Managing CORBA Interfaces

This chapter contains the following information:

- 12.1 What is Cisco MGM GateWay/CORBA?
- 12.2 Using a Static CORBA Listener Port on the Cisco MGM Server
- 12.3 Configuring the CORBA Timeout

Note Cisco MGM GateWay/CORBA is only mentioned briefly here. For more information about Cisco MGM GateWay/CORBA, including how to enable username and password encryption, set the heartbeat event, and create OSS clients, refer to the *Cisco Media Gateway Manager 5.0 GateWay/CORBA User Guide and Programmer Manual*.

12.1 What is Cisco MGM GateWay/CORBA?

Cisco MGM GateWay is an architectural component that provides northbound EMS-to-NMS interface mediation. Cisco MGM GateWay allows service providers to integrate Cisco MGM with their OSSs by using open standard interfaces.

Note Cisco offers the CORBA (sold separately) option for Cisco MGM GateWay.

The Cisco MGM GateWay/CORBA option is a CORBA-based interface that provides higher-layer management systems with fault, and inventory information for each NE that Cisco MGM manages. The Cisco MGM GateWay/CORBA option is based on the TeleManagement Forum (TMF) standards for the NMS-to-EMS interface. Cisco MGM GateWay/CORBA supports up to eight simultaneous sessions with higher-layer management systems.

Note For more information about Cisco MGM GateWay/CORBA, including how to enable username and password encryption, set the Cisco MGM GateWay/CORBA heartbeat event, and create OSS clients for Cisco MGM GateWay/CORBA, refer to the *Cisco Media Gateway Manager GateWay/CORBA User Guide and Programmer Manual*.

Figure 12-1 illustrates the Cisco MGM GateWay/CORBA communications architecture within a service provider’s OSS environment.
What is Cisco MGM GateWay/CORBA?

Figure 12-1  Cisco MGM GateWay/CORBA Communications Architecture

Service provider's OSS  

Cisco Transport Manager

CORBA

GIOP

IIOP

TCP

IP

Ethernet

10BASE-T

Cisco MGM GateWay/CORBA is based on the following TMF standards:

- TMF513 v2.0 (October 2001): Multi-Technology Network Management Business Agreement
- TMF608 v2.0 (October 2001): Multi-Technology Network Management Information Agreement
- TMF814 v2.0 (October 2001): Multi-Technology Network Management Solution Set

12.1.1 Viewing the Cisco MGM GateWay/CORBA Properties Pane

Use the GateWay/CORBA Service Properties pane to stop, start, or configure Cisco MGM GateWay/CORBA service parameters. To view the Cisco MGM GateWay/CORBA Properties pane, from the Domain Explorer window, choose Administration > Control Panel, then choose GateWay/CORBA Service from the hierarchy pane at left. The pane contains two tabs, Global and OSS Clients.

12.1.1.1 Global Tab

Use the Global tab to start and stop Cisco MGM GateWay/CORBA service.

Table 12-1  Field Descriptions for GateWay/CORBA Service—Global Tab

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Status</td>
<td>Displays the current status of the service: Active, Not Active, or Not Installed.</td>
</tr>
<tr>
<td>Service Control</td>
<td>Allows you to stop or start a process. Notice that the Service Control button toggles between Stop and Start, and the Service Status field changes accordingly. This field is not available if the Service Status is Not Installed.</td>
</tr>
<tr>
<td>Enable Encryption for Username and Password</td>
<td>When checked, usernames and passwords are transmitted between the EMS server and the OSS in encrypted format. The maximum encryption length is 53 bytes. If this check box is unchecked, Cisco MGM GateWay/CORBA usernames and passwords are transmitted without encryption. By default, encryption is disabled at installation.</td>
</tr>
</tbody>
</table>
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What is Cisco MGM GateWay/CORBA?

Heartbeat for Notification Channel
Notifies the OSS if a failure in the notification service has occurred. The heartbeat is measured in minutes ranging from 0 to 1440 minutes. A zero value implies that the heartbeat is disabled.

Error Level
Allows you to select the error level for the Cisco MGM GateWay/CORBA service. Error levels are:
- Critical
- Major
- Minor
- Informational
- Debug
- Trace

### 12.1.1.2 OSS Clients Tab

Use the OSS Clients tab to view current Operations Support System (OSS) client configuration information or to add a new OSS client. The OSS Clients tab is not displayed if the Service Status is Not Installed.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSS Profile Name</td>
<td>The name of the OSS profile.</td>
</tr>
<tr>
<td>Password</td>
<td>The password that the OSS client uses to log into the Cisco MGM server.</td>
</tr>
<tr>
<td></td>
<td>If you are adding a new OSS client, the password must contain 1 to 53</td>
</tr>
<tr>
<td></td>
<td>characters, including one special character (, ; % &amp; ! + #), at least two</td>
</tr>
<tr>
<td></td>
<td>letters (A - Z, a - z), and at least one number (0 - 9).</td>
</tr>
<tr>
<td>Confirm Password</td>
<td>The reconfirmed password.</td>
</tr>
<tr>
<td>OSS IP Address</td>
<td>The OSS IP address.</td>
</tr>
<tr>
<td>Delete button</td>
<td>Deletes an OSS profile from the Cisco MGM database. If a profile is</td>
</tr>
<tr>
<td></td>
<td>deleted, the OSS using this profile cannot connect to Cisco MGM. If the OSS</td>
</tr>
<tr>
<td></td>
<td>is connected to Cisco MGM when the profile is deleted, Cisco MGM will not</td>
</tr>
<tr>
<td></td>
<td>terminate the OSS session.</td>
</tr>
</tbody>
</table>

Table 12-1  Field Descriptions for GateWay/CORBA Service—Global Tab (continued)
### 12.1.2 Viewing the Cisco MGM GateWay/CORBA Client Configuration Table

The Cisco MGM GateWay/CORBA Client Configuration Table displays information about Operations Support System (OSS) CORBA client properties. To view the Cisco MGM GateWay/CORBA Client Configuration table, from the Domain Explorer window, choose Administration > Control Panel, then choose Administration > Cisco MGM GW/CORBA Client Configuration Table.

#### Table 12-3 Field Descriptions for Cisco MGM GateWay/CORBA Client Configuration Table

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSS Name</td>
<td>Displays the name of the selected OSS client.</td>
</tr>
<tr>
<td>IP Address</td>
<td>Displays the IP address of the OSS client.</td>
</tr>
</tbody>
</table>

### 12.2 Using a Static CORBA Listener Port on the Cisco MGM Server

To use a static CORBA listener port on the Cisco MGM server, proceed as follows.

**Step 1** Log into the Cisco MGM server workstation as the root user.

**Step 2** Change the directory to /opt/CiscoMGMServer/bin.

**Note** The default directory /opt/CiscoMGMServer may have been changed during installation of the Cisco MGM server.

**Step 3** Edit the jne454.sh file by inserting a new line before the -Xbootclasspath line:

```
-Dong.orb.iioplistenerport=Port Number \
```

For example, if the port number is 5555, enter:

```
-Dong.orb.iioplistenerport=5555 \
```

**Step 4** Start the Cisco MGM server.

### 12.3 Configuring the CORBA Timeout

The CORBA timeout determines the number of seconds that the Cisco MGM server has to process a CORBA call and return it to the Cisco MGM client. If the Cisco MGM server does not return a response in time, CORBA automatically times out.

**Step 1** Open the ems-client.cfg file.

By default, the ems-client.cfg file is located in the C:\Cisco\MediaGatewayManagerClient\config directory for Windows platforms and in the /opt/CiscoMGMC client/config directory for Sun Solaris platforms.
Step 2  Set the CORBA_Call_Timeout_Seconds parameter to the desired value. The default timeout is 120 seconds; the recommended range is 120 to 300 seconds.

\[\text{Note}\] If the NE is busy or if the Cisco MGM server is processing many requests, you might need to increase the CORBA timeout parameter accordingly.

Step 3  Save and close the ems-client.cfg file.