

Perform Diagnostic Tests from the LCD Panel of a FirePOWER Appliance



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Introduction

This document describes how to run diagnostic tests on the Cisco FirePOWER 7000 and 8000 Series appliances from the LCD panel.

Note: The Cisco FirePOWER 7000 and 8000 Series appliances have an LCD panel that allows you to view various information of the appliance. You can also configure some settings via the LCD panel instead of the web User Interface (UI).

Background Information

This section describes the LCD panel components and some important considerations before you begin the diagnostic tests.

LCD Panel Components

The LCD panel has these components:

- **Display** The display contains two lines of text and a multi-function key map. The key map indicates the actions that you can perform with each multi-function key.
- **Multi-function keys** There are four multi-function keys (buttons) on the LCD panel that allow you to view system information and complete basic configuration tasks, which vary dependent upon the LCD panel mode:
 - ◆ The left two buttons are used in order to navigate up and down in a list.
 - ◆ The right two buttons are used in order to select one of the two items that are displayed on the panel.

Tip: Refer to the FireSIGHT Installation Guide, Version 5.4.1 in order to learn more about the key map.

This image illustrates the LCD panel display and buttons:



Important Considerations

Before you run the diagnostic tests, ensure that you consider this important information:

- The device must be taken out of the production network before you run the diagnostic tests.
- When you run the diagnostic tests, traffic will be interrupted. Cisco recommends that you perform the diagnostic tests during a maintenance window.
- In order for the loopback test to run as a part of the diagnostic tests, you must ensure that the cable connections are configured properly between the various ports, as described in the next section.

Loopback Test Preparation

If you plan to include the loopback test as a part of the diagnostic tests, you must use one short Ethernet cable for every two ports on the device.

For example, on a 3D7120 Series device with eight ports, connect the cables like this:

- Port 1 to Port 3
- Port 2 to Port 4
- Port 5 to Port 7
- Port 6 to Port 8

On 8000 Series devices, the cable connections depend upon the netmods that are installed. For 4–port netmods, both copper and fiber, connect the cables on each netmod like this:

- Port 1 to Port 3
- Port 2 to Port 4

Stacked netmods must have Port 1 and Port 2 connected to each other. If a system uses 2–port netmods of the same type (Long Reach (LR) or Short Reach (SR)), the netmods must be daisy–chained to each other. For example, Port 2 of one netmod must be connected to Port 1 of the next netmod, and must loop back to the first netmod.

Caution: Do not mix LR and SR netmods. If a system uses both types of netmod, they must be on two separate chains.

Run Diagnostic Tests from the LCD Panel

Note: Each diagnostic test takes approximately 15 minutes to complete. The system requires a reboot after the tests are complete.

Complete these steps in order to run the diagnostic tests:

1. Connect the Ethernet cables as described in the previous section.
2. Press any LCD panel button in order to begin.
3. Select *System Status*.
4. Navigate to and select *Diagnostics*.
5. Select *Enter Combination*.
6. Complete the actions that are indicated on the LCD panel, and then press and hold the button that corresponds to the flashing symbol for five seconds.

Note: You must press and hold the button for at least five seconds. You are then prompted to press three more buttons that correspond to the flashing symbol. This process ensures that the LCD diagnostic tests are not run by mistake.

7. A warning message appears. After the warning message disappears, use the top-left button in order to select *Accept: Run diags*.

Note: At this point, the system is prepared to run the diagnostic tests. In order to return the FirePOWER appliance to normal operation, the device must be rebooted.

8. Select the test that you want to perform (you should perform both tests):

- ◆ *Media Diags*
- ◆ *NFE0 Diags*

The device then runs the selected diagnostic test(s).

9. If all of the tests pass, then the LCD display shows *Media DIAGS PASSED* or *NFE DIAGS PASSED*. Otherwise, the screen displays a list of tests that failed, with *Exit* shown at the bottom of the screen. If any of the tests have failed, record them and select *Exit*.

10. Reboot the device.