



## Troubleshooting

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This chapter describes problems that could occur with the router hardware, possible causes of the problems, and steps for solving the problems. This chapter contains the following sections:

- [Before You Call Your Cisco Reseller, page 6-1](#)
- [Problems During First Startup, page 6-2](#)
- [Problems After the Router Is Running, page 6-3](#)

For more information on problems that could occur with the software, see the *Cisco 850 Series and Cisco 870 Series Access Routers Software Configuration Guide*.

### Before You Call Your Cisco Reseller

Some of the solutions in this chapter instruct you to contact your Cisco reseller. Before you contact your reseller, have the following information ready:

Type of Information	Your Information
Router model and serial number (on the back panel)	
Maintenance agreement or warranty information	
Date you received the router	
Brief description of the problem	
Brief description of the steps you have taken to resolve the problem	

# Problems During First Startup

Table 6-1 lists problems that could occur the first time you turn on the router.

**Table 6-1** Problems During First Startup

Symptom	Problem	Solutions
All LEDs, including OK LED, are off.	No power to router.	Perform the following tasks in order: <ol style="list-style-type: none"> <li>1. Make sure that the power switch is set to ON.</li> <li>2. Make sure that all connections to and from the power supply are secure.</li> <li>3. Make sure that the power outlet has power.</li> <li>4. If the problem continues, the power supply could be faulty. Contact your Cisco reseller.</li> </ol>
No connection to modem or to Ethernet switch. (WAN LNK LED is off.)	A cable-related problem: <ul style="list-style-type: none"> <li>• Improperly connected cable.</li> <li>• Damaged cable.</li> </ul>	Perform the following tasks in order: <ol style="list-style-type: none"> <li>1. Make sure that you have cabled the device correctly. Review the instructions in <a href="#">Chapter 4, “Router Cabling Procedures.”</a></li> <li>2. Make sure that the connectors at both ends of the cable are securely seated.</li> <li>3. Check whether the cable is physically damaged. If it is damaged, order another cable from Cisco, or replace it with a similar cable.</li> </ol>
No connection to Ethernet devices. (ETHERNET LAN 0, ETHERNET LAN 1, ETHERNET LAN 2, and ETHERNET LAN 3 LEDs are off.)	A cable-related problem: <ul style="list-style-type: none"> <li>• Improperly connected cable.</li> <li>• Damaged cable.</li> </ul>	Perform the following tasks in order: <ol style="list-style-type: none"> <li>1. Make sure that you have cabled the device correctly. See <a href="#">Chapter 4, “Router Cabling Procedures.”</a></li> <li>2. Make sure that the connectors at both ends of the cable are securely seated.</li> <li>3. Check whether the cable is physically damaged. If it is damaged, order another cable from Cisco Systems, or replace it with a similar cable.</li> </ol>
Cannot connect to the Internet.	<ul style="list-style-type: none"> <li>• Broadband modem or external Ethernet switch is not connected or turned on.</li> <li>• There is a problem with the broadband or WAN service.</li> <li>• Router is improperly configured.</li> </ul>	<ul style="list-style-type: none"> <li>• Reconnect the broadband modem or external Ethernet switch, and make sure that it is receiving power.</li> <li>• Check with the Internet service provider or corporate network administrator to determine whether there is a problem.</li> <li>• Use the Cisco Router and Security Device Manager (SDM) software to configure the router, or configure the router using a PC that is connected to the console port.</li> </ul>
No connection to xDSL link. (The WAN LNK LED on the front panel is off for a long time.)	Wrong cable.	<ul style="list-style-type: none"> <li>• Make sure that you are using the correct cable. See <a href="#">Appendix A, “Specifications.”</a></li> </ul>

**Table 6-1** Problems During First Startup (continued)

Symptom	Problem	Solutions
No connection to xDSL link. (The WAN LNK LED on the front panel is off for a long time.)	Improperly connected cable.	<ul style="list-style-type: none"> <li>Make sure that you have connected the ADSL cable properly. See <a href="#">Chapter 4, “Router Cabling Procedures.”</a></li> <li>Make sure that the connectors at both ends of the cable are securely seated.</li> </ul>
No connection to xDSL link. (The CD LED on the front panel is off for a long time.)	Wrong cable.	<ul style="list-style-type: none"> <li>Make sure that you are using the correct cable. See <a href="#">Appendix A, “Specifications.”</a></li> </ul>
No connection to xDSL link. (The CD LED on the front panel is off for a long time.)	Improperly connected cable.	<ul style="list-style-type: none"> <li>Make sure that you have connected the ADSL cable properly. See <a href="#">Chapter 4, “Router Cabling Procedures.”</a></li> <li>Make sure that the ADSL port is connected to the correct port on the ISDN splitter.</li> <li>Make sure that the connectors at both ends of the cable are securely seated.</li> </ul>

## Problems After the Router Is Running

[Table 6-2](#) lists problems that could occur after the router has been up and running.

**Table 6-2** Problems After the Router Is Running

Symptom	Problem	Solutions
Problems with Ethernet connection. (ETHERNET LAN 0, ETHERNET LAN 1, ETHERNET LAN 2, and ETHERNET LAN 3 LEDs are off.)	A cable-related problem: <ul style="list-style-type: none"> <li>Disconnected cable.</li> <li>Damaged cable.</li> </ul>	Perform the following tasks in order: <ol style="list-style-type: none"> <li>Make sure that the connectors at both ends of the cable are secure.</li> <li>Check whether the cable is physically damaged. If it is damaged, order another cable from Cisco Systems, or replace it with a similar cable.</li> </ol>
Connection to the broadband or Ethernet line is intermittent or lost. (The WAN LNK, ADSL CD, or G.SHDSL CD LED on the front panel is off.)	A cable-related problem: <ul style="list-style-type: none"> <li>Disconnected cable.</li> <li>Damaged cable.</li> </ul>	Perform the following tasks in order: <ol style="list-style-type: none"> <li>Make sure that the connectors at both ends of the cable are secure.</li> <li>Make sure that the cable is not physically damaged. If it is damaged, order another cable from Cisco Systems, or replace it with a similar cable.</li> </ol>
Connection to the broadband or Ethernet line is intermittent or lost. (The WAN LNK, ADSL CD, or G.SHDSL CD LED on the front panel is off.)	Problem with broadband line or WAN service.	Contact your broadband line or WAN service provider to determine whether there is a problem.

**Table 6-2** Problems After the Router Is Running (continued)

Symptom	Problem	Solutions
Connection to the xDSL line is intermittent or lost. (The ADSL CD or G.SHDSL CD LED on the front panel is off.)	A cable-related problem: <ul style="list-style-type: none"> <li>• Disconnected cable.</li> <li>• Damaged cable.</li> </ul>	<ul style="list-style-type: none"> <li>• Make sure that the connectors are secure at both ends of the cable.</li> <li>• Check whether the cable is physically damaged. If it is damaged, order another cable from Cisco Systems or replace it with a similar cable.</li> </ul>
Connection to the xDSL line or WAN port is loose. (The WAN LNK LED and the ETHERNET LAN 0, ETHERNET LAN 1, ETHERNET LAN 2, or ETHERNET LAN 3 LED on the front panel are off.)	Problem with DSL line or WAN service.	Contact your DSL line or WAN service provider to determine whether there is a problem with the DSL or WAN service.
Connection to the xDSL line is intermittent or lost. (The ADSLCD or G.SHDSL CD LED on the front panel is off.)	A cable-related problem: <ul style="list-style-type: none"> <li>• Disconnected cable.</li> <li>• Damaged cable.</li> </ul>	<ul style="list-style-type: none"> <li>• Make sure that the Ethernet port is not configured to be administratively down.</li> <li>• Make sure that the device connected to the Ethernet port is connected, powered on, and properly configured.</li> <li>• Make sure that the connectors at both ends of the cable are secure.</li> <li>• Check whether the cable is physically damaged. If it is damaged, order another cable from Cisco Systems or replace it with a similar cable.</li> </ul>
Connection to the xDSL line or WAN is lost. (The ADSL CD or G.SHDSL CD LED and the ETHERNET LAN 0, ETHERNET LAN 1, ETHERNET LAN 2, or ETHERNET LAN 3 LED on the front panel are off).	Problem with xDSL or WAN service.	<ul style="list-style-type: none"> <li>• Check all passwords and device names to make sure that they are correct.</li> <li>• Contact your DSL line or WAN service provider to determine whether there is a problem with the ADSL or WAN service.</li> </ul>