Using the Subscriber Manager GUI Tool

This chapter describes how to use the Subscriber Manager (SM) GUI tool to configure subscribers in the Cisco Service Control Management Suite (SCMS) Subscriber Manager (SM) database.

The SM GUI tool is especially useful when the SCMS-SM holds a static list of subscribers. It is not applicable when the Cisco Service Control Application for Broadband (SCA BB) is operating in subscriberless mode (a mode in which control and analysis functions are available only at a global platform resolution) or in anonymous subscriber mode (a mode in which entities defined as IP addresses or VLANs are treated as subscribers).

Using the SM GUI Tool

The SM GUI tool allows you to manage subscribers on an SCMS-SM. The SCMS-SM functions as middleware software that bridges between the OSS and the Service Control Engine (SCE) platforms. SCE platforms use the subscriber information to provide subscriber-aware functionality, per-subscriber reporting, and policy enforcement. Subscriber information is stored in the SCMS-SM database and can be distributed between multiple platforms according to actual subscriber placement.

You can use the SM GUI tool to import and export subscriber files, and to perform operations on individual subscribers, such as adding a new subscriber, editing parameters of an existing subscriber, and deleting a subscriber.

Note   To access an SCMS-SM from the SM GUI tool, you must first add the SCMS-SM to the Site Manager tree in the Network Navigator tool (see How to Add SM Devices to a Site, page 5-4).

The SM GUI tool provides only a subset of the functionality that is provided by the SM Command-Line Utility. For more information about the SCMS-SM, see the *Cisco Service Control Management Suite Subscriber Manager User Guide*.

Connecting to an SCMS-SM

You can connect to an SCMS-SM:

- From the Network Navigator tool

- From anywhere else in the Console
- From the Subscriber Manager GUI tool

Note The SM GUI tool performs authentication on the SCMS-SM by opening a PRPC connection to port 14374 and attempting to log in using the username and password that you entered in the Password Management dialog box. If a PRPC server with this user is not running on the SCMS-SM, authentication will fail.
If you have changed the PRPC port on the SCMS-SM, see User Authentication, page 5-34.

How to Connect to an SCMS-SM from the Network Navigator

Step 1 In the Site Manager tree in the Network Navigator tab, right-click an SM device.

A popup menu appears.

Step 2 From the menu, select **Manage Subscribers.**

A Password Management dialog box appears.

Step 3 Enter the appropriate password. (For more information, refer to Password Management, page 5-6).

Step 4 Click **Connecting.**

The Password Management dialog box closes.

A Connecting to progress bar appears.

The system connects to the SCMS-SM.

(**Import subscribers from CSV file**), (**Export subscribers to CSV file**), and (**Disconnect from SM**) are enabled.

How to Connect to an SCMS-SM from the Console

![Note icon]

Note   (If you are already in the SM GUI tool, start at Step 3.)

Step 1   From the Console main menu, choose **Tools > Subscriber Manager.**

The SM GUI tool opens.

A Subscriber Manager is not connected message appears.

Step 2   Click **OK.**

The Subscriber Manager is not connected message closes.

Step 3   In the SM GUI toolbar, click [icon] (**Connect to an SM**).

If more than one SCMS-SM device is configured in the Network Navigator, the Choose SM Devices dialog box appears.

Step 4   Select a device and click **OK.**

A Password Management dialog box appears.

Step 5   Enter the appropriate password. (For more information, refer to Password Management, page 5-6.)

Step 6   Click **Connecting.**

The Password Management dialog box closes.

A Connecting to progress bar appears.

The system connects to the SCMS-SM.

 (**Import subscribers from CSV file**), (**Export subscribers to CSV file**), and (**Disconnect from SM**) are enabled.

How to Disconnect from the Current SCMS-SM

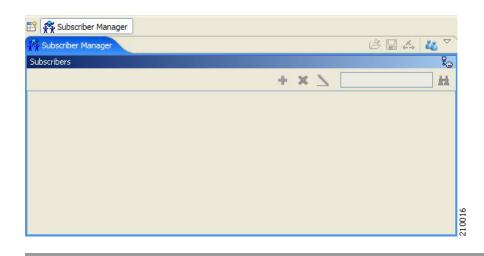**Step 1**   In the SM GUI toolbar, click (**Disconnect from SM**).

The Console disconnects from the SCMS-SM, but the SM GUI tool remains open.

 (**Import subscribers from CSV file**), (**Export subscribers to CSV file**), and (**Disconnect from SM**) are dimmed.

The subscriber list is empty.

Working with Subscriber CSV Files

Because of the large number of subscribers that must be introduced into the system, it is not feasible to enter subscriber information manually. Subscriber information is usually generated by a RADIUS server (or some similar source) and imported into the SM GUI tool.

You can also export updated subscriber information to a CSV file.

The format of subscriber CSV files is described in the "CSV File Formats" chapter of the *Cisco Service Control Application for Broadband Reference Guide.*

How to Import Subscriber Information from a CSV File

You can import subscriber data that was exported to a CSV file into the SM GUI tool.

Step 1   In the SM GUI toolbar, click   (**Import subscribers from CSV file**).

An Import from File dialog box appears.

Step 2   Browse to the file that is to be imported and click **Open.**

An Import Warning message appears.

Step 3   Click **Yes.**

The Import from File dialog box closes.

The selected file is imported into the SM GUI tool; the imported subscribers are listed in the subscriber list.

How to Export Subscriber Information to a CSV File

You can export subscriber information to a CSV file (for example, when data in the SCMS-SM database is updated).

Step 1   Select the subscribers whose data you want to save (see Selecting Subscribers, page 11-7)

Step 2   In the SM toolbar, click   (**Export subscribers to CSV file**).

An Export to File dialog box appears.

Step 3   Browse to the folder in which you want to save the exported file.

Step 4   In the File name field, enter a file name.

Step 5   Click **Save.**

The Export to File dialog box closes.

The selected subscribers are saved to the CSV file.

Managing Subscribers

After importing subscribers into the system, you can maintain and update the database.

You can perform the following operations:

- Add subscribers
- Edit information for existing subscribers
- Delete subscribers

Subscriber Information

All subscribers currently introduced into SCA BB are displayed in a list in the SM GUI tool. Use this list to manage individual subscribers or groups of subscribers. Use the Find function to display a subset of the subscribers (see How to Find a Subscriber or Group of Subscribers, page 11-7).

The subscriber list has the following columns:

- Subscriber ID—Name of the subscriber in the system.
- Subscriber Domain—Domain to which the subscriber is assigned. The names of the SCE platforms that belong to each domain appear in square brackets.
- Network Mappings—IP address, range of IP addresses, or VLAN tag mapped to the subscriber.
- Package—Package ID assigned to the subscriber. The name of the package is shown in square brackets.

Finding and Selecting Subscribers

For ease of use, the SM GUI tool incorporates two standard features:

- Find—Search for a specific subscriber.
- Multiple Select—Select a range of subscribers or a number of individual subscribers.

How to Find a Subscriber or Group of Subscribers

Use this feature to find a specific subscriber or a group of subscribers according to a subscriber ID prefix. This is useful for editing the parameters of either a specific subscriber or a group of subscribers (see Editing Subscriber Details, page 11-10)

Step 1   In the Find field (see the following illustration), enter the prefix to be matched.

Step 2   Click (**Find Subscribers**).

Only those subscribers that match the specified prefix are displayed in the subscriber list.

Selecting Subscribers

You can edit, export, or delete a group of subscribers at one time by selecting subscribers displayed in the subscriber list. The group may be either of the following:

- A range of contiguous subscribers

- A number of noncontiguous subscribers
- How to Select a Range of Subscribers, page 11-8
- How to Select a Number of Noncontiguous Subscribers, page 11-8

How to Select a Range of Subscribers

Step 1   Select the first subscriber in the range.

Step 2   Press the **Shift** key and click the last subscriber in the range.

All subscribers in the range are selected.

You can combine this function with the search function; search to display specific subscribers and then select the entire range.

How to Select a Number of Noncontiguous Subscribers

Step 1   Press the **Ctrl** key while selecting subscribers.

You can combine this function with selecting a range of subscribers; first select the range of subscribers and then select additional subscribers.

How to Add a Subscriber

You can add additional individual subscribers to the SCMS-SM.

To add large number of subscribers, export their information from a RADIUS (or DHCP) server to a CSV file, and then import the CSV file (see Working with Subscriber CSV Files, page 11-5)

Step 1   In the SM toolbar, click ✚ (**Add Subscriber**).

The Add A New Subscriber dialog box appears.

Step 2   In the Subscriber ID field, enter text that identifies the subscriber.

Step 3   From the Subscriber Domain drop-down list, select the appropriate domain for the new subscriber.

Step 4   From the Subscriber Package drop-down list, select a package to assign to this subscriber.

The contents of the list depend on the selected subscriber domain.

Step 5   To activate subscriber real-time monitoring, check the **Activate Subscriber Real-time Monitoring** check box. This causes the SCE application to generate Real-Time Subscriber Usage RDRs for this subscriber.

If you are not going to define network mappings for this subscriber, continue at Step 11.

Step 6   Click the **Network Mappings** tab.

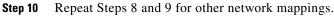The Network Mappings tab opens.

The system supports either IP addresses or VLAN tags as network identification for subscribers.

Step 7   Select one of the **Subscriber Network Mappings** radio buttons.

 • **IP Address**

 • **VLAN**

Step 8   Click ⊤ (**Add**) to add a network mapping of the type selected in the previous Step.

A new network-mapping entry is added to the subscriber network mappings list, displaying a default value.

Step 9   Edit the network-mapping entry.

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Step 10   Repeat Steps 8 and 9 for other network mappings.

Step 11   Click **OK.**

The Add A New Subscriber dialog box closes.

The new subscriber is added to the database, and to the subscriber list displayed in the SM GUI tool.

Editing Subscriber Details

You can edit parameters of single or multiple subscribers.

How to Edit Details for Single Subscribers

Step 1   Find and select a subscriber. (See How to Find a Subscriber or Group of Subscribers, page 11-7.)

Step 2   In the SM toolbar, click (**Edit Subscriber**).

The Edit Subscriber dialog box appears.

Step 3   Modify subscriber details.

- Edit the entry in the Subscriber ID field.

- From the Subscriber Domain drop-down list, select a subscriber domain.

- From the Subscriber Package drop-down list, select a package to assign to this subscriber.

  The contents of the list depend on the selected subscriber domain.

- Check or uncheck the **Activate Subscriber Real-time Monitoring** check box.

If you are not editing the network mappings for this subscriber, continue at Step 6.

Step 4   Click the **Network Mappings** tab.

The Network Mappings tab opens.

Step 5   Modify subscriber network mappings:

  a. Select one of the **Subscriber Network Mappings** radio buttons:

   – **IP Address**

   – **VLAN**

  b. To add a new network mapping to the list, click <img> (**Add**), and edit the network-mapping field that is added to the Subscriber Network Mappings list.

c. To delete a network mapping from the list, select an entry in the subscriber network mappings list and click ✖ (**Delete**).

Step 6   Click **Apply.**

The Edit Subscriber dialog box closes.

The modified subscriber information is saved to the database and displayed in the subscriber list in the SM GUI tool.

How to Edit Details for a Group of Subscribers

You can assign the same package or domain to many subscribers at one time.

Step 1   Select a group of subscribers (see) to modify.

Step 2   In the SM toolbar, click ✎ (**Edit**).

The Edit Multiple Subscribers dialog box appears.

The Subscriber ID field is dimmed and the Network Mappings tab is disabled.

Step 3   Modify fields in the General tab.

- From the Subscriber Domain drop-down list, select a subscriber domain.
- From the Subscriber Package drop-down list, select a package to assign to this subscriber.

    The contents of the list depend on the selected subscriber domain.

- Check or uncheck the **Activate Subscriber Real-time Monitoring** check box.

Step 4   Click **Apply.**

The Edit multiple Subscribers dialog box closes.

The modified subscriber information is saved to the database and displayed in the subscriber list in the SM GUI tool.

How to Delete a Subscriber from the Database

You can delete subscribers from the database.

Step 1   Select a single subscriber or a group of subscribers (see Selecting Subscribers, page 11-7).

Step 2   In the SM toolbar, click ✖ (**Delete Subscriber**).

The system asks for confirmation before deleting the selected subscribers:

Step 3   Click **Yes** to confirm.

The selected subscribers are deleted from the database and removed from the subscriber list displayed in the SM GUI tool.