Adding or Editing a Scheduled Report

You can add a new scheduled report or edit an existing one on the UTM panel on the Configuration > Scheduled Reports screen. When adding or editing the report, you can configure its name, category, formats, cover page, summary report page, and detailed reports page. You can also use or create a profile for the detailed reports page settings.

To add or edit a new scheduled report, perform the following steps:

1. Navigate to the Configuration > Scheduled Reports page and do one of the following:
   - To add a new schedule report, click the **Add Scheduled Report** button.
   - To edit an existing report, click the pencil icon in that row. The Scheduled Report Configuration window displays.
2. Enter a name for the report in the **Name** field.
3. Enter descriptive information in the **Description** field.
4. To email the report, select the **Email** check box. The screen expands to show email configuration settings.
5. Enter the IP address of the mail server into the **SMTP Server** field.
6. By default, the ViewPoint Reporting Module will use the email address that was configured in the Console panel in the Management > ViewPoint Settings screen as the Sender email address. To change it, enter a new Sender email address in the **Source Email Address** field.
7. Enter one or more destination email addresses, separated by semicolons, into the **Destination Email Addresses** field.
8. Enter the Subject Line that will appear in reports sent from the ViewPoint Reporting Module in the **Email Subject** field.
9. Enter text that will appear in the message body in the **Email Body** field.
10. To copy the contents of the report into the body of the email message, select the **Send Reports Inline** check box. To send the file as an email attachment, make sure this check box is deselected.



Note Reports can only be sent inline when all data is sent in a single report.

11. To archive the file on the server's hard disk, select the **Archive** check box and enter a path in the **Save Directory** field.

Specify the directory where the file will be archived in the **Save Directory** field.

12. For Report Type, select **Daily**, **Weekly**, or **Monthly.**
13. For Report Format, select **HTML**, **XML**, or **PDF.**
14. Select either **Include all data in a single report** or **Zip Reports into a single file.**
15. If you selected **PDF** for the Report Format, you can create a password to protect it by selecting **Password Protect the PDF File** and typing a password into the **Password** field. Users must input the password to view the contents of a password-protected PDF file. The content can be copied or printed, but is not editable by a PDF editor.
16. If the zip file is selected, you can create a password for it by selecting **Password Protect the Zip File** and typing a password into the **Password** field.



Note When both **PDF** and **Zip Reports into a single file** are selected, you can password-protect the PDF, but not the zip file.

17. For the Cover Page, enter a **Title** and **Subtitle** and select colors for the **Foreground** and **Background** of the cover page.
18. For Summary Report Page, you can select up to 4 reports. Select a report for the summary page from the **Choose the Summary Reports** drop down list, and then click **Add.**
19. For Detailed Report Page, do one of the following:
    - Click **Select an existing profile**, and then select the profile to use from the **Profile Name** drop-down list.
    - Click **Create a new profile**, type a profile name into the **New Profile Name** field, and then select the checkboxes in the Report list for each report to be included. You can click the checkbox next to the **Report** heading to select all reports in the list.
20. Optionally click **Configure Filters Options**. For this procedure see “Configuring Filters and Options” on page 137.
21. To see a preview of this scheduled report, click **PREVIEW.**
22. When finished, click **Add.**

Configuring Filters and Options

1. At the bottom of the Scheduled Report Configuration page, click the **Configure Filters/Options** button. The Display Options/Settings page displays.
2. Select the number of sites to display in Top Sites reports (default: 20).
3. Select the number of users to display in Top Users reports (default: 20).
4. Select the number of sites to display in Sites by User/Users By Site reports (default: 20).
5. Select the number of items to display in all other reports (default: 20).
6. Select the number of entries per item to display in all other reports (default: 20).
7. Under Inclusion Filter Parameters, enter a comma separated list of sites to include in By Site reports in the **Site List** field.
8. Enter a comma separated list of users to include in By User reports in the **User List** field.
9. To include the user's full name and IP address in the report, select the **Whole Name/IP** checkbox.
10. For Bandwidth Usage reports, select the source from the **Source Interface** drop-down list.
11. For Bandwidth Usage reports, select the destination from the **Destination Interface** drop-down list.
12. Click the **Update** button to apply changes. The new report will appear in the list on the Scheduled Reports page.

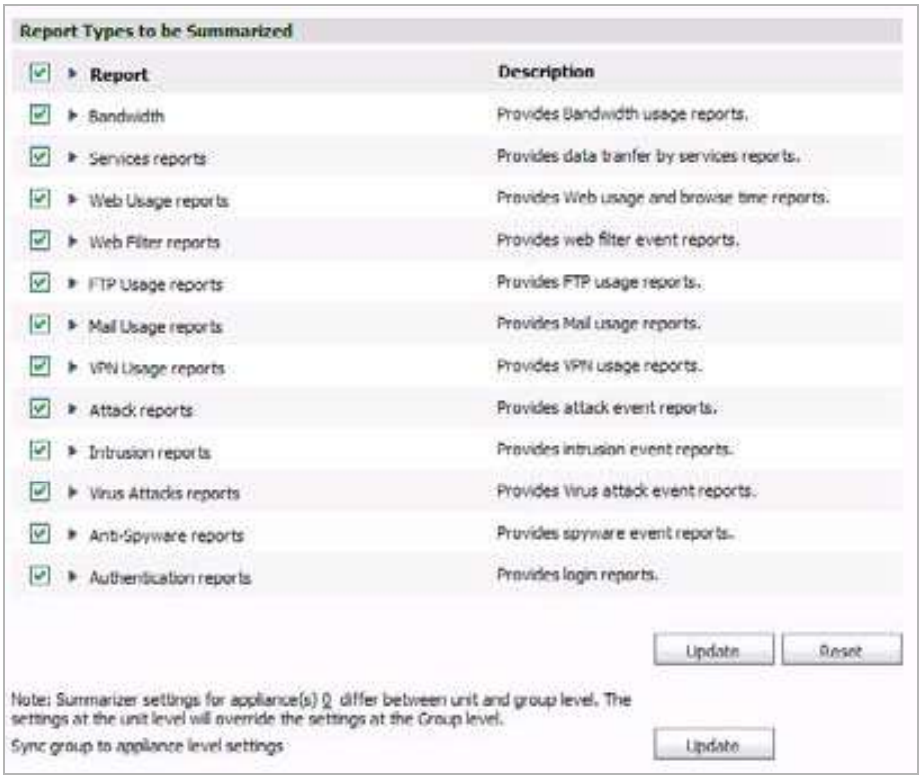
Selecting Reports for Summarization

This section describes how to tune the performance of the Summarizer by configuring which reports will be created. When an appliance is configured to communicate with ViewPoint, you need to prepare it for syslog data collection for reporting. Make sure the summarizer is collecting data for the reports you want for this unit.

To configure the Summarizer settings, perform the following steps:

1. Click the **UTM** tab.

2. Expand the **Configuration** tree and click **Summarizer Settings**. The Summarizer Settings page provides a list of reports and a correlating description of each report. Each report contains a checkbox that you can select to generate a summarized report.



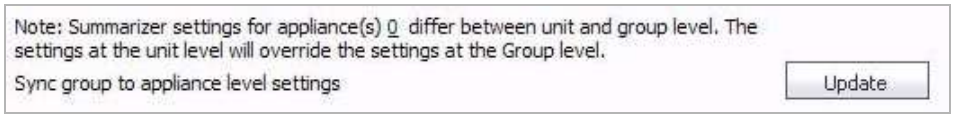
3. Select the checkbox of each report type to summarize.
4. When you are finished, click **Update**. Your configuration changes are saved automatically.

Configuring Inheritance for Reporting Screens

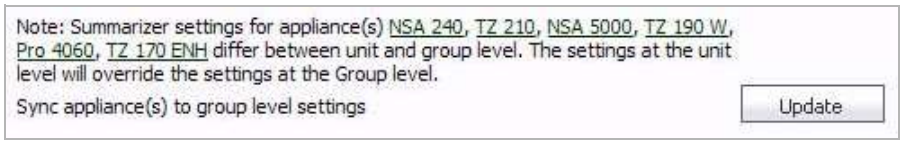
On the Configuration > Summarizer Settings screen, there is an option to synchronize report settings between the unit level and global level. This option can be displayed in any of the sections on this page when those settings are not synchronized between the unit level and global level.

This option provides inheritance support for report settings.

When you are viewing the screen at the unit level, the option is **Sync group to appliance level settings**. This is reverse inheritance. Click the **Update** button to apply your current unit level settings to the group to which this unit belongs.

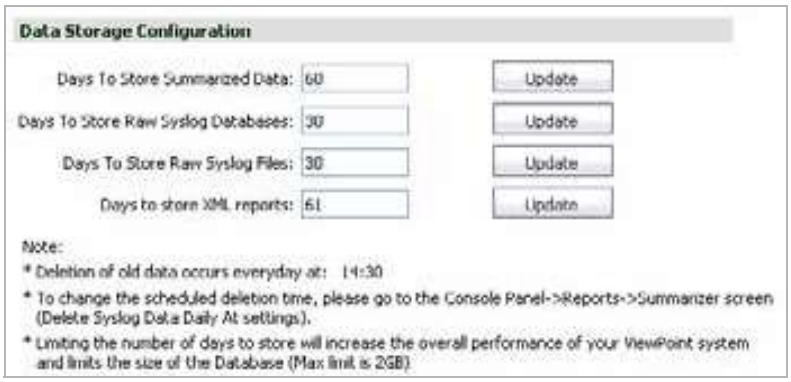


When you are viewing the screen at the global level, the option is **Sync appliance(s) to group level settings**. This is forward inheritance. Click the **Update** button to apply your current global level settings to the appliances in this group.



Configuring Data Storage Settings

The Data Storage Configuration section of the **Configuration > Summarizer Settings** page allows you to specify the number of days to store summarized data and syslog data.



For all fields in this section, the minimum values should be 3 days, and will typically be longer.

Raw syslog data is transferred to the ViewPoint system by individual SonicWALL appliances, where it is stored in raw syslog files. The data from these files is combined and stored in a raw syslog database. Data from this database is processed by the Summarizer and then stored in the summarized data database.

The raw syslog files and databases older than the number of days specified here will get deleted by the global daily deletion schedule configured on the Console > Reports > Summarizer page. That page also provides a way to delete the summarized database for a certain date. See the "Configuring the Syslog Deletion Schedule Settings" section on page 78.

To configure the Data Storage Configuration settings:

1. On the **UTM** tab, expand the **Configuration** tree and click **Summarizer Settings**.
2. Scroll down to the **Data Storage Configuration** section.
3. Type the desired number of days to store summarized data into the **Days To Store Summarized Data** field and then click **Update**.
4. Type the desired number of days to store raw syslog database files into the **Days To Store Raw Syslog Databases** field and then click **Update**.
5. Type the desired number of days to store raw syslog database files into the **Days To Store Raw Syslog Databases** field and then click **Update**.
6. Type the desired number of days to store archived XML reports into the **Days To Store XML reports** field and then click **Update**.

Configuring Summarization Data for Top Usage

The Reports Summarization Data for Top Usage section of the Configuration > Summarizer Settings page allows you to enable Web event consolidation and resolve unrated categories.

When enabled, Web event consolidation reduces repetitive syslog event entries within the syslog database. Enabling Web Event Consolidation promotes search and summarizer efficiency by consolidating the syslog messages that result from a single click (for example, a visit to a Web page), and further correlates events by time proximity, such as multiple visits to the same URL by the same user within a set time, and HTTP header information. ViewPoint consolidates syslog messages under the main domain name.

When Web Event Consolidation is disabled, multiple syslog events are logged for one request. For instance, a single access to www.cnn.com can generate more than 70 syslog messages. Many of the 70 syslog messages refer to the links to other pages like images.cnn.com or video.cnn.com that are included in the Web page. In this simplified example, if **Domain Only** consolidation is

selected, then only one Web event is recorded (cnn.com). If **Host & Domain** is selected, then you would see three Web events. You would see all 70 Web events if consolidation was not enabled at all.

To enable Web event consolidation and resolve unrated categories, perform the following:

1. On the **UTM** tab, expand the **Configuration** tree and click **Summarizer Settings.**
2. Scroll down to the **Reports Summarization Data for Top Usage** section.
3. Select the **Enable Web Event Consolidation** checkbox to consolidate repetitive syslog event entries within the syslog database and then select one of the following levels of consolidation:
   - Host & Domain - More restrictive, less consolidation
   - Domain Only - More general, more consolidation
4. Optionally select the **Resolve “Not Rated” categories using message comparison** checkbox. If enabled, ViewPoint will attempt to categorize unrated items by comparing them to rated items, and will display the results in reports.
5. Click **Update.**

Configuring Summarization Data for Bandwidth Reports

The Reports Summarization Data for Bandwidth Reports section of the Configuration > Summarizer Settings page allows you to configure the currency type and cost per megabyte for use in bandwidth reports.

To configure the data for bandwidth reports, perform the following:

1. On the **UTM** tab, expand the **Configuration** tree and click **Summarizer Settings.**
2. In the **Reports Summarization Data for Bandwidth Reports** section, select the currency type in the **Type of Currency** field. Over 20 different currencies from around the world are available.
3. Specify an amount based on your chosen currency in the **Cost Per Mega Byte Bandwidth Use** field.
4. Click **Update.**

Configuring Dashboard Summary Reports

In the Configuration > Dashboard page, you can configure settings to control the information displayed by the Dashboard > Summary screen. Settings are available for the following:

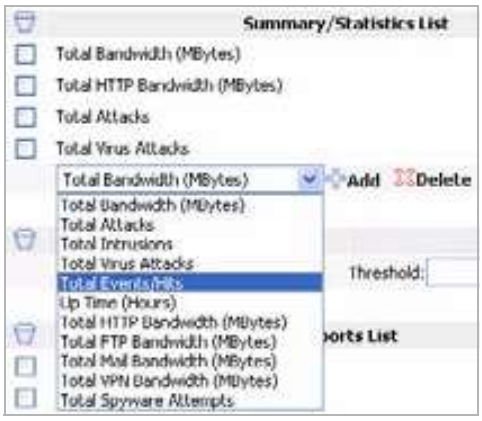
- Summary statistics list at the top left of the Dashboard > Summary page
- Alerts list at the top right of the Dashboard > Summary page
- Reports list in the main body of the Dashboard > Summary page



To configure Dashboard Summary report settings, perform the following steps:

1. Click the **UTM** tab.
2. Expand the **Configuration** tree and click **Dashboard.**

3. In the Summary / Statistics List section, to add a statistic to the Dashboard > Summary page, select it from the drop-down list and then click **Add.**



4. To remove a statistic from the Dashboard > Summary page, select the checkbox under the trashcan icon for that statistic, and then click **Delete.**

5. In the Alerts List section, to add an alert to the Dashboard > Summary page and to receive an email alert when the alert setting is matched, select an event type from the drop-down list, type a threshold value into the **Threshold** field, and then click **Add.**

   Alerts are emailed using the settings configured in the Console > Management screens. See “Settings” on page 61 and “Alert Settings” on page 64.



6. To remove an alert, select the checkbox under the trashcan icon for that alert, and then click **Delete.**

7. In the Reports List section, to add a report to the Dashboard > Summary page, select the report type from the drop-down list, and then click **Add.**

8. To remove a report from the Dashboard > Summary page, select the checkbox under the trashcan icon for that report, and then click **Delete.**

Viewing Current Alerts

You can view a list of current alerts on the **Events > Current Alerts** page of the UTM panel. Select a global view or unit to view current alerts for your selection.



Scheduling PDF Compliance Reports

ViewPoint can create scheduled email reports in PDF format. Called *Compliance Reports*, this feature allows you to export regular reports in universally readable format.

Compliance Report Overview

A *Compliance Report* is a report that collects report data and presents it in an organized format.

The ViewPoint Compliance Report feature allows administrators to provide more customized report summaries and to create more formal and defined layout of report information in PDF format. This feature provides the following benefits:

- Customizable cover page (Default also available)
- Customize Summary/ Descriptions for the reports.
- Ability to customize a set of reports.
- Three reports can be persisted as a profile so that it can be consumed by less experienced users in the system.
- Reports can be generated in industry standard PDF format.
- Compressed format provides a smaller sized file than an equivalent HTML report.
- The print quality is higher.

- This feature has the ability to open a 200 page PDF report with ease. In comparison, opening the same report in HTML takes a more extensive amount of time using IE, as it is weighed down by memory and other systems.

Requirements

Adobe Reader ® plug-in is required for the preview function.

How Do Compliance Reports Work?

ViewPoint has the capability to generate both online and scheduled reports in HTML format. Since PDF has become a standard document format for distribution, the compliance reports are based on this universal standard. Moreover, users are able to customize/define sections throughout the report. For example, they can assign different logos/titles to the cover pages for their customers.

Adding a New Scheduled Compliance Report

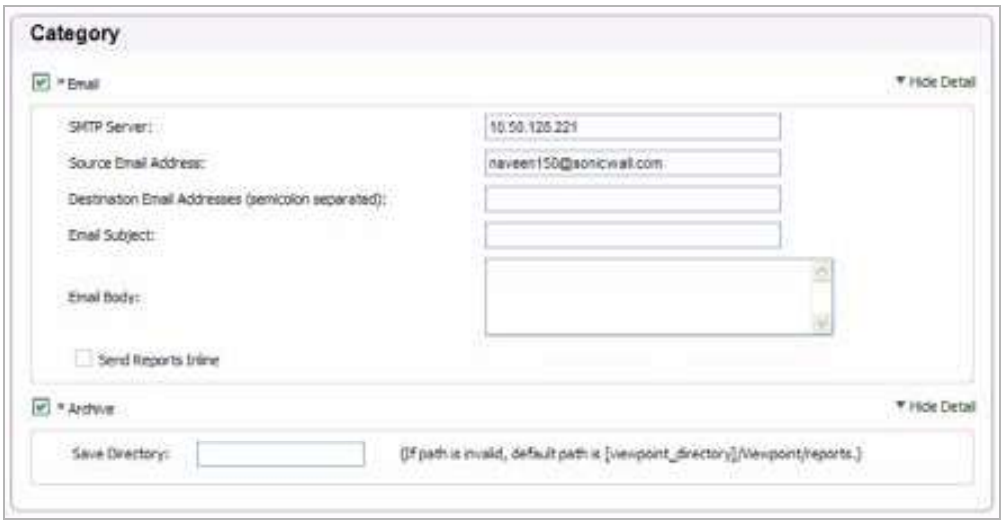
This section includes the following sub-sections:

- "Customizing Your Cover Page" section on page 147
- "Customizing Your Summary Report Page" section on page 148
- "Customizing Your Detailed Reports Page" section on page 149
- "Editing Existing Profiles" section on page 150
- "Verifying User Compliance Reports Configuration" section on page 152

To begin creating a new customized Compliance Report, perform the following steps:

1. Navigate to **UTM > Configuration > Scheduled Reports.**
2. Click the **ADD** button, to add a scheduled report.
3. The Scheduled Report Configuration page displays. In the **General** section, enter the name of your report into the **Name** field, and the report description.

4. In the **Category** section, select the **Email** check box. The details window displays:
   - **SMTP Server** field: Enter your SMTP Server IP address or hostname.
   - **Source Email Address** field: Enter your Source Email Address.
   - **Destination Email Address** field: Enter the Destination Email Address(es).
   - **Email Subject** field: Enter your Email Subject.
   - **Email Body** field: Enter your Email Body.

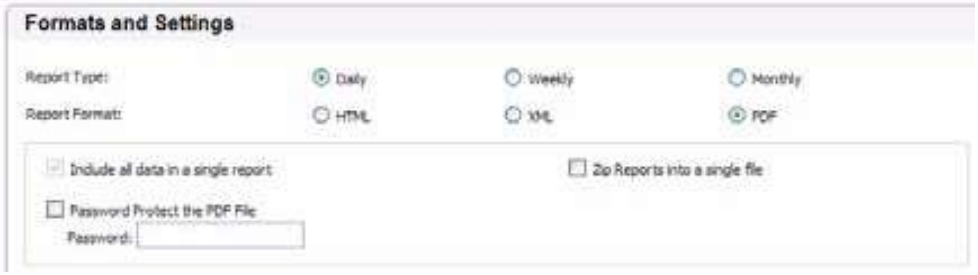


5. To archive a directory, click the **Archive** check box. Enter the your desired directory you want to archive into the **Save Directory** field.

To change the format and settings of your customized compliance report, perform the following steps:

6. In the **Format and Settings** category, select the **Report Type** that reflects the time interval you want to view your reports, either **Daily**, **Weekly**, or **Monthly.**

7. Select the PDF report format in the **Report Format** category. Selecting the **PDF** option will open additional fields to allow you to customize the set up of the **Cover Page**, **Summary Report Page**, and **Detailed Report Page** of your report in PDF format.



8. To zip all of your reports into a single file, select the check box next to the **Zip Reports into a single file** check box.

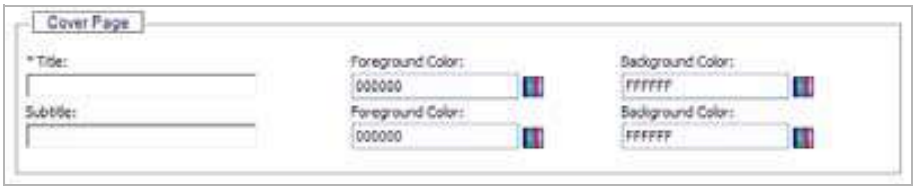
Note PDF will disable some options that are only applicable to HTML.

9. For custom reports, enter the template folder name into the **Template Folder Name** field.

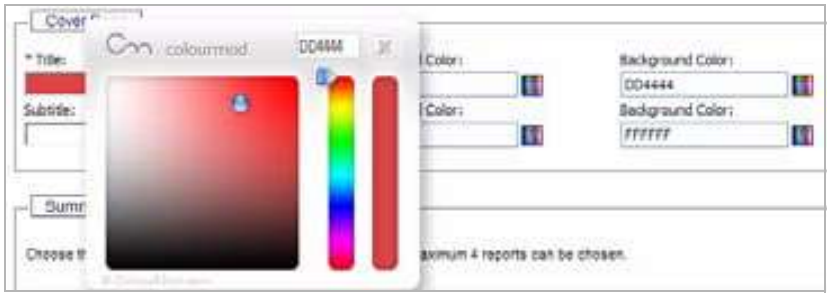
Customizing Your Cover Page

The Cover Page section allows the user to design a cover page for their report using different color schemes.

1. **Title** field: Enter the document title.
2. **Subtitle** field: Enter the document subtitle. (Optional).



3. Select the color for the Title and Subtitle's foreground and background by clicking the gradient color box in the right side of the each field. You may select a color by either choosing a color on the color bar and then selecting its value in the color box or by typing in the HTML color.

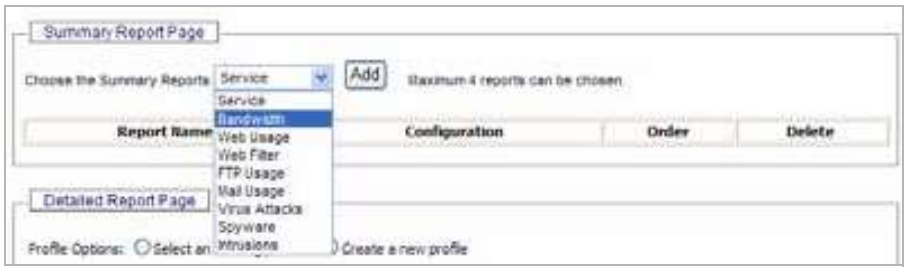


4. The color codes are automatically filled in the corresponding fields once the color chooser window is closed.

Customizing Your Summary Report Page

The Summary Report Page allows you to add new reports and individually customize their appearance.

1. On the Summary report page, select the type of summary reports you need, up to a maximum of 4 reports. Then, click the **Add** button. The report will be created based on the type of summary report you have selected.
2. Enter the report title in and report description in the appropriate fields.
3. Select the text color for the title and description.
4. Select the background color for both fields.
5. Select the order in the **Order** drop-down window.

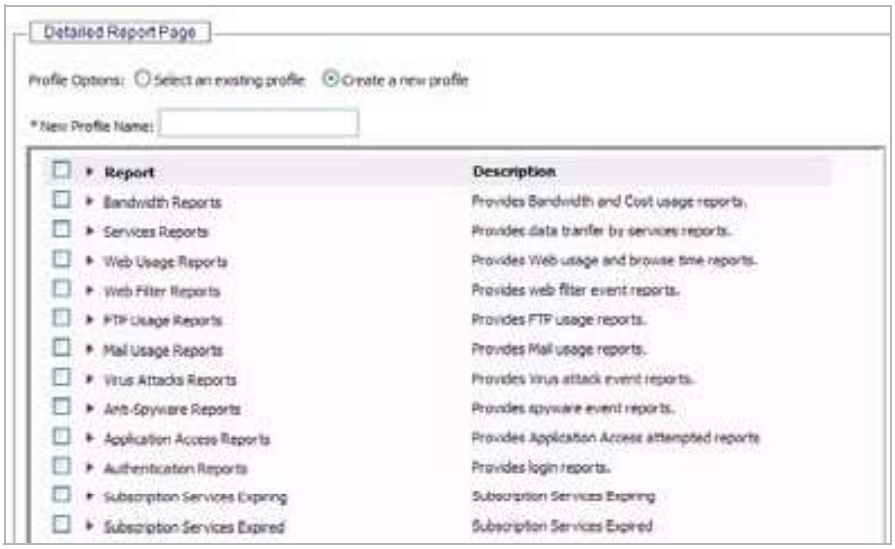


6. You may continue to add reports based on the summary you select in the Summary Reports drop-down menu. Repeat steps 1-5 to add more summary reports.

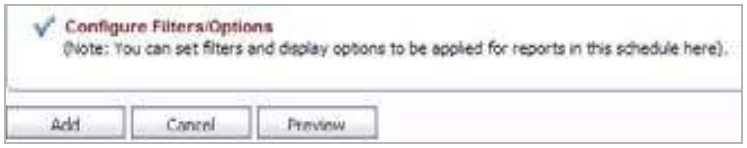
Customizing Your Detailed Reports Page

The Details Report Page provides you with a list of reports you may select to include in your report summaries. You can refine your setting for your report in more detail in the Detailed Report Settings category. First, select the appropriate profile setting for your report. If you are creating a new profile, select the **Create a New Profile** button.

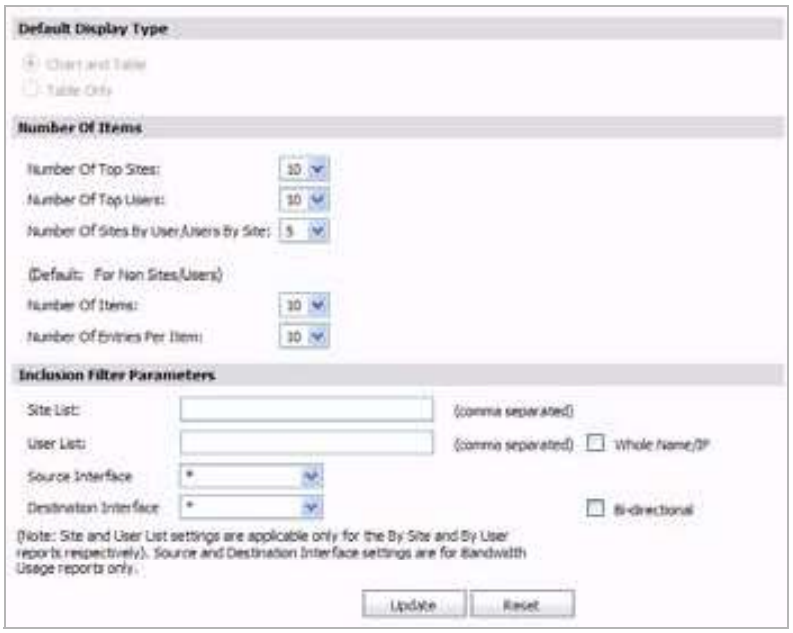
1. **New Profile Name** field: Enter the name of your new profile.



2. To determine the type of reports that will be summarized in your compliance report, check the boxes next to the reports you need. Sub-folders are revealed to each folder by clicking the plus icon. When all sub-folders are selected, the main folder will be selected.
3. When you have completed your selection(s) of reports, scroll down the page until you see a check button with Configure Filters/Options beside it. Click the check mark button.



4. In the Configure Filter/Options section, you are able to decide how your filter and display is set. Once you have clicked the check button, fill out the table accordingly.



Editing Existing Profiles

A profile is associated with selected reports from the report list. You have the ability to go back and edit existing profiles in your scheduled reports. Since the report list is populated based on the report type selection, a profile is associated with the report type also. Instead of three categories, there will only be two: **single day** or **multi-days**. A profile in a single report will not be seen be seen by the users when they select weekly or monthly as report types.

To edit existing profiles, perform the following tasks:

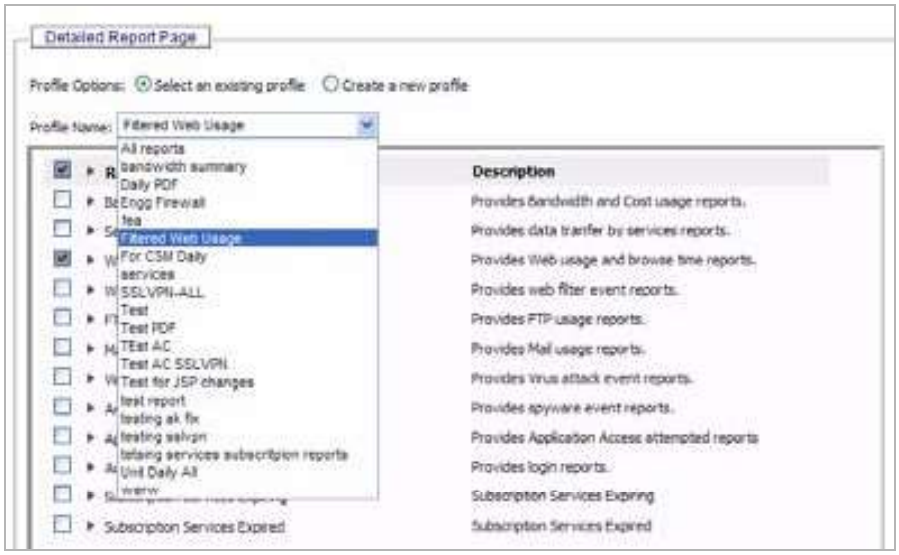
1. Click the **Edit** icon, located next to the report name you want to edit.



2. In the Detailed Page section, choose the **Select an existing profile** button.

Note You are able to delete an existing profile in that section by clicking the **Delete Selected Scheduled Reports** button located at the top of the page.

3. From the drop-down list in the Detailed Report Page, select the profile name you wish to edit. Choose the reports you want to add or remove from that profile. If a new profile has the same name as one of the existing profiles, the behavior will be the same as users opening the existing profile and edit the report list. When selecting an existing profile, the associated reports are checked in the report list automatically.



A default cover page is provided:



Keysight, EX-1030
Page 317

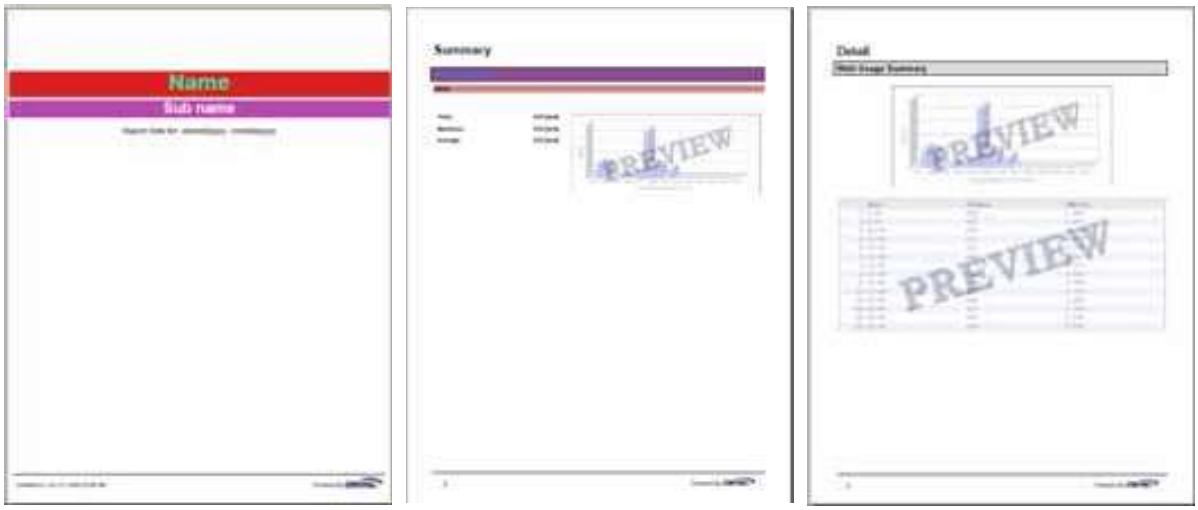
Verifying User Compliance Reports Configuration

If you have chosen the PDF version of this report, you now have the option to see a preview of the report covers you have created and how all of the report summaries you added will fit into that template.

To review your customize PDF settings, click the **Preview** button:



Figure 3 Cover page; Summary page; and Details page Preview



Note The images used for the preview do not use actual data.

CHAPTER 15
Viewing Reports

This chapter describes how to generate reports using the SonicWALL ViewPoint Reporting Module.

The following section describes how to configure the settings for viewing reports:

- "Managing Report Settings" section on page 154

Select from the following reports:

- "Viewing General Status Reports" section on page 157
- "Viewing Dashboard Reports" section on page 159
- "Using Custom Reports on UTM Appliances" section on page 163
- "Viewing Bandwidth Reports" section on page 180
- "Viewing Services Reports" section on page 189
- "Viewing Web Usage Reports" section on page 191
- "Viewing Web Filter Reports" section on page 209
- "Viewing File Transfer Protocol Reports" section on page 225
- "Viewing Mail Usage Reports" section on page 231
- "Viewing VPN Usage Reports" section on page 238
- "Viewing Attacks Reports" section on page 250
- "Viewing Virus Attacks Reports" section on page 260
- "Viewing Anti-Spyware Reports" section on page 266

- “Viewing Intrusion Prevention Reports” section on page 273
- “Viewing Application Firewall Reports” section on page 281
- “Viewing Authentication Reports” section on page 287
- “Viewing the Log” section on page 290

Managing Report Settings

All of the reports in ViewPoint report on data gathered on a specific date or range of dates. You can also edit the report settings for each report by using the Search Bar and the More Options button.

Editing Report Settings

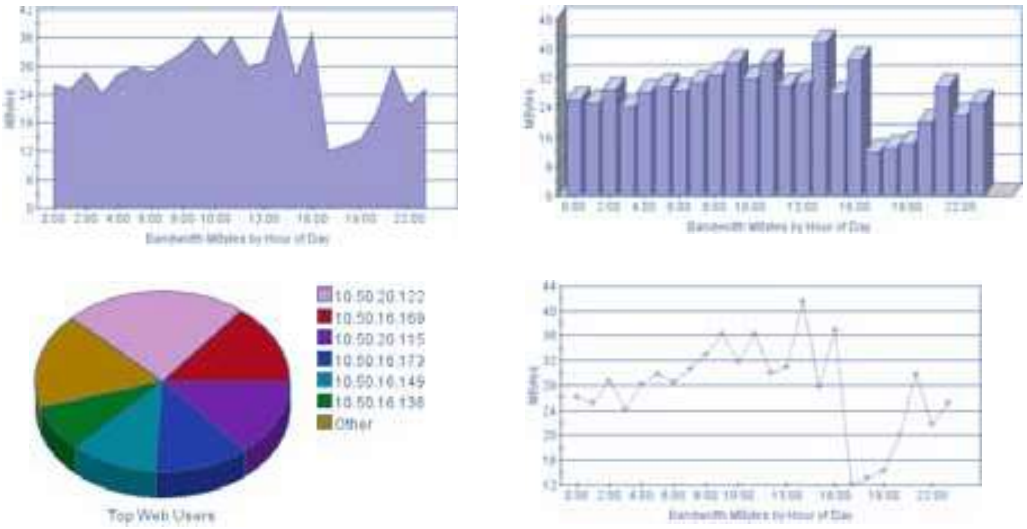
To edit the report settings, use the Search Bar at the top of the report. You can search other reports, set the start and end dates for a report to view, or click **More Options** to access other Report Display Settings. For a detailed description, see the “Searching for a Report” section on page 123.



Selecting a Graphical Display

Some reports allow you to specify how many items to display in the report. Select **5**, **10**, **20**, **50**, **100**, or **All** from the **Number of Items** list. This allows you to limit the display to a the specified number in order to make the report easier to read.

Many reports offer different graphical displays for the data, such as a bar-graph or a pie chart. To select a graphical display, select **Chart and Table** under **Report Display Settings** and choose the display type from the **Chart Type** list. Your selection should display immediately in the report screen. For most reports you can choose **Area**, **Bar**, **Pie** or **Plot.**



Setting a Date or Date Range

Summary reports display only information for a single date. Over-time reports display information over a date range.

Selecting a Single Date

To select a single date for a report, click on the **Start** or **End** fields in the Search Bar to display the drop-down calendar. The End field is only configurable for Over Time reports. In the calendar, you can set the month by

clicking the single arrows (<, >), or the year by clicking the double arrows (<<, >>). To select the month or year from a drop-down list, click and hold the arrow button. Click **Search** to begin building the report.



Selecting a Date Range

To select a date range for an Over Time report, select a **Start Date** and **End Date** in the Search Bar, and then click **Search**. You can use the drop-down calendars by clicking in either field.

Additional Settings

Many reports have additional settings that you can select such as source and destination interfaces to report traffic through or how to display names and IP addresses. Make your selection from these lists and click **Search.**

Troubleshooting Reports

One of the most common error messages when a report does not display is “No Data”. There are several reasons why you might see this error, and SonicWALL ViewPoint 5.1 and higher displays the most likely reason and points you to the screen where you can make the necessary adjustments.

Some examples are shown in the following figures.

Figure 4 Appliance is Not Licensed for Reporting

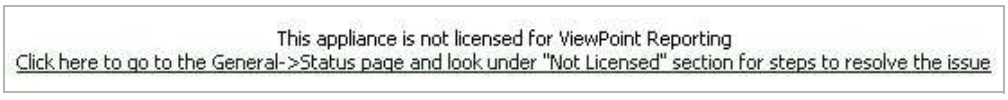


Figure 5 Appliance is Down



Figure 6 Appliance in a Provisioned State



Figure 7 Configured for Status Only



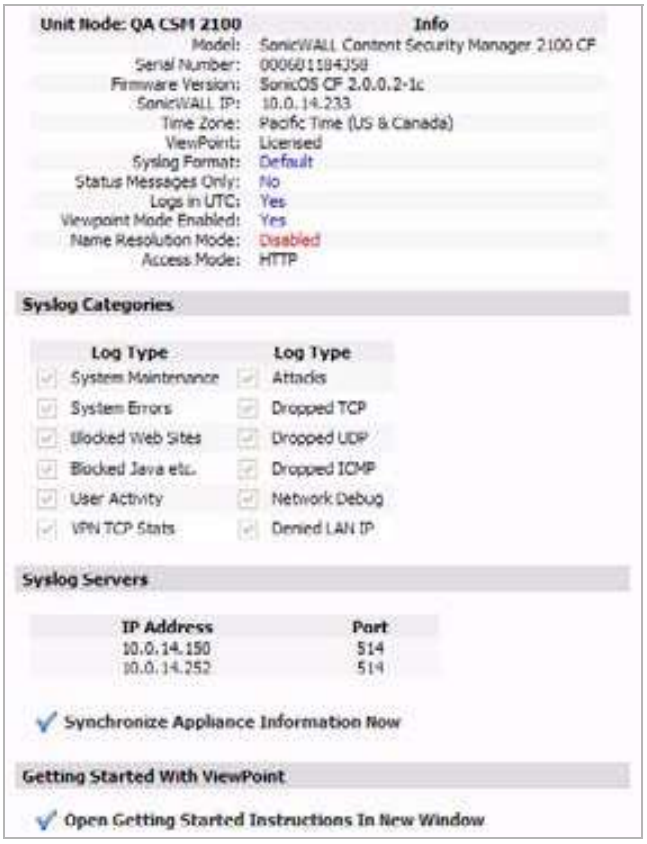
Viewing General Status Reports

The **General > Status** page contains information on the SonicWALL appliance or group of SonicWALL appliances.

To view the Status page, perform the following steps:

1. Click the **UTM** tab.
2. Select the global icon or a SonicWALL appliance.

3. Expand the **General** tree and click **Status**. The Status page displays.



4. The sections contain the following information:
   - Node information—Information on the firewall(s) is displayed at the global or unit level.
   - Syslog Categories—The types of syslog data selected to be collected for the selected appliance.
   - Syslog Servers—The IP address and Port number of the syslog servers configured to collect data from the selected appliance.
     - Synchronize Applicance Information with ViewPoint—Click the **Synchronize Applicance Information Now** link to refresh status data about the monitored appliances. This status information is normally updated every 24 hours.
   - Getting Started With ViewPoint—Click the **Open Getting Started Instructions In New Window** link to open the ViewPoint installation and initial configuration instructions in a separate window.

Viewing Dashboard Reports

Dashboard reports display an overview of bandwidth, uptime, intrusions and attacks, and alerts for managed SonicWALL UTM appliances. The Security Dashboard report provides data about worldwide security threats that can affect your network. The Dashboard also displays data about threats blocked by the SonicWALL security appliance.

Select from the following:

- "Viewing the Dashboard Summary Report" on page 159
- "Viewing the Security Dashboard Report" on page 162

Viewing the Dashboard Summary Report

The Dashboard Summary report displays statistics, alerts, graphical summary reports, and a list of available custom report templates. Displayed statistics can include total bandwidth, total attacks and other measurable information. The alerts list is displayed when the configured threshold has been reached. A wide range of graphical reports are also available for display.

You can configure the Dashboard > Summary report contents in the UTM > Configuration > Dashboard page. For a description of the configuration procedure, see "Configuring Dashboard Summary Reports" section on page 142.

To view the Dashboard Summary report, perform the following steps:

1. Click the **UTM** tab.
2. Select the global icon or a SonicWALL appliance.

3. Expand the **Dashboard** tree and click **Summary.**



4. The tables at the top of the page display the totals, using megabytes for the bandwidth totals.
5. The graphical display breaks down the information as follows:
   - **Bandwidth**—shown by group when viewed at global level. At the unit level, the bandwidth is shown per hour.
   - **HTTP Bandwidth**—at the unit level, this is shown as a pie chart with eight slices. The top seven Web users by IP address are each shown as a slice, with all other HTTP bandwidth combined in the eighth slice.
   - **Attacks Events**—at the global level, both attack events and virus attack attempts are shown per group. At unit level, these are shown per hour (not pictured).
   - **Custom Report Templates**—your “favorites” list of saved custom report templates. See “Using Custom Reports on UTM Appliances” on page 163.

     You can click the Edit icon next to the template on this page to edit the template in the Custom Report page and save it using the Save Template button. To delete the template, click the Delete icon.

Viewing Custom Reports on the Dashboard

SonicWALL ViewPoint provides access to your saved Custom Report templates on the Dashboard > Summary page for the appliance. The template must have been previously created and saved for the same appliance on the Custom Report > Internet Activity or Custom Report > Website Filtering page.



When you click on a saved template, the detailed report page is displayed in Full Mode with the same categories in the same order as in the template that you saved. In the report page, the Print, PDF, and Excel icons are available, along with the pagination controls. There is no link to Split Mode and no Save Template button since this template is already saved.

You can also configure or delete a saved template from the Dashboard > Summary page.

To access a custom report from the Dashboard:

1. Select a unit for which Log Viewer is enabled, and then navigate to **Dashboard > Summary.**
2. Locate the box labeled **Custom Report Templates**. All saved templates for this appliance are listed in the box.

3. Do one of the following:

- To generate a Custom Report, click a saved template in the **Custom Report Templates** box.
- To configure a saved template, click the Configure icon for that template, make the desired changes, and then click **OK**. For configuration instructions, see "Using Custom Reports on UTM Appliances" on page 163.
- To delete a saved template, click the Delete icon for that template and then click **OK** in the confirmation dialog box.

Viewing the Security Dashboard Report

The Security Dashboard report shows two types of reports:

- An Individual Appliance Report that displays a summary of attacks detected by the local SonicWALL security appliance.
- A Global Report that displays a summary of threat data received from all SonicWALL security appliances worldwide.

The Dashboard > Security Dashboard screen is available at the global level, but not at unit level for SonicWALL CSM Series appliances.

To view the Security Dashboard report, perform the following steps:

1. Click the **Reports** tab.
2. Select the global icon, a group, or a SonicWALL appliance.
3. Expand the **Dashboard** tree and click **Security Dashboard**. The Security Dashboard page displays.

Figure 8 Security Dashboard Page

4. At the top of the screen, select either the **Global** radio button or, for reporting at unit level, select the radio button that is labeled with the unit's MAC address. Select Global to display a summary of attacks caught by SonicWALL appliances worldwide. Select the unit's MAC address to see results only for attacks through this unit. At all levels, the categories charted include the following:
   - Viruses Blocked by SonicWALL Network
   - Intrusions Prevented by SonicWALL Network
   - Spyware Blocked
   - Multimedia (IM/P2P) Detected/Blocked

For each of these, the report includes the results over time for the top ten.

5. Optionally select the period of time for the report from the drop-down box at the top right of each graphical display. At the unit level, you can select only the **Last 21 days**. At the global or group level, you can select from:
   - Last 12 Hours
   - Last 14 Days
   - Last 21 Days
   - Last 6 Months

Using Custom Reports on UTM Appliances

Custom Reports are available at the unit level for appliances visible on the UTM tab. Log Viewer must be enabled for the appliance. For information about enabling Log Viewer, see “Viewing the Log” on page 290.

When configuring a Custom Report on the Internet Activity or Website Filtering page, the Template Section acts as a query builder. You select the criteria for the report that you want, and SonicWALL ViewPoint uses your input to query the raw syslog database for the information, and then outputs the report. The Template Section consists of two parts: the Date/Time section and the Report Layout section.

After building your query in the Template Section and clicking the **Generate Report** button, the report is displayed in the Report Section. The Report Section is displayed in the lower half of the page, under the Template Section; this layout is called Split Mode. You can easily toggle between Split Mode and Full Mode. Full Mode can be used to display only the Template Section or only the Report Section in a full page view.

The Report Section displays the report and provides controls for pagination, printing, and exporting the report in PDF or CSV format. You can also click the **Save Template** button in this section if you want to save the settings for this report as a template for reuse later.

See the following sections for detailed information:

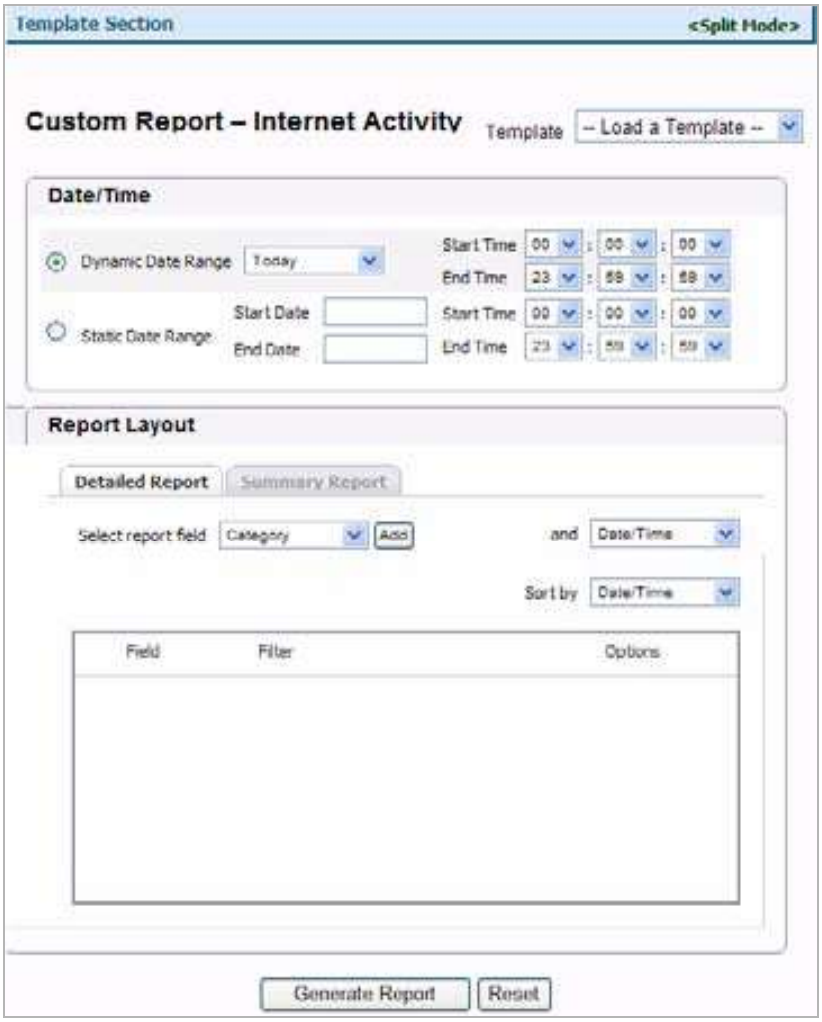
- “Toggling Between Split Mode and Full Mode” on page 164
- “Configuring the Date and Time for Custom Reports” on page 166
- “Configuring the Report Layout and Generating the Report” on page 168
- “Generating the Custom Report” on page 176
- “Viewing a Custom Report” on page 177

- “Printing a Page or Exporting the Report as a PDF or CSV File” on page 179
- “Saving the Report Template” on page 180

Toggling Between Split Mode and Full Mode

The Custom Report page contains two main sections, the Template Section and Report Section, which can be displayed together or independently depending on the mode.

When the Custom Report page is initially displayed for a selected appliance, the Template Section is displayed in Full Mode. Split Mode is available, but the Report Section displays no data until a report has been generated. The Custom Report > Internet Activity page with the Template Section displayed in Full Mode is shown below.



After generating a report, the page automatically changes to Split Mode and displays the report settings in the Template Section in the top half of the page and the report results in the Report Section in the lower portion. The Template Section and Report Section displayed in Split Mode is shown below.



At any time, you can change to Full Mode if you want to display either the Template Section or the Report Section individually. From Full Mode, you can easily change back to Split Mode.

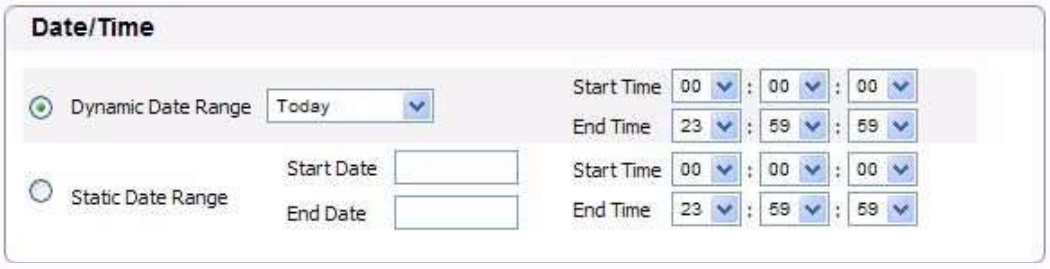
To toggle between Split Mode and Full Mode:

1. Select a unit for which Log Viewer is enabled, and then navigate to the **Custom Report** page.
2. On a page that is currently displayed in Full Mode, to change the view to Split Mode click the **<Split Mode>** button at the right side of the section heading.
3. On a page that is currently displayed in Split Mode, do one of the following to change to a Full Mode display of either the Template Section or the Report Section:
   - Click the **<Full Mode>** button to the right of the Template Section heading.
   - Click the **<Full Mode>** button to the right of the Report Section heading.

Configuring the Date and Time for Custom Reports

At the top of the Template Section of the Custom Report page, the Date/Time region provides a way to designate the time period to use when generating the report. You can select either a Dynamic Date Range or a Static Date Range.

Both the Dynamic Date Range and the Static Date Range provide Start Time and End Time settings. By using the Start Time and End Time fields, you can specify the exact hour, minute, and second for both the beginning and the end of the period for the report. When a start and end time is specified for a date range containing multiple days, the start/end times are applied to each day of the period when analyzing data for the report. The default is to include data for the full 24 hours in each day of the date range.



Dynamic Date Range

The **Dynamic Date Range** selection allows you to select from four date ranges and to specify the exact starting and ending times on the days in the selected date range for the log data to be used for the report.

For the **Dynamic Date Range**, you can select from the following four date choices:

- **Today** – Uses log data from the current date, beginning just after midnight
- **Yesterday** – Uses log data from just after midnight of the previous day, up to and including the most recent log message from the current date
- **Week to Date** – Uses log data from the current date, plus the seven preceding days
- **Month to Date** – Uses log data from the same date as the current date in the previous month, up to and including the most recent log message from the current date

When generating a report with a template containing a dynamic date range setting, the dates used when referencing the log data are relative to the current date. Thus, two reports generated from the same template on different days will provide different results.

To select a Dynamic Date Range:

1. Select a unit for which Log Viewer is enabled, and then navigate to the page under **Custom Report** for the report type you want.
2. In the Template Section under Date/Time, select the **Dynamic Date Range** radio button.
3. In the drop-down list, select **Today**, **Yesterday**, **Week to Date**, or **Month to Date.**
4. For the **Start Time**, select the hour, minute, and second from the drop-down lists in the Dynamic Date Range row. These settings specify the earliest data to be included in the report, for each day of the date range.
5. For the **End Time**, select the hour, minute, and second from the drop-down lists. These settings specify the most recent data to be included in the report, for each day of the date range.
6. To change the settings back to the defaults, click **Reset** at the bottom of the Template Section. Note that this will change the Report Layout region as well as the Date/Time region back to default settings.

Static Date Range

The **Static Date Range** selection allows you to specify the exact dates, starting, and ending times on the days in the selected date range for the log data to be used for the report. You can specify a single date or a date range, and indicate the exact hour, minute, and second for both the beginning and the end of the daily period for the report.

A popup calendar makes it easy to select the Start Date and End Date for the date range.



To specify a Static Date Range:

1. Select a unit for which Log Viewer is enabled, and then navigate to the page under **Custom Report** for the report type you want.
2. In the Template Section under Date/Time, select the **Static Date Range** radio button.
3. Click the **Start Date** field to access the pop-up calendar.
4. Use the navigation arrows near the top of the calendar to change the year or month. Click the **<<** button to move to the previous year, or hold the button to select from a list of years. Click the **>>** button to move to the next year, or hold the button to select from a list of years. Similarly, click the **<** or **>** to move back or ahead by one month, or hold the button to select from a list of months.
5. Click the desired start date in the calendar. This adds the date to the **Start Date** field and closes the calendar.
6. Click the **End Date** field to access the pop-up calendar.
7. Use the navigation arrows near the top of the calendar to change the year or month.
8. Click the desired end date in the calendar. This adds the date to the **End Date** field and closes the calendar.
9. For the **Start Time**, select the hour, minute, and second from the drop-down lists in the Static Date Range row. These settings specify the earliest data for each day in the date range to be included in the report.
10. For the **End Time**, select the hour, minute, and second from the drop-down lists. These settings specify the most recent data for each day in the date range to be included in the report.
11. To change the settings back to the defaults, click **Reset** at the bottom of the Template Section. Note that this will change the Report Layout region as well as the Date/Time region back to default settings.

Configuring the Report Layout and Generating the Report

Located in the Template Section of the Custom Report page below the Date/Time region, the Report Layout region provides a way to specify the type of data to include, and the format of the report. The Report Layout region has a Detailed Report tab and a Summary Report tab. The report appearance and the way information is organized is quite different between a Detailed Report and a Summary Report.

The Detailed Report tab contains a list of data categories that you can add as report fields, and allows you to specify query values for each. The categories you select will appear as column headings in the report.

The Summary Report tab allows you to structure a report showing the top elements of Internet Activity or Website Filtering. You can select the number of top elements, what to base the comparisons on, and the two data categories to evaluate when determining the top elements. The generated report provides graphical output that you can click to drill down for detailed information.

For more information about each of these Report Layout tabs, see the following sections:

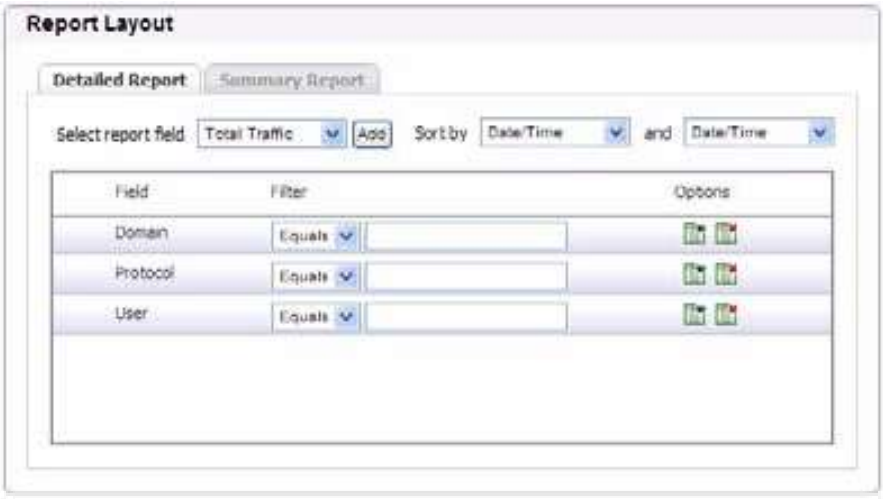
- "Detailed Reports" on page 169
- "Summary Reports" on page 173

For information about the Filter operators, see the following section:

- "Filter Operators" on page 175

Detailed Reports

The Detailed Report tab is the default view in the Report Layout region.



For a UTM Internet Activity report, the **Select Report Field** drop-down list contains eight data categories that you can add as column headings in the report. The categories are:

- **Full URL** – Adds a column containing the full URL of each Web site visited
- **Category** – Adds a column containing the category of each site visited, such as Gambling or Adult/Mature Content

- **Domain** – Adds a column containing the domain name of each site visited
- **Protocol** – Adds a column containing the protocol used by the traffic
- **Received Traffic**– Adds a column containing the number of bytes received from the visited site
- **Transmitted Traffic** – Adds a column containing the number of bytes transmitted to the site
- **Total Traffic** – Adds a column containing the total number of bytes received and transmitted
- **User** – Adds a column containing the user ID

For a UTM Website Filtering report, the **Select report field** drop-down list contains four data categories that you can add as column headings in the report. The categories are:

- **Full URL** – Adds a column containing the full URL of each logged Web site
- **Category** – Adds a column containing the category of each logged site, such as Gambling or Adult/Mature Content
- **Domain** – Adds a column containing the domain name of each logged Web site
- **User** – Adds a column containing the user ID

To include a field in the report, select a choice from the list and then click **Add.** When you click **Add**, a row is populated in the table below, which has three column headings: Field, Filter, and Options.



Note When you place your mouse cursor over the row, under the Field heading, the cursor changes to a “move” cursor. You can drag and drop the rows to rearrange the column ordering in the final report.

In the Filter column, two fields are displayed: an operator field and an input field. The operator field is a drop-down list containing the operator choices for the selected report field. See “Filter Operators” on page 175 for a description of each operator. The input field can be a drop-down list or a standard input field, depending on the selected report field.

The operators and input fields are defined in Table 5 for each report field.

Table 5 Operators and Input Fields for Each Data Type

Data Type	Operators	Input Field
Category	Equals	The input field is a drop-down list containing an alphabetized list of all the content filtering categories, such as Adult/Mature Content, Gambling, Military, etc. Leave the default of All in the input field if you choose not to filter by a certain category.
Destination IP	Equals Starts with Ends with Contains	The input field is a standard input field where you can type in the numbers to match, such as 192 or 10.25. Leave the input field blank if you choose not to filter by a certain destination IP address.
Domain	Equals Start with End with Contains	The input field is a standard input field where you can type in the domain to match, such as sonicwall.com. Leave the input field blank if you choose not to filter by a certain domain.
Full URL	Equals Start with End with Contains	The input field is a standard input field where you can type in the URL to match, such as: `http://www.funnyyoutubevideo.com/funniest.html` Leave the input field blank if you choose not to filter by a certain URL.
Protocol	Equals Start with End with Contains	The input field is a standard input field where you can type in the protocol to match, such as FTP. Leave the input field blank if you choose not to filter by a certain protocol.
Received Traffic	= > >= < <= !=	The input field is a standard input field where you can type in the number of bytes to match or compare to. Leave the input field blank if you choose not to filter by a certain amount of traffic.
Source IP	Equals Starts with Ends with Contains	The input field is a standard input field where you can type in the numbers to match, such as 192 or 10.25. Leave the input field blank if you choose not to filter by a certain source IP address.
Total Traffic	= > >= < <= !=	The input field is a standard input field where you can type in the number of bytes to match or compare to. Leave the input field blank if you choose not to filter by a certain amount of traffic.

Data Type	Operators	Input Field
Transmitted Traffic	= > >= < <= !=	The input field is a standard input field where you can type in the number of bytes to match or compare to. Leave the input field blank if you choose not to filter by a certain amount of traffic.
User	Equals Start with End with Contains	The input field is a standard input field where you can type in the user ID to match. Leave the input field blank if you choose not to filter by a certain user.

In the Options column, two icons are displayed: an Eye  and an X  . You can click the Eye to toggle whether the report field on that row will be displayed in the final report. This allows you to filter the report results based on the selected report field and related filter value, but not display the field as a column. When you click on the Eye icon within a row, the eye closes  to show that this field will not be displayed in the final report. The filter value will still be used to filter results from the raw syslog database to apply towards the report.

For example, you might specify the following Field/Operator/Filter Value: **Protocol/=/http**. It would make sense to click the Eye icon to disable the Protocol field from being shown in the report, since it would always just be “http” and would not add any interesting information to the final report. Contrast this with simply specifying the Protocol field and leaving the Filter Value blank, in which case you would want to enable the Eye so that this column would appear in the report showing a variety of protocols such as udp/dns, tcp/http, udp/ntp, or numbered protocols such as udp/389 (the LDAP protocol) or tcp/445 (MS Server Message Block (SMB) file sharing).

Clicking the X icon under Options deletes the selected report field from the table, so it will not be used to generate the report results nor will it be displayed in the report. Use the X icon instead of the Eye when you do not choose to filter the report results based on the field.

The Detailed Report tab also contains the Sort By drop-down list. The list contains the Date/Time option and any other report fields that you have selected from the eight data types. The choice you select will be used to order the results in the report from the first page to the last. The selection in the left drop-down list is used for the first sorting, then the selection in the right drop-down list is used to sort and group the entries within each group resulting from the the first sorting.

To configure a detailed report:

1. Select a unit for which Log Viewer is enabled, and then navigate to the page under **Custom Report** for the report type you want.
2. In Report Layout region of the Template Section of the Custom Report page, select the **Detailed Report** tab.
3. In the **Select report field** drop-down list, select a data type to include in the report, and then click **Add**. A row for this field is populated in the table below. Repeat this step to add other fields.
4. Optionally select an operator from the drop-down list under **Filter** in a table row, and type in or select an input value to be matched when the database is queried. Repeat this step for other rows to add filter values for those fields.
5. To prevent a field from appearing in the final report, click the **Eye** icon in that row so that the eye appears closed. To allow the field to be displayed in the report, click the closed **Eye** icon to return it to normal appearance.
6. To delete a field from the table, click the **X** icon in that row.
7. To sort the report pages by a different field than the default of Date/Time, select the desired field from the **Sort by** drop-down list.
8. To change the settings back to the defaults, click **Reset** at the bottom of the Template Section. Note that this will change the Date/Time region and the Report Layout region back to default settings.

Summary Reports

The Summary Report tab is available in the Report Layout region of the Template Section.



The Top drop-down list provides selections for the number of entries to display in the report. For example, if the User field is selected below as a Summary Group, and 5 is selected in the Top drop-down list, the report will provide entries for the top five users. For all Custom Reports, available numbers in the Top drop-down list are 5, 10, 20, 50, and 100.

The Summary Base drop-down list offers a selection of traffic types that will be used to determine the top usage for the selected field. The Summary Base choices vary as follows depending on the type of Custom Report:

- For a UTM Internet Activity report, the Summary Base choices are Total traffic, Received traffic, or Transmitted traffic.
- For a UTM Website Filtering report, the only Summary Base choice is Filtered Items.

Below the Top and Summary Base fields, you can create one or two Summary Groups from the choices listed on the left side. The Summary Groups choices vary as follows depending on the type of Custom Report:

- For a UTM Internet Activity report, the choices are Total traffic, Received traffic, or Transmitted traffic.
- For a UTM Website Filtering report, the choices are Category, Domain, or User.

To select a field for a Summary Group, simply drag and drop the desired field from the list to either the Level 1 Summary Group or Level 2 Summary Group boxes. When the field name is dragged to one of these, the operator drop-down list and filter input value field are displayed, allowing you to specify values to match when the data is searched. See “Filter Operators” on page 175 for a description of each operator.

Either the Level 1 Summary Group field or the Level 2 Summary Group field can be used alone; the resulting report will look the same in both cases.

When both the Level 1 and Level 2 Summary Group fields are populated, the report will display the top entries for the Level 2 field for each of the top entries for the Level 1 field. For example, if User is dragged to the Level 1 Summary Group and Domain is dragged to the Level 2 Summary Group, and 5 is selected in the Top drop-down list, the generated report will display the top five domains visited by each of the top five users.

To configure a summary report:

1. Select a unit for which Log Viewer is enabled, and then navigate to the page under **Custom Report** for the report type you want.
2. In Report Layout region of the Template Section of the Custom Report page, select the **Summary Report** tab.

3. In the **Top** drop-down list, select the number of entries to be displayed in the report.
4. In the **Summary Base** drop-down list, select one of the choices to use when determining which are the top elements in the selected field.
5. To specify the field for the **Level 1 Summary Group**, click and drag the desired field from the list on the left to the **Level 1 Summary Group** field, and then release your mouse button to drop the field into position. The filter operator and input field are displayed next to the field name.



6. To specify the field for the **Level 2 Summary Group**, click and drag the desired field from the list on the left to the **Level 2 Summary Group** field, then release your mouse button to drop the field into position. The filter operator and input field are displayed next to the field name.
7. To specify a filter operator and filter value for a Summary Group, select the operator from the drop-down list next to the field and type a filter value into the input field to the right of the operator.
8. To change the settings back to the defaults, click **Reset** at the bottom of the Template Section. Note that this will change the Date/Time region as well as the Report Layout region back to default settings.

Filter Operators

When configuring the Report Layout on either the Detailed Report tab or the Summary Report tab, you can specify filter values to be matched in the database during report generation. Depending on the selected field type, text string or numeric, several filter operators are available. The filter operators are used with a filter input value to determine which data should be included in the report.

The operators are defined as shown in Table 6.

Table 6 Filter Operators

Operator	Definition
Equals	Only data that exactly matches the filter input text will be included in the report
Start with	Data that begins with the input text will be included in the report

Operator	Definition
End with	Data that ends with the input text will be included in the report
Contains	Data that contains the input text will be included in the report
=	Only data that exactly matches the filter input numerical value will be included in the report
>	Data values that are greater than the input numerical value will be included in the report
>=	Data values that are greater than or equal to the input numerical value will be included in the report
<=	Data values that are less than or equal to the input numerical value will be included in the report
<	Data values that are less than the input numerical value will be included in the report
!=	Data values that are not equal to the input numerical value will be included in the report

Generating the Custom Report

The Generate Report button at the bottom of the Template Section is used to create the report. Before clicking Generate Report, use the Template Section to specify the time period for the report and the contents and layout of the report.



Note Custom Reports are available at the unit level and Log Viewer must be enabled for the appliance. For information about enabling Log Viewer, see "Viewing the Log" on page 290.

To generate a custom report:

1. Select a unit for which Log Viewer is enabled, and then navigate to the page under **Custom Report** for the report you want.
2. In the **Date/Time** region of the Template Section, specify the time period that the report will cover. For detailed information and instructions, see "Configuring the Date and Time for Custom Reports" on page 166.

3. In the **Report Layout** region of the Template Section, specify the contents and appearance of the report. For detailed information and instructions, see “Configuring the Report Layout and Generating the Report” on page 168.
4. Click **Generate Report** to create the report using the specified configuration.

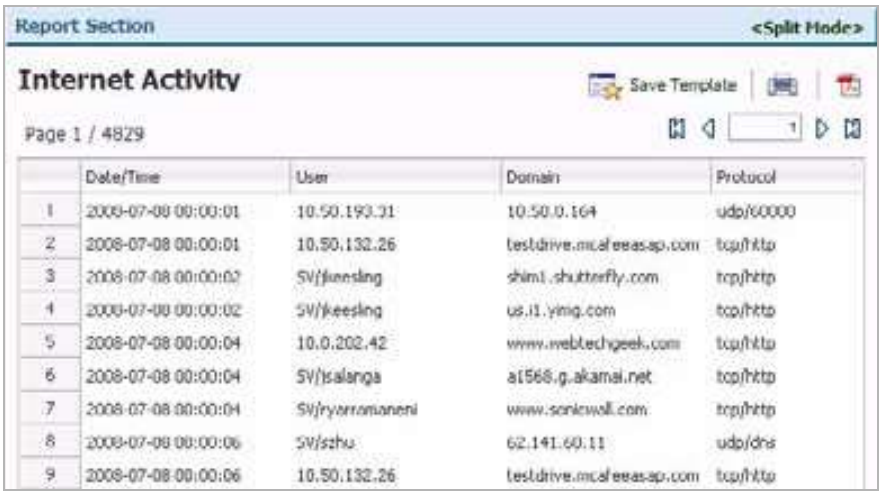
Viewing a Custom Report

After you click Generate Report, the Report Section is displayed in Split Mode in the lower half of the main window, even if you previously were in Full Mode for the Template Section.

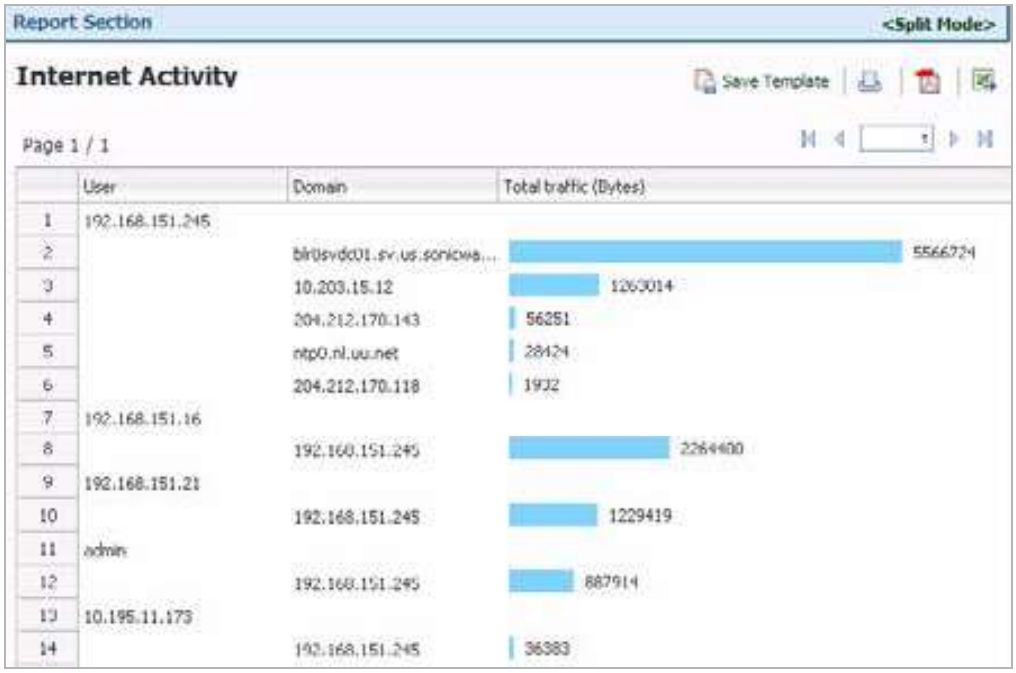
Pagination controls are displayed at the upper right of the report, just below the Save Template button and the printer, PDF, and Excel icons. Navigation buttons are provided to take you to the first page, next page, previous page, and last page, or you can specify an exact page number in the field.



In a Detailed Report, shown below, the selected report fields are displayed as column headings. You can click on any column heading to sort that page by the values in the column that you click. Click again to toggle between ascending and descending order on that page. When you navigate away from that page and then come back using the pagination controls, the page reverts to the original sorting order as specified in the **Sort by** field of the Template Section before generating the report.

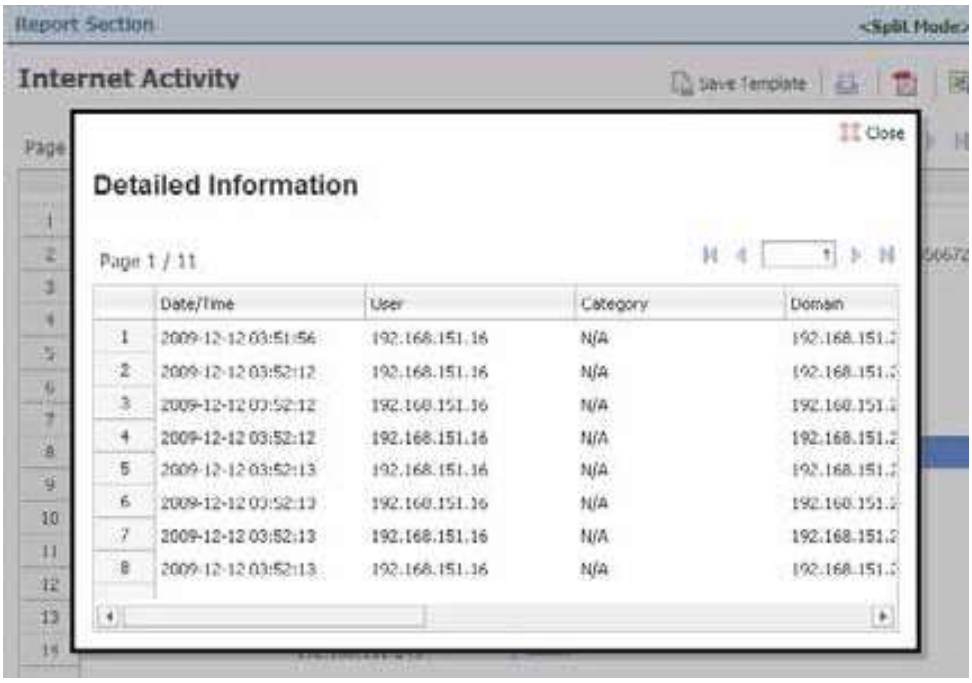


In a Summary Report, the Report Section displays the traffic volume as horizontal bar charts. This lets you see the information at a glance, such as who consumed the most bandwidth and which domains they visited the most.



You can click on a bar in the chart to pop up detailed information, just like the detailed report with all of the columns for all fields. The report lists details about this Summary Group field only. For example, in the Internet Activity report, if the Summary Group contains the User field and you click on a bar for one of the top users, the report displays the date and time of all Internet activity for the user, and includes data for every field available for detailed reports. A scroll bar is provided along the bottom of the Detailed Information window to allow viewing of all eight fields plus the date and time column.

The Detailed Information window is shown below.



Printing a Page or Exporting the Report as a PDF or CSV File

To print the current page of the report, click the printer icon at the top of the Report Section. Your normal print dialog box pops up. This prints only the page that is currently displayed.

To export the entire report in PDF format, click the PDF icon at the top of the Report Section. A PDF file is generated showing the report results in table format.

To export the entire report in Microsoft Excel Comma Separated Value (CSV) format, click the Excel icon at the top of the Report Section. A CSV file is generated showing the report results in spreadsheet format.

The PDF can contain a maximum of 10,000 records. If your report contains more than 10,000 records, you can use the Static Date Range fields to adjust the dates and regenerate the report to shorten its length. You can save the PDF or CSV file using any filename and location.

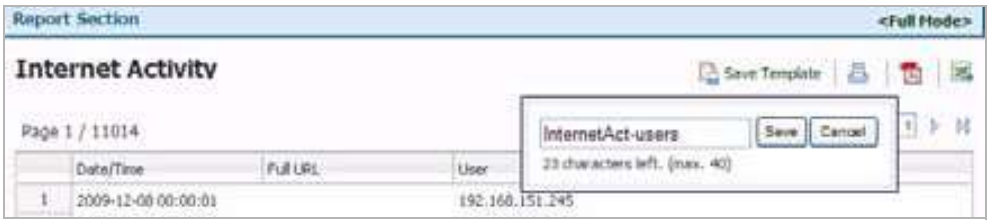
Saving the Report Template

After generating the report, you can save the settings for this report as a template for reuse. You can select the saved template from the Template Section or from the Dashboard > Summary page at a later time, and use it to generate a report using the same settings. For information about using the template on the Dashboard > Summary page, see "Troubleshooting Reports" on page 156.

The template is saved for the currently selected appliance and for the specific user. The saved template will not be available for other appliances or for other users.

To save the report template:

1. In the Report Section in the upper right corner, click the **Save Template** button.



2. In the popup dialog box, type in a descriptive name for the template, up to 40 characters. The number of remaining characters allowed in the name is displayed below the input field and changes as you type.
3. Click **Save**. If you are in a Full Mode display of the Report Section, you can verify that the template has been saved by changing back to Split Mode and viewing the contents of the **Template** drop-down list.

SonicWALL ViewPoint provides access to your saved Custom Report templates on the Dashboard > Summary page for the appliance. See "Viewing Custom Reports on the Dashboard" on page 161.

Viewing Bandwidth Reports

Bandwidth reports display the amount of data transferred through one or more selected SonicWALL appliances. These reports include the cost of consumed network bandwidth per 100 megabytes transferred through the selected appliances.

Bandwidth reports are an ideal starting point for viewing overall bandwidth usage. You can view bandwidth usage view by hour, day, or over a period of days. Additionally, you can view the top users of bandwidth.

From this information, you can determine network strategies. For example, if you need more bandwidth, you might need to upgrade network equipment, or you might simply need to curtail the bandwidth usage of a few employees.



Note All reports appear in the appliance's time zone.

Select from the following:

- "Viewing the Bandwidth Summary Report" on page 181
- "Viewing the Top Users of Bandwidth" on page 183
- "Viewing Bandwidth Usage Over Time" on page 185
- "Viewing the Top Users of Bandwidth Over Time" on page 187

Viewing the Bandwidth Summary Report

The Bandwidth Summary report contains information on the amount of traffic handled by a SonicWALL appliance during each hour of the specified day, or at the global level, for all SonicWALL appliances for the day.

To view the Bandwidth Summary report, perform the following steps:

1. Click the **UTM** tab.
2. Select the global icon or a SonicWALL appliance.

3. Expand the **Bandwidth** tree and click **Summary**. The Summary page displays.



4. The bar graph displays the amount of bandwidth transferred during each hour of the day.
5. The table contains the following information:
   - **Hour**—when the sample was taken.
   - **Events**—number of events or “hits.”
   - **Cost ($)**—amount of the expense per 100 megabytes. You can configure this in the **Cost Per Mega Byte Bandwidth Use** field in the Console > Reports > Summarizer screen.
   - **MBytes**—number of megabytes transferred.
   - **% of MBytes**—percentage of megabytes transferred during this hour, compared to the day. For example, if 1000 megabytes of data was transferred during the day and 100 megabytes was transferred at the 12:00 time period, the **% of MBytes** field will display 10%.
6. The ViewPoint Reporting Module shows yesterday’s report. To change the date of the report and other settings, click the **Start** or **End** field to access the drop-down calendar, or click **More Options** for report display settings.
7. Under Report Display Settings you can set:

- **Display Type**: **Chart and Table**, or **Table Only**
- **Chart Type**: **Area**, **Bar**, **Pie** or **Plot** chart
- Select the **Source** and **Destination** interfaces to view
- If you want to track bandwidth usage in both directions, select the **Bi-directional** check box.

See “Managing Report Settings” on page 154.

8. When you are finished, click **Search**. The ViewPoint Reporting Module displays the report for the selected day.



Note These settings will stay in effect for all summary reports during your active login session.

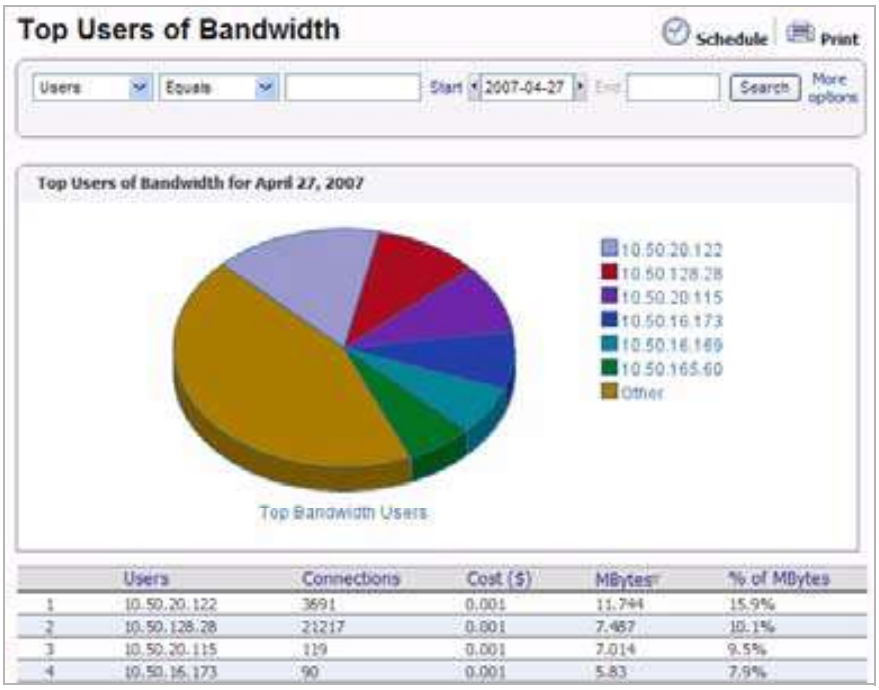
Viewing the Top Users of Bandwidth

The Top Users report displays the users who used the most bandwidth on the specified date and the correlating expense.

To view the Top Users report, perform the following steps:

1. Click the **UTM** tab.
2. Select a SonicWALL appliance.

3. Expand the **Bandwidth** tree and click **Top Users**. The Top Users page displays.



4. The pie chart displays the percentage of bandwidth transferred by each user.
5. The table contains the following information:
   - **Users**—the IP address of the user.
   - **Connections**—number of events or “hits.”
   - **Cost ($)**—amount of the expense per 100 megabytes. You can configure this in the **Cost Per Mega Byte Bandwidth Use** field in the Console > Reports > Summarizer screen.
   - **MBytes**—number of megabytes.
   - **% of MBytes**—percentage of megabytes transferred by this user, compared to all users. For example, if 1000 megabytes of data was transferred during the day and 200 megabytes was transferred by the top user, the **% of MBytes** field will display 20%.
6. By default, the ViewPoint Reporting Module shows yesterday’s report, a pie chart, and the ten top users. To change the date of the report and other settings, click the **Start** or **End** field to access the drop-down calendar, or click **More Options** for report display settings.

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7. Under Report Display Settings you can set:
   - **Display Type**: **Chart and Table**, or **Table Only**
   - **Chart Type**: **Area**, **Bar**, **Pie** or **Plot** chart
   - **Number of Users**
   - **Rows per Screen**

   See “Managing Report Settings” on page 154.
8. To display a limited number of users, use the Search Bar fields.



Note The search bar fields use pattern matching with operators such as “contains”. For example, “john” will match john_smith, john42, or big_john.

9. When you are finished, click **Search**. The ViewPoint Reporting Module displays the report for the selected day.



Note These settings will stay in effect for all similar reports during your active login session.

Viewing Bandwidth Usage Over Time

The Bandwidth Over Time report displays the daily amount of traffic and the total daily expense for consumed network bandwidth handled by a SonicWALL appliance or a group of SonicWALL appliances for the specified time period.

To view the Bandwidth Over Time report, perform the following steps:

1. Click the **UTM** tab.
2. Select the global icon or a SonicWALL appliance.