



Troubleshooting

This chapter provides troubleshooting procedures for basic problems with the access point. For the most up-to-date, detailed troubleshooting information, refer to the Cisco TAC website at <http://www.cisco.com/tac>. Select **Wireless LAN** under Top Issues.

Sections in this chapter include:

- [Checking the Top Panel Indicators](#)
- [Checking Basic Settings](#)
- [Resetting to the Default Configuration](#)

Checking the Top Panel Indicators

If your access point is not communicating, check the three indicators on the top panel. You can use them to quickly assess the unit's status. [Figure 4-1](#) and [Figure 4-2](#) show the indicators, and [Table 4-1](#) lists the meanings of the indicator signals.

Figure 4-1 Indicators on the 340 Series and 350 Series Access Point

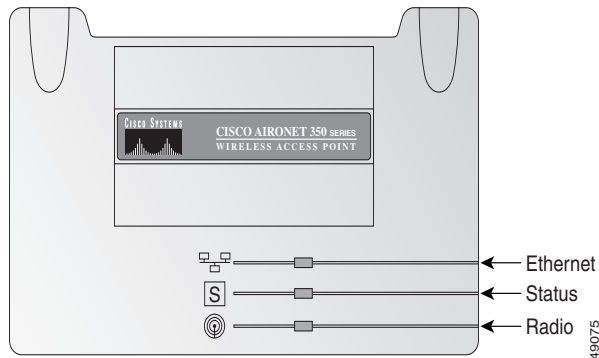
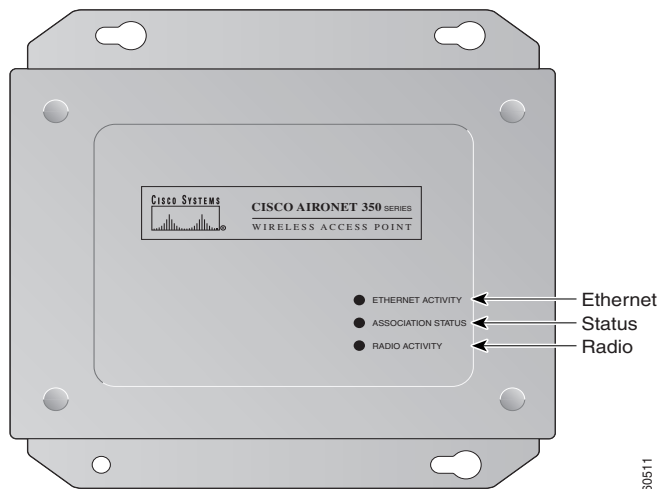


Figure 4-2 Indicators on 350 Series Metal Case Access Points



The indicators signals have the following meanings:

- The Ethernet indicator signals traffic on the wired LAN, or Ethernet infrastructure. This indicator blinks green when a packet is received or transmitted over the Ethernet infrastructure.
- The status indicator signals operational status. Blinking green indicates that the access point is operating normally but is not associated with any wireless devices. Steady green indicates that the access point is associated with a wireless client.

For repeater access points, blinking 50% on, 50% off indicates the repeater is not associated with the root access point; blinking 7/8 on, 1/8 off indicates that the repeater is associated with the root access point but no client devices are associated with the repeater; steady green indicates that the repeater is associated with the root access point and client devices are associated with the repeater.

- The radio indicator blinks green to indicate radio traffic activity. The light is normally off, but it blinks green whenever a packet is received or transmitted over the access point's radio.

Table 4-1 Top Panel Indicator Signals

Message type	Ethernet indicator	Status indicator	Radio indicator	Meaning
Association status	–	Steady green	–	At least one wireless client device is associated with the unit.
	–	Blinking green	–	No client devices are associated; check the unit's SSID and WEP settings.
Operational	–	Steady green	Blinking green	Transmitting/receiving radio packets
	Blinking green	Steady green	–	Transmitting/receiving packets.
	–	Steady green	Blinking amber	Maximum retries or buffer full occurred on the radio.
Error/warning	Blinking amber	Steady green	–	Transmit/receive errors.
	Blinking red	–	–	Ethernet cable is disconnected (340 series only).
	–	Blinking amber	–	General warning
Failure	Steady red	Steady red	Steady red	Firmware failure; disconnect power from the unit and reapply power.
Firmware upgrade	–	Steady red	–	Unit is loading new firmware.

Checking Basic Settings

Mismatched basic settings are the most common causes of lost connectivity with wireless clients. If the access point does not communicate with client devices, check the following settings.

SSID

Wireless clients attempting to associate with the access point must use the same SSID as the access point. The default SSID is *tsunami*.

WEP Keys

The WEP key you use to transmit data must be set up exactly the same on your access point and any wireless devices with which it associates. For example, if you set WEP Key 3 on your wireless LAN adapter to 0987654321 and select it as the transmit key, you must also set WEP Key 3 on the access point to exactly the same value. The access point does not need to use Key 3 as its transmit key, however.

Refer to the “Security” section in Chapter 3 of the *Cisco Aironet Access Point Software Configuration Guide* for instructions on setting the access point's WEP keys.

Resetting to the Default Configuration

If you forget the password that allows you to configure the access point, you might need to completely reset the configuration. Follow the steps below to delete the current configuration and return all access point settings to the factory defaults.

Steps for Firmware Versions 11.07 or Later

Follow the steps in this section if your access point is running firmware version 11.07 or later.


Note

The following steps reset *all* configuration settings to factory defaults, including passwords, WEP keys, the IP address, and the SSID. If you do not need to reset the entire configuration, use the Configuration Reset buttons on the System Configuration Setup page in the web-browser interface. Consult the *Cisco Aironet Access Point Software Configuration Guide* for more information on the reset buttons in the web-browser interface.

Step 1 Use a straight-through cable with 9-pin male to 9-pin female connectors to connect the COM 1 or COM 2 port on your computer to the RS-232 port on the access point.

Step 2 Open a terminal-emulation program on your computer.


Note

These instructions describe HyperTerminal; other programs are similar.

Step 3 In the Connection Description window, enter a name and select an icon for the connection and click **OK**.

Step 4 In the Connect To window, select the port to which the cable is connected and click **OK**.

Step 5 In the Port Settings window, enter the following settings:

- **9600** baud,
- **8** data bits,
- **No** parity,
- **1** stop bit, and
- **Xon/Xoff** flow control

Step 6 Click **OK**, and press **Enter**.

Step 7 When the Summary Status screen appears, reboot the access point by unplugging the power connector and then plugging it back in.

Step 8 When the access point reboots and the Summary Status screen reappears, type **:resetall**, and press **Enter**.

Step 9 Type **yes**, and press **Enter** to confirm the command.


Note

The **resetall** command is valid for only 2 minutes immediately after the access point reboots. If you do not enter and confirm the resetall command during that 2 minutes, reboot the access point again.

- Step 10** After the access point reboots and the Express Setup screen appears, reconfigure the access point by using the terminal emulator or an Internet browser.
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Steps for Firmware Versions 11.06 or Earlier

Follow the steps in this section if your access point is running firmware version 11.06 or earlier.

**Note**

The following steps reset *all* configuration settings to factory defaults, including passwords, WEP keys, the IP address, and the SSID. If you do not need to reset the entire configuration, use the Configuration Reset buttons on the System Configuration Setup page in the web-browser interface. Consult the *Cisco Aironet Access Point Software Configuration Guide* for more information on the reset buttons in the web-browser interface.

Determining the Boot-Block Version

The steps you follow to reconfigure the access point depend on the version of the access point's boot block. Follow these steps to find out which boot block version is on your access point:

- Step 1** Open a Telnet session to the access point.

**Note**

You can also use these instructions while communicating with the access point through the console port or with an SNMP manager. Skip to [Step 3](#) if you use an SNMP manager.

- Step 2** Type **:cmd** and press **Enter** to switch from text-browser mode to SNMP mode.
- Step 3** Type **bootblockVersion** and press **Enter**. Text appears with information about the system. If your access point's boot block version is 1.01, the text might look like this:
- ```
OID: iso.org.dod.internet.private.enterprises.aironet.awcVx.awcSystem.
bootblockVersion
Value [RO]: 1.01
```
- Step 4** Type **exit** and press **Enter** to return to text-browser mode.
- Step 5** If your boot block version is 1.01 or earlier, follow the instructions in the “[Reconfiguration Steps for Boot Block Version 1.01 or Earlier](#)” section on page 4-6. If your boot block version is 1.02 or later, follow the instructions in the “[Reconfiguration Steps for Boot Block Version 1.02 or Later](#)” section on page 4-7.
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## Reconfiguration Steps for Boot Block Version 1.01 or Earlier

Follow these steps to reconfigure your access point if the boot block version on your access point is version 1.01 or earlier and the firmware version on your access point is 11.06 or earlier. To find which boot block version is on your access point, follow the steps in the [“Determining the Boot-Block Version” section on page 4-5](#).



### Caution

Failure to follow these instructions correctly can result in a nonoperational access point that must be returned to the factory. If your access point stops working after you attempt this procedure, contact Cisco TAC for assistance.

**Step 1** Use a straight-through cable with 9-pin male to 9-pin female connectors to connect the COM 1 or COM 2 port on your computer to the RS-232 port on the access point.

**Step 2** Open a terminal-emulation program on your computer.



**Note** These instructions describe HyperTerminal; other programs are similar.

**Step 3** In the Connection Description window, enter a name and select an icon for the connection and click **OK**.

**Step 4** In the Connect To window, select the port to which the cable is connected and click **OK**.

**Step 5** In the Port Settings window, make the following settings: **9600** baud, **8** data bits, **No** parity, **1** stop bit, and **Xon/Xoff** flow control.

**Step 6** Click **OK** and press **Enter** three times.

**Step 7** When the Summary Status screen appears, reboot the access point by unplugging the power connector and then plugging it back in, or by pressing **Ctrl-X**.

**Step 8** When the message “Type <esc> within 5 seconds for menu” appears, press **Esc**.

**Step 9** Write down the list of files for future reference.



### Caution

Perform the next six steps carefully to avoid accidentally deleting the installation key files or the firmware files. You must carefully note the file selection letters, because they change during the following steps. If you forget to copy the access point’s installation key file to DRAM in [Step 10](#), or if you do not copy it back to configuration memory in [Step 13](#), your access point will stop functioning.

**Step 10** Copy the access point’s installation key file to the access point’s DRAM by pressing **c** to select **Copy file**, then **1** to select **DRAM**, then the selection letter for the file called *AP Installation Key*.

**Step 11** If the list of configuration files contains a file called *VAR Installation Key*, copy that file to DRAM along with the AP Installation Key. Copy the VAR installation key file to DRAM by pressing **c** to select **Copy file**, then **1** to select **DRAM**, then the selection letter for the file called *VAR Installation Key*.



### Caution

Make sure you select the Configuration memory bank for formatting in [Step 12](#). If you accidentally format a different memory bank your access point will stop functioning.

**Step 12** Reformat the access point’s configuration memory bank by pressing **!** to select **FORMAT memory bank**, then **2** to select **Config**, then upper-case **Y** to confirm the **FORMAT** command.

- Step 13** Copy the installation key back to the configuration memory bank by pressing **c** to select **Copy file**, then **2** to select **Config**, then the selection letter for the AP Installation Key.
- Step 14** If you copied a VAR installation key to DRAM in [Step 11](#), copy it back to the configuration memory bank by pressing **c** to select **Copy file**, then **2** to select **Config**, then the selection letter for the file *VAR Installation Key*. If the access point does not have a VAR installation key file, skip to [Step 15](#).
- Step 15** Run the access point firmware by pressing **r** to select **Run**, then the selection letter for the firmware file which is displayed. The message “Inflating [firmware file name]” appears while the access point starts the firmware.
- Step 16** When the Express Setup screen appears, begin reconfiguring the access point using the terminal emulator or an Internet browser.

## Reconfiguration Steps for Boot Block Version 1.02 or Later

Follow these steps to reconfigure your access point if the boot block version on your access point is version 1.02 or later and the firmware version on your access point is 11.06 or earlier. To find which boot block version is on your access point, follow the steps in the [“Determining the Boot-Block Version” section on page 4-5](#).



### Caution

Failure to follow these instructions correctly can result in a nonoperational access point that must be returned to the factory. If your access point stops working after you attempt this procedure, contact Cisco TAC for assistance.

- Step 1** Use a straight-through cable with 9-pin male to 9-pin female connectors to connect the COM 1 or COM 2 port on your computer to the RS-232 port on the access point.
- Step 2** Open a terminal-emulation program on your computer.



### Note

These instructions describe HyperTerminal; other programs are similar.

- Step 3** In the Connection Description window, enter a name and select an icon for the connection and click **OK**.
- Step 4** In the Connect To window, select the port to which the cable is connected and click **OK**.
- Step 5** In the Port Settings window, make the following settings: **9600** baud, **8** data bits, **No** parity, **1** stop bit, and **Xon/Xoff** flow control.
- Step 6** Click **OK** and press **Enter**.
- Step 7** When the Summary Status screen appears, reboot the access point by pressing **Ctrl-X** or by unplugging the power connector and then plugging it back in.
- Step 8** When the memory files are listed under the heading “Memory:File,” press **Ctrl-W** within 5 seconds to reach the boot block menu.

**Step 9** Write down the list of files for future reference.

**Caution**

Perform the next six steps carefully to avoid accidentally deleting the installation key files or the firmware files. You must carefully note the file selection letters, because they change during the following steps. If you forget to copy the access point's installation key file to DRAM in [Step 10](#), or if you do not copy it back to configuration memory in [Step 13](#), your access point will stop functioning.

**Step 10** Copy the access point's AP Installation Key to the access point's DRAM by pressing **c** to select **Copy file**, then **1** to select **DRAM**, then the selection letter for the file *AP Installation Key*.

**Step 11** If the list of configuration files contains a file called *VAR Installation Key*, you must copy that file to DRAM along with the AP Installation Key file. If the access point does not have a VAR installation key file, skip to [Step 12](#).

**Caution**

If you forget to copy the access point's VAR installation key file to DRAM in [Step 11](#), or if you do not copy it back to configuration memory in [Step 14](#), your access point will stop functioning.

Copy the VAR Installation Key to DRAM by pressing **c** to select **Copy file**, then **1** to select **DRAM**, then the selection letter for the file *VAR Installation Key*.

**Step 12** Reformat the access point's configuration memory bank by pressing **Ctrl-Z** to reach the reformat menu. When the menu appears, press **!** to select **FORMAT memory bank**, then **2** to select **Config**, then upper-case **Y** to confirm the **FORMAT** command.

**Caution**

Make sure you select the Configuration memory bank for formatting. If you accidentally format a different memory bank your access point will stop functioning.

**Step 13** Copy the installation key back to the configuration memory bank by pressing **c** to select **Copy file**, then **2** to select **Config**, then the selection letter for the file *AP Installation Key*.

**Step 14** If you copied a VAR installation key to DRAM in [Step 11](#), copy it back to the configuration memory bank by pressing **c** to select **Copy file**, then **2** to select **Config**, then the selection letter for the file *VAR Installation Key*. If the access point does not have a VAR installation key file, skip to [Step 15](#).

**Step 15** Run the access point firmware by pressing **r** to select **Run**, then the selection letter for the firmware file that is displayed. The message "Inflating [firmware file name]" appears while the access point starts the firmware.

**Step 16** When the Express Setup screen appears, begin reconfiguring the access point using the terminal emulator or an Internet browser.