



Troubleshooting

This section describes troubleshooting procedures for the Cisco ATA:

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Note

The term *Cisco ATA* is used throughout this manual to refer to both the Cisco ATA 186 and the Cisco ATA 188, unless differences between the Cisco ATA 186 and Cisco ATA 188 are explicitly stated.

General Troubleshooting Tips

The suggestions in this section are general troubleshooting tips.

- Make sure that the DHCP server is operating correctly. Note that the function button blinks slowly when the Cisco ATA attempts to acquire the DHCP configuration.
- If the green activity LED is not flashing after you connect the Ethernet cable, make sure that both the power cord and the Ethernet connection are secure.
- If there is no dial tone, make sure that the telephone line cord from the telephone is plugged into the appropriate port on the Cisco ATA. Make sure that your Cisco ATA is properly registered on your Call Control system. Test another phone; if this phone does not work either, there may be a problem with the current configuration or with the Cisco ATA.
- A busy tone indicates that the party you called is not available. Try your call again later. A fast-busy tone indicates that you dialed an invalid number.
- After power up, if the function button continues to blink slowly, the Cisco ATA cannot locate the DHCP server. Check the Ethernet connection and the availability of the DHCP server.
- The DHCP server should show an incoming request from the MAC address listed on the product label or given by the voice prompt.
- If you place a call to another IP telephone, detect ringing, and the called party answers but you cannot detect the speaker's voice, verify that the Cisco ATA and the other IP telephone support at least one common audio codec: G.711A-law, G.711 μ -law, G.723.1, or G.729A.

Symptoms and Actions

Symptom Parameters with values set by using the web server interface or voice configuration menu revert to their original settings.

Possible Cause You are using TFTP for configuration (the UseTFTP parameter is set to 1). The Cisco ATA has a cached version of its configuration file stored in its flash memory; this is what displayed or played through the web server interface or voice configuration menu. If UseTFTP is set to 1, then the cached value of the Cisco ATA configuration file is synchronized with its configuration file located at the TFTP server. This synchronization update of the cached value occurs at approximate intervals determined by the CFGInterval parameter value as well as when the Cisco ATA powers up or resets.

Recommended Action If you are using TFTP for configuration, do not use the web server interface or voice configuration menu to modify the value of the Cisco ATA configuration file. Use the web server interface or voice configuration menu only to initially configure the Cisco ATA to contact the TFTP server for the Cisco ATA configuration file.

Symptom Unable to access the web configuration page.

Possible Cause Software versions earlier than 2.0 require the web configuration page to be enabled using option 80# on the voice configuration menu.

Recommended Action Upgrade the software.

Symptom The Cisco ATA does not seem to be configured using the TFTP server.

Possible Cause The TFTP server address is not properly set.

Recommended Action Ensure that the TftpURL is correctly set to the URL or IP address of the TFTP server that is hosting the configuration file for the Cisco ATA. If you are using DHCP to supply the TFTP server IP address, make sure that the TftpURL is set to 0. Also, unless the TftpURL is an IP address, be sure that the DNS1IP and DNS2IP values are properly set to resolve the TftpURL supplied by DHCP.

Symptom The Cisco ATA contacts the TFTP server more often than specified in the CfgInterval parameter.

Possible Cause The ToConfig parameter is not set to 0.

Recommended Action After the Cisco ATA has a valid configuration file, the ToConfig parameter must be set to 0. If it is not set to 0, the Cisco ATA will attempt to contact the TFTP server too frequently.

Symptom Cannot place call.

Possible Cause Equipment failure on the network.

Recommended Action Replace defective network equipment.

Possible Cause Recipient has not registered the IP phone.

Recommended Action Register the IP phone.

Possible Cause Ethernet cable is not connected.

Recommended Action Make sure that all cables are connected.

Symptom Fast busy tone.

Possible Cause Authentication credential is incorrect.

Recommended Action Verify authentication credential, and revise if necessary.

Possible Cause Recipient has not registered the IP phone.

Recommended Action Register the IP phone.

Possible Cause No common codec between the Cisco ATA and remote end.

Recommended Action Change codec to one that is common with the Cisco ATA and the remote end.

Possible Cause Recipient is in a call with call waiting disabled.

Recommended Action Attempt to place the call at a later time.

Installation and Upgrade Issues



Note

The following issues apply to the manual image-upgrade process only. Image upgrades must be performed separately.

Symptom The red LED is flashing slowly on the function button.

Possible Cause The Cisco ATA is trying to obtain the DHCP address or the software image is being upgraded.

Possible Cause The Ethernet cable is unplugged.

Recommended Action Plug in the Ethernet cable.

Symptom Voice prompt returns *Upgrade not available* message. This can only occur if you are using the executable-file upgrade method.

Possible Cause You are attempting to upgrade to the existing version.

Recommended Action You do not need to upgrade.

Symptom Voice prompt returns *Upgrade failed* message. This can only occur if you are using the executable-file upgrade method.

Possible Cause You have entered an incorrect IP address.

Recommended Action Enter the correct IP address.

Possible Cause Software image is corrupted.

Recommended Action Upgrade software image.

Symptom No dial tone.

Possible Cause No user ID was entered.

Recommended Action Enter the correct user ID.

Symptom Incorrect dial tone.

Possible Cause Check the web interface for your DialTone setting. The default is *U.S.*

Recommended Action Set the correct country DialTone value.

Debugging

The MS-DOS Windows-based debugging program tool, `preserv.exe`, is included in every software upgrade package. The tool is also available from Cisco TAC. The `prserv` program is used in conjunction with the `NPrintf` configuration parameter. This file serves as an upgrade server that captures debug information sent by the Cisco ATA software to your PC's IP address and port number. This debug file (`prserv.exe`) compiles the information from the Cisco ATA into a readable log file. To capture this "NPRINTF" information, you must know the IP address of the PC using the `prserv` program, illustrated as follows:

IP address.port

where *IP address* is the IP address of your PC, and *port* is 9001. If another process on your PC already uses port 9001, you may use some other value (legal values are from 1024 to 65535). If no port value is entered, the default value is 9001.

To enter the IP address and port number, use voice menu option 81#. You must enter the IP address and port number in alphanumeric format, which requires entering the * key after every character entered. To enter the "." character, you must enter the sequence 1 1#.

For example, for a computer with the IP address 172.28.78.90 and port number 9001 (172.28.78.90.9001), you would enter the following on your telephone handset:

1* 7* 2* 1 1* 2* 8* 1 1* 7* 8* 1 1* 9* 0* 1 1* 9* 0* 0* 1* *

To operate the debug capture program *prserv.exe*, place the *prserv* program in a folder on your PC; then at the DOS prompt of the folder where you have placed it, enter:

```
C:> prserv port.log
```

where *port* is the port number you have selected. If you do not enter *port.log*, debug information still appears on your screen, but it is not saved to a log file.

After you finish capturing debug information, you can stop the log program by entering Ctrl-C at the DOS prompt. The log file created is named *port.log*. If you restart the process without changing the name of the log file, any new debug information is appended to the end of the original file.

Contact Cisco TAC for more information. See the “[Obtaining Technical Assistance](#)” section on page xvi for instructions.

You should also have access to a sniffer or LAN analyzer.



Caution

For security reasons, Cisco recommends that you do not use the web interface over the public network. Disable the web interface, using the `UIPassword` parameter, before the Cisco ATA is moved from the service provider site.

Frequently Asked Questions

Q. Does the Cisco ATA support power denial when disconnecting a call?

A. No. However, the Cisco ATA can be configured to reverse the voltage polarity when a call is connected or disconnected. See the “[Polarity](#)” section on page 5-27.

Q. How can I recover the box if I forgot the password?

A. There are two important passwords. One is the `UIPassword`, which protects access to the Cisco ATA Web Server interface; the other is the `EncryptKey`, which protects access to the TFTP configuration file. If you forget the value for the `UIPassword` but still have access to TFTP-stored configuration file, you can modify the `UIPassword` via TFTP. However, if you are not configuring the Cisco ATA via TFTP, or if you forget both passwords, the only way you can recover the box is to have physical access to the box and do a factory reset on the box via the box voice configuration menu interface (Access Code: `FACTRESET#`). See the “[Resetting the Cisco ATA to Factory Default Values](#)” section on page 3-18.

Q. What is the maximum distance from which I can drive an analog device with a Cisco ATA?

A. [Table 9-1](#) provides maximum distances for this question.

Table 9-1 Ring Loads and Distances

Ring Load (per RJ-11 FXS Port)	Maximum Distance
5 REN	200 feet (61 m)
4 REN	1000 feet (305 m)
3 REN	1700 feet (518 m)

Table 9-1 Ring Loads and Distances (continued)

Ring Load (per RJ-11 FXS Port)	Maximum Distance
2 REN	2500 feet (762 m)
1 REN	3200 feet (975 m)

The Cisco ATA, however, is not designed for long distance. The simple test is to determine if the phone or phones that are connected to the Cisco ATA work properly in their environment.

Pay attention to the following questions:

1. Can the Cisco ATA detect on/off hook from the analog phone?
2. Can the Cisco ATA detect the DTMF signal?
3. Can you dial the remote side?
4. Can the Cisco ATA ring the phone?
5. Is voice quality satisfactory?

If you answer no to any of the above questions, you may have a loop impedance greater than 400 ohm. In this case, perform the following procedure.

Procedure

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- Step 1** Increase the wire gauge to reduce the impedance until the Cisco ATA can detect on/off hook and DTMF signal.
- Step 2** If the Cisco ATA cannot ring the phone, find a phone that can ring at a lower ringing voltage. Also, try to use only one phone instead of multiple phones in parallel.
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Q. Does the Cisco ATA support an overhead paging system, and, if so, does the Cisco ATA support power denial?

A. The Cisco ATA supports an overhead paging system *only* if that system does not require power denial (battery removal) when a call is disconnected. However, the Cisco ATA can be configured to reverse the voltage polarity when a call is connected or disconnected. For more information, see the “Polarity” section on page 5-27.

Contacting TAC

Qualified customers who need to contact the Cisco Technical Assistance Center (TAC) must provide the following information:

- Product codes.
- Software version number—To identify the software revision number, use the configuration menu number **123**.
- Hardware version number—To identify the hardware revision number, use the serial number and MAC address found on the label on the bottom of the Cisco ATA. The MAC address can also be obtained using voice menu option 24.
- Software build information—To identify the software build information, use the voice menu option **123123**.
- Cisco ATA serial number.

See the [“Obtaining Technical Assistance”](#) section on page xvi for instructions on contacting TAC.

**Note**

Customers who obtained their equipment through service providers, independent dealers and other third parties must contact their equipment provider for technical assistance.
