STREAMREPORT

2021 Streamcore SAS - All rights reserved

Table des matières

1 Introduction 4

1.1 StreamGroomer Manager (SGM) 4

1.2 The StreamReport Application 5

1.2.1 Overview 5

1.2.2 Main Operations 5

2 Launching StreamReport 6

2.1 Logging into the Database 6

2.2 Understanding the Web Interface 7

2.2.1 Overview 7

2.2.2 UMT Object Tab 8

2.2.3 Report Object Tabs 9

2.2.4 Define wizard 9

3 Report Architecture & Formats 10

3.1 Overview 10

3.2 Standard Report Architecture 10

3.2.1 Services Dashboard Report 10

3.2.2 Single or Set of Categories/Sites Report 11

3.2.3 Single or Set of StreamGroomers Report 12

3.3 Macro-Report Architecture 12

3.4 Report Formats 13

3.4.1 Parameters 13

3.4.2 PDF Format 14

3.4.3 HTML Format 15

3.4.4 Word Format 16

3.4.5 CSV/XML Format 17

3.4.6 Business Hours Filtering 17

4 Define Reports 18

4.1 Services - Dashboard Report 18

4.1.1 Introduction 18

4.1.2 Parameters 18

4.1.3 Add/Modify/Delete Operations 22

4.1.4 Trends Parameters 22

4.2 Services - Single or Set of Categories/Sites Report 23

4.2.1 Introduction 23

4.2.2 Parameters 23

4.2.3 Add/Modify/Delete Operations – Tree Menu 31

4.2.4 Add/Modify/Delete Operations – Templates 32

4.3 Services - Macro-report 35

4.3.1 Introduction 35

4.3.2 Parameters 35

2021 Streamcore SAS - All rights reserved

4.3.3 Add/Modify/Delete/Move Operations 35

4.4 StreamGroomers Report 36

4.4.1 Introduction 36

4.4.2 Parameters 36

4.4.3 Add/Modify/Delete Operations 38

4.5 Schedule Reports 39

4.6 Introduction 39

4.7 Parameters 39

4.7.1 Add/Modify/Delete Operations 41

5 View Reports 41

6 Appendix: CSV/XML format 42

6.1 Overview 42

6.2 Summary table file 42

6.3 Graph file 44

2021 Streamcore SAS - All rights reserved

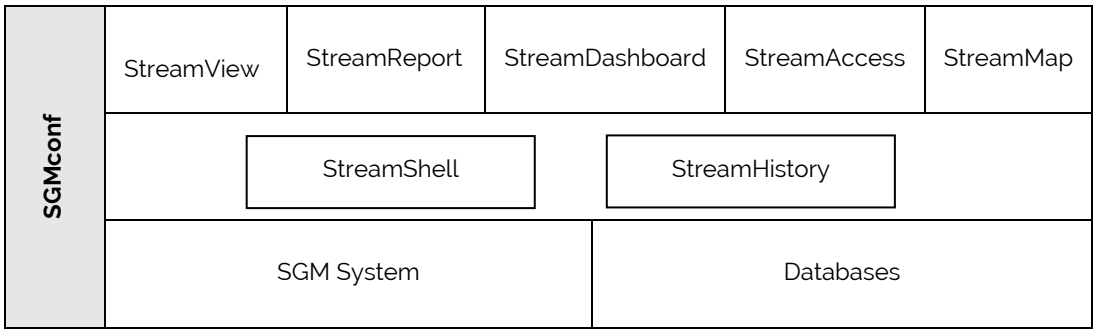
1 Introduction

1.1 STREAMGROOMER MANAGER (SGM)

StreamGroomer Manager (SGM) is a specific hardware platform, which hosts the following software applications:

- SGMconf: SGM management application
- SGM System: SGM operating system
- Databases: coherent sets of data associated with one or several StreamGroomers
- StreamShell: command mode (cli) on which all the applications are interfaced
- StreamHistory: access module to long-term data and graph generation
- StreamView: configuration and supervision application in graphic mode
- StreamReport: application for editing PDF reports
- StreamDashboard: application for managing personalized Web dashboards
- StreamAccess: application for managing flexible access rights to the Web applications
- StreamMap: application for alarms and performance summary display in a geographic map

This software suite can be represented as follows:



The SGM "Databases" groups' parameters and statistics associated with one or more StreamGroomers into a coherent whole. Management of these databases (i.e., creation, deletion, back up, and restoration) is handled through the SGMconf application.

A database is used through the middleware (StreamShell, StreamHistory) by the applications (StreamView, StreamReport, StreamDashboard, StreamAccess and StreamMap) in order to configure and manage all Streamcore solution features.

2021 Streamcore SAS - All rights reserved

1.2 THE STREAMREPORT APPLICATION

1.2.1 Overview

StreamReport is an application for **generating, sending, and viewing PDF reports** (or other formats such as HTML, CSV, XML).

These reports present statistics collected by a set of StreamGroomers and stored on the StreamGroomer Manager. A set of StreamGroomers is managed using a database created previously on the StreamGroomer Manager.

Database management tasks (create, edit, delete, backup, restore) are performed using SGMconf – *see SGMconf Guide*. Services are configured and operated using StreamView – *see StreamView Guide*.

This StreamReport Guide describes the steps required to create reports, to schedule their generation, and to send them by email.

1.2.2 Main Operations

Three types of operations can be performed when managing reports:

- **Chapter 4: Define**: Select the scope and parameters of the report:
  - Language, format and layout (PDF, CSV…)
  - Categories, sites or StreamGroomers to be included
  - Type of information required: network, application, VoIP/Video

- **Chapter 5: Schedule**: Select when the report will be generated (once, daily, weekly…), who should be the recipients by email, and the storage policy on the SGM

- **Chapter 6: View**: Display the reports generated and stored on the SGM

2021 Streamcore SAS - All rights reserved

2 Launching StreamReport

2.1 LOGGING INTO THE DATABASE

After launching a browser, a database can be logged into via the following methods:

1. Direct Access: http://<@IP-SGM>/streamview/<database_name>/

   <@IP-SGM>: the SGM IP address (the name assigned by DNS can also be used)

   <database_name>: database name, as defined when it was created with the SGMconf application

   Access via the Welcome Screen: `http://<@IP-SGM>/`

   <@IP-SGM>: the SGM IP address (the name assigned by DNS can also be used).

   The SGM welcome page then presents links for launching various applications. To access a database click a displayed database name.

Note: To provide a secure connection between a browser and an SGM replace "http" with "https".

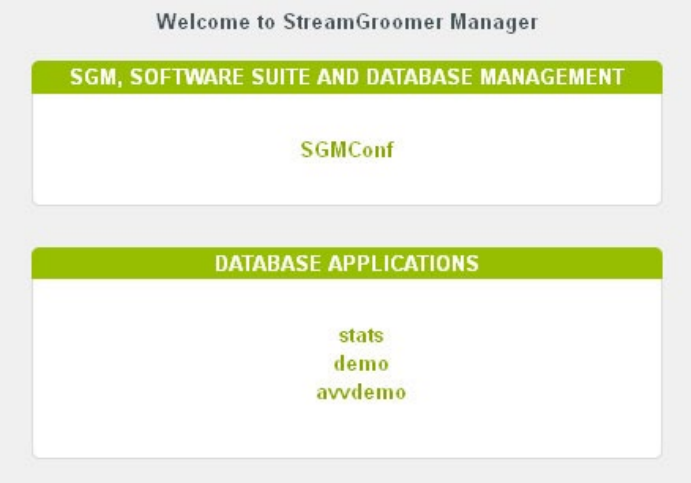


Figure 1 – Access via the SGM welcome screen

2. From the welcome screen, enter your user name and password. If you have created a new database and accessing it for the first time, use the user name **global** and no password.

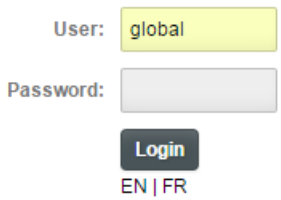
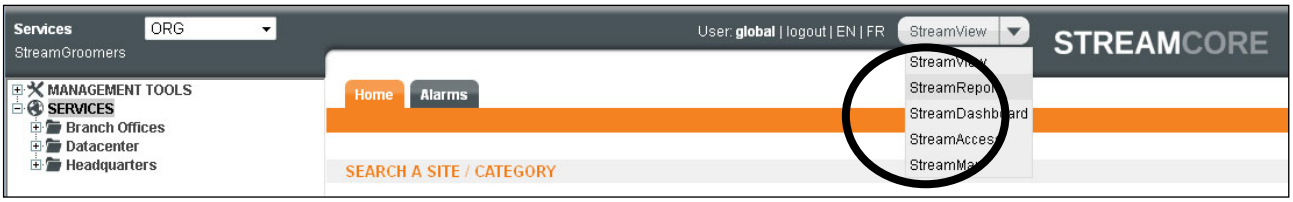


Figure 2 – First time long in to newly created database

Note: The default language for all Streamcore applications can be set via the SGMconf application.

2021 Streamcore SAS - All rights reserved

By default, the StreamView application will be launched. In order to switch to StreamReport, select it in the Application selection menu in the "Upper frame":



Note: In order to have access to StreamReport, the related access rights must have been granted to the user by StreamAccess (See "StreamDashboard / StreamAccess Guide – Access rights management")

2.2 UNDERSTANDING THE WEB INTERFACE

2.2.1 Overview

The various frames in the StreamReport application appear in the following form:

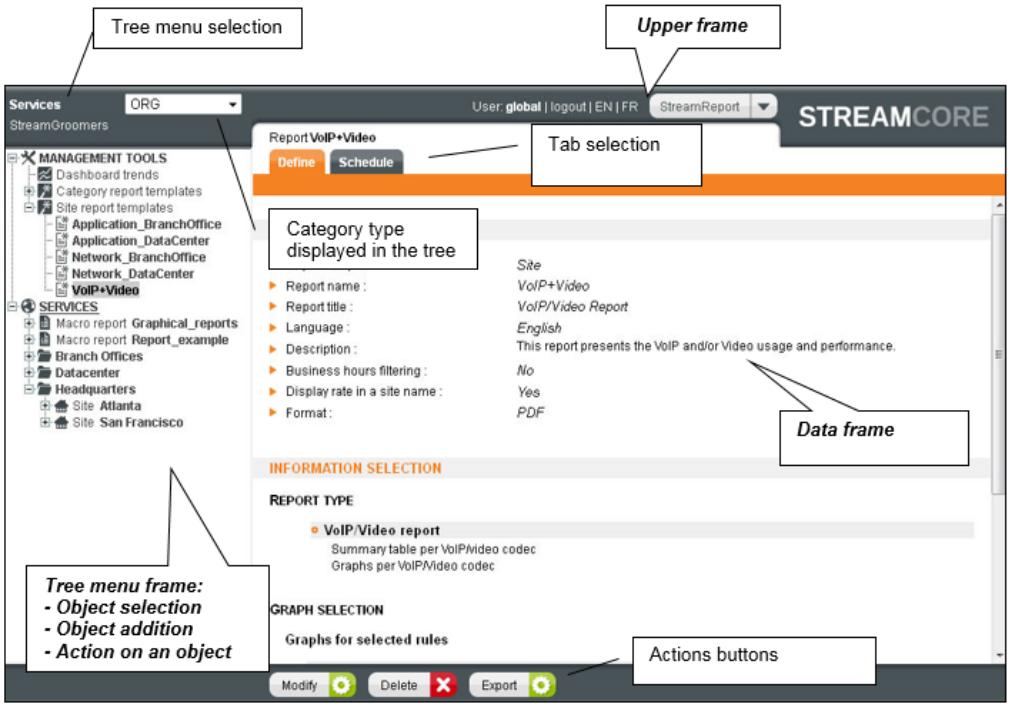


Figure 3 – StreamReport frames

The right-hand "Data frame" enables the configuration, and display of database objects.

Navigation in StreamReport is done in the left-hand "Tree menu frame". It is possible to select 2 kinds of tree menus:

- ***Services*** **:** to manage services, category or site reports
- ***StreamGroomers*** **:** to manage reports related to StreamGroomers

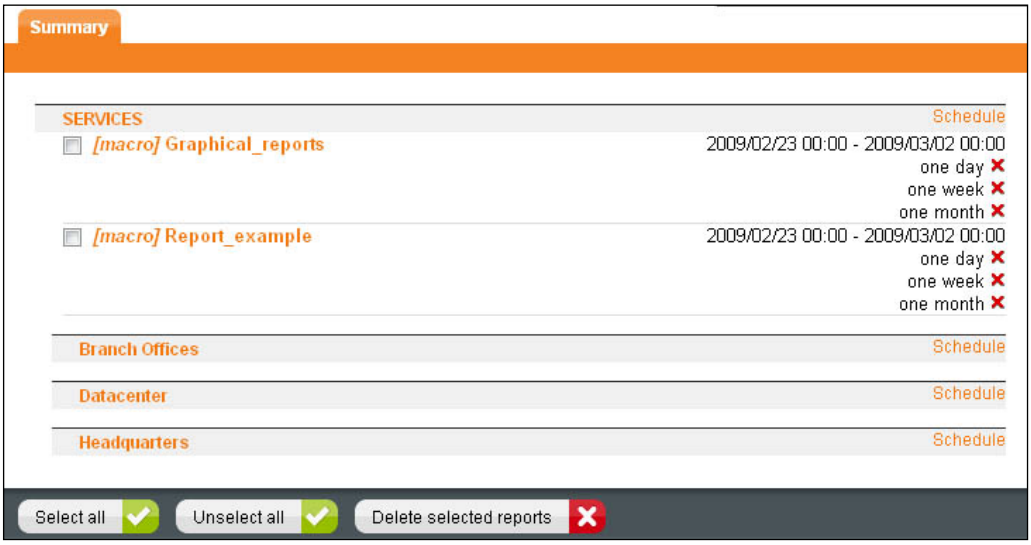
Note: The tree menu sometimes needs to be updated. To do so, click on a branch, using the right-hand mouse button, and then select "Update" or "Close and reset the entire branch".

2021 Streamcore SAS - All rights reserved

2.2.2 UMT Object Tab

When clicking on any object within the Unified Mapping Tree (UMT) (Services, Category, Site, StreamGroomers), a summary page is displayed with a list of all defined reports and their scheduling. The list varies according to the selected object:

Object	Displayed reports
SERVICES	All the reports defined in the "Services" branch
CATEGORY	All the reports defined in the "Category" branch
SITE	All the reports defined for the Site
STREAMGROOMERS	All the reports defined for the StreamGroomers

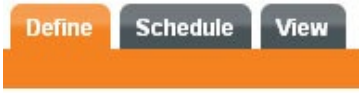


2021 Streamcore SAS - All rights reserved

2.2.3 Report Object Tabs

When clicking on a report, three tabs are available:

Use the tab area to set up or view reports.



Tab	Actions
Define	View all the characteristics of a report and access the editing pages.
Schedule	Define the report generation periods and view the periods in a summary table
View	Access and view generated reports stored on StreamGroomer Manager.

2.2.4 Define wizard

Defining a report involves several steps, depending on the selected scope.
The top of each window displays your progress through these various steps:

- **Underlined in black**: the current step
- In **black**: validated steps
- In **gray**: remaining steps

To move between steps, click the links at the bottom right of the operations window: **Previous** and **Next**.

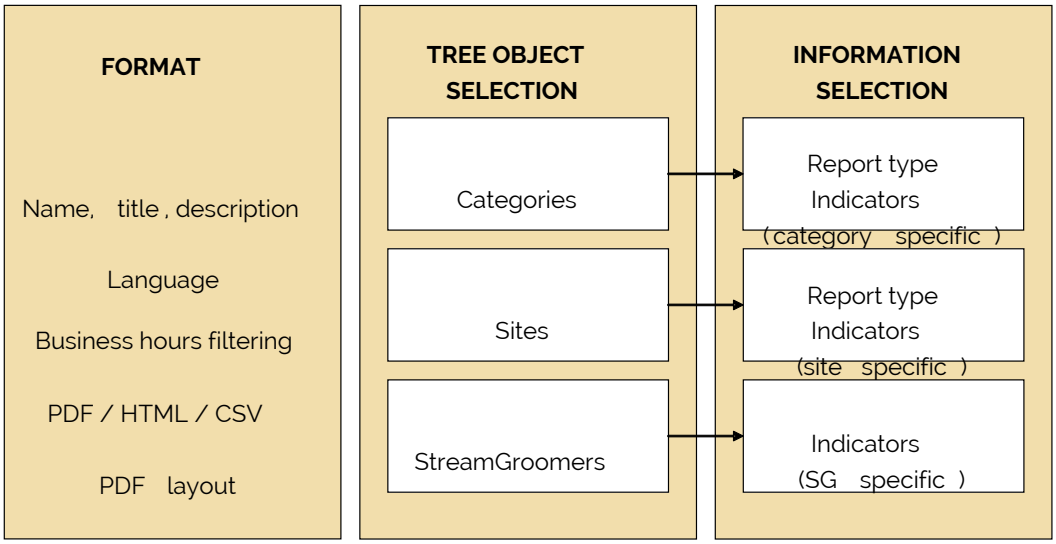
In the last step, you can confirm the creation of the report by clicking the **Finish** link at the bottom right of the operations window.

2021 Streamcore SAS - All rights reserved

3 Report Architecture & Formats

3.1 OVERVIEW

In order to understand how to define or modify a report, a clear understanding of report architecture is key. Indeed, any creation or modification will lead through screens related to this architecture:



- **Format**: select the name, title and description, language, business hours, as well as the format and layout for the report

- **Tree object selection**: select the objects in the Unified Mapping Tree (categories, sites or StreamGroomers) to be included in the report:
  - **All objects:** all sites or all categories
  - **Manual selection:** choose which objects to include in the report, whether by creating the report directly in a specific part of the Unified Mapping Tree, or by defining additional selection criteria.

    Example 1: Geographical categories "America" and "Europe"

    Example 2: All the sites belonging the Business Unit "Retail"
  - **Automated selection (for sites only):** define performance criteria to let StreamReport automatically select the sites to be included in the report.

    Example 1: The 5 sites with the most loaded access link

    Example 2: The 10 sites with the worst response time for the Business application

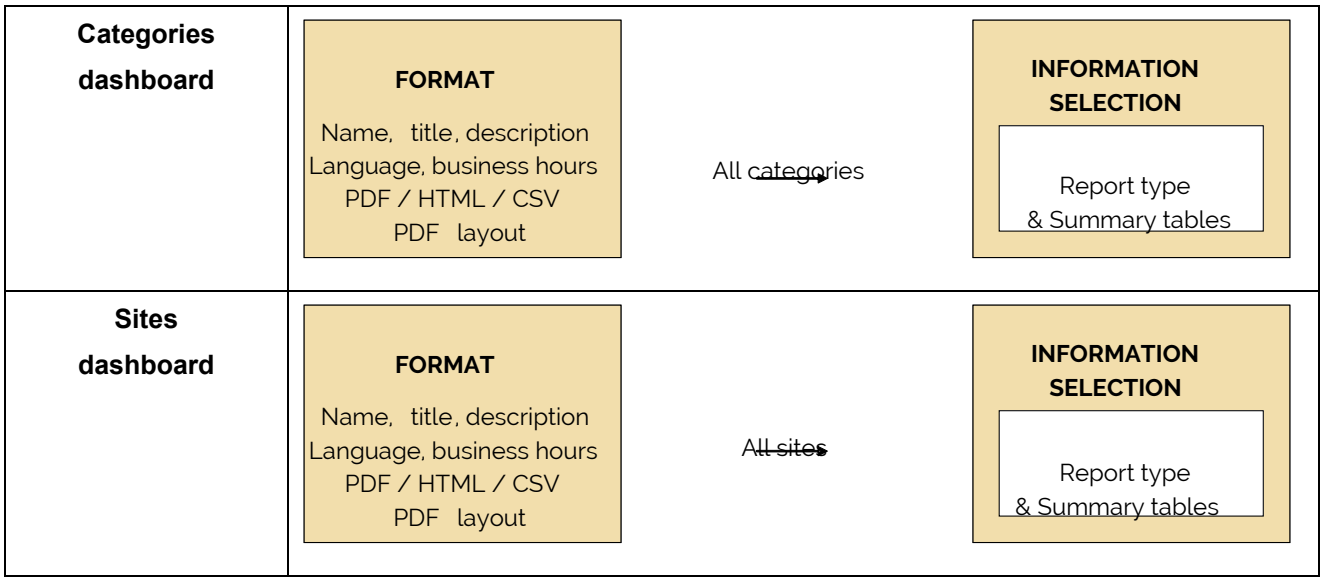
- **Information selection**: select the summary tables or graphs to be included in the report by following a 2 step process:
  a. **Report type:** choose between the following types of information:
     - Network
     - Application
     - VoIP/Video
  b. **Summary table/Graph selection:** choose the summary tables and available graphs depending on the selected report type(s)

3.2 STANDARD REPORT ARCHITECTURE

3.2.1 Services Dashboard Report

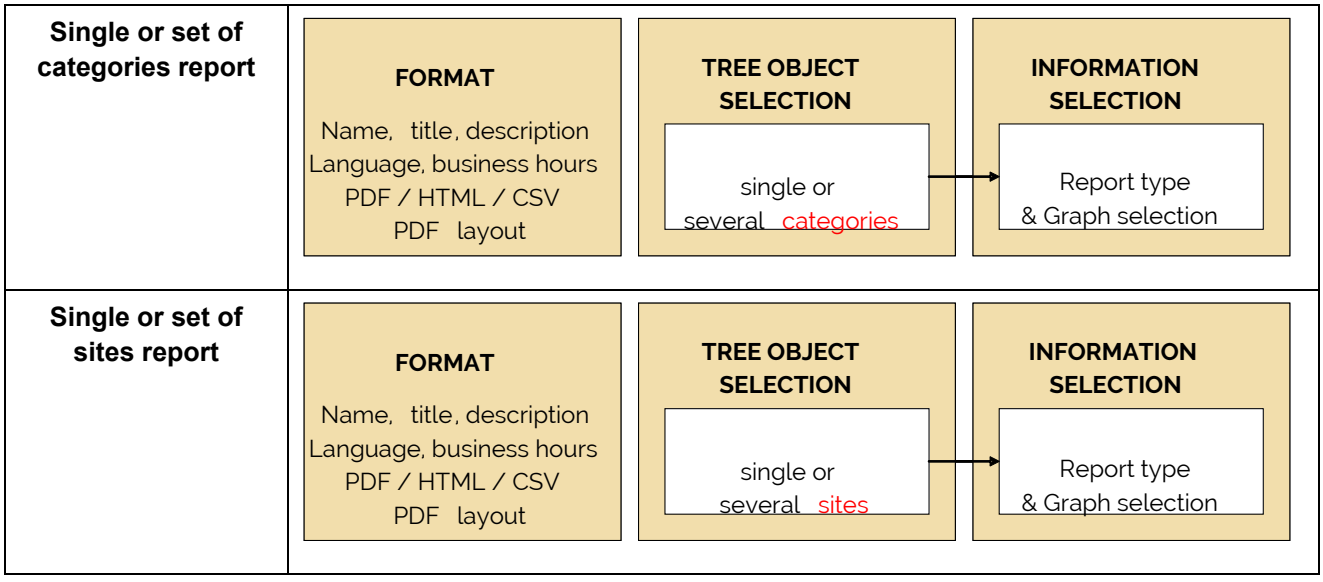
2021 Streamcore SAS - All rights reserved

A Services dashboard report provides summarized information for all categories or all sites:



3.2.2 Single or Set of Categories/Sites Report

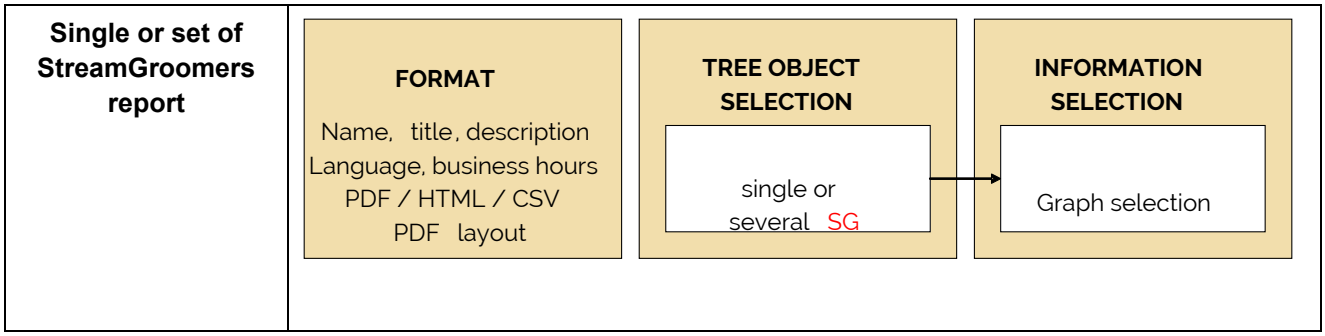
A Single or set of categories/sites report provides detailed information for a selection of categories or sites:



2021 Streamcore SAS - All rights reserved

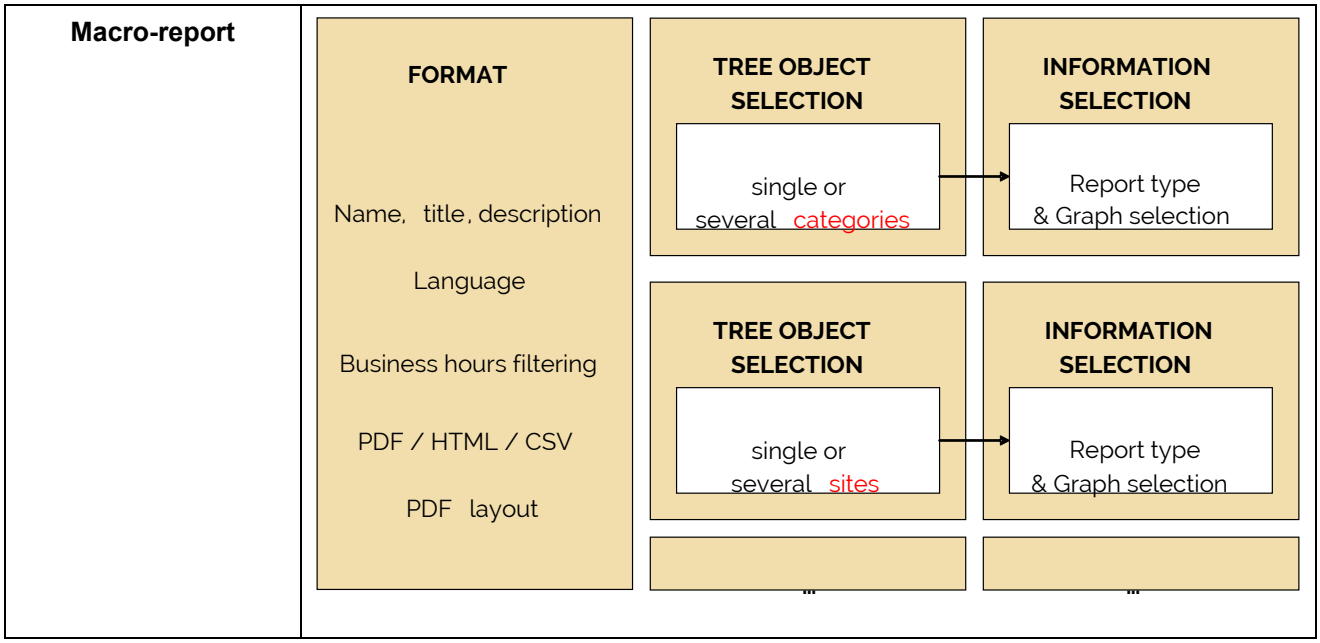
3.2.3 Single or Set of StreamGroomers Report

A Single or set of StreamGroomers report provides detailed information for a selection of StreamGroomers:



3.3 MACRO-REPORT ARCHITECTURE

A macro-report is kind of a "sub-reports container" and allows to mix different types of standard reports with a common format (for instance within a single PDF file):



2021 Streamcore SAS - All rights reserved

3.4 REPORT FORMATS

Parameters

When creating or editing a report, the parameters for the report format are:

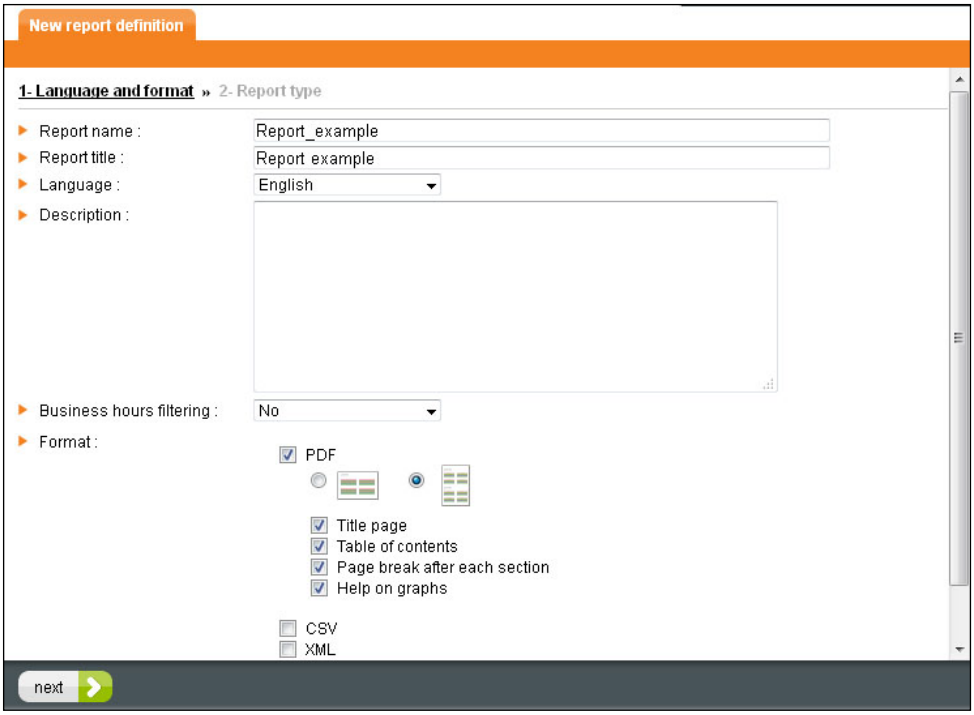


Figure 4 – Report format parameters

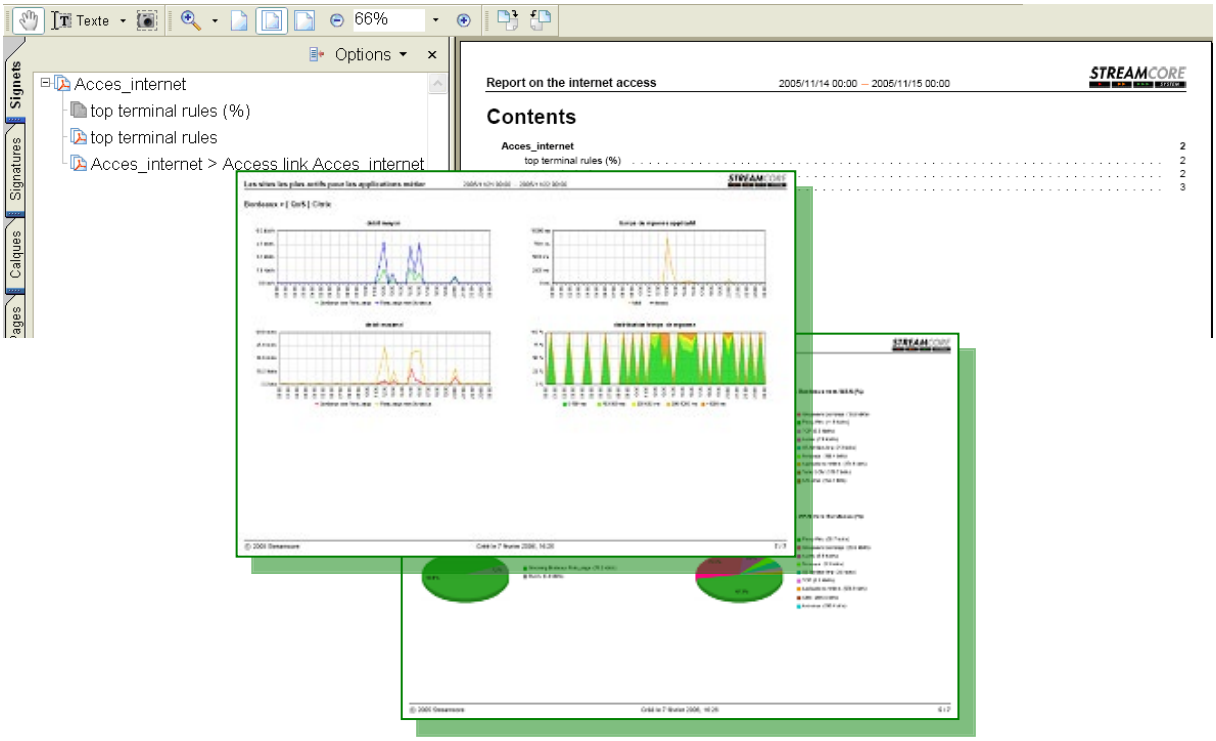
Parameter	Description / Values
Name	The name appears in the tree and in the name of the generated file. It must not include spaces or special characters -- if the name is invalid, a pop-up window is displayed
Title	The title appears: in the PDF cover page in the View summary when reports are sent by Email
Language	Select English or French
Description	The description is only used in PDF reports, and is displayed in the Title page
Business hours filtering	(default=No) Business hours or NON business hours filters can be applied when generating a report, in order to consider statistics only during relevant time of the day. See chapter 3.4.6 for more information.
Display throughput in site name	(default=No) For site reports, the data throughput of the WAN access link can be displayed in the page title for each site.
Format	Choose between PDF (default), CSV, XML or HTML formats. For PDF, additional options are offered: 4, 8 or 9 graphs per page add a title + description page add the table of contents

2021 Streamcore SAS - All rights reserved

	- add page break between sections - add help on graphs

3.4.2 PDF Format

Reports in PDF format include a dynamic table of contents that directly points to the report pages. A set of bookmarks, similar to the table of contents, also makes it easy to browse through the report.



2021 Streamcore SAS - All rights reserved

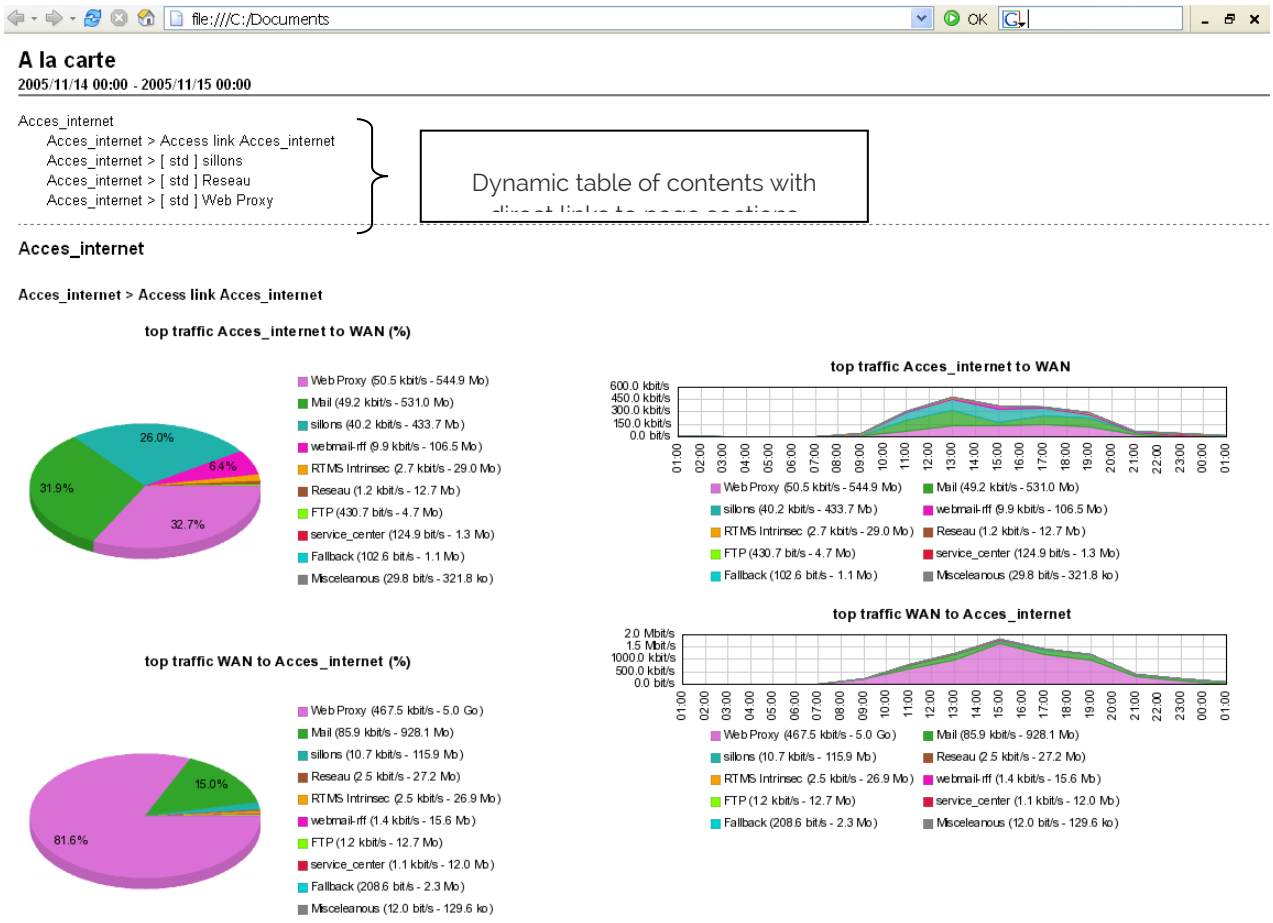
3.4.3 HTML Format

When you create a report in csv/xml format, StreamReport generates a zip file containing:

- a single HTML file
- various png files

To display the HTML report, unzip the zip file, and double click on the HTML file (a browser will automatically display the report).

A dynamic table of contents -- similar to the one in PDF format – makes it easy to browse through the graphs in the report.



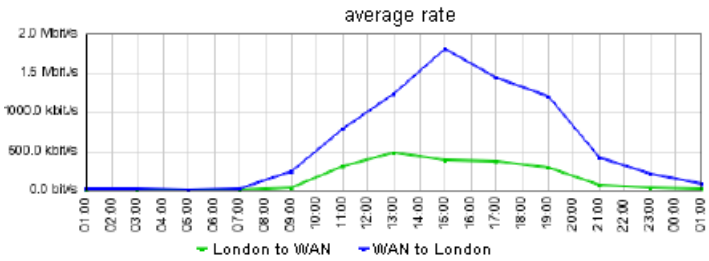
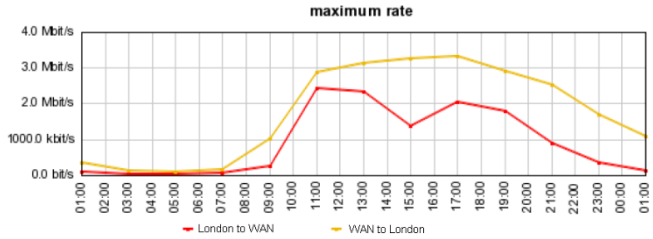
2021 Streamcore SAS - All rights reserved

3.4.4 Word Format

You can generate a report in Word format from a report in HTML format:

1. Go to the **View** tab in the report and click the HTML report,
2. Copy the objects created into a single folder (png images and the HTML file),
1. Open the HTML file in Word,
2. Save the document in .doc format.

→ Here is the resulting report:

> **EUROPE**
> **2005/11/14 00:00 - 2005/11/15 00:00**
>
> *Europe > Paris*
> top
> *Europe > Paris > Access link Paris*
> Average throughput
>
> 
>
>
> top
> *Europe > London*
> top
>
> *Europe > London > Access link London*
> Maximum throughput
>
> 
>
>
> top
>
> […]

2021 Streamcore SAS - All rights reserved

3.4.5 CSV/XML Format

When you create a report in csv/xml format, StreamReport generates a zip file containing the various csv/xml files:

- **Site reports only**: a summary file with, for each rule, the value of the averaged indicators over the period.
- **Category and site reports**: a detailed file for each graph, so you can plot graphs using external tools.
- More information about generated CSV/XML files is available in Annex.

3.4.6 Business Hours Filtering

When generating a report, the Business hours templates can be applied to filter statistics to be considered in the report:

- When applying "Business hours", only the statistics within the defined days and time are computed.
- When applying "NON business hours", only the statistics out of the defined days and time are computed.

The business hours to be taken into account per site are provisioned in StreamView.
See StreamView User Guide for more information.

2021 Streamcore SAS - All rights reserved

4 Define Reports

4.1 SERVICES - DASHBOARD REPORT

4.1.1 Introduction

A Services dashboard report provides summarized information for all categories or all sites:

Categories dashboard	**FORMAT** Name, title, description Language, business hours PDF / HTML / CSV PDF layout	All categories	**INFORMATION SELECTION** Report type & Summary tables
Sites dashboard	**FORMAT** Name, title, description Language, business hours PDF / HTML / CSV PDF layout	~~All sites~~	**INFORMATION SELECTION** Report type & Summary tables

4.1.2 Parameters

1 SUMMARY

A summary of a dashboard report parameters can be displayed by clicking on the Parameters tab:

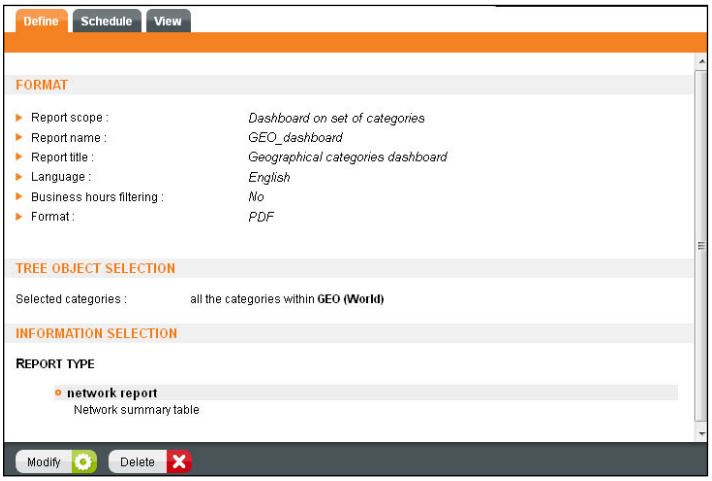


Figure 5 – Dashboard report summary

2 INFORMATION SELECTION - CATEGORIES DASHBOARD

The information selection for a categories dashboard is the following:

2021 Streamcore SAS - All rights reserved

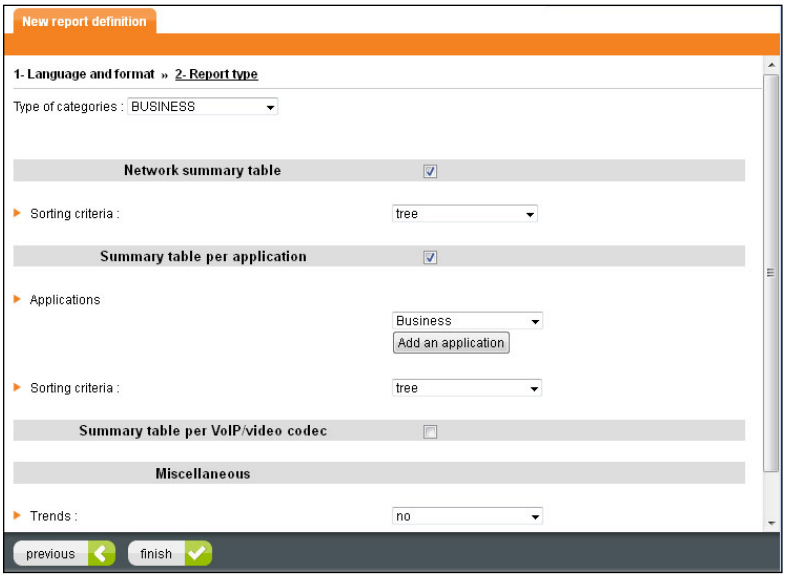


Figure 6 – Categories dashboard information selection

Parameter	Description / Values
Type of categories	Select the category type. In case of hierarchical categories, sorting criteria options in summary tables are available only if "level 1 categories" are selected.
Network summary table	Select Yes/No + sorting criteria
	This table provides the following information for each category: • volume exchanged over WAN (To / From WAN)
Summary table per application	Select the list of applications[1] + sorting criteria
	A table per application provides the following information for each category: • Total volume exchanged over WAN (To / From WAN) • Average response time • Average number of sessions
Summary table per VoIP/Video codec	Select the list of VoIP/Video codecs[2] + sorting criteria
	A table per VoIP/video provides the following information for each category: • Total volume exchanged over WAN (To / From WAN) • Average MOS (G.711, G.723, G.729 codecs only) • Average number of communications
Miscellaneous	Trends: select whether trends should be displayed in summary tables

[1] All terminal data rules defined in group of rules are listed
[2] All terminal audio/video rules defined in group of rules are listed

2021 Streamcore SAS - All rights reserved

3 INFORMATION SELECTION - SITES DASHBOARD

The information selection for a sites dashboard is the following:

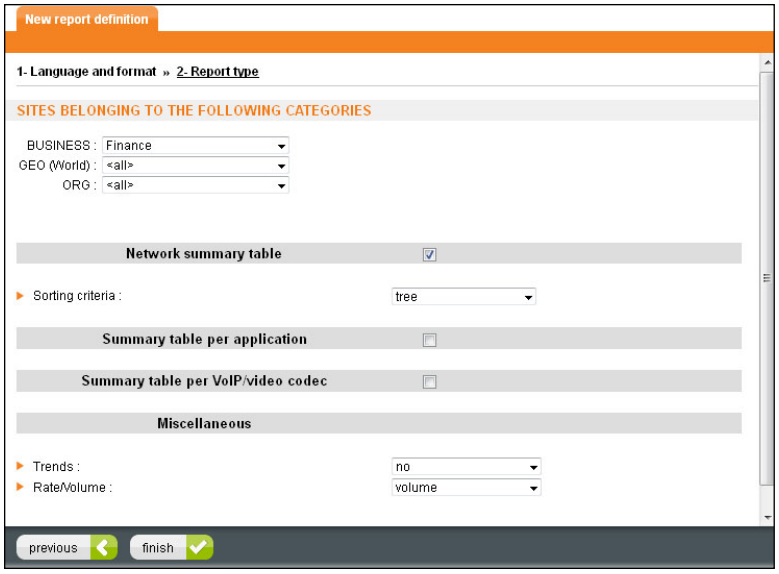


Figure 7 – Sites dashboard information selection

Parameter	Description / Values
Sites selection	You can select one category per type in order to restrict the report to a subset of sites with similar properties (for instance belonging to a specific BU and country)
Network summary table	Select Yes/No + sorting criteria
	This table provides the following information for each site: • Average data throughput exchanged over WAN (To / From WAN)
Summary table per application	Select the list of applications[3] + sorting criteria
	A table per application provides the following information for each site: • Average data throughput exchanged over WAN (To / From WAN) • Average response time • Average number of sessions
Summary table per VoIP/Video codec	Select the list of VoIP/Video codecs[4] + sorting criteria
	A table per VoIP/video provides the following information for each site: • Average data throughput exchanged over WAN (To / From WAN) • Average MOS (G.711, G.723, G.729 codecs only) • Average number of communications
Miscellaneous	Trends: select whether trends should be displayed in summary tables Throughput/Volume: select whether throughput or volume should be displayed in summary tables

[3] All terminal data rules defined in group of rules are listed
[4] All terminal audio/video rules defined in group of rules are listed

2021 Streamcore SAS - All rights reserved

2021 Streamcore SAS - All rights reserved

4.1.3 Add/Modify/Delete Operations

4 ADD

The creation wizard can be launched on **SERVICES**.

1. Right click on **SERVICES** object: in the pop-up menu, choose **Add >*Categories dashboard report or Sites dashboard report***
2. Follow these steps:

	Wizard	Step 1: format	Step2: information selection
Services object	Categories dashboard report	See 3.4.1	See 4.1.2.2
	Sites dashboard report		See 4.1.2.3

5 MODIFY

To modify an existing report (format, information selection), follow these steps:

1. Right-click on the report in the tree and select **Modify**
2. The "Define" wizard will be started, with the value defined for the report. Follow all steps, and perform changes till the end of the wizard.

6 DELETE

To delete any kind of report, follow these steps:

1. Right-click on the report in the tree and select **Delete**

   OR
2. Select the report in the tree, select the ***Define*** tab, and click on the **Delete** button

4.1.4 Trends Parameters

Trends can be displayed in any summary table (network, application, VoIP/video). If a report is scheduled for a period T, then the statistics computed can be compared for up to the last 3 previous periods. For instance:

- The statistics for a daily report will be compared with the last 3 previous days
- The statistics for a weekly report will be compared with the last 3 previous weeks
- The statistics for a monthly report will be compared with the last 3 previous months

In order to manage trends, click on **MANAGEMENT TOOLS > Dashboard trends**. The parameters are applied for all reports with trends enabled. The parameters are:

Parameter	Description / Values
Period taken into account	Select the periods that should be taken into account into the comparison: Up to T-3, T-2 or T-1
Weight for period T-1	(default= 3)
Weight for period T-2	(default= 2)
Weight for period T-3	(default= 1)

2021 Streamcore SAS - All rights reserved

4.2 SERVICES - SINGLE OR SET OF CATEGORIES/SITES REPORT

4.2.1 Introduction

A Single or set of categories/sites report provides detailed information for a selection of categories or sites:

Single or set of categories report	**FORMAT** Name, title, description Language, business hours PDF / HTML / CSV PDF layout	**TREE OBJECT SELECTION** single or several categories	**INFORMATION SELECTION** Report type & Graph selection
Single or set of sites report	**FORMAT** Name, title, description Language, business hours PDF / HTML / CSV PDF layout	**TREE OBJECT SELECTION** single or several sites	**INFORMATION SELECTION** Report type & Graph selection

4.2.2 Parameters

7 SUMMARY

A summary of a single or set of Categories/Sites report parameters can be displayed by clicking on the Parameters tab:

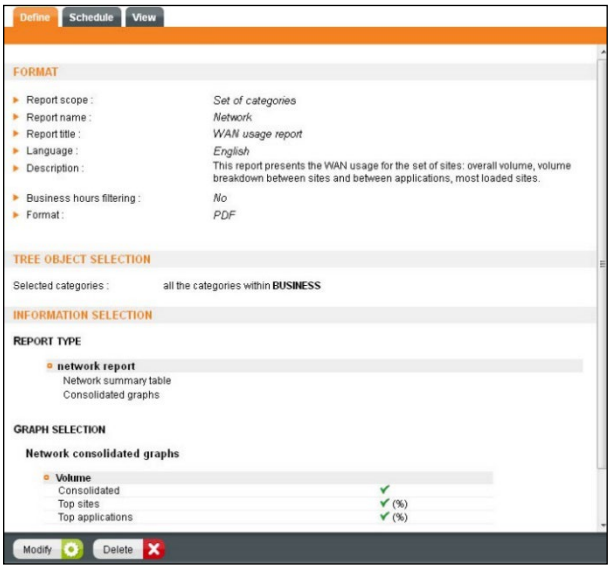


Figure 8 – Set of categories selection

8 TREE OBJECT SELECTION - CATEGORY

For a report on a set of categories, the options to select the categories are:

2021 Streamcore SAS - All rights reserved

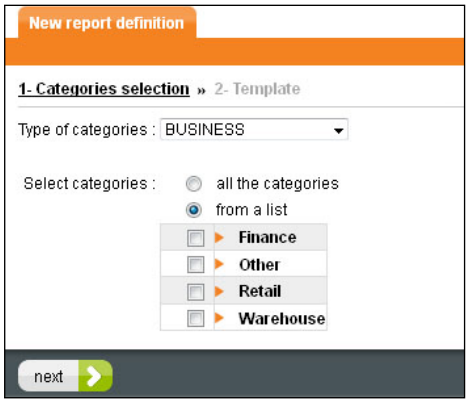


Figure 9 – Set of categories selection

Parameter	Description / Values
Type of categories	Select a type of categories
Select categories	Select all categories belonging to the selected type, or a manual selection of them

9 TREE OBJECT SELECTION - SITE

For a report on a set of sites, the options to select the sites are:

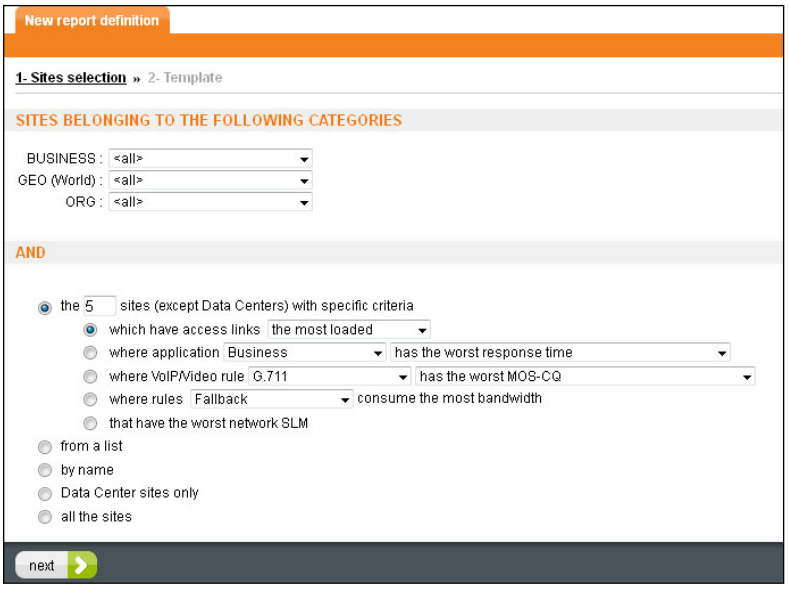


Figure 10 – Set of sites selection

2021 Streamcore SAS - All rights reserved

Parameter	Description / Values
Category properties criteria	
Categories	To select one category per type in order to restrict the report to a subset of sites with similar properties (for instance belonging to a specific BU and country)
Site properties criteria	
Performance criteria	To select a number of sites (by default: 5) using the following criteria: - The most loaded/least loaded sites (usage throughput) - The sites on which a given application (chosen from the list): has the worst response time, has the most users, or uses the most bandwidth - The sites on which a given VoIP rule (chosen from the list): has the worst MOS-CQ, has the worst MOS-LQ, has the most communications, consumes the most bandwidth. - The sites for which unclassified traffic (fallback rule) consume the most bandwidth - The sites with the worst network SLM
Name criteria	To select a site by its exact name, or you can select a group of sites with partially similar names. Simply enter the common part of the name followed by the wildcard character: *
Data center criteria	To select only sites with the data center parameter set to yes
All sites	To select all sites

10 INFORMATION SELECTION - PER CATEGORY

The information selection for a category report is performed in a 2 step process:

1/ Report type selection

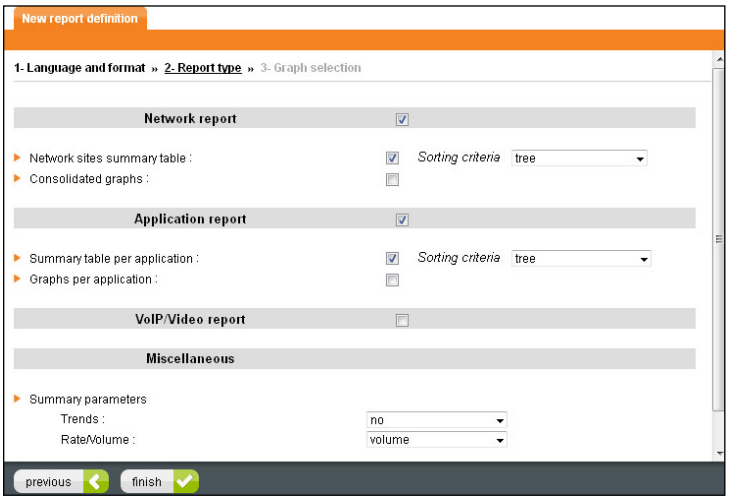


Figure 11 – Category information selection

2021 Streamcore SAS - All rights reserved

Parameter	Description / Values
Network report: Yes/No	
Network summary table	This table provides the following information for each site belonging to the category: - Average data throughput exchanged over WAN (To / From WAN)
Consolidated graphs	Setting this parameter to Yes will provide access to network consolidated graphs in the report (to be selected in the Graph selection screen)
Application report: Yes/No	
Summary table per application	A table per application provides the following information for each site belonging to the category: - Average data throughput exchanged over WAN (To / From WAN) - Average response time - Average number of sessions
Graphs per application	Setting this parameter to Yes will provide access to application consolidated graphs in the report (to be selected in the Graph selection screen)
VoIP/video report: Yes/No	
Summary table per VoIP/Video codec	A table per VoIP/video provides the following information for each site belonging to the category - Average data throughput exchanged over WAN (To / From WAN) - Average number of communications - Average MOS (G.711, G.723, G.729 codecs only)
Graphs per VoIP/video codec	Setting this parameter to Yes will provide access to VoIP/Video consolidated graphs in the report (to be selected in the Graph selection screen)
Miscellaneous: summary table parameters	
Trends	(Default=No) Select whether trends should be displayed in summary tables
Throughput/volume	(Default=Volume) Select whether throughput or volume should be displayed in summary tables

2/ Graph selection

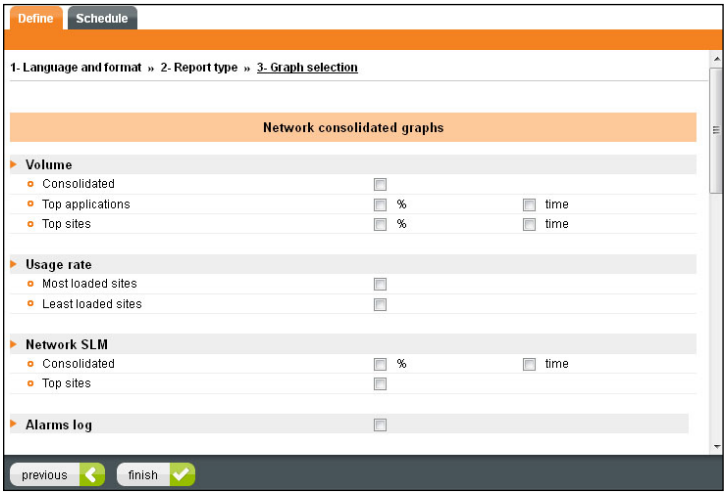


Figure 12 – Category information selection - Graph

2021 Streamcore SAS - All rights reserved

Parameter	Description / Values
Network consolidated graphs*	
Volume	- Consolidated: time graph presenting the overall volume of traffic over the network - Top applications: time/pie graph presenting the Top 10 applications consuming the most bandwidth - Top sites: time/pie graph presenting the Top 10 sites consuming the most bandwidth
Usage throughput	- Most loaded sites: bar graph presenting the Top 10 sites with highest network usage throughput - Least loaded sites: bar graph presenting the Top 10 sites with lowest network usage throughput
Network SLM	- Consolidated: time/pie graph presenting the overall network quality - Top sites: bar graph presenting the Top 10 sites with the worst network quality
Alarms log	To view the 30 most recent alarms triggered for the selected categories
Application consolidated graphs*	
Volume	- Consolidated: time graph presenting the overall volume of selected application traffic - Top sites: time/pie graph presenting the Top 10 sites consuming the most bandwidth - Top sub-rules (intermediate rule): top10 sub-rules for the application
Number of connections (terminal data rule)	- Consolidated: time graph presenting the average number of connections - Top sites: time/pie graph presenting the Top 10 sites with the most connections
Response time (terminal data rule)	- Consolidated: time graph presenting the average response time - Top sites: bar graph presenting the Top 10 sites with the worst response time
Alarms log	To view the 30 most recent alarms triggered for the selected categories
VoIP/video consolidated graphs*	
Volume	- Consolidated: time graph presenting the overall volume of selected codec traffic - Top sites: time/pie graph presenting the Top 10 sites consuming the most bandwidth - Top sub-rules (intermediate rule): top10 sub-rules for the intermediate rule
Number of communications (terminal A/V rule)	- Consolidated: time graph presenting the average number of communications - Top sites: time/pie graph presenting the Top 10 sites with the most communications
MOS (terminal A/V rule	- Consolidated: time graph presenting the MOS - Top sites: bar graph presenting the Top 10 sites with the worst MOS
Alarms log	To view the 30 most recent alarms triggered for the selected categories

* If selected in report type

2021 Streamcore SAS - All rights reserved

11 INFORMATION SELECTION - PER SITE

The information selection for a site report is performed in a 2 step process:

1/ Report type selection

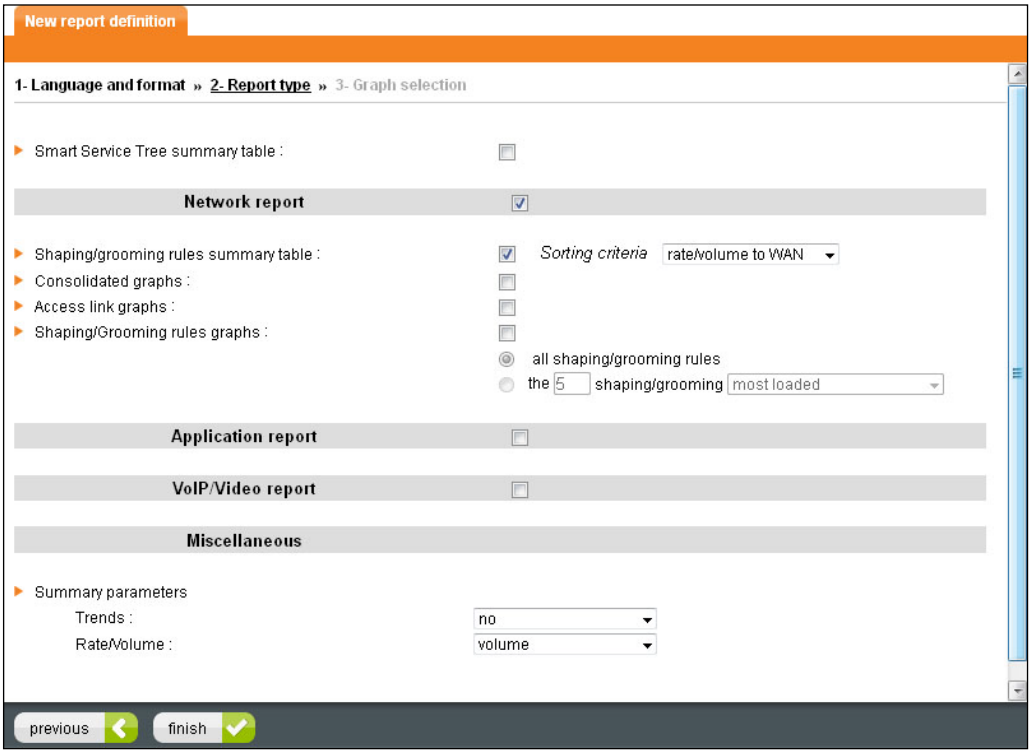


Figure 13 – Site information selection

Parameter	Description / Values
Unified Mapping Tree summary	This table provides the following information for each rule in the tree: - Average data throughput exchanged over WAN (To / From WAN) - Max data throughput exchanged over WAN (To / From WAN)
Network report: Yes/No	
Shaping/Grooming rules summary table	This table provides the following information for each shaping/grooming rule: - Average data throughput exchanged over WAN (To / From WAN)
Consolidated graphs	Setting this parameter to Yes will provide access to network consolidated graphs in the report (to be selected in the Graph selection screen)
Access link graphs	Setting this parameter to Yes will provide access link graphs in the report (to be selected in the Graph selection screen)
Shaping/Grooming rules graphs	Setting this parameter to Yes will provide shaping/grooming rules graphs in the report (to be selected in the Graph selection screen). You can select all the shaping and grooming rules, or they can be selected automatically using the following criteria: most loaded, most bandwidth consuming, worst latency, worst availability
Application report: Yes/No	
Application summary table	This table provides the following information for each terminal data rule: - Average data throughput exchanged over WAN (To / From WAN)

2021 Streamcore SAS - All rights reserved

	- Average response time - Average number of sessions
Graphs per application	Setting this parameter to Yes will provide access to application graphs in the report (to be selected in the Graph selection screen)
VoIP/video report: Yes/No	
VoIP/Video summary table	This table provides the following information for each terminal audio/video rule: - Average data throughput exchanged over WAN (To / From WAN) - Average number of communications - Average MOS (G.711, G.723, G.729 codecs only)
Graphs per VoIP/video codec	Setting this parameter to Yes will provide access to VoIP/video graphs in the report (to be selected in the Graph selection screen)
Miscellaneous: summary table parameters	
Trends	(Default=No) Select whether trends should be displayed in summary tables
Throughput /volume	(Default=Volume) Select whether throughput or volume should be displayed in summary tables

2/ Graph selection

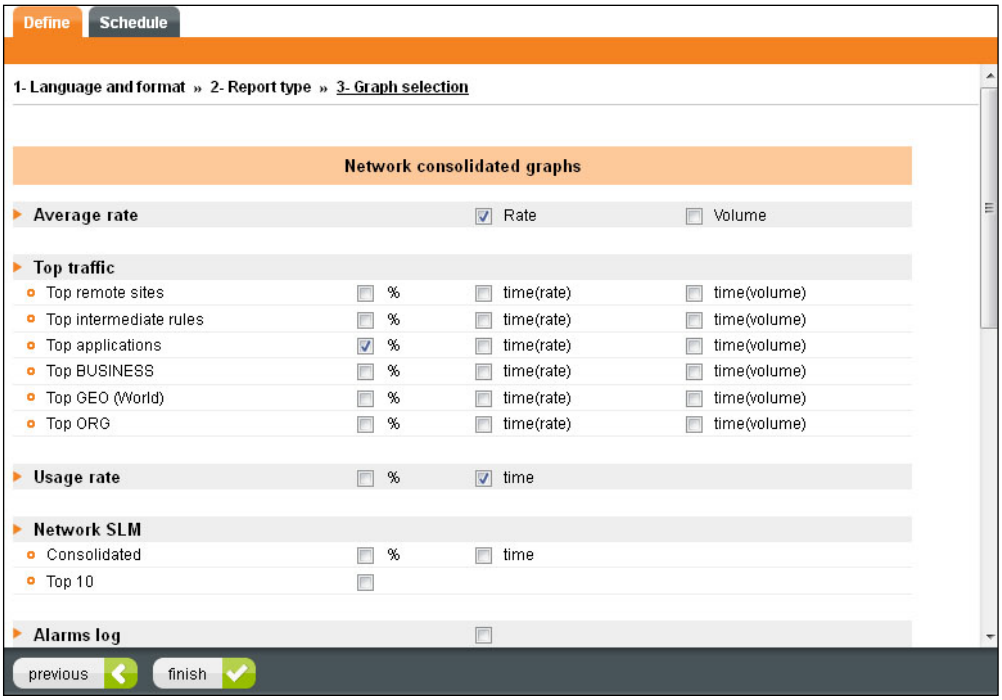


Figure 14 – Site information selection - Graph

2021 Streamcore SAS - All rights reserved

Parameter	Description / Values
Network consolidated graphs*	
Average throughput	Consolidated: time graph presenting the average data throughput /overall volume over the WAN access
Top traffic	Top remote sites: time/pie graph presenting the Top 10 remote sites consuming the most bandwidth on the WAN access Top intermediate rules: time/pie graph presenting the Top 10 intermediate rules consuming the most bandwidth Top applications: time/pie graph presenting the Top 10 applications consuming the most bandwidth Top "category": time/pie graph presenting the Top 10 categories consuming the most bandwidth
Usage throughput	Time/pie graph presenting the overall usage throughput over the WAN access
Network SLM	Consolidated: time/pie graph presenting the overall network quality Top 10: bar graph presenting the Top 10 shaping/grooming rules with the worst network quality
Alarms log	To view the 30 most recent alarms triggered for the selected sites
Application consolidated graphs*	
Average throughput	- Consolidated: time graph presenting the average throughput over the WAN access for the selected application - Top sub-rules (intermediate rule only): time/pie graph presenting the Top 10 sub-rules consuming the most bandwidth - Top remote sites: : time/pie graph presenting the Top 10 remote sites consuming the most bandwidth for the selected application - Top "category": time/pie graph presenting the Top 10 categories consuming the most bandwidth for the selected application
Number of connections (terminal data rule)	- Consolidated: time graph presenting the average number of sessions over the WAN access for the selected application - Top remote sites: time/pie graph presenting the Top 10 remote sites with the most sessions for the selected application - Top "category": time/pie graph presenting the Top 10 categories with the most sessions for the selected application
Response time (terminal data rule)	- Consolidated: time graph presenting the average response time over the WAN access for the selected application Top remote sites: bar graph presenting the Top 10 remote sites with the worst response time for the selected application Top "category": time/pie graph presenting the Top 10 categories with the worst response time for the selected application
Alarms log	To view the 30 most recent alarms triggered for the selected sites
VoIP/video consolidated graphs*	
Average throughput	Consolidated: time graph presenting the average throughput over the WAN access for the selected VoIP/video codec Top sub-rules (intermediate rule only): time/pie graph presenting the Top 10 sub-rules consuming the most bandwidth
Number of communications	Consolidated: time graph presenting the average number of communications over the WAN access for the selected VoIP/video codec

2021 Streamcore SAS - All rights reserved

MOS	Consolidated: time graph presenting the average MOS over the WAN access for the selected VoIP/video codec
Alarms log	To view the 30 most recent alarms triggered for the selected sites
Graphs for selected rules (access links, shaping/grooming…)	
Level 1 top traffic	List of graphs available on rules. This graph selection part is shared by all rules (network, application, VoIP/video) selected in the report.
…	

* If selected in report type

12 INFORMATION SELECTION - SITE EXPERT REPORT

This option is not available when using report templates. The information selection for a site report is performed in a 2 step process:

1/ Rule selection: You can select exactly the rules to be included in the report for a single site.

2/ Graph selection: You can select the list of graphs available on rules.

Note: this graph selection part is shared by all rules (network, application, VoIP/video) selected in the report.

4.2.3 Add/Modify/Delete Operations – Tree Menu

13 ADD

The creation wizard can be launched on any objects within the **SERVICES** tree (services, category, site):

1. Select the **SERVICES>*XX*** object
2. Right click on the object: in the pop-up menu, choose **Add** > ***Set of categories / sites report or Category / Site report***
3. **Since templates are used during the creation process** (except site expert report) the creation steps are simplified:

1	Select the tree objects (categories, sites) to be included in the report (if necessary)
2	Select the template to be applied

Depending on the object location, different wizard options will be offered:

	Wizard	*Step1: format*	*Step2: tree object selection*	*Step3: information selection*
Services object	Set of categories report	-	See 4.2.2.2	Select: - the template to be applied - applications and/or VoIP/video codecs
	Set of sites report	-	See 4.2.2.3	
Category object	Category report	-	-	
	Set of sites report	-	See 4.2.2.3	
Site object	Site report	-	-	
	Site expert report	See 3.4.1	-	See 4.2.2.6

2021 Streamcore SAS - All rights reserved

14 MODIFY

To modify a report within the **SERVICES** (services, category, site) :

1. Select the **SERVICES> *XX*** object
1. Click on the **Modify** button
2. Follow these steps:

1	Update the report language and format
2	Update the object selection (categories, sites) to be included in the report
3	Update the summary tables and graphs per object to be included in the report

Depending on the object location, different wizard options will be offered:

	Wizard	*Step 1: format*	*Step2: tree object selection*	*Step3: information selection*
Services object	Set of categories report	See 3.4.1	See 4.2.2.2	See 4.2.2.4
	Set of sites report		See 4.2.2.3	See 4.2.2.5
Category object	Category report		-	See 4.2.2.4
	Set of sites report		See 4.2.2.3	See 4.2.2.5
Site object	Site report		-	See 4.2.2.5
	Site expert report		-	See 4.2.2.6

15 DELETE

Single report

To delete any kind of report, follow these steps:

1. Right-click on the report in the tree and select **Delete**
   OR
2. Select the report in the tree, select the ***Define*** tab, and click on the **Delete** button

Multiple reports

When displaying a reports summary by clicking on a Unified Mapping Tree object (services, category, site), then you can select a set or all reports and click on the **Delete** button.

4.2.4 Add/Modify/Delete Operations – Templates

16 OVERVIEW

The site or category report templates are managed in the **MANAGEMENT TOOLS**.

By default, the following predefined templates are available:

2021 Streamcore SAS - All rights reserved

	Template name	Description
Category report templates	Application	This report presents the usage and performance of the application for the set of sites
	Network	This report presents the WAN usage for the set of sites: overall volume, volume breakdown between sites and between applications, most loaded sites.
	VoIP/Video	This report presents the usage and performance of the VoIP/Videoconferencing traffic for the set of sites
Site report templates	Application - Data Center	This report presents the application usage and performance for all sites accessing the Data Center
	Application - Branch Office	This report presents the application usage and performance
	Network - Data Center	This report presents the usage and performance of the Data Center WAN access: most consuming sites or applications, average and peak throughput or usage throughput of the access links…
	Network - Branch Office	This report presents the usage and performance of the site WAN access: most consuming applications, average throughput and usage throughput of the access link…
	Standard	This report presents the usage and performance of the WAN access link, and a selection of applications.
	VoIP/Video	This report presents the VoIP/videoconferencing usage and performance

These templates can be modified or re-created. Export/import as well as copy/paste operations can be performed. Brand new templates can be also created.

17 ADD A PREDEFINED TEMPLATE

If a predefined template has been deleted, or modified, it is possible to create a new predefined template with the default parameters:

1. Select **MANAGEMENT TOOLS > Site report templates** or **Category report templates**
2. Right click on the object: in the pop-up menu, choose **Add** > **Predefined template**
3. Select the predefined template to be created.

18 ADD A NEW TEMPLATE

To add a new template:

1. Select **MANAGEMENT TOOLS > Site report templates** or **Category report templates**
2. Right click on the object: in the pop-up menu, choose **Add** > **New template**
3. Follow these steps:

1	Select the report language and format.
2	Select the summary tables and graphs per object to be included in the report

	Wizard	Step1: format	Step2: information selection

2021 Streamcore SAS - All rights reserved

Category report template	Category report – Template	See 3.4.1	See 4.2.2.4
Site report template	Site report – Template		see 4.2.2.5

19 MODIFY

To modify an existing template report (format, information selection), follow these steps:

1. Right-click on the template report in the tree and select **Modify**

   OR

   Select the template report in the tree, select the ***Define*** tab, and click on the **Modify** button
2. The "Define" wizard will be started, with the value defined for the report. Follow all steps, and perform changes till the end of the wizard.

20 DELETE

To delete any kind of report, follow these steps:

1. Right-click on the report in the tree and select **Delete**

   OR
2. Select the report in the tree, select the ***Define*** tab, and click on the **Delete** button

21 IMPORT/EXPORT

Export

Category or site report templates can be exported directly through the Graphical User Interface by clicking in the "Export" button when displaying a report template, or by following these steps:

1. Select the template report in the tree, select the ***Define*** tab
2. Click on "Export" button: it will launch automatically the file download.

Import

Category or site report templates can be imported directly through the Graphical User Interface by following these steps:

1. Click on **MANAGEMENT TOOLS > Category report templates** or **Site report templates**, and select the Import tab.
2. Enter the template name
3. Browse and select the path to the template file to be imported
4. Click on the **Import file** button

22 COPY/PASTE

To copy/paste a report template, follow these steps:

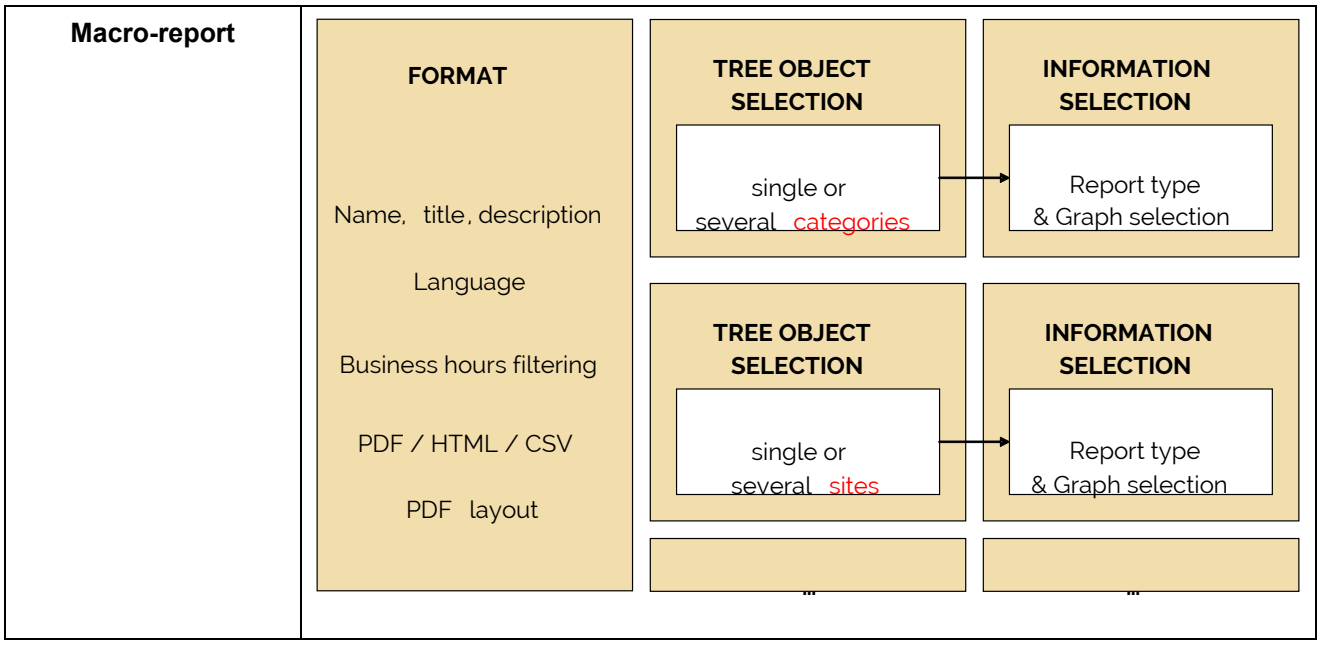
1. Right-click on the template report in the tree and select **Copy**
2. Right click on **MANAGEMENT TOOLS > Category report templates** or **Site report templates** in the tree and select **Paste**.

2021 Streamcore SAS - All rights reserved

4.3 SERVICES - MACRO-REPORT

4.3.1 Introduction

A macro-report is kind of a "sub-reports container" and allows to mix different types of standard reports with a common format (for instance within a single PDF file):



4.3.2 Parameters

Format

A summary of the macro-report format parameters can be displayed by clicking on the Parameters tab.

Sub-report parameters

The parameters of each sub-report (tree object selection, information selection) can be displayed by clicking on the Parameters tab.

4.3.3 Add/Modify/Delete/Move Operations

23 ADD

Add a macro-report

The creation wizard can be launched on any objects within the **SERVICES**.

1. Select the **SERVICES> *XX*** object
2. Right click on the object: in the pop-up menu, choose **Add** > **Macro-report**
3. Fill the **Format** definition screen (title, name, PDF/CSV…), described in 3.4.1

Add a sub-report

1. Once the Macro-report is created, any report creation wizard can be launched within a Macro-report. Right click on the Macro-report object: in the pop-up menu, choose **Add** > **wizard name**
2. The same wizard options as for standard report creation will be offered depending on the Macro-report location (the Format definition steps will of course be bypassed).

24 MODIFY

2021 Streamcore SAS - All rights reserved

Macro-report format update

To modify an existing macro-report format, follow these steps:

1. Right-click on the macro-report in the tree and select **Modify**
   OR
   Select the macro-report in the tree, select the ***Define*** tab, and click on the **Modify** button
2. Perform changes and Submit.

Sub-report update

For each report included in the macro-report, the Information selection can be updated, exactly as for a standard report.

25 DELETE

To delete a macro-report or a sub-report, follow these steps:

1. Right-click on the report in the tree and select **Delete**
   OR
2. Select the report in the tree, select the ***Define*** tab, and click on the **Delete** button

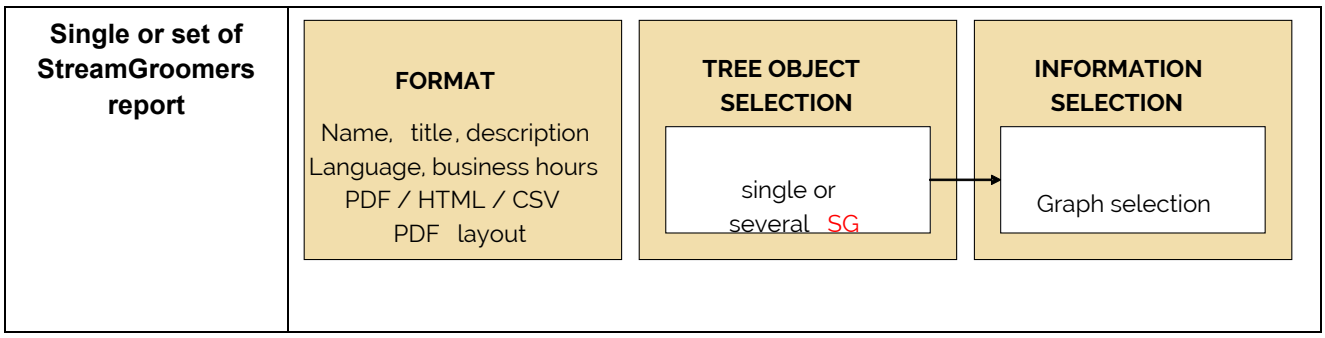
26 MOVE

The order of the sub-report when scheduling the macro-report can be changed: right-click on the sub-report in the tree and select **Move up/down.**

4.4 STREAMGROOMERS REPORT

4.4.1 Introduction

A Single or set of StreamGroomers report provides detailed information for a selection of StreamGroomers:



4.4.2 Parameters

27 SUMMARY

A summary of StreamGroomers report parameters can be displayed by clicking on the Parameters tab:

2021 Streamcore SAS - All rights reserved

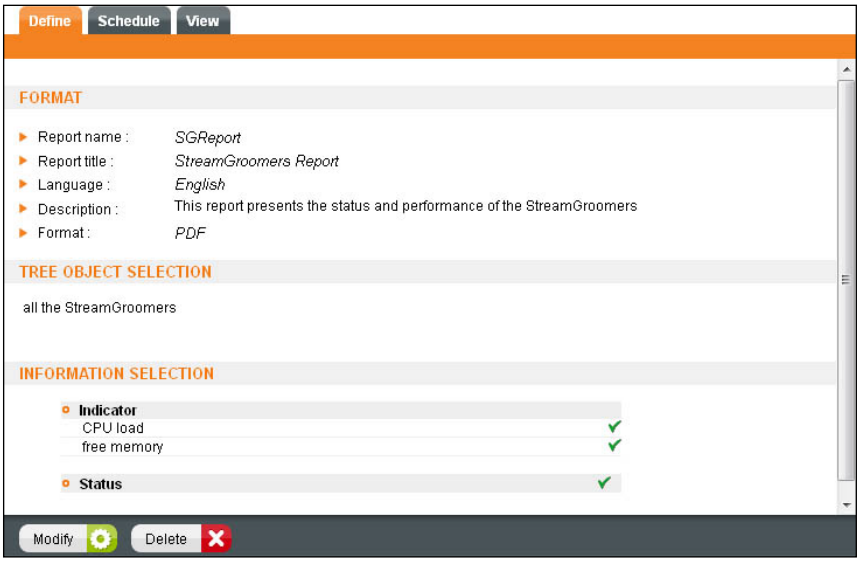


Figure 15 – StreamGroomers report summary

28 STREAMGROOMERS SELECTION

For a report on a set of StreamGroomers, the options to select the StreamGroomers are:

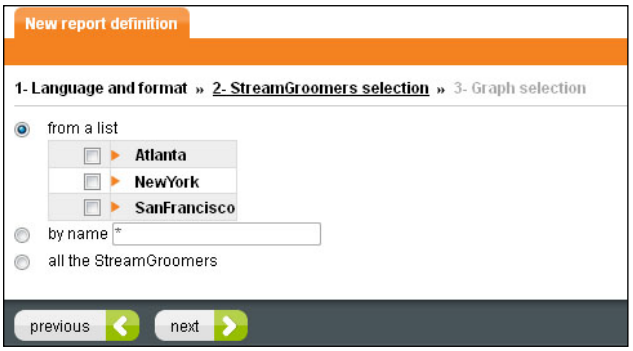


Figure 16 – StreamGroomer selection

Parameter	Description / Values
From a list	To select manually a set of StreamGroomers
Name criteria	To select a StreamGroomer by its exact name, or you can select a group of StreamGroomers with partially similar names. Simply enter the common part of the name followed by the wildcard character: *
All StreamGroomers	To select all StreamGroomers

29 INFORMATION SELECTION

The information selection for a StreamGroomer report is performed as follows:

2021 Streamcore SAS - All rights reserved

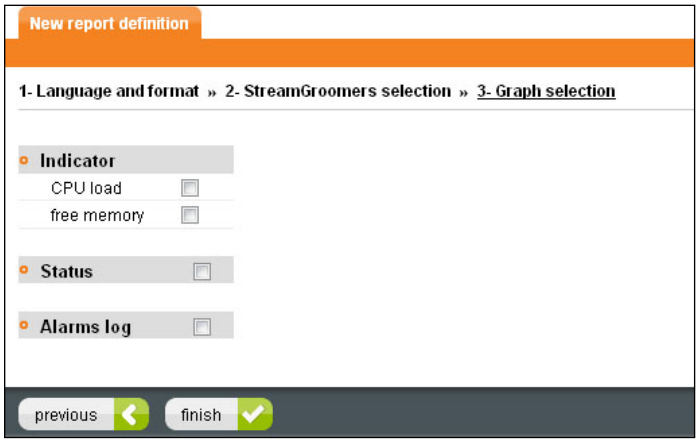


Figure 17 – StreamGroomer information selection

Parameter	Description / Values
Indicator	Time graph presenting the CPU load or memory
Status	You can track the status of the StreamGroomers back to the date the report was generated. The following status values are possible: • - Unreachable • - Boot • - Optimization, or Monitoring, or Bypass, since *YYYY/MM/DD HH:MM*, version XX
Alarms log	To view the 30 most recent alarms triggered for the selected StreamGroomers

4.4.3 Add/Modify/Delete Operations

30 ADD

1. Select the **StreamGroomers** object
2. Right click on the object: in the pop-up menu, choose **Add** > **Report**
3. Follow these steps:

1	Select the report language and format
2	Select the StreamGroomers
3	Select the information per SG

Depending on the object location, different wizard options will be offered:

	Wizard	Step 1: format	Step2: tree object selection	Step3: information selection
StreamGroomers object	Set of StreamGroomers report	See 3.4.1	See 4.4.2.1	See 4.4.2.3
StreamGroomer xx object	StreamGroomer report		-	See 4.4.2.3

2021 Streamcore SAS - All rights reserved

31 MODIFY

To modify an existing report (format, StreamGroomers and information selection), follow these steps:

1. Right-click on the report in the tree and select **Modify**
2. The "Define" wizard will be started, with the value defined for the report. Follow all steps, and perform changes till the end of the wizard.

32 DELETE

To delete any kind of report, follow these steps:

1. Right-click on the report in the tree and select **Delete**

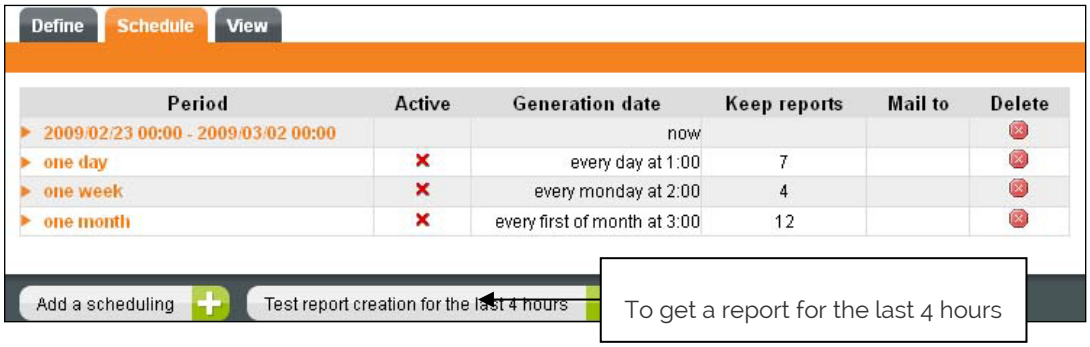
   OR
2. Select the report in the tree, select the ***Define*** tab, and click on the **Delete** button

4.5 SCHEDULE REPORTS

4.6 INTRODUCTION

A schedule defines the report frequency and the dates it should be generated, as well as an (optional) list of email recipients. If no recipients are defined, then the reports will be available exclusively via the **View** tab.

The **Schedule** tab provides a summary of the configured scheduling for a report:



To add a scheduling, simply click the "Add a scheduling" button.

4.7 PARAMETERS

The scheduling parameters are:

2021 Streamcore SAS - All rights reserved

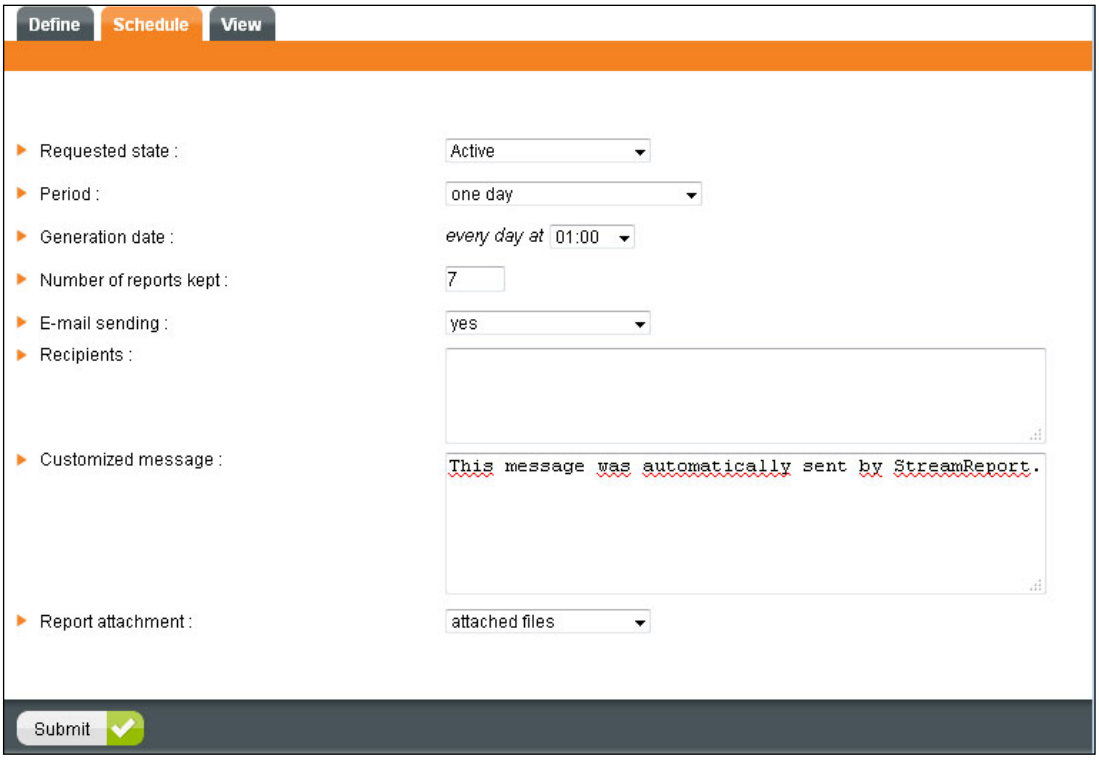


Figure 18 – Scheduling parameters

Parameter	Description / Values
Status	By default a scheduler is enabled. However, you can disable it and thus cancel the report generation and transmission.
Period	The scheduling can be launched with various frequencies: • monthly • weekly • daily • custom
Generation date	Depending on the selected period (generate the first day of the month, every week on the first day of the week, etc.), the hour of report generation can be selected.
Number of reports kept	Enter the number of reports that are stored on the StreamGroomer Manager.
E-mail sending	Defined whether the report should be sent or not by email
Recipients	Each generated report is sent to a list of recipients. This list must have the following format: a carriage return after each recipient's name.
Customized message (e-mail)	Customize the text message sent within the email body
Report attachment	Attach files or provide a URL link redirecting to the SGM

Note: To send reports by email, the mail server defined in SGMconf must accept to relay email from the SGM without authentication.

2021 Streamcore SAS - All rights reserved

4.7.1 Add/Modify/Delete Operations

33 ADD

1. Select the **Report** object
2. Click on the Schedule Tab, and "Add" button
3. Enter the parameters and click on the “Submit” button.

34 MODIFY

1. Select the **Report** object
2. Click on the Schedule Tab, and the Scheduling object to update
3. Enter the parameters and click on the "Submit" button.

Note: You cannot directly change the report generation frequency once you have created a schedule. To change the frequency, you must define a new schedule and delete the old one.

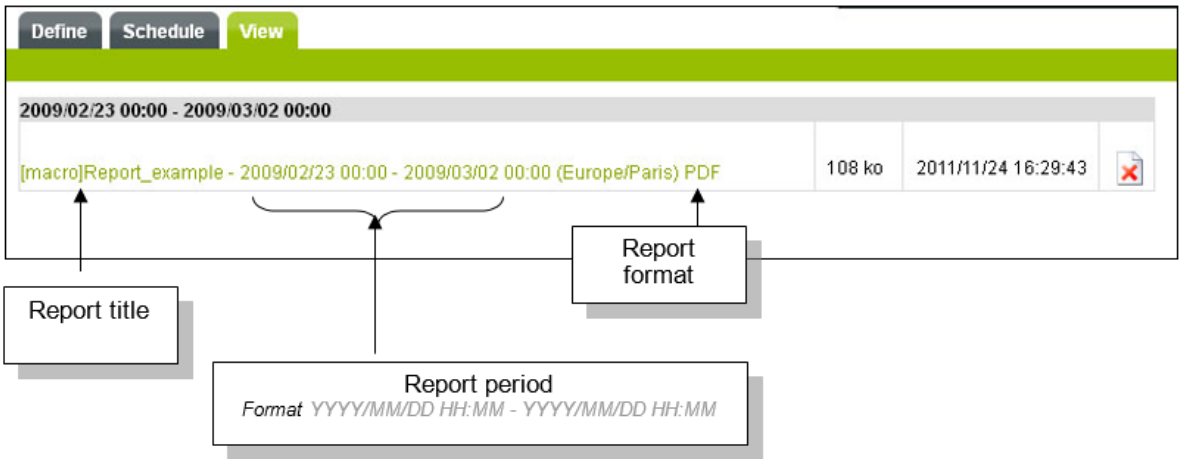
35 DELETE

1. Select the **Report** object
2. Click on the Schedule Tab, and click on the “Delete” button.

5 View Reports

A certain number of reports are kept on the StreamGroomer Manager: you can view them directly in the StreamReport **View** tab.

The visualization page displays all the reports available on the SGM.



Click the link; the report is displayed:

- In the browser window (*pdf format*)
- By executing a utility such as WinZip (*HTML, xml, csv formats*)

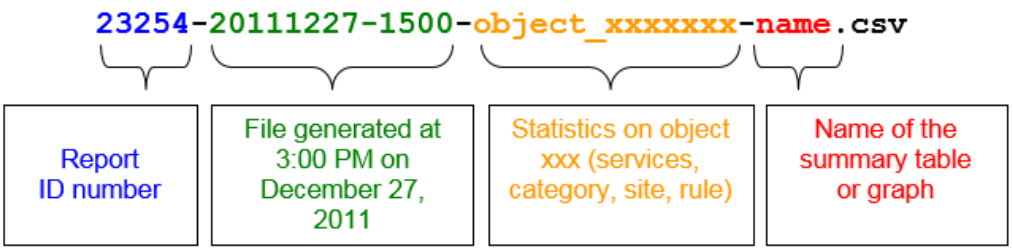
2021 Streamcore SAS - All rights reserved

6 Appendix: CSV/XML format

6.1 OVERVIEW

When a report is created in csv/xml format, StreamReport generates a zip file containing the various csv/xml files:

- **Services dashboard report**: a summary file for each summary table.
- **Category and site reports**: a summary file for each summary table and a detailed file for each graph, so that you can plot graphs using external tools.
- The naming convention for each file is the following:



6.2 SUMMARY TABLE FILE

File contents are presented in the following format:

← List of Categories, sites or rules

SUMMARY TABLE FILE	
HEADER	
`# base = ww`	Database name
`# title = ww`	Summary table name
`# name = ww`	Internal summary table name (*used in the file name*)
`# object = ww`	Possible values: Services, Category xx, Site xxx
`# start = 1234567890`	Start date, in number of seconds since January 1, 1970
`# end = 1234567890`	End date, in number of seconds since January 1, 1970
`# seconds = 12345`	Number of seconds in the period
CONTENTS	
`name;composA1;composA2;composB;composC1;composC2`	*First line* Name; Names of each indicator's components

`Val1_object;name_1;val1A1;val1A2;val1B;val1C1`
`Val2_object;name_2;val2A1;val2A2;val2B;val2C1`
…
	Following lines
	Corresponding values

Sample file opened with Excel:

2021 Streamcore SAS - All rights reserved

← List of Categories

# base = demostats2			
# title = Network summary			
# name = categories&rootCat=17860?network			
# object = services			
# start = 1235343600			
# end = 1235948400			
# seconds = 604800			
name	volumeLtoR	volumeRtoL	
Africa	957.01 MB	2.7 GB	
America-Central	0B	0B	
America-North	159.48 GB	127.89 GB	
_Canada	621.9 MB	1.88 GB	
_Mexico	80.35 MB	1.94 MB	
_USA Central	7.95 GB	33.64 GB	
_USA East	144.27 GB	72.06 GB	
_USA West	6.55 GB	20.31 GB	

Note: To obtain a correct page layout when the file is opened using Microsoft Excel, you may need to launch the application and then open the file using the **File > Open (Ctrl + O)** command.

Note: The decimal symbol used (dot or comma) in the csv file is defined in the SGMConf system page.

2021 Streamcore SAS - All rights reserved

6.3 GRAPH FILE

Graph file (time)

File contents are presented in the following format:

GRAPH FILE (TIME)	
HEADER	
`# base = ww`	Database name
`# title = ww`	Indicator name
`# name = ww`	Internal indicator name (*used in file name*)
`# object = ww`	Possible values: category, site or rule number, in xx xxxx format
`# start = 1234567890`	Start date, in number of seconds since January 1, 1970
`# end = 1234567890`	End date, in number of seconds since January 1, 1970
`# seconds = 12345`	Number of seconds in the period
`# params = ww`	Optional parameters such as traffic direction (LtoR, RtoL), display type (percent, time), top traffic level (leaf:1)
CONTENTS	
`Date ; compos1 ; compos2`	*First line: Statistics legend* Date in "YYYY-MM-DD HH:MM" format; Names of the indicator's components

← List of dates
`"val1_date";"val1_compos1";"val1_compos2"`
`"val2_date";"val2_compos1";"val2_compos2"`
…
	Following lines
	Corresponding values

Sample file opened with Excel:

← List of dates

# base = ma base			
# title = débit moyen			
# name = avgRate			
# object = rule 12 2009			
# start = 1131922800			
# end = 1132009200			
# seconds = 86400			
date	rateLtoR	rateRtoL	
14/11/2005 01:00	5780,0	4524,6	
14/11/2005 03:00	5391,0	4157,4	
14/11/2005 05:00	5827,5	4544,1	
14/11/2005 07:00	5707,5	4440,9	
14/11/2005 09:00	10269,2	36070,5	
14/11/2005 11:00	14387,2	38973,2	
14/11/2005 13:00	31080,8	75405,8	
14/11/2005 15:00	22739,3	56548,8	
14/11/2005 17:00	12041,2	72184,2	
14/11/2005 19:00	15957,2	112569,9	
14/11/2005 21:00	18956,1	136385,9	
14/11/2005 23:00	9026,7	100147,6	

Note: To obtain a correct page layout when the file is opened using Microsoft Excel, you may need to launch the application and then open the file using the File > Open (Ctrl + O) command.

Note: The decimal symbol used (dot or comma) in the csv file is defined in the SGMConf system page.

2021 Streamcore SAS - All rights reserved

Graph file (% or bar graph)

File contents are presented in the following format:

GRAPH FILE (% OR BAR GRAPH)	
HEADER	
`# base = ww`	Database name
`# title = ww`	Indicator name
`# name = ww`	Internal indicator name (*used in file name*)
`# object = ww`	Possible values: category, site or rule number, in xx xxxx format
`# start = 1234567890`	Start date, in number of seconds since January 1, 1970
`# end = 1234567890`	End date, in number of seconds since January 1, 1970
`# seconds = 12345`	Number of seconds in the period
`# params = ww`	Optional parameters such as traffic direction (LtoR, RtoL), display type (percent, time), top traffic level (leaf:1)
CONTENTS	
`name;composA1;composA2;composB;composC1;composC2`	*First line* Graph name; Names of each indicator's components

`Val1_object;name_1;val1A1;val1A2;val1B;val1C1`
`Val2_object;name_2;val2A1;val2A2;val2B;val2C1`
…
	Following lines
	Corresponding values

← List of rules,

7 → *Indicators*

2021 Streamcore SAS - All rights reserved