



CHAPTER 1

Configuring the SCA BB Application to Support VAS Traffic Forwarding

Revised: September 23, 2015

VAS Configuration in the SCA BB Application: Traffic-Forwarding Tables

In the SCA BB application, you define a set of parameters that enable the application to relate a particular traffic flow to a VAS service. Based on the combination of IP protocol and port number, traffic flows are assigned to a VAS server group. You can create one or more VAS forwarding tables defining the traffic forwarding schemes. Each forwarding table is then assigned to a package. Subscriber traffic in a package is forwarded to the respective VAS server groups according to the assigned VAS forwarding table.

There are four broad aspects to VAS traffic forwarding configuration in the SCA BB application:

- Enabling VAS traffic forwarding in the SCA BB application.
- (Optional) Assigning meaningful names to the server groups that were defined in the SCE platform.
- Configuring the VAS forwarding tables to configure which traffic goes to which VAS server group. If there are different traffic forwarding schemes for different groups of subscribers, create a traffic forwarding table for each scheme.
- Assigning the VAS forwarding tables to the relevant packages.

Enabling VAS Traffic Forwarding

By default, VAS traffic forwarding is disabled. You can enable it at any time.



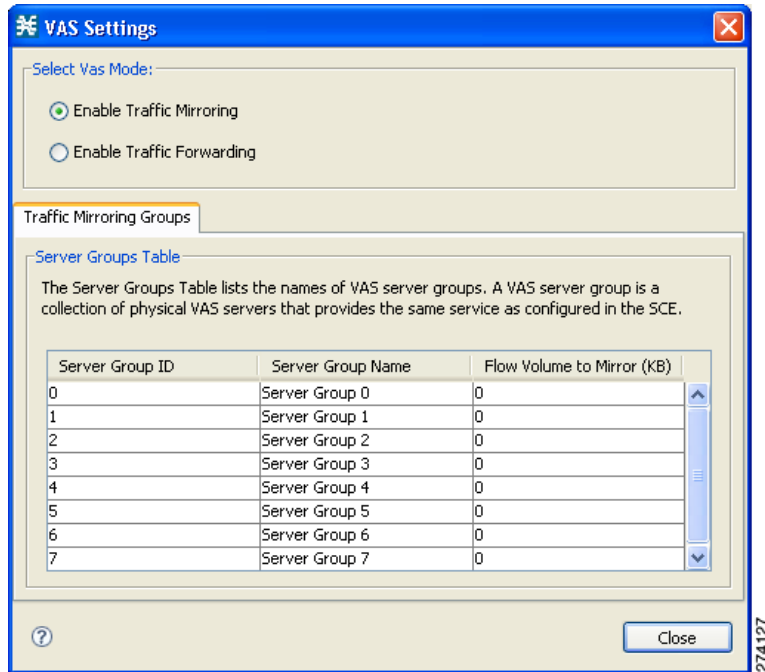
Note

VAS traffic forwarding is not supported in asymmetric routing classification mode. If you try to enable traffic forwarding when asymmetric routing classification mode is enabled, a VAS error message appears.

To enable VAS traffic forwarding, complete the following steps:

- Step 1** From the Service Configuration Editor, choose **Configuration > Policies > VAS Settings**.
The VAS Settings dialog box appears (Figure 1-1).

Figure 1-1 VAS Settings



- Step 2** Click the **Enable Traffic Forwarding** radio button.
A VAS warning message appears.
- Step 3** Click **Yes**.

Renaming the VAS Server Groups

An SCE platform can forward flows to up to eight different VAS server groups. By default, the eight server groups are named “Server Group *n*”, where *n* takes a value from 0 to 7. These values correspond to the number you assigned to the server group when you created it using the SCE platform CLI.

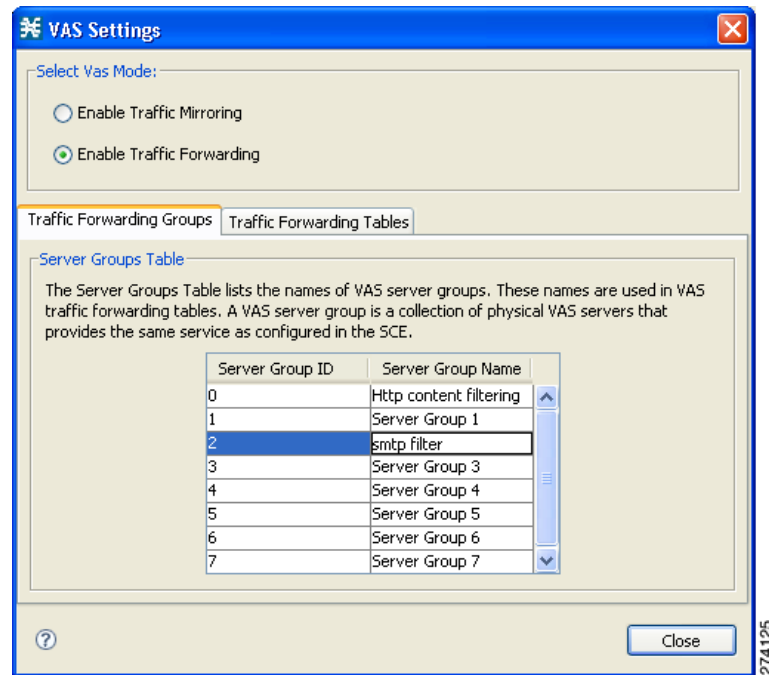
For your own convenience, you can give the server groups meaningful names. The names you give appear in the drop-down list in the Server Group groups field when creating traffic-forwarding tables (see [Managing VAS Table Parameters, page 1-5](#)).

To rename the VAS server group, complete the following steps:

- Step 1** From the Service Configuration Editor, choose **Configuration > Policies > VAS Settings**.
- Step 2** In the table in the Server Groups Table area in the Traffic Forwarding Groups tab (see [Figure 1-2](#)), double-click in a cell containing a server group name.
- Step 3** Enter a meaningful name in the cell.

Step 4 Repeat [Step 2](#) and [Step 3](#) for other server groups you wish to rename.

Figure 1-2 Traffic Forwarding Groups Tab




Managing the VAS Traffic-Forwarding Tables

SCA BB decides whether a flow passing through an SCE platform should be forwarded to a VAS server group based on a traffic-forwarding table. Each entry in a traffic-forwarding table defines which VAS server group the specified flows should be forwarded to. Flows are defined by IP protocols and port numbers.

Adding a VAS Traffic-Forwarding Table

A default traffic-forwarding table is included in the service configuration. You can add up to 63 more traffic-forwarding tables, and then assign different traffic-forwarding tables to different packages.

To add a VAS traffic-forwarding table, complete the following steps:

- Step 1** From the Service Configuration Editor, choose **Configuration > Policies > VAS Settings**. The VAS Settings dialog box appears.
- Step 2** Click the **Traffic Forwarding Tables** tab. The Traffic Forwarding Tables tab opens.
- Step 3** In the Traffic Forwarding Tables area, click the Add  icon.

A new table named Table (n), where n is a value from 1 through 63, is added to the list of traffic-forwarding tables.

The table name is also displayed in the Item Name box in the Table Parameters tab.

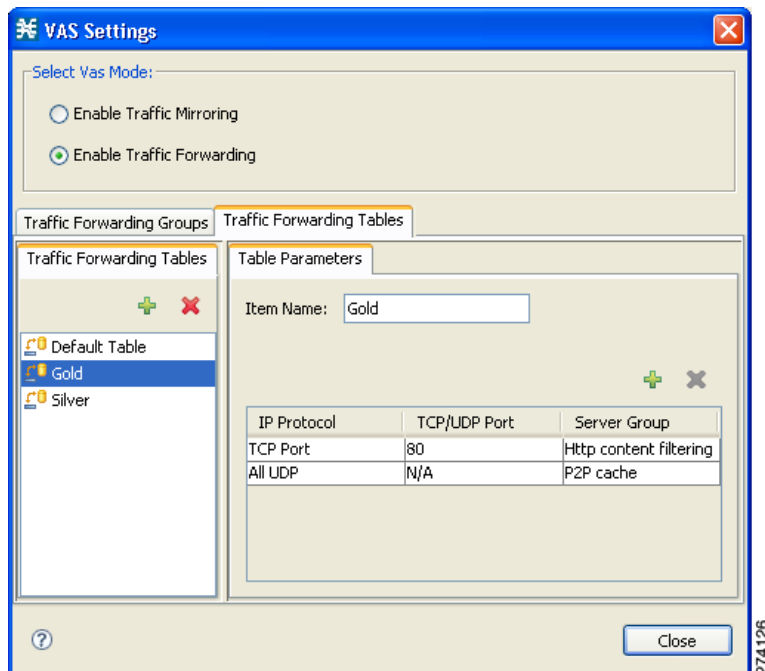
- Step 4** In the Item Name field, enter a unique and relevant name for the traffic-forwarding table.
You can now add table parameters to the new traffic-forwarding table (“[Adding VAS Table Parameters](#)” section on page 1-5).
- Step 5** Click **Close** to save the changes and close the dialog box.

Viewing VAS Traffic-Forwarding Tables

To view VAS traffic-forwarding table, complete the following steps:

- Step 1** From the Service Configuration Editor, choose **Configuration > Policies > VAS Settings**.
The VAS Settings dialog box appears.
- Step 2** Click the **Traffic Forwarding Tables** tab.
The Traffic Forwarding Tables tab opens, displaying a list of all traffic-forwarding tables in the left pane.
- Step 3** Click a table in the list to display the table parameters.
A list of all table parameters defined for this traffic-forwarding table opens in the Table Parameters tab ([Figure 1-3](#)).

Figure 1-3 Traffic Forwarding Tables Tab




Deleting VAS Traffic-Forwarding Tables

You can delete all user-created traffic-forwarding tables. The default traffic-forwarding table cannot be deleted.


Note

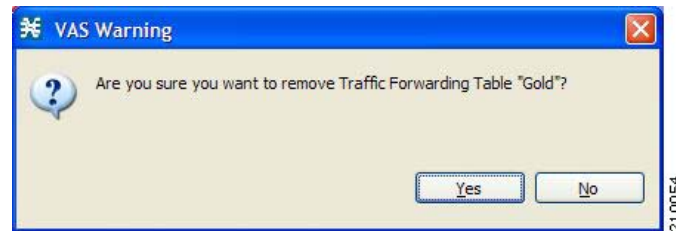
A traffic-forwarding table cannot be deleted while it is associated with a package.

To delete VAS traffic-forwarding tables, complete the following steps:

- Step 1** From the Service Configuration Editor, choose **Configuration > Policies > VAS Settings**. The VAS Settings dialog box appears.
- Step 2** Click the **Traffic Forwarding Tables** tab.
- Step 3** From the list of traffic-forwarding tables in the Traffic Forwarding Tables area, select a table.
- Step 4** Click the delete  icon.

A VAS Warning message appears ([Figure 1-4](#)).

Figure 1-4 VAS Warning



- Step 5** Click **Yes**.

Managing VAS Table Parameters

A table parameter is an entry in the VAS table. It consists of three parts:

- IP protocol type
- Associated TCP/UDP port or range of ports (where applicable)
- VAS server group or a range of IP addresses


A traffic-forwarding table can contain up to 64 table parameters.

- [Adding VAS Table Parameters, page 1-5](#)
- [Editing VAS Table Parameters, page 1-6](#)
- [Deleting VAS Table Parameters, page 1-7](#)

Adding VAS Table Parameters

You can add up to 64 table parameters to a traffic-forwarding table.

To add VAS table parameters, complete the following steps:

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- Step 1** From the Service Configuration Editor, choose **Configuration > Policies > VAS Settings**.
The VAS Settings dialog box appears.
 - Step 2** Click the **Traffic Forwarding Tables** tab.
 - Step 3** From the list of traffic-forwarding tables in the Traffic Forwarding Tables area, select a table.
 - Step 4** In the Traffic Parameters tab, click the add  icon.
A new table parameter is added to the list of table parameters in the Table Parameters tab.

**Note**

Each new table parameter has the default values as listed in [Table 1-1](#).

Table 1-1 Table Parameter Default Values

Parameter	Default value
IP Protocol	TCP Port
Server Group	Server Group 0
TCP/UDP Port	80

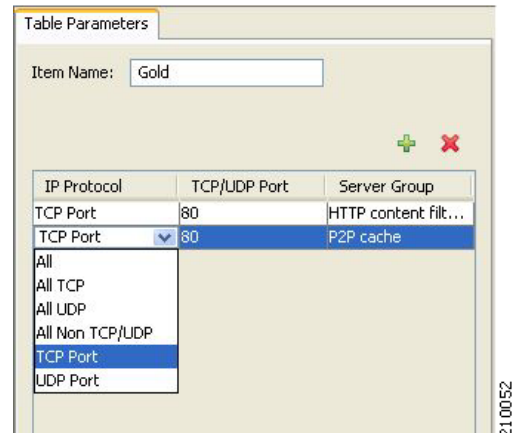
You can now edit the new table parameter, as described in the following section.

Editing VAS Table Parameters

To edit VAS table parameters, complete the following steps:

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- Step 1** From the Service Configuration Editor, choose **Configuration > Policies > VAS Settings**.
The VAS Settings dialog box appears.
 - Step 2** Click the **Traffic Forwarding Tables** tab.
 - Step 3** From the list of traffic-forwarding tables in the Traffic Forwarding Tables area, select a table.
 - Step 4** In the table in the Table Parameters tab, select a protocol, port, and server group.
 - a.** Click in a cell in the IP Protocol column, and, from the drop-down list that opens, select an IP protocol type ([Figure 1-5](#)).

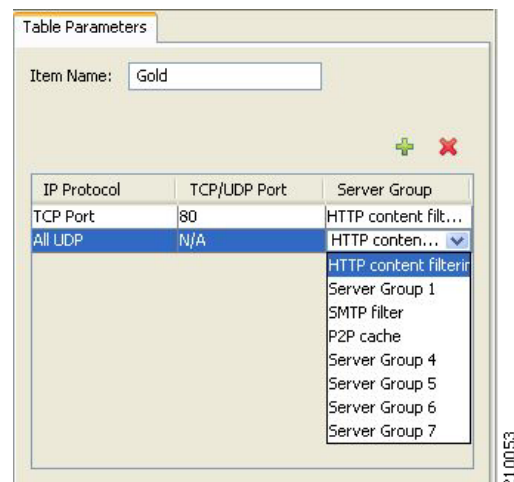
Figure 1-5 Table Parameters Tab



If you select All, All TCP, All UDP, or All Non TCP/UDP, “N/A” appears in the TCP/UDP Port cell when you move to another cell in the table.

- b. If you select TCP Port or UDP Port, double-click in the cell in the TCP/UDP Port column, and enter the port number or a range of ports in the format *port1-port2*.
- c. Click in the cell in the Server Group column, and, from the drop-down list that opens, select a server group (Figure 1-6).

Figure 1-6 Tables Parameters Tab




Step 5 Click **Close** to save the changes and close the dialog box.

Deleting VAS Table Parameters

To delete VAS table parameters, complete the following steps:

Step 1 From the Service Configuration Editor, choose **Configuration > Policies > VAS Settings**.

The VAS Settings dialog box appears.

- Step 2** Click the **Traffic Forwarding Tables** tab.
 - Step 3** From the list of traffic-forwarding tables in the Traffic Forwarding Tables area, select a table.
 - Step 4** From the list of table parameters in the Table Parameters tab, select a table parameter.
 - Step 5** Click the delete  icon.

The selected table parameter is deleted and is no longer displayed in the list of table parameters.
 - Step 6** Click **Close** to save the changes and close the dialog box.
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Assigning a VAS Forwarding Table to a Package

Traffic is forwarded to the appropriate VAS server group based on the package assigned to the subscriber. A traffic-forwarding table defining the desired traffic forwarding scheme is assigned to the package. The SCE platform then forwards all traffic for that package to the server groups according to protocol and port as defined in the assigned traffic forwarding table.

To assign a VAS forwarding table to a package, complete the following steps:

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- Step 1** In the **Policies** tab of the Service Configuration Editor, right-click the desired package name and select **Edit Package**.

The Package Settings dialog box for the selected package appears.
 - Step 2** Click the **Advanced** tab.
 - Step 3** At the bottom of the tab, in the VAS Traffic Forwarding Table area, select the desired traffic forwarding table from the drop-down list.

Figure 1-7 Edit Package Advanced Tab

Package Settings for "Default Package"

General | Quota Management | Subscriber BW Controllers | **Advanced**

Package Index
Set the Index for this Package: 0

Parent Package
Select Parent Package (for sharing usage counters):

Package Usage Counters
A package can either be mapped to exclusive package usage counters, or share usage counters with its ancestor package.
 Map this Package to exclusive package usage counters
Package usage counter name for this package: Default Package Counter
Counter Index: 0

Calendar
Select Calendar for this Package: Default Calendar

VAS Traffic Forwarding Table
Select Traffic Forwarding Table for this Package: Table 1
Default Table
Table 1
Table 2
Table 3

OK Cancel

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