



6-5.T12 Release notes

Version 1.2

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1 Software Suite 6-5.T12

The Streamcore software suite is a set of software releases for StreamGroomers and SGM. This document contains the release notes for the Streamcore 6-5.T12 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: 6-5.T12 Official OPE: 6-4.25 Official OPE: 6-5.11

Official ACC: ACC25 (version 6.1.0-243)

Official M4G64 boot: S54 Official M5G boot: T08

2 IMPORTANT RECOMMENDATIONS

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.To6, the Streamcore software suite installs a new license management system that requires an update of the license currently used on the SGM.

If you have already used an SGM in 6-5.To6, you do not need to update the license.

2.2 NEW PASSWORD

Starting with version 6-5.To6, 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 enduser 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.

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 <u>Known problems</u>).
- The ACC25 can work with other SGs in the ACC25 or ACC24 only (for future versions, please see 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):

Software suites	End of the assistance	
6-3	End of support since November 30 th 2018	
6-4	December 31 st 2022	
6-5	Not planned	

OPE	End of the assistance	
6.2	30/11/2018	
6.2 high performance	30/12/2023	
6.3	End of support since November 30 th 2018	
6.4	31/12/2024	
6.5	Not planned	

• It is strongly recommended that the SGM, StreamGroomers, and StreamCollectors be updated with 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.

4 Improvements and new features

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

4.1 SGM 6-5.T12

1.1.1 Change the user's password

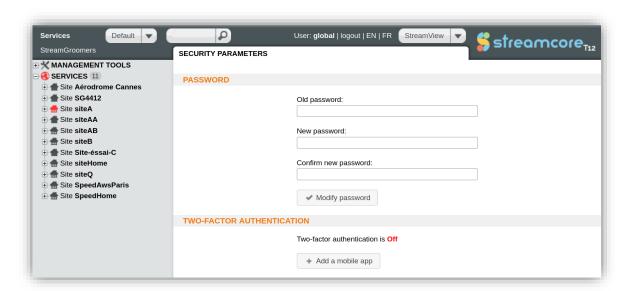
It is now possible to change your own user password online while working in StreamView.

This feature is only available for locally defined users. Users defined with LDAP or Radius authentication cannot change their password in StreamView because the password is managed by an external system.

A new menu has been added to the user button on the top bar: Just click on the user name in the top ribbon:



And change your password:



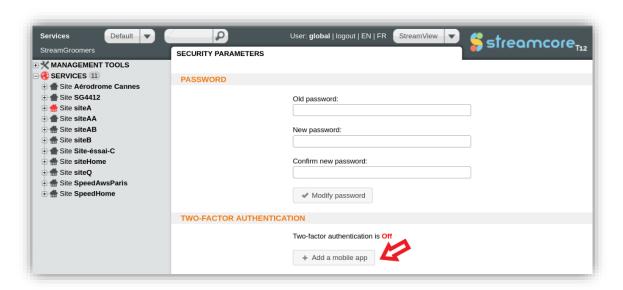
1.1.2 Two-factor authentication (2FA)

4.1.2.1. Configuration

Users defined locally in StreamView (not with LDAP or Radius authentication) can request a two-factor authentication check.

Streamcore recommends enabling 2FA specifically for SGMs accessed through a public IP address (Cloud or NAT).

It is activated in the same window as the password change window:

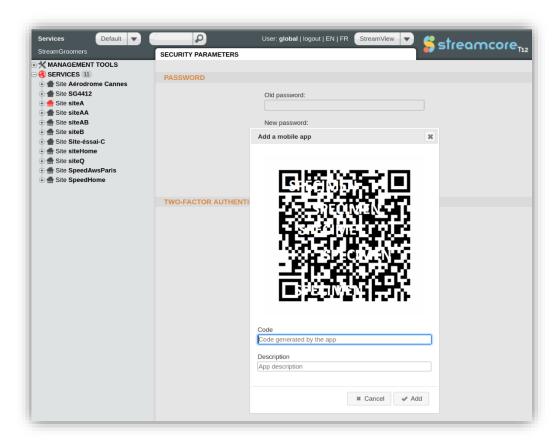


This two-factor authentication will be based on the **TOTP** protocol suite and, to work, you will need to install a compatible application on your mobile device.

The following list of TOTP mobile applications has been tested and works with StreamView.

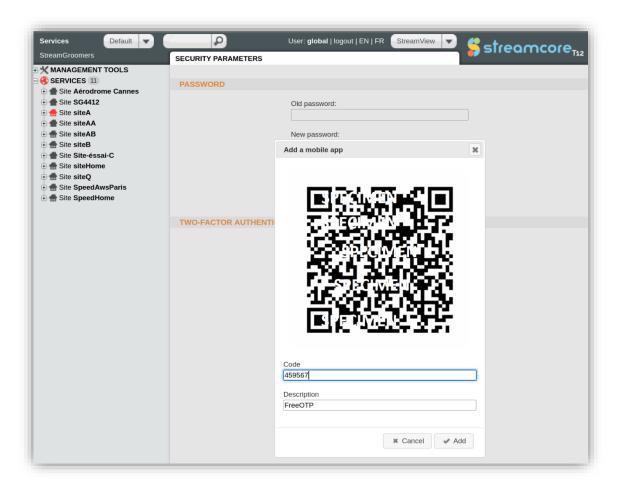
Publisher	Application	Tested version	
Google	Google Authenticator	Version 3.3.6000	
Microsoft	Microsoft Authenticator	Version 6.5.85	
Red Hat	<u>FreeOTP</u>	Version 2.3 (iOS)	
Twilio	Authy2-Factor Authentication Authy	Version 24.6.0 (IOS)	
Salesforce	Salesforce	Version 3.7.1	

The initialization requires the reading of a QR Code that you will have to scan from your mobile application:

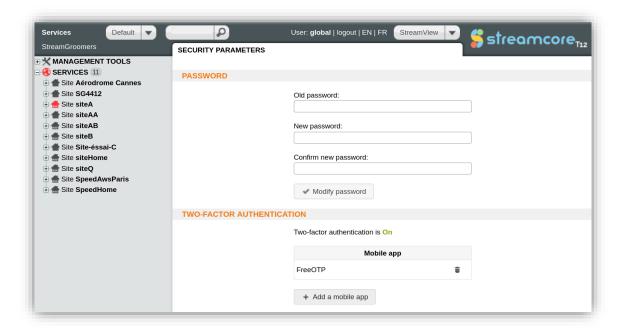


When the scan is complete, the application displays a code number that you must enter in the *code* entry box:

You can also add a description to identify the application used for this 2FA authentication. And because once the scan is launched, you will need to quickly enter the code, it is easier to write this description before launching the QR code scan.



And simply click on **Add**:



WARNING: Because TOTP authentication is based on time synchronization, the SGM must be set correctly to the time. And we recommend configuring the use of an NTP server on the SGM.

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4.1.2.2. Use

To use the 2FA system, simply go to the login page, enter your credentials and you will be directed to a page where you will need to enter the code generated by your mobile authenticator.



You will have about 30 seconds to enter the validation code.

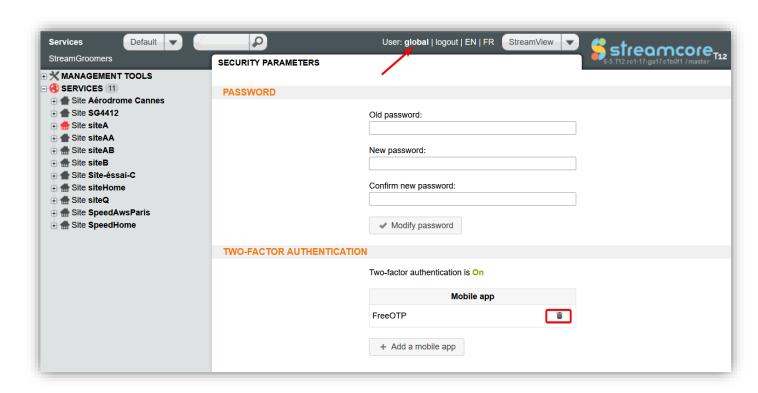
If you have configured multiple authentication applications, you can use whichever one you want and enter the code to unlock your access.

Authentication with 2FA is valid until the cookie expires (3 days by default).

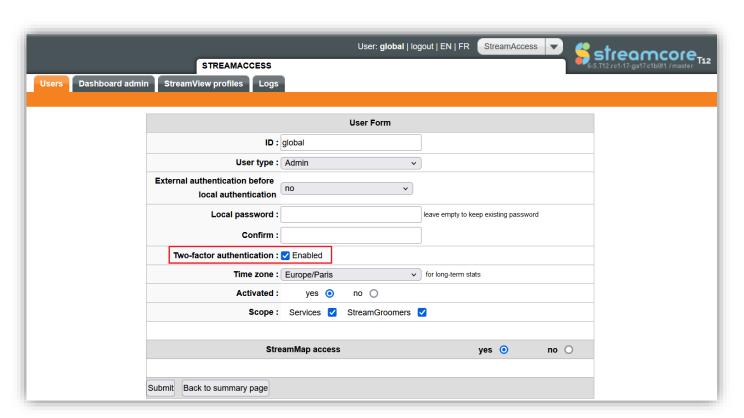
4.1.2.3. Removal of two-factor authentication

At any time in StreamView, a user can discontinue the use of their two-factor authentication and revert to one-time password authentication.

Click on your name and delete the "mobile application":



Or you can use StreamAccess to disable two-factor authentication.

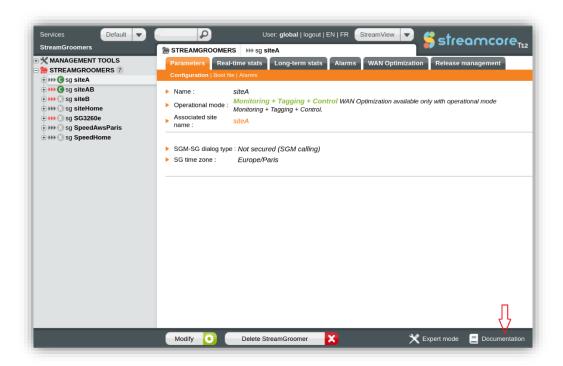


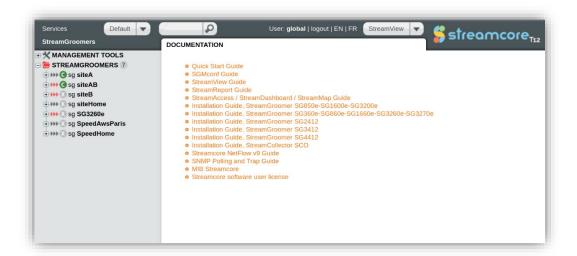
Through StreamAccess, and if you have the right to do so (admin), you can modify the access of other users.

1.1.3 Documentation

Streamcore.com

StreamCore documentation is now directly accessible in StreamView by clicking on the **Documentation** icon in the lower right-hand corner of the window:





1.1.4 SG with N ports

Prerequisite: SG with BOOT To8 and OPE 6-5.11 or higher

As the number of links in networks tends to increase, Streamcore has added the possibility to manage more than 2 links in a StreamGroomer probe.

In addition to the default Admin and Ext ports, you can now configure up to 9 bypass links (or 18 ports) on a single probe.

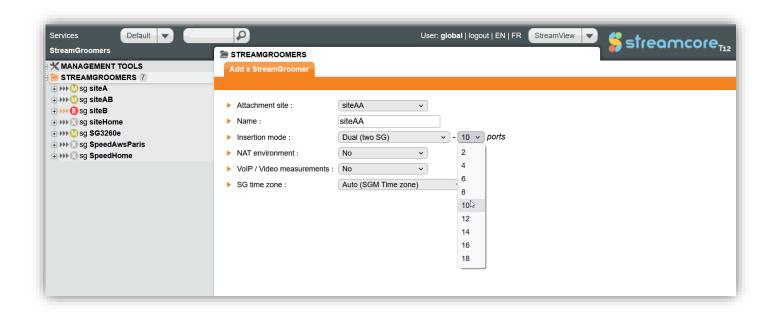
4.1.4.1. Creation of a SG N ports

When creating a SG, you can select the number of ports attached to this machine.

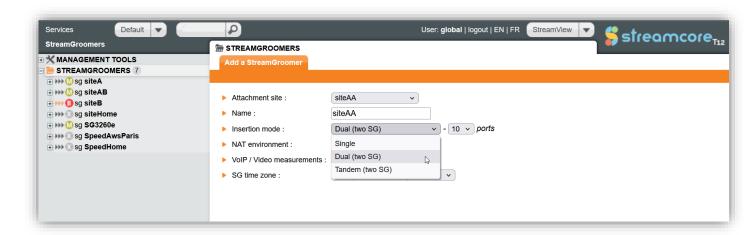
These ports are grouped into 9 lan/wan bypass pairs.

By default, the first two ports admin and ext are always added at creation (and are therefore not included in the account).

You must select the number of bypass ports that are physically inserted inside the StreamGroomer:



In addition, the SG can be configured in dual or tandem with any of these port numbers.



4.1.4.2. Port naming

The port names have been changed to facilitate recognition among the many ports (up to 20 per device).

The name is composed of:

- 1 digit for the bypass number (from 1 to 9) and 0 for the default ports (Admin & EXT)
- o-lan for the Lan side of a link
- 1-wan for the Wan side of a link

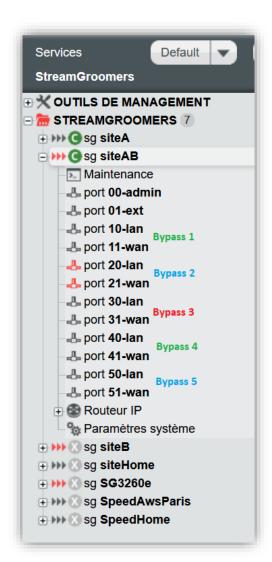
The name of each port is based on its place in the list of bypass port pairs.

The pair numbered **0** as the first digit will always be the pair of *admin* and *ext* ports (which in fact do not form a bypass pair).

The other couples are numbered in ascending order of their position from left to right (and from bottom to top) seen from the front.

The full name of the ports indicates the LAN or WAN nature of the port and is formed by the number **n of** the bypass pair followed by a *O-lan* or **1-wan**. The Admin and Ext ports are named **00-admin** and **01-ext** respectively.

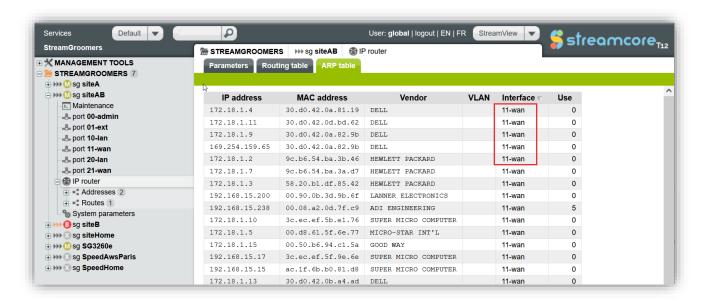
We can then have the following 12 SG ports:



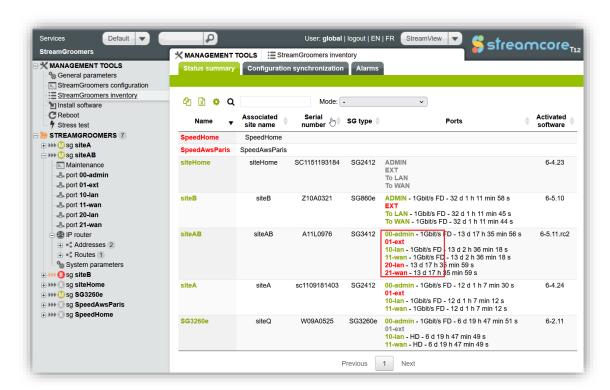
Since an SG can configure up to 18 ports to form 9 bypass pairs, the latest available port names are 90-lan and 90-wan.

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The name of these ports will be displayed in the ARP table of the SG:



As in the SG inventory list:



1.1.5 Exporting NetFlow under license

The limitation of NetFlow collection to a single site in the SGM has been removed.

It is now possible to configure NetFlow export on any number and type of sites to the SGM (if used as a collector).

This functionality is controlled by a license linked to the number of rules exporting NetFlow tickets.

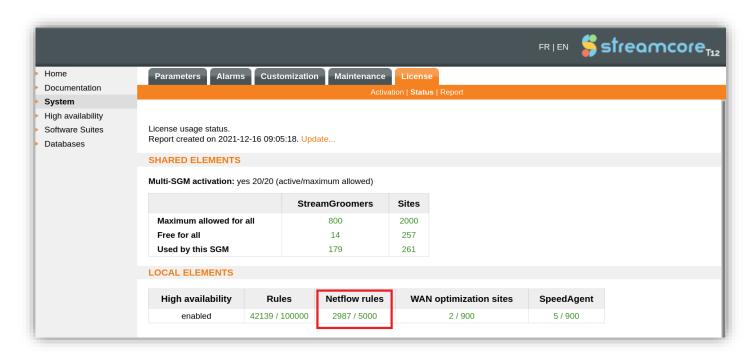
Streamcore.com

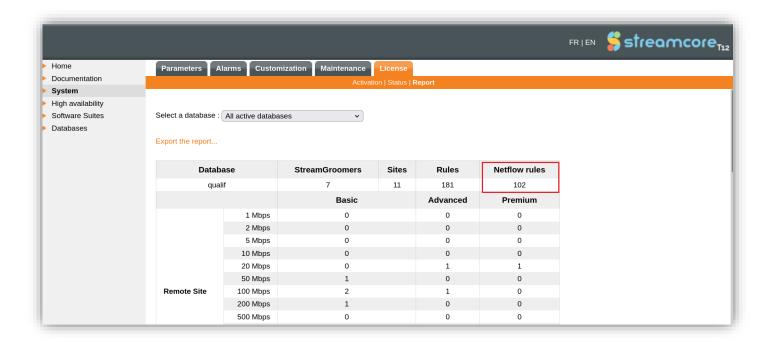
Adding a new rule for this export will be prohibited if it leads to exceeding the number defined in the current license.

An error message is then displayed to inform of this overuse:



The number of NetFlow rules is presented in the license status and report (for a per-database view) with SGMConf:





Netflow management:

There are 2 ways to store and manage NetFlow tickets in the Streamcore solution

- Directly on the StreamGroomer Manager (SGM)
- In an external repository named StreamCollector (SCO)

To enable NetFlow export, you must configure each StreamGroomer probe with a destination collection platform (SGM or SCO).

The number of rules that can be exported is controlled by the SGM license.

4.2 SG: OPE 6-4.2 5

1.1.6 Quic v1 support

The management of the SNI field in the official Quic session (IETF) v1 has been improved.

The TLS protocol type is now displayed in the "domain name" column in live connections.

4.3 SG OPE 6-5.10

1.1.7 QUIC v1 support

The management of the SNI field in the official Quic session (IETF) v1 has been improved.

The TLS protocol type is now displayed in the "domain name" column in live connections.

4.4 SG OPE 6-5.11

1.1.8 SG with N ports

As described in 4.1.4 with this OPE, a SG can manage up to 18 different bypass ports.

4.5 SG: BOOT S5

1.1.9 Fixed SNMP problem

From boot S49, an SNMP request to the SG can fail.

This has been corrected in this S54 version.

4.6 SG: BOOT T08

1.1.10 SG with N ports

As described in 4.1.4 with this OPE, a SG can manage up to 18 different bypass ports.

4.7 CLOUD IMAGES

4.8 ACC 25

- Improved performance, especially when accelerating TLS connections with SSL optimization enabled.
- Improved TLS server name filtering capabilities (SNI)
- Enhanced configuration options around TLS configuration

4.9 WITHDRAWAL OF THE FUNCTION

4.9.1 4.9.1 Inventory of local networks

IP and port scanning also did not comply with security policies for virtual and cloud environments.

5 Problems fixed by Software Suite 6-5.T12

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

Note: In this software suite, the BOOT components are **S54**. and **T08**. 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 issues that have been fixed in version 6-5.T12 of the software suite and new features if reported as [implemented]:

User's problem	Reference	Description of the problem that was solved (SGM 6-5.T12)
osci s problem	Reference	
		SGM 6-5.T12
	SC-351	Off-line license SGM: Unreserved SG
SCC-00001363	SC-367	"Reserved flow" encoded as an integer: out of capacity for multiGiga sites.
SCC-00001340	SC-369	Warn when the subnet mask is set to 0.
	SC-378	[Streamview] Warning for licenses prevents certain actions from being performed.
SC-383 [StreamAccess] Clicking on the Users tab redirects t		[StreamAccess] Clicking on the Users tab redirects to StreamView
SC-438 Connections: WARN fx_sgRule.pm line 2641 SC-439 Long term port statistics - no cookie		Connections: WARN fx_sgRule.pm line 2641
		Long term port statistics - no cookie
	SC-456	The change of port names on streamgroomers
SCC-00001359	SC-468	SG in BOOT mode: statistics on ADMIN/LAN/WAN ports show an error: should print an SG warning in BOOT mode.
	SC-481	SG inventory: no category selection.
SCC-00001371	SC-487	[netflow-SGM] Move the netflow folder to the database partition.
	SC-488	The migration of a database failed when it was started during a query session.

User's problem Reference		Description of the problem that was solved (OPE 6-4.25)
OPE 6-4.25		
	SC-6	Support for QUIC v1
SC-11		REINIT to an SG failed for an HTTPS filter with two wildcards *
SC-432		QUIC - SNI field not deciphered (chrome / chromium)
SC-482 maxRate" parameter limited to 4 Gbit/s for a SG		maxRate" parameter limited to 4 Gbit/s for a SG
	SC-485	VxLAN decryption not explicit enough.

User's problem	Reference	Description of the problem that has been solved (Boot S54)	
Boot S54			
SCC-00001365 SC-371 SNMP request failed on SG KO since S49 start		SNMP request failed on SG KO since S49 startup	
	SC-440	SG not manageable after an upgrade of a calling SG (in the first non dual version)	

User's problem	User's problem Reference Description of the problem that was solved (OPE 6-5.10)				
	OPE 6-5-10				
	SC-3 [quic] Crash on memory allocation for SNI				
SC-4 Crash if a large number of connectio		Crash if a large number of connections are requested.			
SC-6 Support		Support for QUIC v1			
	SC-432	QUIC - SNI field not deciphered (chrome / chromium)			
	SC-433	Connections: empty list after OPE startup			
	SC-434	Connections: Crash OPE			

User's problem Reference Description of the problem that was solved (OPE 6-5.11)				
OPE 6-5-11				
	SC-9	Management of N-ports on a SG (4 <= N <= 18)		
	SC-10	DUAL of SG to n-ports (N >= 4)		
	SC-11	REINIT of a HTTPS KO filter when two wildcards * are used		
SCC-00001370	SC-416	Crash of an M5G SG on the modification of a rule that is deployed on this SG.		
	SC-482	On a SG, the various "maxRate" parameters are made to be less than 4Gb/s.		
	SC-485	VxLAN analysis not explicit enough.		

User's problem	Reference	Description of the problem that was solved (Boot T08)			
	Boot T08				
	SC-440	SG not manageable after an upgrade of a calling SG (in the first non-dual version)			

6 Known issues

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 " guillemet ' Slash / Exclamation mark! Back cut Hooks [and] Star *	Change the Radius password avoiding the use of these characters.
FB42810	SG	StreamGroomers can reboot in a port mirroring configuration when capturing traffic.	
-	SG	Grooming, dual mode and tandem mode do not work in high performance mode.	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
FB49373	SG	The SG may not be accessible from the SGM if there is a DNS misconfiguration on that SG.	Update the DNS configuration of the SG
FB49383	SGM	Possible migration problem to version 6-5.T12 if the SGM contains more than one base, including a very large one.	Contact Streamcore support to manually start the migration on this very large base.
FB49409	SG	On a 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	SG with a T0# boot version could not use any SGM calling Secured (weak or strong) dialog type	Choose the Not secured one which already use a SSH connection. Or a SG calling dialog type.

7 Installation and deployment

Read the following recommendations carefully:

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

8 Software interoperability rules

8.1 GRADE UPOPERATION

All upgrades are authorized according to the information provided in the migration guide.

Important: If the SGM is to be upgraded from 6.2 to 6.3 or later versions, it is mandatory to request a new Streamcore license before upgrading the SGM; if the license is not updated, some functionality may be disabled.

Important: To upgrade from v6.1 to v6.4, you must first upgrade to v6.2.

8.2 VERSION DOWNGRADE OPERATION

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 damage)
- ACC acceleration system: unauthorized operation

8.3 INTEROPERABILITY BETWEEN COMPONENTS

Interoperability is guaranteed for an SGM in the following cases:

- Version SGSS 6.2 with a SG in OPE 6.2, 6.1, 6.0 and 5.3
- Version SGSS 6.3 with a SG in OPE 6.3, 6.2, 6.1, 6.0 and 5.3
- Version SGSS 6.4 with a SG in OPE 6.4, 6.3, 6.2, 6.1, 6.0 and 5.3
- Version SGSS 6.5 with a SG in OPE 6.4, 6.3, 6.2, 6.1, 6.0 and 5.3

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

The table below indicates when compatibility between OPE and Boot versions is guaranteed:

Boot	OPE 6.1	OPE 6.2	OPE 6.3	OPE 6.4
S16 à S25	Yes	Not supported	Not supported	Not supported
From S26	Yes	Yes	Yes	Yes

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 to 5	Yes, for OPE >= 6-2	Yes, for OPE >= 6-2	

9 Technical support

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