



# Set Up Your Cisco Router

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## Step 7: Set Up an ADSL WAN Connection

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## Introduction

This document explains how to set up an ADSL WAN connection with PPPoE or RFC 1483 (PPPoA) encapsulation on your router.

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## Requirements

- You must have completed the initial configuration of your router as presented in [Configure Your Router with Security Device Manager](#).
- You must have completed the [Site Survey](#), which includes the Internet worksheet for the router.
- Your router must have an ADSL WAN Interface Card (WIC). If you do not have an ADSL WIC or need assistance to install a new one, contact the [SMB Technical Assistance Center \(SMB TAC\)](#) for assistance.

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## Set Up an ADSL Connection

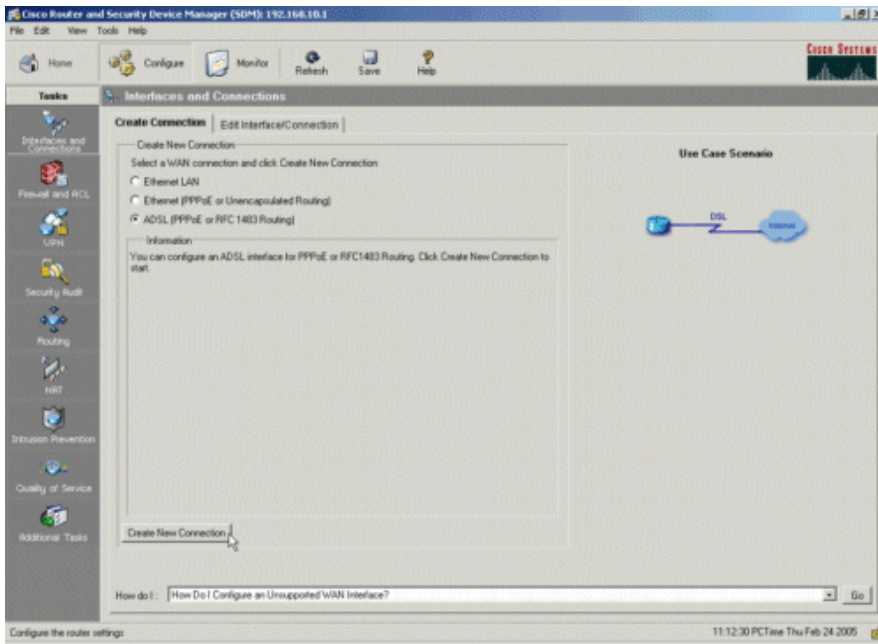
To set up an ADSL connection, follow these steps:

1. Open a web browser and type **http://router IP address** in the Address field. The router's IP address is the IP address that you entered in the LAN Addressing Worksheet (L6A).

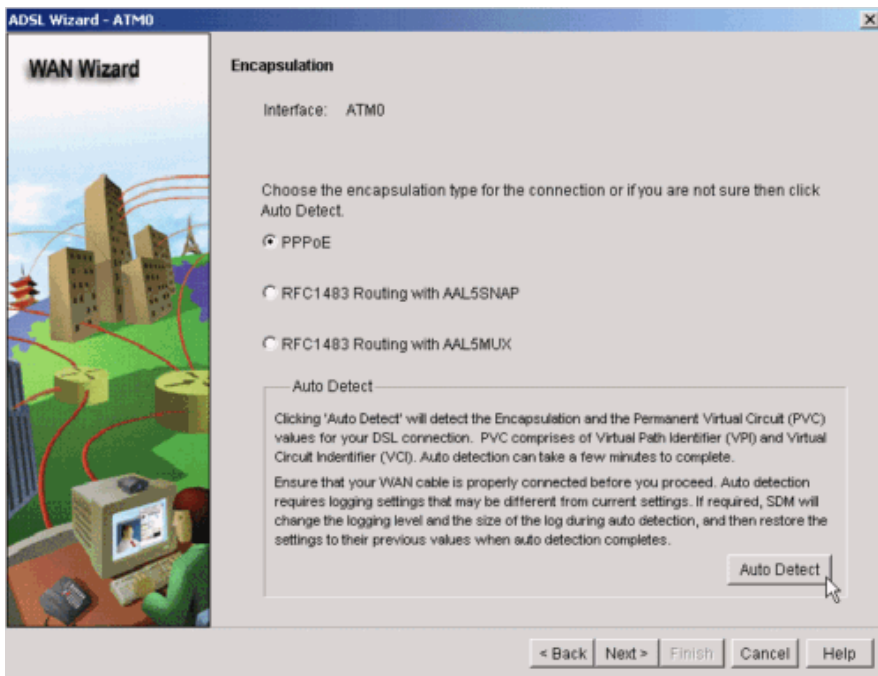
**Note:** For further information about how to launch SDM, refer to [Configure Your Router with Security Device Manager](#).

2. Click **Configure > Interfaces and Connections**.

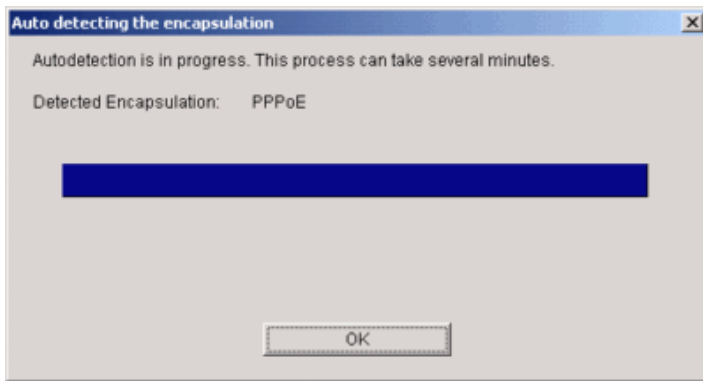
3. Choose **ADSL (PPPoE or RFC 1483 Routing)**, and then click **Create New Connection**.



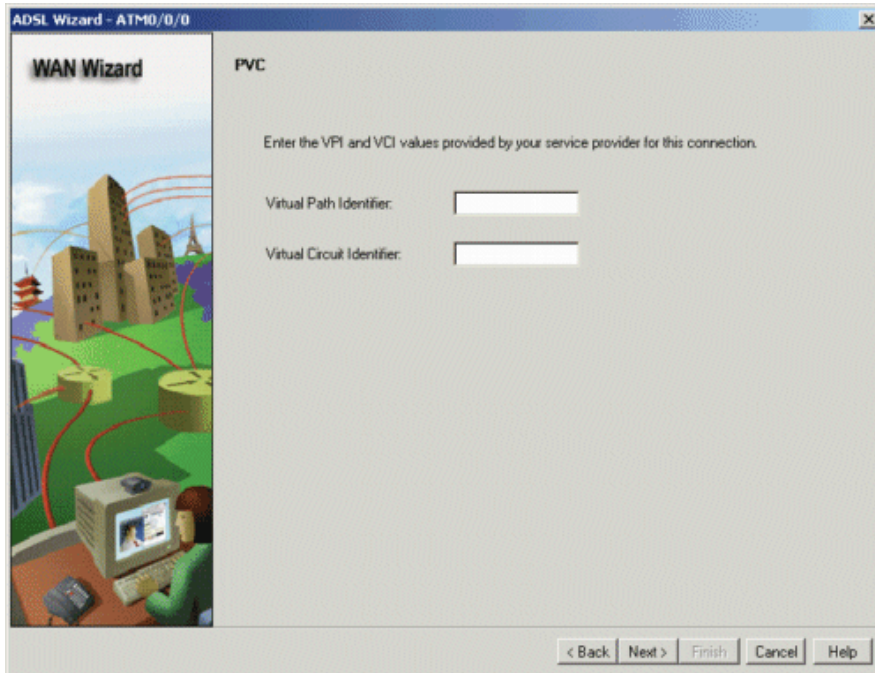
4. On the Welcome screen, click **Next** to begin the ADSL Wizard.
5. Click **Auto Detect**.



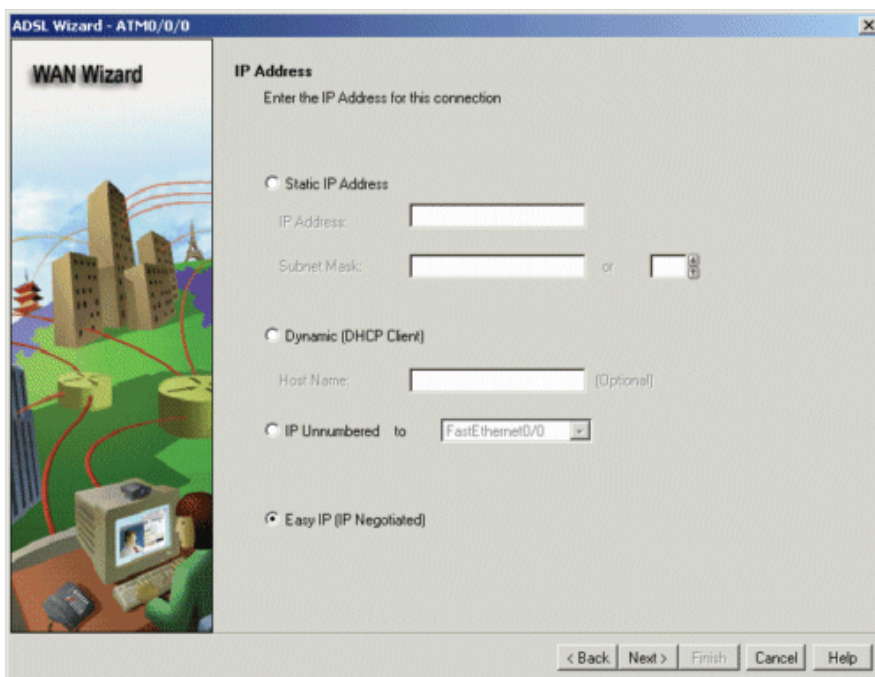
6. SDM attempts to determine the encapsulation for your ADSL connection. If SDM is unable to determine your encapsulation, click **OK** and manually enter the encapsulation type that you entered in the Internet Worksheet (A51), then click **Next**.



7. On the PVC screen, enter the VPI and VCI values that you entered in the Internet Worksheet (A52 and A53). Click **Next**.

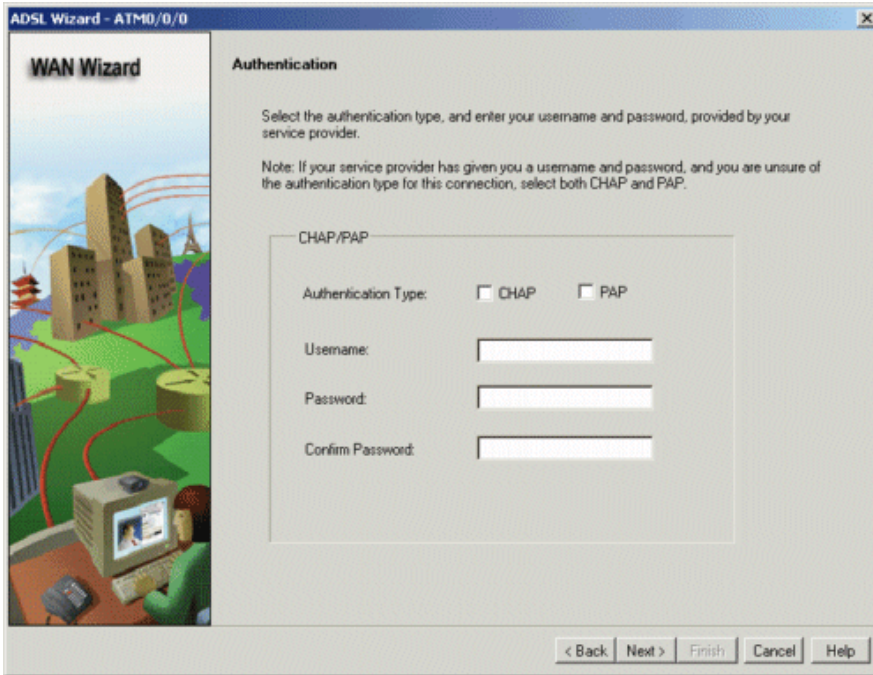


8. On the IP Address screen, choose the value you entered in the Internet Worksheet (B45 and B46). Click **Next**.

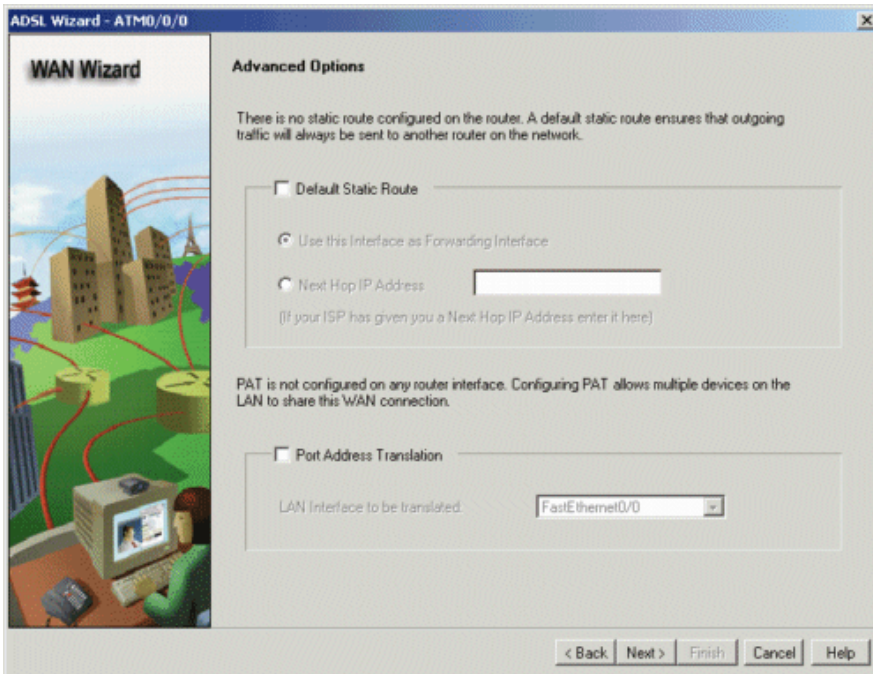


9. If you selected PPPoE in the Encapsulation screen, the Authentication screen appears. Enter the values

you entered in your Internet Worksheet (B62-B64). Click **Next**.



10. If you chose Static IP Address in the IP Address screen, the Advanced Options screen appears. Check **Default Static Route** and choose **Next Hop IP Address**. Enter the ISP Router IP Address that you entered in the Internet Worksheet (B47). Click **Next**.



11. On the Summary screen, review your configuration to ensure that it is accurate, and then click **Finish**.
12. When the Commands Delivery Status screen appears, click **OK** to confirm.
13. Click **Save** to save your new configuration.

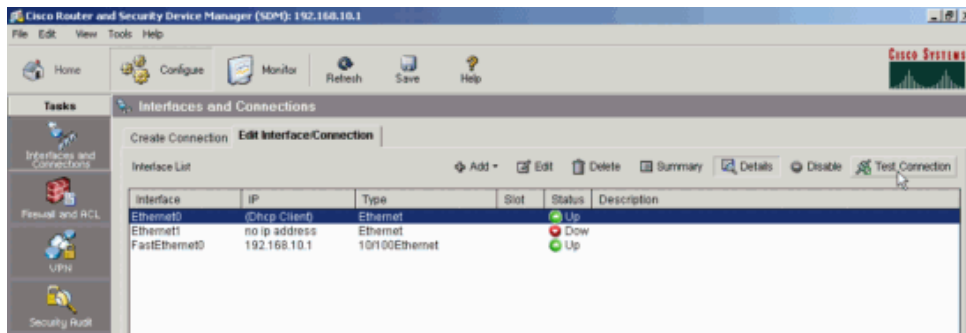


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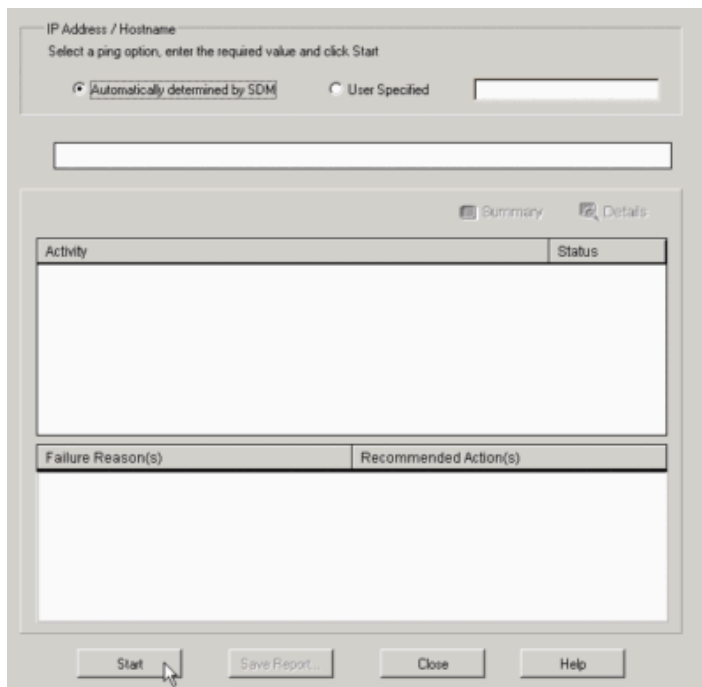
### Verify the WAN Connection

To verify your WAN connection, follow these steps:

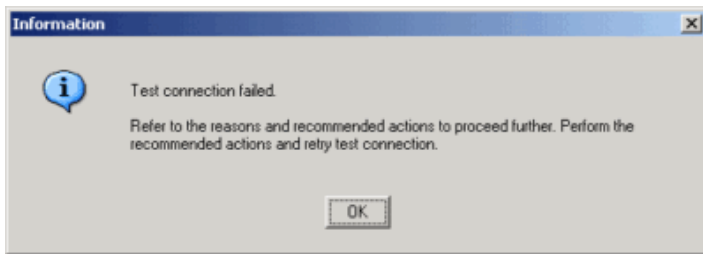
1. Click **Configure > Interfaces and Connections**.
2. Select your new WAN interface and click **Test Connection**.



3. Choose **Automatically determined by SDM**, and then click **Start** to begin the test.



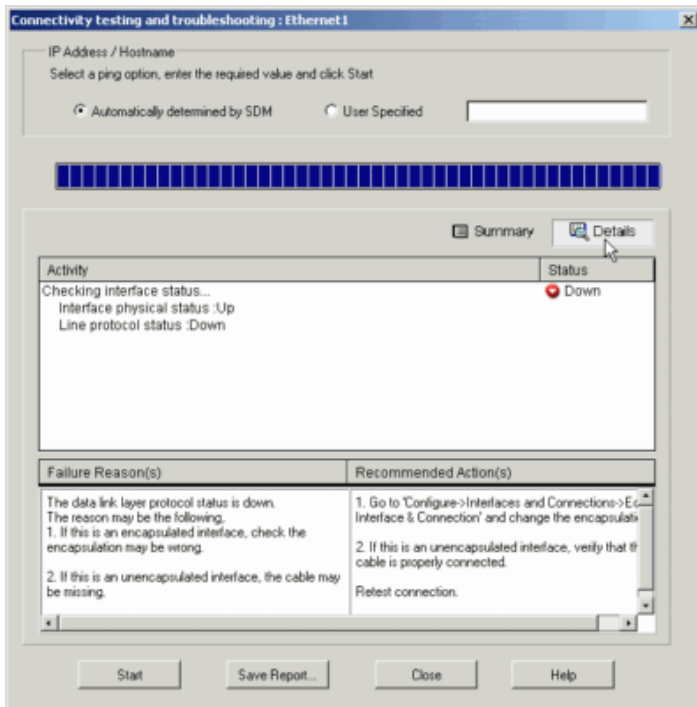
4. SDM displays a window that indicates whether or not the test was successful.



Click **OK** to close the Information window.

5. If the test is successful, proceed to the next step.

If the test failed, click **Details** to display the interface state. Make a note of the Interface State and proceed to [Troubleshoot WAN Connection](#).



6. Click **Close** to exit the testing interface.

7. Click **File > Exit** to exit SDM.

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## Next Step

You have now set up an ADSL WAN connection.

You can now set up firewall and security options on your router. For instructions, refer to [Set Up Internet Security on a Cisco Router](#).

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## Troubleshoot the Procedure

This section provides information about common problems that you may encounter. If this information does not solve your problem, contact the [SMB Technical Assistance Center \(SMB TAC\)](#) for assistance.

| Problem | Cause(s) and Suggested Solution(s) |
|---------|------------------------------------|
|         |                                    |

|   |  |
|---|--|
| <p>The Create Connection screen does not display an option for the WAN connection I want to set up.</p> | <ul style="list-style-type: none"> <li>• Make sure the ADSL card is properly installed. For further assistance, contact <a href="#">SMB TAC</a>.</li> <li>• If the card is installed and the router does not detect the card, contact <a href="#">SMB TAC</a> for assistance.</li> <li>• If the router detects your WIC card but the settings you require are not available in the Create Connection Wizard, you have an unsupported interface type. You need to use the command-line interface (CLI) to configure your interface. Cisco recommends that you contact your Internet Service Provider to request a sample configuration. To access the CLI, refer to <a href="#">Create a HyperTerminal Connection</a>. If you require further assistance, contact the <a href="#">SMB TAC</a>.</li> </ul> |
| <p>I need more information about my WAN connection to complete wizard.</p>                              | <p>Contact your Internet Service Provider (ISP) to confirm the details of your WAN connection.</p>   |
| <p>I set up my WAN connection but it does not function properly.</p>                                    | <p>See the <a href="#">Troubleshoot WAN Connection</a> section.</p>  |

### Troubleshoot the WAN Connection

If your WAN connection does not function correctly, use the table to determine the appropriate solution.

| Interface physical status | Line Protocol Status | Action  |
|---------------------------|----------------------|---|
| Up                        | Up                   | <p>This interface status indicates that the router can communicate with the remote device on the WAN. If you still experience problems with the connection, contact your Internet Service Provider (ISP) for assistance.</p>  |
| Administratively Down     | Down                 | <p>This interface status indicates that the interface is disabled in the router configuration.</p> <p>To enable your interface, click <b>Edit Interface/Connection</b>, select your WAN interface, and click <b>Enable</b>.</p>   |
| Down                      | Down                 | <p>This interface status indicates that the WAN interface is unable to communicate with a remote device.</p> <ul style="list-style-type: none"> <li>• The router configuration does not match the configuration of the network. Contact your Internet Service Provider (ISP) to verify your configurations.</li> <li>• The router is not physically connected to the network. Ensure that the router is properly plugged into the WAN connection.</li> <li>• Verify with your Internet Service Provider (ISP) that service is ready for use. Make a note of your current interface state and your current configuration before you contact your ISP.</li> </ul> |

|    |      |  |
|----|------|--|
| Up | Down | <p>This interface status indicates that the interface is enabled and the router is physically connected to a remote WAN device but the interface cannot communicate properly with the remote WAN device.</p> <ul style="list-style-type: none"><li>• The router configuration does not match the configuration of the network. Contact your Internet Service Provider (ISP) to verify your configurations.</li><li>• Check to ensure that you have the proper cable type connected to your WAN connection (from the ISP). Make a note of your current interface state and your current configuration before you contact your ISP. For more information about cable types, refer to <a href="#">Cable Descriptions</a>.</li><li>• Reset the router.</li></ul> |
|----|------|--|

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## Related Information

- [Configure Your Router with Security Device Manager](#)
- [Site Survey](#)
- [Set Up Internet Security on a Cisco Router](#)
- [Create a HyperTerminal Connection](#)
- [Cable Descriptions](#)