Provisioning with VSPT Wizards

Wizards are utilities included in the Cisco Voice Services Provisioning Tool (VSPT) that can help you rapidly create a new MGC configuration deployment by providing a graphical user interface (GUI) for provisioning specific solutions. A wizard leads you through the steps of provisioning the Cisco MGC and the external components of the solution you choose.

Note A *solution* is a logical combination of Cisco hardware and software configured to perform a specific network task.

This chapter provides an example of using a wizard to configure a solution. It includes the following sections:

Starting a New Provisioning Session

When you start a new provisioning session, you can choose to base the configuration on an existing configuration, by using the Import from MGC option, or you can use a configuration wizard, or you can perform the configuration manually.

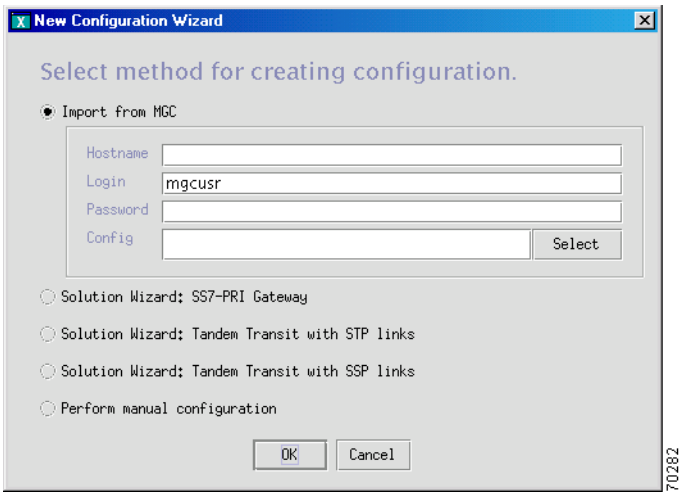
Use the following procedure to start a new VSPT provisioning session:

Step 1 Start and log in to the VSPT.

Step 2 Select **File > New** on the menu bar.

Step 3 Enter a name for the new configuration you will create, and click **OK**. The screen shown in Figure 2-1 appears.

Figure 2-1 Select Method for Creating Configuration

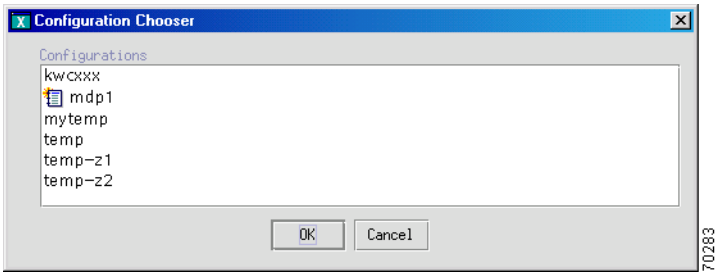


Step 4 If you want to import an existing configuration, click the **Import from MGC** radio button, and click **Select**; otherwise, click **Perform Manual Configuration** and proceed to Chapter 3, or choose the solution wizard to use.

Note This imports the Cisco MGC configuration only; it does not import gateway configurations. To import configurations for gateways, after importing the MGC configuration, select each gateway and import its configuration.

If you import an existing configuration, the screen shown in Figure 2-2 appears.

Figure 2-2 Select Configuration



Step 5 Select the configuration to import, and click **OK**. The configuration will be imported from your Cisco MGC.

Overview of the VSPT Wizards

The VSPT includes the following solution provisioning wizards:

- SS7-PRI Gateway—Offloads modem dial traffic from competitive local exchange carrier (CLEC) switches and either forwards the calls, using SS7, to the destination CLEC switches or translates the primary rate access calls to integrated services digital network (ISDN PRI) to terminate them on the network access server (NAS) gateways.
- Tandem Transit with STP Links—Offloads modem dial traffic from CLEC switches and forwards the calls to the IP network through a signal transfer point (STP).
- Tandem Transit with SSP Links—Offloads modem dial traffic from CLEC switches and forwards the calls to the Interne Protocol (IP) network with no intermediate connection to STPs.

Each wizard automatically guides you through the steps involved in creating a provisioning configuration for a specific solution. A VSPT wizard:

- Lets you create configuration files across multiple devices, for example, MGCs and Cisco MGX 8850s
- Helps you avoid common errors when you are provisioning devices independently (for example, ensuring that you correctly match D-channels for PRI)
- Lets you avoid having to repeatedly enter duplicate data
- Creates the MML files and the Cisco MGX 8850 command files you use to provision the Cisco MGC and MGX 8850

The example in this chapter uses a wizard to provision a tandem transit with STP links solution, but the process is similar for all VSPT wizards. Specific components and steps vary, depending on the solution wizard you are using; for a complete description of solution components, refer to the documentation for that solution.

When you finish the provisioning session, the VSPT wizard saves your configuration as the “active” configuration, and that configuration cannot be modified. To make changes, you must save the configuration with another name and deploy the new provisioning session to make it active.

The number of configurations you can store might be limited by available disk space. Consider deleting old or unwanted configurations, or save them to another machine, if you do not have sufficient disk space.

Note The provisioning procedures described in this chapter follow the sequence for provisioning a “typical” Cisco MGC described in the Cisco *Media Gateway Controller Software Release 9 Provisioning Guide*.

Using the Tandem Transit with STP Solution Wizard

The VSPT utility, Solution Wizard: Tandem Transit with STP Links, guides you step-by-step through the following procedures:

- Configuring the Cisco MGC, page 2-4
- Configuring SS7 Signaling Services, page 2-6
- Configuring Media Gateway Control Links, page 2-8

When you finish using the VSPT wizard, you must still configure the trunk groups, trunks, and routes. For more information, see the *Cisco Media Gateway Controller Software Release 9 Provisioning Guide*.

Tip Before you begin provisioning, compile information about the solution components, including their names, IP addresses, and properties. Worksheets designed for collecting this information are provided in the *Cisco Media Gateway Controller Software Release 9 Provisioning Guide*. Complete them before you begin provisioning, and refer to them during provisioning.

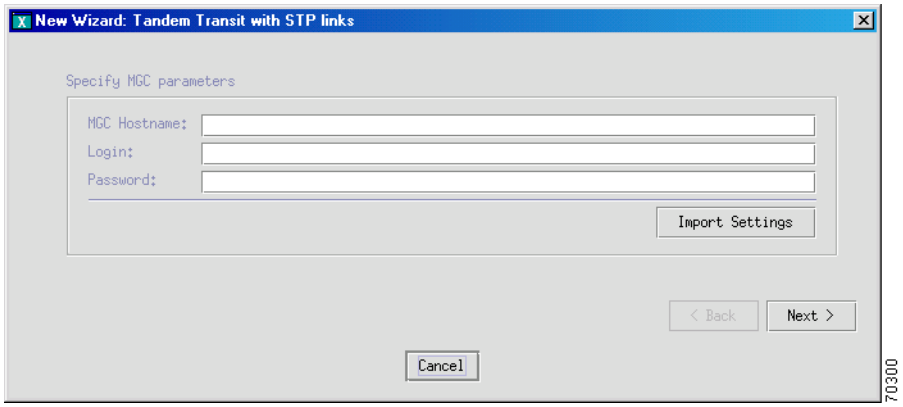
Configuring the Cisco MGC

Use the following procedure to provision a Cisco MGC using the Tandem Transit with STP solution wizard:

Step 1 Start a new provisioning session, and click **File > New** on the menu bar.

Step 2 Click the **Solution Wizard: Tandem Transit with STP** radio button, and click **OK**. A screen similar to the one in Figure 2-3 appears.

Figure 2-3 Specifying Cisco MGC Properties

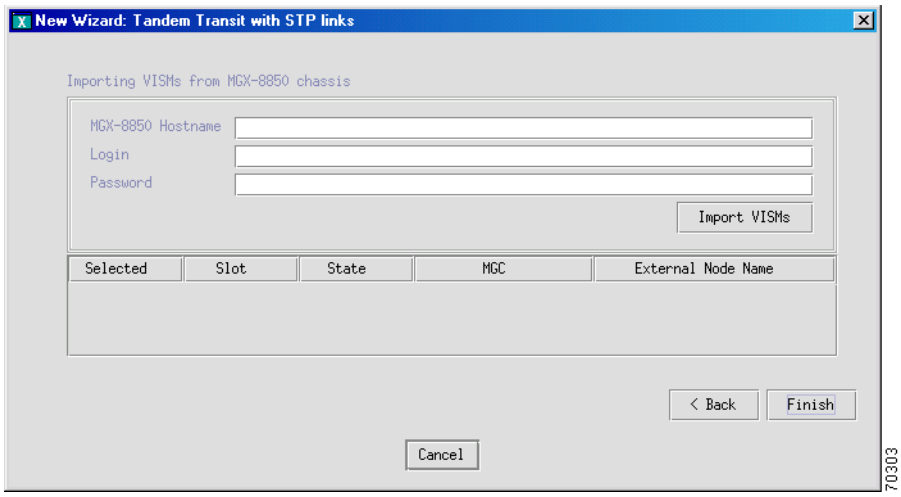


Step 3 Enter the MGC IP address, for example, 172.31.157.1, in the MGC Hostname field.

Step 4 Enter a login ID and a password.

Step 5 Click **Next**. A screen similar to the one in Figure 2-4 appears.

Figure 2-4 Specifying MGC IP Addresses



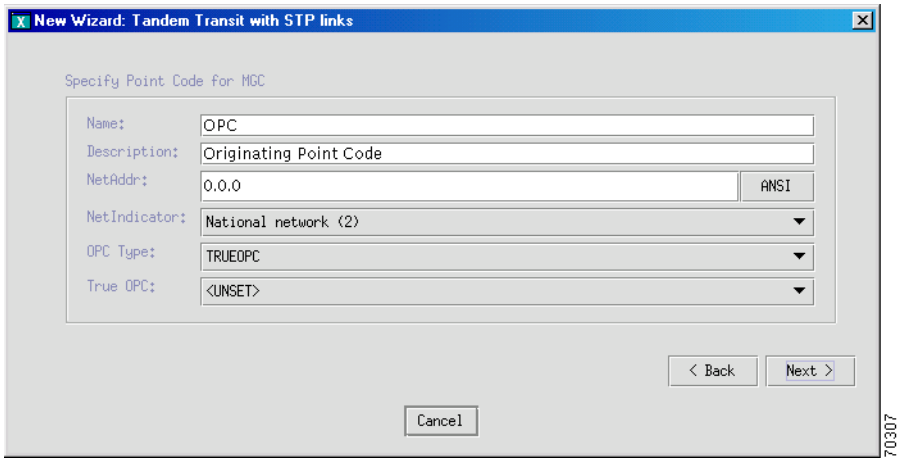
Step 6 Enter the network addresses of the MGC (IP_Addr1 and IP_Addr2) in dotted decimal notation, for example, 172.18.145.38.

Step 7 Click **Next**.

Step 8 If the Cisco MGC has a failover Cisco MGC, click the radio button next to **Has a failover MGC,** and enter the network addresses of the failover Cisco MGC (**IP_Addr1** and **IP_Addr2**). Use dotted decimal notation. If there is no failover Cisco MGC, click the radio button next to **Does not have a failover MGC**. The IP_Addr 1 and IP_Addr 2 fields are not valid and are grayed out when there is no failover MGC.

Step 9 Click **Next**. A screen similar to the one in Figure 2-5 appears, and SS7 signaling service provisioning begins.

Figure 2-5 Specifying a Point Code



Configuring SS7 Signaling Services

Use the following procedure to configure SS7 signaling services:

Step 1 Enter a name, for example, OPC, in the Name field on the screen shown in Figure 2-5.

Step 2 Enter a description of the OPC, for example, Originating Point Code.

Step 3 Enter the OPC network address (NetAddr) in dotted notation, for example, 1.1.2.

Step 4 From the NetIndicator drop-down menu, choose a network indicator menu. There are four options.

- International—Used if the node is an international gateway.
- Spare—In countries where multiple carriers share point codes, networks are differentiated by this indicator.
- National—Used if the node routes calls through the national network (default value).
- Reserved—For national use. Do not use.

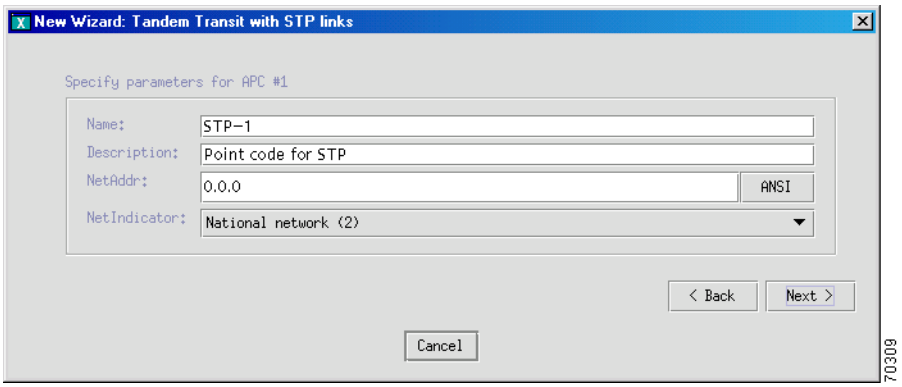
Step 5 From the OPC type indicator, choose either TRUEOPC or CAPOCP.

Step 6 Leave the True OPC indicator at <UNSET>.

Step 7 Click **Next**.

Step 8 Enter the number of adjacent point codes (APCs) to create, corresponding to the number of Cisco MGX 8850 switches to be provisioned. Click **Next**. screen similar to the one in Figure 2-6 appears.

Figure 2-6 Specifying Properties for Each APC



Step 9 Enter the APC name.

Step 10 Enter a description of the APC.

Step 11 Enter the network address (NetAddr) in dotted notation; for example, 2.2.1.

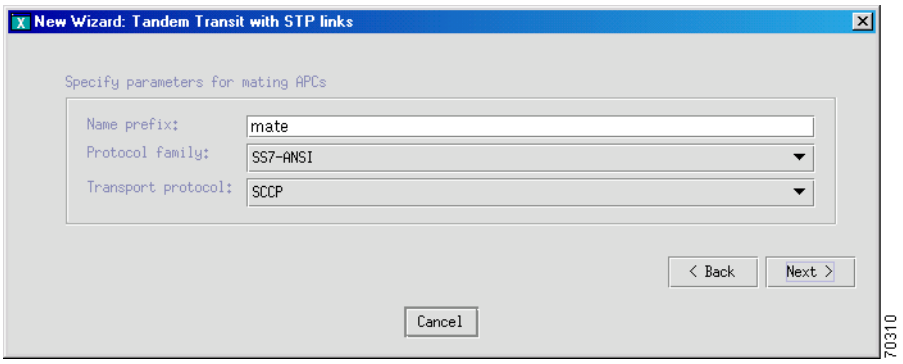
Step 12 From the NetIndicator drop-down menu, choose the network indicator:

- International—Used if the node is an international gateway.
- Spare—In countries where multiple carriers share point codes, networks are differentiated by this indicator.
- National—Used if the node routes calls through the national network (default value).
- Reserved—For national use. Do not use.

Step 13 Click **Next**. A series of screen similar to the one in Figure 2-6 appears sequentially for each APC you specified in Step 8.

Step 14 Repeat Step 9 through Step 13 for each APC screen. After you have configured properties for each APC you specified in Step 8, a screen similar to the one shown in Figure 2-7 appears.

Figure 2-7 Specifying Properties for Mating APCs



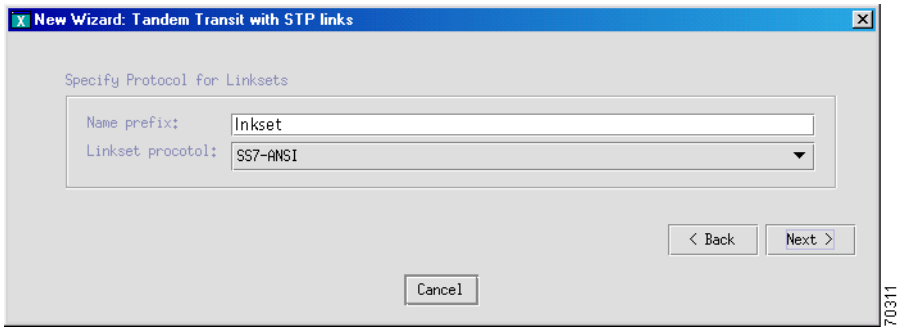
Step 15 Enter the name prefix for the subsystem (default is mate).

Step 16 Choose the protocol family.

Step 17 Choose the transport protocol.

Step 18 Click **Next**. A screen similar to the one in Figure 2-8 appears.

Figure 2-8 Specifying a Protocol for Linksets

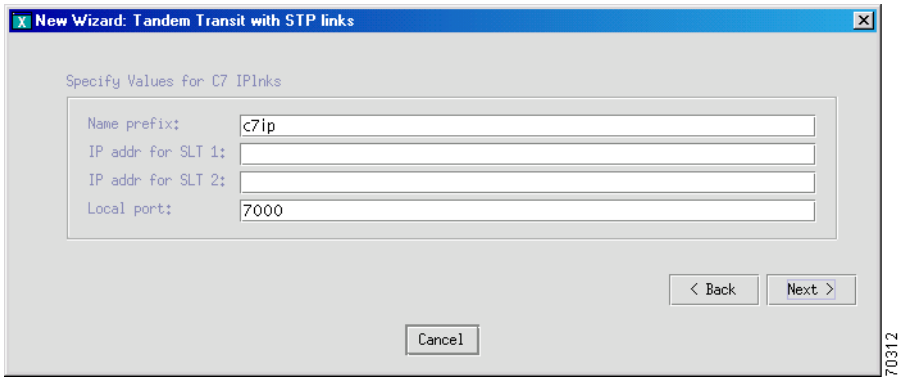


Step 19 Enter the name prefix for the linkset (default is lnkset).

Step 20 From the Linkset protocol drop-down menu, choose the linkset protocol for the linkset you are configuring.

Step 21 Click **Next**. A screen similar to the one in Figure 2-9 appears.

Figure 2-9 Specifying Values for C7 IP lnks



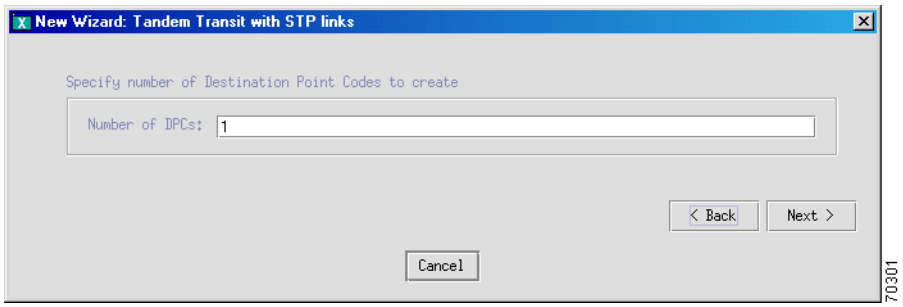
Step 22 Enter the name prefix (the default is c7ip).

Step 23 Enter the network addresses (IP addr for SLT 1 and IP addr for SLT 2) in dotted notation; for example, **172.16.145.38** and **172.16.145.40**.

Step 24 Enter the local port on the SLT.

Step 25 Click **Next**. A screen similar to the one in Figure 2-10 appears, and you can begin configuring media gateway control links.

Figure 2-10 Specifying the Number of Destination Point Codes



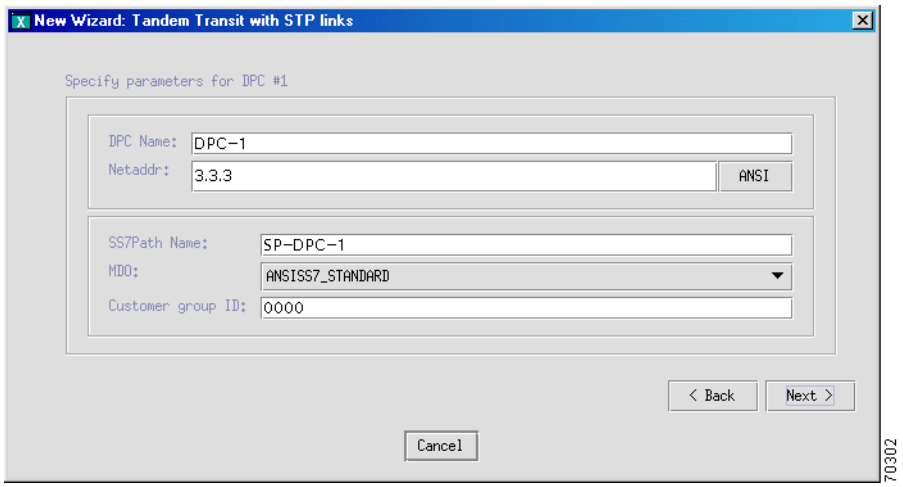
Configuring Media Gateway Control Links

Use the following procedure to configure MGC links for this solution.

Step 1 Enter the number of DPCs to create, in the window shown in Figure 2-10.

Step 2 Click **Next**. A screen similar to the one in Figure 2-11 appears.

Figure 2-11 Specifying Properties for Each DPC



Step 3 Enter the DPC name.

Step 4 Enter the network address of the destination network element in dotted notation; for example, 172.16.145.38.

Step 5 Enter the SS7 path name.

Step 6 From the MDO drop-down menu, choose the protocol for this signaling service, for example, ANSISS7_STANDARD.

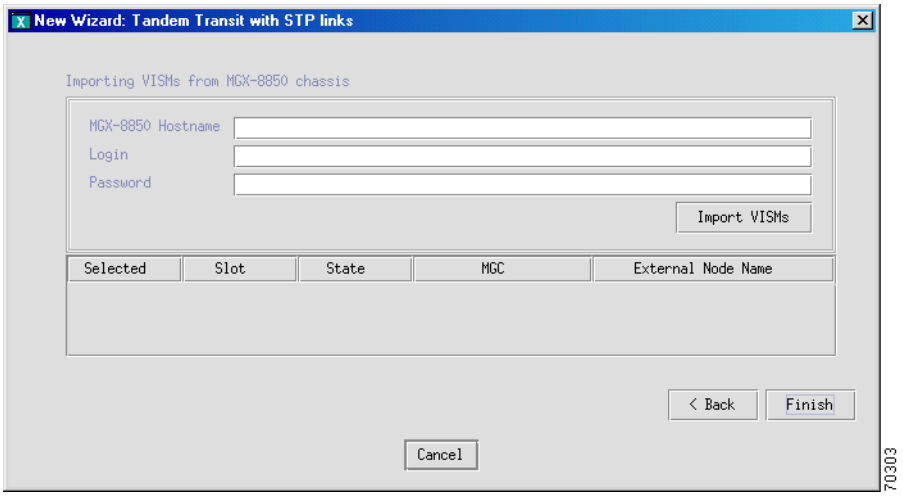
Step 7 Enter the Customer group ID.

Step 8 Click **Next**.

Step 9 Enter the SS7 route name prefix, and click **Next**.

Step 10 A screen similar to the one in Figure 2-12 appears.

Figure 2-12 Importing VISMs from the MGX 8850 Chassis



Step 11 Enter the name of the MGX 8850 host in which the VISM cards are installed.

Step 12 Enter the login ID for the MGX 8850 host.

Step 13 Enter the password.

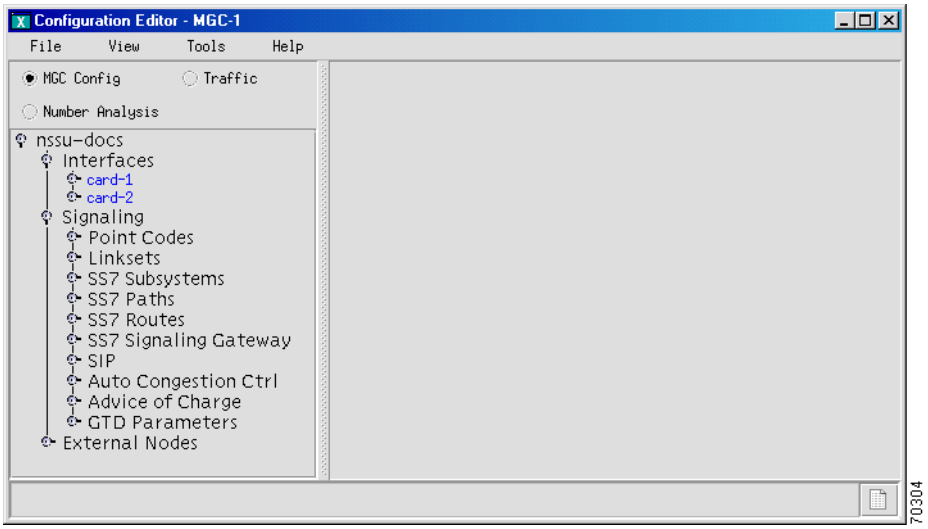
Step 14 Click **Import VISMs**. A list of the imported MGX 8850 switches appears in the lower portion of the screen.

Step 15 Click **Finish**. You can now provision trunk groups, trunks, and routes for this solution. Refer to the *Cisco Media Gateway Controller Software Release 9 Provisioning Guide*.

Provisioning Session Results

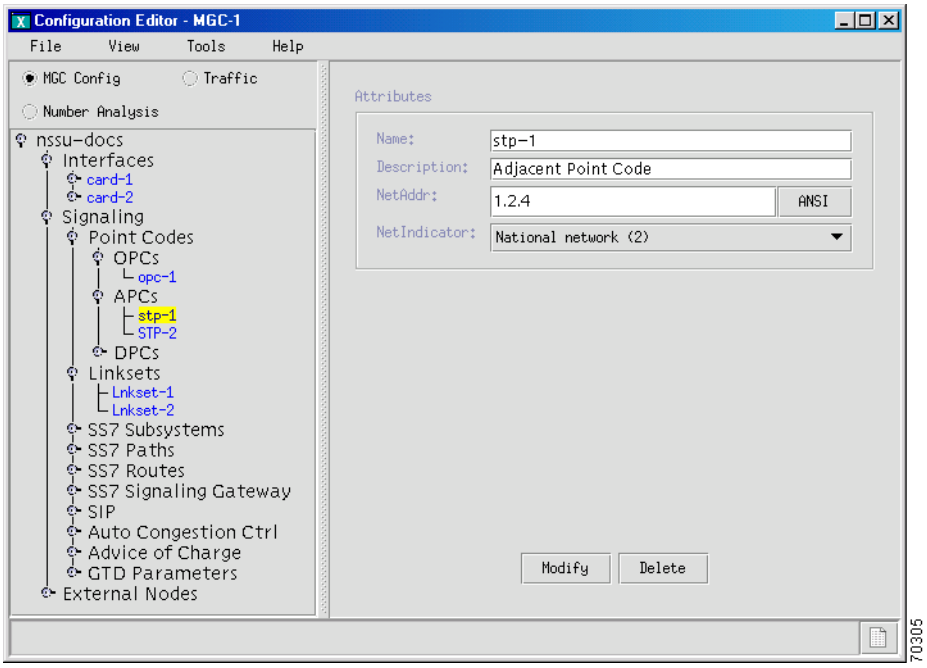
The results of the provisioning session you just completed are visible in the hierarchical tree in the left pane of the main VSPT screen, as shown in Figure 2-13.

Figure 2-13 Expanded Hierarchical Tree Showing Results of Provisioning Session



You can expand the branches to view individual components. To view the provisioning information for a particular system component, click on the component name. Information about the selected component is shown on the right-hand side of the screen (see Figure 2-14 for an example).

Figure 2-14 View a Selected Component Configuration



You cannot use the VSPT wizard to provision trunk groups, trunks, and routes. For more information about provisioning these components using the VSPT, see the *Cisco Media Gateway Controller Software Release 9 Provisioning Guide*.

Viewing Generated MML

To view the MML commands generated by the VSPT wizard, refer to the "View Generated MML Commands" section on page 3-3.