



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 15.06.00.SA
November 7, 2007

Contents

- Contents..... 1
- Purpose and Polycom Firmware Requirements2
- Summary of New Features.....3
- Summary of Bug Fixes5
- Upgrade Instructions7
- Appendix A – Other Resolved Issues.....10
- Appendix B – Errata for 15.06.00.SA 11
- Appendix C – Related Documents 13

Purpose

AOS Voice Products release 15.06.00.SA provides several new features and enhancements. This release also addresses several field issues.

Release 15.06.00.SA 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 B](#).

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

Required Polycom Phone Firmware

AOS 15.06.00.SA for the NetVanta 7100 was tested with Polycom SIP version 2.1.2 firmware. It is necessary that you upgrade to version 2.1.2 for proper operation with AOS 15.06.00.SA.

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.

Summary of New Features

This section highlights the major features, commands and behavioral changes for AOS 15.06.00.SA.

Shared Line Appearances

- Similar to key system/square key functionality
- Inbound calls on a LINE notify every SIP phone that registers to the line.
- A LINE can be seized by selecting the LINE button on the phone.
- The status of a LINE will be updated on all other phones registered to that line. Status will include IDLE, RINGING, BUSY, and HOLD.
- A LINE on hold may be retrieved by any other SIP Phone that registers on the LINE
- A busy LINE cannot be seized by other SIP Phones. Barge or Monitoring of the LINE is NOT supported.
- A LINE can have coverage to VM or AA.
- A LINE can be part of a trunk group so it can be selected by normal call routing, instead of a LINE seizure.
- Call restrictions for a LINE are based on the LINE, and NOT the user placing the call. This is a phase II development.
- Please see publication 61200796L1-31A, **Shared Line Accounts (SLA) – Config Guide**, in our Knowledgebase (<http://kb.adtran.com>) for additional information.

PRI Calling Party Name Delivery

- Enhanced CPN receive method to include the Setup message as well as a separate Facility message following the Setup message.

Improved Voicemail Engine/Features

- Default voicemail digit mappings revised to be more simple and intuitive.
- Customizable playback and authentication settings supported on a per-user basis
 - Envelope playback enable/disable
 - Message auto-play enable/disable (skips main menu)
 - Authenticate using mailbox/password, password only, or no authentication if calling from valid phone
- Message forwarding supported
 - Forward voicemail message to a single other mailbox
 - Note: Attaching a recorded message to the forwarded message is not supported at this time. A system default message will be included as the message is forwarded stating which mailbox and name from which it was forwarded
- New User/Voicemail Setup Wizard
 - User prompted to record name, greeting and setup password when accessing voicemail for the first time.
 - Admin can reset at any time
- Please see the **NetVanta 7100 Voicemail Quick Reference Guide** for the new voicemail menu and additional features.

Support for SIP over TCP

- IP Phones may register to our SIP server via UDP or TCP protocols.
- Although you don't have to specify a protocol in the CLI, you must configure the Transport under IP Phone Configs for TCP.

Status Groups (Busy Lamp Field) Full Support

- Ability to monitor up to 32 users / park zones in a Status Group when SIP phone registers via TCP.
- Change the Transport under IP Phone Configs from UDP to TCP in order to support monitoring of more than 5 users / park zones.

Simplified Customization of Global Phone Configs

- Can now edit "customer-sip.cfg" in the Web interface.
- Please see the **Polycom Phone Operation** document, for additional information about phone config files.
- Please see **ADTRAN/Polycom Phone Admin Guide** for details on configuration syntax in "customer-sip.cfg"

Email Notification of Emergency Calls

- An email distribution list can be setup to notify the list on all calls marked as Emergency type.
- Dial Plan number patterns marked as "Always Permitted" are treated as Emergency Calls.

Summary of Bug Fixes

This section highlights major bug fixes in AOS version 15.06.00.SA. For a list of other issues that were addressed in 15.06.00.SA, please see [Appendix A](#).

ISDN PRI - Block Caller ID blanks the Calling Party Number.

Issue Detail

- Calling Party Number (CPN) is transmitted with Number Type and Presentation both set to Unknown and no digits when Per Call Block Caller ID (invoked by *67) is used.

Corrective Action

- Always present Calling Party Number but instead with Presentation set to Restricted if *67 is used.

Auto Attendant fails to accept input

Issue Detail

- 7100 stops detecting DTMF digits in the Auto Attendant after a long period of time.

Corrective Action

- Cleared timeout flag before transitioning states within the Auto Attendant to ensure digits are still accepted.

CFLASH can become corrupt.

Issue Detail

- After many FTP transfers to CFLASH, it can become corrupt and cause a system fault when trying to read a corrupted file or folder.

Corrective Action

- Added CHKDSK to monitor the CFLASH for corruption and correct it. Output of CHKDSK results during a reboot can be viewed by using "show output-chkdisk".

System Performance Degradation.

Issue Detail

- Degraded audio quality during web and file system access.

Corrective Action

- Redesigned the voicemail system to execute outside the realm of call control.

Low volume on calls over analog trunks and when accessing voicemail remotely.

Issue Detail

- When using analog trunks, inbound audio volume on calls can be low.

Corrective Action

- Added additional configurable impedance values. With proper impedance, the gains on the analog trunks can be adjusted properly.
- Additional debug assistance to choose the proper impedance value is available by contacting ADTRAN Post Sales Technical Support.

[WEB]: Auth Password is not copied over to new phone configuration file.

Issue Detail

- [WEB]: When changing the MAC address on a User Account, the Auth Password is not copied over to the new phone configuration that is created.

Corrective Action

- Corrected script on web page to include all necessary values when generating the new config file.

Calls from E+M trunk to Auto Attendant have no audio.

Issue Detail

- Inbound calls to an Auto Attendant may get one ring and then hear silence instead of the Auto Attendant greeting

Corrective Action

- Removed conditional statement that checks if the IP Address is equal to the loopback address before starting the RTP channel. Auto Attendant and Voicemail use the loopback address to source RTP.

Special Ring Cadences (int/ext) ringing does not work.

Issue Detail

- Calls from an external source do not play a different ring type on the Polycom phones than the one for internal calls.

Corrective Action

- Allowed the inclusion of Alert Info on external calls in order to play out special ring cadences. Also added the ability to disable special ring cadences if desired.

AA Prompt plays but no audio is heard.

Issue Detail

- Auto Attendant greeting audio is not heard on incoming calls from an analog trunk.

Corrective Action

- Allowed for more time for the voice path to connect before we initiate dialtone detection.

Delay in notification of new voicemails.

Issue Detail

- If a voicemail message was left anytime between 12:00pm and 1:00 pm the message would play back with a timestamp of 12:xx am.

Corrective Action

- Corrected the timestamp process.

Call placed via a BLF key cannot be transferred.

Issue Detail

- If a call is placed via a BLF key or retrieved via a Park/Retrieve BLF key, attempts to transfer the received call will fail.

Corrective Action

- The NetVanta 7100 now examines the User-Agent header to determine whether a BLF subscription was initiated by a Polycom phone. For Polycom subscriptions, "tel" URI's were used instead of "sip" URI's.

Ring Group not sending Alerting.

Issue Detail

- The 7100 intermittently did not generate the "Alerting" message over ISDN for ring group calls.

Corrective Action

- State information related to "Alerting" in the ring group was cleared appropriately.

Possible unresponsive state.

Issue Detail

- 7100 becomes unresponsive intermittently.

Corrective Action

- Corrected a memory address violation to prevent problem.

Upgrade Instructions

Several steps need to be taken to assure a valid upgrade. First, save your existing configuration via the web interface (include voice settings) or 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 15.06.00.SA

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.

Note that you will have to login and have registered a NetVanta 7100 serial number in order to download firmware.

AOS Upgrade Instructions

1. Upload the AOS Image to CFLASH via FTP.
2. From the Command Line Interface in Global Configuration Mode, enter "boot system cflash NV7100A-15-06-00-SA-E.biz X Y" where "X" is the location of the backup firmware image and "Y" is the name of that firmware image or,
3. After the AOS image is applied, then enter "reload" and select "y" to save and to reload.

AOS Bootcode Details

When upgrading to AOS 15.06.00.SA, an upgrade to the Bootcode is not required.

Before you plug in phones...

To address a few issues we have found with Polycom config files and the 7100s shipped with AOS 14, please enter the following commands. It is best to complete the items listed below regarding InterVLAN routing and SNTP also before connecting phones for the first time.

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

Also Note that Step 3 should probably 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

AOS 15.06.00.SA now 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 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.

InterVLAN routing

To enable interVLAN routing between the default VLAN 1 and VLAN 2, add this access list to your Private Policy Class:

```
ip access-list extended InterVLAN
  permit ip 10.10.10.0 0.0.0.255 10.10.20.0 0.0.0.255
  permit ip 10.10.20.0 0.0.0.255 10.10.10.0 0.0.0.255
```

Note: this access list must be included before any NAT statements in the Private Policy Class.

For the phones to sync to the 7100 for time (SNTP)

Enter these commands:

- "ip sntp server"
- "ip sntp server send-unsynced"

or enable SNTP with Send Unsynced in the Web GUI.

Appendix A – Other Resolved Issues

The following is a list of previous errata that have been addressed in AOS 15.06.00.SA.

Allowed support for more than 19 speed dial entries in a user account.

Issue Detail

- Configurations where user accounts have more than 19 speed dial entries may cause a reboot of the system.

Corrective Action

- Added the ability to specify more than 19 speed dial entries per User Account.

Disable message waiting tone in adtran-sip.cfg.

Issue Detail

- Default phone configuration played out a tone at a regular interval to notify the phone user of voice messages waiting.

Corrective Action

- Changed default configuration to disabled.

Related Documentation

- See **Polycom Phone Operation** and **ADTRAN/Polycom Phone Admin Guide** at <http://kb.adtran.com>.

Disable hold reminder tone in adtran-sip.cfg.

Issue Detail

- Default phone configuration played out a tone at a regular interval to notify the phone user of a call on-hold.

Corrective Action

- Changed default configuration to disabled.

Related Documentation

- See **Polycom Phone Operation** and **ADTRAN/Polycom Phone Admin Guide** at <http://kb.adtran.com>.

Appendix B – Errata for 15.06.00.SA

The following is a list of errata that still exists in 15.06.00.SA.

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 that greatly reduces the occurrence of this issue is included in AOS 15.06.00.SA. Contact ADTRAN Technical Support for assistance in enabling this solution.

Can't set FXO RX Gain over +1dB.

Issue Detail

- Configuring the RX Gain on an FXO interface results in higher gain output than the configured value and generally incurs local echo.

Errata Justification

- Most cases do not require a RX gain of over +1dB. A solution will be provided in a maintenance build of AOS 15.

Can't change voicemail PIN when encryption is enabled.

Issue Detail

- When password encryption is enabled, a user cannot change their voicemail PIN via the Voicemail Wizard or Administrative Options in the Voicemail Menu structure.

Errata Justification

- The voicemail PIN be changed in the command line by using the following command:
 - "voicemail password xxxx" (where "xxxx" is the new unencrypted PIN value)
 - This only occurs with password encryption enabled.

Can't view all of encrypted password in GUI

Issue Detail

- When changing the SIP Auth Password or Voicemail PIN for a User Account while password encryption is enabled, only 6 characters of the encrypted passwords are shown. To change the password, the entire contents of the field must be cleared and replaced with the new value.

Errata Justification

- These values can be changed in the command line by using the following commands on the User Account
 - "password xxxx" (where "xxxx" is the new unencrypted value)
 - "voicemail password xxxx" (where "xxxx" is the new unencrypted PIN value)
- This only occurs with password encryption enabled.

Windows direct backup of CFLASH fails.

Issue Detail

- When backing up a CFLASH card directly to a Windows PC, Windows changes the file/folder names. This causes an issue with restoring the contents to a new CFLASH.

Errata Justification

- FTP Backup is the recommended method and does not change the file or folder names.
-

SIP Phone Call Appearances may become stuck.

Issue Detail

- Over a long period of time, SIP call appearances can become unusable.

Errata Justification

- Each SIP user has six call appearances. The risk to address this issue was too great in AOS 15.

GUI: Operator Group VM Email Schedule missing.

Issue Detail

- CLI commands exist for configuring notification schedules in operator and ring groups, but the commands do not work.

Errata Justification

- The commands are removed in a future release.

Loss of system configuration.

Issue Detail

- System configuration can be lost if a reboot occurs while writing the configuration.

Errata Justification

- ADTRAN recommends archiving existing configuration before activating any changes to configuration. The risk to address this issue in AOS 15 was too great.

BLF: status-group NOTIFY is not reaching phone over UDP and VPN.

Issue Detail

- Configuring BLF on a remote phone using UDP connected via VPN does not work properly.

Errata Justification

- Specifying TCP for the primary registration of the remote phone resolves this.

CLI: Range command for FXO interfaces doesn't include tx-gain or rx-gain.

Issue Detail

- Configuring the RX and TX gains for FXO trunks cannot be done for a range of interfaces.

Errata Justification

- The gains can be configured on an individual basis.

[WEB] Cannot set DID or Number of Digits on Trunk Account.

Issue Detail

- DID or number of digits on a trunk account cannot be set via the web interface.

Errata Justification

- This can be configured in the CLI and will be resolved in the next release.

Appendix C – Related Documents

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

NetVanta 7100 Remote Phone Guide -

<http://kb.adtran.com/article.asp?article=2072&p=2>

Email Integration with the NetVanta 7100 VoiceMail System -

<http://kb.adtran.com/article.asp?article=2119&p=2>

NetVanta 7100 Voicemail Quick Reference Guide -

<http://kb.adtran.com/article.asp?article=2182&p=2>

Polycom Phone Operation –

<http://kb.adtran.com/article.asp?article=2049&p=2>

Configuring Shared Line Accounts -

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