22b Release notes

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Table of contents

1 Software Suite 22b *4*

1.1 Software Suite Numbering Evolution **4**

2 IMPORTANT RECOMMENDATIONS *4*

2.1 Licenses **5**

2.2 New password **5**

2.3 Activation of a Boot, ACC and OPE version **5**

2.4 Software versions for M3G not available **5**

2.5 Update of the ACC25 **6**

2.6 Upgrade boot M4G64 S49 or later **6**

3 End of support for software suites *6*

4 Migration to 22b *7*

4.1 Updating the system base **7**

4.2 Restarting the SGM after installing the base 010 **9**

4.3 Configuration of a passphrase **9**

4.4 Installation of the software suite 22b **10**

5 Improvements and new features *10*

5.1 SGM 22b **10**

5.1.1 New home page 10
5.1.2 Automatic generation of SGM certificate 16
5.1.3 SFTP backup of databases 18
5.1.4 Encrypting exported databases 19
5.1.5 Restoring an encrypted database 20
5.1.6 Specific size of the acceleration cache for a SpeedAgent 20
5.1.7 Database access history 21
5.1.8 Web Audience Analysis on the SGM 21

6 Problems corrected by the Software Suite 22b *23*

7 Known problems *26*

8 Installation and deployment *26*

9 Software interoperability rules *28*

9.1 Downgrade operation **28**

9.2 Interoperability between components **28**

10 Technical support *29*

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1 Software suite 22b

The Streamcore software suite is a set of software releases for StreamGroomers and the SGM. This document contains the release notes for the Streamcore 22b software suite.

The software suite must be installed on the SGM with the SGMConf application.

The OPE and BOOT elements must be deployed on the StreamGroomers from the SGM with the StreamView application. **Since version 6.3, when an OPE is installed on a StreamGroomer, the SGM automatically deploys the latest versions of the BOOT and ACC modules. The BOOT version will only be active after the StreamGroomer has been restarted (see "Restarting the StreamGroomer"). 2.3 Activation of a Boot, ACC and OPE version below)**

This software suite contains the following SGM and StreamGroomers software versions:

```
Software suite: 22b
Official OPE: 6-4.25
Official OPE: 6-5.15
Official ACC M4G64 : ACC26
Official ACC M5G : ACC31
Official M4G64 boot: S56
Official M5G boot: T10
```

New versions of parallelized OPE are also available on request from support

- Version 6-5.15 qhp (parallelization of the QoS on 2 cores separated from the monitoring core. They have all the functions of the 6-5.15
- Version 6-6 (parallelization of QoS on 2 cores and monitoring on all remaining cores. Functional restrictions apply

1.1 SOFTWARE SUITE NUMBERING EVOLUTION

To simplify the tracking of releases, the numbering of releases is changing:

The software suite number is now composed of two parts:

- 2 digits for the year of release (22 for example)
- 1 letter for the release sequence in the year (a for the first release of the year)

The software suites are currently scheduled for 3 releases per year.

The other elements of the software suite keep their own numbering

OPE 6-5.15 or OPE 6-4.25 for example

This approach is intended to simplify the understanding of the serial numbers of the different modules:

- Avoiding confusion between the serial numbers of software suites and OPEs or other modules
- By facilitating the coexistence of several different versions in a fleet of probes (OPE, 6-4, 6-5 and soon 6-6 for example)
- By allowing a quick reading of the "age" of the version
- By simplifying the memorization of the version number

2 IMPORTANT RECOMMENDATIONS

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Before deploying this version of the software, please read the following recommendations carefully and contact Streamcore support if you have any questions.

2.1 LICENSES

As of version 6-5.T06, the Streamcore software suite installs a new license management system that requires an update of the license currently in use on the SGM.

If you have already used an SGM in 6-5.T06, you do not need to update the license.

2.2 NEW PASSWORD

Starting with version 6-5.T06, the default passwords for *sgm* and *sc* users are set to different values.

Please contact Streamcore support at support@streamcore.com to receive these new passwords.

2.3 ACTIVATION OF A BOOT, ACC AND OPE VERSION

The activation of a new version of the OPE/ACC requires a restart of the StreamGroomer. During the restart phase, the StreamGroomer is inaccessible. Restarting StreamGroomer automatically stops the following functions at the corresponding sites:

- Monitoring: No measurements (polling) are made during the restart and probably no statistics will be available for the corresponding 1 minute or 10 minute period in the real-time and long-term graphs and reports. The groomings stop working and their status is set to *DOWN*, unless the grooming has been configured to be temporarily managed as a shaping.
- QoS and marking: Traffic will not be prioritized or marked until the StreamGroomer has reloaded and activated its configuration.
- Load balancing: Load balancing is disabled on the site supported by the StreamGroomer.
- WAN optimization: Accelerated TCP sessions will be interrupted.
- Netflow and monitoring: The StreamGroomers will stop sending Netflow tickets and traps/informs until it has reloaded and applied its configuration.

It is strongly recommended to plan and schedule appliance restarts to minimize the impact on network flows and end-user activities.

It is recommended to activate the same versions of Boot, OPE and ACC on the StreamGroomers of a dual and tandem configuration.

If WAN optimization, Grooming, QoS and Tagging or Load Balancing features are used, it is strongly recommended to run the same versions of Boot, OPE and ACC on both ends of a grooming or peering to avoid errors caused by inconsistency between StreamGroomers.

2.4 SOFTWARE VERSIONS FOR M3G NOT AVAILABLE

The boot and OPE packages for M3G appliances are removed from the Streamcore 6-4.12 software suite, as M3G appliances are in EOL.
OPE version 6.1 is also removed from the Streamcore software suite, as this version is also in EOL.

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2.5 ACC25 UPDATE

- The content of the existing cache can be deleted from the StreamGroomer each time the ACC25 is launched on the SG (see Known problems).
- The ACC25 can work with other SGs in ACC25 or ACC24 only (for future versions, please refer to the corresponding release note).

2.6 UPGRADE BOOT M4G64 S49 OR LATER

A critical issue has been identified with boot versions up to S42 on SG360e, SG860e, SG1660e and SG3260e that impacts communication with StreamGroomers and many other operations such as configuration, measurement and statistics collection, WAN optimization.
If the operating time of these StreamGroomers is longer than 200 days, the device may become inaccessible after a software reboot (e.g. when activating an OPE version). The workaround is a hardware reboot (unplug and plug in the power supply). To solve this problem, deploy the Boot S49 on these appliances and apply the new version as soon as possible by restarting the StreamGroomer.
Streamcore strongly recommends that all StreamGroomers be upgraded to an S49 or later boot version as soon as possible.

3 End of support for software suites

Please note the end of support dates for Streamcore software suites and operational software releases (OPEs):

You can refer to the End of Life Policy (EOL POLICY DOC Version 202208_v06) for a comprehensive view of the end of life (EOL) dates for Streamcore equipment and software.

Software suites	End of the assistance
6-4	December 31, 2023
6-5	Not planned

OPE	End of the assistance
6.2 high performance	30/06/2023
6.3	**End of support since 1s 01/04/2019**
6.4	31/12/2023
6.5	Not planned

- It is strongly recommended that the SGM, StreamGroomers, and StreamCollectors be updated to the latest versions of the Streamcore software suite, OPE, and Boot.

Please feel free to contact the Streamcore support team (support@streamcore.com) or your sales representative for more details on the upgrade path.

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4 Migration to 22b

4.1 UPDATE OF THE SYSTEM BASE

To allow the evolution of the graphical interface, new packages are needed on the SGM. For this purpose, the system base must be updated.

Before updating to 22b an SGM that is in an earlier version, you must make sure that the System Base version of this SGM is **010**. Otherwise an error message will appear during installation:

This base version is visible in **SGMConf > Software Suites** :

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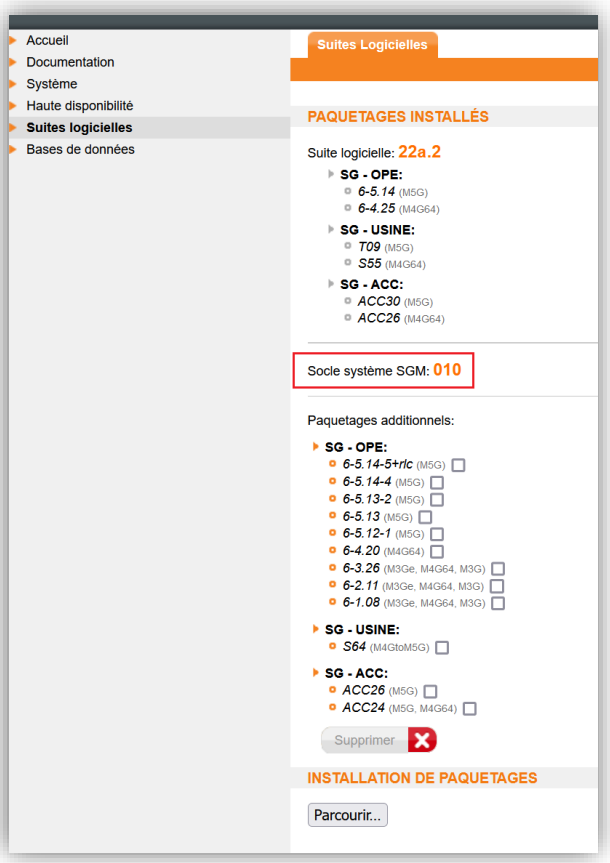

If this version is not **010** update the SGM system base.

Installation files of the base allow to switch from one version to another: **StreamCore-SGM-Base-007-008.scr**

For example, to go from a base version 06 to the final version 010 you will have to install 4 different files, all with a name indicating the passage concerned: StreamCore-SGM-Base-006-007.scr, StreamCore-SGM-Base-007-008.scr, StreamCore-SGM-Base-008-009.scr and StreamCore-SGM-Base-009-010.scr

Install each file with SGMConf :

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If these base update files are not provided with the software installation file, you will need to contact support: support@streamcore.com to obtain them.

4.2 RESTARTING THE SGM AFTER INSTALLING THE BASE 010

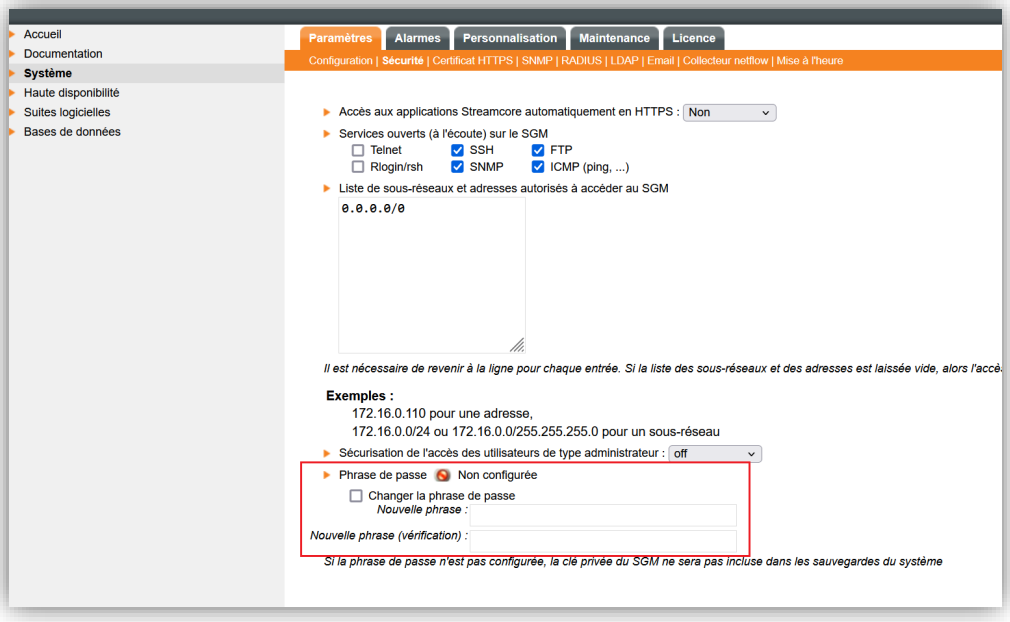
After the installation of the last **StreamCore-SGM-Base-009-010.scr** package a restart of the SGM is necessary to finalize the installation:

The reboot does not affect the activity of the network probes. Only access to the SGM will be lost during the reboot phase (a few minutes). Polling in progress or to come during the reboot will be interrupted and a loss of a data point is possible.

4.3 CONFIGURATION OF A PASSPHRASE

To improve the security of SGM data and especially backups, the passphrase required for encryption becomes mandatory. If you have not already created a passphrase, a default value will be created.

Before upgrading the SGM to 22b it is strongly advised to set up a security **passphrase** on the SGM if it is not already done (of 16 characters minimum):



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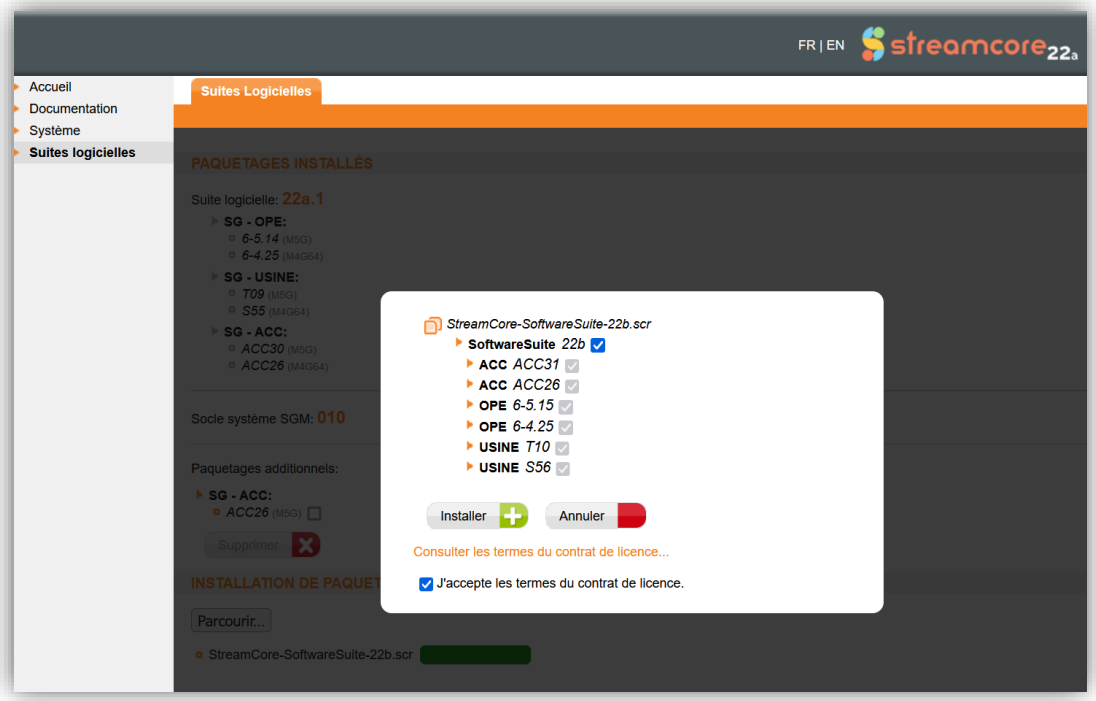
If no phrase is entered during the migration a default value is entered.
Contact Streamcore support to get the value of this default phrase.

The passphrase is used to encrypt database backups (if requested).

4.4 INSTALLATION OF THE SOFTWARE SUITE 22B

You can now install the 22b software suite.

This installation will automatically migrate the already installed databases to this new version.



5 Improvements and new features

With this new version, Streamcore brings new useful features to its SGM and SG.

5.1 SGM 22B

The SGM interface has evolved in recent versions and will continue to evolve both graphically and ergonomically to facilitate the use of the product.

The 22b version inaugurates a new graphic charter and a home page allowing a simpler and faster referral to the various functions of the product.

5.1.1 New home page

Direct access to the SGM name or address will now display the following page:

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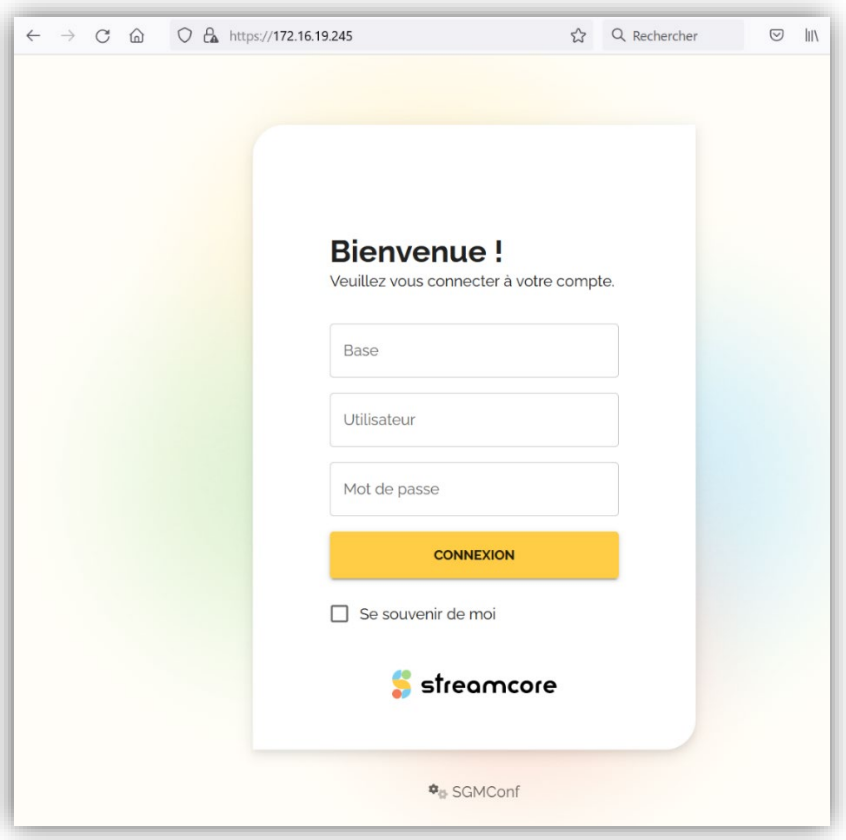
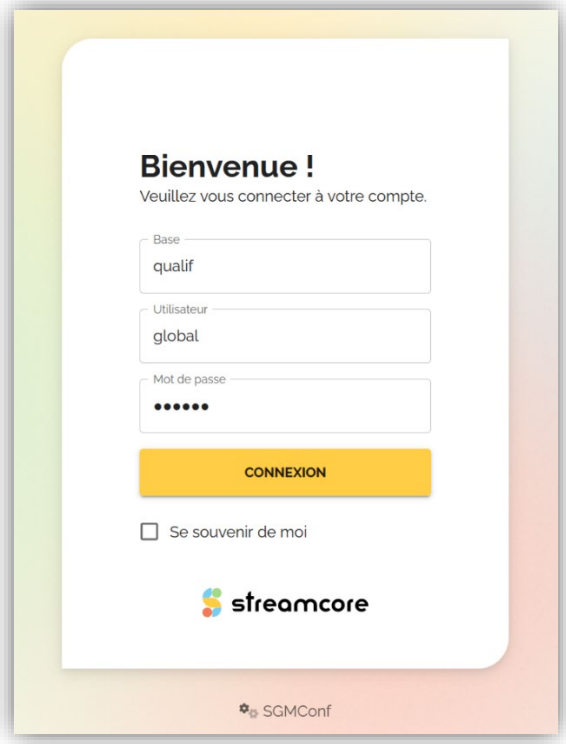


The link at the bottom to SGMConf opens the "standard" page of the SGMConf manager.

The access to a database with its identifiers presents a new page centralizing the different action modules:



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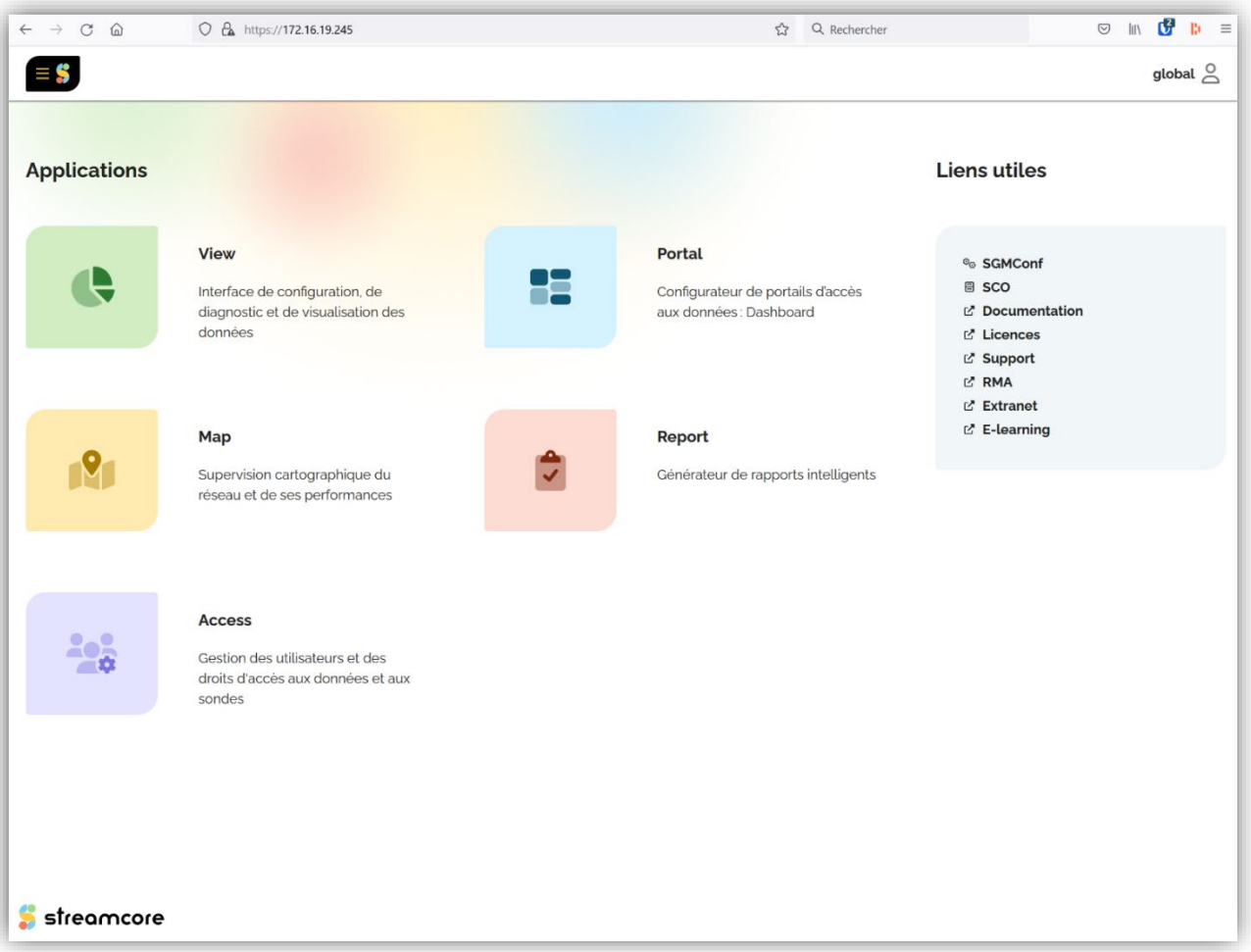
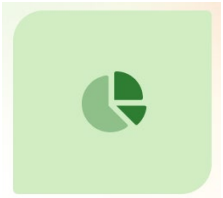
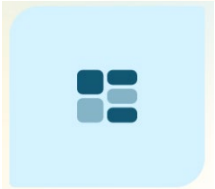


Clicking on one of the large icons opens a new tab on a particular module:



StreamView: configuration, diagnostic and data visualization interface



StreamDashboard : Data access portal configurator: Dashboard

StreamReport: Intelligent report generator

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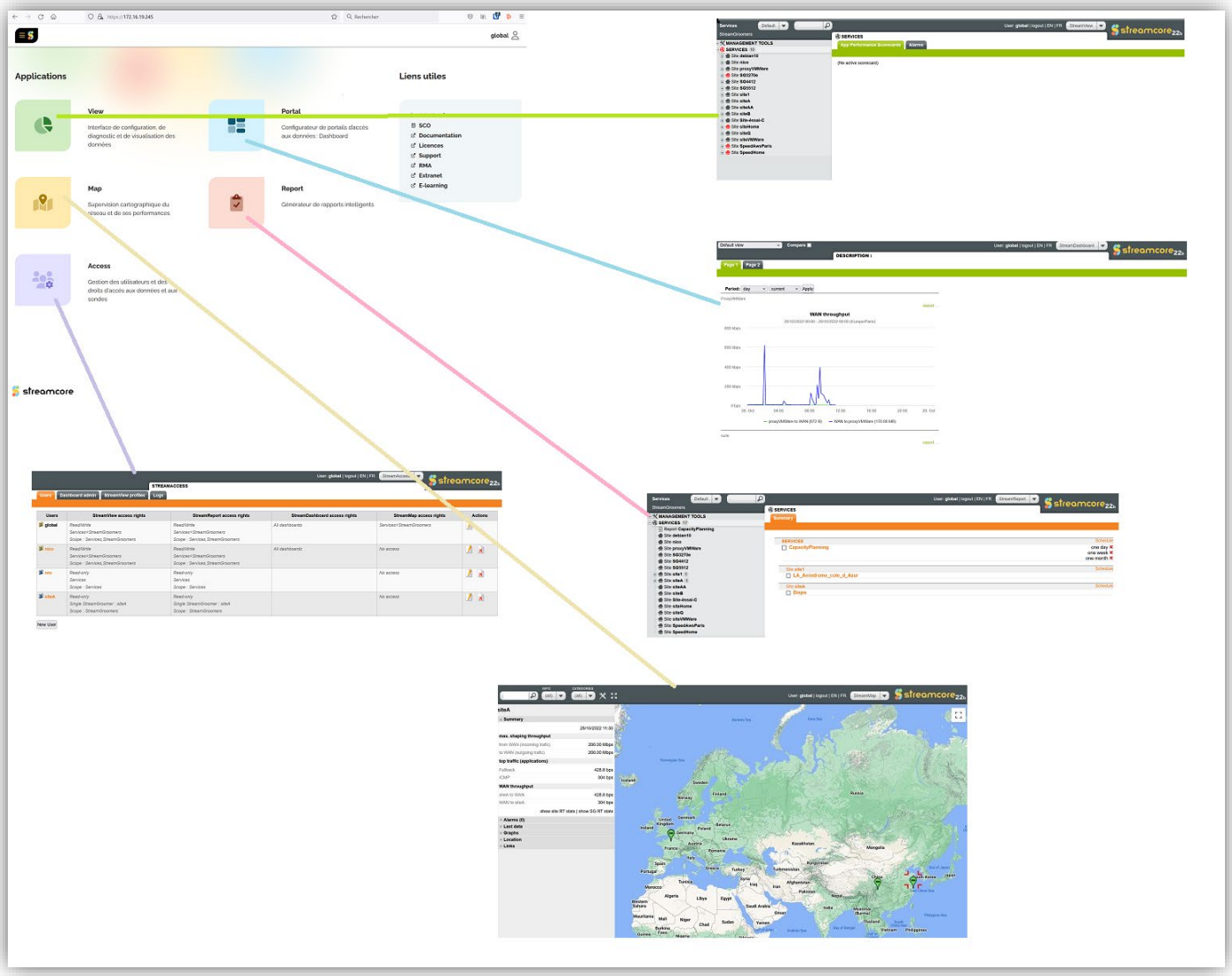
StreamMap: Mapping network and performance monitoring

StreamAccess: Management of users and access rights to data and probes

New icons will appear on this screen as new interfaces are released.



A menu for accessing user data is available at the top right of the screen

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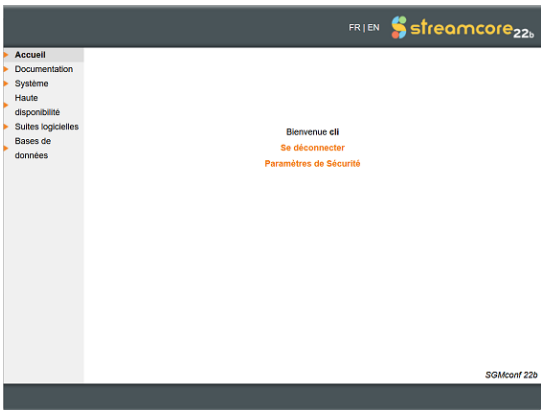
We recommend that you enable multi-factor authentication to secure access, especially for administrators.

5.1.1.1 USEFUL LINKS

This part points to Streamcore services.

These services can be hosted on web-based servers and require an access account.

If you do not have an associated account, please contact Streamcore support to resolve the situation.

	SGMConf Link to the SGMConf interface of the SGM.	

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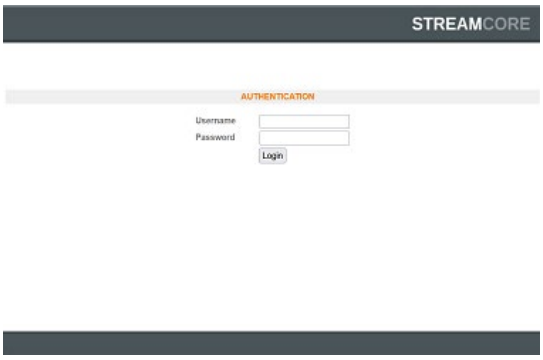
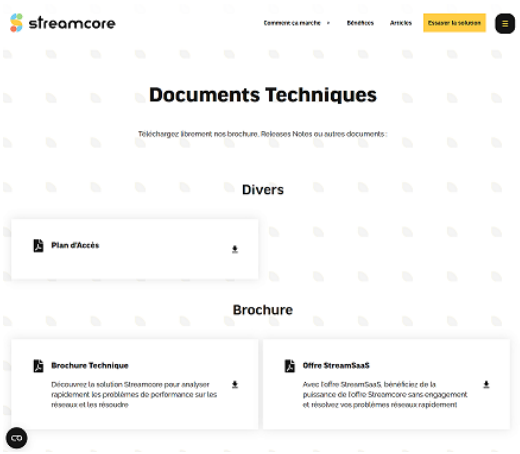
Liens utiles

- SGMConf
- SCO
- Documentation
- Licences
- Support
- RMA
- Extranet
- E-learning

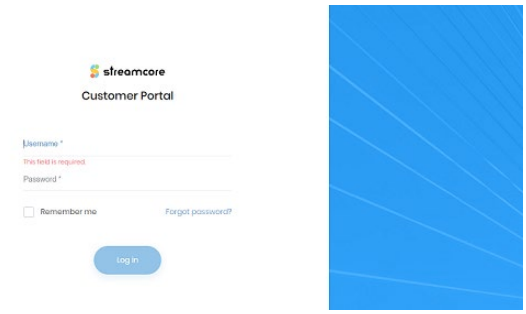
SCO
If an external SCO is configured, open its interface.



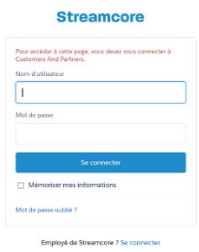
Documentation
Link to Streamcore technical documentation on the Streamcore website



Licenses
Access to the licensing portal, an external site that requires an account to access.



Support



RMA

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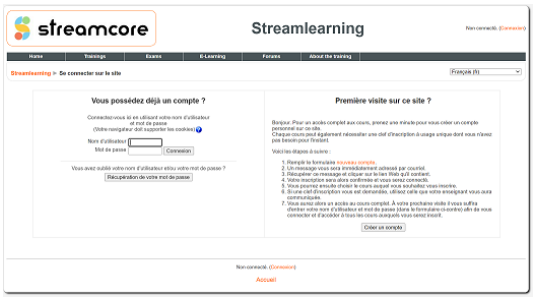
	Extranet	
	E-Learning	

5.1.2 Automatic generation of SGM certificate

Access to the central management console of the Streamcore solution must be secure.

The SGM can work with a self-signed certificate. However, this generates warning messages or freezes in browsers which may confuse some users.

You can also install a specific certificate from a recognized authority or a certificate generated by your internal certification authority.

In addition, we open the possibility to use Let'sEncrypt certificates and to automatically manage the renewal of this certificate.

This approach allows you to benefit from a certificate that is recognized by terminals and browsers and that is constantly up to date, thus avoiding warning messages and blocking by certain browsers.

It is possible to ask *Let'sEncrypt to* automatically provide an HTTPS certificate to the SGM.
This certificate will be valid for three months and automatically renewed at the end of this period.

Prerequisite:

- Have a public and accessible DNS name.
- Have port 80 open on the SGM.

The opening of port 80 requires, for obvious security reasons, to force the access to the SGM in HTTPS only before launching the opening of the port.
To do this, change in **SGMConf** > **Security**, the parameter "**Access to applications in HTTPS**" to "**Yes"**:

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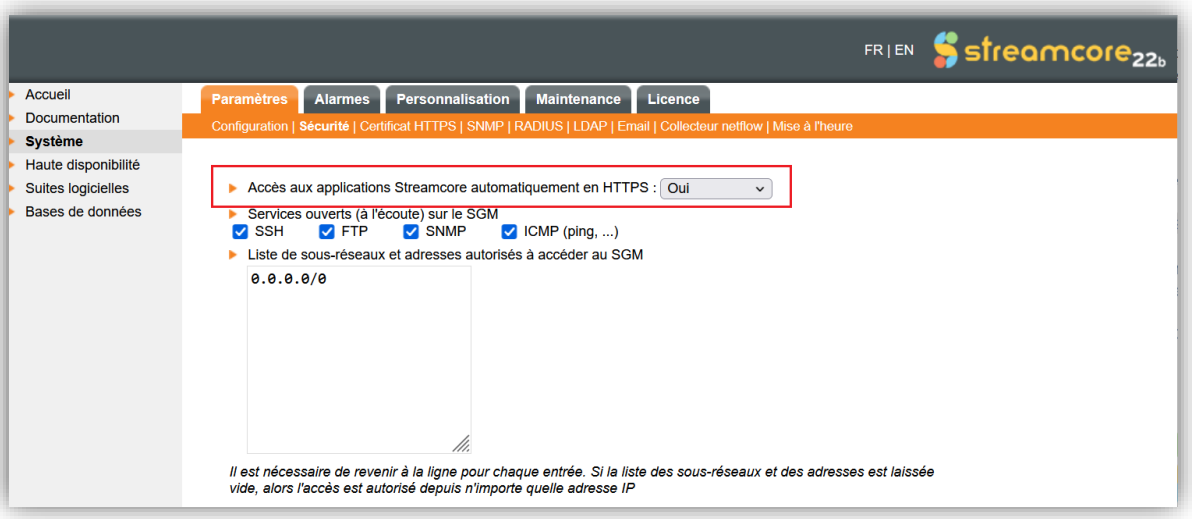
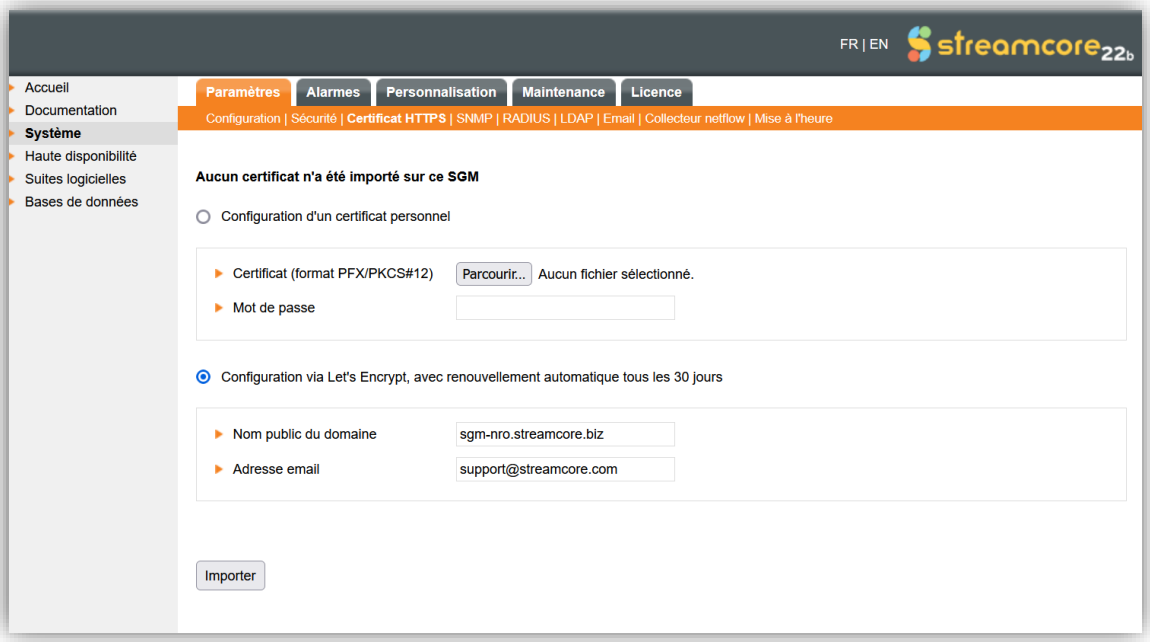


For the configuration of the automatic generation of certificates we need the DNS name of the SGM and an e-mail address that will be used as a contact for the license renewal operations:



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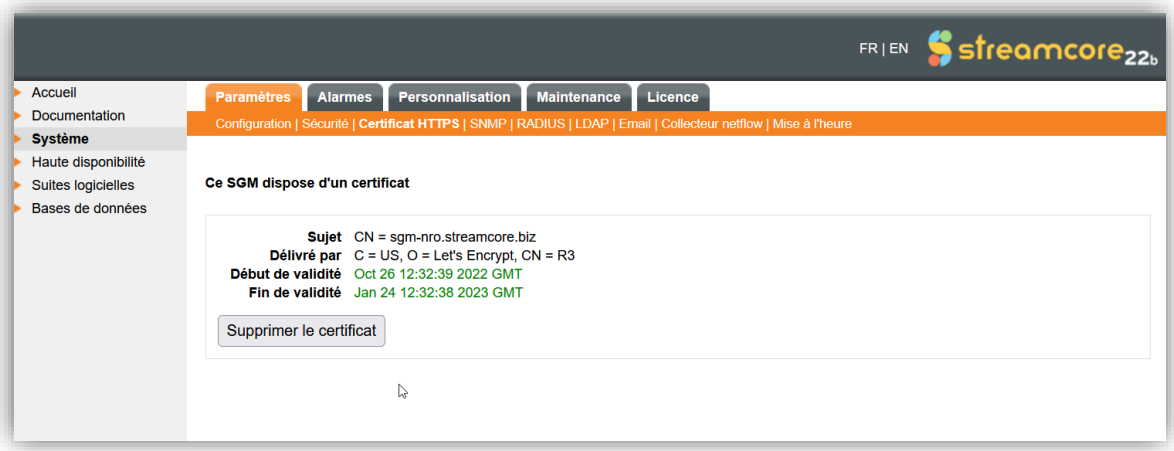
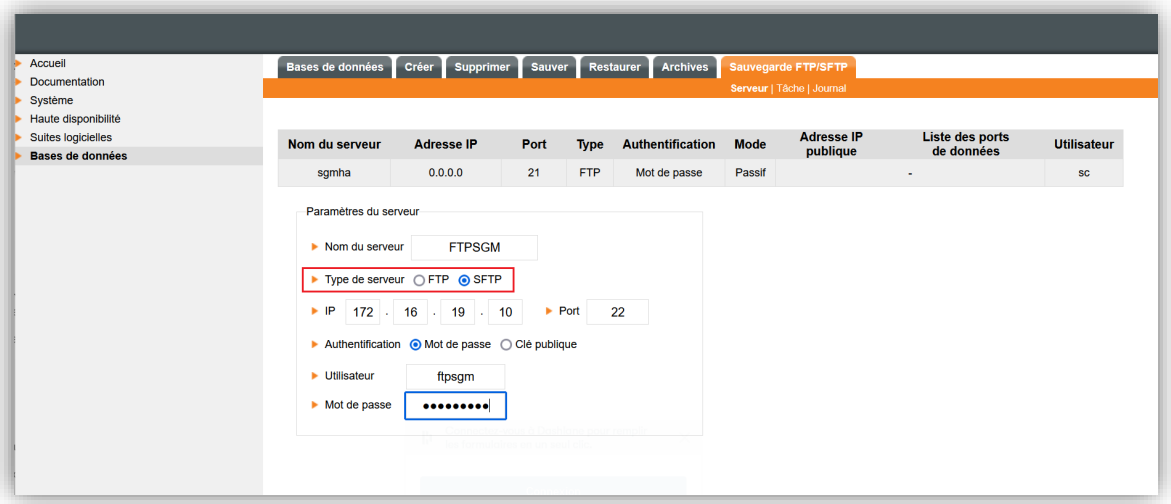


N.B. If you already have a certificate but want to take advantage of this new feature, you will have to delete it before creating the new one.

5.1.3 SFTP backup of databases

The SGM automatically backs up its databases every night for both configuration and data (excluding Netflow tickets). Machines with a separate system disk, back up the databases on a physical disk separate from the data storage.

However, it is recommended to copy these backups to a space external to the SGM. Historically, this function was only available through FTP. From version 22b onwards, it is possible to use the SFTP protocol to export one or more SGM databases in a secure manner.



The connection to the SFTP server will be done with a user and his password (as above with the user ftpsgm), or with a user and his public key.

In this last case, using a public key, you have to export the public key of the user sc from the SGM to the SFTP server. To export this key you have to copy the public key of the sc account from the SGM to the **~/.ssh/authorized_keys** file of the

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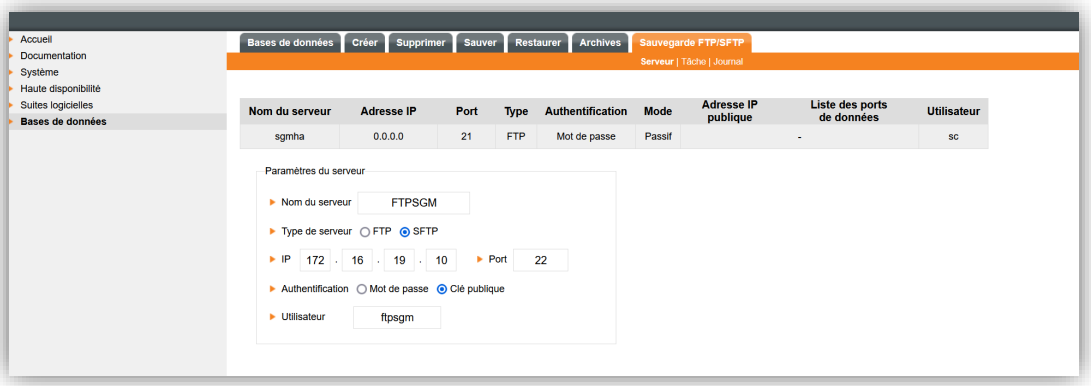
SFTP server for the selected user.
The easiest way to do this export is to connect as user **sc** on the SGM (in SSH) and to type the following command (example with the user ftpsgm of the SFTP server) :

ssh-copy-id ftpsgm@172.16.19.10

which will then ask to enter the user's password and automatically copy the key.

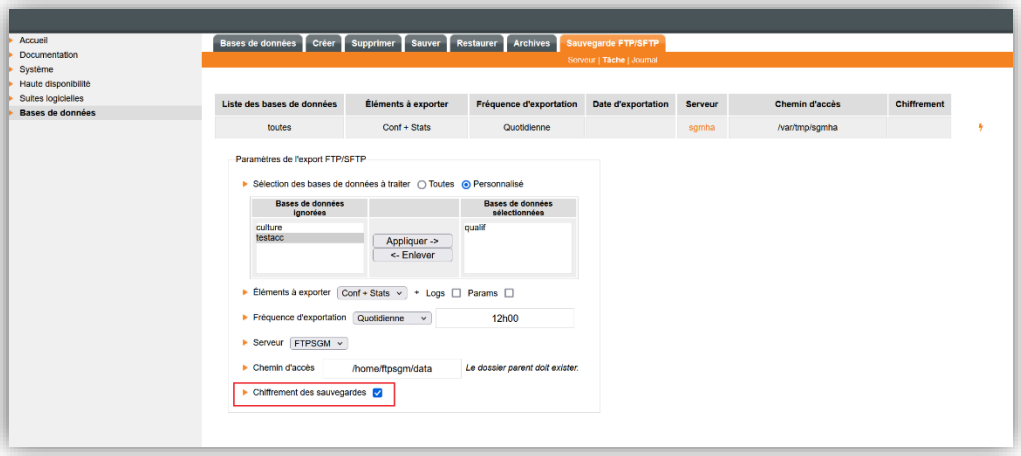
We can then use a connection with key authentication:

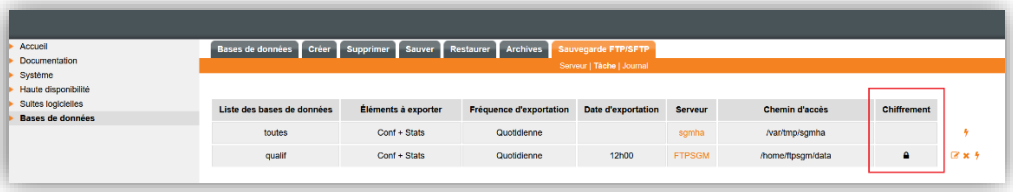


And set up a transfer task that can now encrypt the sent files.

5.1.4 Encryption of exported databases

Sending a backup of a database to an external server via FTP or SFTP can now be encrypted. This makes it easier to move and store them securely.





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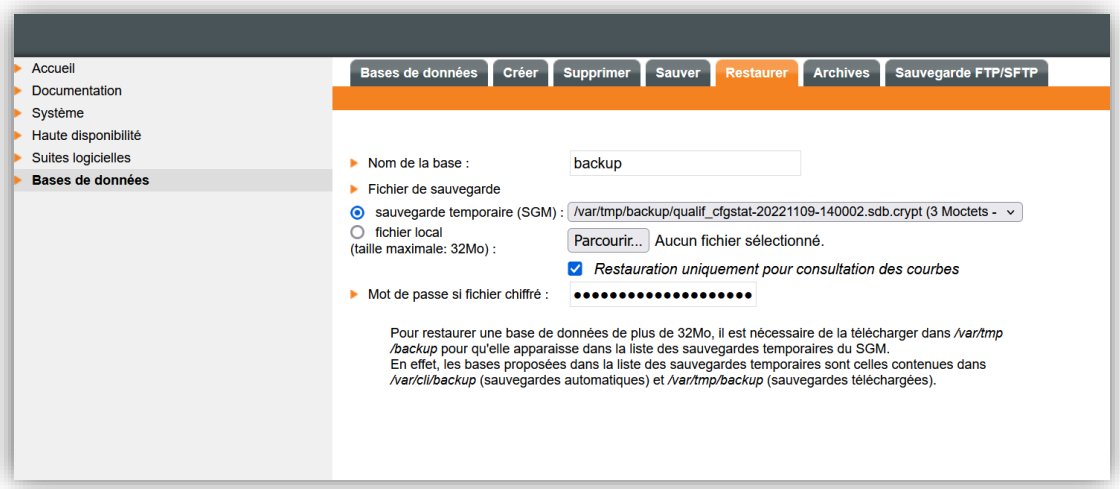
N.B. The encryption uses the passphrase which must be configured in **SGMConf > System > Security**.

5.1.5 Restore an encrypted database

If you want to restore a database from an encrypted export, you will have to enter the password that was used at the time of the export. The password to enter is the passphrase configured on the SGM when the database was copied to the FTP/SFTP server. If this passphrase has been changed since then, you must use the old one.



5.1.6 Special size of the acceleration cache for a SpeedAgent

A second cache size used for acceleration is added and can be configured in this version.

This new size, called "Specific cache size", is in addition to the first one called "Global size" and is used as follows:

- If no specific cache size is configured, then the set of acceleration pairings will take a global cache size.
- If a specific size is set, then the pairs established with a SpeedAgent will take this cache size, the other pairs remaining with the global size
- By default only the global size is set
- A "size propagation" parameter indicates if a modification of a global size is to be propagated on the already existing pairs, by default its value is No

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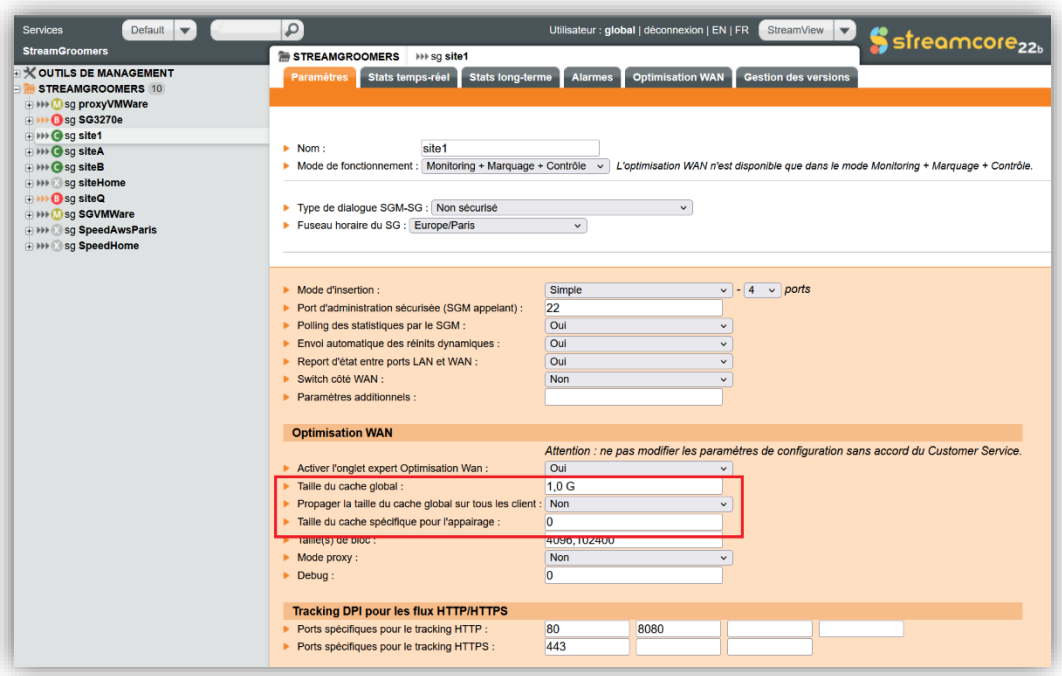
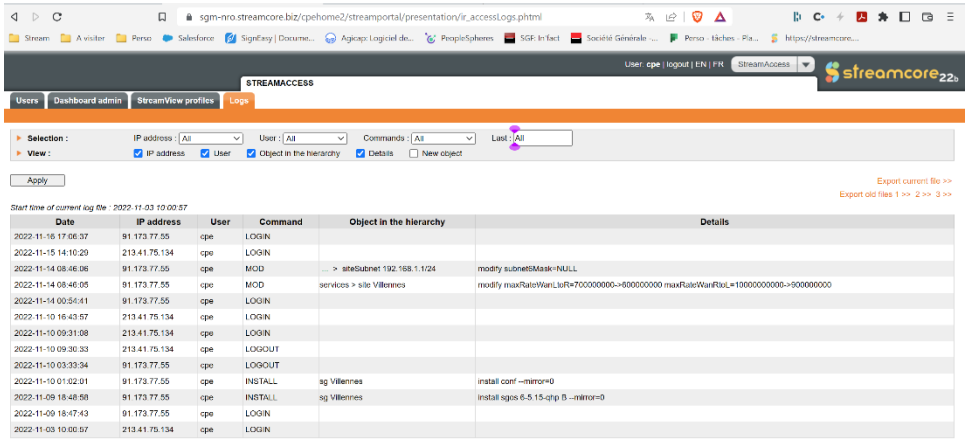


5.1.7 Historical access to the databases

StreamAccess logs recorded failed access attempts and object changes in the database for auditing and traceability purposes.

The logs have been extended to also record successful accesses to the database with recording of the connection IP address.



5.1.8 Web audience analysis on the SGM

It is often useful to have indicators on the use of a tool like the SGM. Of course, there are logs to track accesses and modifications of objects. However, understanding the usage in mass and not for each individual allows to understand which pages are used and how often.

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Rather than developing specific tools to track usage, Streamcore decided to rely on standard market tools, mainly Google tools. Streamcore does not upload any information to its own or Google's servers.

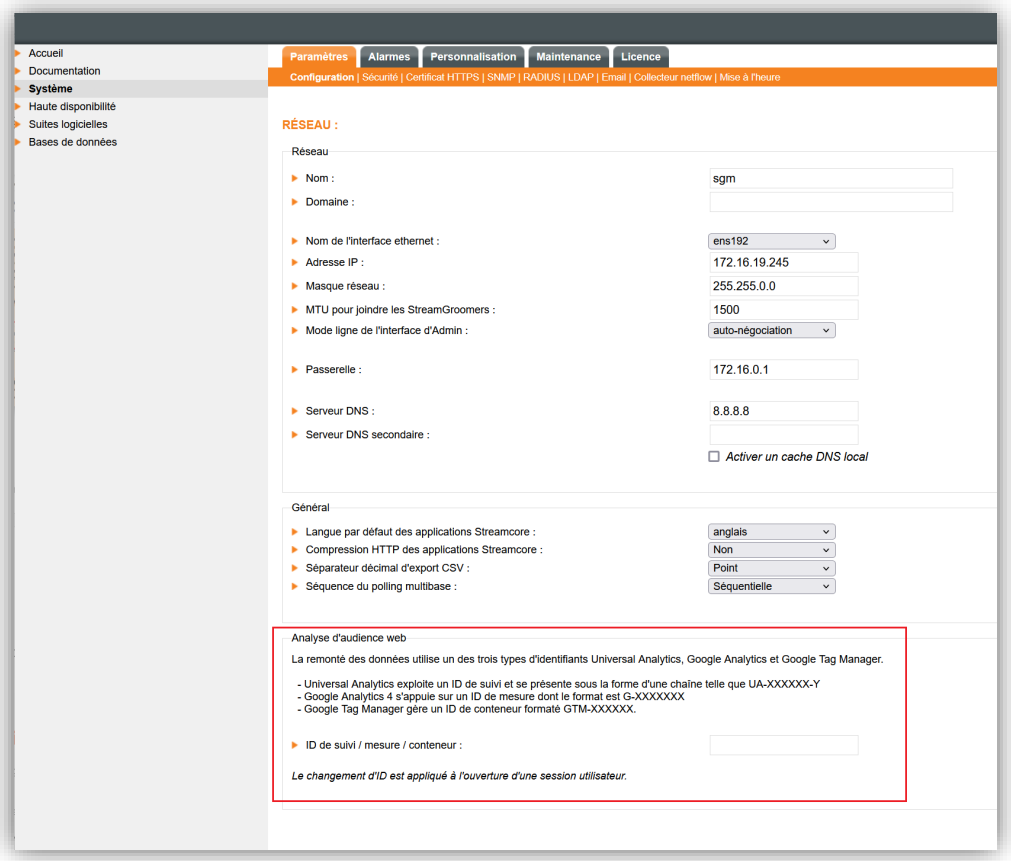
It is up to you to configure the function with your Google account to retrieve usage indicators of the tool. No critical information (users, IP addresses, applications, etc.) is sent to Google servers when the service is activated. Only browsing and usage information is collected in an anonymous way.

Data collection is performed on all SGMConf, StreamView, StreamReport, StreamDashboard, StreamAccess and StreamMap pages.

This analysis is based on one of the following three tools:

- Universal Analytics (Google Analytics old version)
- Google Analytics 4
- Google Tag Manager

You have to start by adding the URL of the website present on the SGM to the Analytics or Tag Manager account, a unique ID of the website is then created. This ID must be filled in SGMConf to identify the origin of the collected data:



The results of the analysis will then be available on the tool's own website.

N.B. If no configuration is entered, which is the default configuration, no analysis will be launched and no data will be transmitted.

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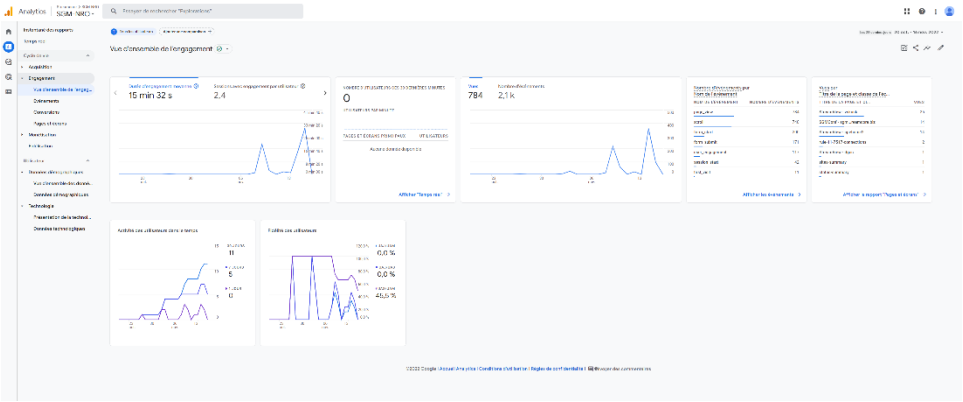
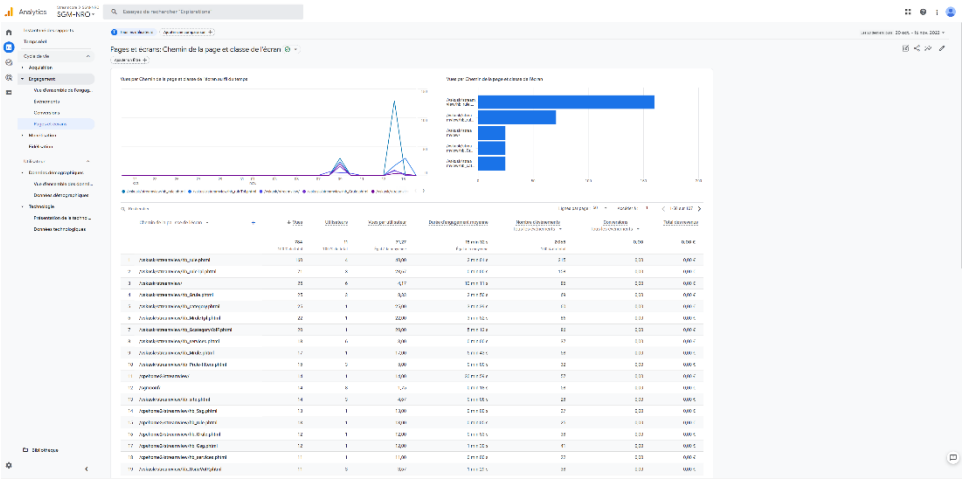
Type of results exposed by google analytics



Tracking of accessed pages



A list of correspondence between page paths and menu options is available in support.

6 Problems corrected by Software Suite 22b

All components of the software suite are delivered as updated versions.

Note: In this software suite, the BOOT components are **S55**. and **T09**. The correct version, depending on the type of SG (M4G or M5G), will be installed automatically by the SGM when a BOOT is deployed on the StreamGroomers.

The following tables list the issues that have been fixed in version 22b of the software suite and the new features if they are reported as [implemented]:

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Customer ticket	Reference	Description of the problem that was solved (SGM 22b)
SGM 22b		
	SC-1183	On site list of empty rules
	SC-1158	[SGMConf - BullsEye] Some logs are missing
	SC-1155	[SGMConf] Error when creating a database
	SC-1132	[SGM - BullsEye] Importing a certificate crashes the SGM
	SC-1128	Infinite redirection on the WAN Opt.
SCC-00001408	SC-1127	Error when generating a report
SCC-00001407	SC-1124	Requests from SGM to SCO fail
	SC-1123	Acceleration crashes if a peer is not available
	SC-1122	The modification of the passphrase leaves in error
	SC-1105	Double numbering management of the bases for the pre-installation checks of the softwaresuites
SCC-00001406	SC-1099	SG Proxy ACC: first app server in transparent mode
SCC-00001405	SC-1097	Log rotate not functional for multishaping (clidynconf)
SCC-00001404	SC-1093	Sites without alarm colors
SCC-00001405	SC-1089	Multi-shaping does not seem to be operational
SCC-00001403	SC-1081	On SG proxy ACC: deleting server applications erases the license
SCC-00001365	SC-1059	SNMP request on SG KO :
	SC-1058	SG SNMP configuration modification : not taken into account on REINIT
	SC-1035	Migration SG M4G to M5G : impossible to migrate a SG M4G managed in SSH
	SC-1024	Grooming synchronization in a very fast loop.
SCC-00001387	SC-1021	Cannot pass an aggregation site to independent if the rule name does not contain "link"
	SC-1020	Unclear rule name display on a TOP
	SC-1019	Alarm on unreachable SG
SCC-00001388	SC-1018	Full "/" score on a SG
	SC-1011	SLM distribution on the access link does not work in 22a
	SC-660	[SGM AWS] Unable to remove individually installed packages (OPE/USINE/ACC)
SCC-00001353	SC-469	SG unreachable in rlogin if the DNS is incorrect on this SG

Customer Ticket	Reference	Description of the problem that was solved (OPE 6-4.25)
OPE 6-4.25		
	SC-482	On a SG, the "maxRate" parameters are limited to 4 Gbit/s
	SC-432	QUIC - undecoded SNI field (chrome / chromium)

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Customer Ticket	Reference	Description of the problem that was solved (OPE 6-5.15)
OPE 6-5.15		
SCC-00001392	SC-1024	Grooming very fast loop synchronization
SCC-00001388	SC-1018	Partition " / " full

Customer Ticket	Reference	Description of the problem that was solved (Boot T10)
Boot T10		
	SC-1073	SG VMWare: what E1000 driver
SCC-00001400	SC-1059	Towards an SG in M5G: snmpwalk goes wrong
	SC-1058	SG SNMP configuration modification : not taken into account on REINIT

Customer Ticket	Reference	Description of the problem that was solved (Boot S56)
Boot S56		
SCC-00001400	SC-1059	Towards an SG in M5G: snmpwalk goes wrong

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7 Known problems

The table below lists known problems and provides a workaround if necessary.

Reference	Component	Description of the known problem	Alternative solution
FB46694	StreamView StreamAccess	From software suite 6-4.S08 - Authentication with Radius does not work if the password contains the following characters • Double quotation mark " • quotation mark ' • Slash / • Exclamation mark! • Back cut • Hooks [and] • Star *	Change the Radius password avoiding the use of these characters.
FB42810	SG	StreamGroomers can restart in a port mirroring configuration when capturing traffic.	
-	SG	Grooming, dual mode and tandem mode do not work in high performance mode 6-2.11	Do not activate the high performance mode.
FB44508	SGM	StreamView - There are no real-time statistics on the audio/video terminal rule when RTP+MOS measurements are selected.	
-	SG	In the WAN optimization profile definition, the FTP manager does not work. Only the control session is optimized.	FTP data traffic can only be accelerated by the Fallback handler.
-	SGM	StreamView - If we declare a server with a certificate while the corresponding SG is inaccessible, the application server will not be considered for acceleration.	Solution: re-insert the certificate and restart the SG.
FB47230	SG	With ACC24 or later and an older OPE (< 6-4.17), each reboot of the SG will clear the acceleration cache.	Upgrade to OPE 6-4.17 or higher
FB49383	SGM	Possible migration problem to version 22b if the SGM contains more than one database, including a very large one.	Contact Streamcore support to manually start the migration on this very large base.
FB49409	SG	On an SG in Dual/Tandem mode and in an SGM HA environment (SGM cluster), changing the communication mode from "calling SG" to "not secured" may cause an error.	Contact Streamcore Support
FB4913	SG	The SG with a T0# boot version could not use any SGM calling the Secure dialog type (weak or strong)	Choose the one that **is not secure** and that already uses an SSH connection. Or a type of SG caller dialogue.

8 Installation and deployment

Read the following recommendations carefully:

- CAUTION: On the SG250e, status mirroring between LAN and WAN ports does not work.

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- After starting the StreamGroomers in operational software, it is strongly recommended to check the LAN and WAN ports statistics (speed and duplex mode, CRC errors, collisions...) in order to avoid any configuration mismatch with the interconnected equipments.
- We recommend to connect to the ADMIN port on the LAN side of the StreamGroomer.
- On the SG350e, when switching from boot software (closed bypass) to operational software in bypass mode, the bypass opens and closes immediately, resulting in two interface state changes. This operation can block traffic for a few seconds.
- Direct connection of peripherals (mouse, keyboard and monitor) to the SGM should only be done for maintenance purposes.

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9 Software interoperability rules

9.1 OPERATION VERSION DROP

Read the rules carefully:

- SGM: unauthorized operation (risk of data loss)
- SG OPE: operation authorized if the OPE vs Boot/System interoperability rules are respected (see table below).
- SG Boot/System: unauthorized operation (risk of material accident)
- ACC acceleration system: unauthorized operation

9.2 INTEROPERABILITY BETWEEN COMPONENTS

Interoperability is guaranteed for an SGM in the following cases:

- Version SGSS 6.4 with a SG in OPE 6.5, 6.4, 6.3 and 6.2
- Version SGSS 6.5 with a SG in OPE 6.5, 6.4, 6.3 and6.2
- SGSS 22x version with a SG in OPE 6.5, 6.4 and 6.2-11

Interoperability not guaranteed for an SGM that is older than the OPE version.

The table below indicates when compatibility between SGM and SCO versions is guaranteed:

SCO	SGSS 6.4	SGSS 6.5
Up to 1.2	Not guaranteed	Not guaranteed
Up to 1.3	Yes, for OPE >= 6-2	Yes, for OPE >= 6-2
From 6.5	Yes, for OPE >= 6-2	Yes, for OPE >= 6-2

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10 Technical support

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