Express Setup

You access the switch module via the host CGR 2010 router. For more information, see Accessing the Switch Module, page 4-2.

To exchange and monitor control messages between the switch module and the router, a Router Blade Configuration Protocol (RBCP) stack operates concurrently on active IOS sessions running on both the host router and the switch module.

You should use Express Setup to enter the initial IP information. You can then access the switch module through the IP address for further configuration.

This chapter contains the following topics:

Note To use the CLI-based initial setup program, see Appendix A, "*Creating an Initial Configuration with the CLI Setup Program,*" in the *Cisco Connected Grid Ethernet Switch Module Interface Card Software Configuration Guide*.

System Requirements

You need the following software and cables to run Express Setup:

- PC with Windows 2000, XP, Vista, Windows Server 2003, or Windows 7
- Web browser (Internet Explorer 6.0, 7.0, or Firefox 1.5, 2.0, or later) with JavaScript enabled
- Straight-through or crossover Category 5 or Category 6 cable

Express Setup

Follow these steps to start Express Setup:

Step 1 Disable any pop-up blockers or proxy settings on your web browser, and any wireless client running on your computer.

Step 2 Verify that no device is connected to the switch module.

Step 3 Temporarily configure your computer to use DHCP, if it has a static IP address. The switch module acts as a DHCP server.

Tip Write down the static IP address, as you need this address in a later step.

Step 4 Power on the CGR 2010 router. Once the host router is powered up, the router automatically powers up the switch model.

For more information, see "Powering Up the Router" in Chapter 4, "Configuring the Router," in the *Cisco Connected Grid Routers 2010 Hardware Installation Guide*.

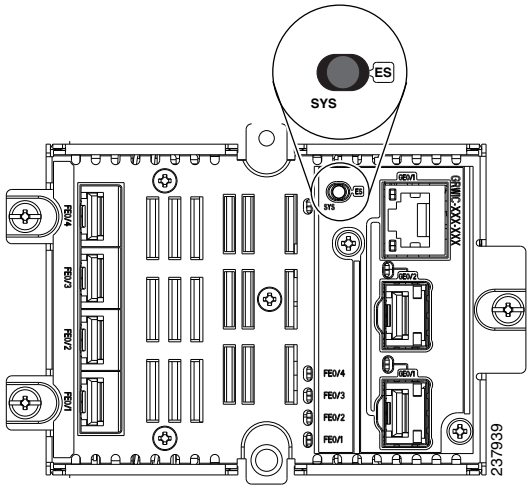
Once the switch module powers on, it starts the Power-On Self-Test (POST), which can take up to two minutes.

- During POST, the System LED blinks green and then port LEDs turn green
- When POST is complete, the System LED remains green and the other LEDs turn off

Note If the System LED blinks green, does not turn green or turns amber, the switch module failed POST. Contact your Cisco representative or reseller.

Step 5 Press the recessed **Express Setup** button with a simple tool, such as a paper clip. You might need to press the button for 3 seconds. When you press the button, the switch module 10/100 Ethernet port LED blinks green.

Figure 3-1 Recessed Express Setup Button



Note If a switch module port LED does not blink green, repeat Steps 1 to 5. You can also use the CLI setup program described in Appendix A, "Creating an Initial Configuration with the CLI Setup Program," in the *Cisco 2010 Connected Grid Ethernet Switch Module Interface Card Software Configuration Guide*.

Step 6 Select one of the following:

- For the *Copper Model* (GRWIC-D-ES-2S-8PC), connect a Cat 5 or 6 cable to the blinking 10/100BASE-T port, and the plug the other end to the Ethernet port on your computer
- For the *SFP Fiber Model* (GRWIC-D-ES-6S), connect a Category 5 or Category 6 cable to the 100/1000BASE-T port of the dual-purpose port (GE0/1), and then plug the other end to the Ethernet plug on your computer

Wait until the port LEDs on the switch module and your computer are either green or blinking green (indicates successful connection).

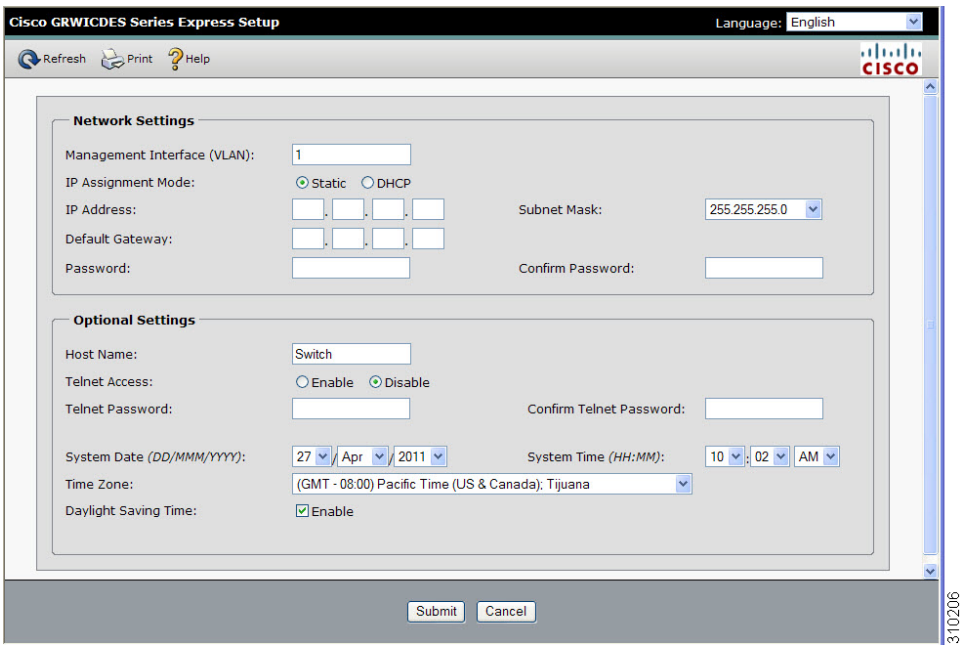
Tip If the port LEDs are not green after 30 seconds, verify you are using Cat 5 or 6 cable and that the cable is not damaged. Make sure the other devices are turned on. You can also verify the connection by pinging IP address 169.250.0.1.

Follow these steps to configure the switch module:

Step 1 Open a web browser and enter the switch module IP address.

Step 2 Enter *cisco* as the default username and password.

Figure 3-2 Express Setup Window



Tip If you cannot access Express Setup, verify that all pop-up blockers or proxy settings are disabled, and that any wireless client on your computer are disabled.

Step 3 Enter the Network Settings values:

Field	Description
Management Interface (VLAN ID)	Use the default setting of **1**. **Note** Enter a new VLAN ID only if you want to change the management interface for the switch module. The VLAN ID range is 1 to 1001.
IP Assignment Mode	Use the default setting of **Static**, which means that the switch module keeps the IP address. **Note** Use the DHCP setting when you want the switch module to automatically obtain an IP address from the DHCP server.
IP Address	Enter the IP address of the switch module
Subnet Mask	Select a subnet mask from the drop-down
Default Gateway	Enter the IP address for the default gateway (router)
Switch Password	Enter your password. The password can be from 1 to 25 alphanumeric characters, can start with a number, is case sensitive, allows embedded spaces, but does not allow spaces at the beginning or end.
Confirm Switch Password	Enter your password again **Note** You must change the password from the default password *cisco*.

Step 4 Enter the Optional Settings now, or enter them later using the Device Manager interface.

You can enter other administrative settings in the Express Setup window. For example, the optional administrative settings identify and synchronize the switch module for enhanced management. NTP synchronizes the switch module with the network clock. You can also manually set the system clock settings.

Step 5 Click **Submit** to save your changes.

The switch module is now configured and exits Express Setup. The browser displays a warning message and attempts to connect with the earlier switch module IP address. Typically, connectivity between the computer and the switch module is lost because the configured switch module IP address is in a different subnet for the computer IP address.

Step 6 Disconnect the switch module from the computer, and install the switch module in your network (see Installation, page 2-2).

Step 7 If you have not changed your IP address, skip this step.

If you changed your IP address in the previous set of steps, change it to the previously configured IP address (see Step 3).

Step 8 Display the Device Manager:

a. Open a web browser and enter the switch module IP address.

b. Enter the username and password and then click **Enter**.

For more information on configuring and managing the switch module, see Accessing the Switch Module, page 4-2.

Note If the Device Manager does not display, check the following:

- Confirm that the LED for the switch module port connected to your network is green

- Confirm that the computer that you are using to access the switch module has network connectivity by connecting to a web server in your network. If there is no network connection, troubleshoot the network settings on your computer.
- Verify that the switch module IP address in the browser is correct. If it is correct, the port LED is green and the computer has network connectivity. Continue troubleshooting by disconnecting and then reconnecting the switch module to your computer. Configure a static IP address on the computer that is in the same subnet as the switch module IP address.

When the LED on the switch module port that connects to the computer is green, open a web browser and enter the switch module IP address to display the Device Manager. When the Device Manager displays, you can continue with configuration.

Troubleshooting Express Setup

If you are still have problems running Express Setup, perform the checks in Table 3-1.

Table 3-1 Troubleshooting Express Setup

Problem	Resolution
POST did not complete before you started Express Setup	Verify that only the System and Port LEDs are green before you press the Express Setup button. **Note** POST errors are usually fatal. Contact your Cisco technical support representative if your switch module fails POST.
Express Setup button was pressed before POST finished	Wait until POST completes, and then restart the switch module. Wait until POST completes again, and then confirm that the System and Port LEDs are green. Press the **Express Setup** button.
Computer has a static IP address	Change the settings on your computer to temporarily use DHCP
Ethernet is connected to the console port	Disconnect the cable from the Console port on the switch module. Connect the cable to a blinking 10/100 Ethernet port on the switch module. Wait 30 seconds, and then open a web browser. **Note** The Console port is outlined in blue, and the Ethernet ports are outlined in yellow.
Cannot open a web browser to start Express Setup	Wait 30 seconds before opening a web browser on the computer

Resetting the Switch Module

Caution Resetting the switch module deletes the configuration and restarts the switch module with default settings.

Step 1 Press and hold the **Express Setup** button for about 10 seconds. The switch module reboots. The system LED turns green after the switch module completes rebooting.

Step 2 Press the **Express Setup** button again for three seconds. The switch module 10/100 Ethernet port LED blinks green.

Step 3 Follow the steps in Express Setup, page 3-1.