Release Notes for Cisco ATA 186 Release 2.12

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These release notes describe newly incorporated features and resolved and open issues for the Cisco Analog Telephone Adaptor (ATA) 186, Release 2.12.

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Introduction: Cisco ATA 186 Analog Telephone Adaptor

The Cisco ATA 186:

- Is an analog telephone adaptor that interfaces regular analog telephones to IP-based telephony networks.
- Is installed at the subscriber’s premises and supports two voice ports, each with its own independent telephone number.
New Features in Release 2.12

This section contains information on new features for Release 2.12 of the Cisco ATA 186.

FAX Passthrough Redundancy

The Cisco ATA 186 now features FAX passthrough redundancy. After a codec switch, real-time transport protocol (RTP) packets sent by the Cisco ATA 186 have a payload type number of 90. 80 bytes of redundant data are appended to each RTP packet.

Configuration

To enable FAX passthrough redundancy, set bit 7 of the ConnectMode parameter to 1 (ConnectMode = 0x00000080).

G.723.1 Silence Suppression

The Cisco ATA 186 can now negotiate G723.1 silence suppression in both SIP and H.323 modes.

Configuration

To enable negotiation of G723.1 silence suppression, set bit 0 (16) of AudioMode to 1. (Line 1—AudioMode = 0x00000001, Line 2—AudioMode = 0x00010000).

Changes in Release 2.12

This section lists the changes in the Cisco ATA 186 in Release 2.12.

- The Cisco ATA 186 now accepts the .zup file format as well as the .kxz and .kbx file formats for TFTP-directed upgrades.
- The Submit and Logout buttons on the Cisco ATA 186 web configuration page have been combined into a single Apply button. The Cisco ATA 186 reboots ten seconds after the Apply button is pressed.
- The Cisco ATA 186 TFTP profile parameters defined as alphanumeric string value types are no longer truncated by one character from the maximum advertised value.
- You can now enter 84# at the configuration menu prompt to hear the Cisco ATA 186 profile, which includes the MAC address of the Cisco ATA 186 in hexadecimal format.
- The Cisco ATA 186 no longer rings the phone at power-up if the GkOrProxy configuration parameter is set. Instead, it fast-cycles the second fast blink on the MENU LED button to indicate a cold-start situation.
- If the LBRCCodec configuration parameter is set to 0, the Cisco ATA 186 does not accept RTP packets with payload type 18 (G729).
- If the LBRCCodec configuration parameter is set to 3, the Cisco ATA 186 does not accept RTP packets with payload type 4 (G723.1).
- The Cisco ATA 186 now has programmable tone event delay.
The Cisco ATA 186 now has a ringing timeout timer.

The Cisco ATA 186 now has a modified dial plan that prevents most invalid dialed digits from being sent. You can change the default interdigit timeout of 9 seconds by adding the following rule to your dial plan string:

\[ In \]

where \( n \) is 1-9 or a-z (for 10-35) seconds.

For example, enter an interdigit timeout of 12 seconds as:

\[ Ic\_\_\_\_[the \ rest \ of \ your \ dial \ plan \ rules] \]

Specifying your own interdigit timeout also changes the behavior of the dial plan so that, rather than the entire dial string being sent at timeout, it is sent only as a result of a matching rule or time intended by a matching rule.

Three-way calling may now be deactivated using the `PaidFeatures` configuration field.

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**Changes for the H.323 Protocol**

The information in this section describes changes applicable when you are using the H.323 signaling protocol.

**Full Registration**

You can now prompt the Cisco ATA 186 to perform a full registration when using the H.323 protocol. To do so, open the following page in your web browser:

http://IP address of Cisco ATA 186/reset

**Two-way Cut-Through of Voice Path Before Connect**

Immediate two-way cut-through of the voice path upon receipt of an RTP stream from a caller is now a configurable option on the Cisco ATA 186. Previously, two-way cut-through occurred immediately upon receipt of an RTP stream on the caller's side even when an H.225 Connect message had not been received. For security purposes, a configurable option now allows service providers to disable two-way cut-through. If this option is enabled, the Cisco ATA 186 disallows early two-way cut-through until after the Connect message is received.

**Configuration**

To disable two-way cut-through before receipt of the H.225 Connect message, set bit 5 in ConnectMode to 1 (ConnectMode = 0x00000020).
Changes for the SIP Protocol

The following changes apply when using the SIP protocol:

- Previously the Cisco ATA 186 did not retry registration after receiving a 1xx response. If the final response from the registrar was lost after a 1xx response, the Cisco ATA 186 might never have registered again. The Cisco ATA 186 now resets the retry timer when it receives a 1xx provisional response to a Register request and continues to retry registration after timing out.

- In previous versions of the Cisco ATA 186, if a BYE request was made to transfer and needed to be authenticated with the Proxy, the ALSO header was not inserted on the authenticated BYE request. The transfer was unsuccessful and the remote parties were simply disconnected. The ALSO header is now inserted in the authenticated BYE if it is used to transfer a call.

- The Cisco ATA 186 now handles mid-call Re-INVITE without SDP properly.

- The Cisco ATA 186 now uses the same port to transmit and receive RTP packets for each connection.

- The Cisco ATA 186 uses the same port to transmit and receive SIP messages. This port can be specified via the configuration parameter SIPPort.

- The Cisco ATA 186 now supports remote refresh via a SIP NOTIFY message with the header **Event: check_sync**.

- The Cisco ATA 186 now supports SIP Diversion headers.

Resolved Issues in Cisco ATA 186 Release 2.12

This section lists the issues in previous releases of the Cisco ATA 186 that are resolved in Release 2.12.

- **CSCdv02022**
  
  The Cisco ATA 186 no longer periodically hangs during stress testing. The Cisco ATA 186 experienced port allocation leaks in certain conditions, eventually causing the box to hang in stress tests.

- **CSCdu83662**
  
  In Swedish operation mode, the AVT tone is no longer played continuously after **hook flash 2** (hold the present call and retrieve a previously held call) was entered.

- **CSCdu83465**
  
  When upgrading from version 1.34 to 2.10, all Cisco ATA 186 users must first upgrade to any of the available 2.0 software versions as a transition step. This workaround has been facilitated by adding a transition software image in the CCO 2.10 .zip file.

- **CSCdu82078**
  
  When the Cisco ATA 186 received a very large endpoint Identifier, certain parameter values are no longer corrupted. The operating Gatekeeper IP might also be corrupted in this manner, causing the Cisco ATA 186 to send RAS messages to a non-existent Gatekeeper IP address.

- **CSCdu72747**
  
  The Cisco ATA 186 no longer fails to decode certain RAS messages from the Naboo Gatekeeper due to an incorrect memory allocation in its ASN.1 decoder.
Resolved Issues in Cisco ATA 186 Release 2.12

- CSCdv42373
  When using G.729 with silence suppression, static could be heard at the beginning of call (before hearing first ringback) on the caller’s side when the Cisco ATA 186 was in G.729AB mode and with IPRingback from the terminating side. This occurred only when the Cisco ATA 186 on the caller’s side did not reset before two successive calls. G.729 parameters are now reinitialized at the end of every call instead of waiting to be reset.

- CSCdv42381
  When transmitting a FAX call between two Cisco ATA 186s, a race condition could arise in the codec switch procedure that prevented the Cisco ATA 186es from switching to the same codec. Additional modes have been added to successfully distinguish FAX mode changes and master/slave roles.

- CSCdv42404
  When negotiating DTMF transmission mode, the Cisco ATA 186 used inband transmission if the other terminal did not support userInputIndication in the terminal capability set. The Cisco ATA 186 now sends out-of-band DTMF using an alphanumeric method when the other terminal does not indicate alphanumeric support (basicString, iA5String, generalString) and signal/signalUpdate (DTMF) in the capability exchange.

- CSCdv42441
  In H.323 mode, when the Cisco ATA 186 was configured via the AudioMode parameter to always select out-of-band DTMF transmission, the Cisco ATA 186 incorrectly enabled an AVT procedure. The AVT procedure is now disabled when operating in H.323 mode.

- CSCdv42499
  In H.323 mode, when the Cisco ATA 186 was configured via the AudioMode parameter to always select out-of-band DTMF transmission, the Cisco ATA 186 incorrectly selected support for DTMF using signal and signalUpdate. The default method is now alphanumeric so the Cisco ATA 186 now arrives at the same method of DTMF transmission whether it is set to select the DTMF transmission method as “always out-of-band” or “through negotiation.” The Cisco ATA 186 selects DTMF transmission using signal and signalUpdate if the other terminal indicates support of this method in its terminal capability set.

- CSCdv42524
  When the Cisco ATA 186 was configured via the AudioMode parameter to always select inband transmission, the Cisco ATA 186 it did not advertise support of alphanumeric and signal and signalUpdate methods in its capability set; it used inband transmission only if the other terminal did not indicate alphanumeric or DTMF support in the capability set. Alphanumeric and signal and signalUpdate are now supported in the capability set even when the AudioMode configuration parameter is set to always choose inband transmission. Additionally, DTMF is sent out through inband audio regardless of the capability of the other terminal.

- CSCdv42541
  When using H.245 signal/signalUpdate messages to transmit DTMF signals, the Cisco ATA 186 restricted the DTMF duration to 10 seconds. When the DTMF tone was longer than 10 seconds, the Cisco IOS gateway generated a noise after it had completed playing 10 seconds of the DTMF tone. The 10-seconds restriction has been removed. The Cisco ATA 186 now sends SignalUpdate to renew the duration if it is longer than 10 seconds.
• CSCdv42556
  The Cisco ATA 186 rejected the H.245 OpenLogicalChannel structure whenever the
  forwardLogicalChannelParameters sequence contained mediaChannel, even when it was a unicast
  address. The Cisco ATA 186 now checks the mediaChannel address in the
  forwardLogicalChannelParameter and rejects the OpenLogicalChannel only if it is indicated as a
  multicast address.
• CSCdv42564
  SIP registration no longer stops on Line 1, Line 2, or both after a random number of calls. This
  problem occurred more often when the registration period was shorter, and the user could only
  recover normal operation by power-cycling the Cisco ATA 186.

Known Issues in Cisco ATA 186 Release 2.12

This section lists open issues for Cisco ATA 186 Release 2.12.
• CSCdu24665
  Symptom:
  Spurious DTMF during conversation between Cisco ATA 186es
  Condition:
  During a call between Cisco ATA 186es, spurious out-of-band DTMF tones can be heard.
  Workaround:
  There is no workaround.
• CSCdu83663
  Symptom:
  Audio breaks up after a long period during reliability test.
  Condition:
  A call made between two Cisco ATA 186es in G.729 mode can experience audio breakup during
  multiple-hour reliability tests.
  Workaround:
  There is no workaround.

Related Documentation

Use these release notes in conjunction with these documents:
• Cisco ATA 186 Installation and Configuration Guide
• Cisco ATA 186 Quick Start Guide
• Cisco ATA 186 Quick Reference Guide
• Release Notes for the Cisco ATA 186 Release 2.0
Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- http://www.cisco.com
- http://www-china.cisco.com
- http://www-europe.cisco.com

Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco Product documentation from the Networking Products MarketPlace:
  http://www.cisco.com/cgi-bin/order/order_root.pl
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:
  http://www.cisco.com/go/subscription
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

Documentation Feedback

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To submit your comments by mail, use the response card behind the front cover of your document, or write to the following address:

Attn Document Resource Connection
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.
Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

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To access Cisco.com, go to the following website:
http://www.cisco.com

Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:
http://www.cisco.com/tac

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:
http://www.cisco.com/register/

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:
http://www.cisco.com/tac/caseopen
Obtaining Technical Assistance

Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:


P1 and P2 level problems are defined as follows:

- **P1**—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- **P2**—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.
Obtaining Technical Assistance