SCO_GUIDE_ENV63_R2

2021 Streamcore SAS - All rights reserved

Table des matières

1. Introduction 4

1.1. What is StreamGroomer Manager (SGM)? 4

1.2. The SGMconf Application 5

1.2.1. Administrating StreamGroomer Manager (SGM) 5

2. Initial Configuration of the SGM IP Address 5

3. Getting Started with SGMconf 6

3.1. Accessing the Application 6

3.2. User Session – Anonymously or Password Protected 7

3.3. Supported Interface Languages 8

4. SGMconf Features 9

4.1. Consulting the Documentation 9

4.2. Managing the System/Server 10

4.2.1. Overview 10
4.2.2. Network Settings 10
4.2.3. Security Settings 12
4.2.4. SNMP Settings 12
4.2.5. SGM Backup Settings 14
4.2.6. RADIUS Settings 18
4.2.7. LDAP Settings 18
4.2.8. Mail 20
4.2.9. Netflow Collector 21
4.2.10. Time 21
4.2.11. Alarms Settings 23
4.2.12. Personalization Settings 25
4.2.13. SGM Maintenance 27
4.2.14. Licenses 28

5. Managing the Software Suites and the SGMconf Version 29

5.1.1. Overview 29
5.1.2. Installing Software 30
5.1.3. Deleting Software 31

6. Managing Databases 32

6.1.1. Overview 32
6.1.2. List of Databases and Choice of Statistics 32
6.1.3. Creating a Database 33
6.1.4. Deleting a Database 34
6.1.5. Saving a Database 34
6.1.6. Restoring a Database 35
6.1.7. Access to Archives 36
6.1.8. FTP Backup 37

7. Installing Widgets 39

2021 Streamcore SAS - All rights reserved

7.1.1. Windows Vista / 7 Widgets 40
7.1.2. iGoogle / Netvibes Widgets 41
7.1.3. Widgets Usage and Recommendation 43

2021 Streamcore SAS - All rights reserved

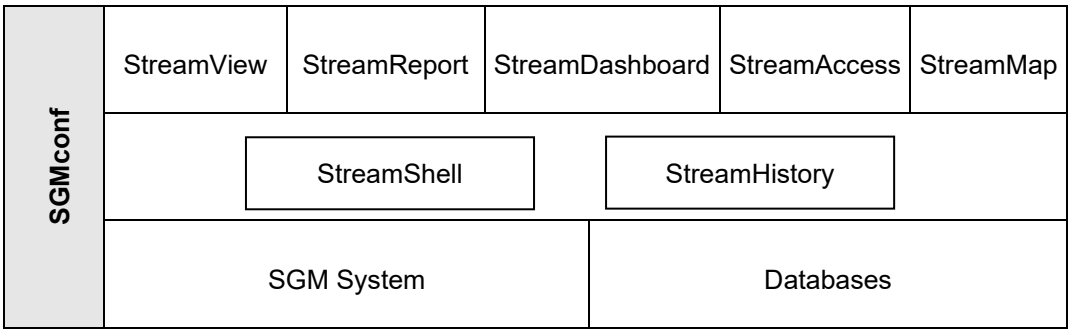
1. Introduction

1.1. WHAT IS 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:



1. Figure 1 – List of software in SGM

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 SGMCONF APPLICATION

1.2.1. Administrating StreamGroomer Manager (SGM)

Updating software and databases are done using the Streamcore application SGMconf**.** It is accessed via HTTP or HTTPS, using a standard Web browser. The following guide presents instructions on how to use the application.

The functions available permit users to:

- Access online documentation
- Modify the "SGM System":
    - Manage SGM backups
    - Update parameters and SGM server security
    - Customize the welcome page and logo used by applications
    - Access maintenance information and manage license upgrades
- Update SGMconf and Manage StreamGroomer Software Suites (SGSS) which consists of all SGM applications:
    - StreamView
    - StreamReport
    - StreamDashboard
    - StreamAccess
    - StreamMap
    - SGM middleware (StreamShell, StreamHistory)
    - Other embedded software used by StreamGroomers
- Manage configuration of StreamGroomers as well as statistic databases. Management tasks include the creation, deletion, backup and the recovery of databases.

2. Initial Configuration of the SGM IP Address

When an SGM is delivered, its IP address must be configured before it can be used. There are two ways of opening the configuration screen:

1. **by connecting a screen, keyboard and mouse:**

   After start-up, an SGM display is in text mode: enter the login "**sgmconf**" to activate the graphic mode. Subsequently the SGMconf application automatically launches.

2. **via the network interface:**

   It is possible to connect a computer directly to SGM's GigaEthernet interface using a crossover cable. This computer's network interface then has to be configured in the same subnetwork as the SGM, and a browser (Internet Explorer for example) has to be started up from the following URL address: **http://<@IP-SGM>/sgmconf.** The SGM is delivered within the following IP address range: 172.16.0.150/24 to 172.16.0.159/24.

From the SGMConf welcome page, enter the login "cli" with the password "cli", then click on "System" to open the SGM configuration screen.

2021 Streamcore SAS - All rights reserved

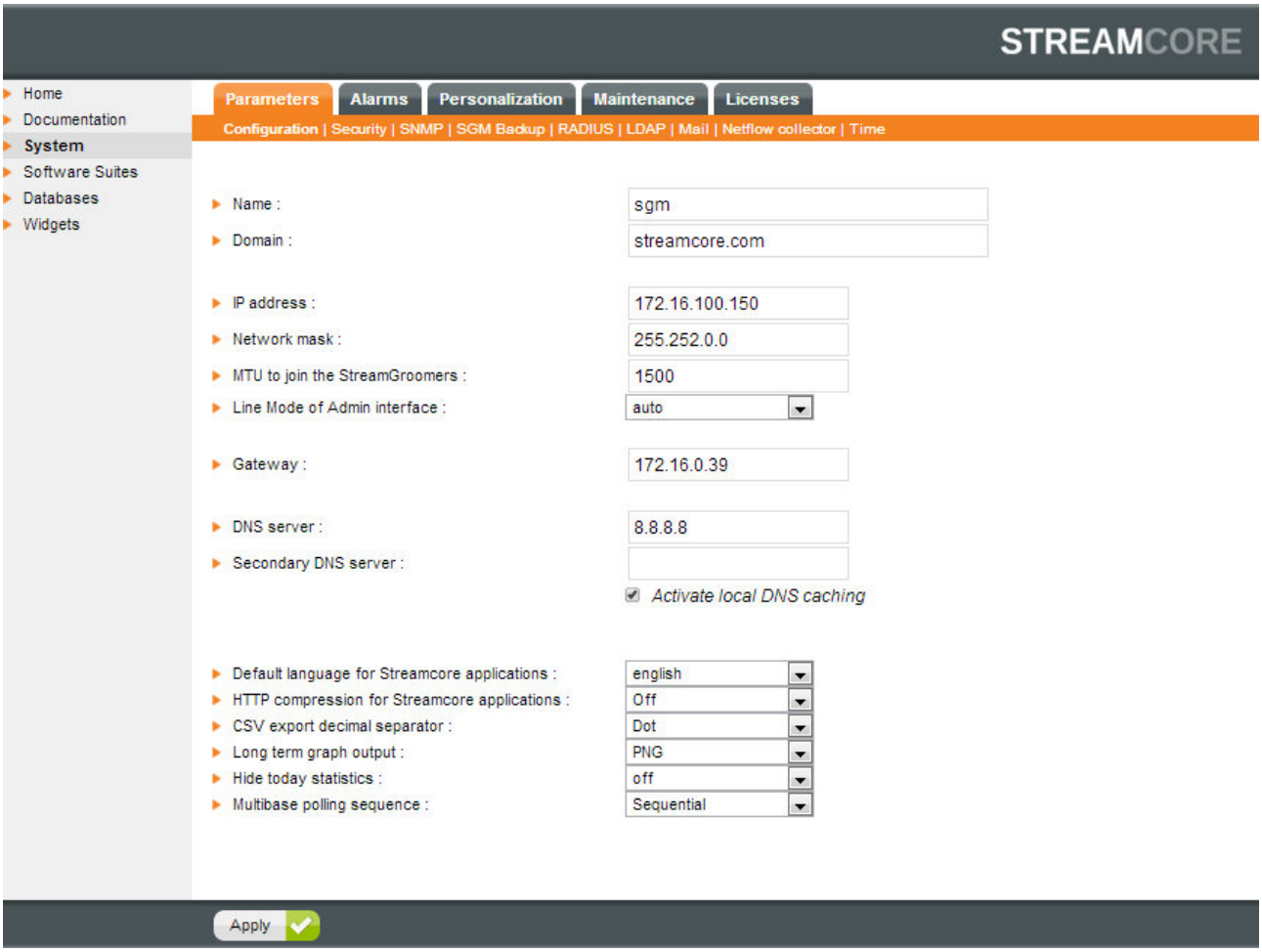


Figure 2: SGM Settings

After entering the IP address, network mask and default gateway, click **Apply**. All modifications are dynamically applied. The SGM can now connect to your company's network.

3. Getting Started with SGMconf

3.1. ACCESSING THE APPLICATION

The SGM is accessible from any computer on a network once the IP address has been configured and the server positioned on the LAN. To access a configured SGM:

- Open a browser.
- Enter the URL: **http://<@IP-SGM>/sgmconf/** in which **<@IP-SGM>** is the SGM IP address (the name attributed by the DNS can also be used).

  Note: By replacing "http" with "https" in the URL above, the connection between the browser and the SGM is secure.

2021 Streamcore SAS - All rights reserved

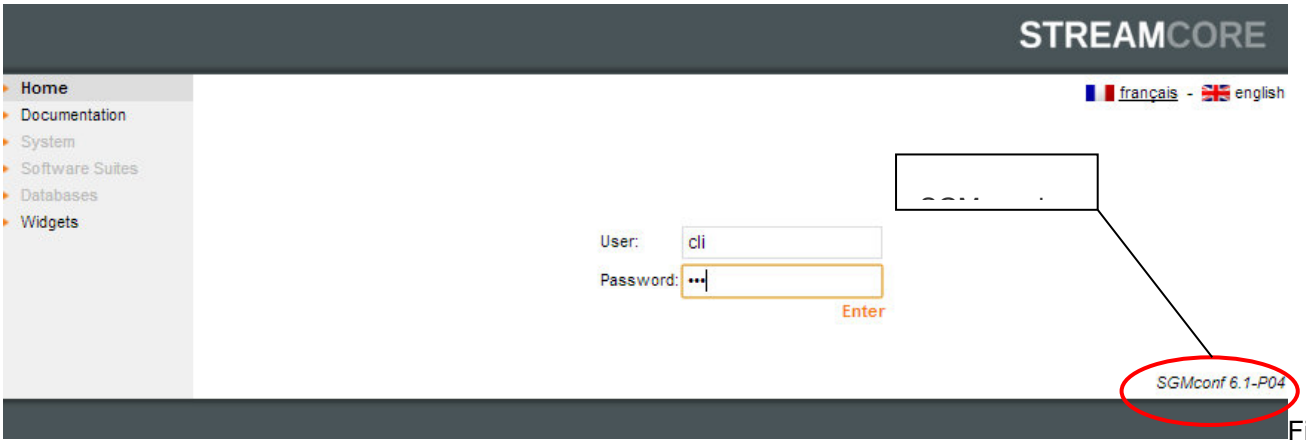


Figure 3 – SGMconf Homepage

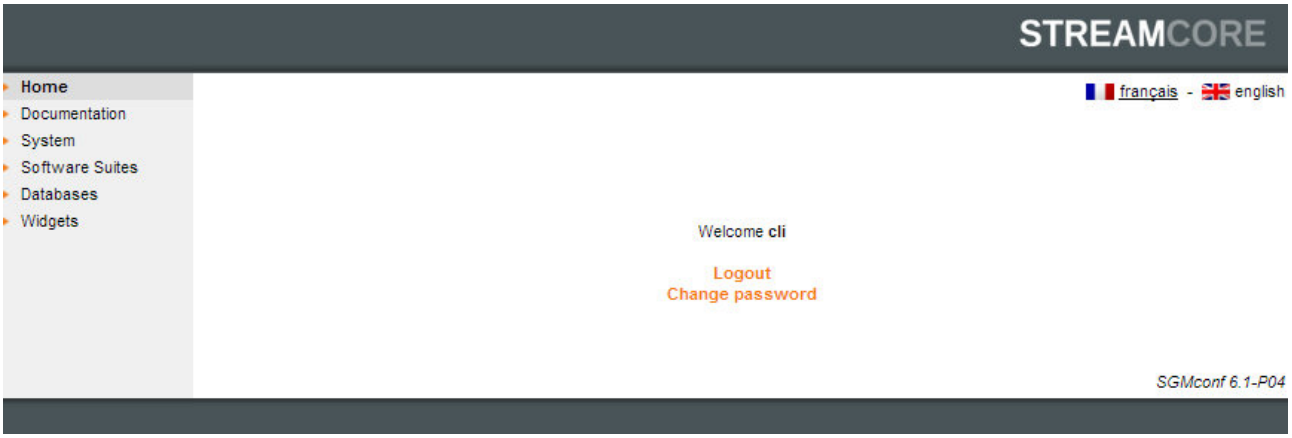
3.2. USER SESSION – ANONYMOUSLY OR PASSWORD PROTECTED

There are two ways of using SGM:

- **Anonymously:** access is given to consult documentation only, other actions cannot be accessed (menu options are greyed-out).
- **User and Password:** by identifying yourself using one of the user names stored in the application.
  - **cli** (default password **cli**). This user has unlimited (administrator) rights and has the ability to read all available documentation as well as perform any action.

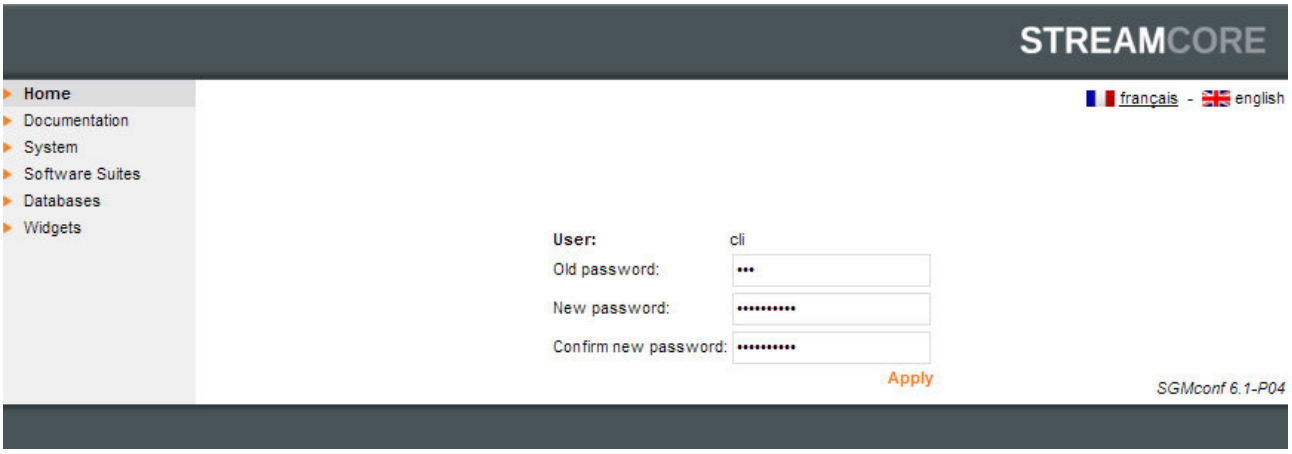
User login credentials described above are related only to a SGMconf session and not to logins used for the StreamView / StreamReport / StreamDashboard / StreamAccess / StreamMap applications.

2021 Streamcore SAS - All rights reserved



To change the "cli" password click the "change password" texted displayed on the welcome page.

Important: A new password must not contain the following characters: `' " <space> / ! \ [ ] * $`



3.3. SUPPORTED INTERFACE LANGUAGES

SGMconf supports two languages, English (default) and French. To change to a French language interface, click the French flag icon displayed at the top right-hand corner of the homepage.

It is also possible to add the option "**?LANG=fr**" to the current URL from any screen. Conversely, to revert back to the default language; add the option "**?LANG=en**".

For example:

http://172.16.100.1xx/sgmconf/local/?LANG=fr

or http://172.16.100.1xx/sgmconf/local/?LANG=en

2021 Streamcore SAS - All rights reserved

4. SGMconf Features

4.1. CONSULTING THE DOCUMENTATION

SGMconf allows you to consult documentation online. When "Documentation" is selected from the displayed menu, the software searches for and displays all available documentation on the server. Each new software version is accompanied by a corresponding list of documentation. The following screenshot displays the documentation for version 6-1.P04.

To consult online documentation, click on the required document from the displayed list. A new browser window will open to display the document.

Note: If documents are downloaded, you may need to install a PDF reader on your local computer.

2021 Streamcore SAS - All rights reserved

4.2. MANAGING THE SYSTEM/SERVER

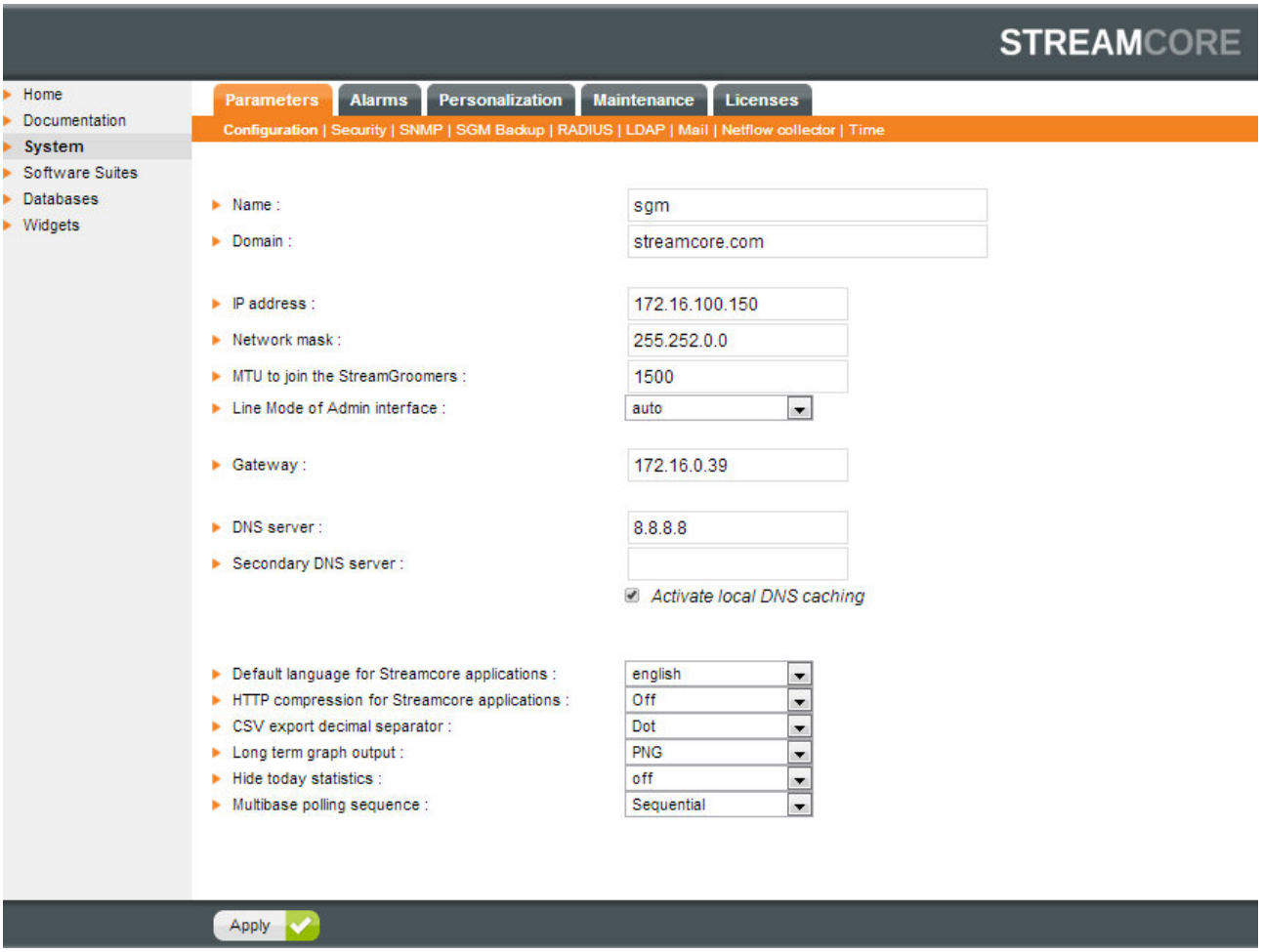
4.2.1. Overview

The functions offered, after selecting the "System" option, are used to:

- configure SGM server parameters (network, security, SNMP, SGM Backup, RADIUS, LDAP, time setting)
- manage alarms related to SGM performance
- customize SGM welcome page and logo
- access maintenance information
- manage licenses

4.2.2. Network Settings

The ***Parameters>Configuration*** tab enables SGM network settings.



2021 Streamcore SAS - All rights reserved

The following options are displayed on the configuration page; they enable settings to be modified and configured:

Name:	The host name that identifies the SGM server ([1])
Domain:	DNS domain name ([2])
IP address:	Local IP address of SGM server
Network mask:	Local IP mask identifying the local network
MTU:	Smallest MTU on the WAN to join a StreamGroomer
Line Mode of Ethernet Ports:	Mode and duplex of the SGM Ethernet Port
Gateway:	Address identifying the default router
DNS server:	Address identifying the DNS server (used by StreamView to display the names instead of IP addresses on some screens). By activating a local cache, you can speed up the DNS name translation.
Secondary DNS server:	Backup DNS server
Local DNS caching:	Activate a local caching of all DNS requests
Default language:	Language used when the applications StreamView / StreamReport / StreamDashboard / StreamAccess / StreamMap are started.
HTTP compression:	HTTP compression used or not automatically when the applications StreamView / StreamReport / StreamDashboard / StreamAccess are started.
CSV export decimal separator:	Decimal separator used in CSV files generated by StreamView or StreamReport applications.
Long term graph output:	Type of graph (Flash or PNG) generated by StreamView or StreamDashboard applications. Choose PNG for faster response or Flash to get information directly on the graph.
Hide today statistics:	On a backup configuration, it displays or not the period: "day->today" in long-term graphs.

Click **Apply** after changing any of the above settings. All changes are dynamically applied.

⚠ *When **changing SGM IP settings**, attention should be paid to the following points:*

- Remember to also change the IP address of the SGM in the StreamGroomers configurations.

- If the IP setting is changed remotely using another computer, it may become impossible to connect to the SGM: this is the case, for example, when the SGM is configured in a new sub-network.

([1]) The name must be made up of alphanumeric characters and start with a letter. The characters "_" and "-" are also authorized, unlike spaces (" ") or full stops (" . ")

([2]) Necessary in order to be able for the SGM to send requests to the DNS. The domain must be made up of alphanumeric characters and start with a letter. The characters "_", "-" and "."are also authorized, unlike spaces (" ")

2021 Streamcore SAS - All rights reserved

4.2.3. Security Settings

The ***Parameters>Security*** tab enables SGM security settings to be modified.

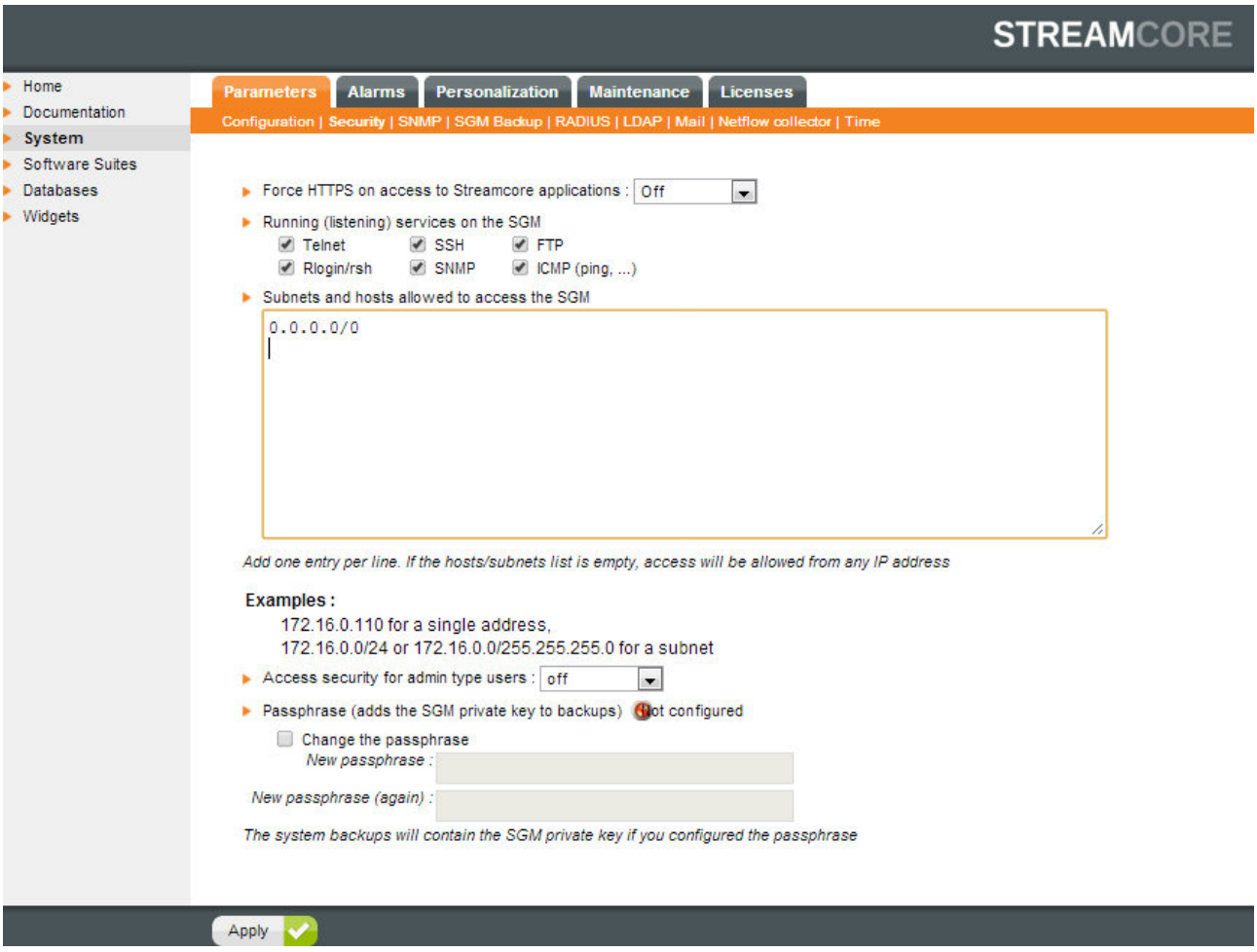


Figure 8 – Security

The security page enables the following settings to be displayed and modified:

HTTPS automated access:	HTTPS used or not automatically when the applications SGMConf / StreamView / StreamReport / StreamDashboard / StreamAccess / StreamMap are started.
Running (listening) services on the SGM:	It is possible to restrict access to services (listening) running on the SGM: Telnet, SSH, FTP, Rlogin/rsh (required for SGM-Backup), SNMP, and ICMP
Restricted access to the SGM:	It is possible to restrict the SGM access to specific hosts or subnets
Access security for admin:	Only one admin user can be connected to a database at a time
Passphrase:	When SSH communications is used between the SGM and SG, it is compulsory to configure a passphrase. Indeed, database backups will then include the SGM private RSA key (encrypted with the passphrase). When restoring the database on a new SGM, the passphrase will be required in order to decrypt the SGM private key.

Click **Apply** after changing any of the above settings. All changes are dynamically applied.

4.2.4. SNMP Settings

2021 Streamcore SAS - All rights reserved

The ***Parameters>SNMP*** tab enables SNMP parameters to be displayed, defined and modified:

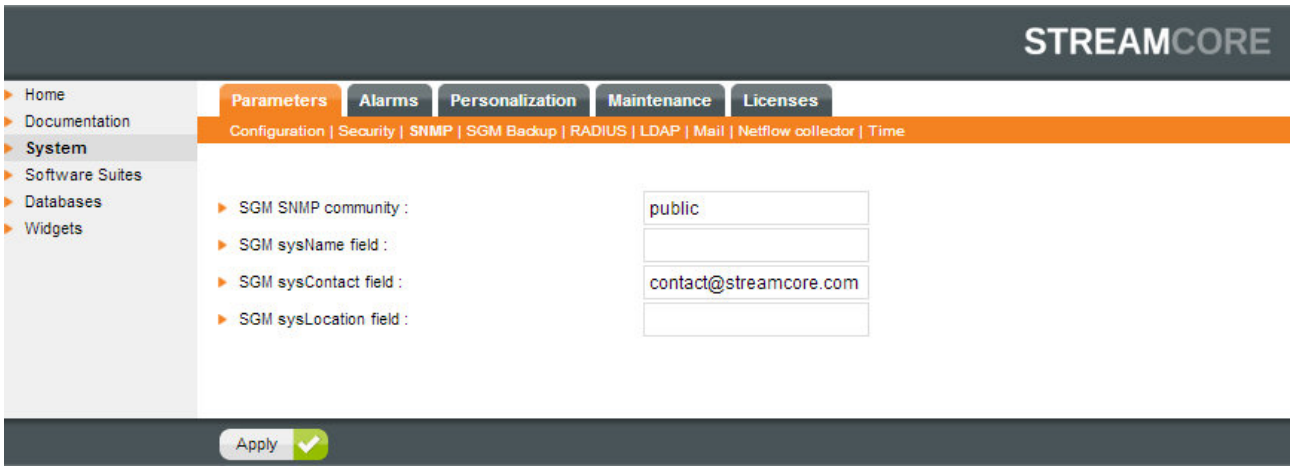


Figure 9 – SNMP Parameters

This SNMP page enables the following settings to be displayed, defined and modified:

SGM SNMP community: SNMP community used to poll SGM MIBs
SGM sysName Field: MIB II sysname information
SGM sysContact Field: MIB II syscontact information
SGM sysLocation Field: MIB II syslocation information

Click **Apply** after changing the above settings. All changes are dynamically applied.

SNMP usage is defined in the document "SNMP Polling and Trap Guide" which also includes details of the MIB STREAMCORE.

2021 Streamcore SAS - All rights reserved

4.2.5. SGM Backup Settings

Overview

This feature is only available for a 64 bit SGM (version S16 and above).

Both SGM's have to be in the same version.

Two SGM's can cooperate to provide high availability. One SGM operates as the active SGM, and the second SGM operates as the passive SGM. The SGM backup feature synchronises automatically from the active to the passive SGM:

- the configuration: in real-time, once a day, once a week or scheduled
- all statistics: once a day, once a week or scheduled

If the active SGM fails, an alarm is generated (by email, SNMP trap or syslog) and the administrator has to change manually the state of the passive SGM into active.

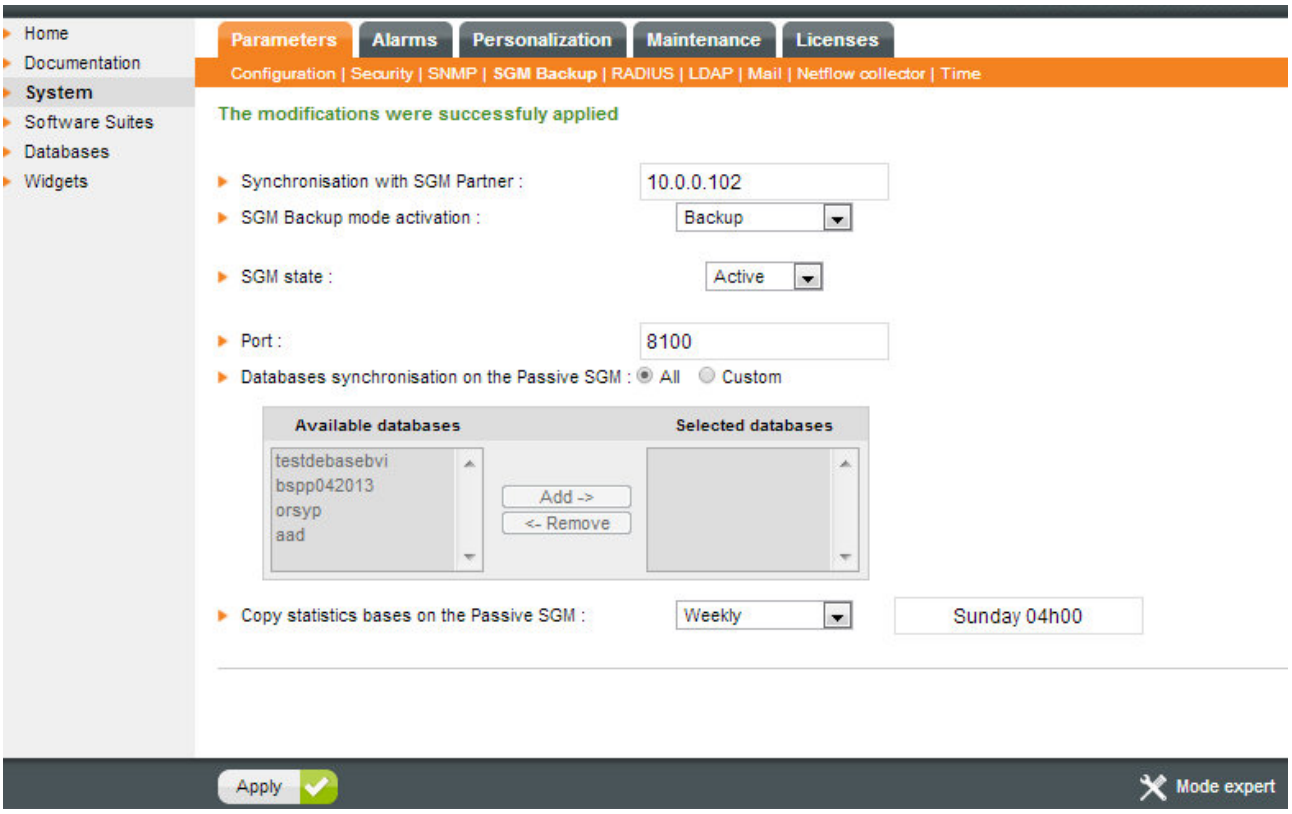


Figure 10 – View of an active SGM

Configuration

The configuration needs to be done on both SGM's, active and passive.

By default the backup daemon is disabled on a SGM. As a first step, enable it through the expert mode to have access to the configuration windows.

2021 Streamcore SAS - All rights reserved

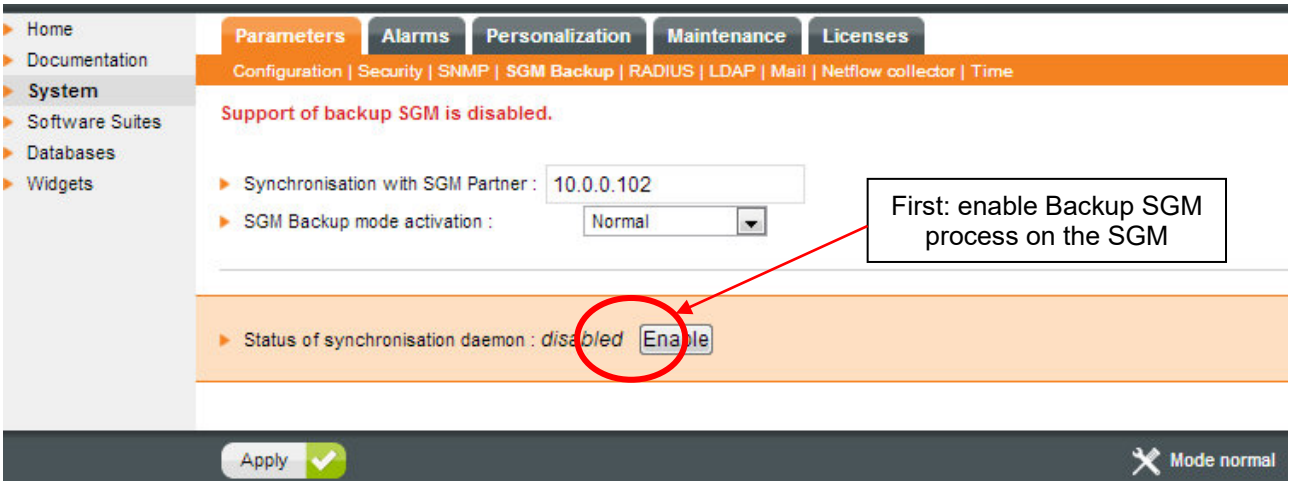


Figure 11 – Enable SGM Backup function

To activate the synchronisation, one SGM should be in "active" mode and the other in "passive" mode.

Active SGM configuration:

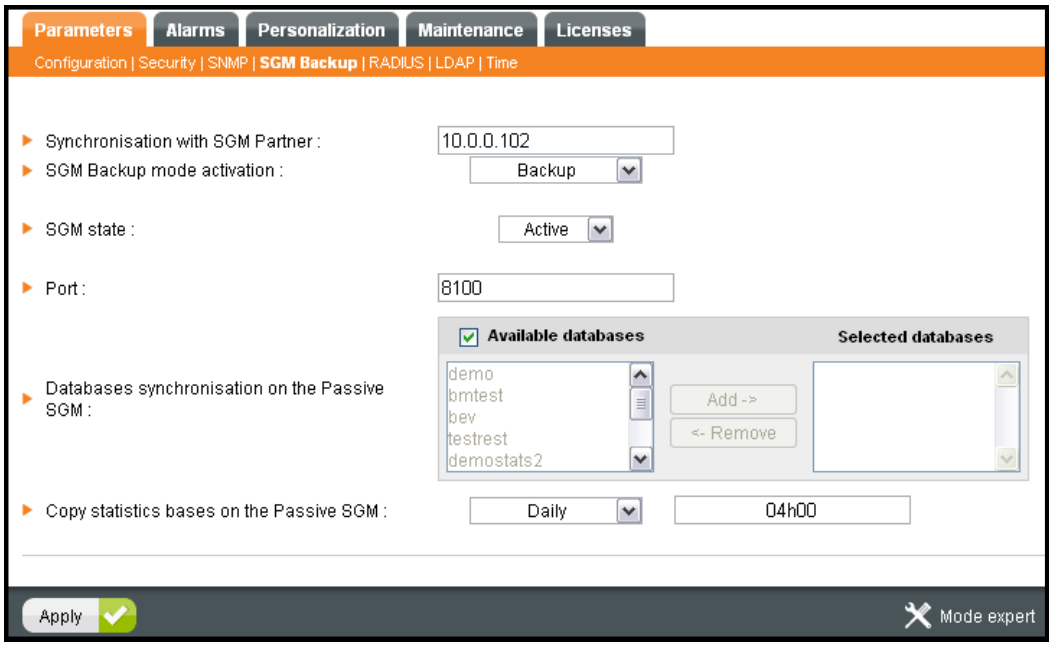


Figure 12 – Active SGM configuration

Synchronisation with SGM Partner:	Define the IP address of the SGM in backup mode
SGM Backup mode activation:	Choose the role of the SGM (active/passive)
Port:	Choose the TCP port used for backup information exchange
Database synchronisation…:	Choose the database which will be synchronised to the backup SGM. All available database are synchronised by default
Copy statistics bases…:	Choose the synchronisation frequency

If the real-time synchronisation is disabled, the synchronisation will be performed at the same time as for the statistics (daily, weekly or scheduled).

It is also possible to force synchronization. This is done by selecting the expert mode and then clicking the force synchronization button.

2021 Streamcore SAS - All rights reserved

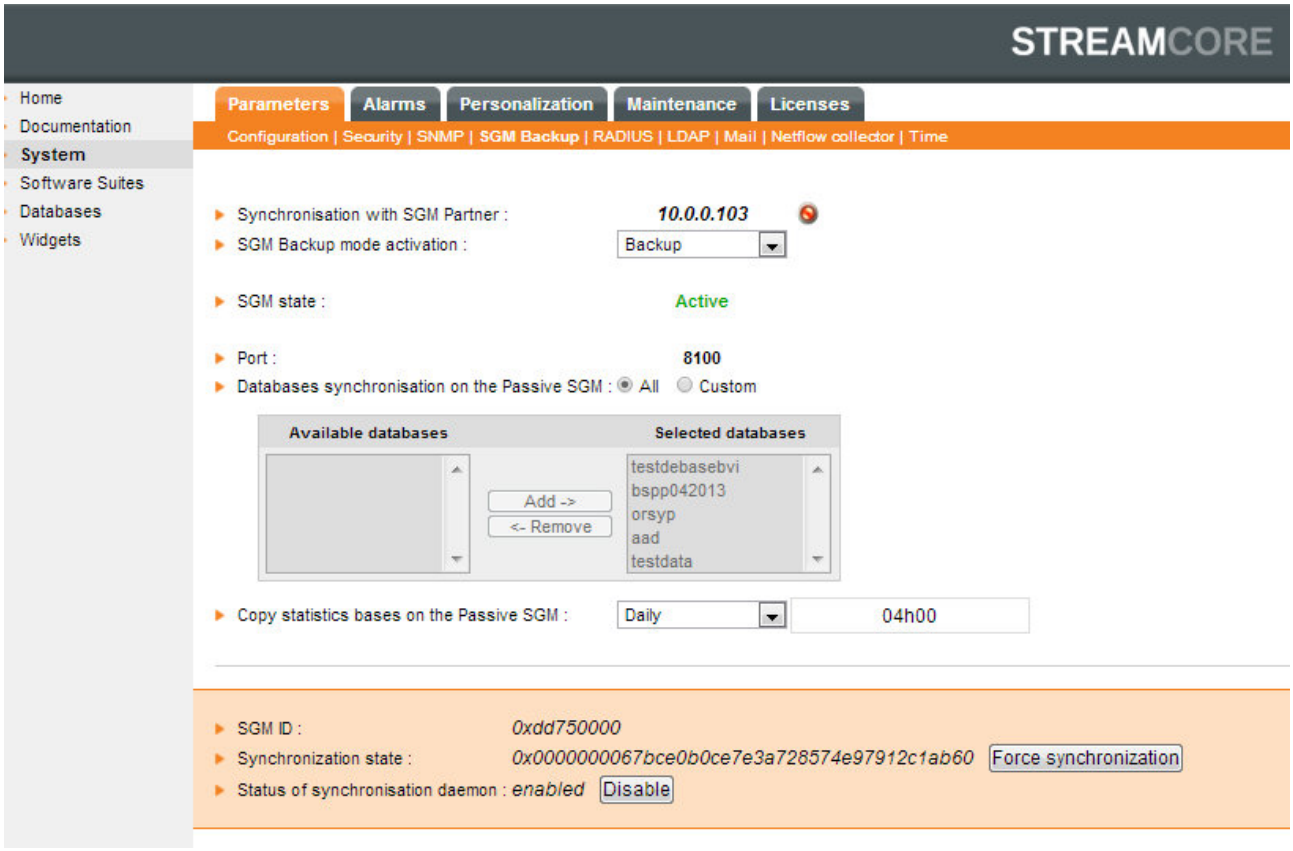


Figure 13 - Force Synchronization

Passive SGM configuration:

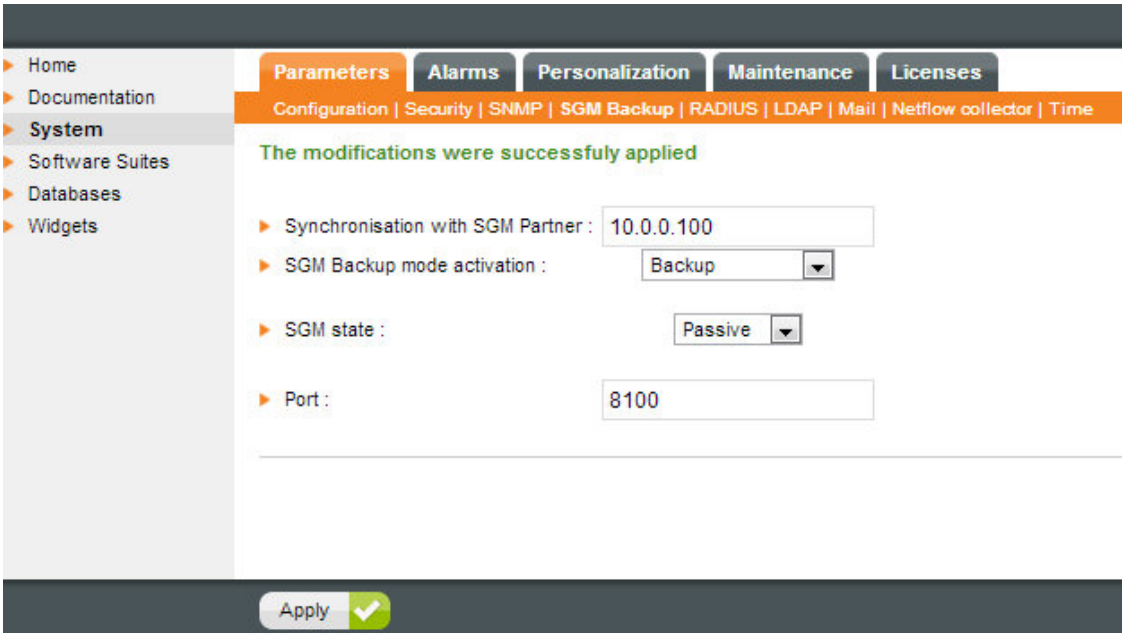


Figure 14 – Passive SGM Configuration

The passive SGM does not need specific configuration except the IP Address of the active SGM and the tcp port used for synchronisation.

The actions available on a passive SGM are restricted to:

2021 Streamcore SAS - All rights reserved

- Documentation
- System
- Software Suite (upgrade the SGM)

Changing a passive SGM state to Active

In case the active SGM fails, an alarm (email, SNMP trap or syslog) is automatically generated by the passive SGM (alarms must be configured). The administrator has then to connect to the passive SGM, and force it to become active.

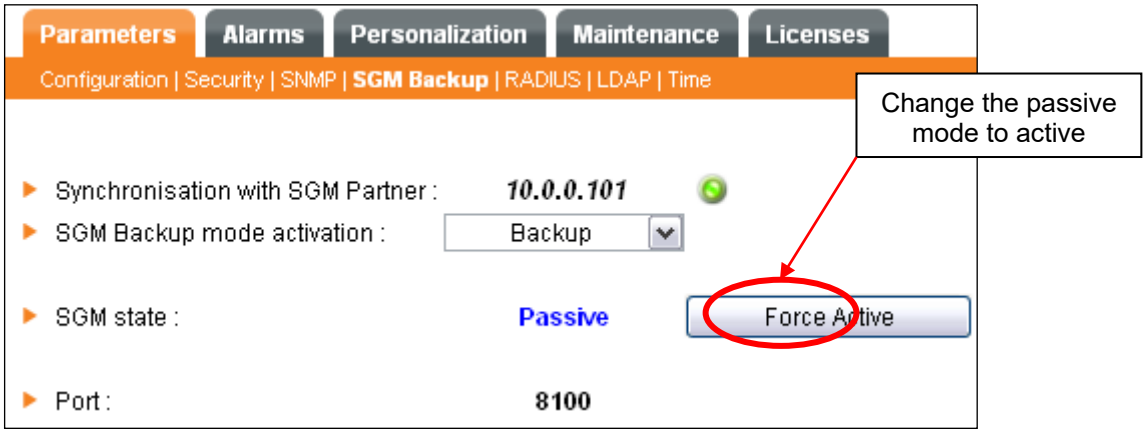


Figure 15 – Passive Mode Configuration Windows

There can only be one SGM in active mode at any one time. In the event of an active SGM becoming available again, both SGMs will be placed in "Standby" mode. The administrator will then have to choose and set the active SGM.

To choose the role between both standbys SGM, the administrator needs to force a standby SGM in active, and automatically, the other SGM will become passive.

When both SGMs are available, at the same time, the administrator can force the passive SGM to become active, and automatically, the previously active SGM will become passive.

SGM Backup state matrix

SGM state	Passive not synchronised	Active not synchronised	Passive synchronised	Active synchronised	Standby
StreamXXX access	NO	YES	NO	YES	NO
Statistics Polling	NO	YES	NO	YES	NO
Multi-Shaping Management	NO	YES	NO	YES	NO
Waiting for an admin action	NO	NO	NO	NO	YES
Conf and stat synchronisation	NO	YES	NO	YES	YES

The synchronisation between two SGM can be checked through the SGM Backup tab

2021 Streamcore SAS - All rights reserved

Important: *In order to run backup, the "Rlogin/rsh" option must be checked on the* ***Parameters>Security*** *tab*

4.2.6. RADIUS Settings

The ***Parameters>RADIUS*** tab enables parameters to be defined for RADIUS authentication. This can be used to manage user access rights to the StreamAccess application.

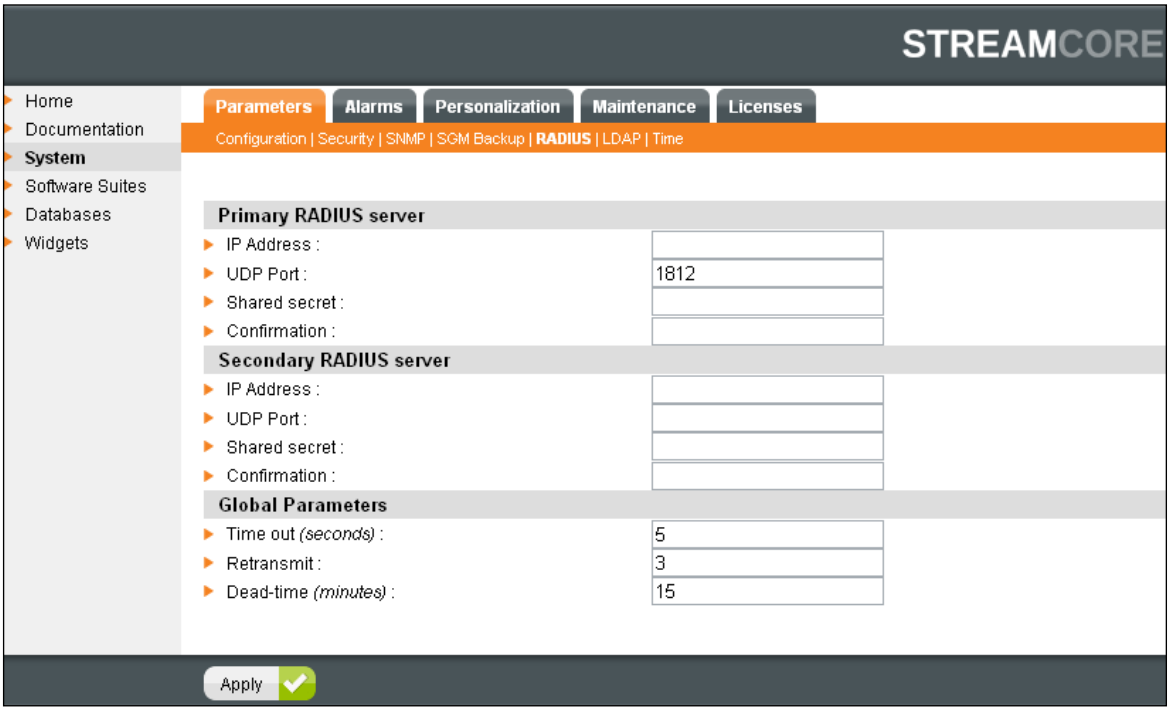


Figure 16 – RADIUS Parameters

This RADUIS page enables the following settings to be displayed and modified:

IP Address:	IP address of the RADIUS Server
UDP Port:	UDP port number used for authentication
Shared secret:	Secret key used to access the server. The same key must be configured on the RADIUS server
Confirmation:	Confirm the shared secret
Timeout:	Number of seconds the SGM waits for the server to respond
Retransmit:	Number of times that requests are retransmitted to a server before changing to local authentication
Dead-time:	If the server fails to respond to all retransmissions, number of minutes that the SGM waits before trying to access the server again.

4.2.7. LDAP Settings

The ***Parameters>LDAP*** tab allows LDAP authentication parameters to be defined. This can be used to manage user access rights to the StreamAccess application.

Two connection modes are available: Standard or Domain. The standard configuration can be used for every type of LDAP server, and the domain configuration can be used if a shortcut exists on the base to the base DN.

2021 Streamcore SAS - All rights reserved

STANDARD CONNECTION MODE

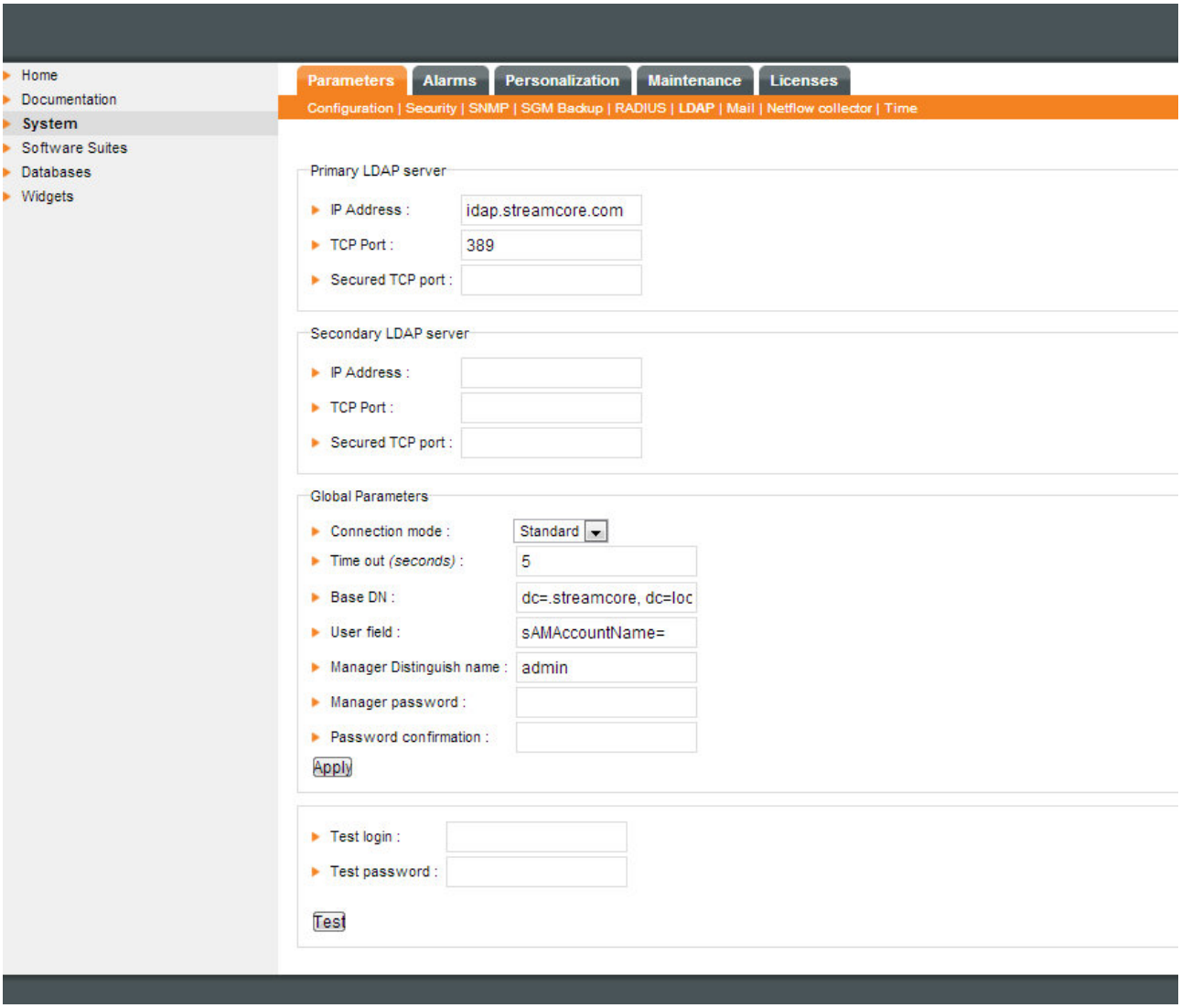


Figure 17 – LDAP Standard Parameters

IP address:	IP address or name of the LDAP server travelled
TCP Port:	TCP port to use for the LDAP connection (389 by default)
Secondary LDAP server:	Used if no answer from the primary LDAP server
Connection mode:	Standard / Domain
Time out (seconds):	Time to wait for an answer from the server
Base DN:	Path to the user's directory (example: dc=OpenLDAP, dc=Org)
Search filter (login):	User field name used to automatically find the entire DN (examples: sAMAccountName= or uid= or cn=)
Manager Distinguish name:	Login of a user allowed to browse the LDAP base (administrator account)
Test login:	To test your access to your base with a standard username

2021 Streamcore SAS - All rights reserved

DOMAIN CONNECTION MODE

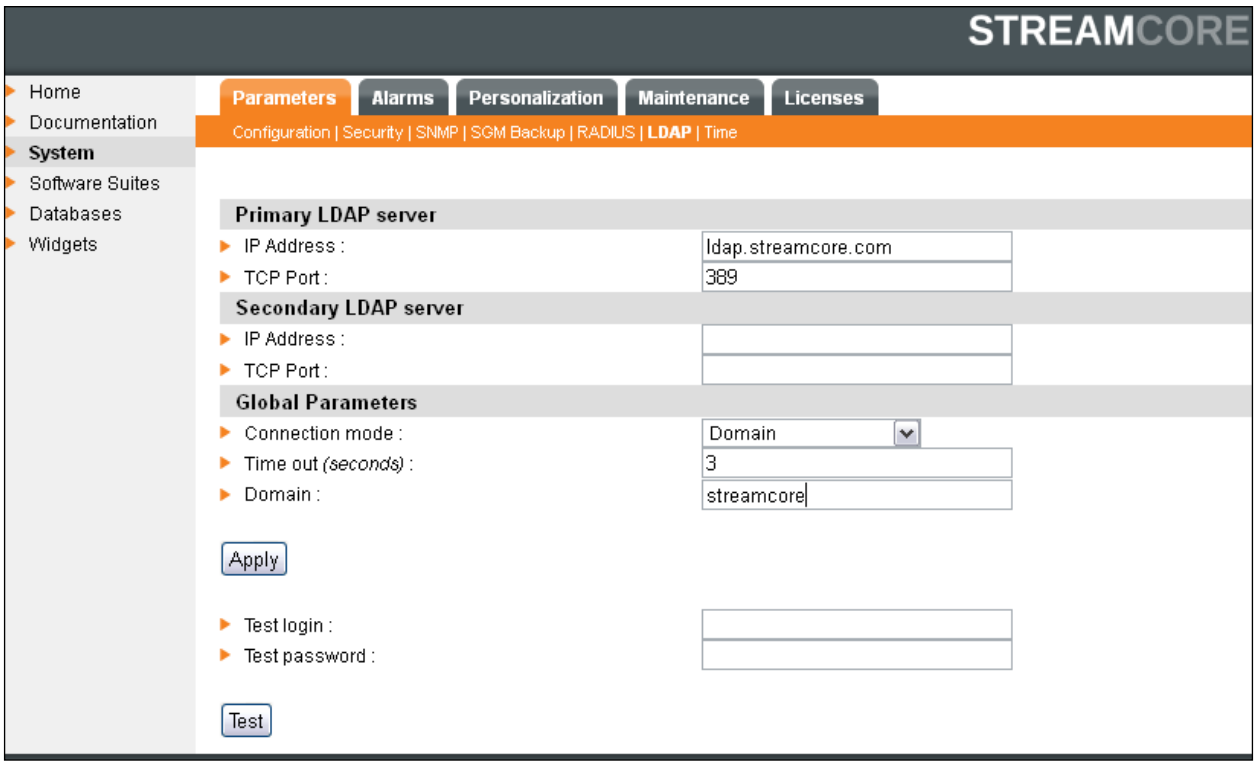


Figure 18 – LDAP Domain Parameters

IP address: IP address or name of the LDAP server
TCP Port: TCP port to use for the LDAP connection (389 by default)

Secondary LDAP server: Used if no answer from the primary LDAP server

Connection mode: Standard / Domain
Time out (seconds): Choose the time to wait for an answer from the server
Domain: Domain name defined on the LDAP server

Test login: To test your access to your base with a standard username

4.2.8. Mail

The "Mail" tab allows you to view and enter mail sender details. The page is split into two sections. The first section is for entering mail sender parameters and the second section is for security and authentication.

Mail sender: Email address used to send mails from the SGM
Mail server: Address of the SMTP gateway (used by SGMConf / StreamView / StreamReport)
Port: Enter the mail server the port

Security: From the menu select the security your mail server uses.
Default is set to "None"

Login: Enter your login details
Password: Enter your password details

2021 Streamcore SAS - All rights reserved

Subsequent to adding your details click **Apply**. You can then test the mail function by using the test feature at the bottom of the page.

4.2.9. Netflow Collector

The NetFlow Collector function allows you to take advantage of a StreamCollector; this is done by an activation process:

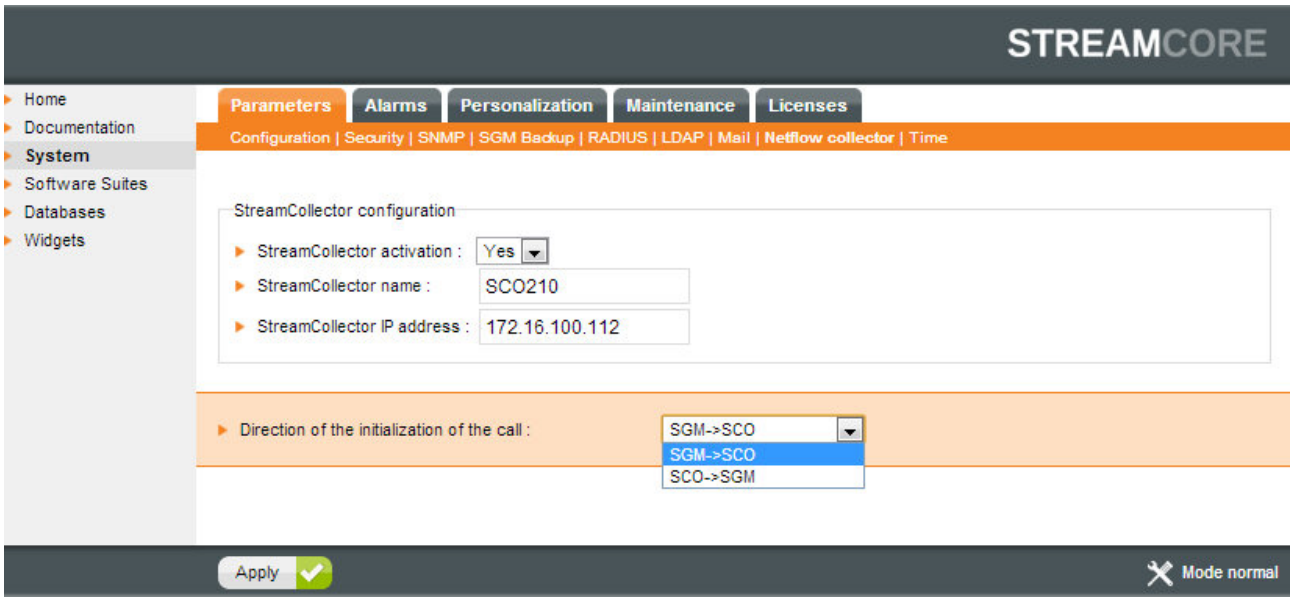


Figure 19: Activating StreamCollector

StreamCollector Activation: Select "Yes" to active. Set to "No" by default

StreamCollector Name: Enter the StreamCollector name

StreamCollector IP address: Enter the StreamCollector IP address

In order to initialize the direction of the call, select "expert mode" then select from the drop-down list the direction of the call.

Click **Apply** after changing the above settings.

4.2.10. Time

The "Time" tab allows you to update an SGM's date and time. It's recommended to carry out this operation when you first install the application. You can also synchronize the SGM on an NTP server.

2021 Streamcore SAS - All rights reserved

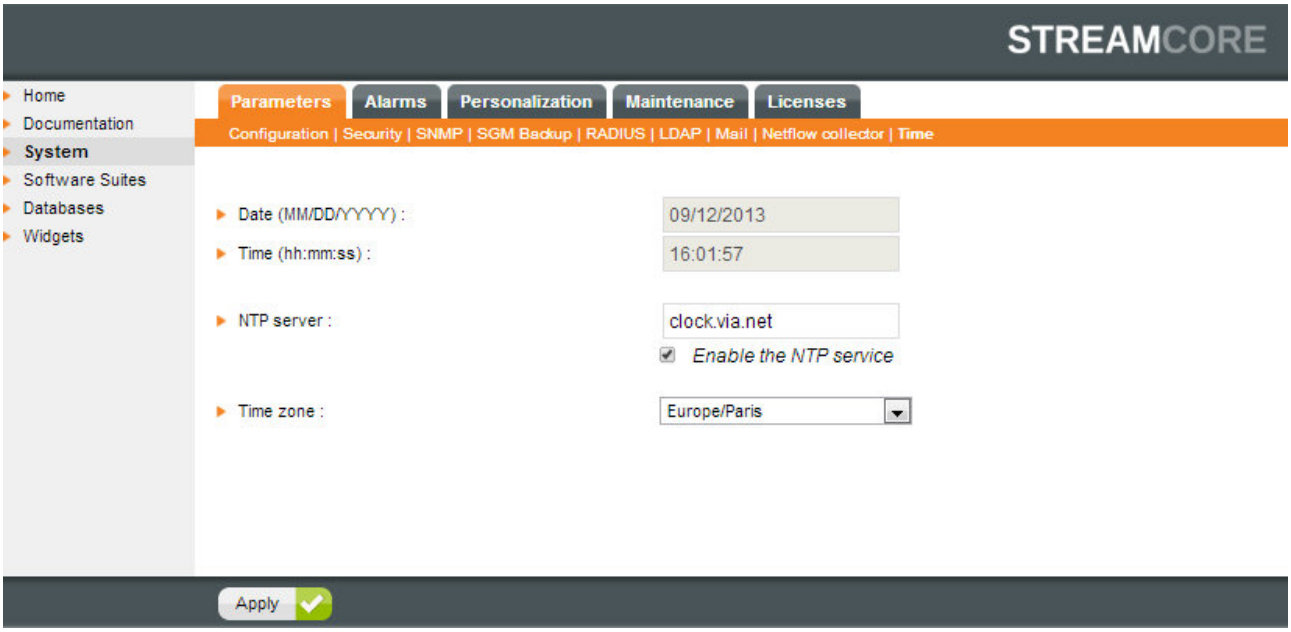


Figure 20 – Setting the time on the SGM manually

StreamGroomers are automatically synchronized by the SGM every day.

2021 Streamcore SAS - All rights reserved

4.2.11. Alarms Settings

The "Alarms" tab is divided into two sections:

- ***Parameters (alarm export)***

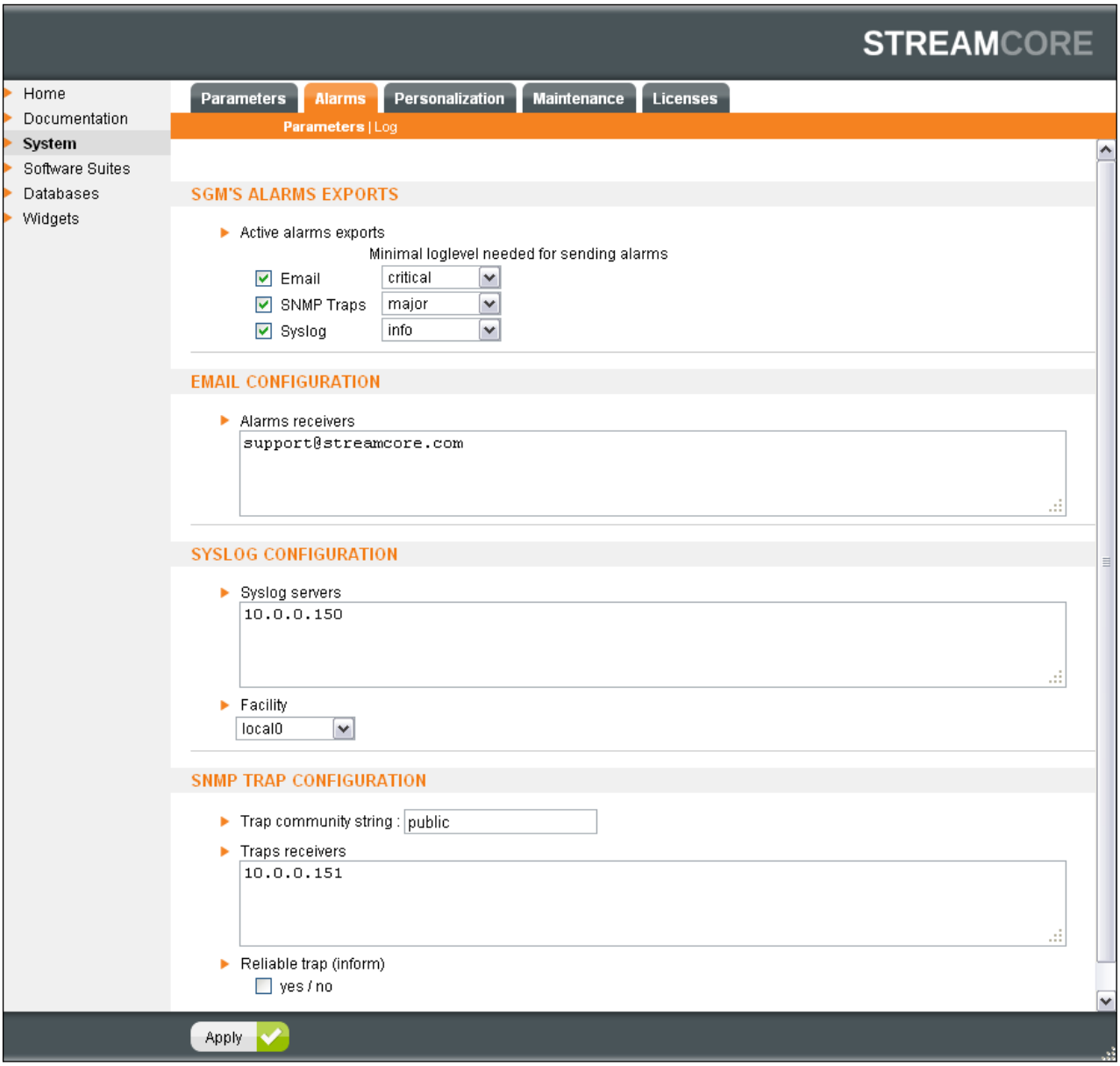


Figure 21 – Alarms Configuration

The ***Alarms>Parameters*** tab enables the following settings to be displayed or modified:

SGM's Alarms exports:	Select the minimum level of alarms to be sent for each export option
Email configuration:	Configure Email addresses of alarms recipients
Syslog configuration:	Configure syslog servers collecting syslog messages
SNMP trap configuration:	Configure SNMP trap collectors

To send alarms by email, the mail server defined in SGMconf must be able to accept relay emails from the SGM without authentication

2021 Streamcore SAS - All rights reserved

The following alarms are automatically available to follow SGM performance and events:

Type	Level	Type	Threshold criteria	Rearm criteria
Hardware				
Hard drive failure (SMART indicators)	Critical	State	-	-
Cold start	Info	State	-	-
Link up/down	Info	State	-	-
Software				
Authorized total number of rules exceeded	Minor	Threshold	SGM type	SGM type
Hard drive partition nearly full	Major	Threshold	95%	75%
Load too high	Major	Threshold	Load = 5	Load = 2
Free memory too low	Major	Threshold	5%	15%
nbLinesCache	Critical	Threshold	15	10
FlushProcess	Critical	State	-	-
Polling	Critical	State	-	-
FsckError	Major	State	-	-
Backup SGM				
Standby transition	Critical	State	-	-
Active-Passive connection failure	Major	State	-	-
Active-Passive connection establishment	Info	State	-	-
Active/Passive state transition	Info	State	-	-
Backup Activation/Deactivation	Info	State	-	-
Synchronization start	Info	State	-	-
Synchronization stop	Info	State	-	-

- ***Log***

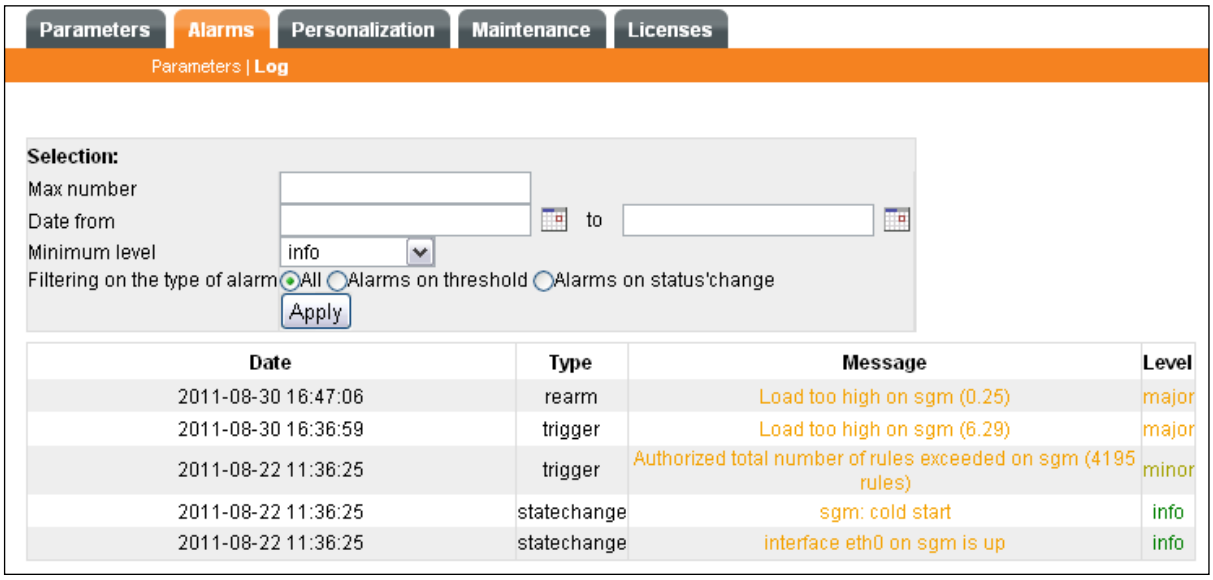


Figure 22 – Alarms Log

2021 Streamcore SAS - All rights reserved

4.2.12. Personalization Settings

The "Personalization" tab allows you to change the logo (displayed in the upper frame, the welcome login page and in the reports generated by StreamReport) and also change the SGM welcome message.

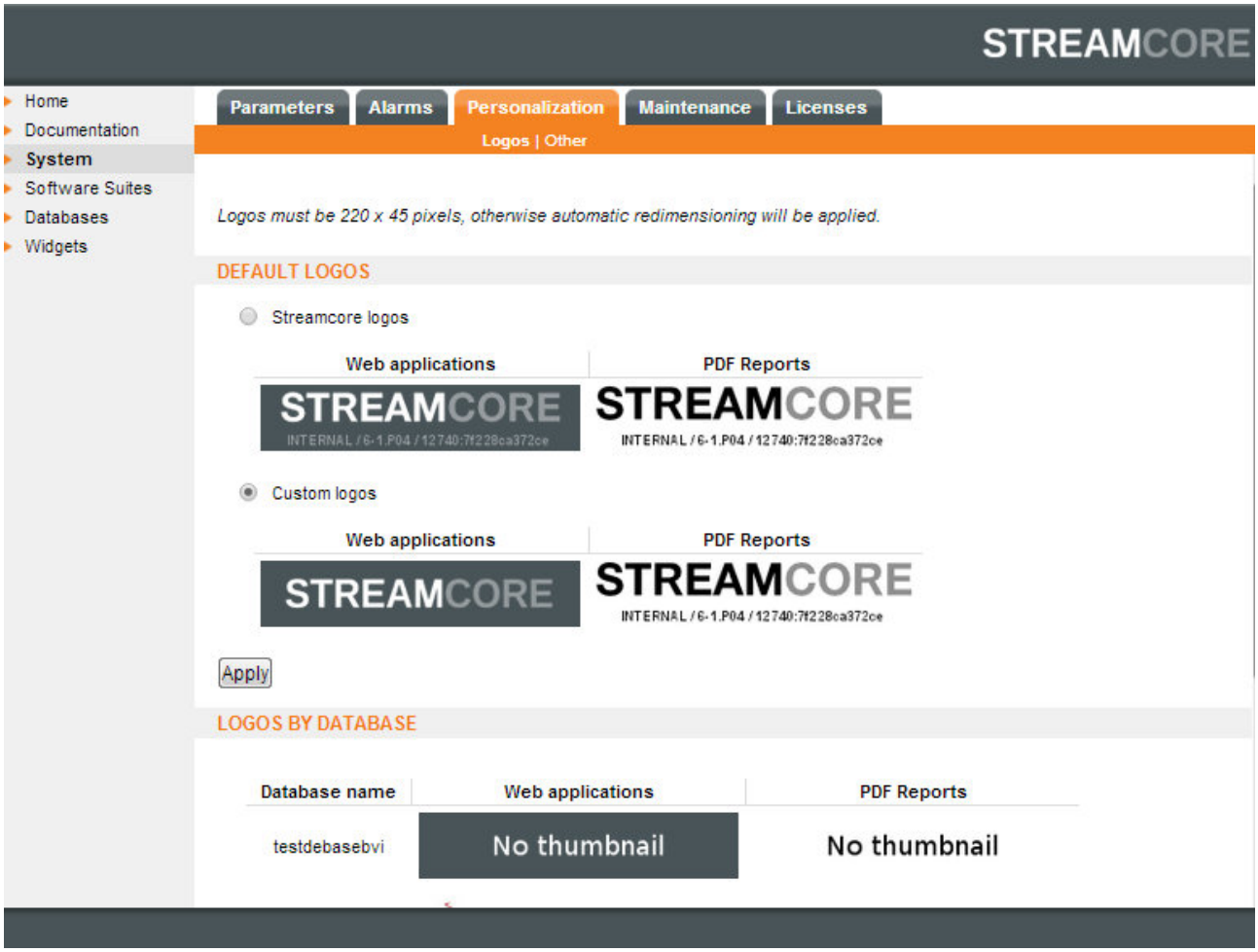


Figure 23 - Personalization

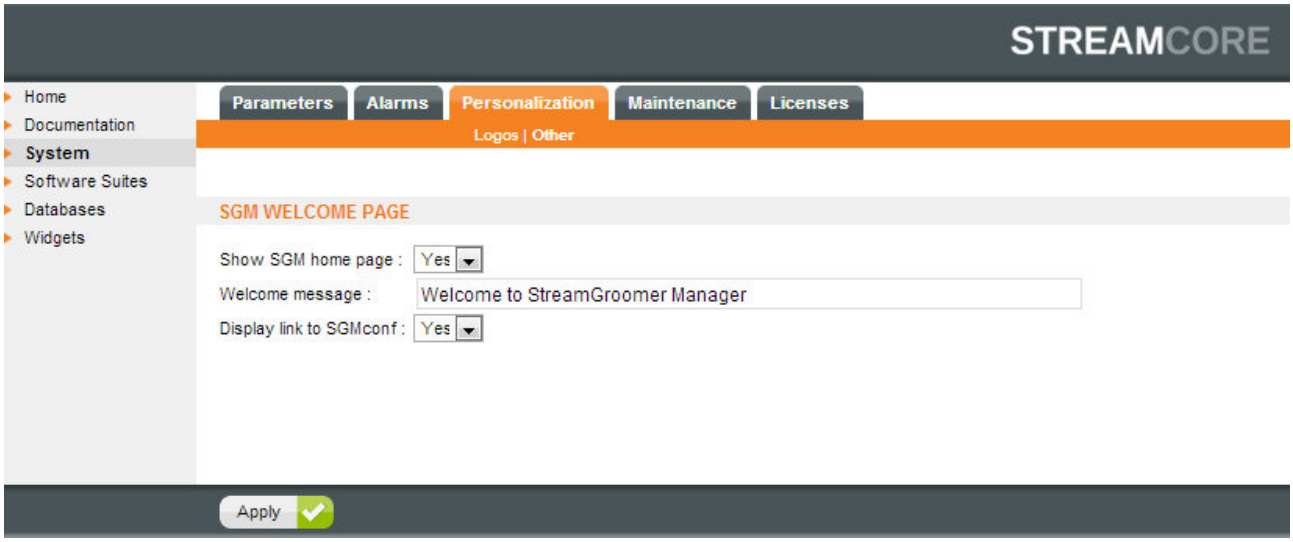


Figure 24 - SGM Welcome Page Configuration

2021 Streamcore SAS - All rights reserved

The personalized tab allows the following settings to be displayed or modified:

Logo choice:	Logo to be displayed in all applications – recommended dimension: 220*45px Two different logos can be defined for applications and reports
Show SGM home page:	Option to hide the access to the home SGM page with the bases' list
Welcome message:	Option to change the SGM welcome page message
Display link to SGMConf:	Option to hide the link to SGMConf on the SGM welcome page

Click **Apply** after changing the above settings. All changes are dynamically applied.

Refresh the page (Ctrl-F5) or empty you Web cache to display the new logo.

2021 Streamcore SAS - All rights reserved

4.2.13. SGM Maintenance

The "Maintenance" tab provides a general picture of the SGM system performance and service status. Three sub-tabs are available:

- ***Actions***
  - Restart Streamcore services
  - Reboot the SGM
  - Turn off the SGM
  - Test email sending

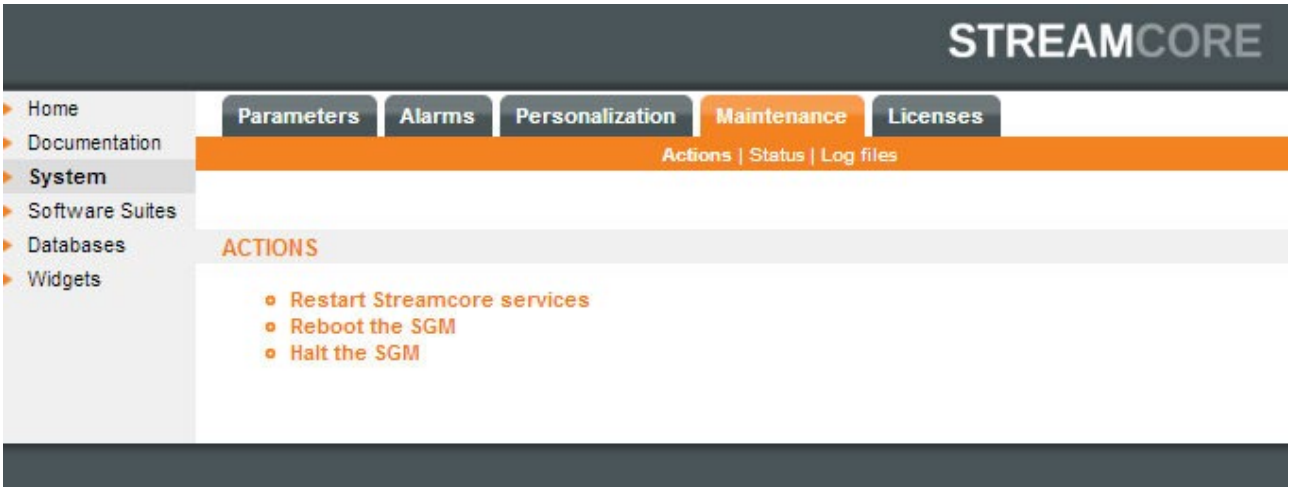


Figure 25 – Maintenance Actions

- ***Status***
  - SGM status
  - Disk usage
  - Memory usage
  - System daemon status
  - Running processes
  - Database status (polling statistics)

- **Log files**

2021 Streamcore SAS - All rights reserved

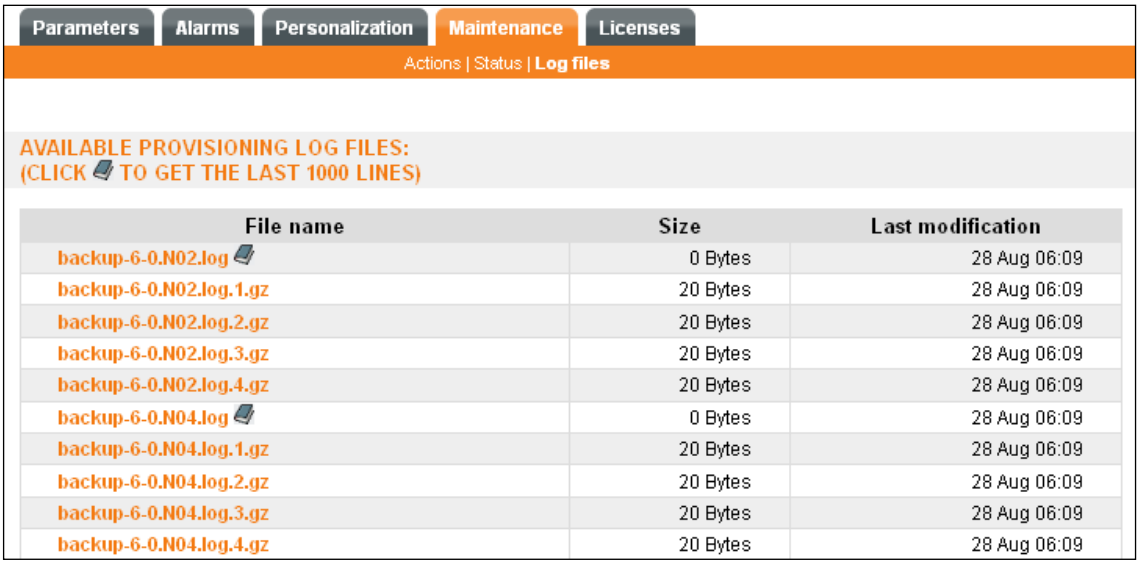


Figure 26 – Maintenance Logs

4.2.14. Licenses

The licenses page provides the opportunity to check if the databases infringe the licenses associated with the SGM.
Two subtabs are available:

- ***SGM license management***

This page allows you to import a license file and display a consolidated report:

Import license file: Import the license file provided by Streamcore (file "sc_XXXXXXXX.lic")

Consolidated report: Report summary consolidating the licenses used by all databases on the SGM (updated once a day automatically). The report summary is updated as well whenever a new license file is imported.

To be able to access to Streamcore support, you need to have a correct license report

- ***Report (per database)***

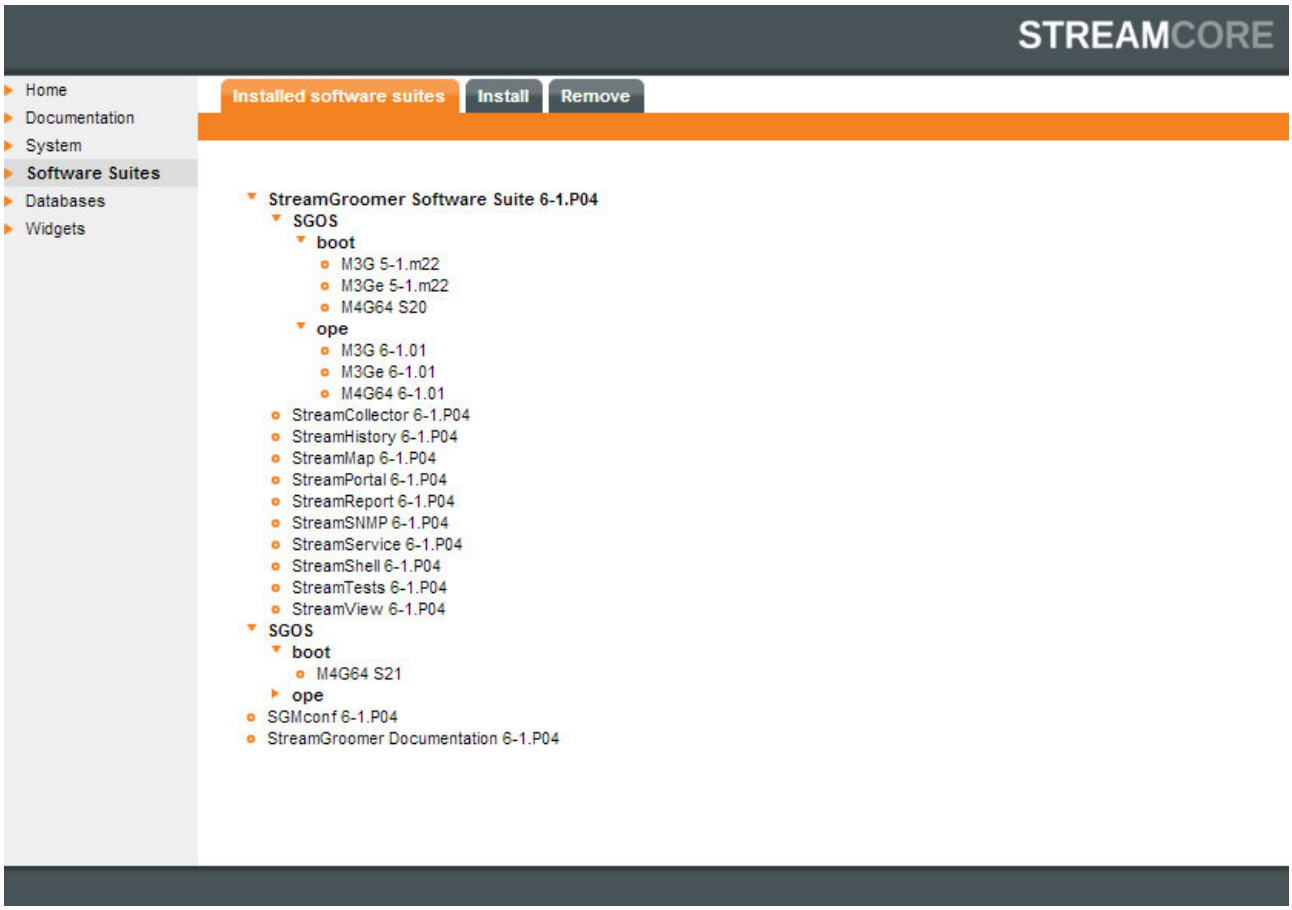
This tab provides a license report for a single or all existing databases configured on the SGM. The report can be exported as a CSV file.

2021 Streamcore SAS - All rights reserved

5. Managing the Software Suites and the SGMconf Version

5.1.1. Overview

To view the list of software installed on the SGM server click "Software Suites" from the display menu option:



3. **Important:** To upgrade to v6.2 you must have v6.1 P05 or above installed.

4. Display software is divided into 4 categories:

- **Software suite**: StreamGroomer Software Suite (version number), made up of:
  - StreamGroomers embedded software:
    - SGOS/boot/XXX: boot software available for SGs
    - SGOS/ope/XXX: operational software available for SGs
  - SGM applications and middleware:
    - StreamView application
    - StreamReport application
    - StreamPortal application (StreamDashboard+StreamAccess)
    - StreamMap application
    - StreamSNMP middleware
    - StreamService middleware
    - StreamShell middleware
    - StreamHistory middleware
    - StreamCollector middleware
- The **SGMconf** application

2021 Streamcore SAS - All rights reserved

- Single **SGOS** (Add-on boot and OPE for StreamGroomers)
- All the **documentation** associated with a suite

If multiple software suites are installed on an SGM:

1. For each SGM application (as mentioned above) the most recently installed software version is used.
2. For StreamGroomer software, you choose the version to use on each StreamGroomer using the If several versions of SGMconf are present on the SGM, the most recently installed software version is used.

5.1.2. Installing Software

Overview

Once the "Install" tab is selected, the following screen is displayed:

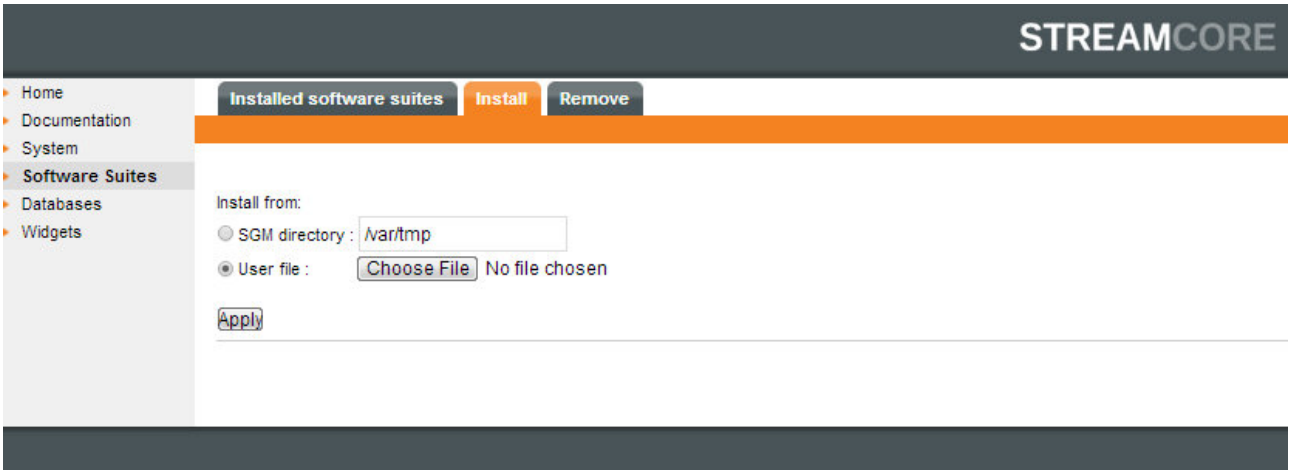


Figure 28 – A Software Suite Installation

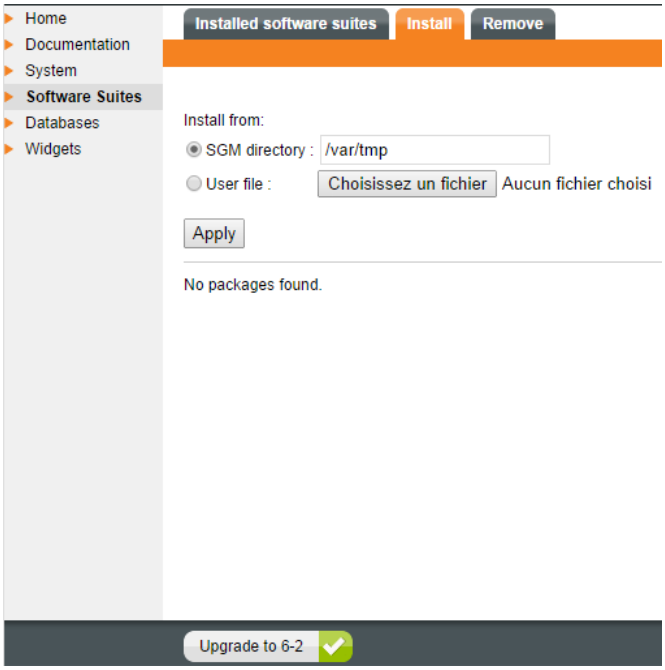
Software can be installed directly from an SCR file stored in an SGM directory.

Installing from an SGM directory:

- Download the SCR file (using FTP or SCP) to the SGM repository /var/tmp (or a sub directory).
- Select the "SGM directory" radio button install page (/var/tmp for instance) then click **Apply**.
- The upgrade to 6.2 button will appear.

Warning no confirmation or cancel button appears when you click the upgrade button therefore the upgrade process will begin immediately.

2021 Streamcore SAS - All rights reserved



If multiple software suites are installed on an SGM, it will not be possible to delete them individually (one by one). Ensure you delete all software suites (not the most recent SGMConf) before installing a new one. (cf §4.3.3.1)

The correct version of SGMConf has to be installed prior to the installation of a new software suite

5.1.3. Deleting Software

Deleting old versions of SGMconf or documentation

Select the "Remove" tab to delete old versions of SGMconf or documentation. Just check the elements you wish to delete, and then click **Remove**. It is not possible to delete the last version of SGMConf.

Deleting a Software Suite

This feature is used to delete actual or old software suites installed on the SGM.

After having selected the software suites you wish to delete, click **Remove**. Once the operation is finished, the suites disappear from the installed software suites.

All elements of a software suite are removed with the deletion. If you need to keep an old version, you will have to re-install this specific version after the deletion.

It is essential to install a new software suite <u>after</u> the deletion of all the software suites installed. Indeed, after the removal:

- except SGMconf, the other SGM applications are no longer available (StreamView, StreamReport, StreamDashboard, StreamAccess, and StreamMap).

- it is no longer possible to access to the databases or upgrade StreamGroomers.

Deleting software suites do not affect the running of the StreamGroomers deployed and does not alter the databases present on the SGM.

However, if no Software Suite is present on an SGM, no new data is stored in the database.

2021 Streamcore SAS - All rights reserved

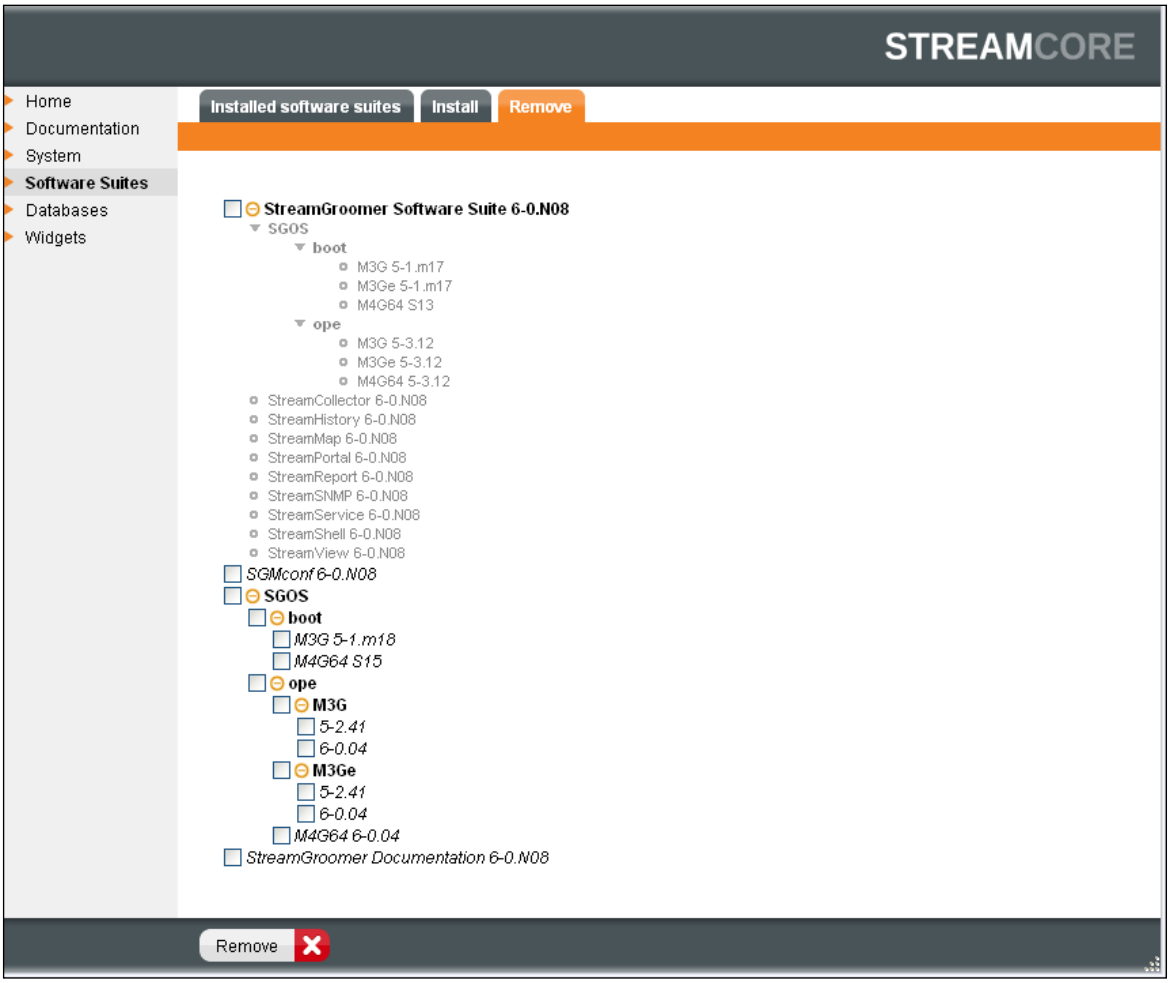


Figure 29 – Software Deletion

6. Managing Databases

6.1.1. Overview

A database is a coherent set of data associated with one or more StreamGroomers. It contains:

- The configuration of the StreamGroomers referenced
- The statistics of StreamGroomers collected via polling by the SGM
- The definition of the reports and PDF files associated with the database
- The definition of personalized Web portals associated with the database
- The definition of users and their access rights associated with the database

In order to ensure data coherence, a StreamGroomer can only be managed by one database at a time.

6.1.2. List of Databases and Choice of Statistics

The screen below presents an example of an SGM containing several databases:

2021 Streamcore SAS - All rights reserved

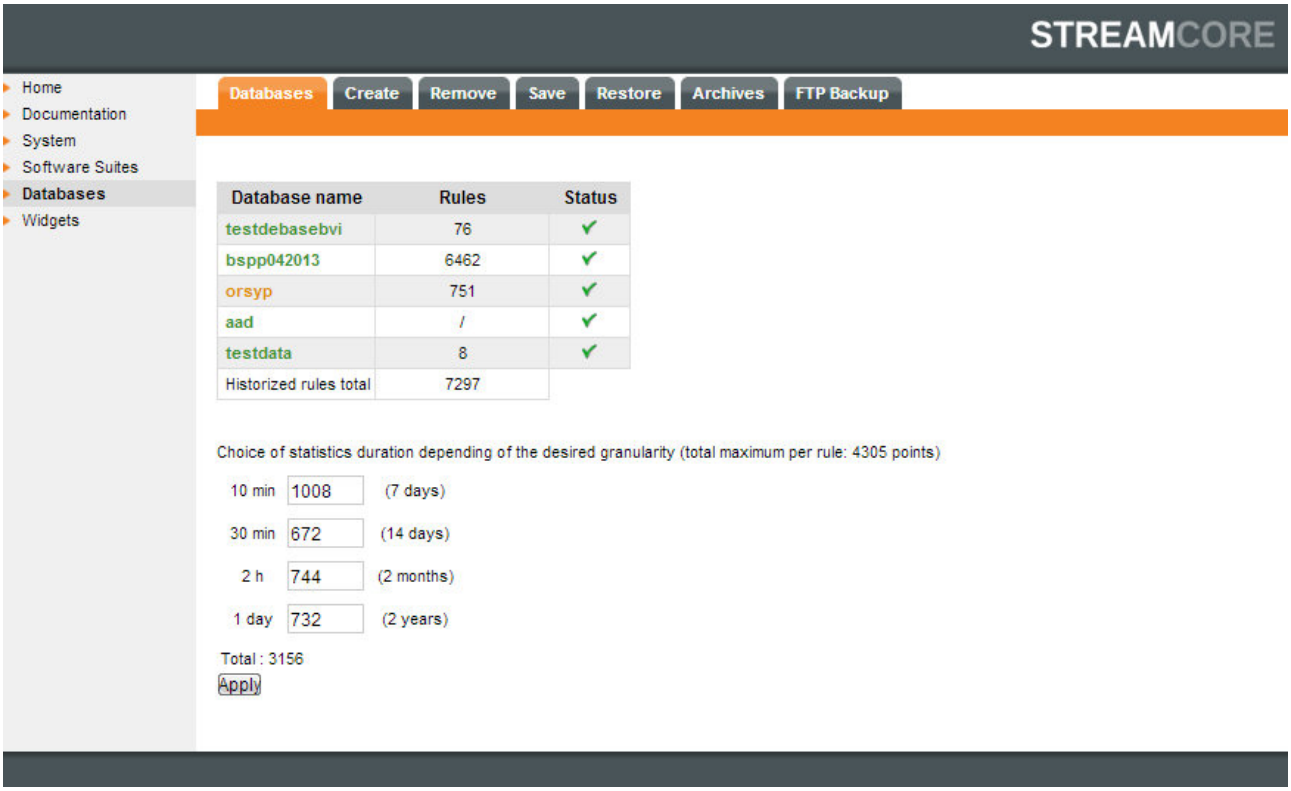


Figure 30 - List of databases

SGM applications can be accessed directly by clicking on a displayed database name (as shown above).

The choice of statistics feature enables you to determine the granularity of desired data.

For example: In the 10 minute box (shown in the figure above) the desired granularity is 1008 points over 7 days. These points when plotted on a graph would be portioned out over a 7 day period. Therefore 10 minutes of data would be represented by 6 points plotted on a graph.

Continuing with the above example; granularity in the 1 day box is represented by 732 points over 2 years. If these points are plotted on a chart, 1 point would represent 24hrs worth of data. Initially this may not seem representative; however when you consider data is over a 2 year period; it not be practical to use a smaller granularity.

Important: A total 4305 points can be assigned to each rule.

6.1.3. Creating a Database

By selecting the "Create" tab, the following screen is displayed:

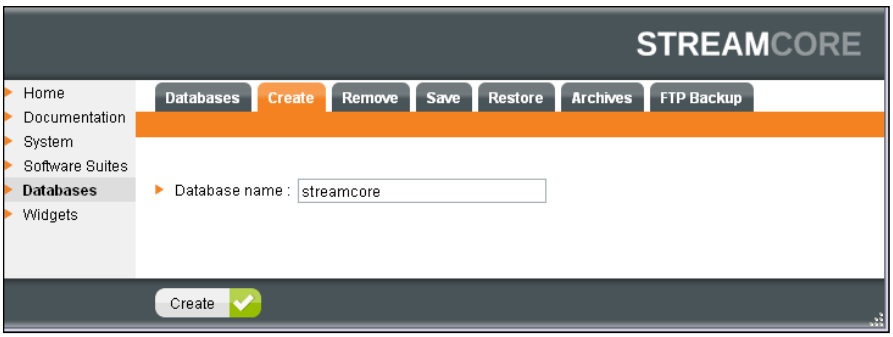


Figure 31 - Creating a Configuration Database

The name of the database must:

2021 Streamcore SAS - All rights reserved

- Be unique on the SGM server (a test to check that it is unique is carried out)
- Be exclusively made up of alphanumeric, lower-class characters
- Start with a letter

Start creation by clicking **Create**.

6.1.4. Deleting a Database

By selecting the "Remove" tab, the following screen is displayed:

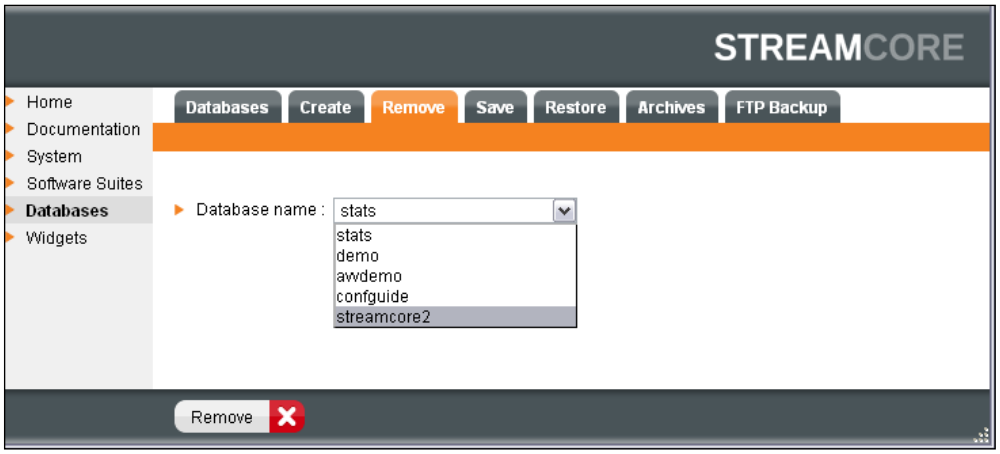


Figure 32 - Removing a Configuration Database

Select the database you wish to delete from the "Database name" list, and then click **Remove**.

The deletion process is irreversible, if required make a backup of the database beforehand (refer to the following paragraph).

On rare occasions a database may not have been completely deleted. If the database name still appears in the database list, repeat the deletion process a second time. If you repeatedly fail to delete the database, restart the SGM and then repeat the deletion process.

6.1.5. Saving a Database

By selecting the "Save" tab the following screen is displayed:

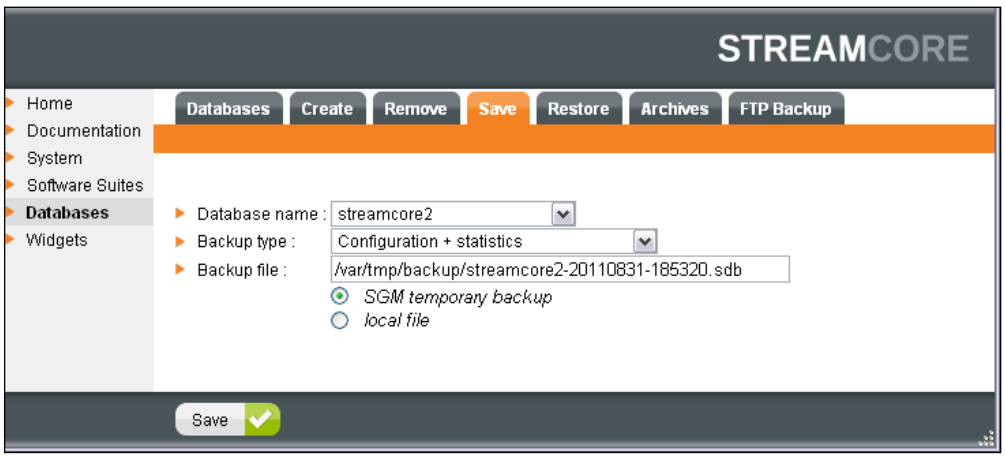


Figure 33 - Saving a Database

2021 Streamcore SAS - All rights reserved

The following parameters must be defined:

Database name: Select a database from the databases present on the server.

Backup type: Configuration + Statistics: backup of the StreamGroomers configuration, the StreamView graphs, the definition of StreamReport reports and StreamDashboard portals, the users defined in StreamAccess.

Configuration only: backup of the configuration of StreamGroomers in StreamView, the definition of StreamReport reports and StreamDashboard portals, the users defined in StreamAccess.

Backup file: The databases can be saved:

SGM temporary backup: specify the directory and the name of the backup file (/var/tmp/backup by default)

on a local file: specify the name of the backup file

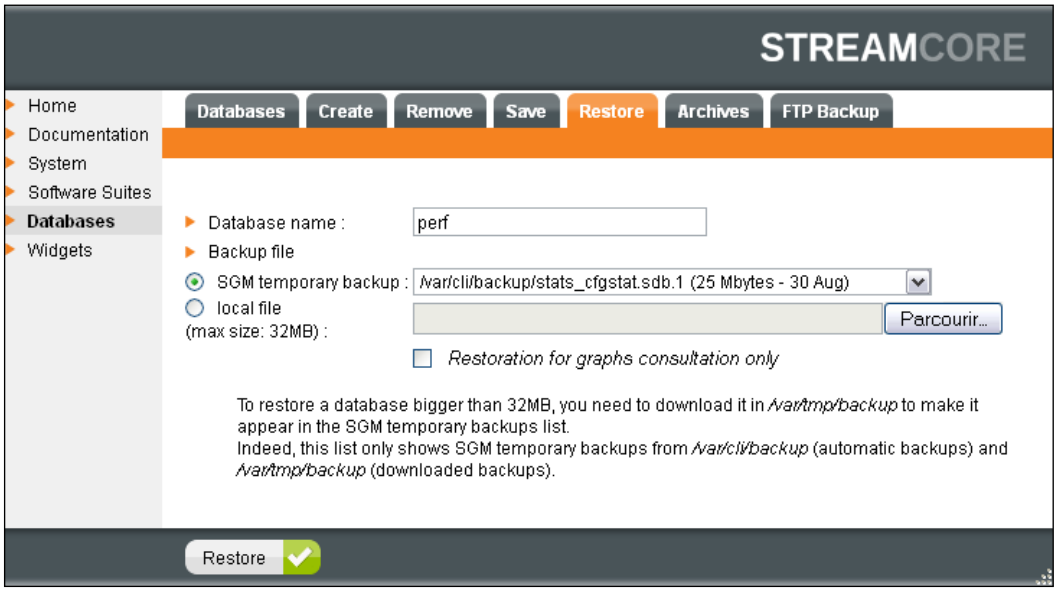
When you have indicated these parameters, start the action by selecting "**Save**". If you have chosen to save to a local file, a screen will appear asking you to choose a backup location on the PC or network.

- *Automated backup on the SGM are available with the Archive tab (§ 4.4.7)*
- *Saving a large database can be a lengthy process.*

6.1.6. Restoring a Database

The "Restore" tab allows you to install databases onto an SGM server, if they have been previously saved according to the above procedure. The database can have any name (the same as the database when it was saved or different).

A specific database can be recovered from a backup file stored on an SGM, on the computer from which SGMconf is launched or from any resource that this computer can access (with a maximum size of 32 Mb due to browser limitations). An option "Restoration for graph consultation only" can be checked in order to restore a database without activating StreamGroomers polling and statistics database consolidation (in order to preserve the same time granularity).



5. Figure 34 - Recovering a Database

2021 Streamcore SAS - All rights reserved

*If you wish to recover a database in order to return to an earlier version to the one currently used on an SGM (as a result of an incorrect operation for example), always **start by deleting the database you wish to replace**. Then start the recovery process. It is necessary to perform this operation to avoid having StreamGroomers managed by 2 databases at the same time.*

Restoring a large database can be a lengthy process.

Only saved databases located in /var/cli/backup (automatic archives) and /var/tmp/backup are listed. When restoring a database on a new SGM, it is therefore necessary to first download the database to /var/tmp/backup.

Elements in /var/tmp (and sub directory) are kept only for 1 month.

6.1.7. Access to Archives

An automated backup of all databases (configuration only and configuration+statistics) is performed on an SGM everyday (starting at 1 A.M.). By default, an SGM stores configuration only backups for 7 days, and configuration+statistics backups for 1 day.

Databases backup are the following:

- Configuration+statistics:
  - <dbname>_cfgstat.sdb Current day
  - <dbname>_cfgstat.sdb.1 Current day -1
- Configuration only :
  - <dbname>_cfgonly.sdb. Current day
  - <dbname>_cfgonly.sdb.1 Current day -1
  - <dbname>_cfgonly.sdb.2 Current day -2
  - <dbname>_cfgonly.sdb.3 Current day -3
  - <dbname>_cfgonly.sdb.4 Current day -4
  - <dbname>_cfgonly.sdb.5 Current day -5
  - <dbname>_cfgonly.sdb.6 Current day -6
  - <dbname>_cfgonly.sdb.7 Current day -7

Click on a backup name to download it.

2021 Streamcore SAS - All rights reserved

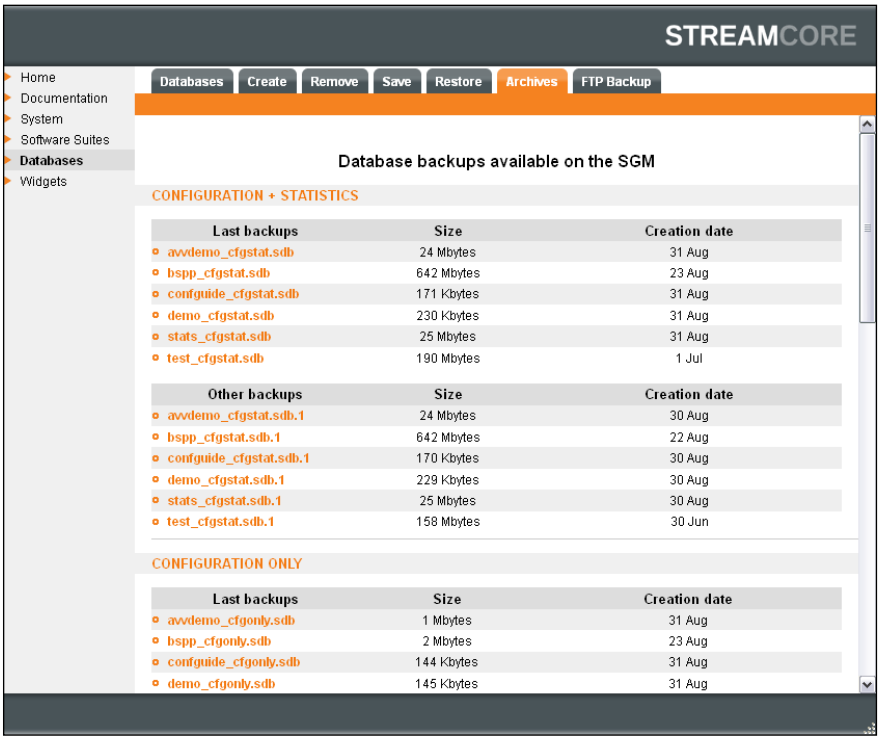


Figure 35 – Access to Archives

6.1.8. FTP Backup

The FTP backup feature allows you to save archives to an external backup server by FTP. It uses database archives saved at 01:00 AM (see chapter 4.4.7).

The configuration of the FTP backup is performed in two parts:

1. configuring the FTP server parameters (server address, FTP connection type…)
2. configuring the content of the backup and scheduling its export to the FTP server

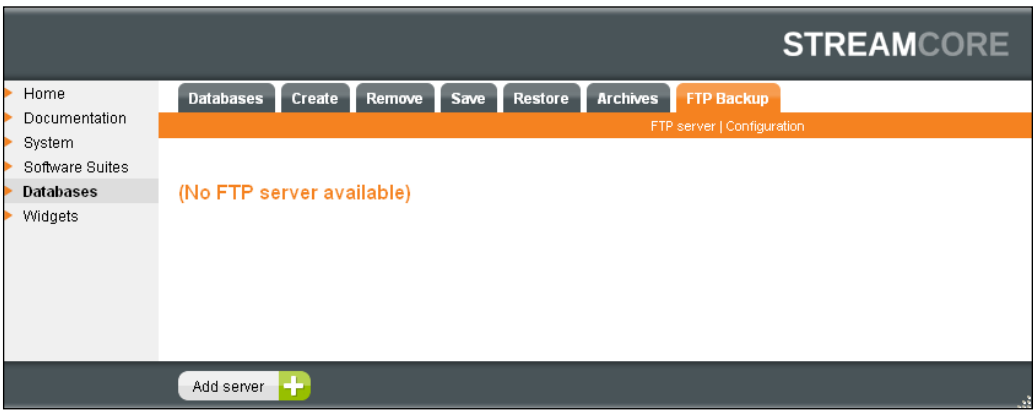


Figure 36 – FTP Backup Configuration

Configuration of the FTP server: click "add server":

2021 Streamcore SAS - All rights reserved

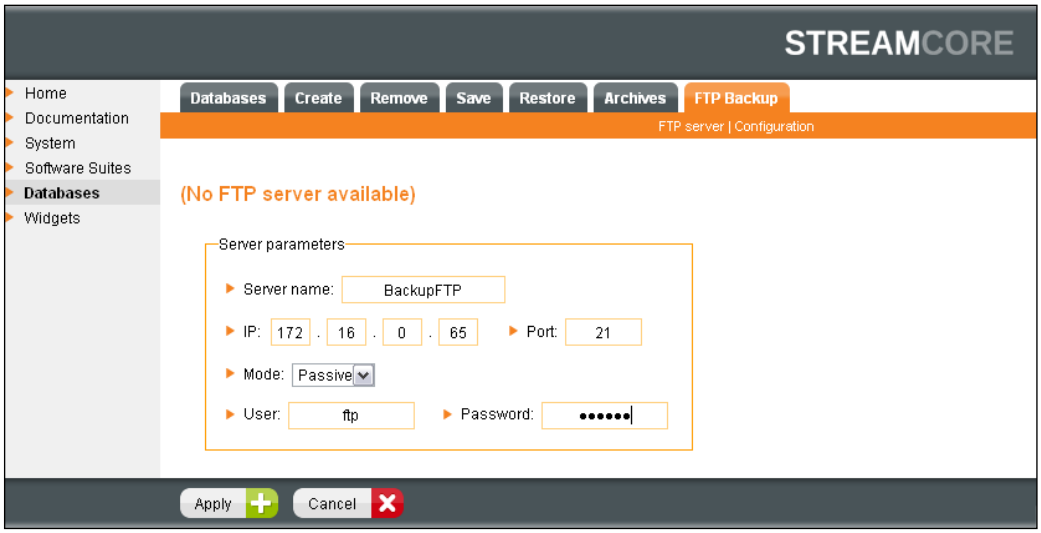


Figure 37 – FTP Server Configuration

The following parameters must be provisioned:

Server name: FTP server template name

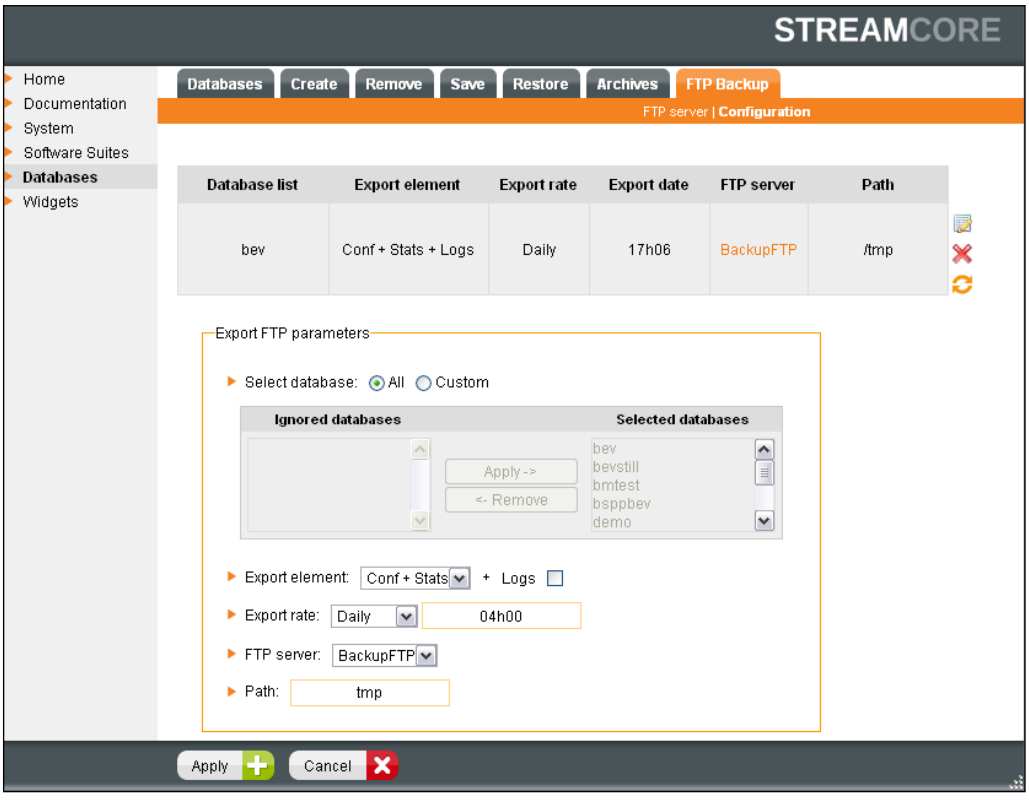
IP: FTP server IP address

Mode: Active / Passive FTP mode

Nat environment (for active mode): Define real IP address and port to use

User / Password: Login used to connect to the FTP server

Once the FTP server template has been defined, the export scheduling can be configured using the "configuration" sub-tab:



2021 Streamcore SAS - All rights reserved

Figure 38 – Export Scheduling Configuration

The following parameters must be provisioned:

Select database: Select the database to be exported (all by default)
Export element: Select "conf only" or "conf+stats" archive to export with SGM logs
Export rate: Select at which frequency the archive is sent to the FTP server: daily/weekly/scheduled (once)
FTP server: Select one server template
Path: Add a directory in the home of the FTP user.

Archives are stored in: **FTPuserHome/$Path/$databasename/backup**
Logs are stored in: **FTPuserHome/$Path/$databasename/logs**

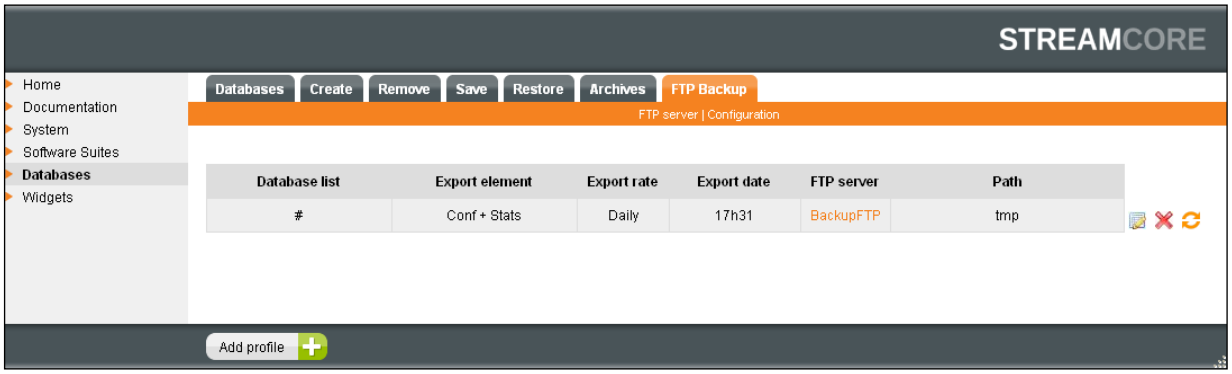


Figure 39 – Export Scheduling Configuration

Once the configuration is completed, the export can be changed, deleted or immediately launched using the three buttons on the right.

7. Installing Widgets

It is possible to allow easy access to any performance measurements from almost anywhere, using desktop widgets running either on a Microsoft Windows Vista or Windows 7 operating system, as well as iGoogle or Netvibes Web portals.

The widgets use an application programming interface (API) based on Web services to retrieve any network, application, VoIP or video performance metrics from Streamcore's centralized management and reporting appliances.

All indicators are updated automaticaly every 10mn.

2021 Streamcore SAS - All rights reserved

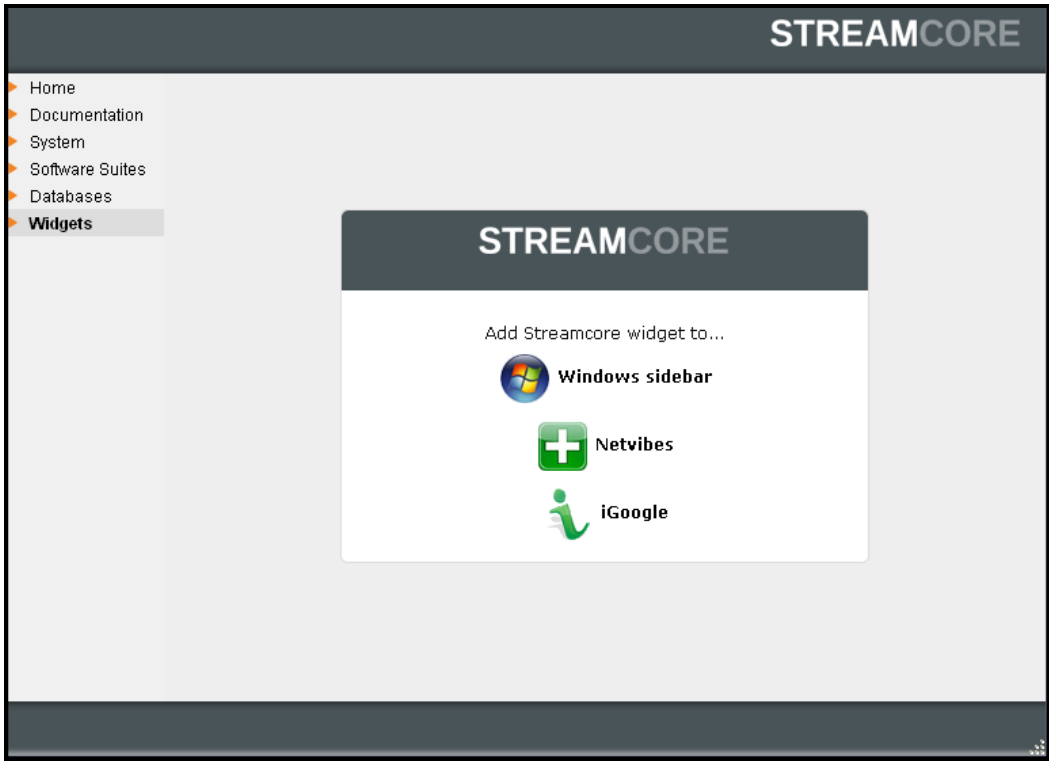


Figure 40 – Select your widget

7.1.1. Windows Vista / 7 Widgets

It's possibe to install desktop widgets on Windows Vista or 7 operating systems. Click on "Windows Vista sidebar", you will be prompt to open and install the Streamcore widget on the PC.

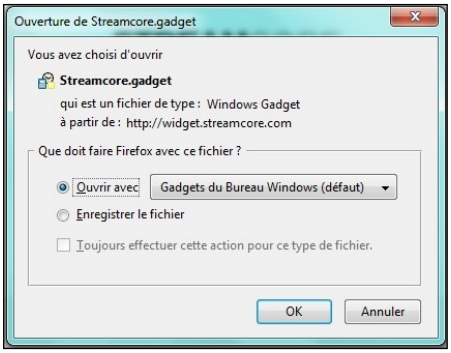


Figure 41 – Open Streamcore Widget

Once installed,widgets can be added on the desktop by opening: ***Windows control panel>widgets***.

2021 Streamcore SAS - All rights reserved

For each desktop widget, set up the connection to the SGM and choose the information to follow among every SGM indicators on category or site.

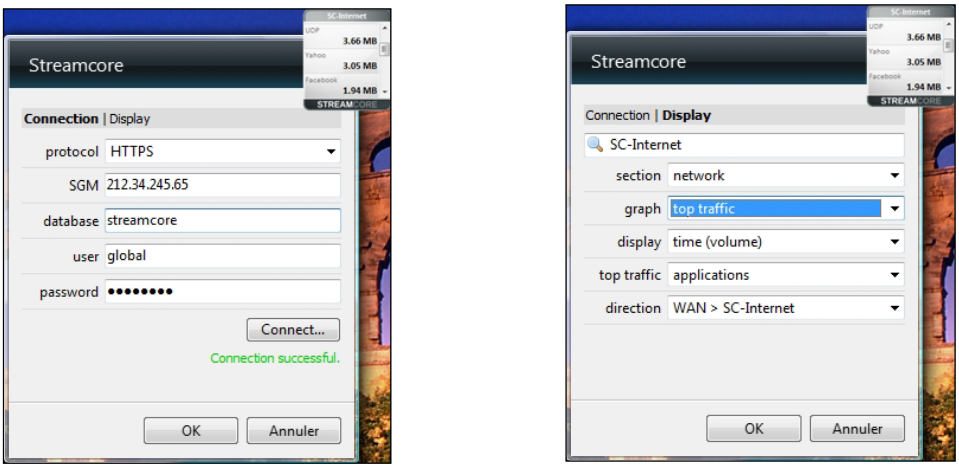


Figure 42 – Vista/7 widget configuration

Click on the value to open the graph of the day. Click everywhere else to close this graph.

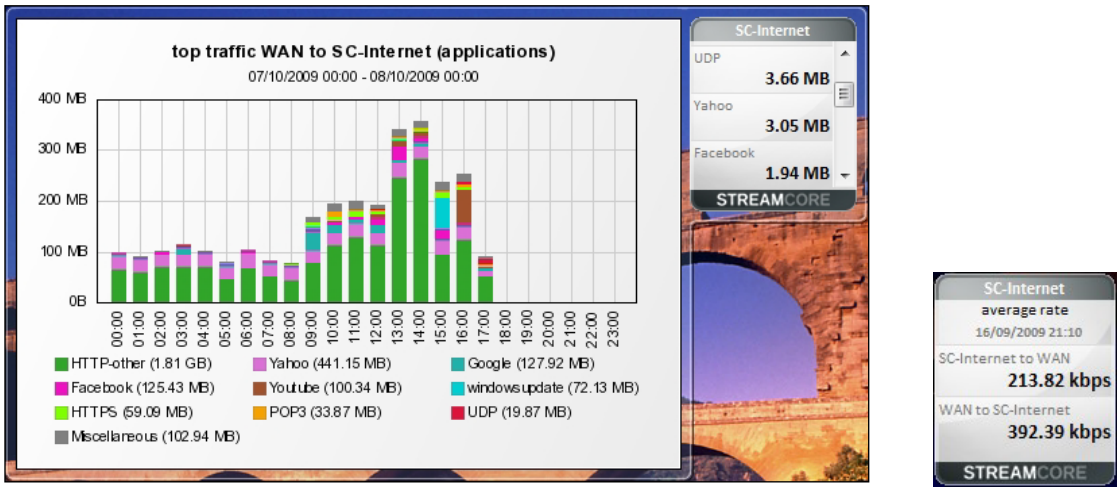


Figure 43 – Vista/7 Widget Graphs and Indicators

7.1.2. iGoogle / Netvibes Widgets

2021 Streamcore SAS - All rights reserved

Streamcore widgets can be also used in your Web browser, add the Streamcore widget to your iGoogle or Netvibes pages.

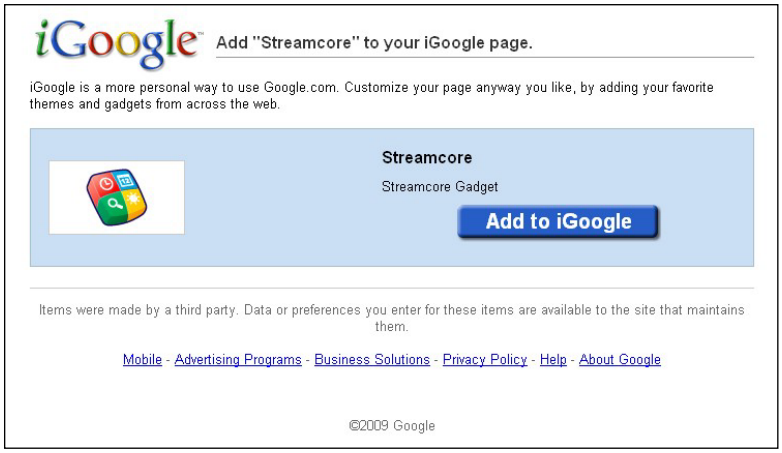
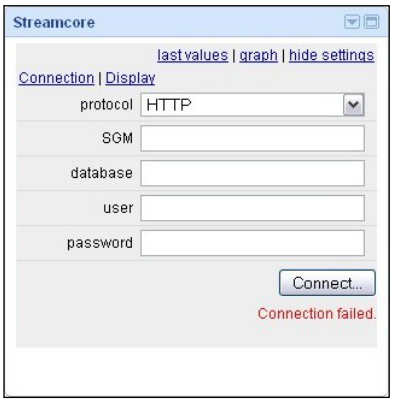


Figure 44 – Add Streamcore Widget to iGoogle

Configure iGoogle or Netvibes dashboard as for Vista/7 widget. Choose site or category indicators (last values) or graphs to display.



You can add lots of widgets on your page:

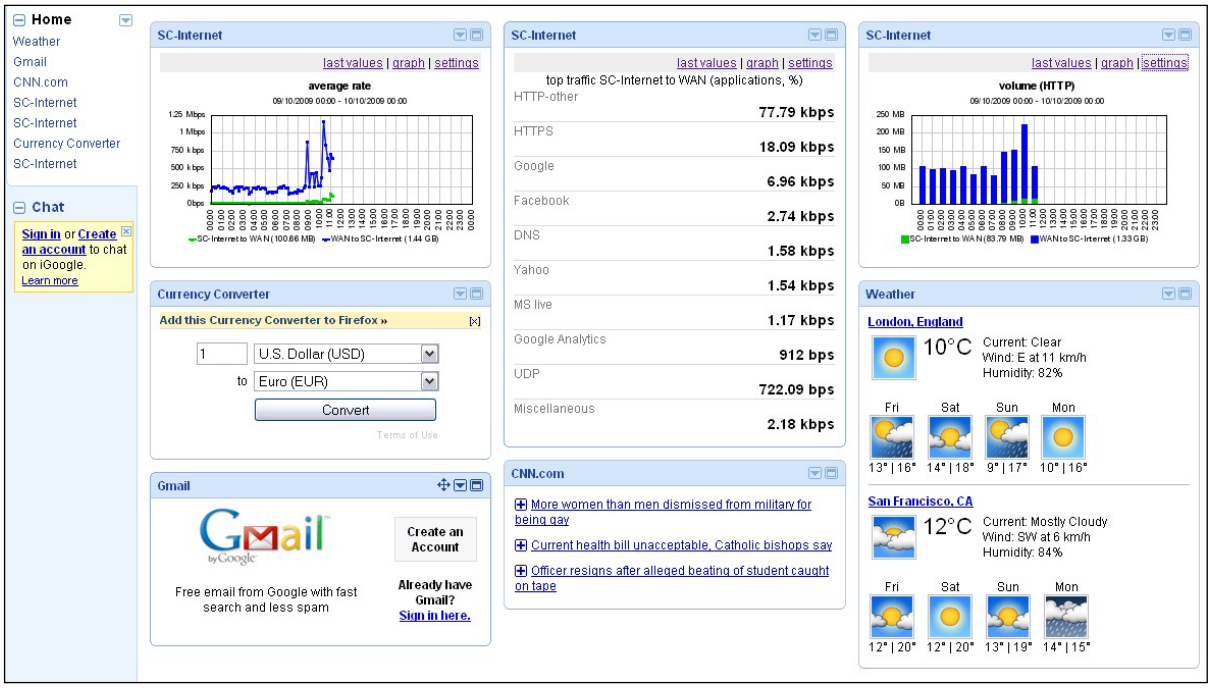


Figure 45 – iGoogle Dashboard

2021 Streamcore SAS - All rights reserved

7.1.3. Widgets Usage and Recommendation

The password entered to log in the SGM is not stored in the widget: only a secured key is saved in the widget based on the login/password and a SGMid. This secured key gives access to the SGM with the access-rights of the account defined in StreamAccess.

For a secured connection, it is recommended to:

- configure HTTPS as the default protocol in the widget as soon as the user can be connected through the Internet.

For iGoogle and Netvibes:

- create a user with read-only rights in StreamAccess
- use HTTPS for the connection to igoogle or netvibes

2021 Streamcore SAS - All rights reserved