



CHAPTER 5

UC 500 and SR500 Secure Router Setup

The Cisco SR500 provide asymmetric digital subscriber line (ADSL) or FastEthernet WAN termination and advanced security features for a Cisco Smart Business Communications System (SBCS) network. This document describes how to connect a Cisco UC 500 behind a Cisco SR500 in secure router mode. It includes the following sections:

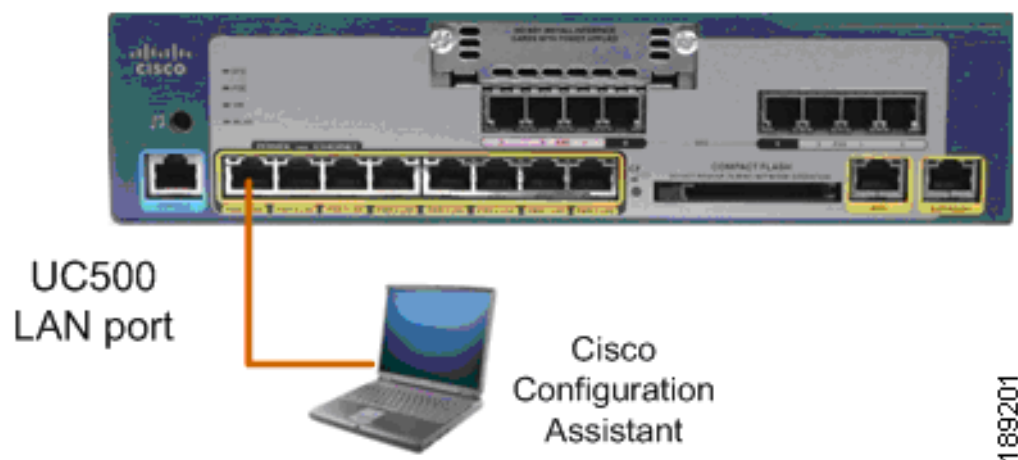
- [Configuring the Cisco UC 500](#)
- [Configuring the Cisco SR500](#)
- [Creating a Customer Site for the Cisco UC 500 and SR500](#)

Prerequisites:

- UC 500 Series Router
- SR500 Series Router
- A PC with an operating system that supports Cisco Configuration Assistant: Windows Vista Ultimate or Windows XP, Service Pack 1 or later
- Cisco Configuration Assistant with version 1.8 or higher installed

Connect your Cisco UC 500 to a Windows PC, as shown in [Figure 5-1](#).

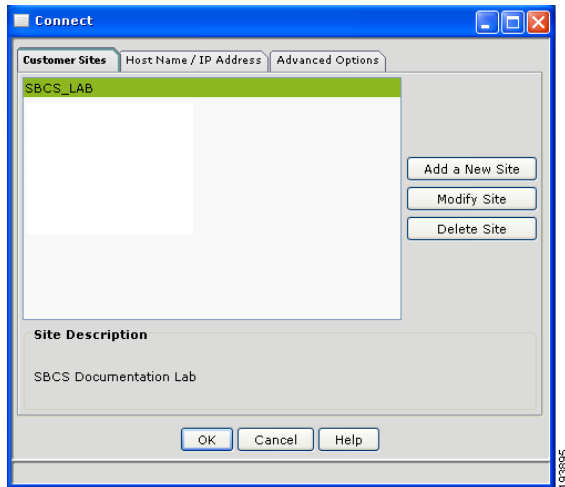
Figure 5-1 Cisco UC 500 Connection



Configuring the Cisco UC 500

Network address translation (NAT) is not required on the UC 500 in this configuration, because the SR500 manages NAT for the network. To configure the Cisco UC 500 using CCA, do the following:

- Step 1** In the Connect window, click the Hostname/IP Address tab and enter the Cisco UC 500 LAN IP address.

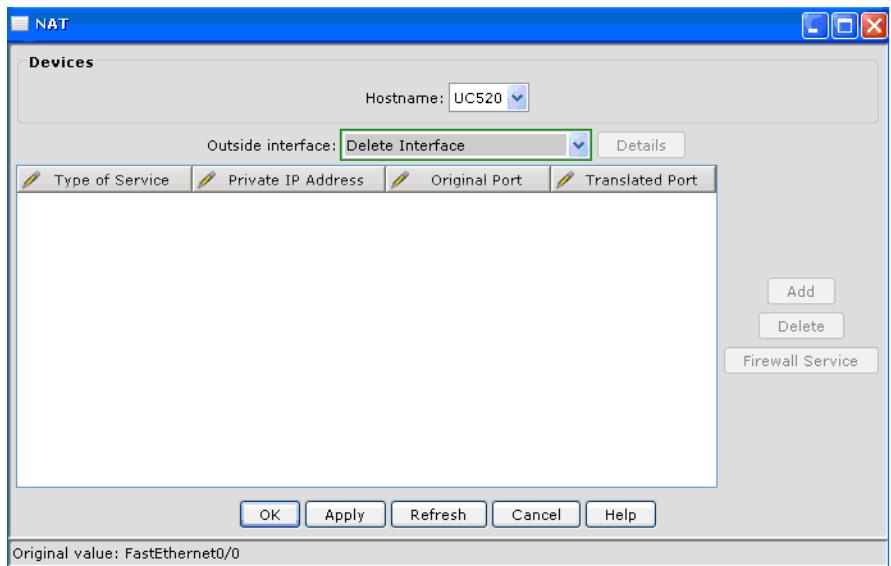


- Step 2** Enter your Cisco UC 500 administrator username and password.

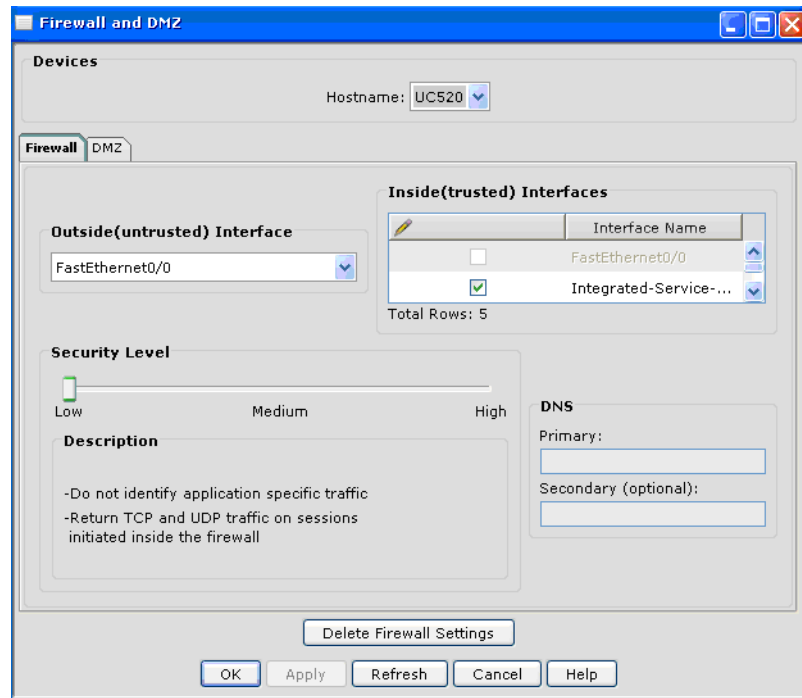
- Step 3** Go to **Configure > Security > NAT**.

- Step 4** From the **Outside Interface** menu on the NAT window, select **Delete Interface**.

- Step 5** Click **Apply** to disable NAT on the UC 500. (The Cisco SR500 will NAT incoming and outgoing Internet traffic; the Cisco UC 500 does not require that NAT is enabled.)



Step 6 Go to **Configure > Security > Firewall and DMZ**.



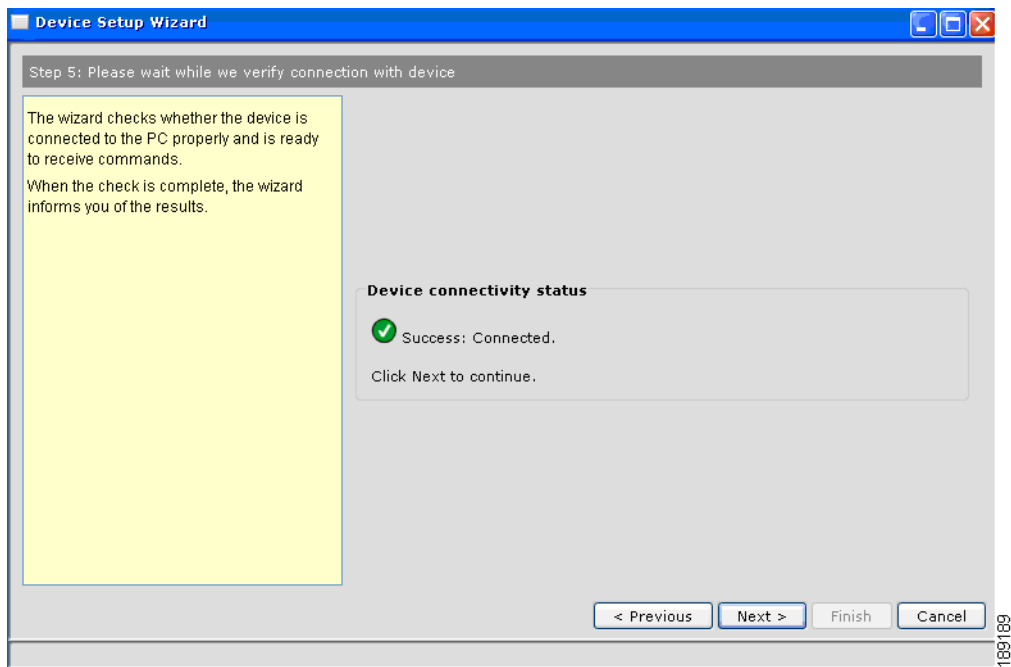
Step 7 Click **Delete Firewall Settings**.

Step 8 Click **Yes** to clear the warning message. This deletes the firewall settings from Cisco UC 500. A firewall is not required on Cisco UC 500, because the Cisco SR500 provides a firewall for the network.

Step 9 Go to **Setup > Device Setup Wizard**.

Step 10 Select **UC500** from the menu and click **Next**.

- Step 11** Click **Next** until device connectivity is verified. It might take 2-3 minutes to verify the device connectivity.



- Step 12** Click **Next**.

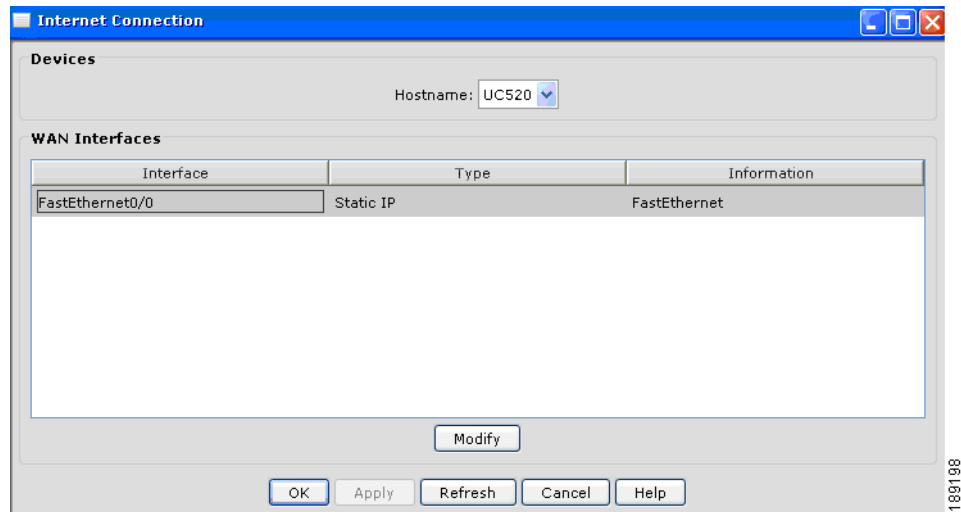
- Step 13** Enter your UC 500 administrator username and password. The default username is **cisco**. The default password is **cisco**.

The screenshot shows the 'Hostname and Credentials' configuration screen. It has four input fields: 'Hostname' with the value 'UC520', 'Username' with the value 'cisco', 'Password' with the value '*****', and 'Confirm Password' with the value '*****'. A small vertical number '189193' is visible on the right side of the screen.

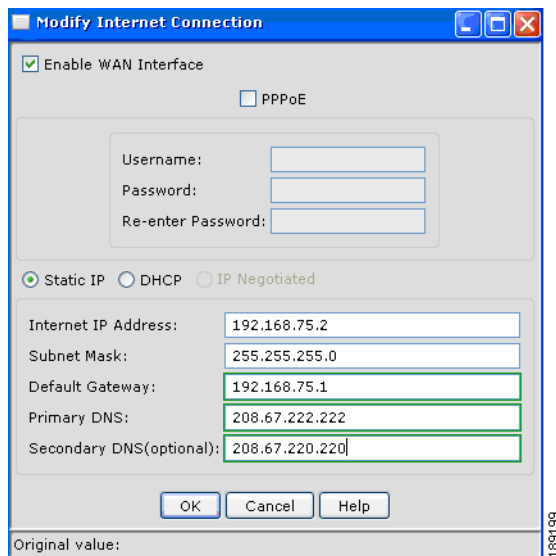
- Step 14** Click **Next**.

The screenshot shows the 'Device setup parameters' configuration screen. It includes a checked checkbox for 'Synchronize with PC'. Below this are date and time settings: 'Month' (August), 'Day' (24), 'Year' (2008), 'Hour' (21), and 'Minute' (19). The 'Time Zone' is set to '(GMT - 08:00) Pacific Time (US, Canada); Tijuana'. There is also a checked checkbox for 'Daylight Saving Time'. A small vertical number '189206' is visible on the right side of the screen.

- Step 15** Verify that the **Synchronize with PC** checkbox is checked. This synchronizes the time and date settings on the UC 500 with your PC and click **Next**.



- Step 16** Select **Fastethernet0/0** and click **Modify**.



- Step 17** In the Internet IP Address field, enter **192.168.75.2**.
- Step 18** Choose **Static IP**.

- Step 19** Enter the **Primary DNS IP** address and the **Secondary DNS IP** address that match the DNS server IP addresses used in your network and click **OK**.

VLAN1 IP address assignment

IP Address: 192.168.10.1
Subnet Mask: 255.255.255.0

DHCP Pool

Network: 192.168.10.1
Subnet Mask: 255.255.255.0
Primary DNS: 208.67.222.222
Secondary DNS(optional): 208.67.220.220
Default Gateway: 192.168.10.1

DHCP Exclusions

Start IP Address: 192.168.10.1
End IP Address: 192.168.10.10

< Previous Next > Finish Cancel

- Step 20** Click **Next**.

Local Settings

Region: United States
Phone Language: US English
Voicemail Language: US English
Location of Language Files: isco Configuration Assistant\appdata\phoneloads\

- Step 21** Select your language from the **Phone Language** menu, and voicemail language.

- Step 22** Select your language **Voicemail Language** menu.

See the [“Changing the System Locale on the UC 500”](#) section on page 3-3 for instructions on how to localize the Cisco UC 500 for non-US/English locales.

Step 23 Click **Next**.

The screenshot shows the 'Summary' screen of the Cisco Configuration Assistant. It contains the following sections:

- Summary:** Hostname: UC520, Username: cisco, Region: United States, Phone Language: US English, Voicemail Language: US English.
- VLAN1 Summary:**
 - IP Address:** IP Address: 192.168.10.1, Subnet Mask: 255.255.255.0
 - DHCP Server:** Network: 192.168.10.1, Subnet Mask: 255.255.255.0, Primary DNS: 208.67.222.222, Secondary DNS(optional): 208.67.220.220, Default Gateway: 192.168.10.1
 - DHCP Exclusions:** Start IP Address: 192.168.10.1, End IP Address: 192.168.10.10
- Warning:** The setup process may take up to 10 minutes.

At the bottom, there are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'. A vertical ID '188204' is visible on the right side of the window.

Step 24 Verify your settings. To make any changes, click **Previous**; otherwise, click **Finish**.

Step 25 Click **Yes** when the warning displays.



Note If you retained the VLAN 1 IP address of 192.168.10.1, Cisco Configuration Assistant does not lose connectivity to the Cisco UC 500 and applies the configuration settings to the Cisco UC 500. This process can take 8-10 minutes

Once the process is complete, you should see the following message.

The screenshot shows a 'Finish status' message box with a green checkmark icon. The text reads: 'Success: The settings have been applied to the device. Press Close to exit.' A vertical ID '188181' is visible on the right side of the window.

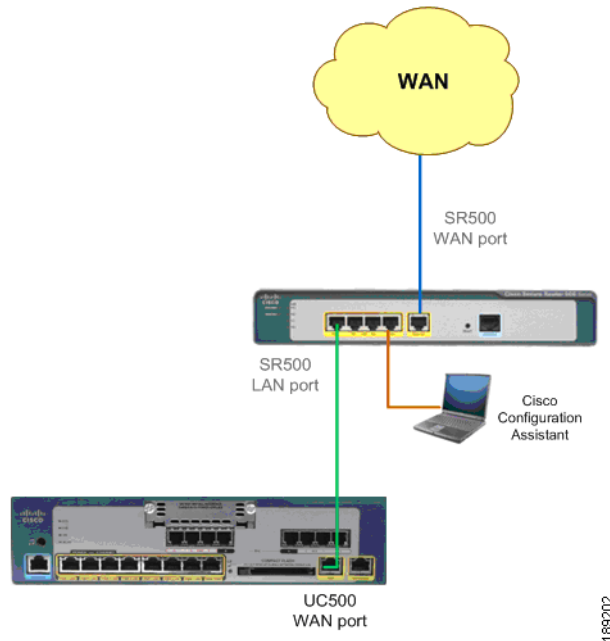
Step 26 Click **Close** to exit the setup wizard.

Step 27 Go to **Configure > Save Configuration** and click **Save**.

Configuring the Cisco SR500

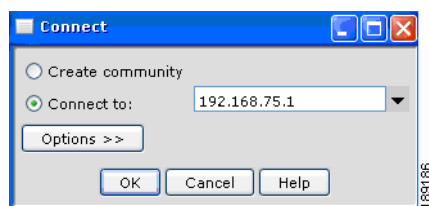
Connect your Cisco UC 500, Cisco SR500, and Windows PC as shown in [Figure 5-2](#).

Figure 5-2 Cisco UC 500, Cisco SR500, and Windows PC Connection



Your Internet/WAN connection might be an ADSL or an Ethernet connection, depending on the Cisco SR500 chassis type.

Step 1 Enter the SR500 LAN IP address in the **Connect to** field in Cisco Configuration Assistant.



If your connection is rejected, it might be necessary to manually release and renew your DHCP lease to obtain an IP address from the Cisco SR500, by doing the following:

1. From the Windows start menu, select **Start > Run**.
2. Enter **CMD** in the Open field to launch a Windows Command window.
3. Enter **ipconfig /release** at the Windows command prompt.

4. Enter **ipconfig /renew** at the Windows command prompt. You should get an IP address that is in the 192.168.75.xxx network. For example:

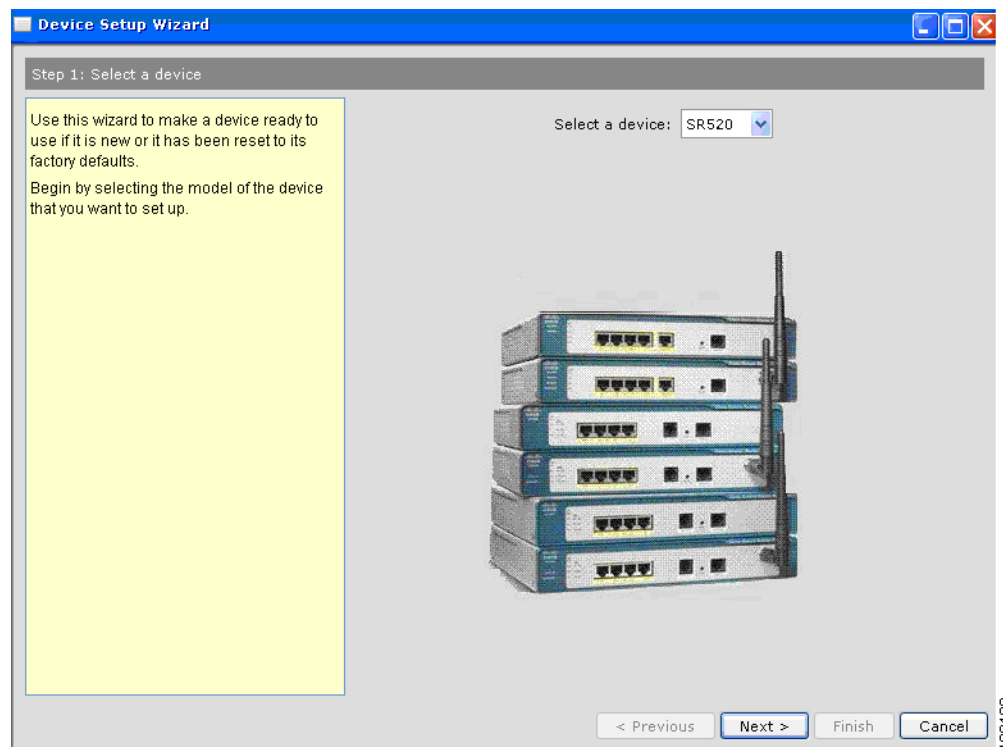
```
C:\temp>ipconfig /renew
```

```
Windows IP Configuration
```

```
Ethernet adapter Local Area Connection:
```

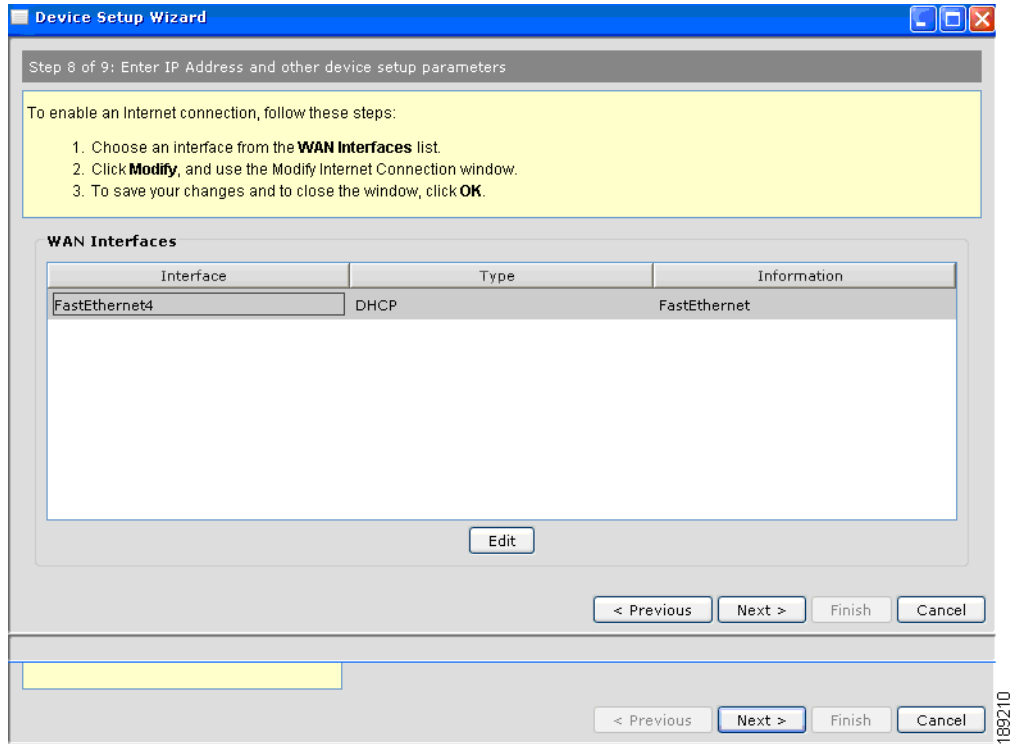
```
Connection-specific DNS Suffix.: cisco.com
IP Address. . . . . : 192.168.75.11
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.75.1
```

- Step 2** Go to **Setup > Device Setup Wizard**.



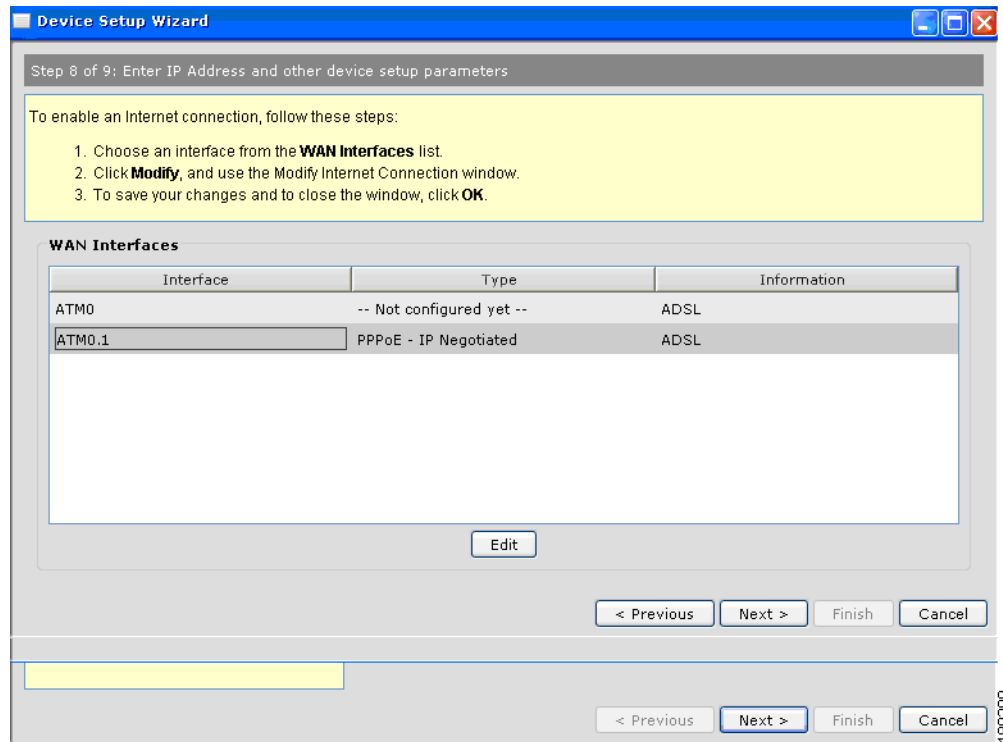
- Step 3** From the **Select a device** menu, select **SR500** and click **Next**.
- Step 4** Click **Next** until device connectivity is verified. It might take 2-3 minutes to verify the device connectivity.
- Step 5** Enter your Cisco SR500 administrator username and password. The default username is **admin**. The default password is **admin**.
- Step 6** Verify that the **Synchronize with PC** checkbox is checked. This synchronizes the time and date settings on the UC 500 with your PC and click **Next**.

Step 7 If you are using WAN FastEthernet, the following window displays:



Select **Fastethernet4** and click **Edit**.

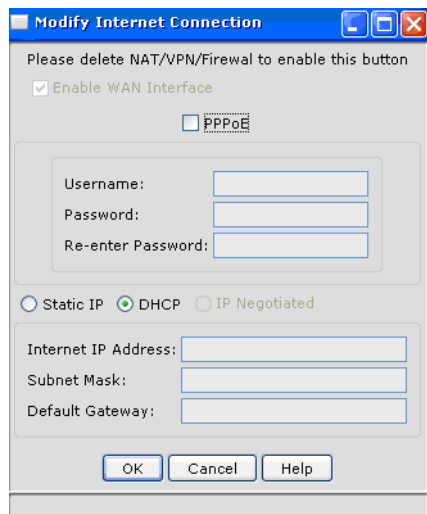
If you are using ADSL, the following window displays:



Select **ATM0.1** and click **Edit**.

Step 8 Specify your Cisco SR500 Internet connection settings and click **OK**. These settings vary depending on which provider and what WAN type you are using to connect to the Internet. For example:

DHCP with FastEthernet



PPPoE with FastEthernet.

The username and password should match the account information provided by your Internet service provider.

The screenshot shows the 'Modify Internet Connection' dialog box. At the top, it says 'Please delete NAT/VPN/Firewal to enable this button'. Below that, there is a checked checkbox for 'Enable WAN Interface'. Underneath, there is a checked checkbox for 'PPPoE'. The 'Username' field contains 'adslmodemuser', the 'Password' field contains '*****', and the 'Re-enter Password' field also contains '*****'. Below the password fields, there are three radio buttons: 'Static IP', 'DHCP', and 'IP Negotiated', with 'IP Negotiated' selected. There are three empty text boxes for 'Internet IP Address:', 'Subnet Mask:', and 'Default Gateway:'. At the bottom, there are 'OK', 'Cancel', and 'Help' buttons. A small vertical number '1889195' is visible on the right side of the dialog box.

PPPoE with ADSL.

The username and password should match the account information provided by your Internet service provider.

The screenshot shows the 'Modify Internet Connection' dialog box. At the top, it says 'Please delete NAT/VPN/Firewal to enable this button'. Below that, there is a checked checkbox for 'Enable WAN Interface'. Underneath, there are two radio buttons: 'PPPoE' (selected) and 'RFC 1483 Routing'. Below the radio buttons, there are two text boxes: 'Virtual Path Identifier (VPI):' with the value '0' and 'Virtual Circuit Identifier (VCI):' with the value '35'. The 'Username' field contains 'dsluser', the 'Password' field contains '*****', and the 'Re-enter Password' field also contains '*****'. Below the password fields, there are three radio buttons: 'Static IP', 'DHCP', and 'IP Negotiated', with 'IP Negotiated' selected. There are three empty text boxes for 'Internet IP Address:', 'Subnet Mask:', and 'Default Gateway:'. At the bottom, there are 'OK', 'Cancel', and 'Help' buttons. A small vertical number '1889196' is visible on the right side of the dialog box.

- Step 9** Click **Next**. Verify your settings. To make any changes, click **Previous**; otherwise click **Finish**. After 1-2 minutes, the Summary message displays.

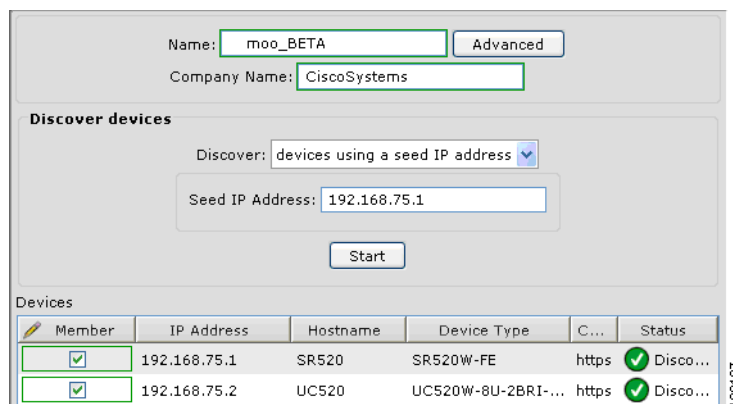


- Step 10** Click **Close**.
The configuration of the Cisco SR500 is complete.

Creating a Customer Site for the Cisco UC 500 and SR500

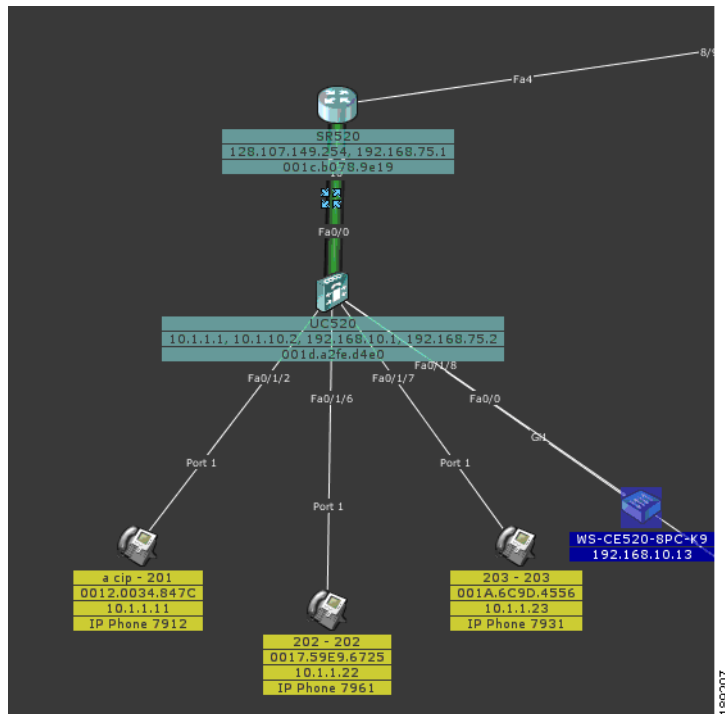
To create a customer site that includes both the Cisco UC 500 and the Cisco SR500, do the following:

- Step 1** Start Configuration Assistant. In the Connect window, select the Customer Sites tab and click **Add a New Site**.
- Step 2** In the **Create a New Customer Site** window, enter a name and description for the customer site.



- Step 3** Enter the Cisco SR500 IP address in the Seed IP Address field. Click **Start**.
- Step 4** When prompted, enter the Cisco UC 500 and the Cisco SR500 administrator usernames and passwords. Click **OK**.

Step 5 In Topology view, verify that the Cisco UC 500 is connected behind the Cisco SR500.



Step 6 Go to **Configure > Save Configuration**.

Step 7 Select **All Devices** in the **Hostname** menu. Click **Save**.



The configuration is complete.

You can now connect your Cisco Configuration Assistant PC to any LAN port on the Cisco UC 500 or Cisco SR500 to access the customer site you created, allowing you to monitor the network and modify the device configurations.

You should connect all LAN devices, such as PCs, IP phones, printers, switches, and access points, to the Cisco UC 500 LAN ports to access the WAN or the Internet from the LAN devices. LAN devices connected to the UC 500 have secure access to the WAN and the Internet, because they are protected by the security features you enabled on the Cisco SR500.

You might choose to connect DMZ devices, such as Web servers or email servers, to the Cisco SR500.