



# CHAPTER 2

## Getting Started

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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.

- [System Components, page 2-1](#)
- [System Requirements, page 2-2](#)
- [Installing the SCA Reporter under Windows, page 2-2](#)
- [Installing the SCA Reporter under Linux, page 2-7](#)
- [How to Launch the SCA Reporter, page 2-8](#)
- [Configuring the SCA Reporter, page 2-9](#)
- [Online Help, page 2-21](#)
- [Quick Start, page 2-23](#)

## 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 under Windows

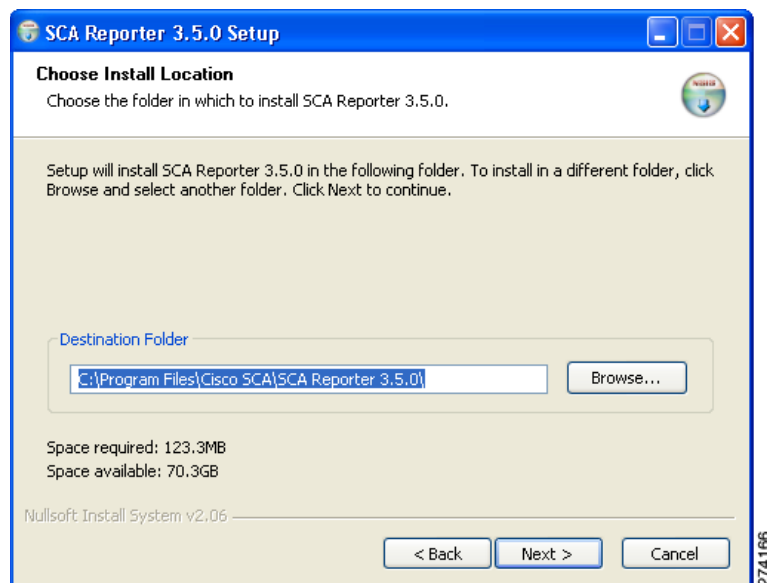
- [How to Install the SCA Reporter under Windows, page 2-3](#)
- [How to Uninstall the SCA Reporter under Windows, page 2-5](#)

## How to Install the SCA Reporter under Windows

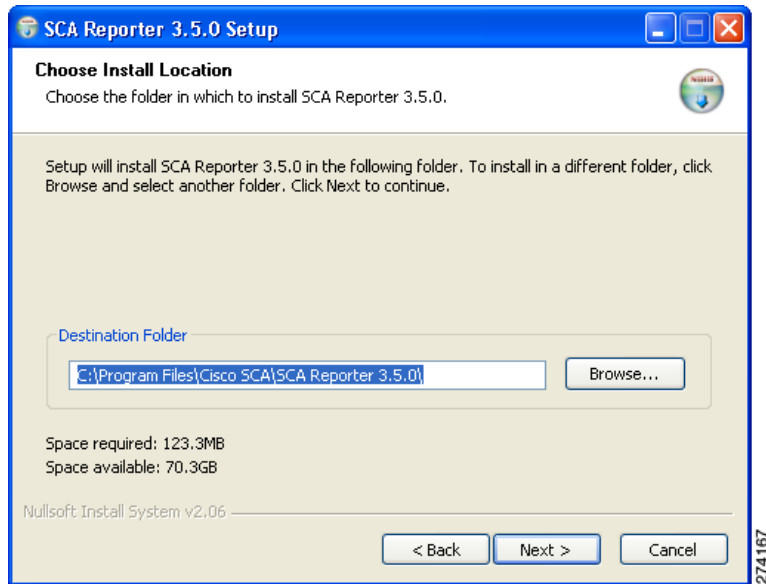
- Step 1** Navigate to the SCA Reporter installation file, SCA Reporter 3.5.0 Setup.exe, and double-click it. The Welcome page of the SCA Reporter 3.5.0 Setup wizard appears.



- Step 2** Click **Next**. The Install Location page of the Setup wizard opens.



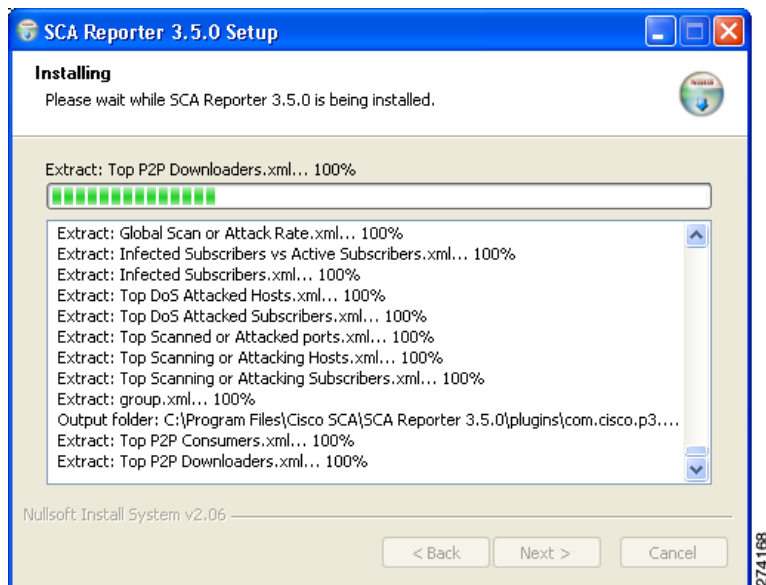
- Step 3** (Optional) Click **Browse** to choose a different destination folder.
- Step 4** Click **Next**. The Start Menu Folder page of the Setup wizard opens.



**Step 5** (Optional) Enter a different Start Menu folder in the Start Menu Folder field.

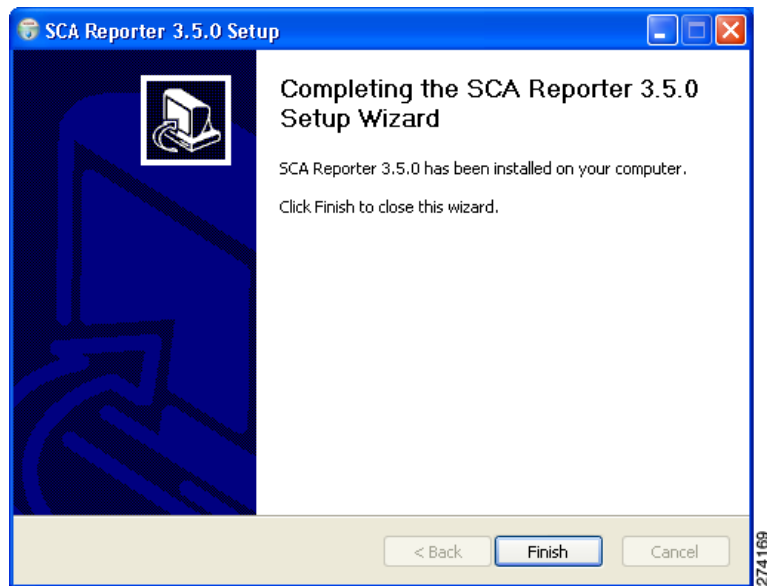
**Step 6** Click **Install**.

The Installing page of the Setup wizard opens.



**Step 7** Wait until installation is complete.

The Installation Complete page of the Setup wizard opens.

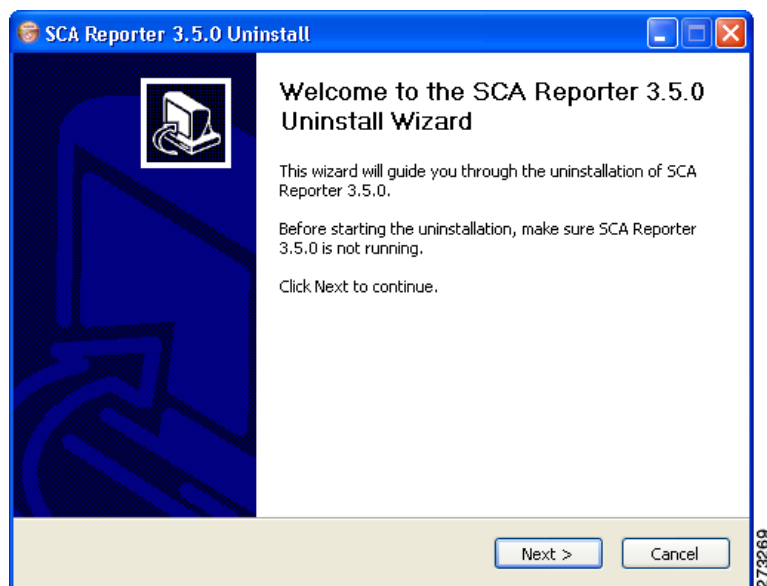


- Step 8** Click **Finish**.
- The SCA Reporter 3.5.0 Setup wizard closes.
- The SCA Reporter is now installed on the machine.
- 

## How to Uninstall the SCA Reporter under Windows

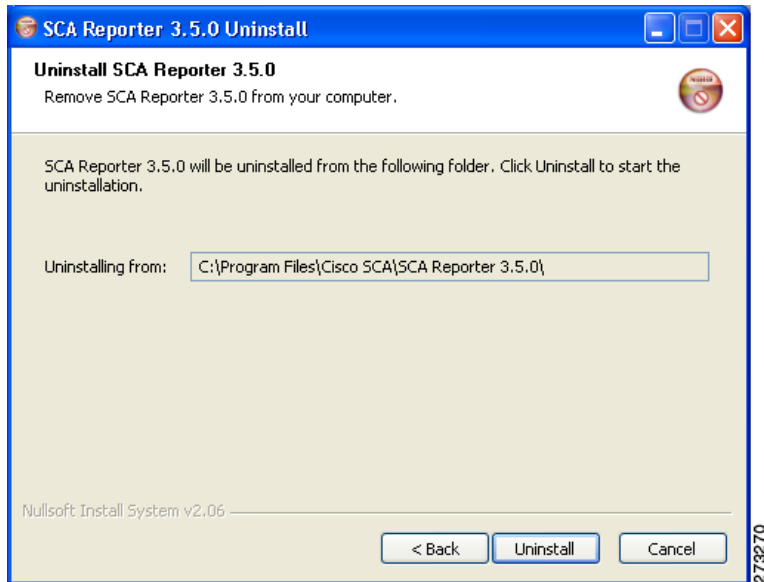
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- Step 1** Choose **Start > All Programs > Cisco SCA > SCA Reporter 3.5.0 > Uninstall**.
- The Reporter Uninstall wizard appears.

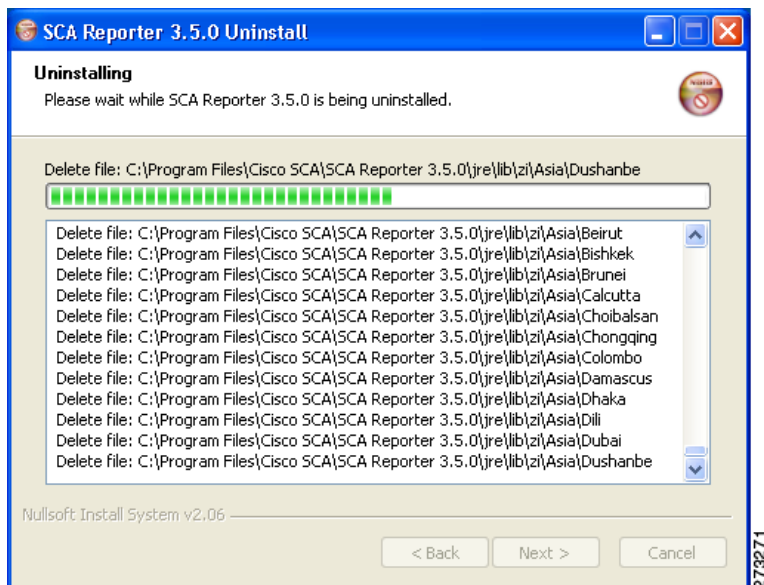


**Step 2** Click **Next**.

The Start Menu Folder page of the Uninstall wizard opens.

**Step 3** Click **Uninstall**.

The Uninstalling page of the Uninstall wizard opens.

**Step 4** Wait until uninstallation is complete.

The Uninstallation Complete page of the Uninstall wizard opens.



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

## Installing the SCA Reporter under Linux

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

- [How to Install the SCA Reporter under Linux](#), page 2-7
- [How to Uninstall the SCA Reporter under Linux](#), page 2-8

## How to Install the SCA Reporter under 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 command `tar xpf reporter-cmd-linux-3.5.0.tgz`.
- Step 3** From the installation directory, run the command `reportercmd.sh -setup`.
-

## How to Uninstall the SCA Reporter under Linux

**Step 1** Delete the installation directory.

## How to Launch the SCA Reporter

You can access the SCA Reporter from the **Start** menu.

**Step 1** Choose **Start > All Programs > Cisco SCA > SCA Reporter 3.5.0 > SCA Reporter 3.5.0**.

The Cisco Service Control SCA Reporter splash screen appears.

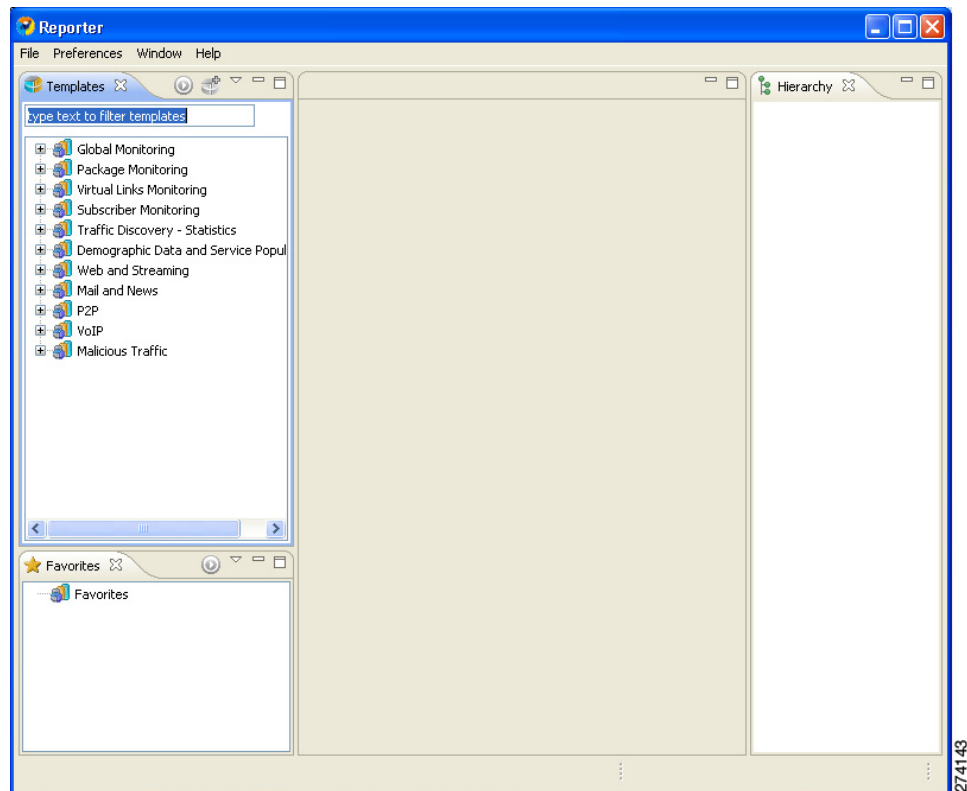


After the SCA Reporter has loaded, the main window of the SCA Reporter appears, displaying the Welcome view.

**Step 2** Close the Welcome view.

The Templates view is displayed.





## Configuring the SCA Reporter

You must create a basic configuration for the SCA Reporter, which 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, etc.) 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 2-10
- [How to Set the IP Address of an SCE Platform](#), page 2-13
- [How to Set the Colors Used in Charts](#), page 2-14

- [How to Configure the Legend Displayed in Charts, page 2-19](#)
- [How to Configure Advanced Options for the SCA Reporter, page 2-20](#)

## 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.

- [How to Add a Database Connection, page 2-10](#)
- [How to Activate a Database Connection, page 2-13](#)

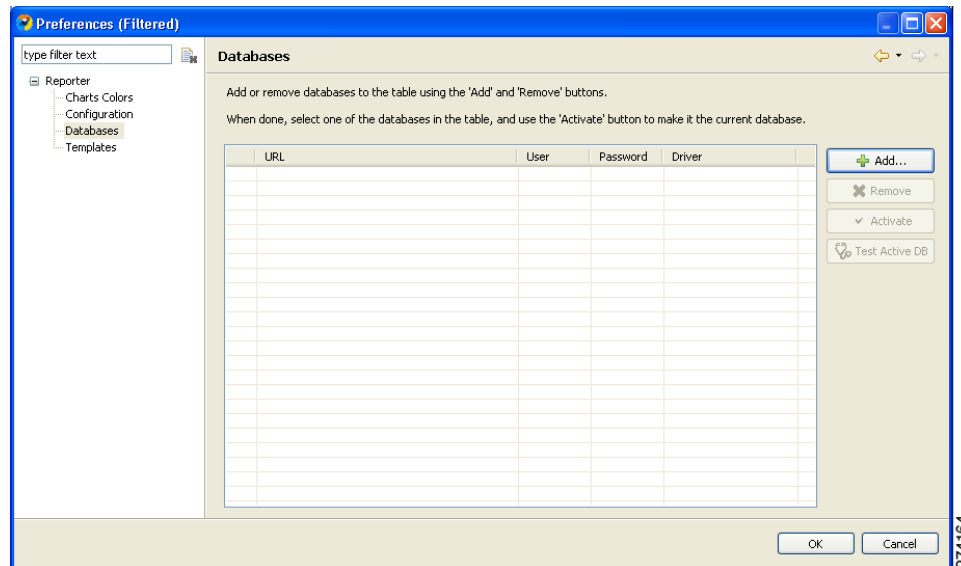
### How to Add a Database Connection

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

**Step 1** From the main menu, choose **Preferences > Reporter**.

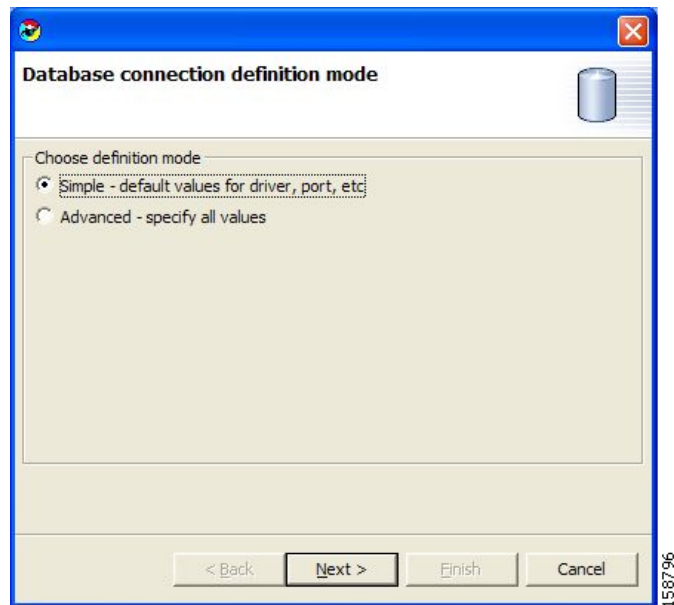
The Preferences dialog box appears.

**Step 2** From the Preferences tree, choose **Reporter > Databases**.



**Step 3** In the Databases pane, click **Add**.

The Add Database wizard appears.



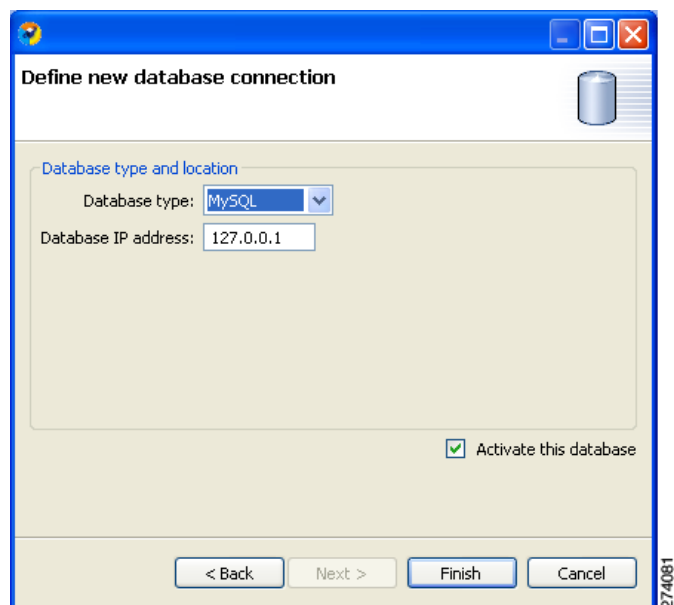
**Step 4** Select one of the **Choose definition mode** radio buttons.

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

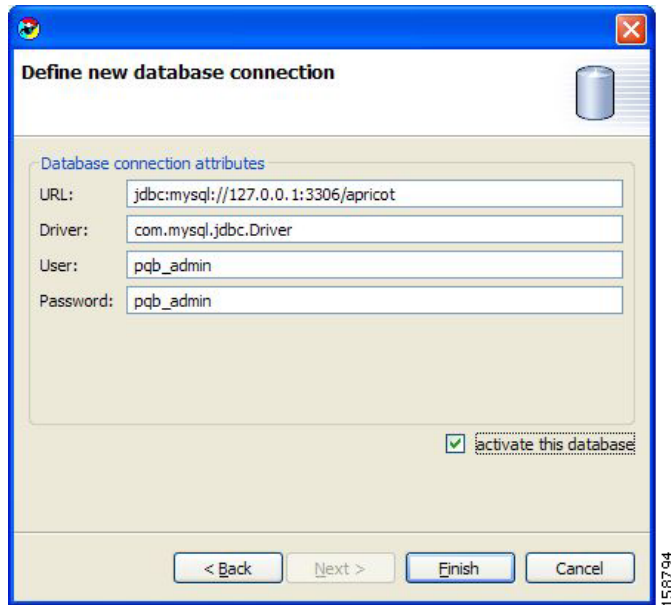
**Step 5** Click **Next**.

The Define new database connection page of the Add Database wizard opens. The actual display depends on the definition mode you selected in Step 4:

- If you selected Simple definition mode:



- If you selected Advanced definition mode:



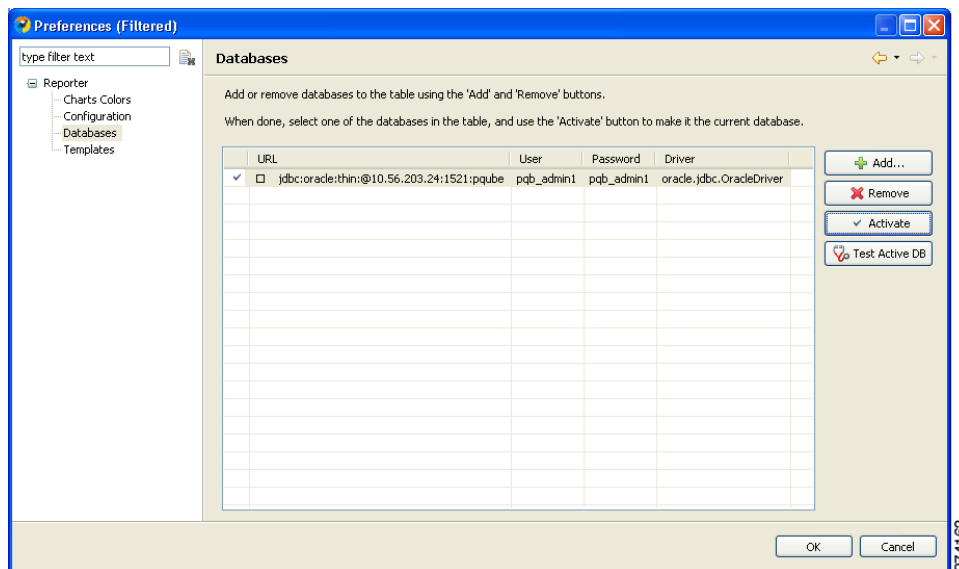
**Step 6** Fill in all the fields.

**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.



**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.

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## How to Activate a Database Connection

**Step 1** From 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.

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## How to Set 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. Use this procedure to change the IP address.



### Note

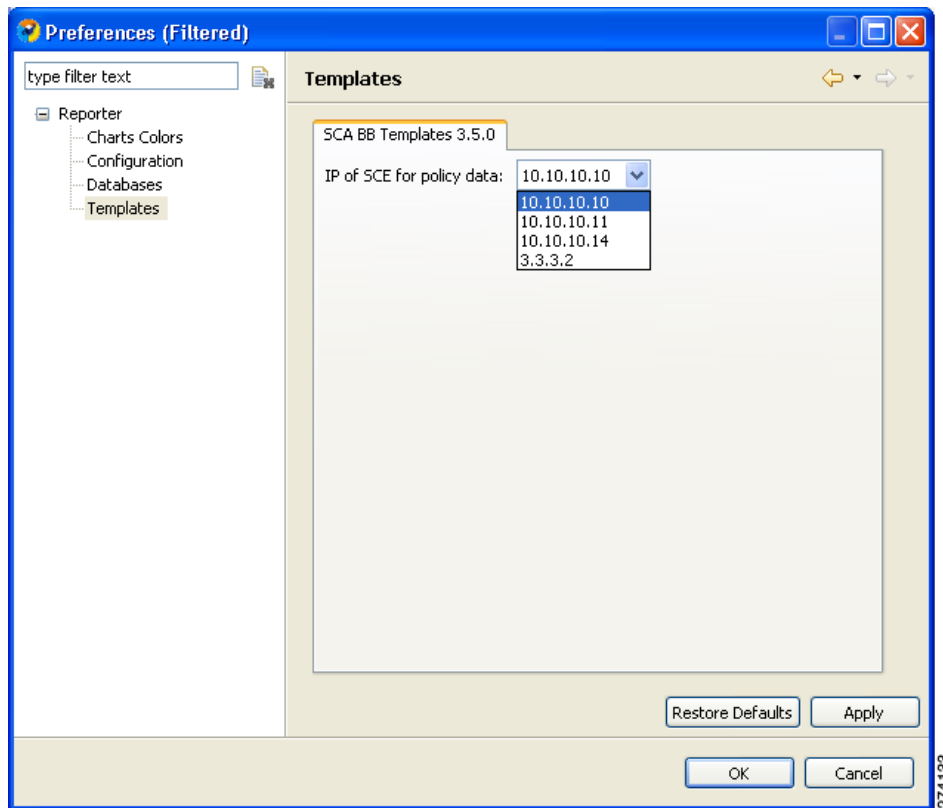
The Preferences dialog box contains one tab for each repository (set of templates) that is available in the Reporter. In each, you choose one SCE platform. If there is more than one repository, there will be more than one set of template groups in the Templates view.

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**Step 1** From the main menu, choose **Preferences > Reporter**.

The Preferences dialog box appears.

**Step 2** In the Preferences tree, select **Reporter > 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** You *must* click **Apply** before you close the dialog box by clicking **OK**.

**Step 5** Click **OK**.

The Preferences dialog box closes.

## How to Set the Colors Used in Charts

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 set(s).

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
- [How to Work with Color Sets, page 2-15](#)
- [How to Change the Color of Single Legend Items, page 2-17](#)

## How to Work with Color Sets

### The Color Set File

Each line of the a color set file defines the color of one legend item.

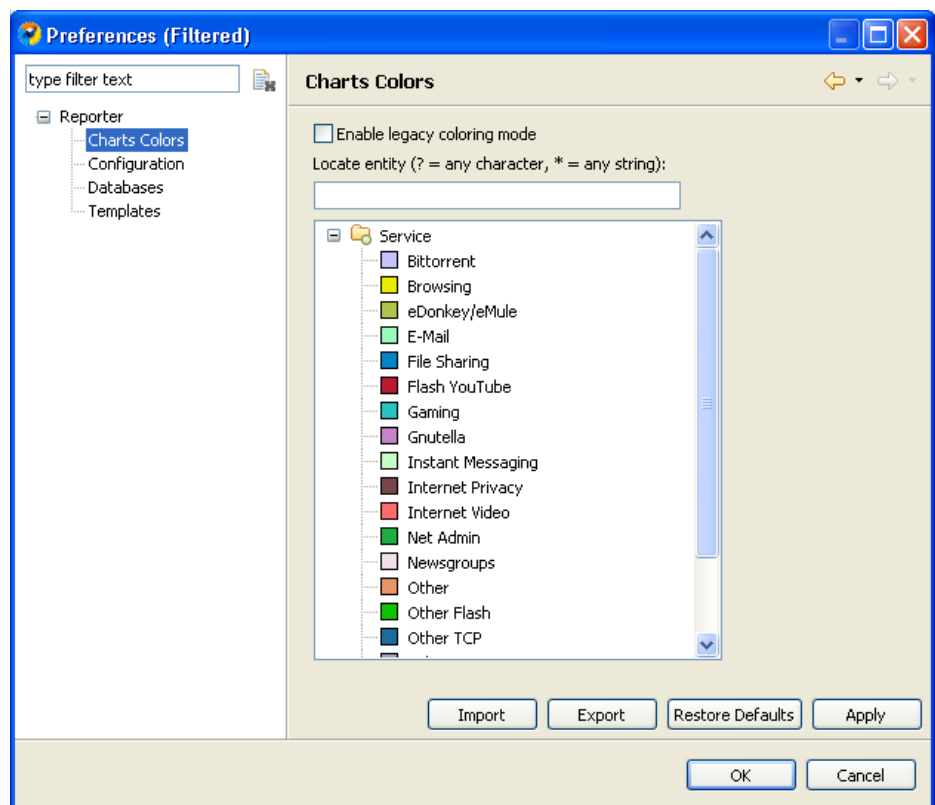
It is recommended that you do not edit the color set file manually.

**Step 1** From 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 an action to perform.

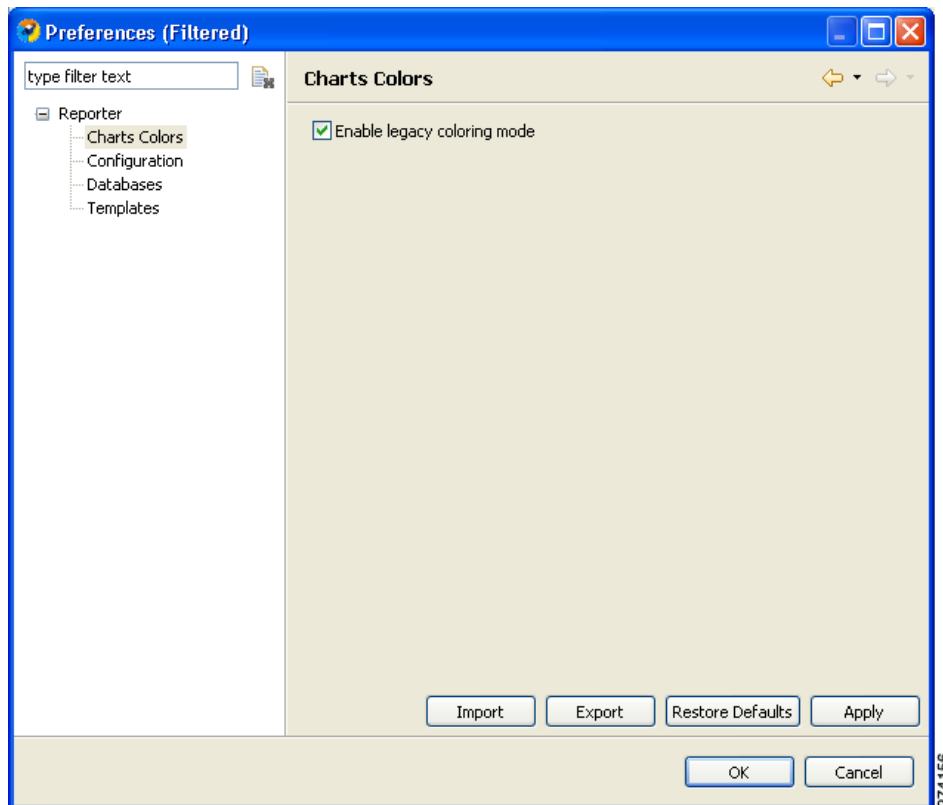
- To import a color set from a file, click **Import**.

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.



**Note** Before applying Import, Restore Defaults, or Enable legacy color mode, a warning is displayed.



**Step 4** Click **OK**.

The Preferences dialog box closes.



## How to Change the Color of Single Legend Items

- Step 1** From 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 screen capture, a service) from the color tree.

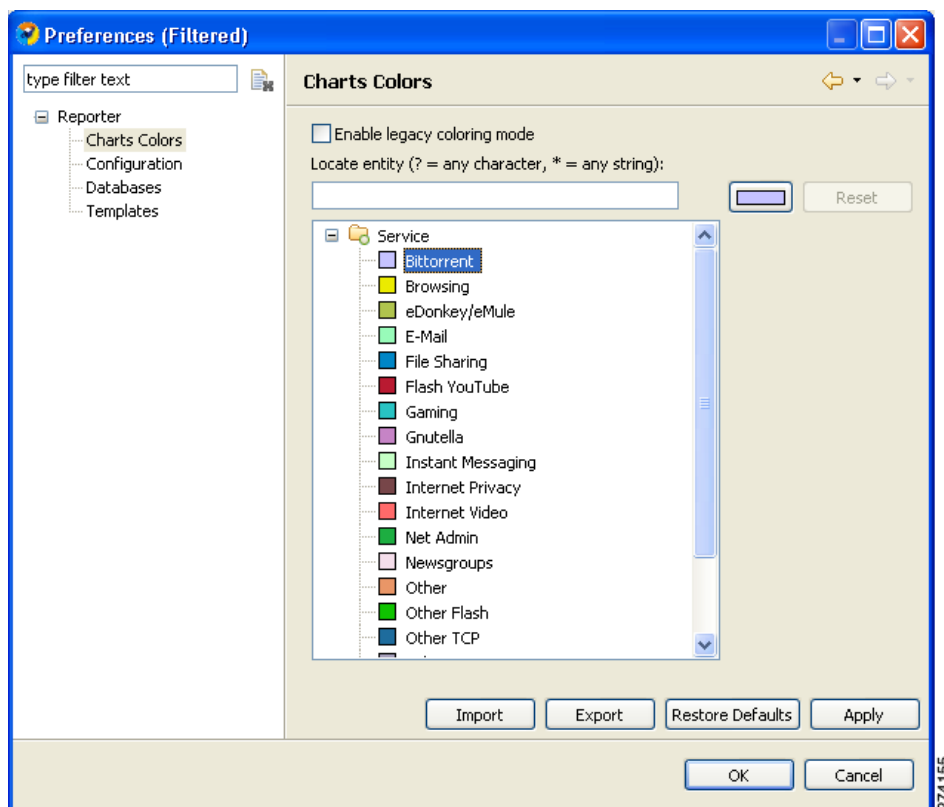


**Note**

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 is displayed in the top right of the Charts Colors pane.



- Step 4** Click on the displayed color.  
A color palette dialog box appears.

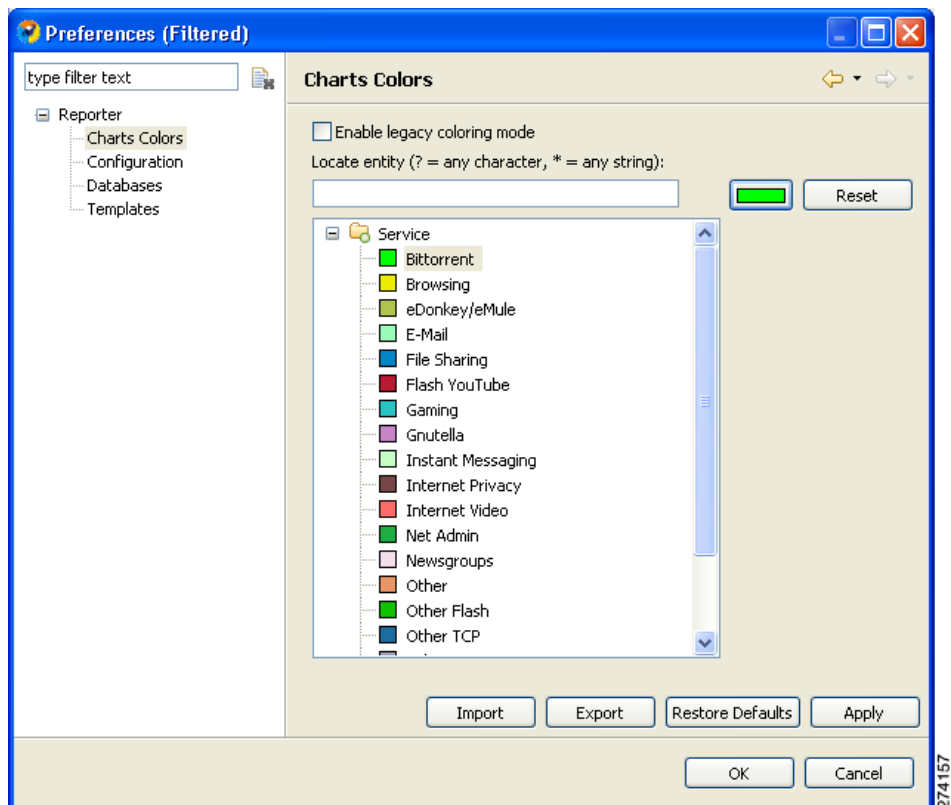


**Step 5** Select a new color for the legend item and click **OK**.

The Color dialog box closes.

The selected color is applied to the legend item.

The Reset button is enabled.



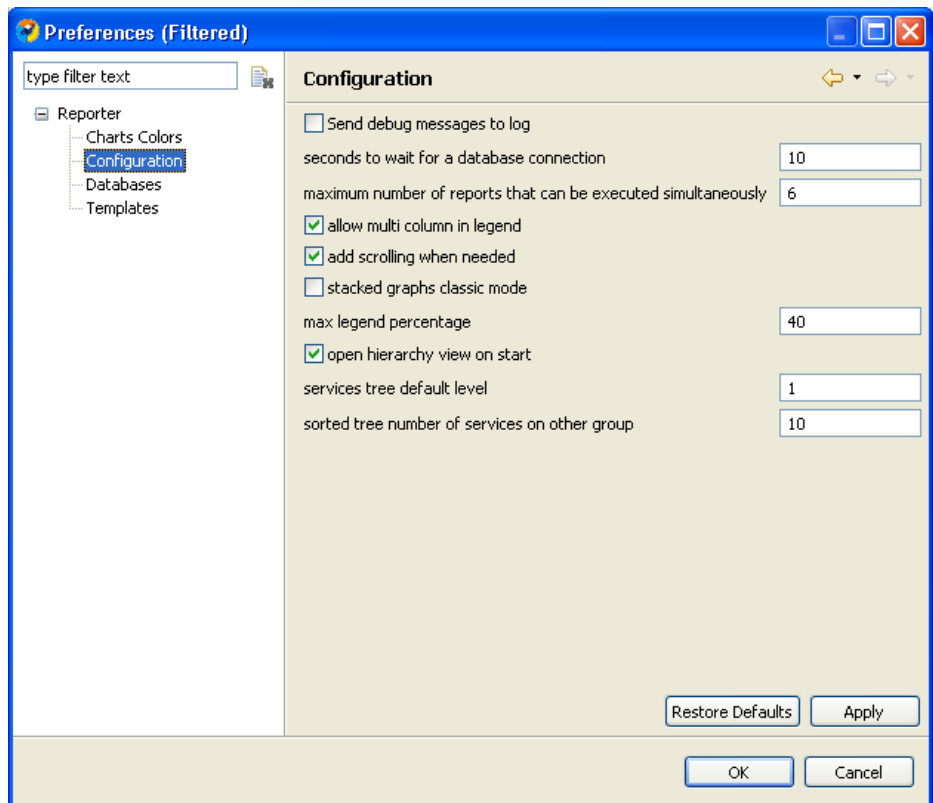
**Note**

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

## How to Configure the Legend Displayed in Charts

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

- Step 1** From the main menu, choose **Preferences > Reporter**.  
The Preferences dialog box appears.
- Step 2** In the Preferences tree, select **Reporter > 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**.

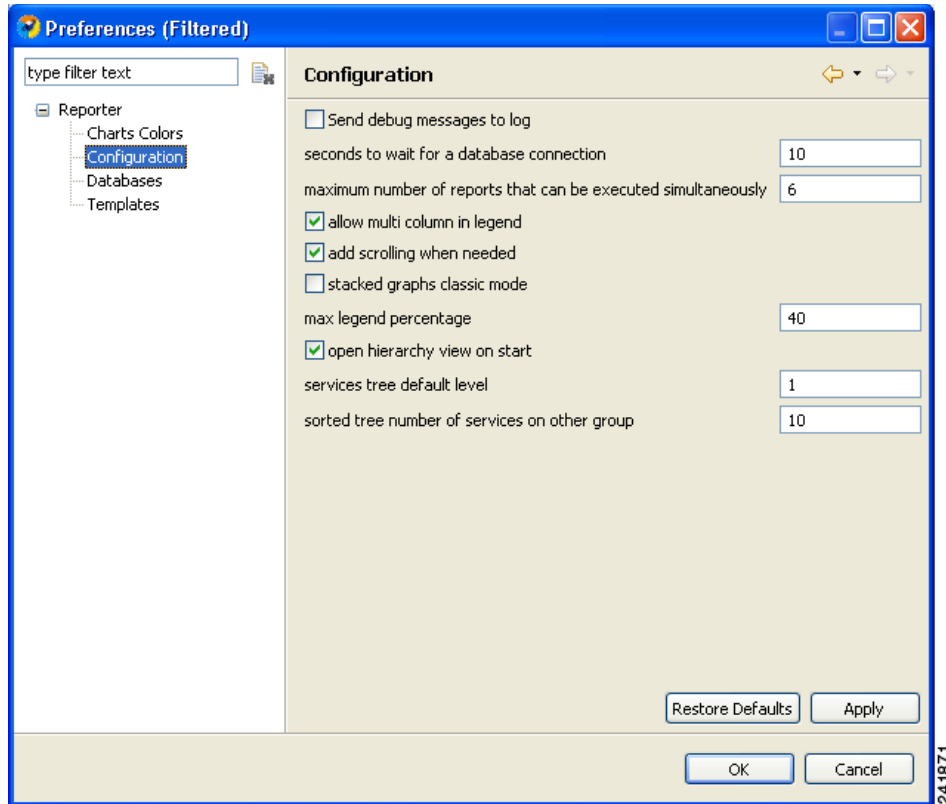
The new settings are saved.

The Preferences dialog box closes.

## How to Configure the Hierachy View

You can configure several attributes of the Hierachy view.

- Step 1** From the main menu, choose **Preferences > Reporter**.  
The Preferences dialog box appears.
- Step 2** In the Preferences tree, select **Reporter > 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

## How to Configure Advanced Options for the SCA Reporter

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

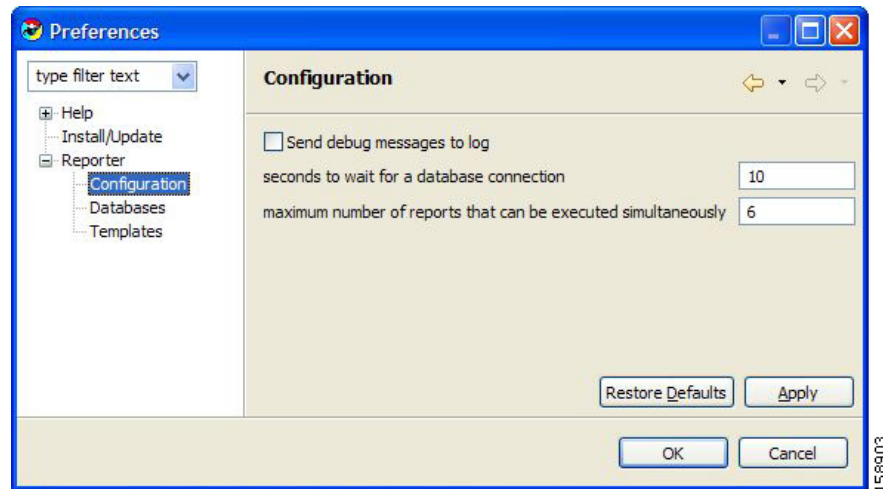
- Whether to log debug messages

- The time to wait for a database connection
- The maximum number of report instances that can be executed simultaneously.

**Step 1** From the main menu, choose **Preferences > Reporter**.

The Preferences dialog box appears.

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

## Online Help

- [How to Access Online Help, page 2-21](#)
- [How to Search Online Help, page 2-22](#)

## How to Access Online Help

You can access relevant parts of this user guide from the SCA Reporter.

**Step 1** From the **Help** menu, choose **Help Contents**.

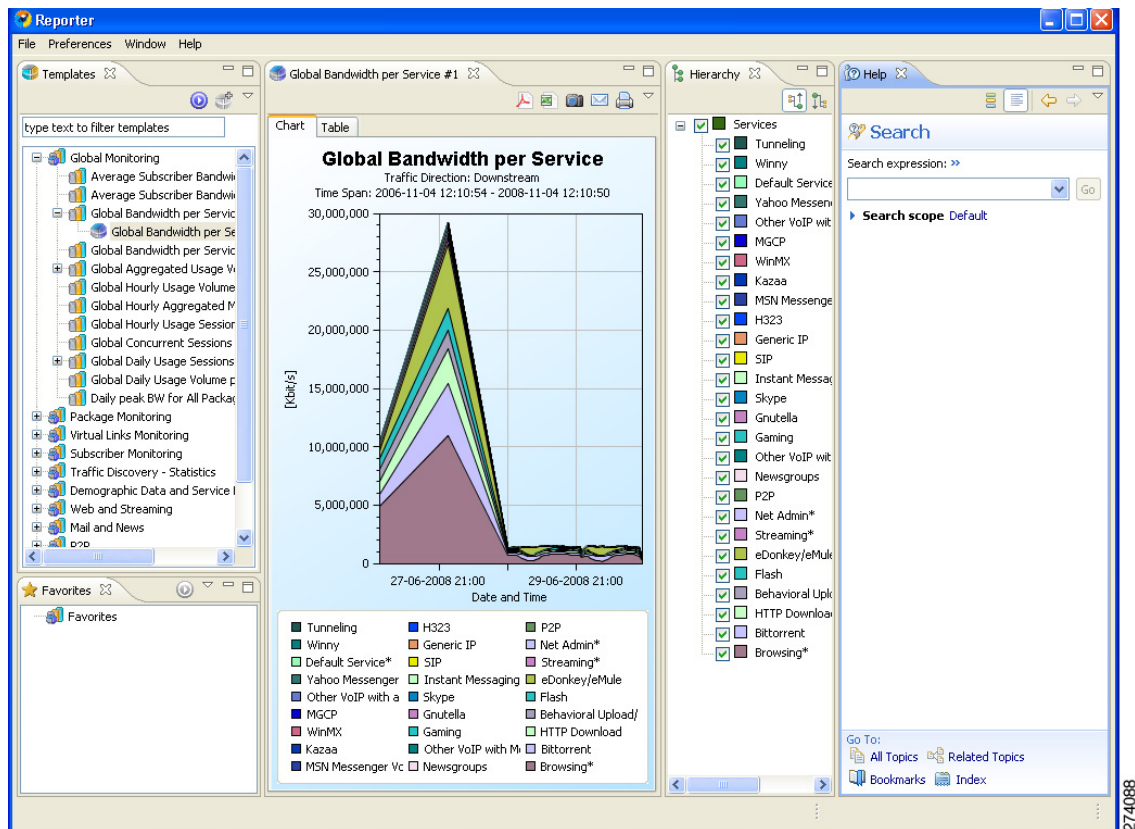
Online help opens in a separate window.

## How to Search Online Help

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.



**Step 2** Enter a word, phrase, or more complex search expression in the **Search expression** field.

The **Go** button is enabled.



**Note**

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

**Step 3** Click **Go**.

Help topics containing your search expression are listed under Local Help.

**Step 4** Click a help topic to view its contents.



**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

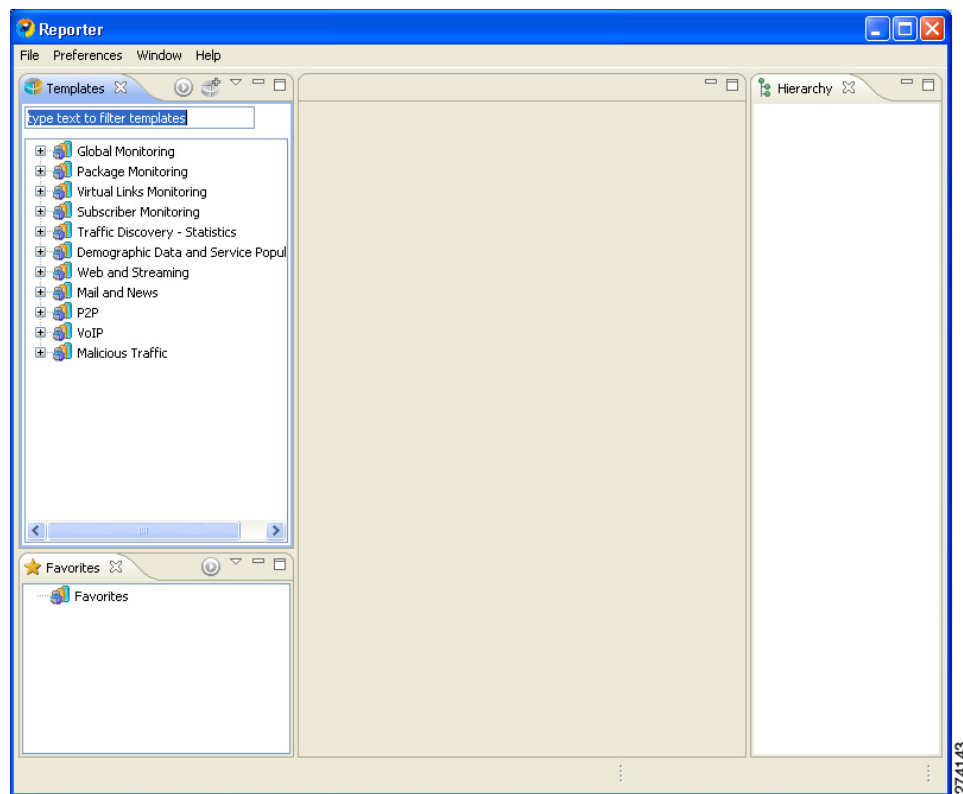
This Quick Start section will help you get started with the SCA Reporter. You will configure the Reporter, create a report instance and generate a report, and then work with the report.

- [How to Create a First Report, page 2-23](#)
- [How to Work with a First Report, page 2-28](#)

## How to Create a First Report

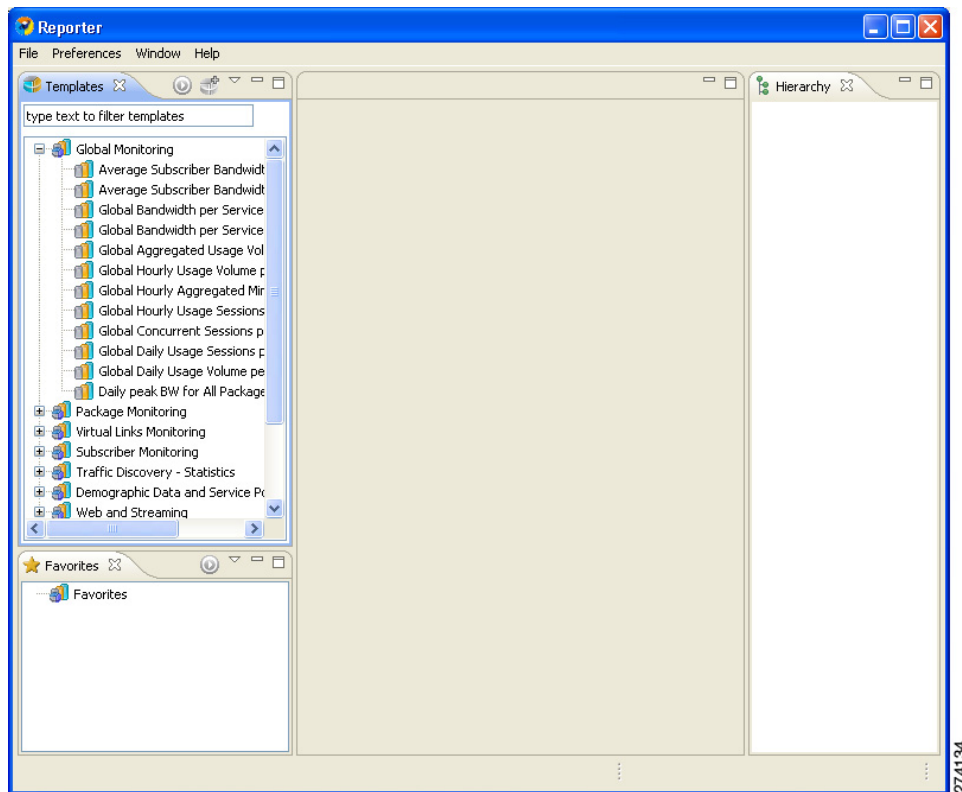
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- Step 1** Launch the SCA Reporter (choose **Start > All Programs > Cisco SCA > SCA Reporter 3.5.0 > SCA Reporter 3.5.0**).



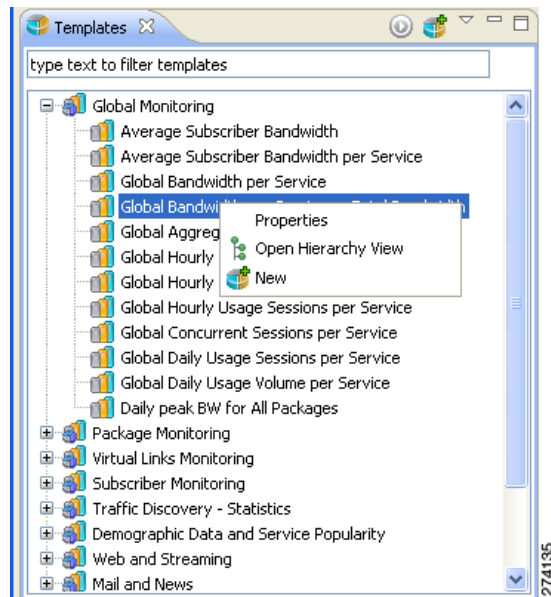
- Step 2** Add, configure, and activate a database connection (see [Managing Database Connections, page 2-10](#)).

- Step 3** Confirm that there is an active database and that the system is configured correctly.
- From the main menu, choose **Preferences > Reporter**.  
The Preferences dialog box appears.
  - In the Preferences tree, choose **Reporter > Databases**.
  - In the Databases pane, click **Test Active DB**.
- Step 4** In the Templates view, expand the node of one of the template groups.

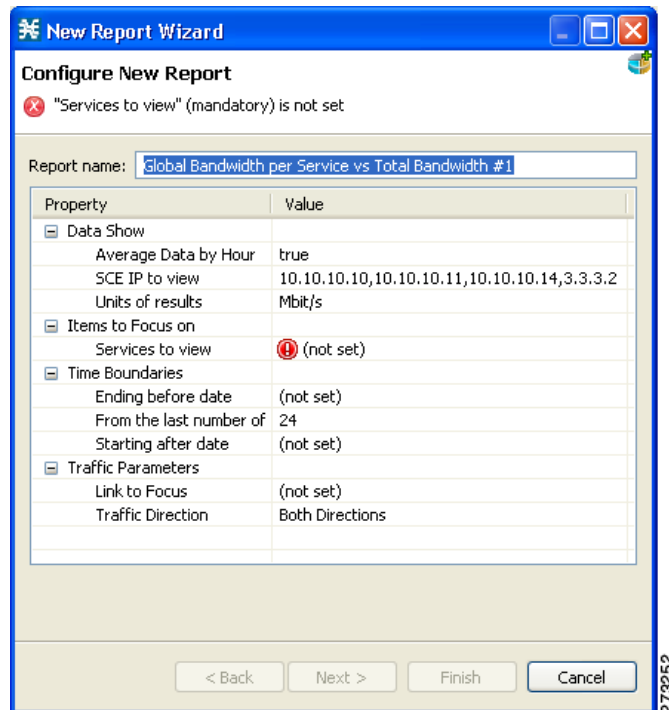


- Step 5** Do one of the following:
- Double-click a report template
  - Right-click a report template.
- A popup menu appears.




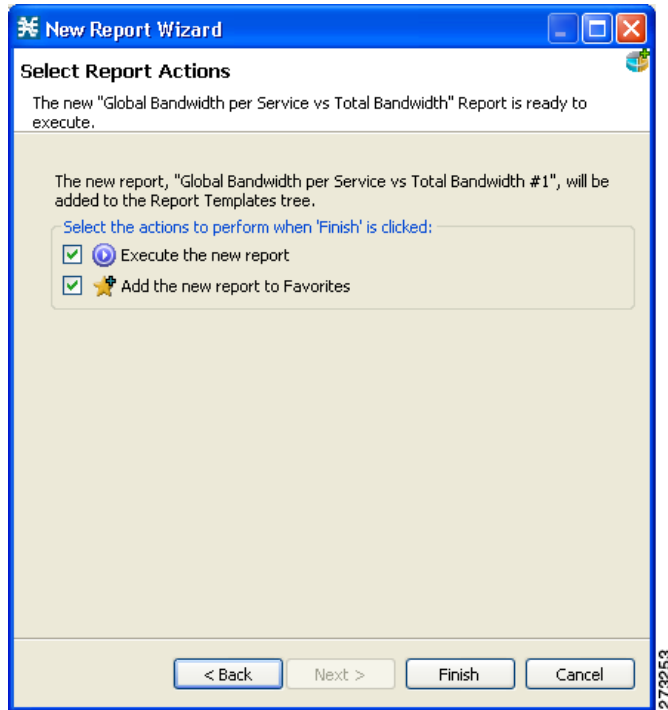


- Step 6** From the menu, select **New**.  
The New Report Wizard appears.

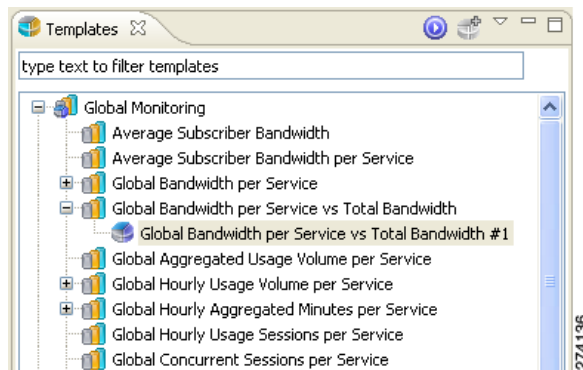


The report instance has the same name as the report template with the addition of “#1”. You can optionally rename the report instance by entering a name in the **Report name** field.

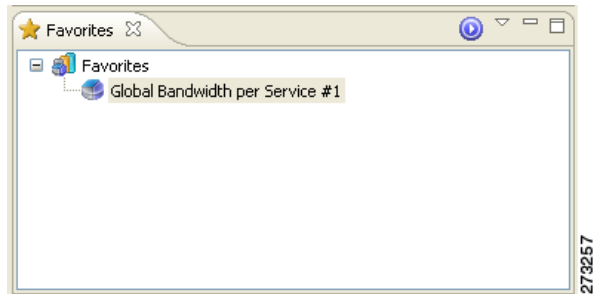
- Step 7** Configure the report instance properties  
If any property has the value  (**not set**), you must assign it a value.

**Step 8** Click **Next**.**Step 9** Click **Finish**.

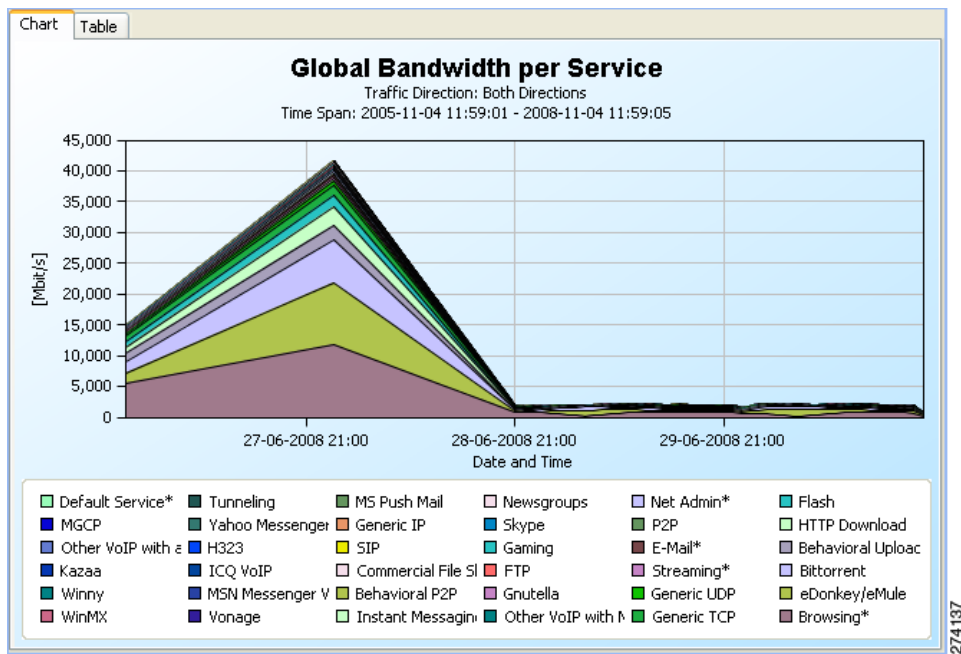
A report instance is added below the report template.



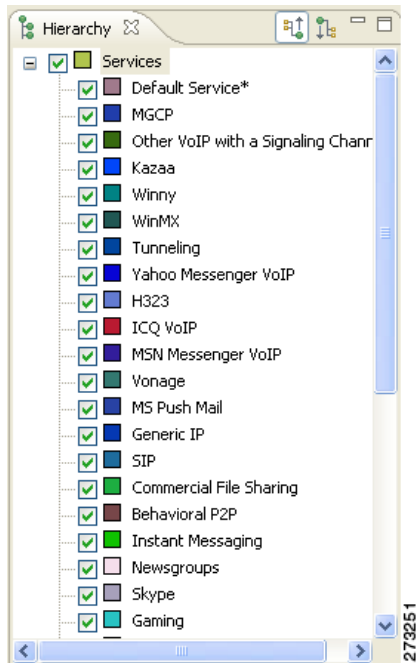
The report instance appears in the Favorites view.



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.



All the services included in the report are included in the Hierarchy view.



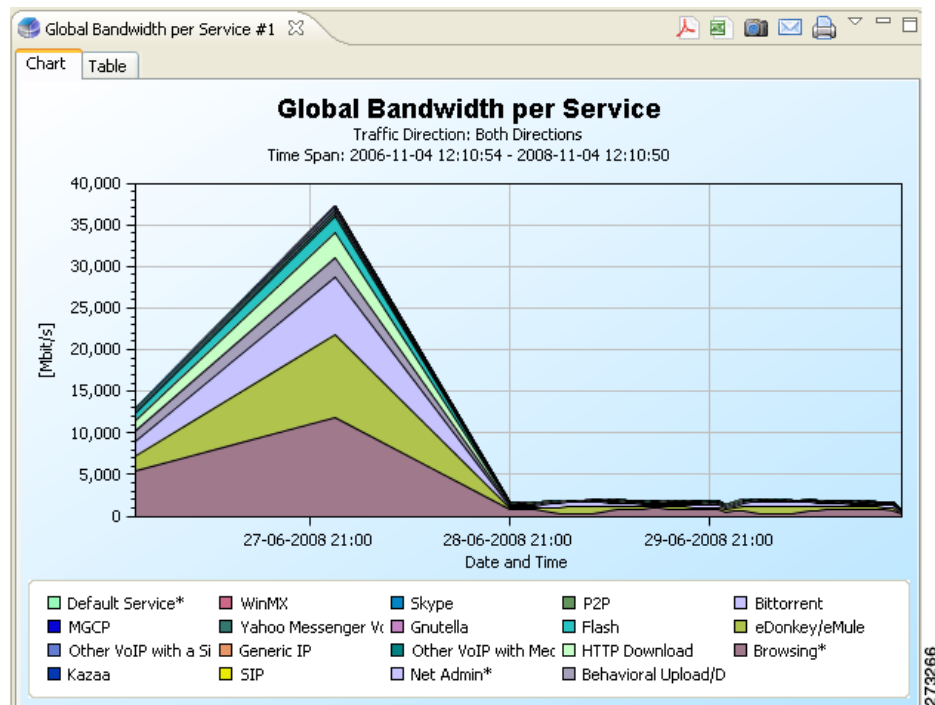
**Step 10** View your report.

The chart display properties are shown in the Properties view.


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

## How to Work 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 is displayed in the report view.
- Step 4** In the report view, from the drop-down menu above the view, select **Go To Report**.



The Properties view displays the report instance properties.

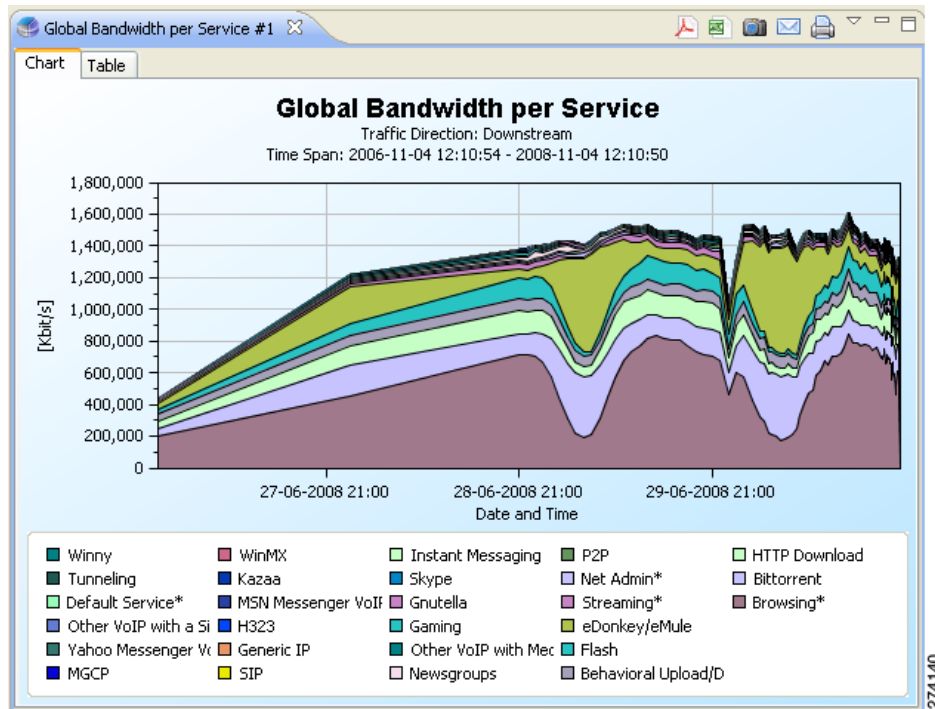
**Step 5** Display all the report instance properties by clicking  (**Show Advanced Properties**).

Property	Value
Items to Focus on	
Services to view	Yahoo Messenger VoIP, Other
Time Boundaries	
Starting after date	2006-11-04 12:10:54
Ending before date	2008-11-04 12:10:50
From the last number of hours	24
Traffic Parameters	
Traffic Direction	Downstream
Link to Focus	Link 0, Link 1
Data Show	
Average Data by Hour	true
SCE IP to view	10.10.10.10, 10.10.10.11, 10.
Units of results	Kbit/s

**Step 6** Modify one or more properties. (See [How to Modify an Existing Report Instance](#), page 4-5.)

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

The modified report is displayed in the report view.



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