Manipulating WSA Network Entities

This chapter explains how to create, modify, and use the network entities available in the Cisco WSA Explorer application:

- Connections on page 5-2

- Net Links on page 5-18

Connections

The following sections give detailed information about the **Connections** entity:

Connections—Description

Provisioning Connections in the physical network is the ultimate goal of WSA. Connections are network entities that terminate at Customer Ports and therefore *belong* to customers.

Connections—Create

To create a new Connection, select **Connections** from the customer view and activate the **New…** right mouse menu from the list view popup menu, as shown in Figure 5-1, "Connection List".

Note In the connection list, the icon colors are associated by connection type. Red is for Frame Relay; blue is for ATM; and yellow is for ATM to Frame Relay Interworking.
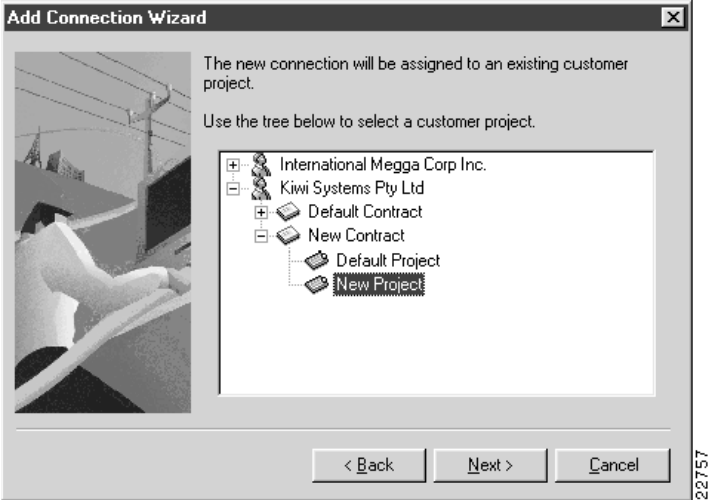
Figure 5-1   Connection List
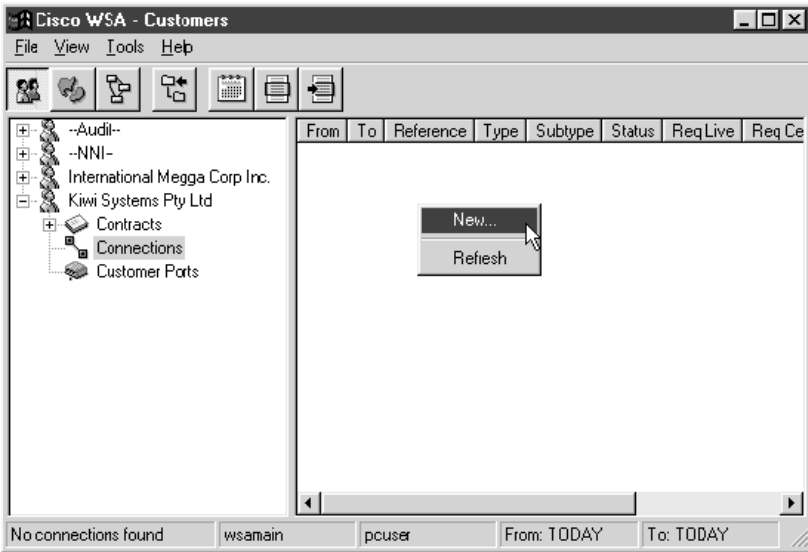
An Add Connection Wizard appears, as shown in Figure 5-2, "Add Connection Wizard".
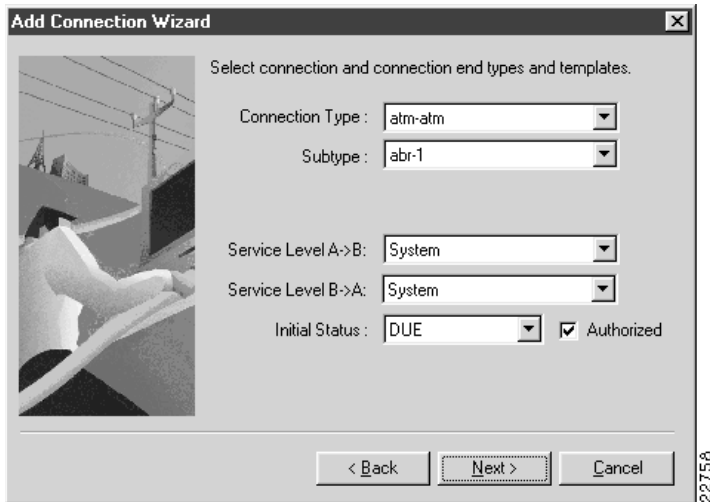
Figure 5-2   Add Connection Wizard

Click **Next** to continue, and select a project that contains the customer ports at which this connection will terminate, as shown in Figure 5-3, "Selecting a Project".

Figure 5-3   Selecting a Project

Click **Next** to continue, and select the connection type and subtype together with the required service levels and initial status. Check **Authorized** if this connection has already been approved for provisioning, as shown in Figure 5-4, "Setting the Connection Type".

Figure 5-4   Setting the Connection Type

Click **Next** to continue, and select the live and cease dates and times for the connection, as shown in Figure 5-5, "Setting Live and Cease Dates and Times".
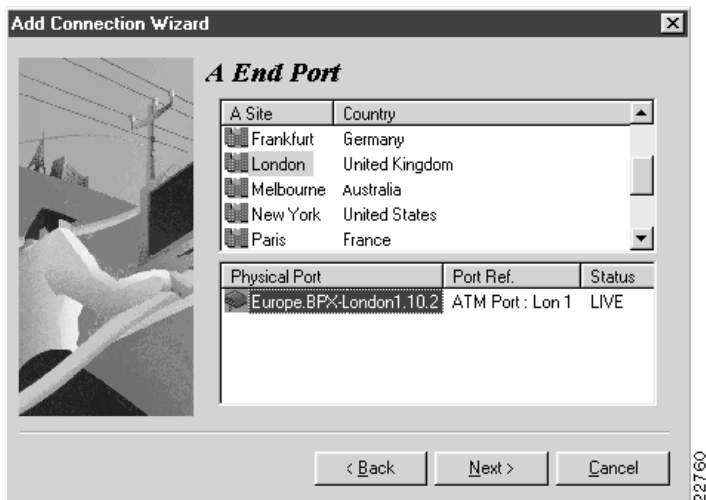
Figure 5-5   Setting Live and Cease Dates and Times

Click **Next** twice to continue. After selecting the site and choosing from the available customer ports at that site, select a customer port for the A end of the connection, as shown in Figure 5-6, "Selecting the A End Customer Port".
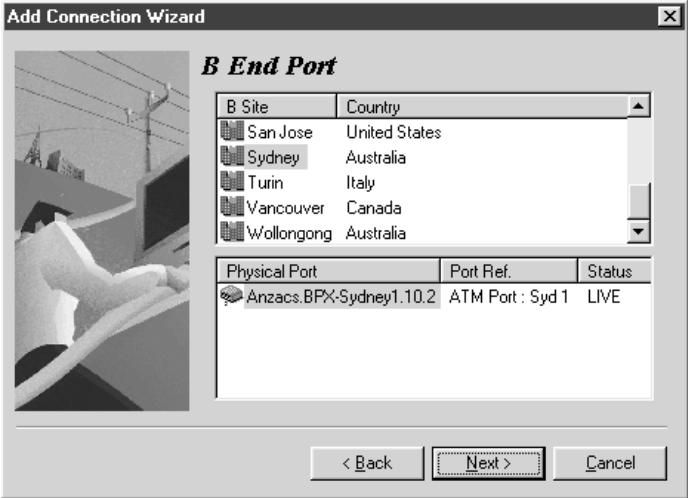
Figure 5-6   Selecting the A End Customer Port

Click **Next** to continue. After selecting the site and choosing from the available customer ports at that site, select a customer port for the B end of the connection, as shown in Figure 5-7, "Selecting the B End Customer Port".

**Figure 5-7   Selecting the B End Customer Port**

Click **Next** to continue and select the virtual path (VP) and virtual channel (VC) for this connection, as shown in Figure 5-8, "Selecting Virtual Paths and Channels".

The default values displayed are the ones that are available at the time of selection, but any other values can be selected. If the chosen values are already in use, you will be informed of this later and the connection will not be created.

If, as shown in Figure 5-8, "Selecting Virtual Paths and Channels", this is the first connection to be created on the physical port allocated to the chosen customer port, then you can check the appropriate box and have the option to use all the available VCs.

**Figure 5-8   Selecting Virtual Paths and Channels**
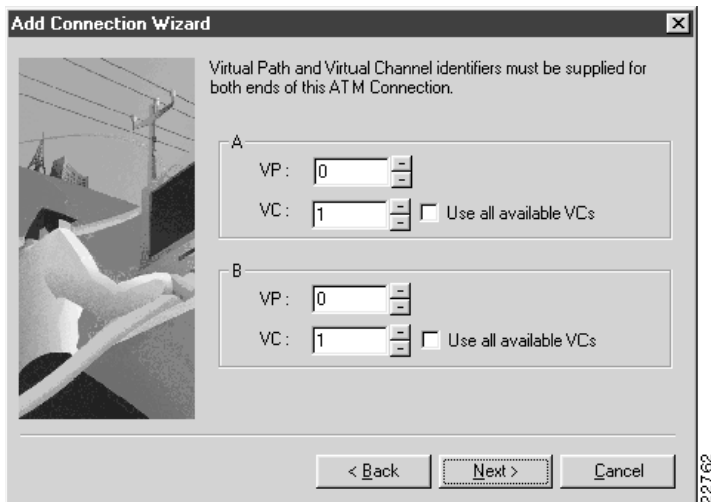
Note   If the connection that you are adding is Frame Relay, this section of the Wizard prompts you to enter the DLCIs for both ends of the connection. If this is the first connection on the physical port allocated to the selected customer port, you have the option to set frame forwarding for this connection.

Click **Next** to continue.

If the customer ports chosen for the two ends of the connection are in different networks, you must select a direct or indirect (backbone) NNI between them to choose a route between these networks, as shown in Figure 5-9, "Selecting NNIs".
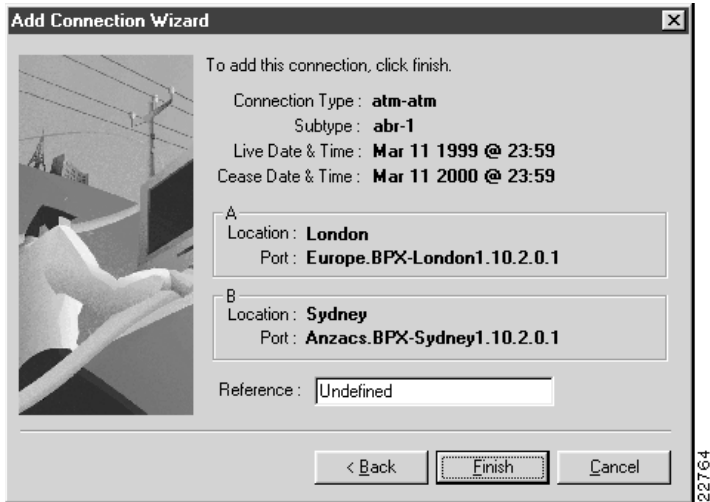
Figure 5-9   Selecting NNIs
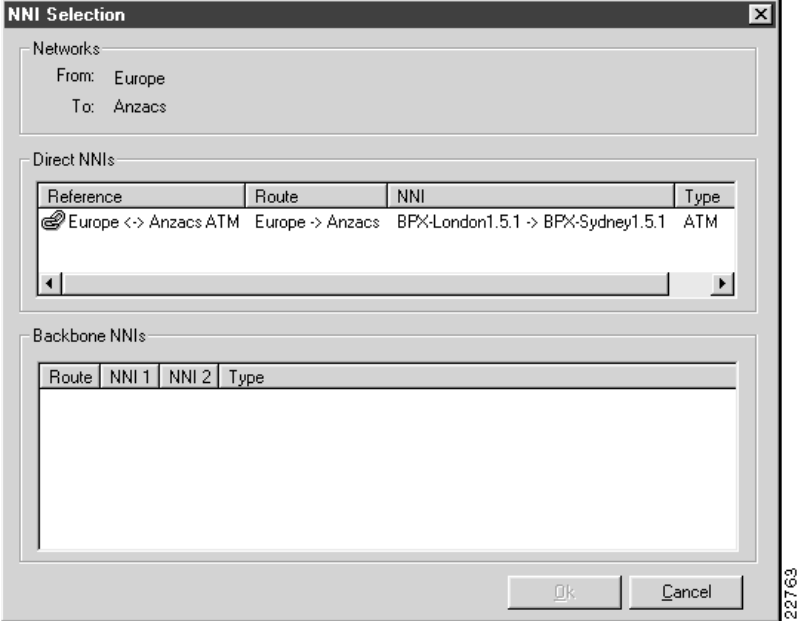
Regardless of whether or not you had to choose an NNI, you will now see a connection summary, as shown in Figure 5-10, "Connection Summary".
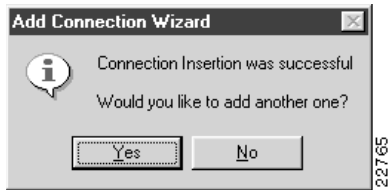
Figure 5-10   Connection Summary

Enter a reference for this connection and press Finish to create the connection.

When the customer port is successfully created, you are asked if you want to create another Customer Port, as shown in Figure 5-11, "Add Another Prompt".

Figure 5-11   Add Another Prompt

Press **Yes** to return to the Add Customer Port Wizard; or press **No** to close the Wizard and return to the Customer Port List.

Connections—Modify

To modify an existing Connection, select **Connections** in the customer view and activate the **Properties…** right mouse menu from the item menu, Figure 5-12, "Selecting a Connection for Modification".

Figure 5-12   Selecting a Connection for Modification
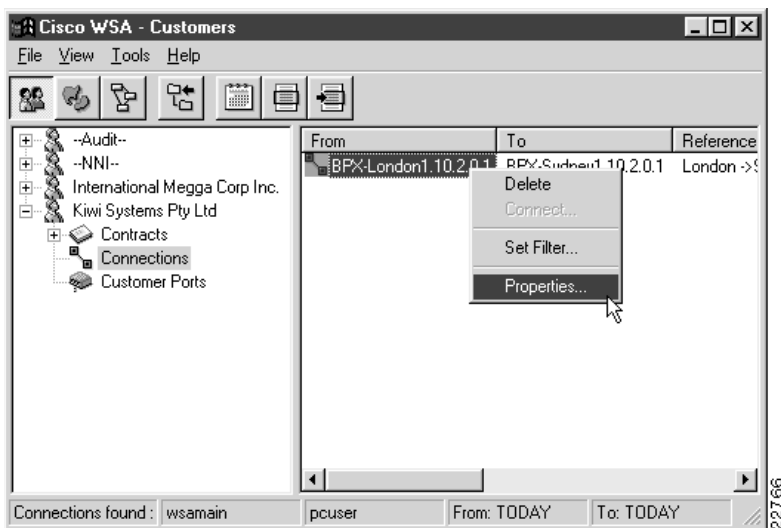
A Connection Properties dialog appears, as shown in Figure 5-13, "Connection Properties".

Figure 5-13   Connection Properties

If the connection has been provisioned in the physical network by the WSA Control System, the **Went Live** field is populated with the date and time that the connection occurred.

Once you complete the settings for this Connection, press **OK** to save the record and close the dialog. If you decide not to modify the properties, press **Cancel** to close the dialog.
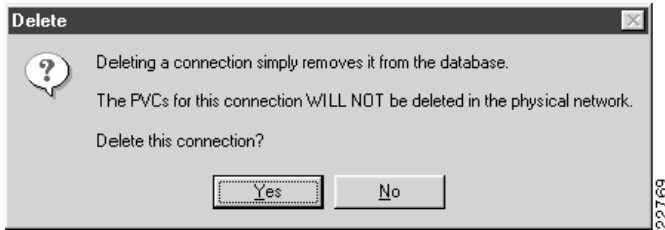
Connections—Delete

To delete a Connection, select **Connections** in the tree view and activate the **Delete…** right mouse menu from the item menu, as shown in Figure 5-14, "Selecting a Connection for Deletion".

Figure 5-14   Selecting a Connection for Deletion
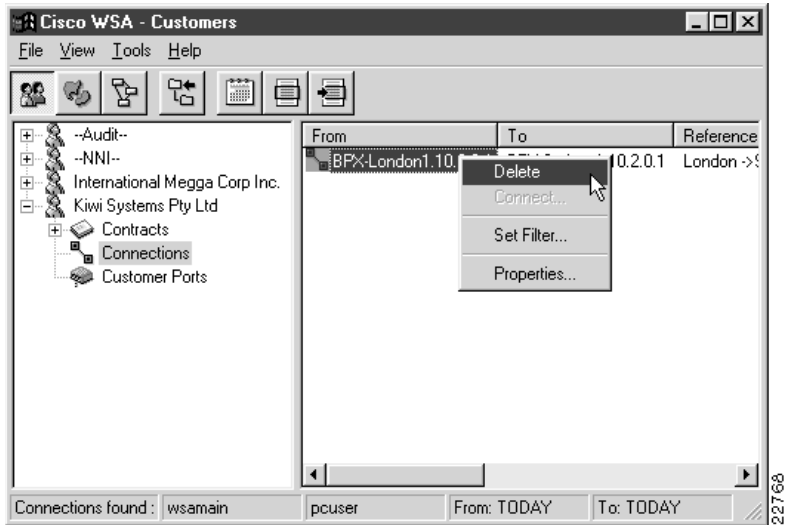
A delete confirmation dialog appears, as shown in Figure 5-15, "Connection Delete Confirmation".

Figure 5-15   Connection Delete Confirmation

Press **Yes** to delete the connection; or press **No** if you decide not to delete it.

Note   When a connection is deleted from the WSA database, no network configuration commands are generated by the WSA control system. If you want to delete a connection from the physical network, you must set its cease date to some time in the near future and monitor its status until it becomes CEASED.

Net Links

The following sections give detailed information about the **Net Links** entity:

- Net Links—Description on page 5-18
- Net Links—Create Trunk on page 5-19
- Net Links—Create NNI on page 5-28
- Net Links—Modify on page 5-36
- Net Links—Delete on page 5-36

Net Links—Description

Net Links are network entities that fall into two categories—Trunks and Network to Network Interconnects (NNIs). Both categories terminate at customer ports belonging to the built-in NNI customer.

Net Links—Create Trunk

To create a new Net Link, select **Net Links** from the network or location view and activate the **New…** right mouse menu from the list view popup menu, as shown in Figure 5-16, "Net Link List".
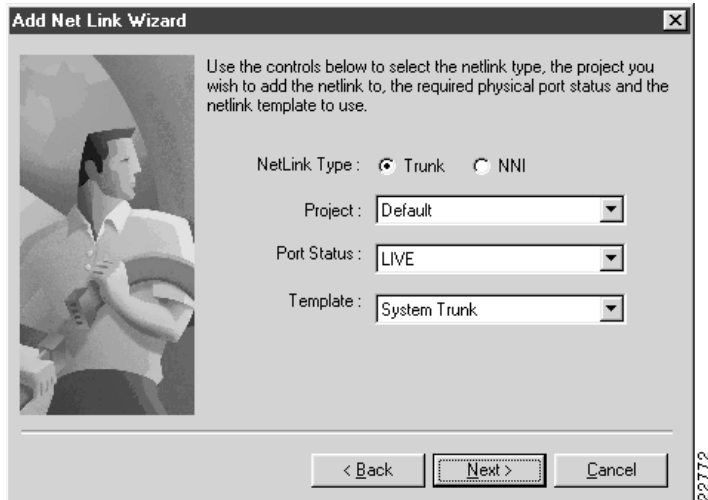
Figure 5-16   Net Link List
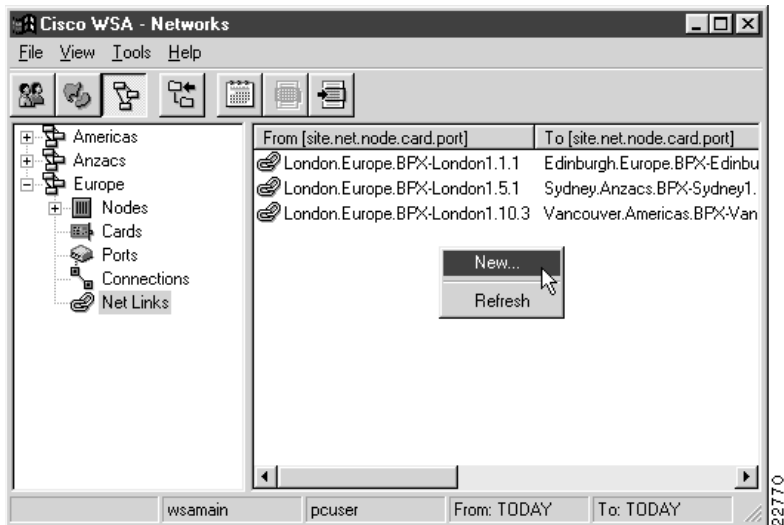
An Add Net Link Wizard appears, as shown in Figure 5-17, "Add Net Link Wizard".

Figure 5-17   Add Net Link Wizard

Click **Next** to continue. Select the net link type as **Trunk** and select the project port status and template for the trunk, as shown in Figure 5-18, "Selecting Net Link Type—Trunk".

Figure 5-18   Selecting Net Link Type—Trunk

Click **Next** to continue. Select the trunk end point locations, as shown in Figure 5-19, "Selecting Trunk End Point Locations".

**Figure 5-19   Selecting Trunk End Point Locations**

Click **Next** to continue, and select the live and cease dates for the trunk, as shown in, Figure 5-20, "Selecting Trunk End Dates".

Figure 5-20   Selecting Trunk End Dates
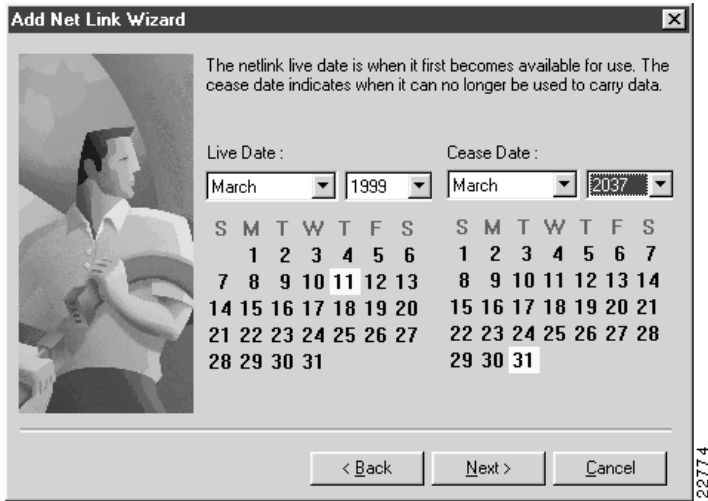
Click **Next** to continue. Set the status and speed for the trunk and enter a link cost, link delay, and reference string, as shown in Figure 5-21, "Setting Trunk Details".

Figure 5-21   Setting Trunk Details
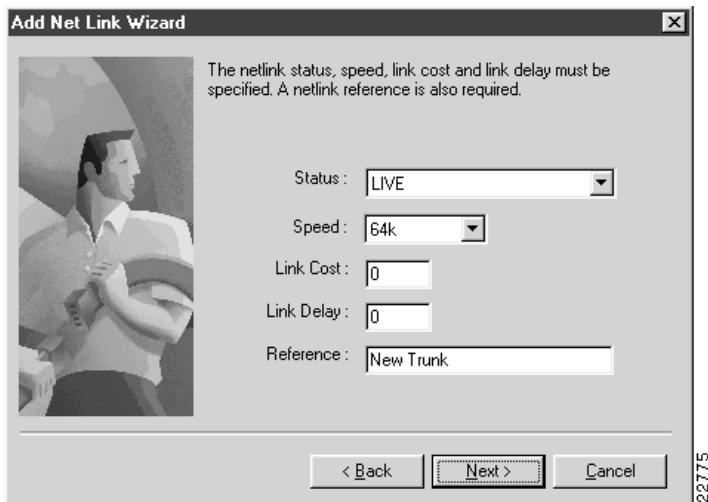
Click **Next** twice to continue, and choose the customer ports belonging to the NNI customer for each end of the trunk, as shown in Figure 5-22, "Selecting Customer Ports".

Figure 5-22   Selecting Customer Ports
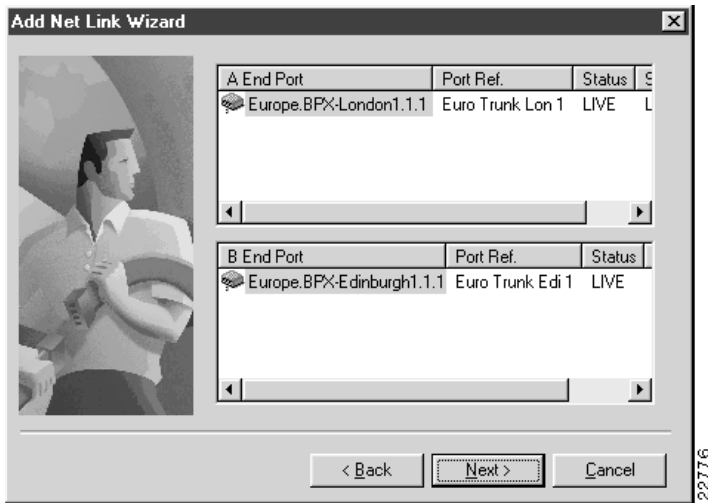
Click **Next** twice to continue and you will see a summary page, as shown in Figure 5-23, "Net Link Summary".

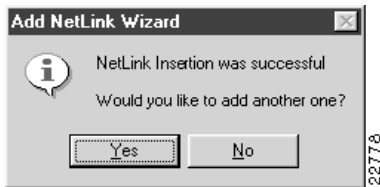**Figure 5-23   Net Link Summary**

Press **Finish** to create the trunk.

When the trunk is successfully inserted, you are asked whether you want to make another insertion, as shown in Figure 5-24, "Add Another Prompt".

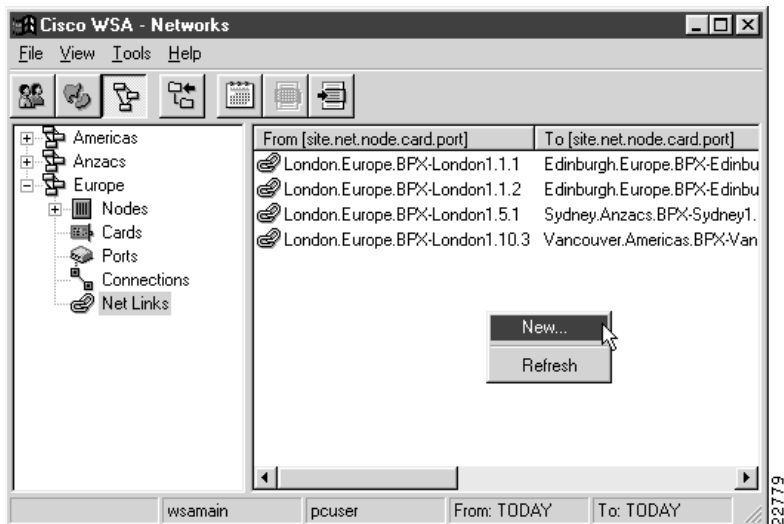**Figure 5-24   Add Another Prompt**

Press **Yes** to return to the Add Net Link Wizard; or press **No** to close the Wizard and return to the Net Link List.

Net Links—Create NNI

To create a new Net Link, select **Net Links** from the network or location view and activate the **New…** right mouse menu from the list view popup menu, as shown in Figure 5-25, "Net Link List".
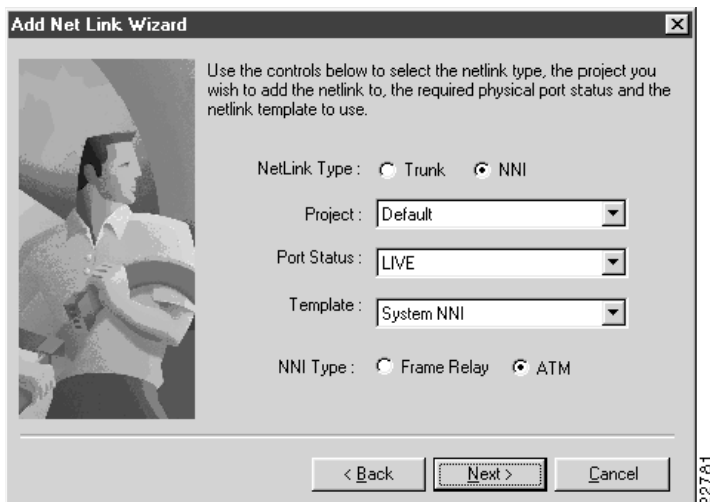
Figure 5-25   Net Link List

An Add Net Link Wizard appears, as shown in Figure 5-26, "Add Net Link Wizard".

Figure 5-26   Add Net Link Wizard

Click **Next** to continue. Select the net link type as **NNI** and indicate whether the NNI is to be ATM or Frame Relay, as shown in Figure 5-27, "Selecting Net Link Type—NNI".

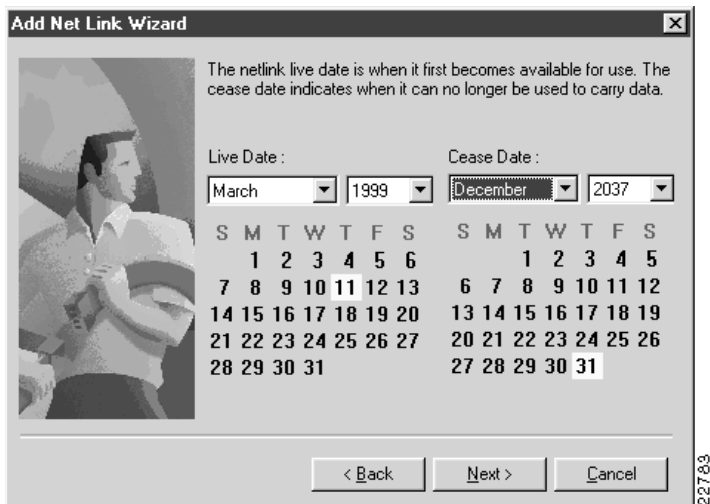**Figure 5-27   Selecting Net Link Type—NNI**

Click **Next** to continue, and select the two networks that the NNI will be between, as shown in Figure 5-28, "Selecting Networks".
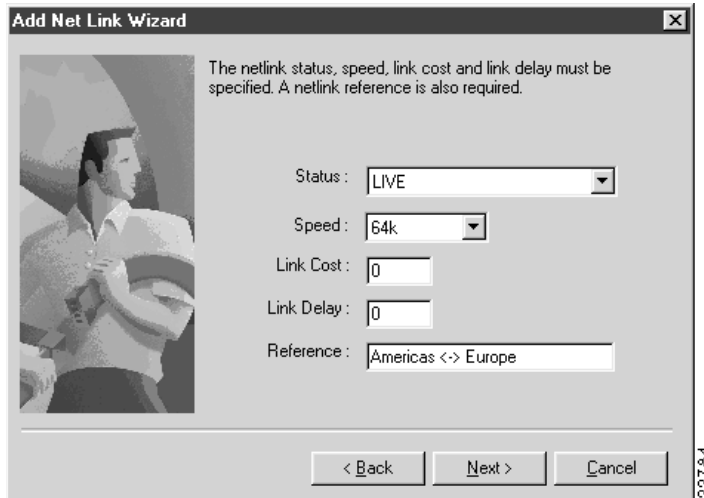
Figure 5-28   Selecting Networks
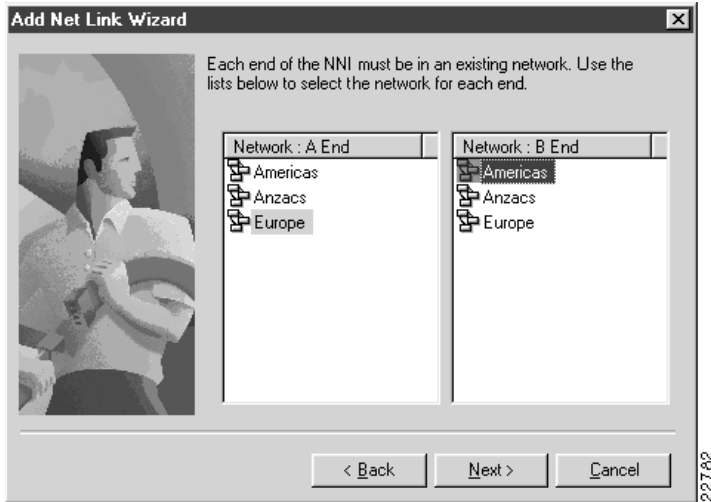
Click **Next** to continue, and select the end dates for the NNI, as shown in Figure 5-29, "Selecting End Dates".

Figure 5-29   Selecting End Dates

Click **Next** to continue. Select the status and speed for the NNI and enter a link cost, link delay, and reference string, as shown in Figure 5-30, "Setting NNI Details".
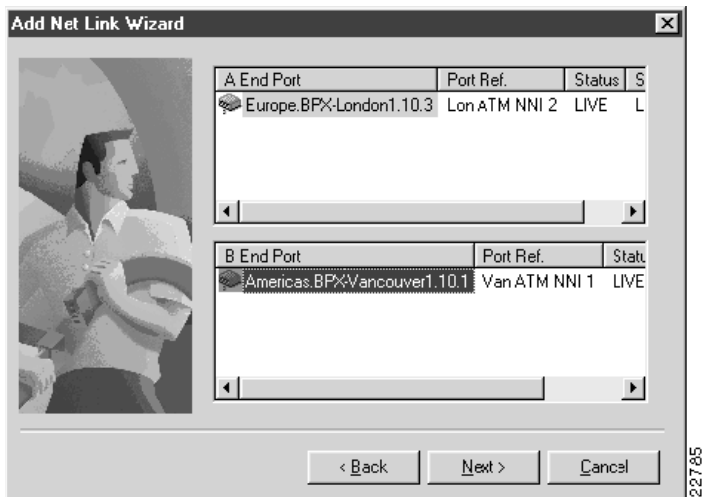
Figure 5-30   Setting NNI Details

Click **Next** to continue and select the customer ports for each end of the NNI, as shown in Figure 5-31, "Selecting Customer Ports".

Figure 5-31   Selecting Customer Ports

Click **Next** twice to continue and you will see a summary page, as shown in Figure 5-32, "Net Link Summary".
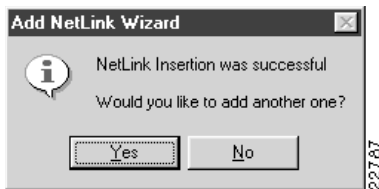
Figure 5-32   Net Link Summary

Press **Finish** to create the NNI.

When the NNI insertion is successful, you are asked whether you want to make another insertion, as shown in Figure 5-33, "Add Another Prompt".

Figure 5-33   Add Another Prompt

Press **Yes** to return to the Add Net Link Wizard; or press **No** to close the Wizard and return to the Net Link List.

Net Links—Modify

Note This version of Cisco WSA does not allow modification of Net Links.

Net Links—Delete

Note This version of Cisco WSA does not allow deletion of Net Links.