



CHAPTER 2

Getting Started

Revised: April 21, 2010, OL-8411-11

Introduction

The Cisco Service Control Application Reporter (SCA Reporter) is the Cisco Service Control Application tool that allows you to produce reports based on the traffic analysis performed by the Service Control Engine (SCE) platform. The information is sent from the SCE platform and is stored in a database. The SCA Reporter can query and retrieve information from the database and present the results in a comprehensive range of reports, including global monitoring, subscriber monitoring, P2P, and traffic discovery statistics reports.

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System Components

The SCA Reporter is a valuable tool for understanding the habits and resource consumption of the applications and subscribers that use your network. It can also be used to judge the efficacy of various rules and the possible impact of their implementation on the network.

The SCA Reporter is available only in a deployment with a database. You can generate reports using any of the following methods:

- Standalone application
- Command-line interface (CLI)—See [The SCA Reporter Command-Line Interface, page 6-1](#)
- Tool of the SCA BB Console—See [SCA Reporter as a Tool in the SCA BB Console, page C-1](#)

The available reports can be displayed in a variety of chart renderings (for example, stacked-bar or area) or in tabular form. You can adjust the chart display for various presentation options (for example, 3D). You can export both tabular and chart reports to multiple file formats as well as print or email reports. You can also modify the reports by changing the values assigned to the properties (for example, time boundaries). You can duplicate, save, and add reports to Favorites.

You can also generate reports using the SCA Reporter Command-Line Interface (CLI) without using the GUI.

SCA Reporter consists of visual components (known as views). The following are the views and the tasks that you can perform in each view:

- **Templates view**—Select a report template, create a new report instance, and generate a report.
- **Properties view**—View properties of the object in focus and their values. The object in focus can be a template group, a report template, a report instance, or the chart display of a report. You can configure report instance and chart display properties.
- **Report view**—View a graphical representation or tabular display of the data of the report. Each report is displayed in its own report view.
- **Progress view**—Monitor reports executed or exported. You can view progress details in this view, and also choose to generate reports in the background so that you can continue working on other reports.
- **Favorites view**—View a list of frequently used report templates, and generate a report.
- **Hierarchy view**—View the report metrics in a hierarchical tree. You can select and deselect metrics to add and remove them from the report.

Generating a report can be divided into five broad steps:

1. Create a report instance from the Templates view using the New Report wizard.
 - a. Configure the properties of the report instance.
 - b. Optionally execute the new report instance.
 - c. Optionally add the new report instance to the favorites view
2. View the report in tabular or graphic form in its report view.
3. Select and deselect chart items in the hierarchy view to view a subset of the report data.
4. Expand and collapse chart items in the hierarchy view.
5. Adjust the chart display of the report in the Properties view.

You can generate multiple reports simultaneously and later export, print or email them. While the reports are executing, you can monitor them and put them in the background by using the Progress view.

System Requirements

You can install and run the SCA Reporter GUI front end and command-line application on any computer running Windows 2000 or Windows XP.

You can install the SCA Reporter command-line application for Linux on any computer running Red Hat Enterprise Linux 4 or 5.

The computer should have a minimum of 512 MB of memory; 1024 MB of memory is highly recommended.

Minimum screen resolution is 1024 by 768 pixels.

Installing the SCA Reporter in Windows

- [Installing the SCA Reporter in Windows, page 2-3](#)
- [Uninstalling the SCA Reporter in Windows, page 2-6](#)

Installing the SCA Reporter in Windows

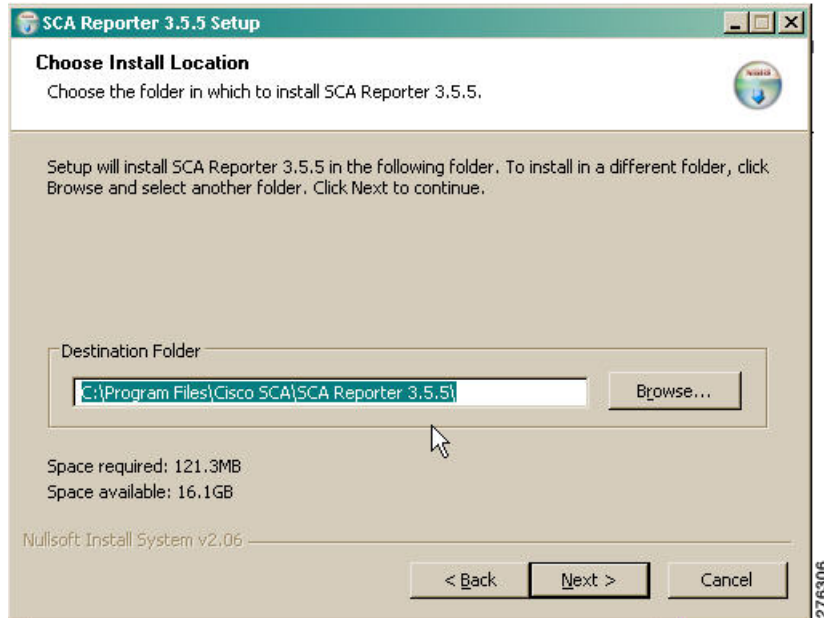
- Step 1** Navigate to the SCA Reporter installation file, SCA Reporter 3.5.5 Setup.exe, and double-click it. The Welcome page of the SCA Reporter 3.5.5 Setup wizard appears ([Figure 2-1](#)).

Figure 2-1 SCA Reporter Setup Wizard Welcome



- Step 2** Click **Next**. The Install Location page of the Setup wizard opens ([Figure 2-2](#)).

Figure 2-2 Choose Install Location

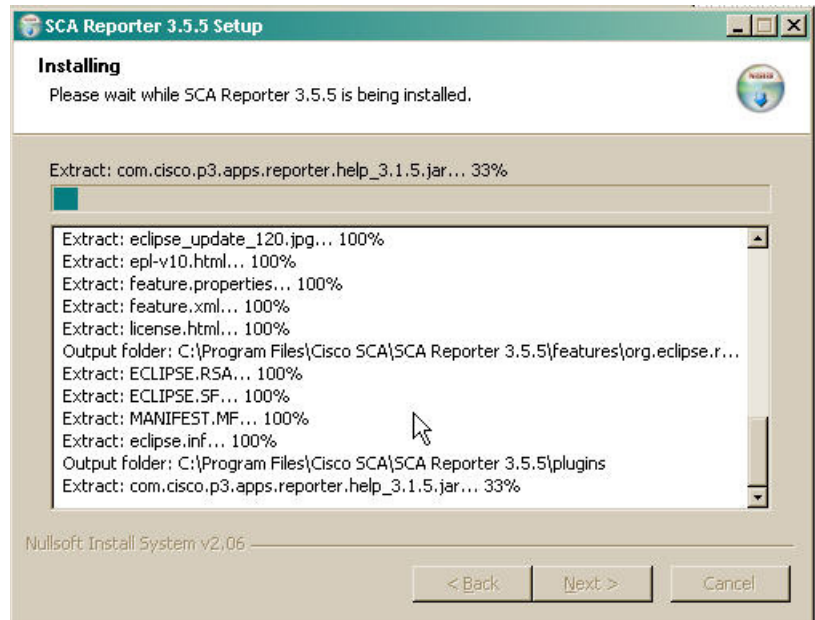


- Step 3** (Optional) Click **Browse** to choose a different destination folder.
- Step 4** Click **Next**. The Start Menu Folder page of the Setup wizard opens (Figure 2-3).

Figure 2-3 Start Menu Location



- Step 5** (Optional) Enter a different Start Menu folder in the Start Menu Folder field.
- Step 6** Click **Install**. The Installing page of the Setup wizard opens (Figure 2-4).

Figure 2-4 *Installing*

Step 7 Wait until installation is complete. The Installation Complete page of the Setup wizard opens (Figure 2-5).

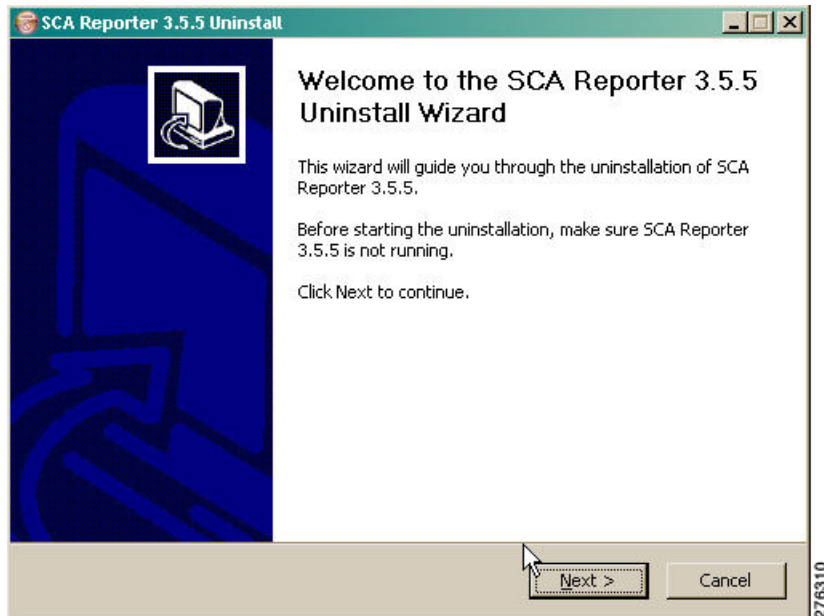
Figure 2-5 *Installation Complete*

Step 8 Click **Finish**. The SCA Reporter 3.5.5 setup wizard closes. The SCA Reporter is now installed on the machine.

Uninstalling the SCA Reporter in Windows

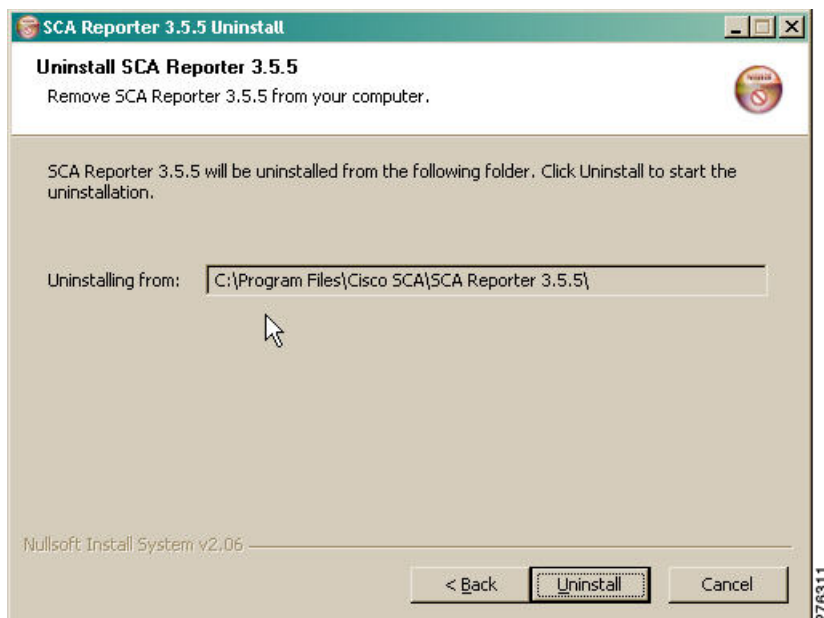
- Step 1** Choose **Start > All Programs > Cisco SCA > SCA Reporter 3.5.5 > Uninstall**. The Reporter Uninstall wizard appears (Figure 2-6).

Figure 2-6 Reporter Uninstall Wizard

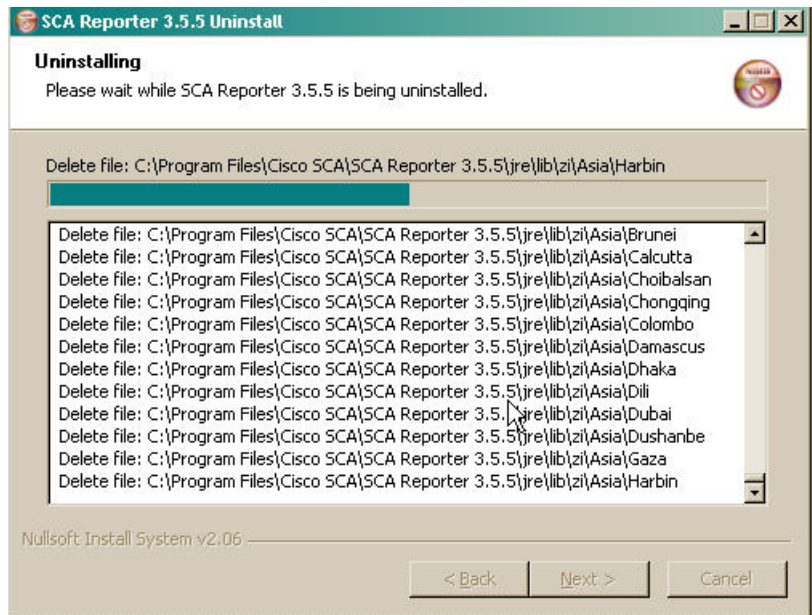


- Step 2** Click **Next**. The Start Menu Folder page of the Uninstall wizard opens (Figure 2-7).

Figure 2-7 Start Menu Folder



- Step 3** Click **Uninstall**. The Uninstall page of the Uninstall wizard opens (Figure 2-8).

Figure 2-8 Uninstall

Step 4 Wait until uninstallation is complete. The Uninstallation Complete page of the uninstall wizard opens (Figure 2-9).

Figure 2-9 Uninstall Complete

Step 5 Click **Finish**. The SCA Reporter is uninstalled from the machine.

Installing the SCA Reporter in Linux

You can install the SCA Reporter in Linux, and then run it from the command line (see [The SCA Reporter Command-Line Interface, page 6-1.](#))

- [Installing the SCA Reporter in Linux, page 2-8](#)
- [Uninstalling the SCA Reporter in Linux, page 2-8](#)

Installing the SCA Reporter in Linux

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- Step 1** Download the SCA BB installation package (reporter-cmd-linux.tgz) from the CCO.
- Step 2** Open the installation package in a selected directory, using the **tar xpf reporter-cmd-linux-3.5.5.tgz** command.
- Step 3** From the installation directory, run the **reportercmd.sh –setup** command.
-

Uninstalling the SCA Reporter in Linux

Delete the installation directory.

Starting the SCA Reporter

Access the SCA Reporter from the **Start** menu.

- Step 1** Choose **Start > All Programs > Cisco SCA > SCA Reporter 3.5.5 > SCA Reporter 3.5.5**.
The Cisco Service Control SCA Reporter splash window appears (Figure 2-10).

Figure 2-10 Cisco Service Control SCA Reporter

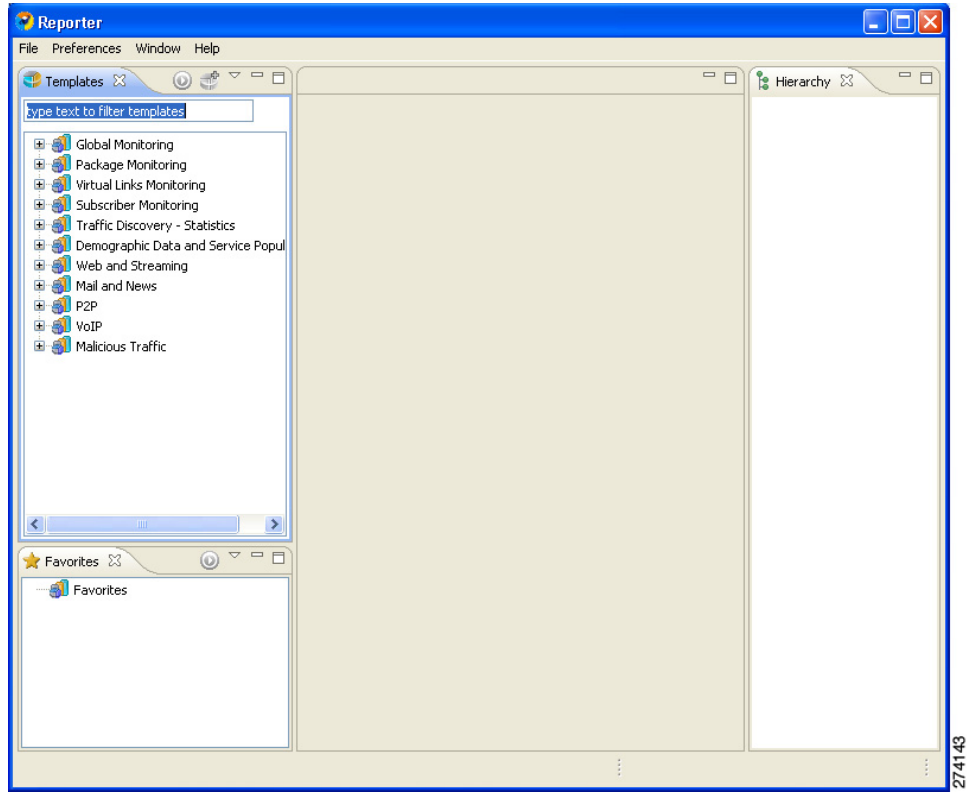


After the SCA Reporter loads, the main window of the SCA Reporter appears, displaying the Welcome view.

- Step 2** Close the Welcome view. The Templates view appears (Figure 2-11).

Figure 2-11 Templates

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Configuring the SCA Reporter

To configure the SCA reporter, you must create a basic configuration for the SCA reporter. This procedure includes selecting a database type, connecting to a database, activating the database, and setting the IP address of the Service Control Engine (SCE) platform whose service configuration data is to be used.

In bundled mode, the Cisco Service Control Management Suite (SCMS) Collection Manager (CM) is used with the Sybase Adaptive Server Enterprise (Sybase ASE). The Sybase data management platform supports transaction-intensive enterprise applications. It enables you to store and retrieve information online and can warehouse information as needed. (For more information, see the *Cisco Service Control Management Suite Collection Manager User Guide*.) The CM can also be configured to work with Oracle and MySQL databases.

After a database is activated, you must select the IP address of one of the SCE platforms in the database. The choice is made for each repository, represented by a tab in the Preferences dialog box. All options offered in the Templates view of the SCA Reporter (available packages, services) are determined by the service configuration currently applied to the configured SCE platform. Each report is generated according to the SCE device to which it is configured. In the example configuration, there is one SCE device connected to the database and one repository preference.

- [Managing Database Connections, page 2-11](#)
- [Setting the IP Address of an SCE Platform, page 2-16](#)
- [Setting Chart Colors, page 2-17](#)
- [Configuring the Legend in Charts, page 2-22](#)
- [Configuring Advanced Options for the SCA Reporter, page 2-24](#)

Managing Database Connections

To use the SCA Reporter, you must create and activate a connection to a database containing data generated from an SCE platform.

You can add connections to a number of databases, and then change the active database as required.

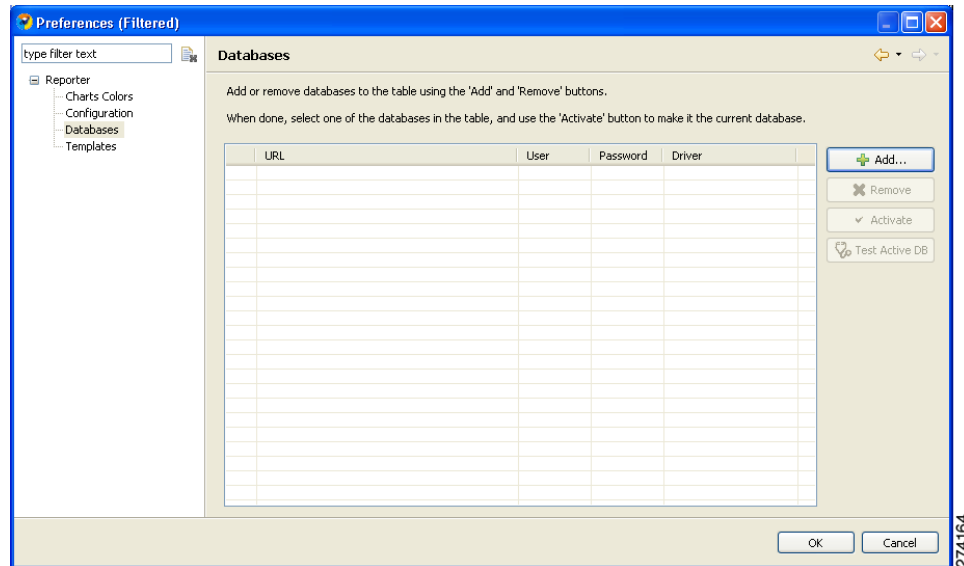
- [Adding a Database Connection, page 2-12](#)
- [Activating Database Connections, page 2-15](#)

Adding a Database Connection

A database connection can be added using the Add Database wizard.

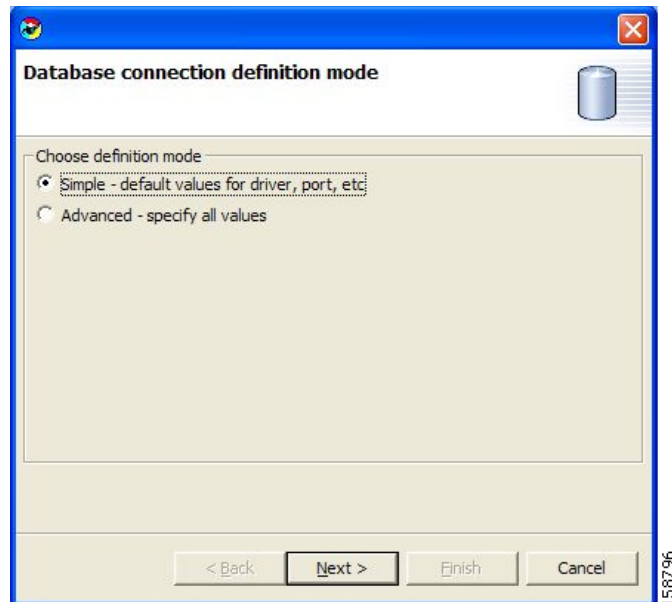
- Step 1** At the Main menu, choose **Preferences > Reporter**. The Preferences dialog box appears (Figure 2-12).
- Step 2** From the Preferences tree, choose **Reporter > Databases**.

Figure 2-12 Preferences (Databases)



- Step 3** In the Databases pane, click **Add**. The Add Database wizard appears (Figure 2-13).

Figure 2-13 Add Database Wizard



Step 4 Select one of the Choose definition mode radio buttons.

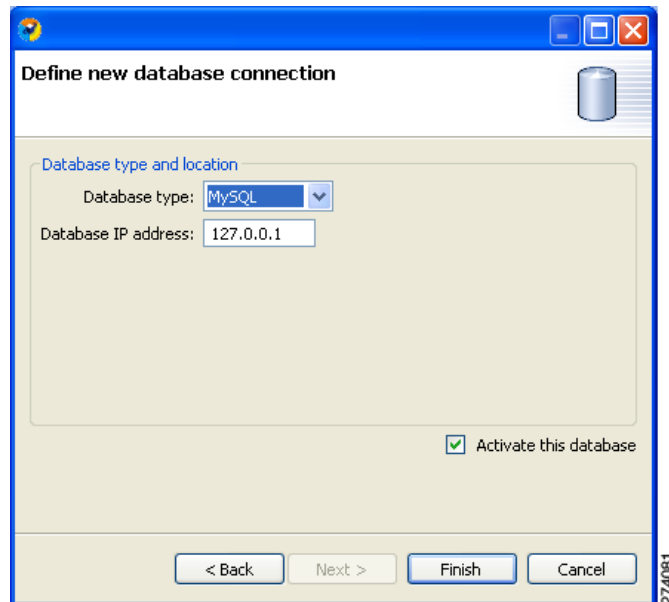
- **Simple**
- **Advanced**

Step 5 Click Next.

The Define new database connection page of the Add Database wizard opens (Figure 2-14). The display depends upon the definition mode selected in Step 4:

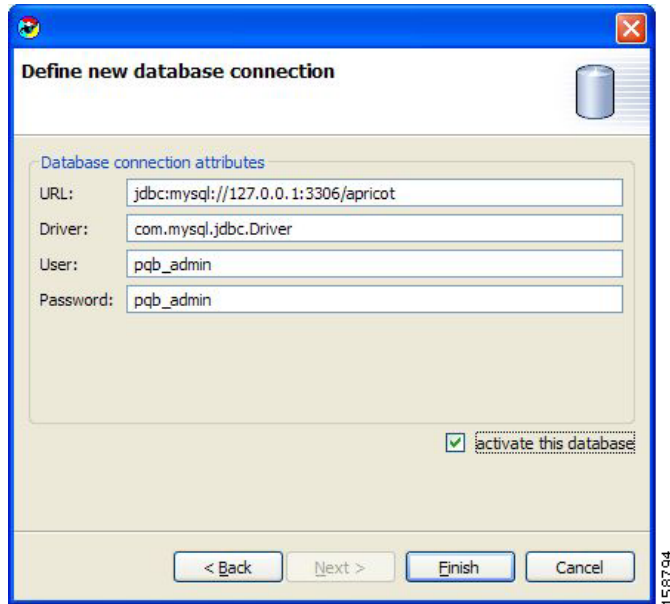
- If you selected Simple definition mode (Figure 2-14):

Figure 2-14 Define New Database Connection



- If you selected Advanced definition mode (Figure 2-15):

Figure 2-15 **Advanced Definition**



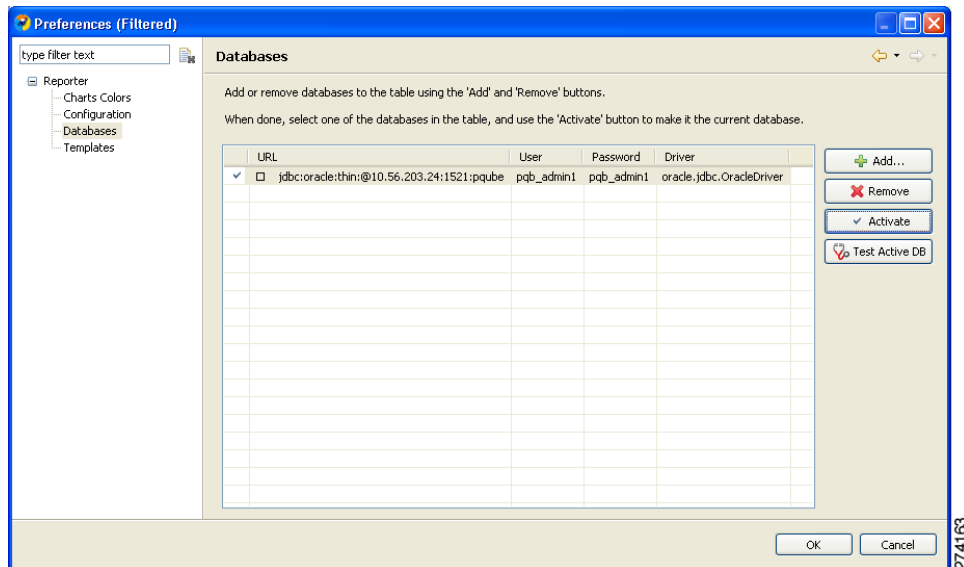
Step 6 Fill in all fields.

Step 7 (Optional) Check the **activate this database** check box.

Step 8 Click **Finish**. The Add Database wizard closes.

The definition of the database is added to the list in the Preferences dialog box (Figure 2-16).

Figure 2-16 **Preferences (Databases)**



Step 9 Click **Test Active DB**.

The database connection is tested.


- If successful, the following message appears: Click **OK**.
- If unsuccessful, reconfigure the database connection.

Step 10 Click **OK**. The Preferences dialog box closes.

Activating Database Connections

Step 1 At the main menu, choose **Preferences > Reporter**. The Preferences dialog box appears.

Step 2 From the Preferences tree, choose **Reporter > Databases**. All defined database connections are listed in the table.

The currently active database (if any) is shown by a check mark ()

Step 3 Choose the database connection you wish to activate.

Step 4 Click **Activate**.

Step 5 Click **OK**. The database is activated.

The first IP address listed for policy data is selected as the IP address of the SCE platform whose service configuration data is to be used in reports. The Preferences dialog box closes.

Setting the IP Address of an SCE Platform

The IP address is set automatically to the first entry of the IP list, when the database is activated. To change the IP address, use this procedure.



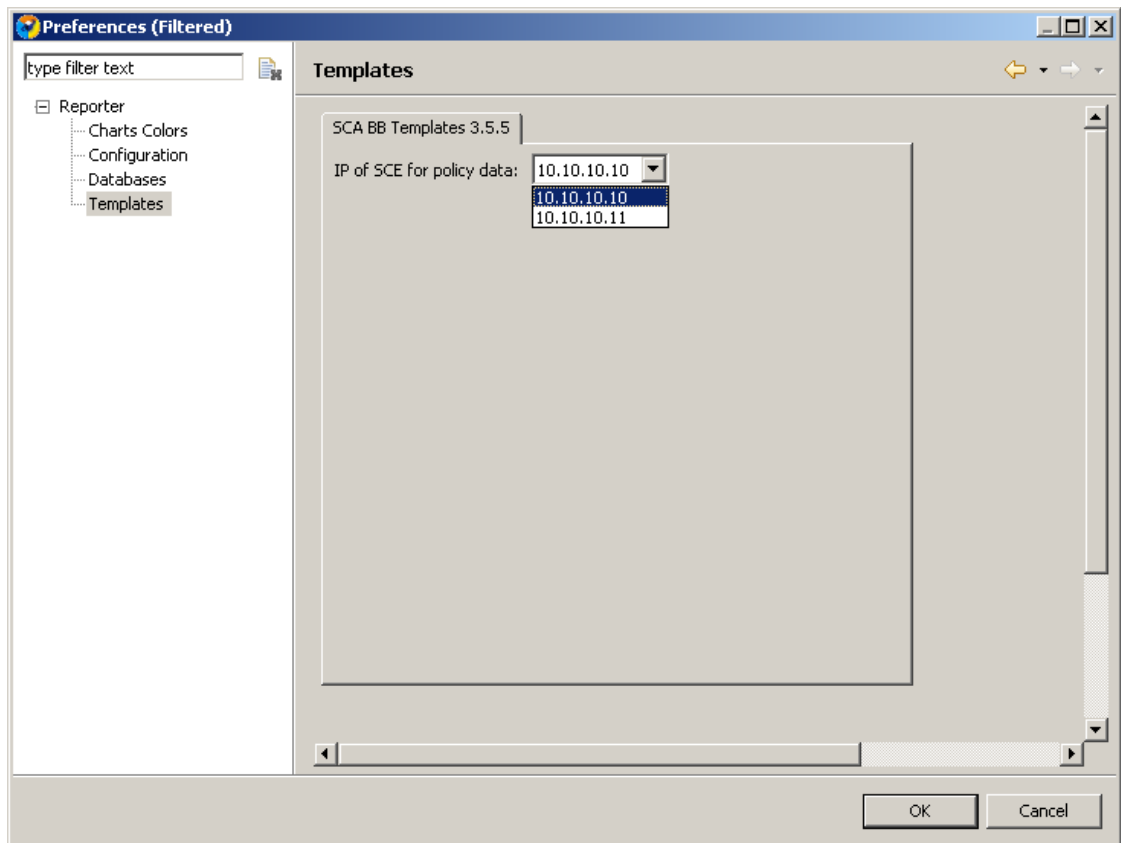
Note

The Preferences dialog box contains one tab for each repository (set of templates) available in the Reporter. In each template, you choose one SCE platform. If there is more than one repository, more than one set of template groups in the Templates view exists.

Step 1 At the main menu, choose **Preferences > Reporter**. The Preferences dialog box appears (Figure 2-17).

Step 2 In the Preferences tree, select **Reporter > Templates**.

Figure 2-17 Preferences (Templates)



Step 3 In the Templates pane, from the **IP of SCE for policy data** drop-down list, choose the IP address of the SCE platform whose service configuration data is to be used in reports. This IP address is added to the SCA Reporter templates repository.

Step 4 Click **Apply**. The IP address of the SCE platform is set for service configuration data.



Note Before you close the dialog box, you *must* click **Apply** by clicking **OK**.

Step 5 Click **OK**. The Preferences dialog box closes.

Setting Chart Colors

Instead of using the default color set for charts that is installed as part of the Reporter installation (the predefined colors are packaged within the SCA BB Templates package), you can define your own color sets.

This allows you to ensure color persistence between different sessions of the Reporter, including:

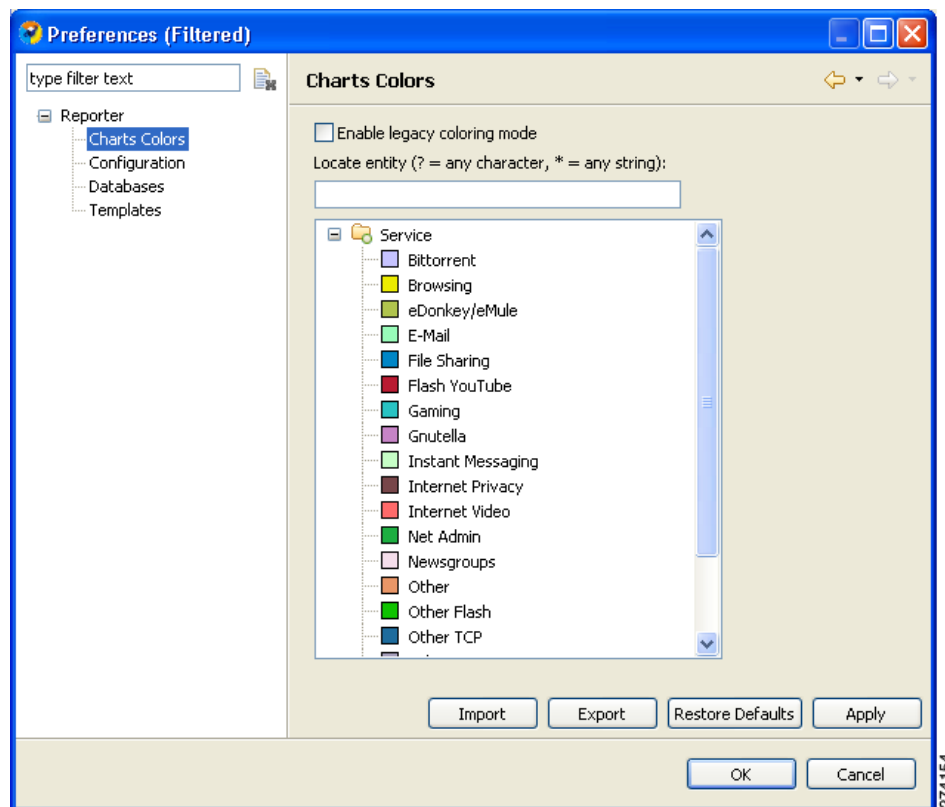
- Different sessions of the same Reporter installation
- Different reporter installations using data from the same SCE platform, by exporting and importing color files
- Different reporters using data from different SCE platforms
- Different versions of the Reporter
- [Using Color Sets, page 2-18](#)
- [Changing a Single Legend Item Color, page 2-19](#)

Using Color Sets

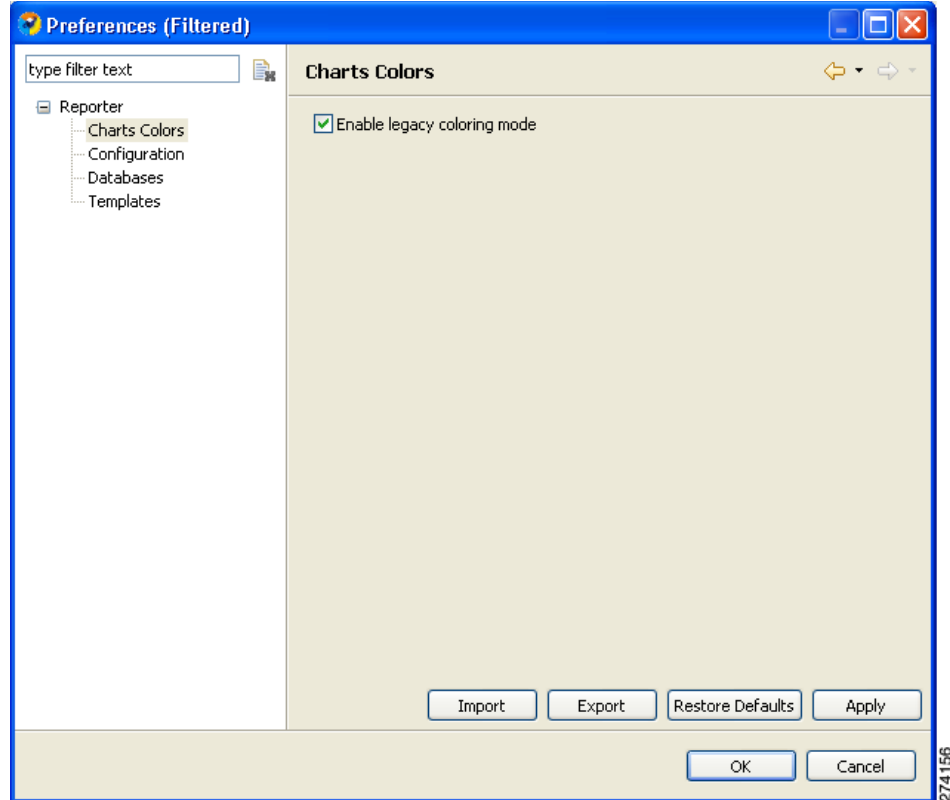
Each line of the a color set file defines the color of one legend item. We recommended that you avoid editing the color set file manually.

- Step 1** At the Main menu, choose **Preferences > Reporter**. The Preferences dialog box appears.
- Step 2** In the Preferences tree, choose **Reporter > Charts Colors**. The Charts Colors preference page opens (Figure 2-18).

Figure 2-18 Chart Colors Preference



- Step 3** Select an action to perform:
- To import a color set from a file, click **Import**.
An Open dialog box appears. Browse to the required file and click **Open**. The file is imported and overwrites the existing color set.
 - To export the current color set to a file, click **Export**.
A Save As dialog box appears. Browse to the required directory, enter a file name in the File name field, and click **Save**. The color set is exported.
 - To Restore the default color set (the predefined colors delivered with the SCA BB Templates package), click **Restore Defaults**.
 - To enable the color allocation method used prior to release 3.5.0, check the **Enable legacy coloring mode** check box (Figure 2-19).

Figure 2-19 Chart Colors - Enable Legacy Coloring Mode**Note**

Before applying Import, Restore Defaults, or Enable legacy color mode, a warning appears (Figure 2-20).

Figure 2-20 Confirm Discarding Color Settings

Step 4 Click **OK**. The Preferences dialog box closes.

Changing a Single Legend Item Color

- Step 1** At the Main menu, choose **Preferences > Reporter**. The Preferences dialog box appears.
- Step 2** In the Preferences tree, choose **Reporter > Charts Colors**. The Charts Colors preference page opens.
- Step 3** Select a legend item (in the following window, a service) from the color tree.

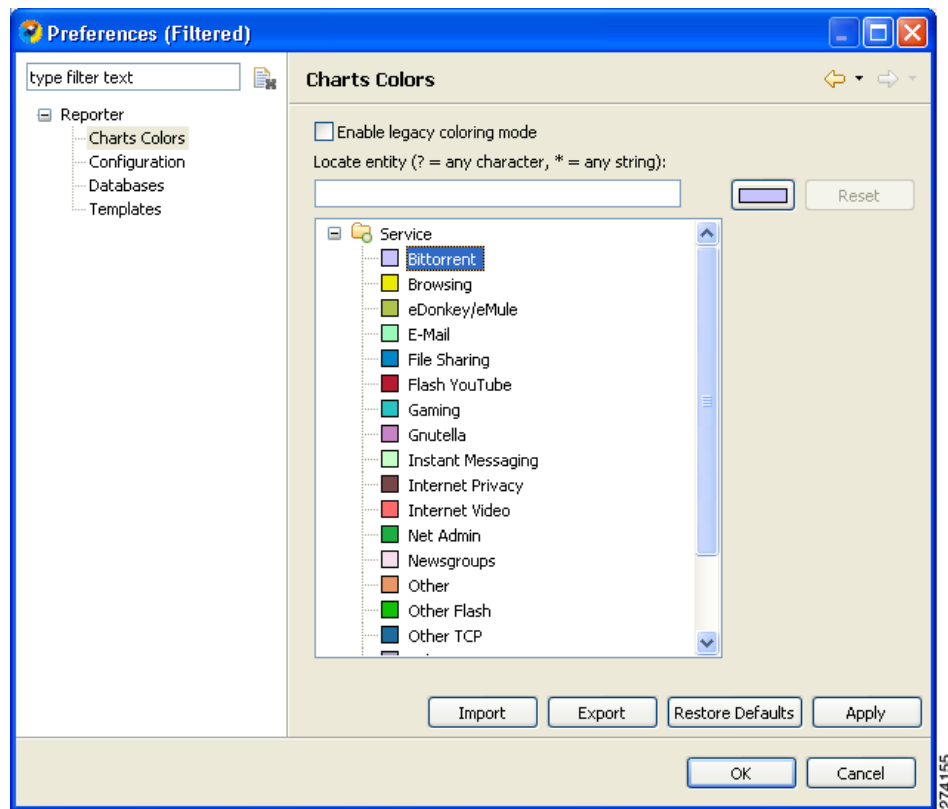
**Note**

Possible categories of legend items are Direction, Hostname, Host IP, Protocol, MOS, Range, Codec, Port Number, Newsgroup, Protocol, Service, Measure, and Subscriber.

Categories and legend items are only displayed in the Charts Colors pane after colors are allocated to legend items. Colors are allocated to any legend items in the chart the first time a report instance is executed.

The current color of the legend item appears in the upper right of the Charts Colors pane (Figure 2-21).

Figure 2-21 Current Color



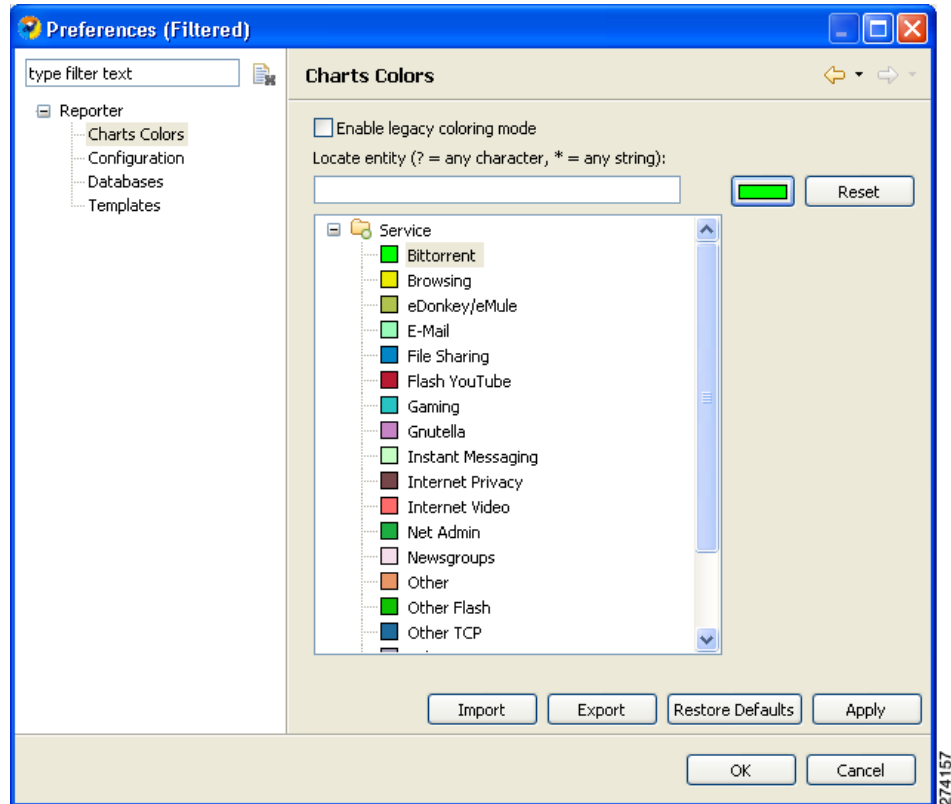
Step 4 Click the color. A color palette dialog box appears (Figure 2-22).

Figure 2-22 Color Palette



- Step 5** Select a new color for the legend item and click **OK**.
 The Color dialog box closes. The selected color is applied to the legend item (Figure 2-23).
 The Reset button is enabled.

Figure 2-23 Selected Color Applied



**Note**

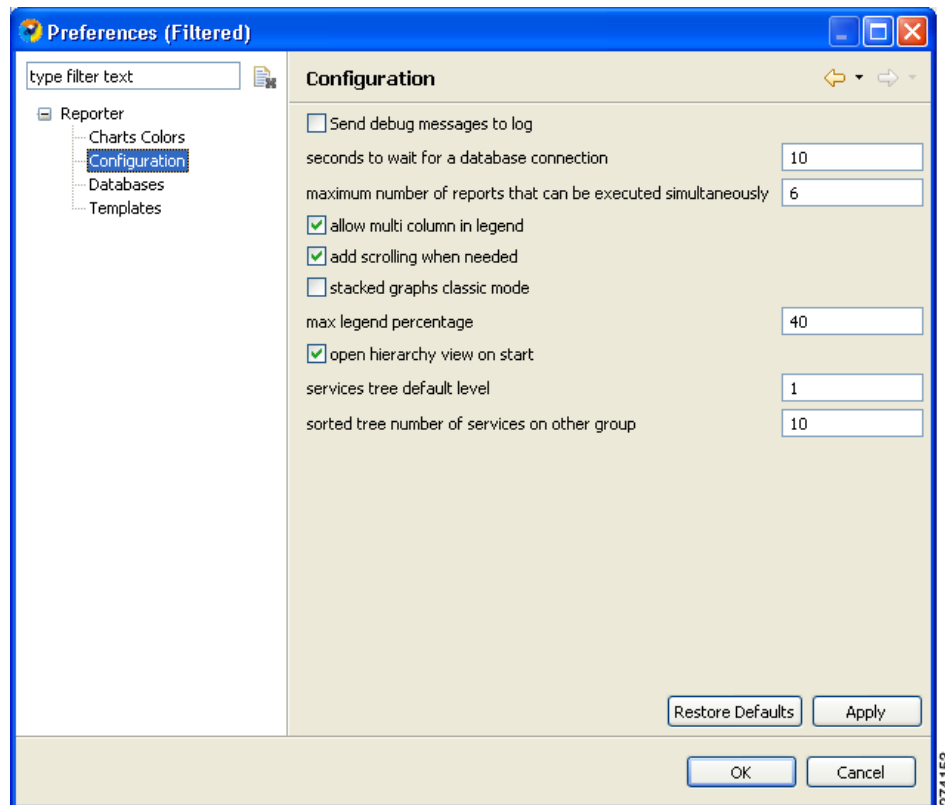
The Reset button restores the default color of a single selected legend item.

Configuring the Legend in Charts

You can globally configure the appearance of the legend in charts.

- Step 1** At the Main menu, choose **Preferences > Reporter**. The Preferences dialog box appears (Figure 2-24).
- Step 2** In the Preferences tree, select **Reporter > Configuration**.

Figure 2-24 Preferences (Configuration)



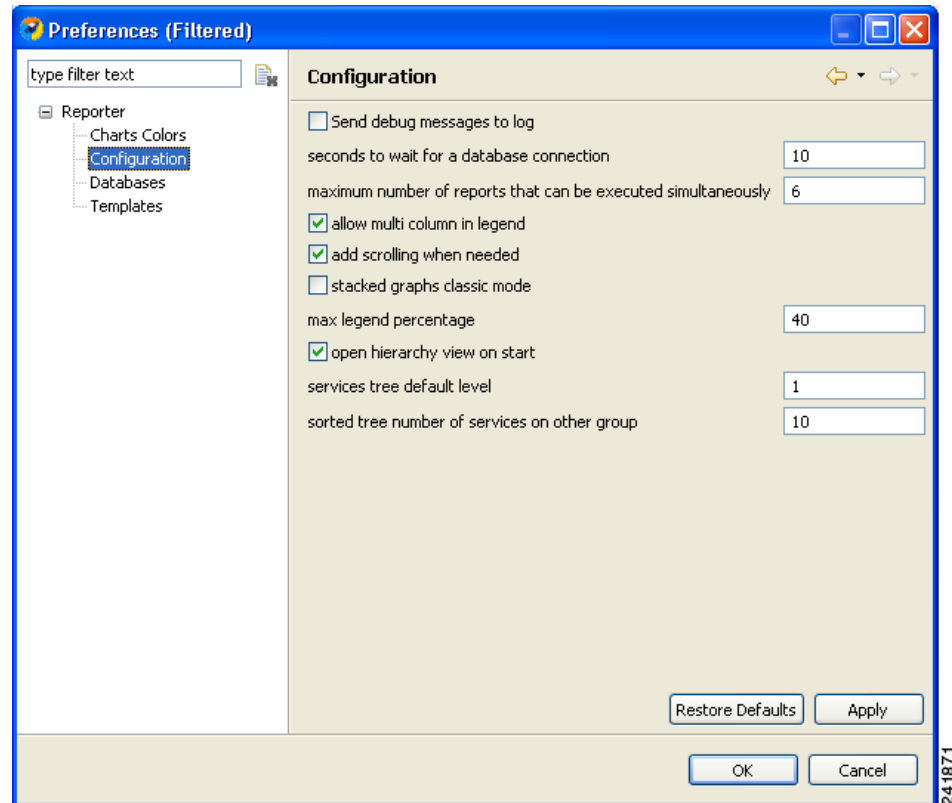
- Step 3** (Optional) Uncheck the **Show item check box in legend** check box.
- Step 4** (Optional) Uncheck the **Allow multi column in legend** check box.
- Step 5** (Optional) In the Max legend percentage field, enter a new value.
- Step 6** Click **OK**. The new settings are saved. The Preferences dialog box closes.

Configuring Hierarchy View

To configure several attributes of the Hierarchy view:

- Step 1** At the Main menu, choose **Preferences > Reporter**. The Preferences dialog box appears (Figure 2-25).
- Step 2** In the Preferences tree, select **Reporter > Configuration**.

Figure 2-25 Preferences (Configuration)



- Step 3** (Optional) Check **open hierarchy view on start**.
- Step 4** (Optional) In the services tree default level field, enter a new value.
- Step 5** (Optional) In the sorted tree number of services on other group field, enter a new value indicating the number of services to include in the Other group of the hierarchy.
- Step 6** Click **OK**. The new settings are saved.
The Preferences dialog box closes

Configuring Advanced Options for the SCA Reporter

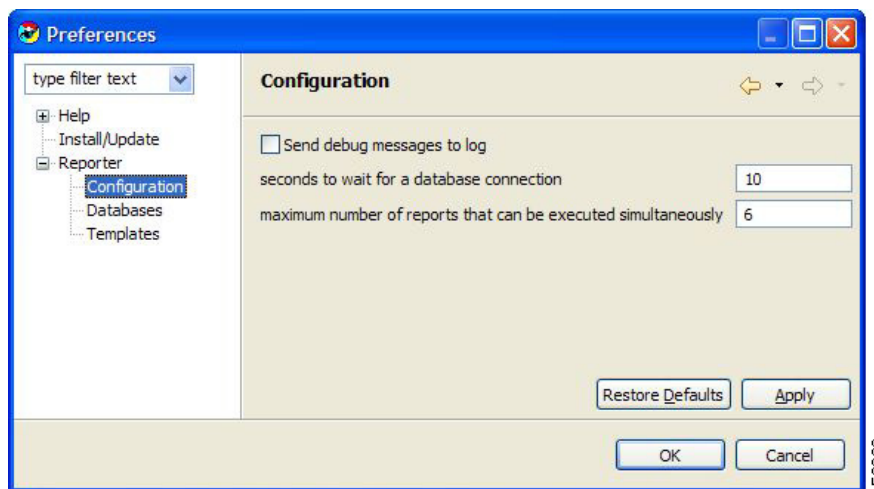
You can configure the following advanced options of the SCA reporter:

- Logging debug messages
- Length of time to wait for a database connection
- Maximum number of report instances that can be executed simultaneously

Step 1 At the Main menu, choose **Preferences > Reporter**. The Preferences dialog box appears (Figure 2-26).

Step 2 In the Preferences tree, choose **Reporter > Configuration**.

Figure 2-26 Preferences (Configuration)



Step 3 To log debug messages, check the **Send debug messages to log** check box.

Logging debug messages can cause the log file to grow rapidly.

Step 4 In the Seconds to wait for a database connection field, enter a new value.

Step 5 In the Maximum number of reports that can be executed simultaneously field, enter a new value.

Step 6 Click **OK**. The new settings are saved. The Preferences dialog box closes.

Using Online Help

- [Accessing Online Help, page 2-25](#)
- [Using Online Help Search, page 2-25](#)

Accessing Online Help

To access parts of this user guide from the SCA reporter:

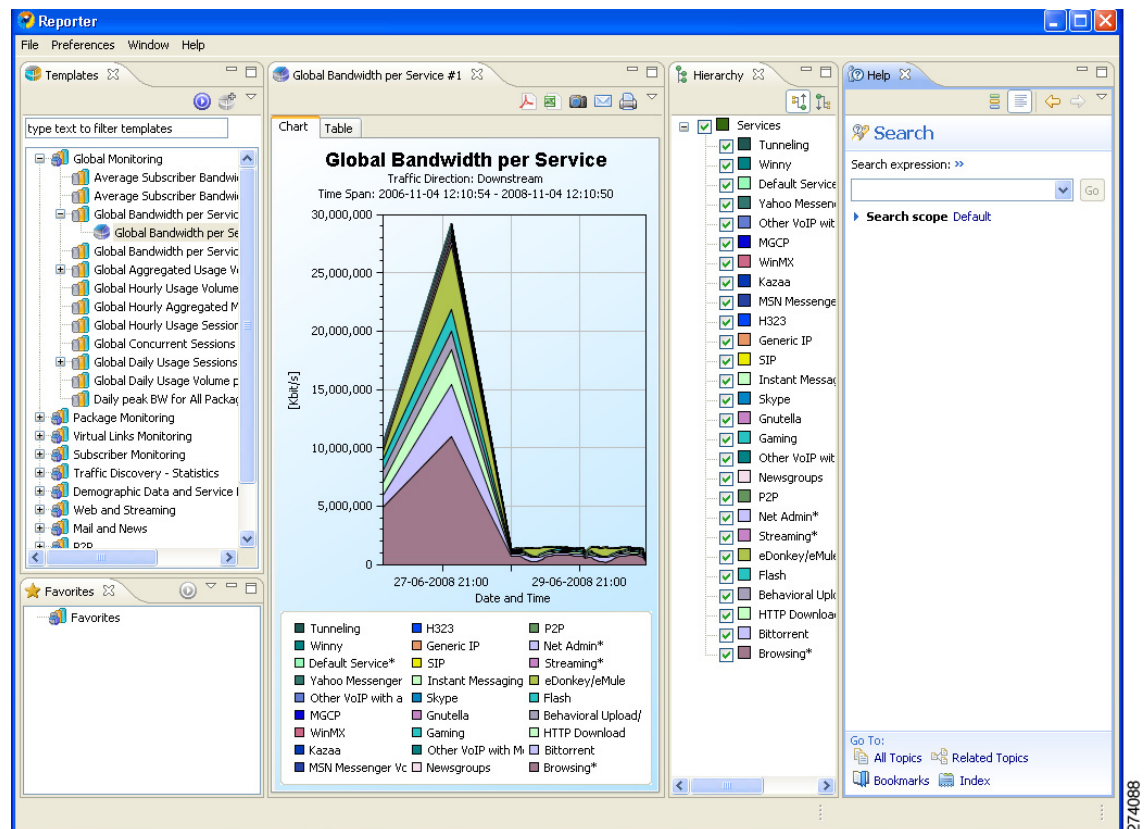
- Step 1** From the Help menu, choose **Help Contents**. Online help opens in a separate window.
- Step 2** Refer to the [“Using Online Help Search”](#) section on page 2-25.

Using Online Help Search

You can also search online help from inside the SCA Reporter.

- Step 1** From the Help menu, choose **Search**. The Help view opens in the Reporter window ([Figure 2-27](#)).

Figure 2-27 Reporter Help



- Step 2** Enter a word, phrase, or expression in the **Search expression** field. The Go button is enabled.



Note Click **>> (Expand)** for an explanation of how to construct search expressions.

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Step 3 Click **Go**. Help topics containing your search expression appear under Local Help.

Step 4 To view its contents, click a **help** topic.



Note You can bookmark topics for later reference.

Step 5 By clicking the appropriate link at the bottom of the Help view, you can switch to:

- All topics
 - Related topics
 - Bookmarks
-

Quick Start—Getting Started with the SCA Reporter

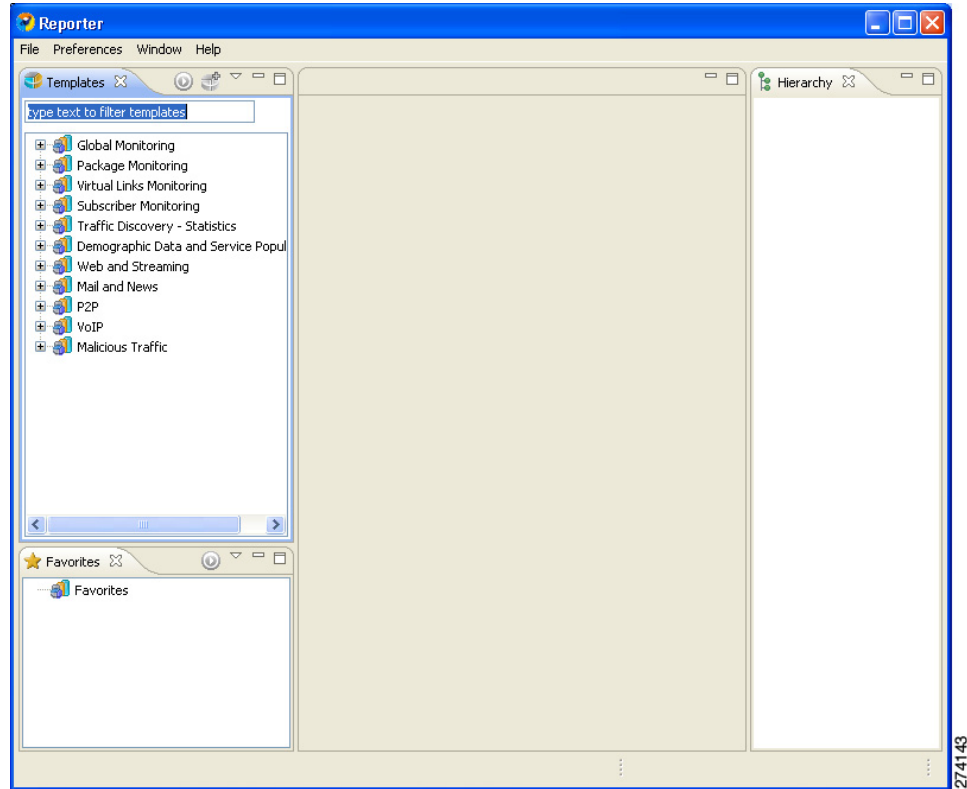
This Quick Start section will help you get started with the SCA Reporter. You will configure the Reporter, create a report instance and generate a report, and then work with the report.

- [Creating a First Report, page 2-27](#)
- [Working with a First Report, page 2-32](#)

Creating a First Report

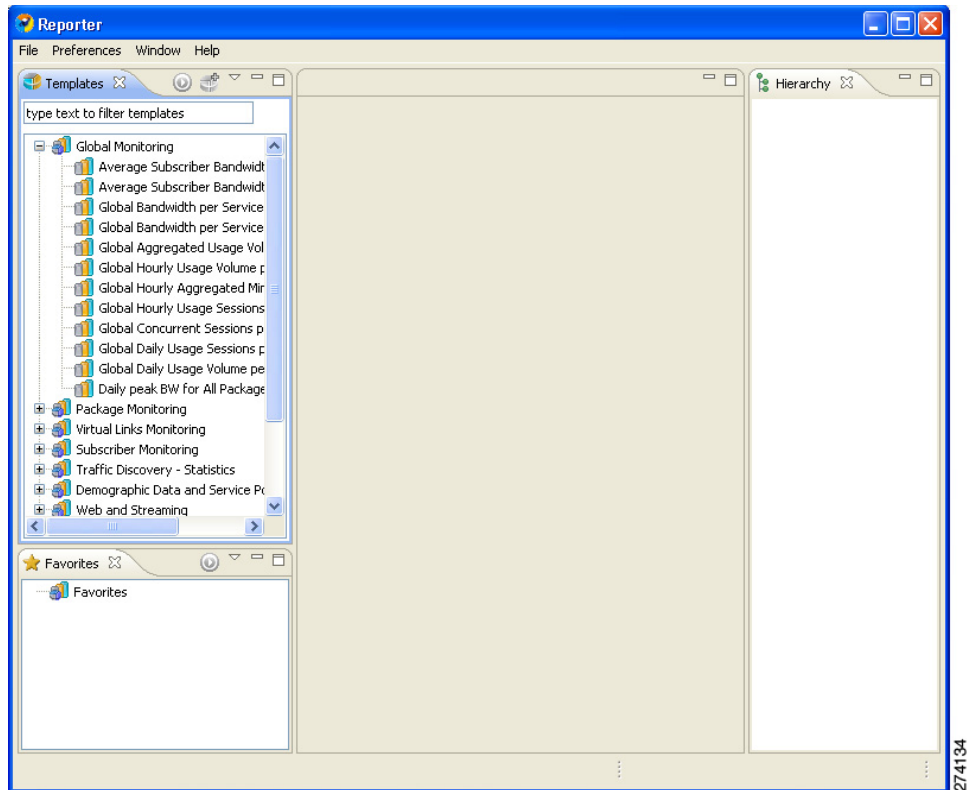
- Step 1** Launch the SCA Reporter (choose **Start > All Programs > Cisco SCA > SCA Reporter 3.5.5 > SCA Reporter 3.5.5**) (Figure 2-28).

Figure 2-28 Reporter



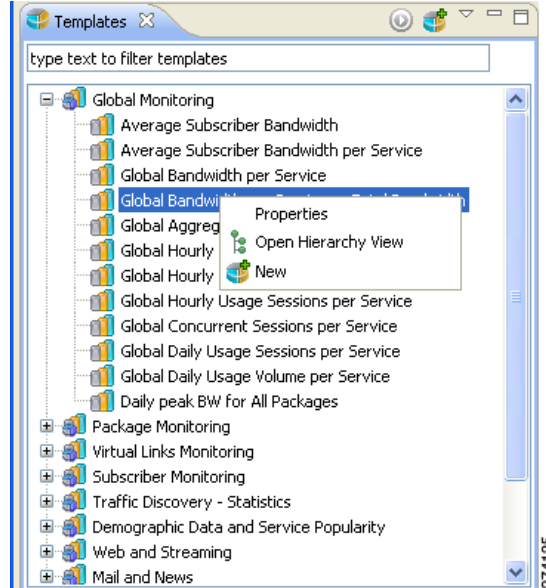
- Step 2** Add, configure, and activate a database connection (see [Managing Database Connections](#), page 2-11).
- Step 3** Confirm that there is an active database and that the system is configured correctly.
- a. At the Main menu, choose **Preferences > Reporter**. The Preferences dialog box appears.
 - b. In the Preferences tree, choose **Reporter > Databases**.
 - c. In the Databases pane, click **Test Active DB**.
- Step 4** In the Templates view, expand the node of one of the template groups (Figure 2-29).

Figure 2-29 Templates



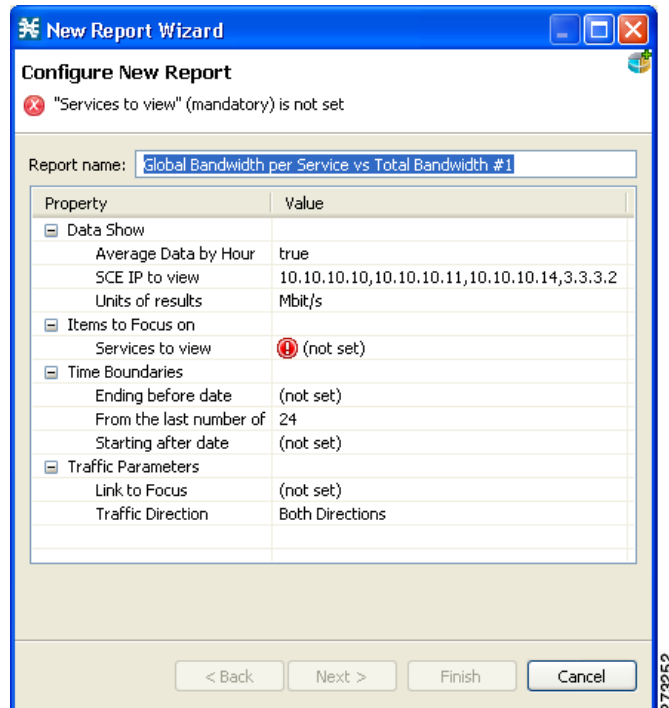
- Step 5** Do one of the following:
- Double-click a report template
 - Right-click a report template.
- A popup menu appears (Figure 2-30).

Figure 2-30 *Templates Popup Menu*



Step 6 From the menu, select **New**. The New Report Wizard appears (Figure 2-31).

Figure 2-31 *New Report Wizard*



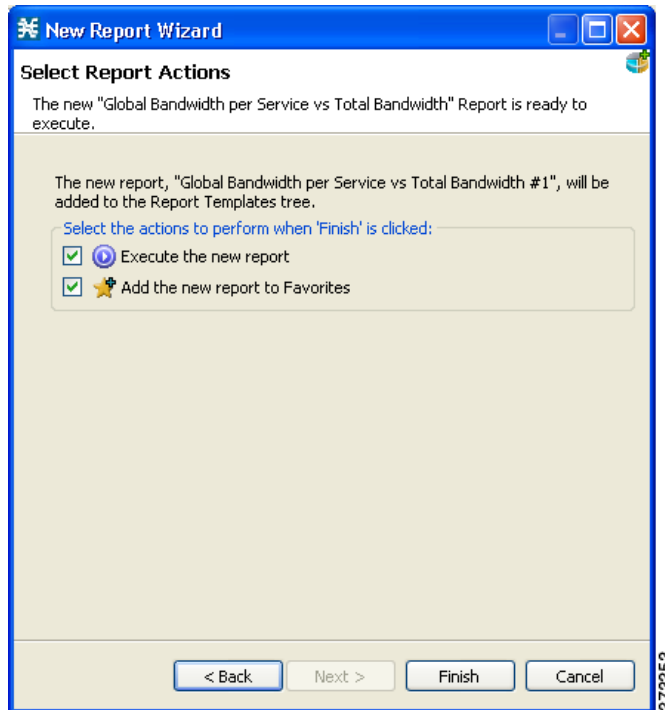
The report instance has the same name as the report template with the addition of “#1”. You can optionally rename the report instance by entering a name in the **Report name** field.

Step 7 Configure the report instance properties

If any property has the value  (**not set**), you must assign it a value.

Step 8 Click **Next** (Figure 2-32).

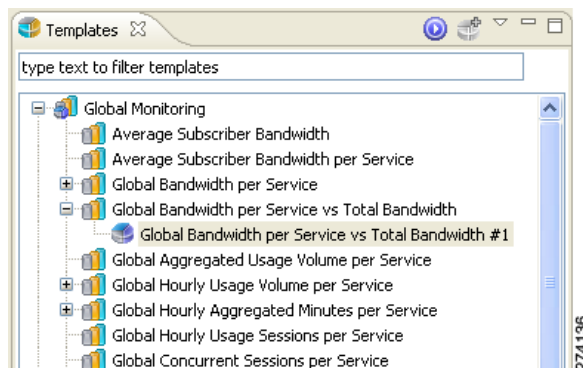
Figure 2-32 Select Report Actions



Step 9 Click **Finish**.

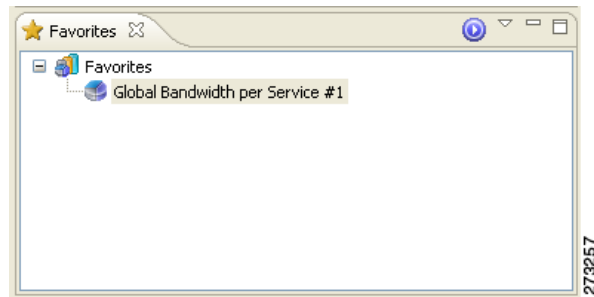
A report instance is added below the report template (Figure 2-33).

Figure 2-33 Report Instance Added



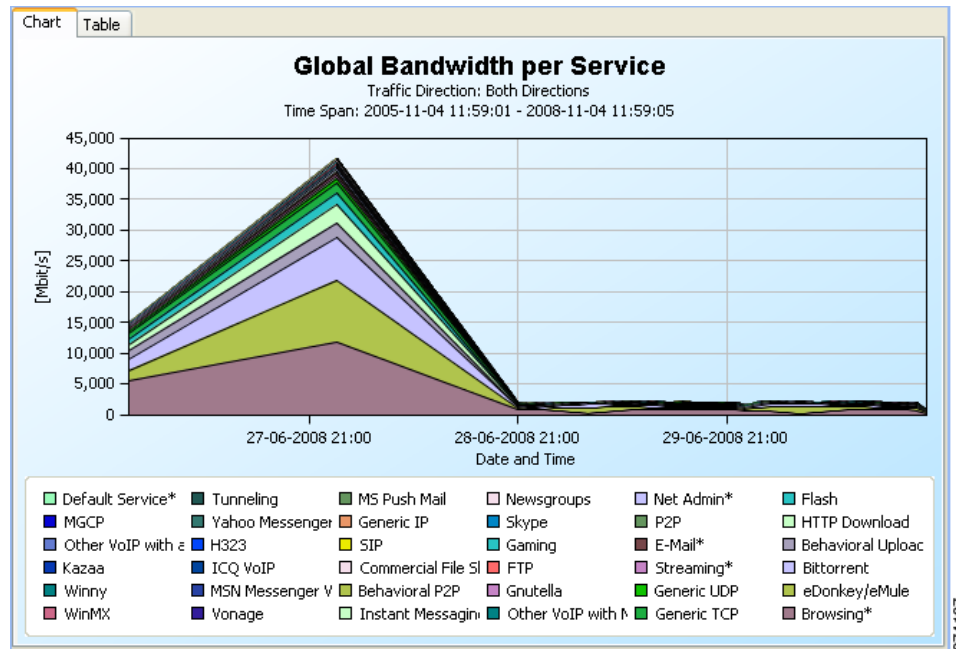
The report instance appears in the Favorites view (Figure 2-34).

Figure 2-34 Favorites



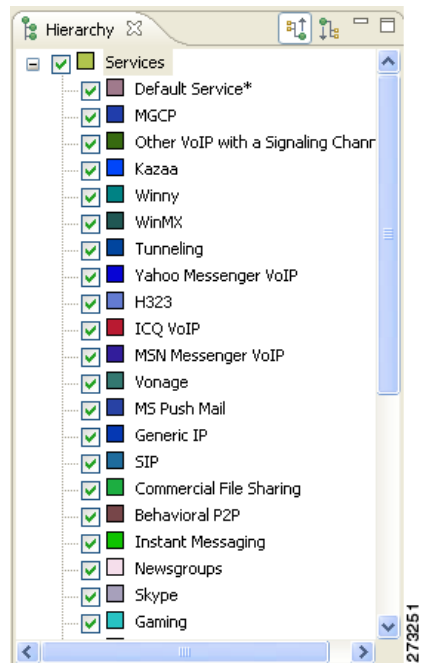
A report view, with the name of the report instance, opens in the top right of the SCA Reporter window, displaying a chart of the report (Figure 2-35).

Figure 2-35 Report



All the services included in the report are included in the Hierarchy view (Figure 2-36).

Figure 2-36 Hierarchy



Step 10 View your report. The chart display properties are shown in the Properties view (Figure 2-37).

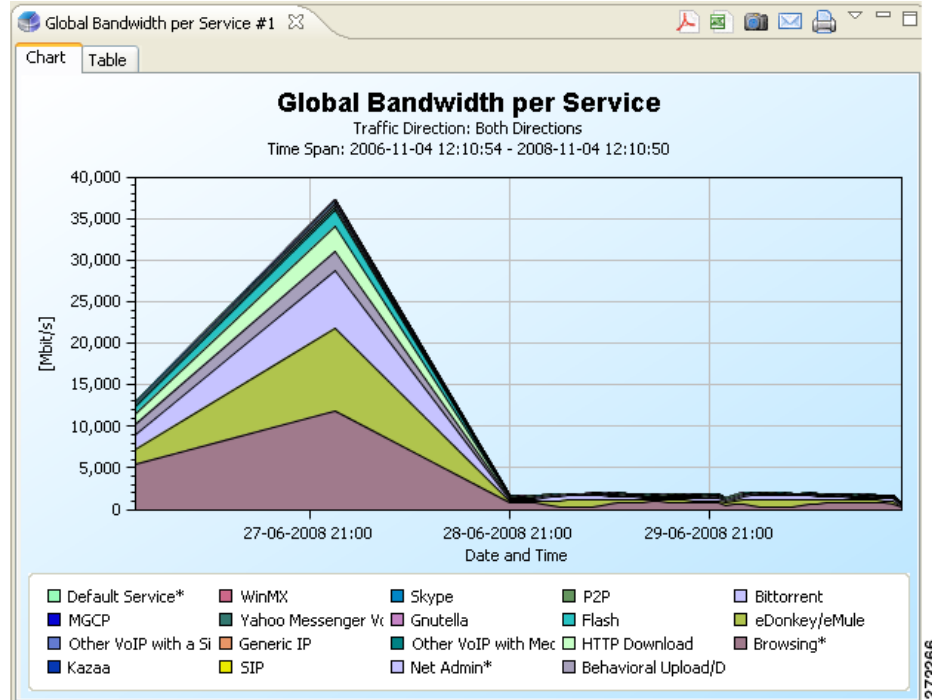
Figure 2-37 Properties

Property	Value
Legend	
Add Scroll	true
Allow multiple column	true
Legend visibility	true
Look	
3D	false
Allow zoom and pan on Y	true
Chart rendering	STACKED_AREA

Working with a First Report

- Step 1** Create a report, as described in the previous procedure.
- Step 2** Adjust the chart display by modifying the chart display properties in the Properties view. (See [Adjusting the Chart Display](#), page 5-11.)
- Step 3** In the Hierarchy view, uncheck several chart items. The modified report appears in the report view (Figure 2-38).
- Step 4** In the report view, from the drop-down menu above the view, select **Go To Report**.

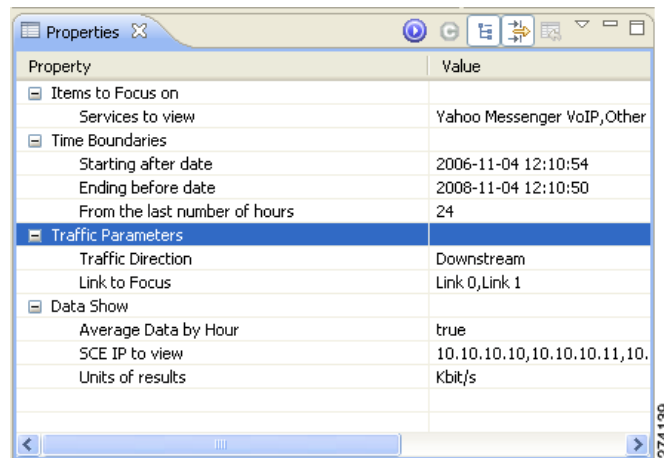
Figure 2-38 Modified Report



The Properties view displays the report instance properties.

- Step 5** Display all the report instance properties by clicking  (Show Advanced Properties) (Figure 2-39).

Figure 2-39 Report Properties

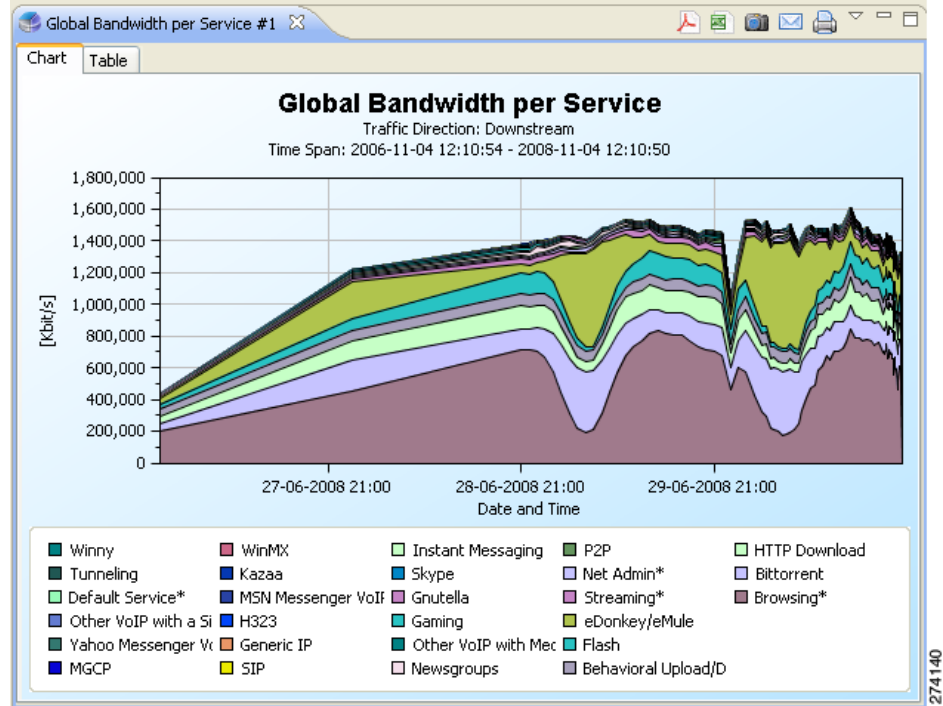


- Step 6** Modify one or more properties. (See [Modifying Existing Report Instances](#), page 4-8.)

- Step 7** Click  (Execute) to regenerate the report.

The modified report is displayed in the report view (Figure 2-40).

Figure 2-40 Modified Report



(In the illustrated example, the **Traffic Direction** and **Units of results** properties were modified)