CHAPTER 4

Troubleshooting the ACE Hardware

If your Cisco 4710 Application Control Engine (ACE) appliance is not working as expected, begin troubleshooting using the procedures in this chapter. This chapter guides you through some initial checks and procedures that can solve basic ACE problems.

This chapter contains the following major sections:

Checking the Basics

To solve some basic ACE problems, follow these steps:

Step 1 Check if an alert message (or any other system message) was issued by the ACE software. All ACE system messages are listed in the *Cisco 4700 Series Application Control Engine Appliance System Message Guide*.

- If a message was issued, check the component named in the alert message.
- If a message was not issued, go to Step 2.

Step 2 Visually inspect the ACE for damage.

- If the ACE is wet or damaged, see the "Obtaining Documentation, Obtaining Support, and Security Guidelines" section and then contact TAC for instructions.

  Note Liquid spills, splashes, and excessive humidity can cause damage to the ACE.

  If the ACE was dropped or damaged while being moved, you should check it to see if it functions properly. If an external device attached to the ACE is dropped or damaged, see the "Obtaining Documentation, Obtaining Support, and Security Guidelines" section and then contact TAC for instructions.

- If the ACE is not damaged or wet, go to Step 3.

Step 3 Perform the steps in the "Checking Connections" section and then check if the problem was resolved.

- If the problem was resolved, the power to the ACE was faulty, or the connections were loose. You have fixed the problem.
- If the problem was not resolved, go to Step 4.

Step 4 Check that the ACE completed its boot routine.

- If the ACE completed its boot routine, then the ACE configuration information was correct.
- If the ACE did not complete its boot routine, see the "Obtaining Documentation, Obtaining Support, and Security Guidelines" section and then contact TAC.

Checking Connections

Loose, incorrect, or improperly connected cables are the most common source of problems for the ACE or other external equipment. A quick check of all the cable connections can solve most problems. See Chapter 1, Product Overview, for the location of the front and back panel controls and connections on the ACE.

To check all the connections, follow these steps:

Step 1 Power down the ACE. Disconnect all the power cables from their electrical outlets.

Step 2 If the ACE is connected to a power strip or power distribution unit, turn the power strip off and then on again.

Step 3 Check that the power strip is receiving power.

- If the power strip is receiveing power, go to Step 5.
- If the power strip is not receiveing power, go to Step 4.

Step 4 Plug the power strip into another electrical outlet, and check that the power strip is receiving power.

- If the power strip is receiving power, the original electrical outlet probably does not function. Use a different electrical outlet.
- If the power strip is not receiving power, go to Step 5.

Step 5 Connect a known working ACE directly to the electrical outlet, and check if the ACE is receiving power.

- If the ACE is receiving power, the power strip is probably not functioning properly. Use another power strip.
- If the ACE is not receiving power, go to Step 6.

Step 6 Reconnect the ACE to the electrical outlet or power strip, and make sure that all connections fit tightly together. Ensure that the Ethernet and Console cables are correct for use with the ACE. (See Chapter 1, Product Overview.)

Step 7 Power up the ACE, and check if the problem has been resolved.

- If the problem was resolved, the connections were loose. You have fixed the problem.
- If the problem was not resolved, see the "Obtaining Documentation, Obtaining Support, and Security Guidelines" section and then contact TAC.