CHAPTER 2

Getting Started

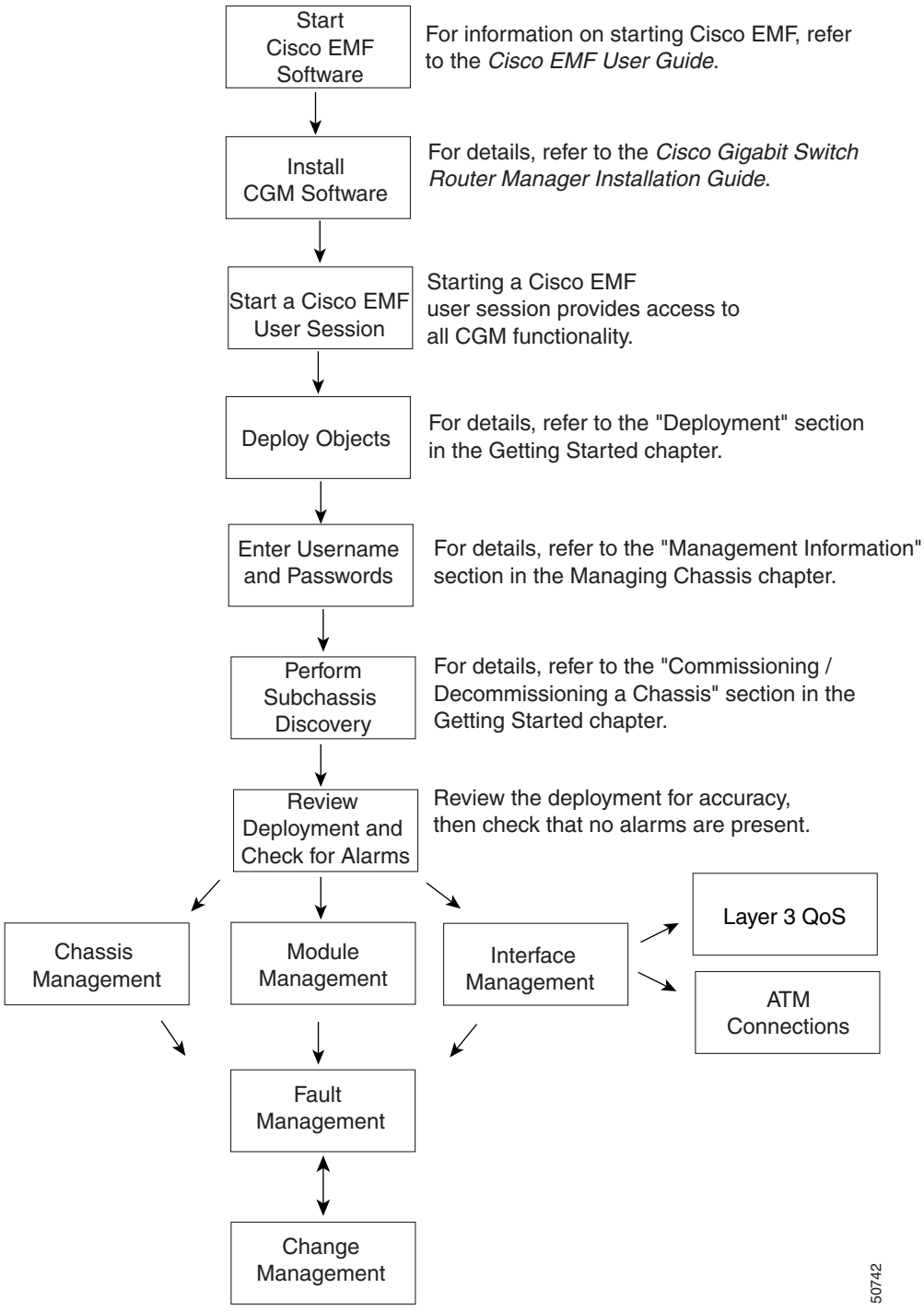
The Getting Started chapter covers the following information:

- General Workflow for CGM Processes
- Cisco EMF and CGM
- Deployment

General Workflow for CGM Processes

Figure 2-1 outlines the steps involved in installing and using the CGM software.

Figure 2-1 General Workflow for CGM Processes



Cisco EMF and CGM

The CGM software is viewed through the Cisco Element Management Framework (Cisco EMF). It is imperative to understand how Cisco EMF works before you can use the CGM software (for details, refer to the *Cisco EMF User Guide*.) When you start a Cisco EMF user session, the CGM software starts up as well.

The Cisco EMF and CGM section covers the following areas:

- Starting a Cisco EMF User Session
- Quitting a Cisco EMF User Session

Starting a Cisco EMF User Session

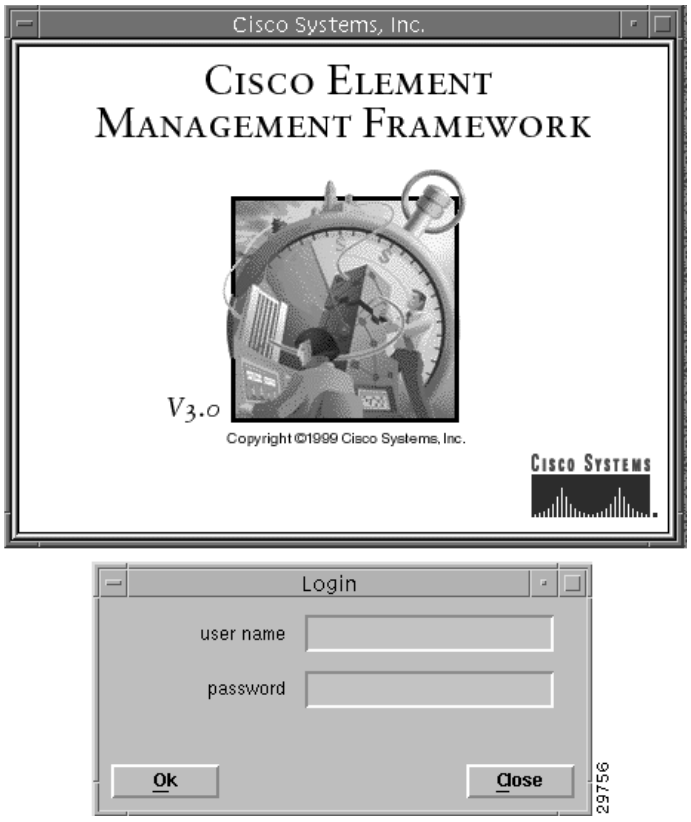
Before you can start a Cisco EMF user session, Cisco EMF has to be running. If you receive a message that Cisco EMF is not running, contact your system administrator.

To start a Cisco EMF user session, proceed as follows:

Step 1 From the command line on the terminal window, type the following:
<*CEMF_ROOT*>/bin/cemf session

Replace <***CEMF_ROOT***> with the root directory where Cisco EMF is installed (for example, /opt/CEMF3). The login window appears:

Figure 2-2 Login Window

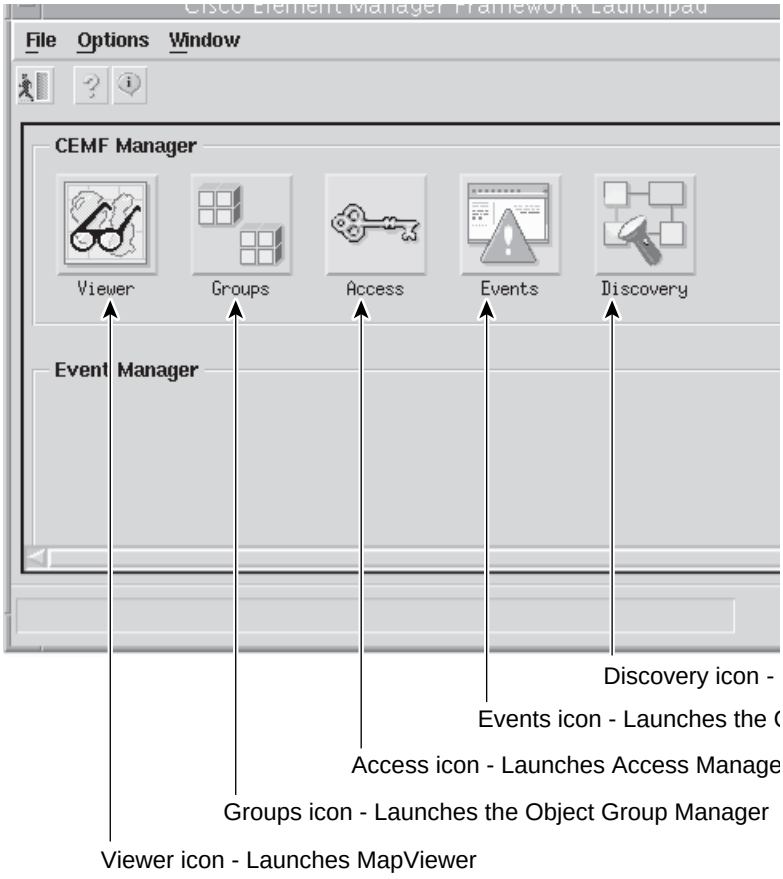


Step 2 Enter your user name and password, then click **Ok** to proceed.

When an invalid user name or password is entered, an error is displayed. Click **Ok**, then enter a valid user name and password. You have three attempts to enter a valid user name and password. If a valid user name and password are not entered within three attempts, the login window closes.

When a valid user name and the password are entered, the session starts and the Cisco EMF Launchpad window appears.

Figure 2-3 Cisco EMF Launchpad



Step 3 Click on the **Viewer** icon. A new window appears, with the different views displayed in the left panel.

Step 4 Click on CGM view, then click on a chassis object to see chassis maps. If you have no objects deployed yet, no objects appear within this view.

Quitting a Cisco EMF User Session

You can quit a Cisco EMF user session any one of the following ways:

Step 1 In the launchpad window, click the **Close** icon from the toolbar

or

From the **File** menu, choose **Quit**

or

Press **Ctrl + Q.**

Step 2 A window appears, asking, *Do you wish to quit the Cisco EMF Manager System?* Click **Yes** to quit the session. All active applications are closed and the session terminates.

Deployment

The first step toward managing a Cisco 12000 GSR is to deploy or predeploy the physical objects that you want to manage. Deploying a physical object creates a representative object in Cisco EMF and as a result, makes the CGM software aware of the physical object's presence.

CGM objects can be discovered automatically or deployed manually. For example, to deploy a chassis, you can either use auto discovery or you can manually deploy the chassis. If you want to deploy any objects under the chassis, you can either use subchassis discovery or manually deploy each object (interfaces are automatically created when you deploy each line card.)

If all or most of your chassis objects are physically present and if you have a large amount of objects to deploy, you might want to automate these processes by using auto discovery. For example, if CGM is installed into an existing network of Cisco 12000 GSRs, auto discovery can dramatically reduce the amount of operator input required. If you only want to deploy a few objects or if many of your objects are not yet physically present, you might want to manually deploy.

The following supporting modules can be deployed using subchassis discovery only, no manual deployment is available for these modules:

- AC or DC power supply card
- Fan tray module
- Blower module

You can also deploy either of the following logical objects:

- SVC—Refer to "Deploying an SVC."
- PVC—Refer to "Deploying a PVC."

Tips WRED (Weighted Random Early Detection) and CAR (Committed Access Rate) objects are not created using the deployment wizard. For details on creating these objects manually, refer to Chapter 10, "Layer 3 QoS."

The Deployment section covers the following areas:

- Deployment Process

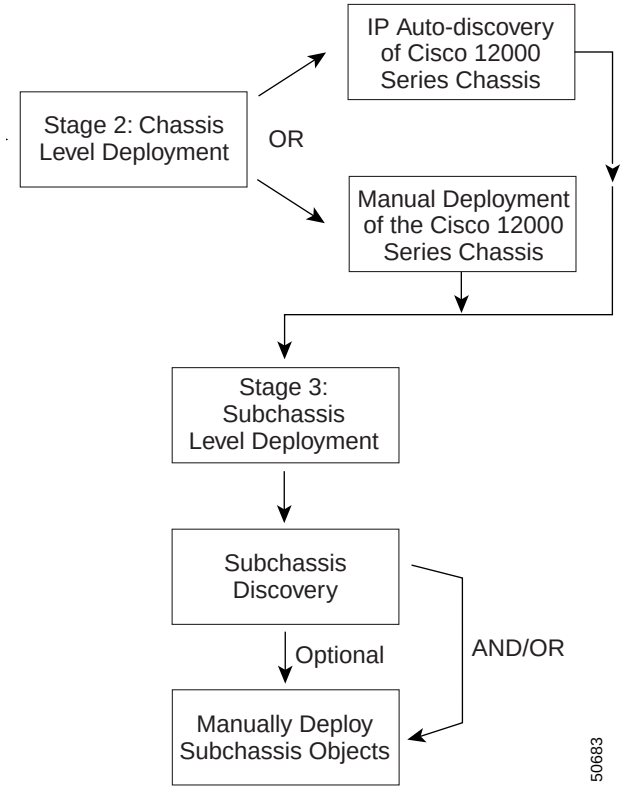
- Predeployment
- Auto Discovery
- Commissioning and Subchassis Discovery
- Deploying a Cisco 12000 GSR Chassis
- Deploying Modules—Includes deploying GRPs, line cards (ATM, POS, Ethernet, DS-3), CSCs, and SFCs.

Deployment Process

Producing a manageable Cisco 12000 GSR in Cisco EMF is a two-stage process (refer to Figure 2-4).

1. The first deployment stage is at the chassis level. The Cisco 12000 GSR chassis can be auto discovered or manually deployed.
2. The second deployment stage is at the subchassis level. This involves either subchassis discovery or deploying subchassis objects (modules) manually.

Figure 2-4 Deployment Process



Predeployment

CGM objects can be manually predeployed before the physical equipment arrives. The following objects can be predeployed in CGM:

- Cisco 12000 GSR chassis
- Line cards and interfaces

For example, if you know that you will be receiving a certain line card, you can manually predeploy that line card before it is actually present.

Predeployment can save time and effort. When the line card becomes available, simply insert it into the chassis, and the CGM software detects its presence and adopts all the configuration parameters you preapplied to it.

Predeployment can be desirable in a situation where the expected hardware is known, but configuration information is perhaps not readily available. If you want to manually predeploy only, follow only the predeployment procedure following, then perform device synchronization (for details, refer to "Device Synchronization.") Manually predeployed objects assume whatever configuration is currently on the device, and this information is displayed in the CGM configuration windows.

Performing Predeployment

Say that you are expecting the following hardware:

- Cisco 12016 chassis and GRP(s)
- ATM and POS line cards (with respective interfaces)

To perform both manual predeployment and offline configuration, proceed as follows.

Predeployment

Step 1 Manually deploy the Cisco 12000 GSR chassis (and shelf) under a site.

Note You should already have created a site object. If you have not created a site, create one now. For details, refer to the *Cisco Element Management Framework User Guide*.

Step 2 Manually deploy GRP(s).

Step 3 Manually deploy the ATM line cards.

ATM interfaces are deployed simultaneously.

Step 4 Manually deploy the POS line cards.

POS interfaces are deployed simultaneously.

Now you have predeployed and thus created representative objects in CGM for your expected hardware, modules, and interfaces. All of these objects will be in the Decommissioned state. For details on manually deploying any of the preceding objects, refer to "Deployment" section on page 2-5.

Device Synchronization

When all of your predeployed objects become available, you can synchronize CGM to the device, or GSR. This process synchronizes or harmonizes the information on the device with the information (predeployment) in CGM. Synchronization is achieved by commissioning the chassis object. Chassis commissioning allows CGM to detect the chassis' actual presence. When you commission the chassis, CGM discovers not only the presence of the chassis, but the presence of all existing objects within the chassis. (For steps on commissioning a chassis, refer to "Commissioning or Decommissioning a Chassis.")

Synchronization effectively tells CGM that you now have a real operating system. All working objects typically receive a state of Normal.

Note that device synchronization does not recreate all objects present in the hardware. Some existing objects cannot be recreated, or need to be uploaded manually. Layer 3 QoS objects and interface profiles are not recreated. You can upload existing ATM connections (for details, refer to "Uploading PVCs and ATM QoS Profiles.")

Auto Discovery

Auto discovery is a Cisco EMF application that discovers existing Cisco 12000 GSR chassis, saving time and effort. For every Cisco 12000 GSR chassis discovered on the specified network, a shelf object is created with a chassis object beneath it.

The auto discovery window can be opened from the Viewer or Discovery icons in the Launchpad. For more information on how to use Auto discovery, refer to the *Cisco EMF User Guide*.

The Auto discovery application has three mechanisms for discovering chassis:

- IP—ICMP pings are used to find chassis in a given IP address range. This finds which IP device exists, but does not discover what kind of device it is.
- SNMP—SNMP get requests are used to find chassis in a given IP address range. Several SNMP community strings can be used so that equipment with different community strings can be discovered in the same discovery session. The SNMP information returned by devices is used to work out what kind of device has been found.
- IP and SNMP—ICMP pings are used to find chassis and then SNMP requests are used to interrogate the chassis to find out what kind of chassis they are. This is the default mechanism.

Auto discovery can discover chassis on more than one subnetwork using multi-hop discovery. It can be scheduled to run at preset times (the Cisco *EMF User Guide* details how to set the schedules.) An option is also available to specify the physical location under which discovered objects are created.

After the Cisco 12000 GSR chassis is detected, an object representing the chassis is created and placed under the site from which auto discovery was launched. A map of the chassis is also created, as shown in Figure 2-5.

Note If you wish to auto-discover Cisco 12000 GSR chassis that can be managed by the CGM, then the Physical Path option must be enabled and an appropriate Physical Path terminated with a Site must be selected. Providing the above is done, the auto discovery application will create a Site containing a Shelf containing a chassis below the selected Physical Path for each Cisco 12000 GSR chassis discovered.

Commissioning and Subchassis Discovery

After you deploy a Cisco 12000 GSR chassis, the second step in creating a manageable system is to commission the chassis, which begins the process of subchassis discovery. Subchassis discovery discovers all physical objects within the chassis. Any line cards and interfaces within the chassis are discovered at this time. Commissioning not only discovers the chassis and all the physical objects within the chassis, but it also initiates heartbeat polling, which allows alarms to be raised on the chassis and all physical objects within the chassis.

Commissioning Filters Down

Because the chassis is the highest-level object (apart from the "virtual" shelf), all objects under the chassis are commissioned as well when you commission the chassis. One level down, if you commission a GRP, you commission all physical objects underneath that level. If you commission a line card, you commission all interfaces on that line card, and so on. However, note that before you can commission any module within a chassis, the chassis object itself must be commissioned. This means that you must run subchassis discovery by commissioning the chassis before you can commission or decommission any individual objects under the chassis. If you do not want to actively manage all objects within the chassis, you can simply decommission the objects you are not ready to manage.

Tips If you are not ready to commission the chassis presently, you can manually deploy individual modules within the chassis (for details, refer to "Deploying Modules.") These can also be commissioned individually, provided the chassis object is commissioned.

Object States

Once subchassis discovery is performed, all objects are assigned a specific state. For details about all potential object states, refer to "CGM Object States" section on page 1-13.

Naming of Objects

Note that during subchassis discovery, modules are auto-named. If you want to rename these objects, you can do so by right-clicking on any object, then choose **View Manipulation>Rename Object**. Select the object you wish to change in the window that appears, then enter the new name. Click **Apply**, and the name is changed in CGM.

Figure 2-5 shows a Cisco 12008 GSR chassis map in the CGM view before subchassis discovery. No modules are deployed within the chassis.

Note The Cisco 12012 and the 12016 GSR chassis maps will look different.

Figure 2-5 Before Subchassis Discovery

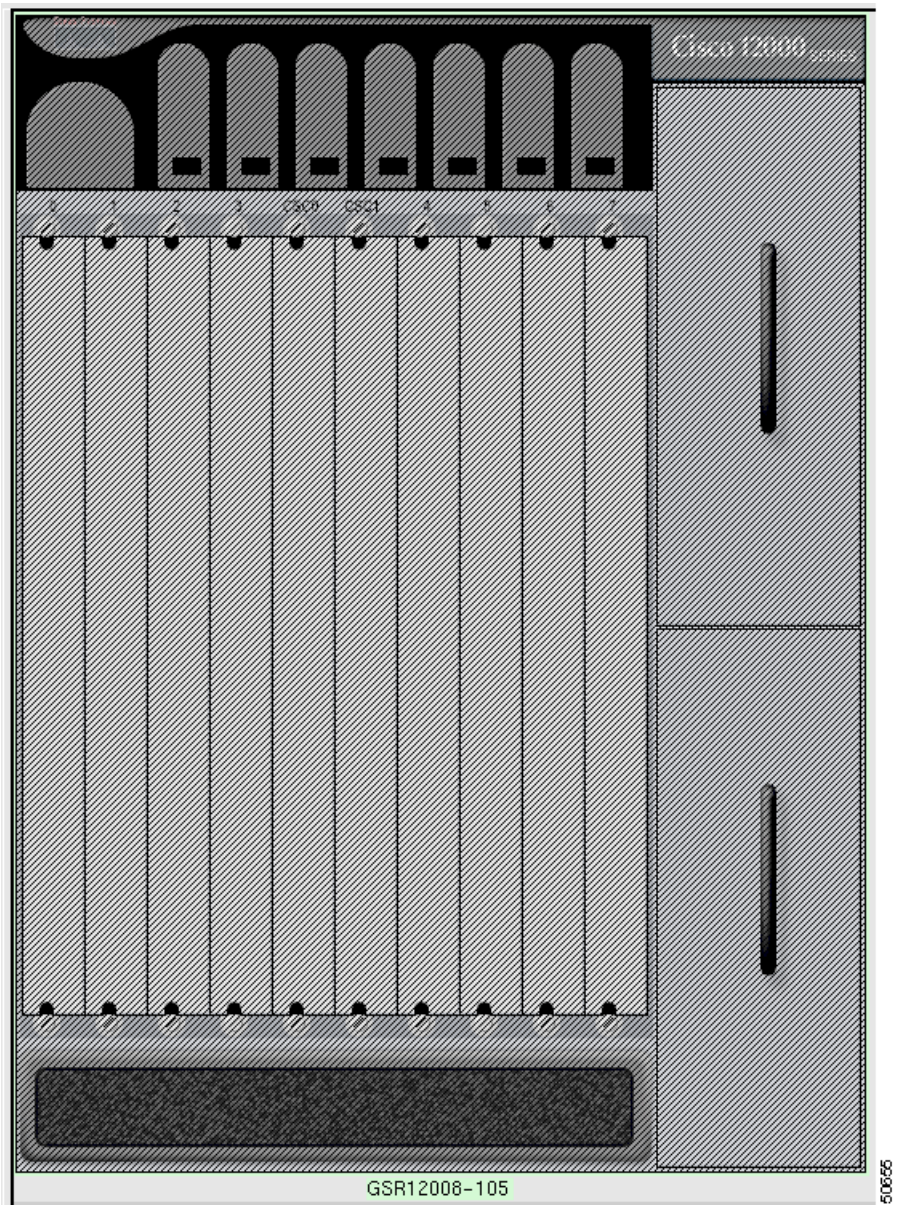
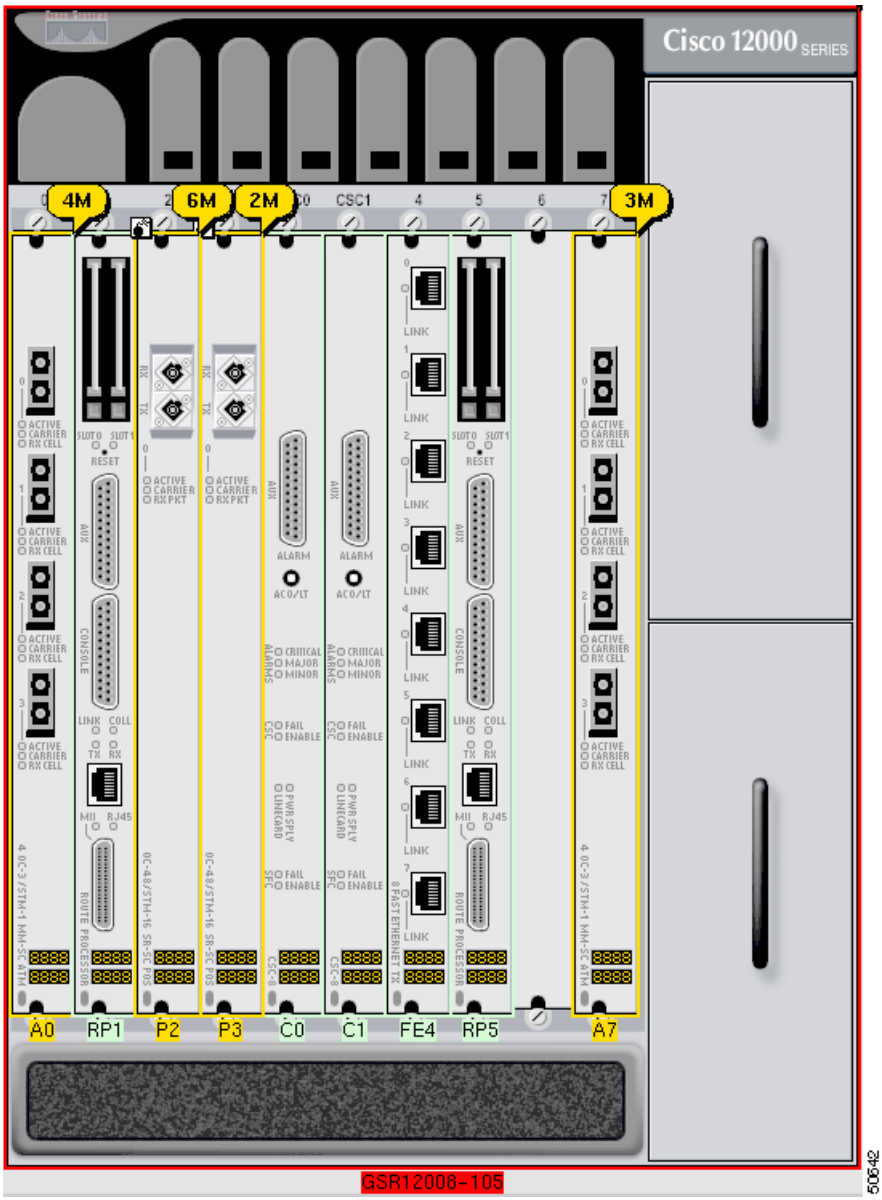


Figure 2-6 shows a Cisco 12008 chassis map in the CGM view after subchassis discovery. Modules are deployed within the chassis.

Figure 2-6 After Subchassis Discovery



Commissioning or Decommissioning a Chassis

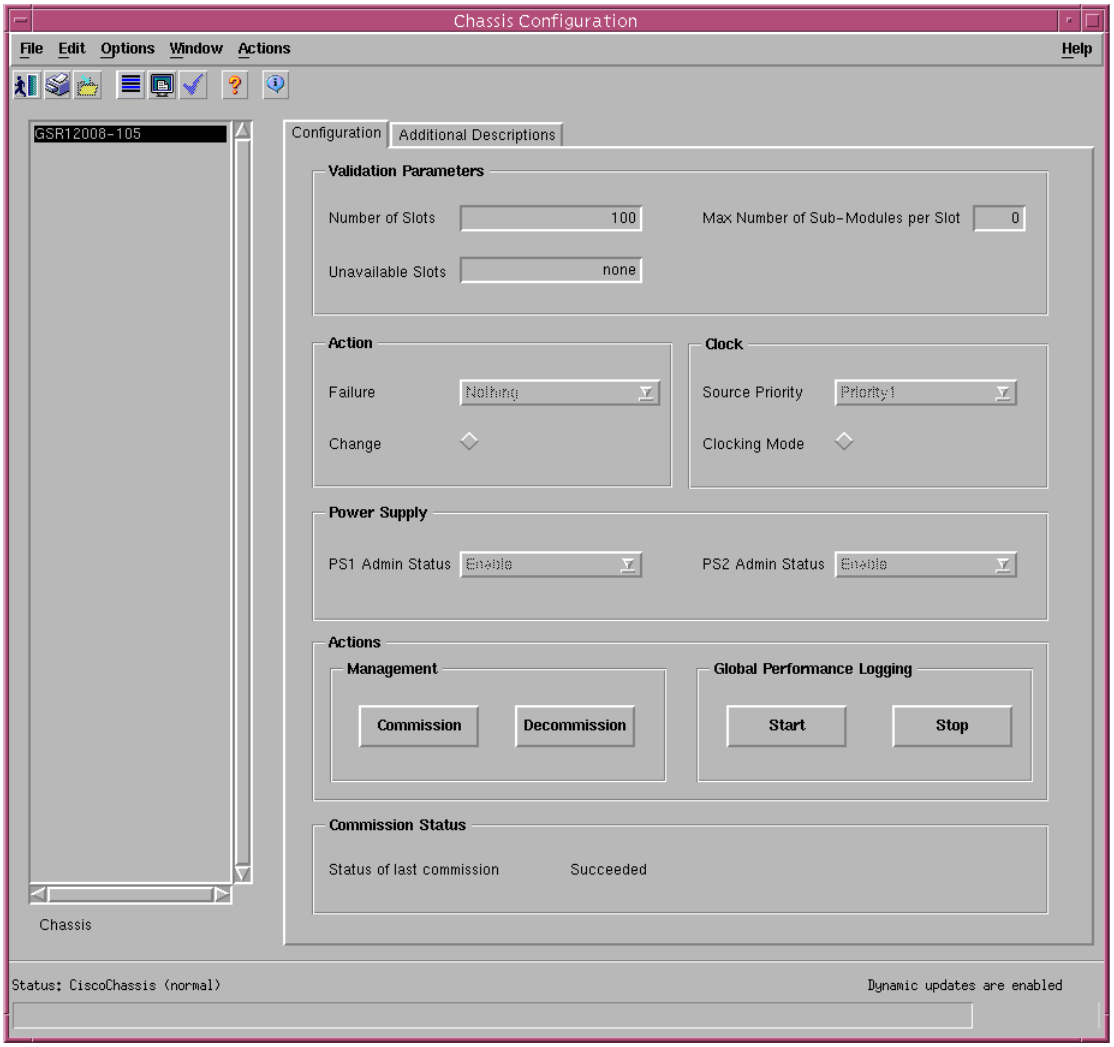
When you commission a chassis, subchassis discovery automatically starts, which discovers and commissions all objects within the chassis. Commissioning means that active management (such as polling) begins upon the chassis and all commissioned objects within the chassis.

Decommissioning a chassis also decommissions all objects within the chassis, which means that active management (such as polling) stops on the chassis and on all objects within the chassis.

To commission or decommission a chassis, proceed as follows:

Step 1 Right click on the chassis you want to commission or decommission, then choose **CGM Management> Physical>Chassis>Configuration**. The Chassis Configuration window appears.

Figure 2-7 Chassis Configuration Window



Step 2 Make sure the chassis you want to commission or decommission is highlighted in the list box at left.

Step 3 Click **Commission** or **Decommission** (located in the Action area).

The chassis and all objects contained within are commissioned or decommissioned. A status report appears in the Commission Status area, which shows whether the action has succeeded or failed.

For detailed information on this window, refer to “Chassis Configuration” section on page 3-4

Deploying a Cisco 12000 GSR Chassis

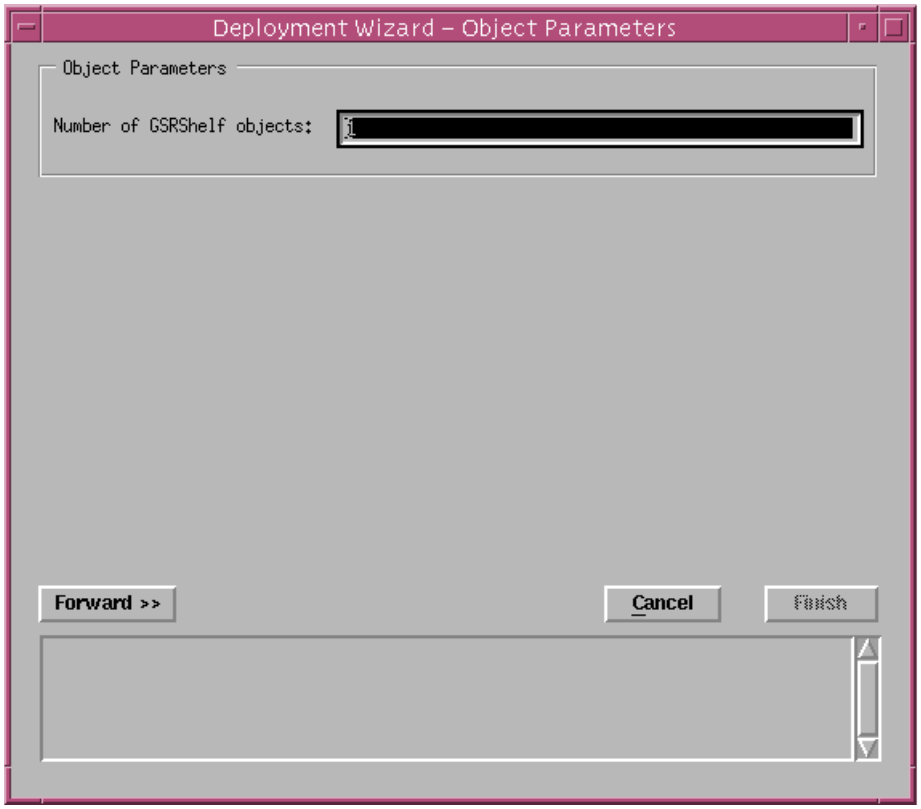
Tips It is recommended that you ping the GSR you intend to deploy, just to ensure the device is contactable.

When you deploy a chassis, a shelf is automatically created as well and placed under the selected site. Multiple shelves and chassis can be deployed under one site, but only one chassis can be deployed under each shelf. To deploy a shelf and a Cisco 12000 GSR chassis, proceed as follows:

Step 1 In the Map Viewer, right click on the site object under which you wish to deploy the shelf and chassis, then choose **Deployment>CGM>12008 or 12012 or 12016>Physical>Chassis**. The Deployment Wizard opens.

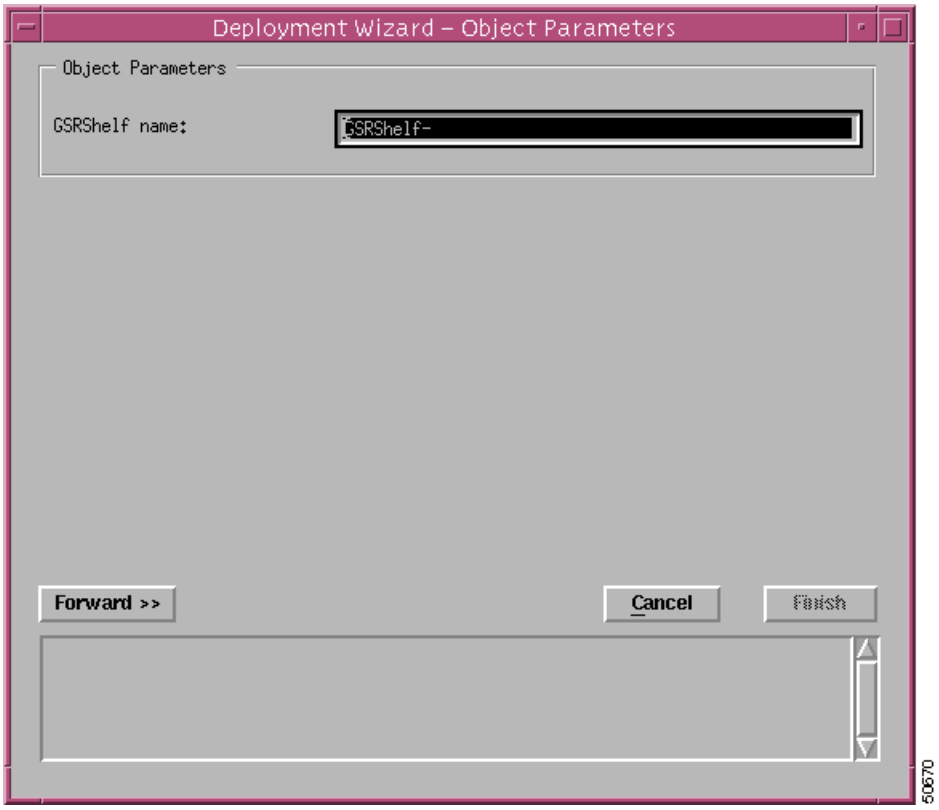
Note You can cancel the operation at any point by clicking **Cancel**.

Figure 2-8 Deployment Wizard—Object Parameters (1 of 3)



Step 2 Enter the number of Shelf objects (or the number of Cisco 12000 GSR chassis) you want to deploy. Click **Forward**.

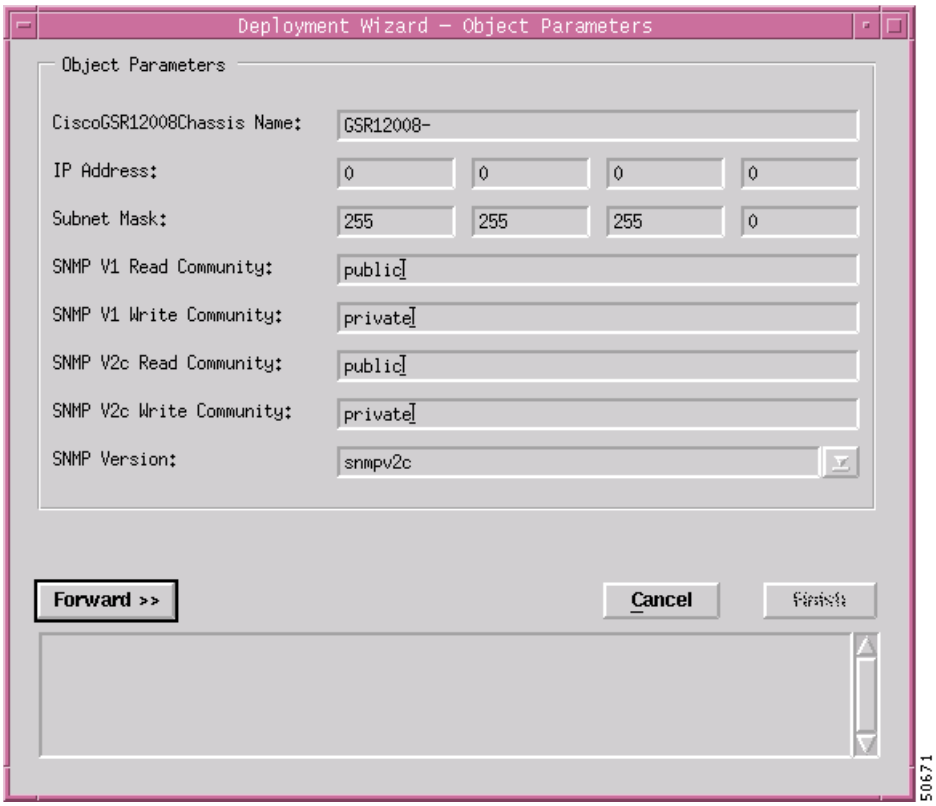
Figure 2-9 Deployment Wizard—Object Parameters (2 of 3)



Step 3 Enter the GSR shelf name, including a prefix and suffix. The prefix of "GSRShelf-" exists by default. You can accept the default prefix or change this prefix, as desired. The shelf name must be unique. Click **Forward** to continue.

Tips If you did not deploy the chassis from a site object, you might see an additional window that prompts you to choose the exact viewing path you want to place the chassis object under. See Figure 2-14 for an example.

Figure 2-10 Deployment Wizard—Object Parameters (3 of 3)



Step 4 Enter the following information:

GSR Chassis Name—Type in a name (including prefix and suffix) for the chassis you are deploying. A default prefix of “GSR12008” or “GSR12012” or “GSR12016” is provided. You can delete this prefix and use your own, or you can keep it and add your own suffix. This name must be unique.

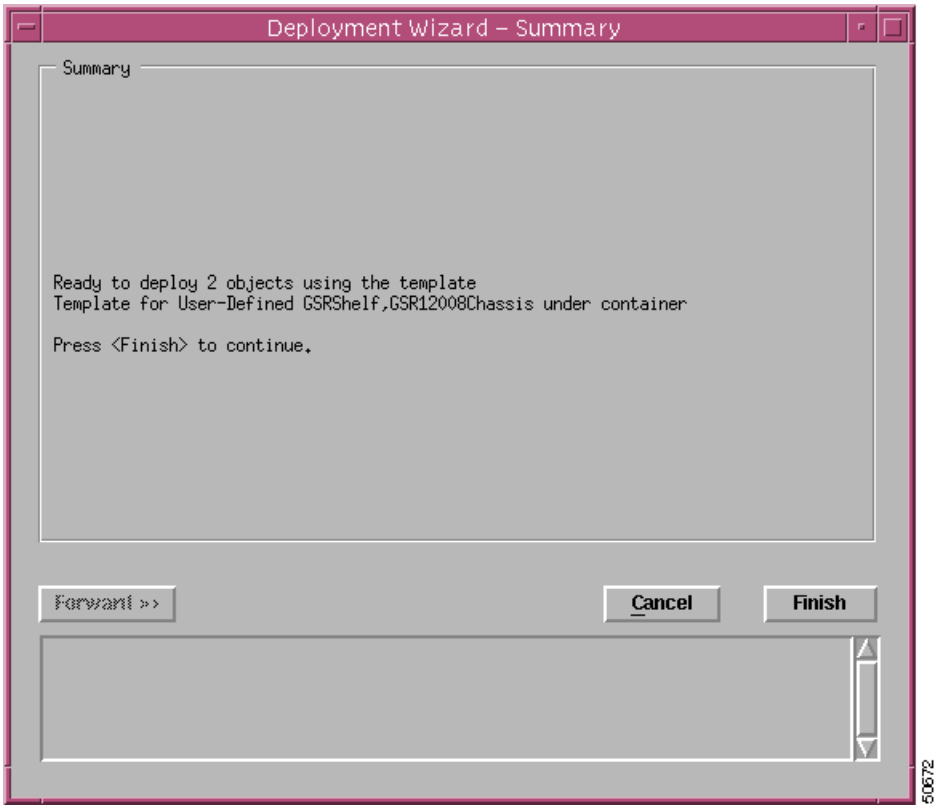
IP Address—Type in the IP address for the chassis you are deploying.

SNMP Details—Type in the SNMP read and write communities, and the SNMP version. The default SNMP version is 2c.

Step 5 Click **Forward** to continue.

If you are deploying more than one shelf and chassis at a time, repeat Steps 3 - 5 for any additional shelves and chassis.

Figure 2-11 Deployment Wizard—Summary



Step 6 The Deployment Summary details appear in the Deployment Summary Screen. If the Deployment Summary information is correct, click **Finish**. If the Deployment Summary information is incorrect, click **Cancel** to stop deployment.

Step 7 To proceed, you have two options:

- To perform subchassis discovery, refer to “Commissioning and Subchassis Discovery.”
- If you want to continue deploying individual modules, proceed to the subsequent page.

Deploying Modules

This section details how to manually deploy modules using the Deployment Wizard. You can manually deploy modules before they are physically present (for details, refer to “Predeployment.”) In this scenario, you need to manually deploy modules, because subchassis discovery will not pick up their presence. You can also decommission these modules if you do not want active management to be carried out on them.

Deployable modules include the following:

- GRPs
- Line Cards (ATM, POS, Ethernet, or DS-3)

Tips Supporting modules, such as AC or DC power supply cards, fan tray modules, and blower modules, can only be deployed through subchassis discovery. You cannot manually deploy these modules.

User Named vs. Auto Named Module Deployment

When you deploy a module, you have two initial options: to deploy an auto-named module, or to deploy a user-named module.

The user-named option allows you to name the module as you like. For example, if you have a specific naming scheme you want to use, then select the user-named option.

The auto-named option assigns an auto-generated name to the module, with the slot number appended to the name. For example, if you deployed an auto-named ATM line card in slot 5, the name given would be "A-5." This option is most useful when you have numerous line cards of the same type to deploy. However, the line cards must be deployed in sequence within the slots. For example, if you wanted to deploy five ATM line cards in slots 1 - 5, then the auto-named option would be ideal.

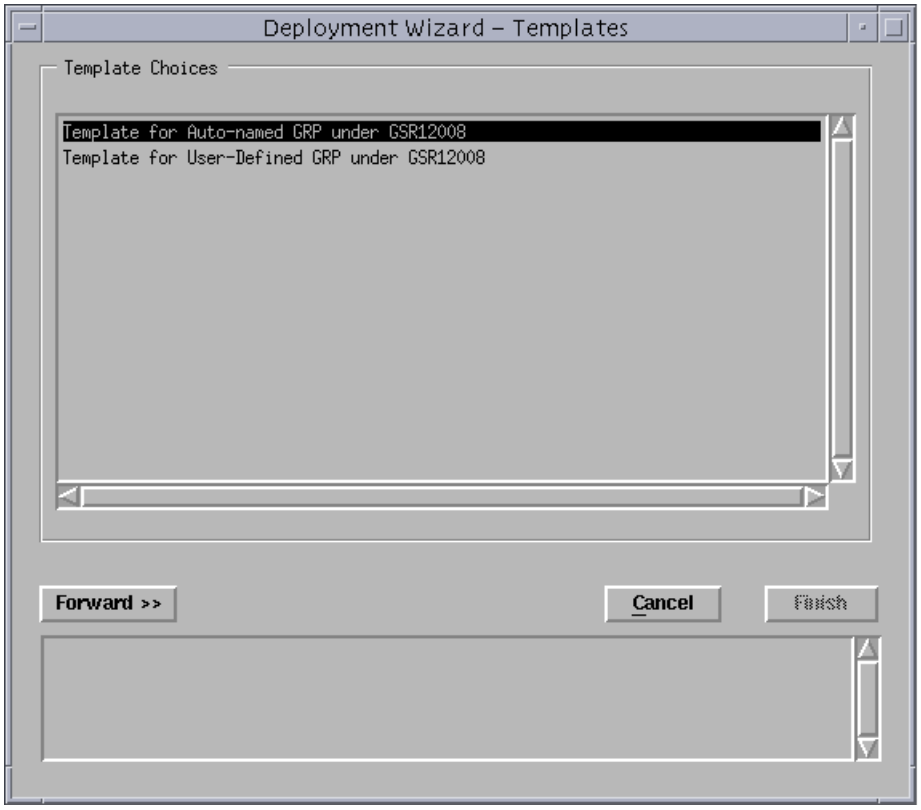
Deploying a GRP

Each Cisco 12000 GSR chassis must have one GRP deployed. A second GRP can be deployed for redundancy; this is optional.

To deploy a GRP, proceed as follows:

Step 1 Right-click on the slot within the chassis where you want the GRP to be deployed, then choose **Deployment>CGM>Physical>Module>GRP**. The Deployment Wizard appears.

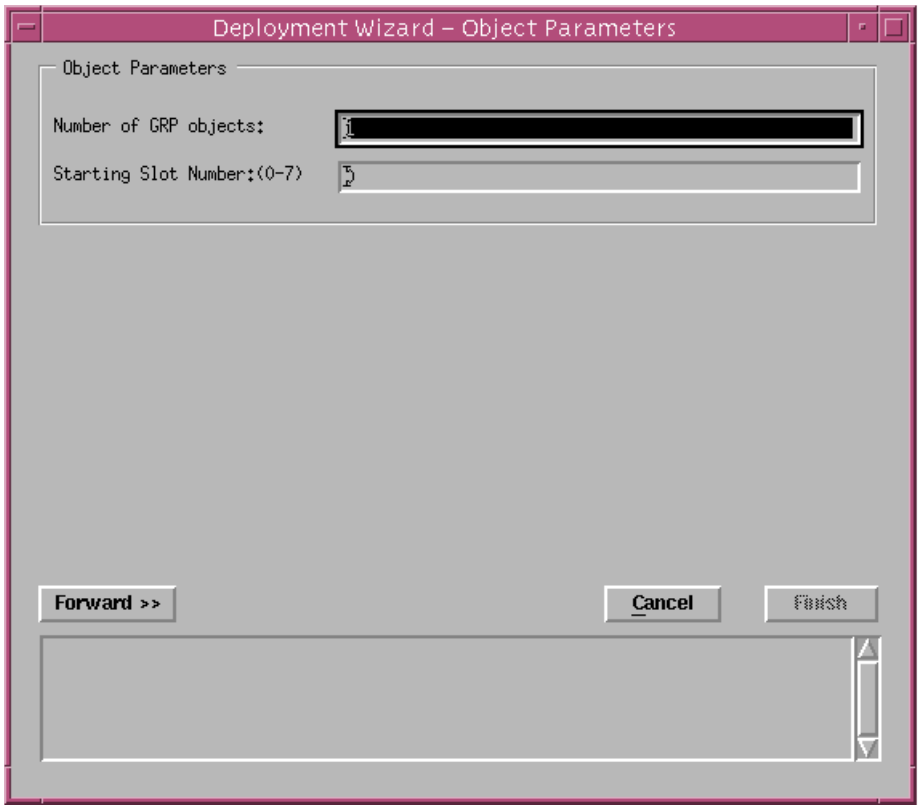
Figure 2-12 Deployment Wizard—Templates



Step 2 Click on the selection you want, either auto-named or user-named deployment. Ensure that your choice is highlighted before continuing.

For more information on auto vs. user named deployment, refer to "User Named vs. Auto Named Module Deployment" section on page 2-17.

Figure 2-13 Deployment Wizard—Object Parameters



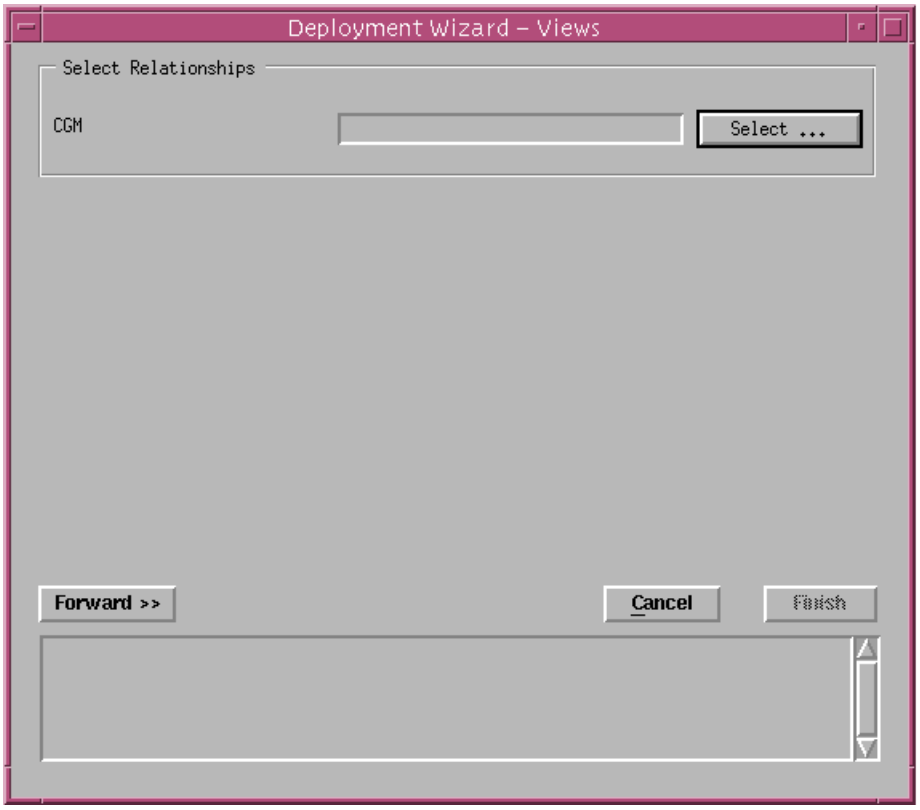
Enter the Number of GRP objects you wish to deploy.

Step 3 Enter in the slot number where you want the GRP to be deployed, then click **Forward**. If you are deploying two GRPs, the primary GRP must be placed in a slot with a lower number than the secondary GRP.

If you are deploying a GRP into a Cisco 12016 GSR, it is recommended to put the GRP in slot 7.

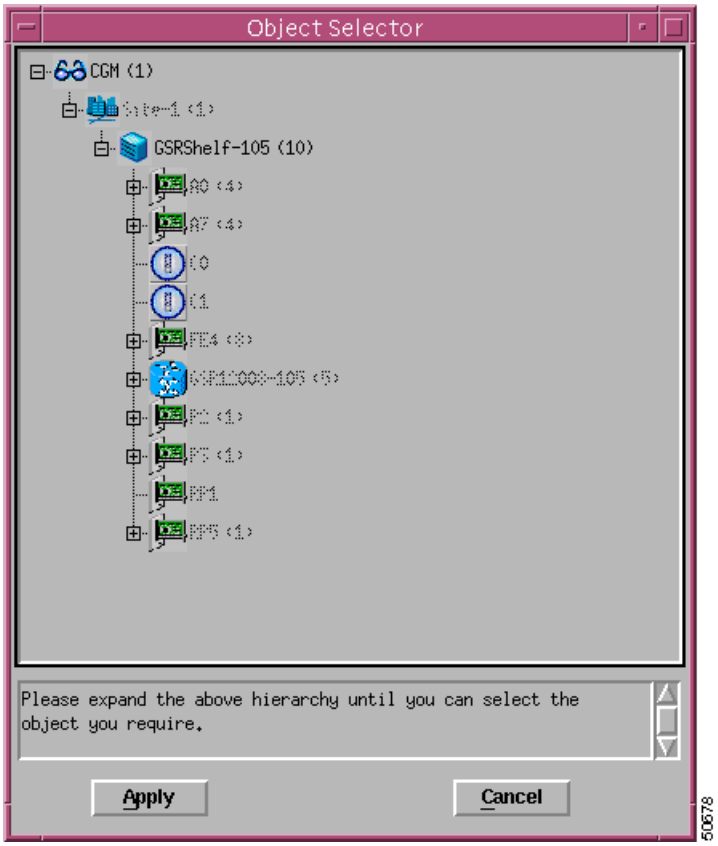
Caution If you deploy a module in a slot that is already occupied, deployment will fail at the **Finish** point.

Figure 2-14 Deployment Wizard—Views



Step 4 Click **Select**. The Object Selector window appears.

Figure 2-15 Object Selector Window

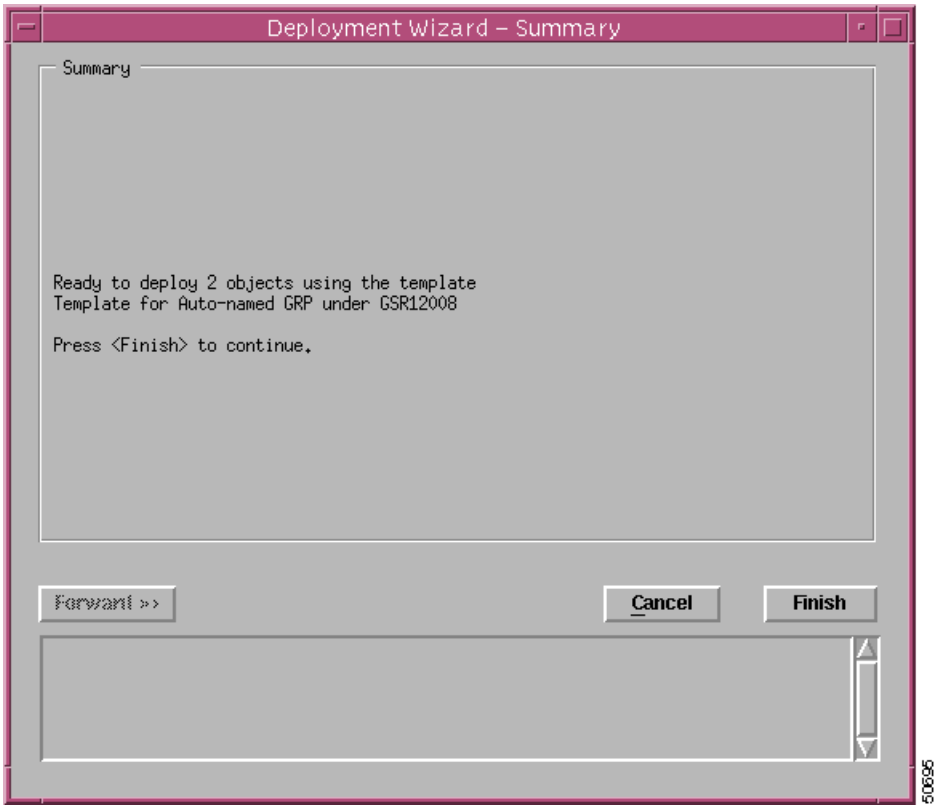


Step 5 Navigate through the hierarchy and choose the chassis that the GRP will be deployed within. Grayed out objects are not available for selection.

Step 6 Click **Apply**. You are returned to the Deployment Wizard - Views window.

Step 7 Click **Forward**.

Figure 2-16 Deployment Wizard—Summary



Step 8 The deployment summary details appear in the Deployment Summary window. If the deployment summary information is correct, click **Finish**. If the deployment summary information is incorrect, click **Cancel** to stop deployment.

Note that two objects are deployed when deploying a GRP: the GRP object itself, and the Ethernet interface object, representing the Ethernet interface on the GRP.

Caution If you have deployed a module in a slot that is already occupied, deployment will fail at the **Finish** point.

Deploying Line Cards

The Cisco 12000 GSR chassis supports four types of line cards (ATM, POS, Ethernet, and DS-3). See Table 2-1to Table 2-4 for further details.

Table 2-1 displays a list of the ATM line cards supported by CGM.

Table 2-1 CGM Supported ATM Line Cards

Card Type	CGM Menu Option	Card Description
atm-qoc3-sm	ATM > OC-3 4 Port > SM	GSR 4 Port OC3 ATM Single Mode (SM) Line Card
atm-qoc3-mm	ATM > OC-3 4 Port > MM	GSR 4 Port OC3 ATM Multi Mode (MM) Line Card
atm-oc12-sm	ATM > OC-12 1 Port > SM	GSR Single Port OC-12 Single Mode (SM) Line Card
atm-oc12-mm	ATM > OC-12 1 Port > MM	GSR Single Port OC-12 Multi Mode (MM) Line Card

Table 2-2 displays a list of the POS line cards supported by CGM.

Table 2-2 CGM Supported POS Line Cards

POS		
Card Type	**CGM Menu Option**	**Card Description**
pos-qoc3-sm	POS > OC-3 > SM	GSR 4 Port Packet Over SONET OC-3c/SM Single Mode Line Card
pos-qoc3-sm-l	POS > OC-3 > SM-LR	GSR 4 Port Packet Over SONET OC-3c/STM-1 Single Mode Long Reach Line Card
pos-qoc3-mm	POS > OC-3 > MM	GSR 4 Port Packet Over SONET OC-3c/MM Multi Mode Line Card
pos-8oc3-ir	POS > OC-8 > SM	GSR 8 Port Packet Over SONET OC-8 Single Mode (SM) Intermediate Reach Line Card
pos-oc12-sm	POS > OC-12 1 Port > SM	GSR 1 Port Packet Over SONET OC-12 Single Mode (SM) Line Card
pos-oc12-mm	POS > OC-12 1 Port > MM	GSR 1 Port Packet Over SONET OC-12 Multi Mode (MM) Line Card
pos-qoc12-sm-lr	POS > OC-12 4 Port > SM	GSR 4 Port (Quad) OC-12 POS Card, Single Mode, Long Reach
pos-qoc12-mm-sr	POS > OC-12 4 Port > MM	GSR 4 port (Quad) OC-12 POS Card, Single Mode, Short Reach
pos-en-qoc12-sr	Not yet supported by manual deployment	GSR Enhanced 4 Port OC-12 Short Reach Line Card
pos-en-qoc12-ir	Not yet supported by manual deployment	GSR Enhanced 4 port OC-12 Intermediate Reach Line Card
pos-oc48-sm-lr-fc	POS > OC-48 > LR-FC	GSR 1 Port Packet Over Sonet OC-48, Single Mode, Long Reach, FC Connector Card

Table 2-2 CGM Supported POS Line Cards

POS		
Card Type	**CGM Menu Option**	**Card Description**
pos-oc48-sm-lr-sc	POS > OC-48 > LR-SC	GSR 1 Port Packet Over Sonet OC-48, Single Mode, Long Reach, SC Connector Card
pos-oc48-sm-sr-fc	POS > OC-48 > SR-FC	GSR 1 Port Packet Over SONET OC-48c/STM-16 Single Mode Short Reach with FC Connector
pos-oc48-sm-sr-sc	POS > OC-48 > SR-SC	GSR 1 Port Packet Over Sonet OC-48, Single Mode, Short Reach, SC Connector Card
pos-en-oc48-lr-fc	POS > Enhanced OC-48 > LR-FC	GSR Enhanced OC-48 Long Reach FC Connector Line Card
pos-en-oc48-lr-sc	POS > Enhanced OC-48 > LR-SC	GSR Enhanced OC-48 Long Reach SC Connector Line Card
pos-en-oc48-sr-fc	POS > Enhanced OC-48 > SR-FC	GSR Enhanced OC-48 Short Reach FC Connector Line Card
pos-en-oc48-sr-sc	POS > Enhanced OC-48 > SR-SC	GSR Enhanced OC-48 Short Reach SC Connector Line Card
pos-8oc3-mm	POS > OC-3 8 Port > MM	GSR 8 Port OC3 Multimode POS
pos-8oc3-ir	POS > OC-3 8 Port > IR	GSR 8 Port OC3 SM Intermediate Reach POS
pos-8oc3-lr	POS > OC-3 8 Port > LR	GSR 8 port OC3 SM Long Reach POS

Table 2-3 displays a list of the Ethernet line cards supported by CGM.

Table 2-3 CGM Supported Ethernet Line Cards

Card Type	CGM Menu Option	Card Description
gsr-1ge	Ethernet > Giga > 1 Port	GSR 1 Port Gigabit Ethernet Line Card
gsr-3ge	Ethernet > Giga > 3 Port	GSR 3 Port Gigabit Ethernet Line Card (trident)
gsr-8fe-tx	Ethernet > Fast > 8 Port > Copper	GSR 8 port Fast Ethernet card with Copper Interface
gsr-8fe-fx	Ethernet > Fast > 8 Port > Fiber	GSR 8 port Fast Ethernet card with Fiber Interface

Table 2-4 displays a list of the DS-3 line cards supported by CGM.

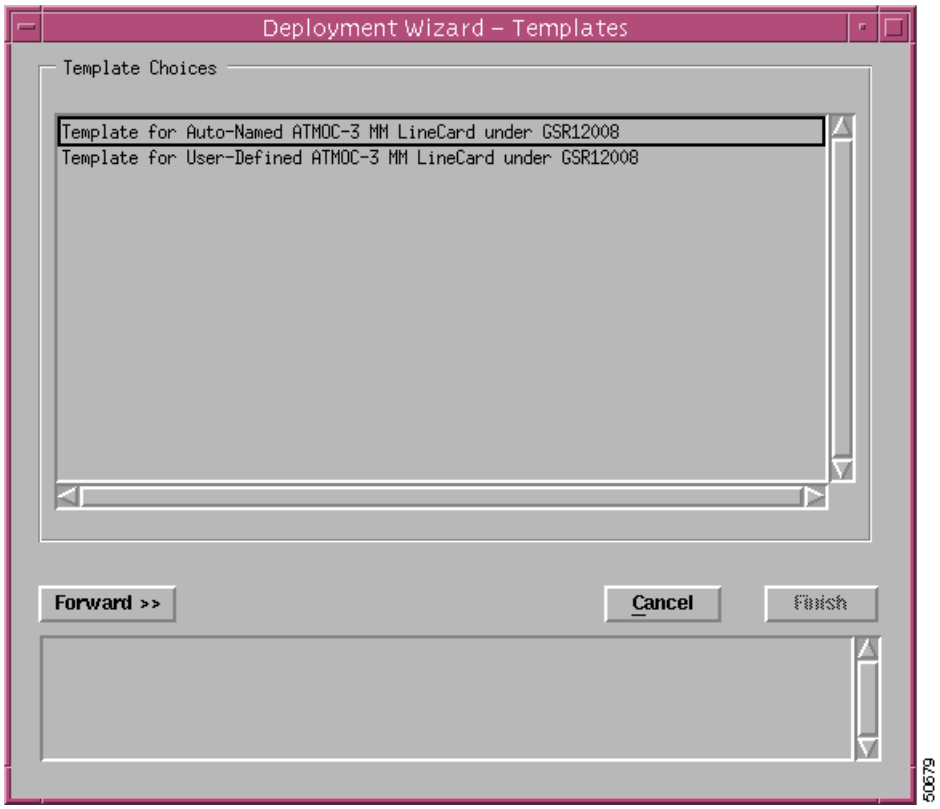
Table 2-4 CGM Supported DS-3 Line Cards

Card Type	CGM Menu Option	Card Description
copper-6ds3	DS3 > 6 Port	GSR 6 Port Copper DS3 Interface Line Card
copper-12ds3	DS3 > 12 Port	GSR 12 Port Copper DS3 Interface Line Card

To deploy a line card of any type, proceed as follows:

Step 1 Right click on the chassis object you want to deploy the line card under, then choose **Deployment> CGM>Physical>Module>ATM or POS or Ethernet or DS-3, then choose the exact type of line card to be deployed (for example, OC-3 4 Port or Fast)**. Now, choose the exact variant (SM, MM, LR-FC, etc) if applicable. The Deployment Wizard appears.

Figure 2-17 Deployment Wizard—Templates

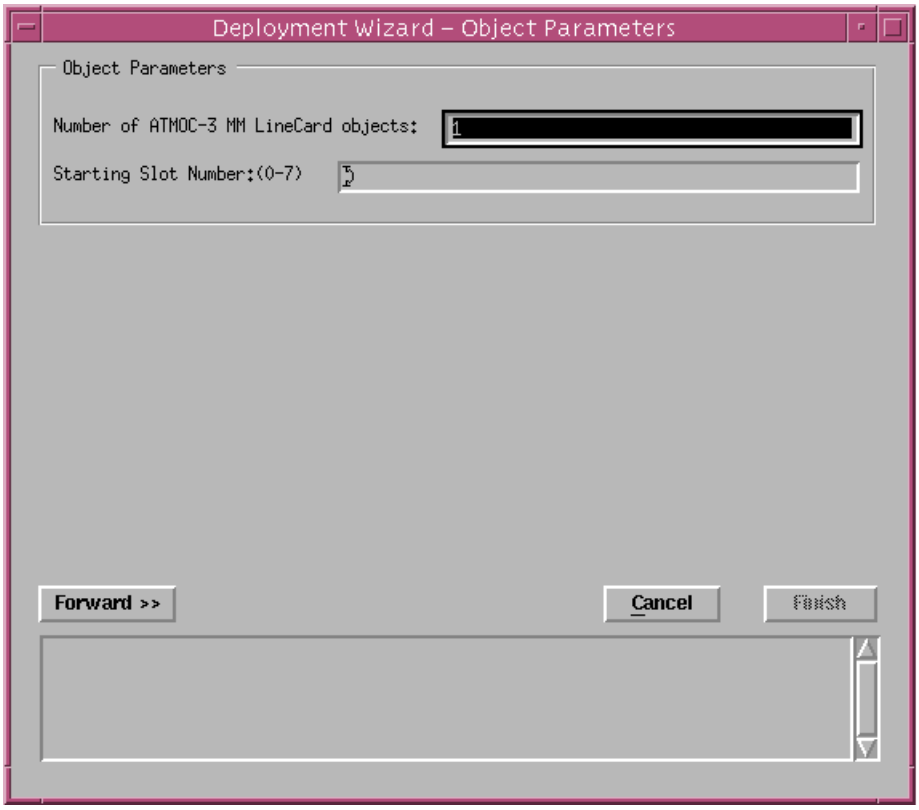


Step 2 Choose the type of deployment, either auto-named or user-named.

Step 3 Click **Forward**.

Note The sample windows displayed are for an ATM OC-3 4 port MM line card.

Figure 2-18 Deployment Wizard—Object Parameters



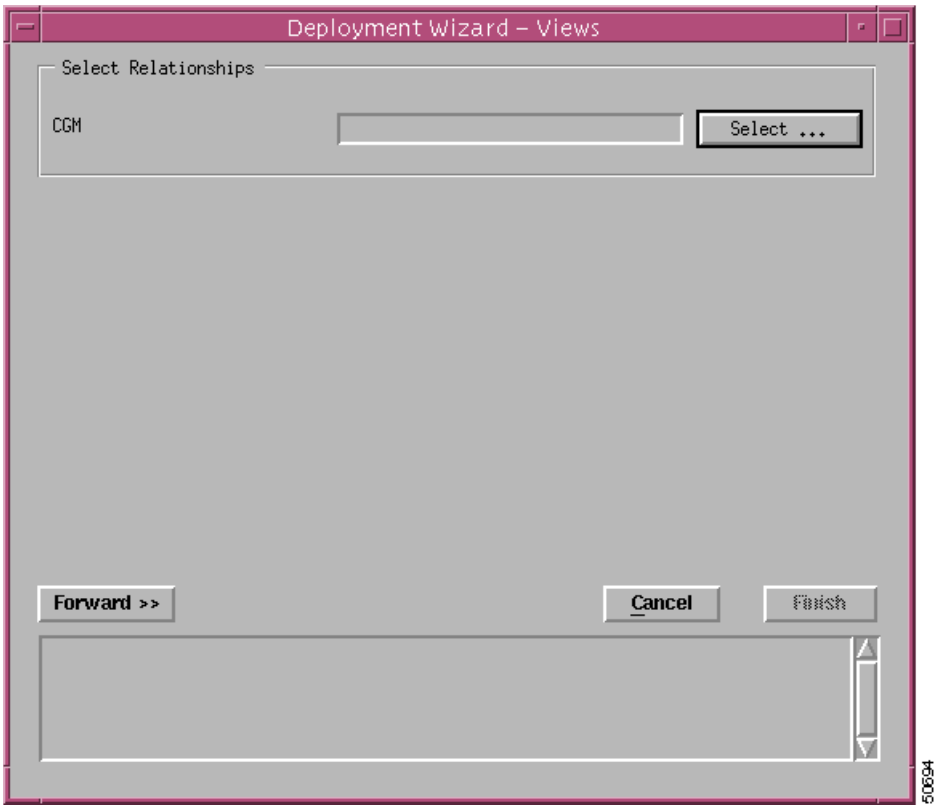
Step 4 Enter the number of line card objects you want to deploy.

Step 5 Enter the slot number where the card is to be deployed.

Step 6 Click **Forward**.

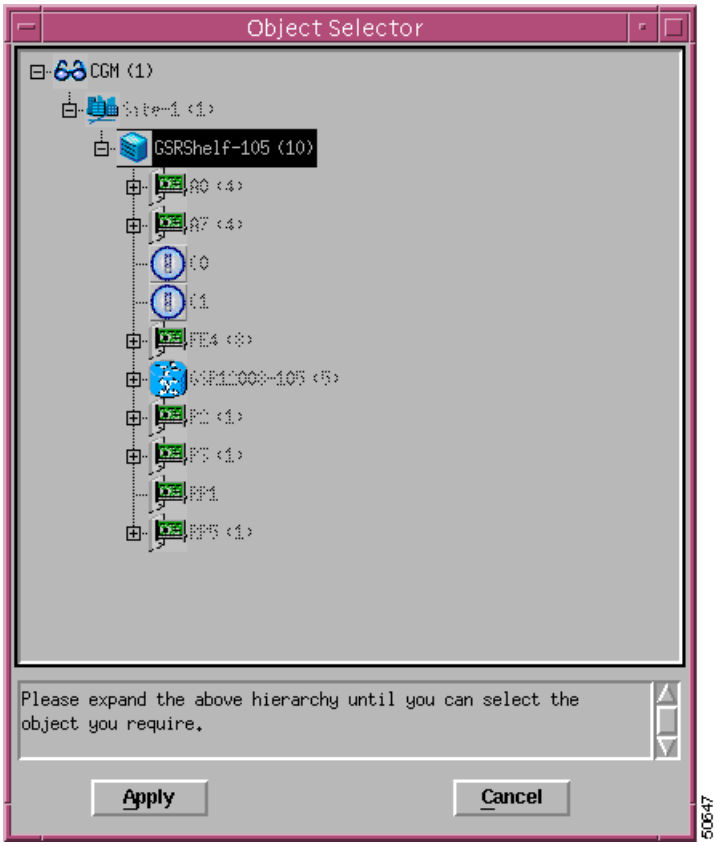
Caution If you deploy a module in a slot that is already occupied, deployment will fail at the **Finish** point.

Figure 2-19 Deployment Wizard—Views



Step 7 Click **Select**. The Object Selector window appears.

Figure 2-20 Object Selector Window



Step 8 Click on the "+" to expand text. Choose the shelf object (which contains the chassis) you want to place the ATM line card under. Objects which are not available for selection are greyed out. Once you have highlighted your selection.

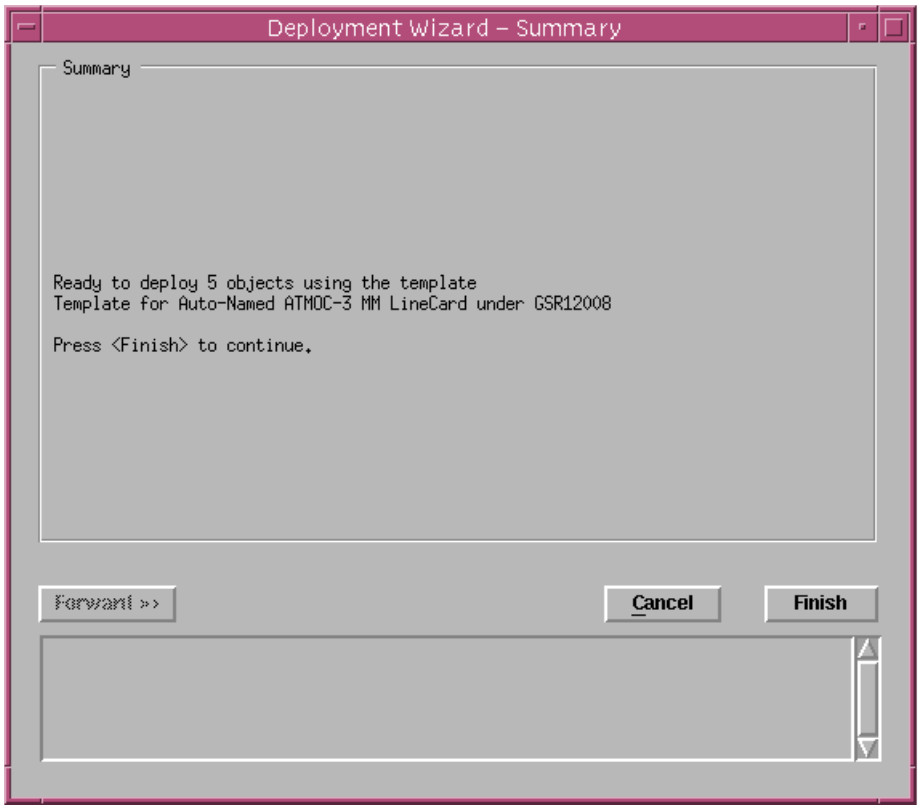
Step 9 Click **Apply**.

Step 10 You are returned to the window in Figure 2-19. Click **Forward**.

Step 11 Repeat steps 4 through 10 if you have selected to deploy multiple ATM line cards.

Tips Under the Select Relationships area, "CGM" implies that the object you are deploying will appear under the CGM view. Likewise for "Physical" and "Component Managed."

Figure 2-21 Deployment Wizard—Summary



Step 12 The deployment summary details appear in the Deployment Summary window. If the information is correct, click **Finish**. Click **Cancel** if the information is incorrect, and the deployment process stops.

Note that the number of objects deployed reflects the line card object + the number of ports or interfaces on the line card. For example, if you have deployed an OC-3 4 port line card, 5 total objects are deployed. The five objects are four interfaces and the one actual line card. Likewise, if you have deployed an OC-12 1 port line card, 2 total objects are deployed.

Tips If you have deployed a module in a slot that is already occupied, deployment will fail at the **Finish** point.

Deploying Supporting Modules

The Cisco 12000 GSR chassis is capable of supporting various supporting modules, as follows:

- CSCs
- SFCs
- AC Power supply modules
- Fan tray modules
- Blower modules

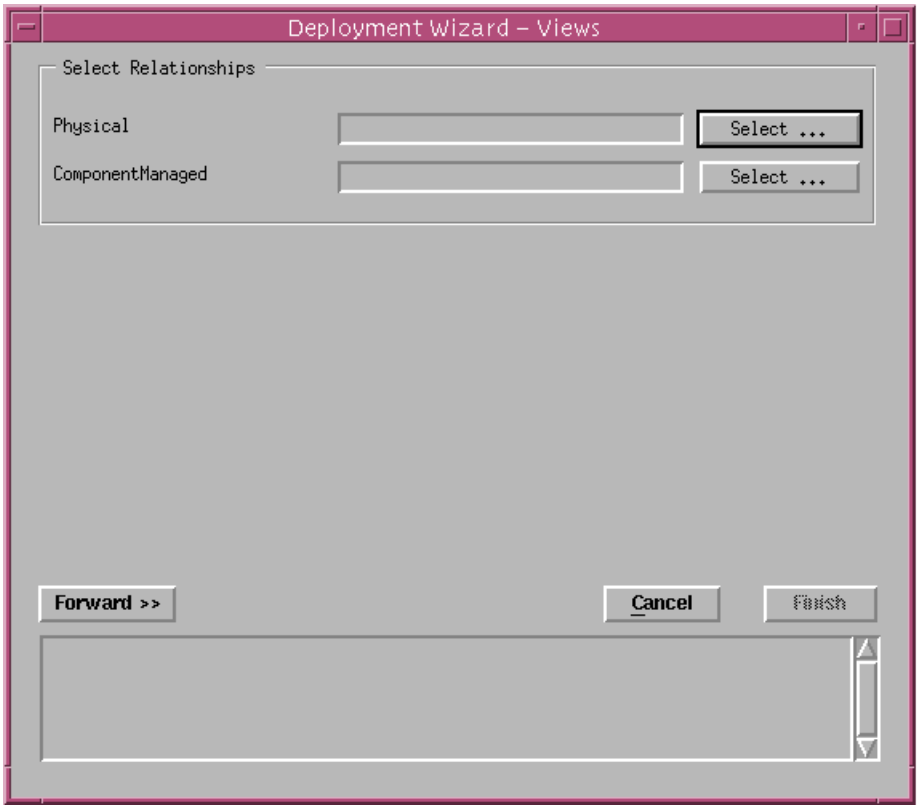
Note that AC power supply modules, blower modules, and fan tray modules cannot be manually deployed, but can only be discovered using subchassis discovery.

Deploying a Switch Fabric Card

To deploy a switch fabric card, proceed as follows:

Step 1 Right click on the chassis object you want to deploy the switch fabric card under, then choose **Deployment>CGM>Physical>Module>SFC>SFC1 or SFC2 or SFC3**
The Deployment Wizard appears.

Figure 2-22 Deployment Wizard—Views



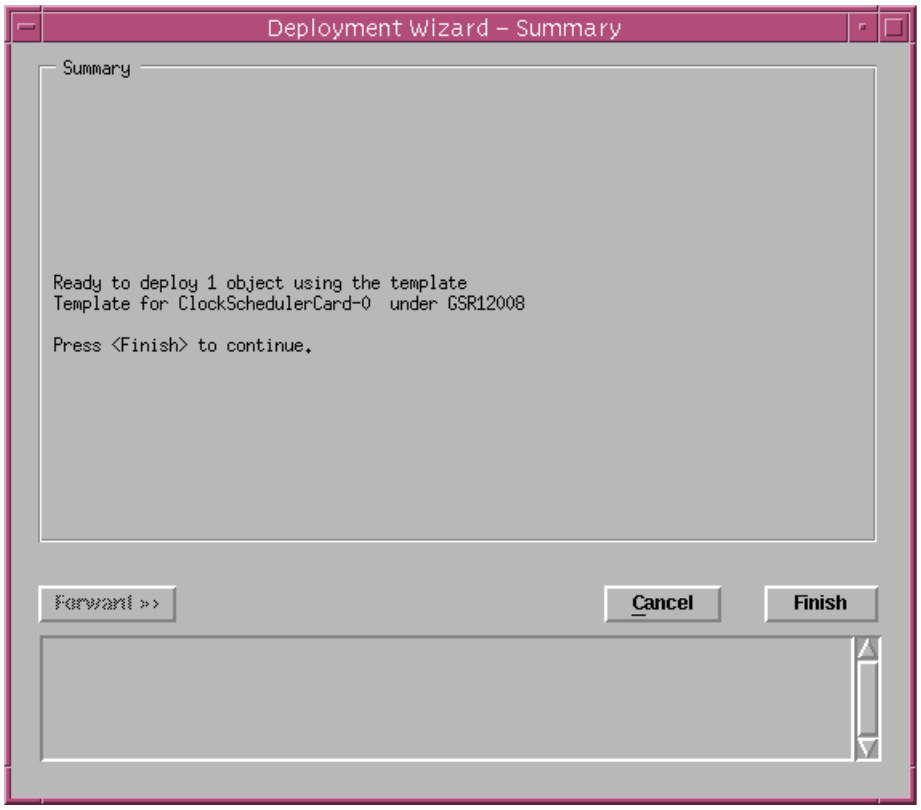
Step 2 Click **Select...**. The Object Selector window appears.

Step 3 Click on the "+" to expand text. Choose the chassis object you want to place the SFC under. Objects which are not available for selection are greyed out. Once you have highlighted your selection, click **Apply**.

Step 4 You are returned to the window in Figure 2-22. Note that your selection populates both fields. Click **Forward** to continue.

Tips Under the Select Relationships area, "Physical" and "Component Managed" imply that the object you are deploying will appear under the Physical and Component Managed view.

Figure 2-23 Deployment Wizard—Summary



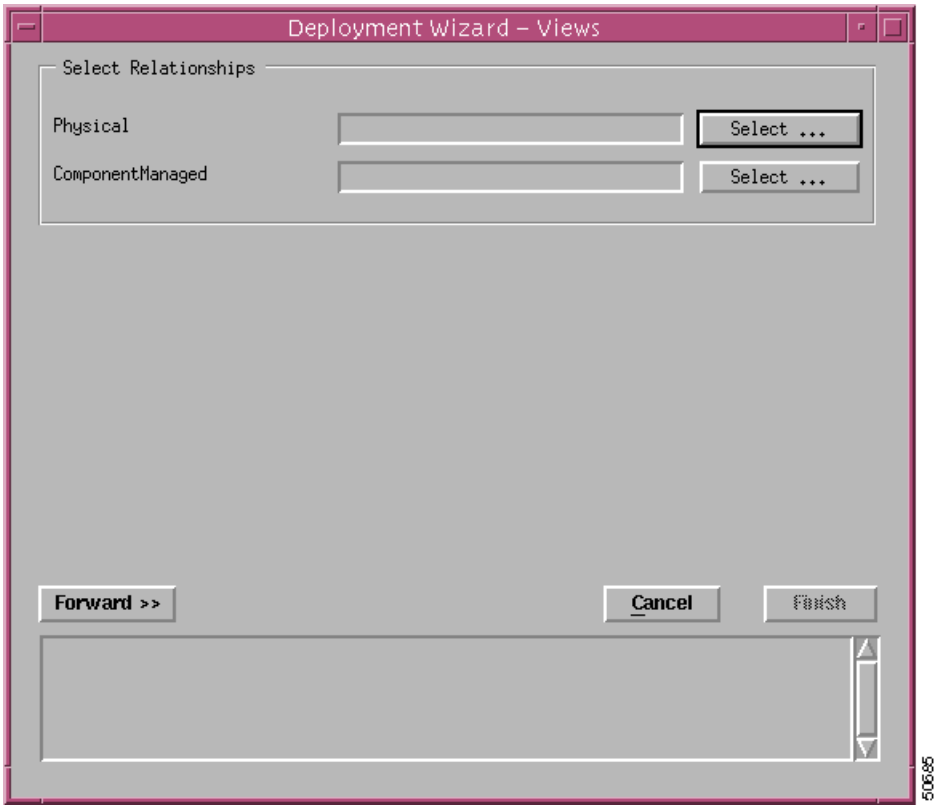
Step 5 The deployment summary details appear in the Deployment Summary window. If the information is correct, click **Finish**. If the information is incorrect, click **Cancel** to stop deployment.

Deploying a Clock Scheduler Card

To deploy a clock scheduler card (CSC), proceed as follows:

Step 1 Right click on the chassis object you want to deploy the CSC under, then choose **Deployment>CGM>Physical>Module>CSC>CSC1 or CSC2>CSC0 or CSC4 or CSC8 or CSC16**. The Deployment Wizard appears.

Figure 2-24 Deployment Wizard—Views

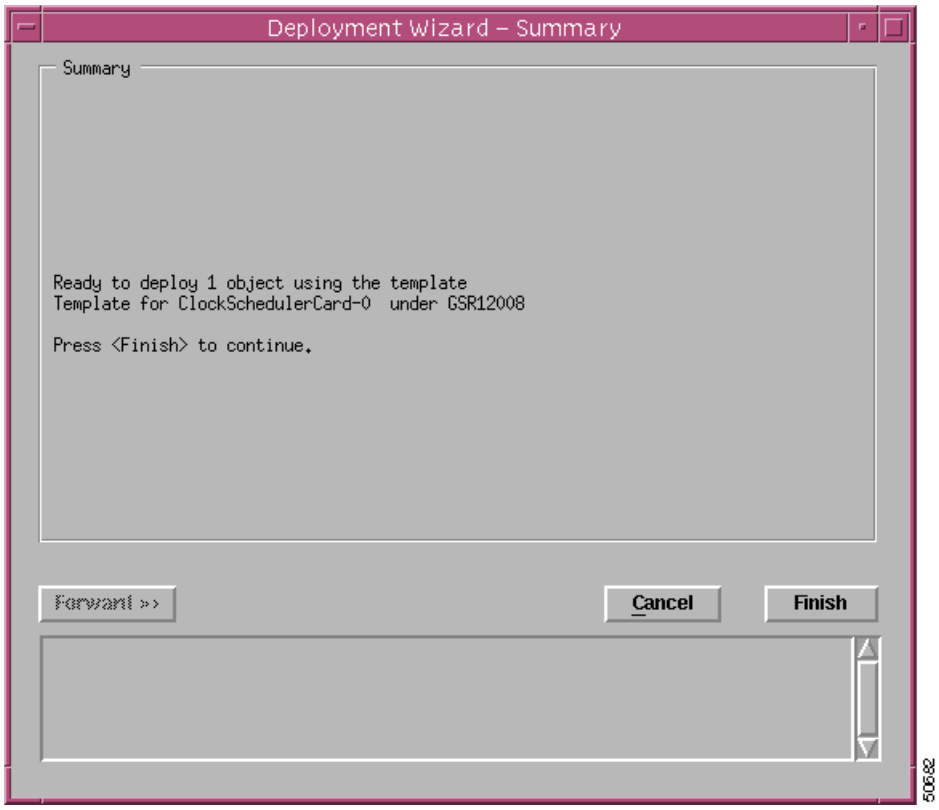


Step 2 Click **Select**. The Object Selector window appears. Click on the "+" to expand text. Choose the chassis object you want to place the CSC under. Objects which are not available for selection are greyed out. Once you have highlighted your selection, click **Apply**.

Step 3 You are returned to the window in Figure 2-24. Note that your selection populates both fields. Click **Forward** to continue.

Tips Under the Select Relationships area, CGM, Physical, and Component Managed imply that the object you are deploying will appear under the respective views. Certain chassis types might not contain all of these views.

Figure 2-25 Deployment Wizard—Summary



Step 4 The deployment summary details appear in the Deployment Summary Screen. If the information is correct, click **Finish**. If the information is incorrect, click **Cancel** to stop deployment.