhancements. This release also addresses several field issues.

Release A1.02.00 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](#). Configuration guides, white papers, data sheets, and other documentation may be found in ADTRAN's Knowledgebase, <http://kb.adtran.com>.

Important Notices

Web Configuration Support for ADTRAN IP 706 and IP 712 Phones

AOS A1.01.00 added the ability to configure the IP 706/712 phones from the IP Phone Configs page in the web interface. For more information on the IP 700 Series phones, please visit the Product page (<http://www.adtran.com/phones>) and Support page (<http://www.adtran.com/support>). The latest firmware version (1.3.3) for the IP 700 Series phones is available on the Support page. Note that these pages require an IPT Partner login.

Before using the IP Phone Configs GUI or User Accounts GUI to create phone configs for the ADTRAN IP 700 Series phones, the default dial plans need to be checked to make sure that they are in a format compatible for the IP 700 Series phones. Go to IP Phone Configs->Default Settings and verify that all entries ending in a "T" have a period before the "T". If any of these entries are missing the period before the "T", modify that dial string to include the period before the "T".

After verifying and, if necessary, modifying the dial strings, a dial string needs to be added for the intercom functionality. Under Extension Dial Strings, add "***xxxx" or "***xxx", depending on whether you are using four or three digit dialing, respectively.

Required Polycom Phone Firmware

For AOS Versions 15.06.00.SA and above, it is necessary that you upgrade your phone firmware to Polycom SIP version 2.1.2 for proper operation with the NetVanta 7100.

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**

Contact ADTRAN Post Sales Technical Support if you are unable to download this file.

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.

Before you plug in phones...

To address a few issues found with Polycom config files and the 7100s that shipped with AOS 14.02.00, please enter the following commands.

Note that if you have any other new installations where the equipment shipped to you had AOS 14.x installed and not AOS 15.x or above, please use these commands during your staging process. All units shipped with AOS 15 and above will have these issues resolved.

Also Note that Step 3 should be performed after uploading the new version of sip.cfg to the Polycom folder.

1. "copy cflash Polycom/polycomboot.cfg flash polycomboot.cfg"
2. "copy cflash Polycom/000000000000-directory.xml flash 000000000000-directory.xml"
3. "copy cflash Polycom/sip.cfg flash sip.cfg"

Connecting and Booting Phones

Beginning with AOS 15.06.00.SA, the NetVanta 7100 caches the phone firmware and configuration files in RAM during the first 30 minutes after boot-up. This is done to speed the boot process for the phones especially when they are being upgraded. In order to take full advantage of this new feature, be sure to have all phones connected to the NetVanta 7100 at the time of boot-up.

For systems that have additional PoE Switches such as the NetVanta 1224 PoE, you can follow this procedure to boot the phones connected there and still take advantage of the firmware and config caching.

1. Disconnect or shut down the port feeding the additional PoE switch.
2. Boot all phones directly connected to the NetVanta 7100.
3. Reconnect or "no shut" the port feeding the additional PoE switch.
4. Issue the command "sip check-sync firmware-upgrade" at the command prompt on the NetVanta 7100. There may be a short delay after entering this command (see below for details).

The "sip check-sync firmware-upgrade" command will re-cache the firmware files for an additional 15 minutes. This re-cache may take up to a minute to complete. This command will also issue a SIP Check-sync to each of the phones on the system which will tell the phones to check for a new version of firmware or config files. The phones on the additional PoE switch should see a new version of the firmware files and reboot to download them.

Summary of New Features

No new features were added to the NetVanta 7100 with the release of AOS A1.02.00.

Summary of Enhancements

This section highlights the enhancements for AOS A1.02.00.

Added new voice debug capability for analog line testing

Enhancement Details

- Added the following debug command: `debug voice dsp voip 0/1 channel x ecan`
- This debug can be used to measure Echo Return Loss with different impedances on the FXO interface. Once the best match is found, you can adjust TX and RX gains properly to manage volume and echo issues.
- Please reference the **NetVanta 7100 Echo Return Loss Measurement Guide** (<http://kb.adtran.com/article.asp?article=2345&p=2>) for further information.

PLEASE READ THE INSTRUCTIONAL GUIDE IN FULL BEFORE ENABLING THIS DEBUG COMMAND.

Summary of Bug Fixes

This section highlights bug fixes included in AOS version A1.02.00.

[Web]: Cannot configure SLA Call Coverage for System Modes

Issue Detail

- The web interface does not fully apply Call Coverage configuration in Shared Line Accounts for System Modes.
- Applying this config from Firefox would give a “successful” response, but would not operate as configured
- Applying this config from Internet Explorer, would also give a “successful” response, but would operate incorrectly.
- CLI configuration worked properly.

Corrective Action

- Resolved the issue with how the web interface was applying the configured Call Coverage settings.

[Web]: Cannot disable System Mode Override from web interface

Issue Detail

- System Mode Override could be enabled via AA, SPRE code, etc but could not be disabled via the web interface.

Corrective Action

- Changed the web interface so that if there is a schedule in place, the page will now show the current System Mode and add a button to 'Enter Override Mode'. If there is a schedule and you are in Override Mode, the text will highlight the active Mode and there will be a button to 'Exit Override Mode'. If there is no schedule in place, the drop down will appear letting users manually change between modes.

[Web]: Not prompted to reboot ADTRAN phone after config change

Issue Detail

- In IP Phone Configs, when changes are made to a config for an ADTRAN IP 7XX phone, the web interface does not prompt the user to reboot the phone to acquire the new configuration.

Corrective Action

- Added the IP 7XX phones to the check-sync process that will reboot the phone in order to acquire the new configuration.

[Web]: SLA Label field not applied for ADTRAN IP 7XX phones

Issue Detail

- In IP Phone Configs, if you add a Shared Line Account to an ADTRAN phone and then modify the label from the default, the modified label does not get applied to the phone config.

Corrective Action

- On ADTRAN phones the line labels were being set to the Display Name. Corrected this.

[Web]: ADTRAN IP 7XX configs may use incorrect Dial Plan

Issue Detail

- When a phone config is created while adding a user through the User Accounts page, the Dial Plan/Dial Strings used are the default and not the ones configured and stored in polycomConfigDefaults.cfg. This will affect systems where the Dial Plan has been changed to accommodate different extension lengths (3-digit, etc).

Corrective Action

- Modified the page so that it translates the Dial Plan/Dial Strings stored in polycomConfigDefaults.cfg into one that will work with the ADTRAN IP 7XX phones.

[Web]: IP 7XX phones not included in “Apply to New and Existing Configurations”

Issue Detail

- In Default Settings under IP Phone Configs, if you choose to apply changes to "New and Existing Configurations", only Polycom phone config files are updated.

Corrective Action

- Included ADTRAN IP 7XX phones in the update process. The new SIP Server and Dial Strings will be inserted into all existing ADTRAN phone configs.

Polycom Phones may reboot.

Issue Detail

- Phones may intermittently lose Power over Ethernet and reboot.

Errata Justification

- Not every system experiences the loss of PoE.
- To address specific cases where this is happening, there is a solution included in AOS A1.02.00. Contact ADTRAN Technical Support for assistance in enabling this solution.

Default SIP Auth Password used even when password was changed

Issue Detail

- The default password, 1234, is being used to authenticate users even if the password has been changed for that user.

Corrective Action

- Corrected authentication process.

[Web]: Clicking Voicemail Settings page results in 503 Server Error

Issue Detail

- Selecting Voicemail Settings under the Voice menu in the web interface will result in a 503: Server Error in the browser.

Corrective Action

- Corrected the display of this page.

[Web]: Change to phone MAC/Model doesn't build new config for IP 7XX phone

Issue Detail

- In the User Account page, when replacing a phone, you can enter the new MAC and change the phone model in the User Account page. However, when an IP 706 or IP 712 is selected, a phone config file is not generated.

Corrective Action

- Converted “Change” button to an “Edit Config” button that will take the user directly to the Phone Configuration page for the configured MAC for that User Account. A new MAC can be entered there and the Phone Model changed. The user will be prompted to choose whether to delete the old phone config.

Transfer to *77z (Call Park) SPRE code fails

Issue Detail

- Transfer to the Call Park SPRE code will fail with the SIP error 488 Not Acceptable Here.

Corrective Action

- Adtran and Polycom phones may try to park a call by transferring to *77x instead of using a SIP Re-Invite to *77x. The NetVanta 7100 will now check the SIP Messaging for a transfer (REFER) to *77 and perform a Park if needed.

Transfer to Leave Voicemail extension (8504) drops the call

Issue Detail

- If a call is transferred to the Leave Voicemail extension, x8504 by default, the original call will be dropped during the transfer process.

Corrective Action

- Corrected transfer method to Voicemail to allow for this type of transfer.

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). You may also save the configuration to a TFTP server. The commands to execute the TFTP copy are:

Router# copy start tftp

Router# copy dynvoice tftp

You will be prompted for file names and the server address in the process.

To Download AOS A1.02.00

Note that you will have to login and have registered a NetVanta 7100 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 7100.
4. Select Firmware Updates.

AOS Upgrade Instructions

1. Upload the AOS Image to CFLASH 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. From the Command Line Interface in Global Configuration Mode, enter "boot system cflash NV7100A-A1-02-00-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.
4. 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 A1.02.00, an upgrade to the Bootcode is not required.

Appendix A – Errata for A1.02.00

The following is a list of errata that still exists in A1.02.00.

Delay in phone FTP process

Issue Detail

- When many phones are booting and upgrading from the NetVanta 7100, some phones may not be able to download their configuration files and may require a reboot to complete.

Errata Justification

- Issuing the “sip check-sync firmware-upgrade” command can improve performance if the issue occurs more than 30 minutes after initial boot of the NetVanta 7100. See [Important Notices](#) (on Page 3) for further information.

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.

Corrective Action

- 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.

Cannot detect dialtone

Issue Detail

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

Errata Justification

- In the configuration of the analog Trunk Account, Blind Dial can be enabled as a workaround.

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.

Errata Justification

- The default filesystem can be changed back with the in the CLI with the “ip ftp server default-filesystem” command or in the web GUI under IP Phone Configs/Boot Settings.

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.

Errata Justification

- The call will complete correctly and this will be resolved in a future AOS release.

Add Configs in Batch feature uses 501 Model

Issue Detail

- All configurations built by using the “Add Configs in Batch” option under IP Phone Configs use the IP 501 phone model type.

Errata Justification

- New User Account phone configuration and Manual addition of phone configs work properly. A resolution will be added in a future version of AOS.

Can't see Audio Prompts Description field in Internet Explorer 6

Issue Detail

- The Audio Prompts Description field is empty in IE6 when the page initially loads. If you click on a prompt, you can see the Description is there. If you change the Description or add one, when you save the new info the Audio Prompts page will refresh and show the Description for the new one as well as all of the others.

Errata Justification

- The information is stored correctly and is viewable by clicking on the prompt. Also, works properly in IE7 and Firefox 2.x.

[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.

Errata Justification

- The partial AOS image can be deleted from the web interface or CLI and then a new AOS image can be uploaded.

[Web]: Auto Attendant page cannot load a large number of Audio Prompts

Issue Detail

- If a large number of Audio Prompts exist (such as 100 or more), the Auto Attendant page cannot load the prompts for selection. The web page is timing out while waiting to load all available prompts.

Errata Justification

- With less prompts, the page can load them all for selection. This will be resolved in a future AOS release.

Appendix B – Related Documents

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

NetVanta 7100 Echo Return Loss Measurement Guide -

<http://kb.adtran.com/article.asp?article=2345&p=2>

AOS A1.01 Command Line Reference Guide (13MB file) –

<http://kb.adtran.com/article.asp?article=2219&p=2>

Configuring System Modes in the NetVanta 7100 (Updated) -

<http://kb.adtran.com/article.asp?article=2313&p=2>

NetVanta 7100 Administrator's Guide (Updated) -

<http://kb.adtran.com/article.asp?article=2292&p=2>

Shared Line Accounts over Analog Trunks Config Guide (Updated) -

<http://kb.adtran.com/article.asp?article=2132&p=2>