Streamcore

Streamcore Software Suite Release 6-5.T09

RELEASE NOTES
v1.0

Table of Contents

Copyright

1 The Software Suite 6-5.T09

The Streamcore Software Suite is a set of software versions for the StreamGroomers and the SGM. This document contains the release notes of the Streamcore Software Suite 6-5.T09.

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 StreamView application. **Since the release 6.3, when an OPE is installed on a StreamGroomer, the SGM automatically deploys the latest versions of the BOOT and ACC modules.**

This Software Suite contains the following software versions of the SGM and StreamGroomers:

```
Software Suite: 6-5.T09
Official OPE: 6-4.22
Official ACC: ACC24 (version 5.6.0-204)
Official Boot M4G64: S51
```

2 IMPORTANT RECOMMENDATIONS

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

2.1 Licensing

Since release 6-5.T06 the StreamCore Software-suite installs a new license management system that needs an update of the license currently used on the SGM.

If you already used a SGM in 6-5.T06 you don't need to update the license.

2.2 New password

From version 6-5.T06 the default passwords for the users *sgm* and *sc* 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

Activating a new version of the OPE/ACC requires to reboot the StreamGroomer. During the reboot phase, the StreamGroomer is unreachable. Rebooting the StreamGroomer will automatically stop the following functions on the corresponding sites:

- Monitoring: No measurement (polling) is performed during the reboot and probably no statistics will be available for the corresponding period of 1 minute or 10 minutes in the Real Time and in the Long-Term graphs and reports. Groomings stops functioning and their status is set to *Down* status unless the Grooming has been configured to be managed temporary as a shaping.
- QoS and tagging: Traffic will not be prioritized nor tagged 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 broken.
- Netflow and monitoring: The StreamGroomers will stop sending Netflow tickets and traps/informs until has reloaded and applied its configuration.

It is strongly recommended to plan and schedule the reboot of the appliances to minimize the impact on the IT production workflows and activities of the end users.

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

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

2.4 Software versions for M3G not available

Boot and OPE packages for M3G appliances are removed from the Streamcore Software Suite 6-4.12. The reason is that M3G appliances are EOL.

OPE version 6.1 is also removed from the Streamcore Software Suite. The reason is that Release 6.1 is EOL.

2.5 Updating to ACC24

- The content of the existing cache is deleted from the StreamGroomer each time this SG is started with ACC24 (cf. Known issues).

- ACC24 can work with others SG in ACC24 or ACC23 only (for future versions please check the corresponding release note).

2.6 Updating to Boot M4G64 S49 or later

A critical issue has been identified with boot versions up to S42 on SG360e, SG860e, SG1660e and SG3260e that impact the communication with the StreamGroomers and many other operations such as configuration, statistics measurement and collect, WAN optimization.

If the uptime of these StreamGroomers is longer than 200 days, the appliance can become unreachable after a software reboot (for example when activating an OPE version). The workaround is a hardware reboot (unplug and plug the power supply). To solve this issue, deploy the Boot S49 on these appliances and apply the new version as soon as possible by rebooting the StreamGroomer.

Streamcore highly recommends updating all the StreamGroomers with a boot version S49 or later as soon as possible.

3 End of Support of the Software Suites

Please note the End of Support dates of the Streamcore Software Suites and Operational (OPE) software versions:

Software Suites and OPE	End of Support
6.0	End of Support since June 1st 2016
6.1	**End of Support since June 30th 2017**
6.2	Not planned
6.3	**End of support since November 30th 2018**
6.4	August 1st 2021

It is highly recommended to upgrade the SGM, StreamGroomers and StreamCollectors to the latest versions of the Streamcore Software Suite, OPE and Boot.

Do not hesitate to contact the Streamcore Support team (support@streamcore.com) or your sales representative for further details about the update path.

4 Improvements and new features

With this new release, Streamcore brings useful new features on its SGM and SG.

4.1 Default Password management

To increase security in the solution, especially when SGM is exposed to the Internet, standard passwords are now replaced by customed password generated at time of installation or activation.

4.1.1 SGMConf: cli

At first attempt to login on SGMConf with the "cli" account (after reception of a new SGM appliance or virtual image), the user is prompted to create the password for the "cli" account:

In case of a migration from an older version of the software suite, no new password is asked.

4.1.2 Streamview: global

At database creation the password for the "global" default account needs to be setup:

In case of a migration from an older version of the software suite, passwords for existing bases are not changed.

4.2 Licensing

From this software suite a new way to evaluate and to display the license is adopted.

A license consists of a list of items, each defined with a maximum value that should not be exceeded.

One single license can be shared among several SGM (and so activated on several SGM), and among all the bases of one SGM. For each SGM a usage value is computed for every item of the license. This usage value must be lower or equal than the maximum value that comes with the license in order to comply with this later.

Depending on the item the usage value is computed for one single SGM or globally for all the SGM.

The Status window, as displayed below, summarizes the usage of this license for the current SGM.

Most of the items are presented as follow:

<number used > **/** < number allowed>	The right side indicates what the license authorized as limit for this item, the left side what is used with the current configuration.
<number used > / < number allowed>	If presented in green the use is within the license limit
<number used > / < number allowed>	In red the use overpass the license
--	Indicates no value

The usage of the license is declined with the following areas:

SHARED ELEMENTS

Those elements are global among the several SGM that are using this license.

A: the number of **sites** declared with the license is shared between all the different SGM.

LOCAL ELEMENTS

These figures are computed on a per SGM basis.

Each SGM is allowed to use:

B: a number of **rules**, this includes all the type of rules and in case of a group rules all the rules that are instantiated under each site. This number of rules is computed from all the different bases of one single SGM.

C: the different throughputs of the WAN ACCESS LINK configured on all the sites. The licence defines an array of predefined throughputs with a maximum number of usages. A site counts for one usage in this array for the throughput equal or just above its definition.
This area concerns only the configuration of remote sites.

D: As in C above but for the site defined as data-center only.

Home
Documentation
System
High availability
Software Suites
Databases

| Parameters | Alarms | Customization | Maintenance | License |

Activation | **Status** | Report

License usage status.
Report created on 2020-11-10 08:16:38. Update...

SHARED ELEMENTS

Multi-SGM activation: yes 12/20 (active/maximum allowed)

	Sites
Maximum allowed for all	1000
Free for all	864
Used by this SGM	5

A

LOCAL ELEMENTS

SGMSpare	Rules	WAN optimization sites	SpeedAgent
enabled	50 / 5000	- / 900	1 / 900

B

StreamGroomer		Basic	Advanced	Premium
	1 Mbps	- / -	- / -	- / -
	2 Mbps	- / -	- / -	- / -
	5 Mbps	- / -	- / -	- / -
	10 Mbps	1 / -	- / -	- / -
	20 Mbps	- / 100	- / -	- / 100
	50 Mbps	- / -	- / -	- / -
Remote Site	100 Mbps	3 / -	- / -	- / -
	200 Mbps	- / -	- / -	- / -
	500 Mbps	- / -	- / -	- / -
	1 Gbps	- / -	- / -	- / -
	2 Gbps	- / -	- / -	- / -
	5 Gbps	- / -	- / -	- / -
	10 Gbps	- / -	- / -	- / -
		4	0	0

C

StreamGroomer		Basic	Advanced	Premium
	1 Mbps	- / -	- / -	- / -
	2 Mbps	- / -	- / -	- / -
	5 Mbps	- / -	- / -	- / -
	10 Mbps	- / -	- / -	- / -
	20 Mbps	- / -	- / -	- / -
	50 Mbps	- / -	- / -	- / -
Datacenter	100 Mbps	- / -	- / -	- / -
	200 Mbps	- / -	- / -	- / -
	500 Mbps	- / -	- / -	- / -
	1 Gbps	- / -	- / -	- / -
	2 Gbps	- / -	- / -	- / -
	5 Gbps	- / -	- / -	- / -
	10 Gbps	- / -	- / -	- / -
		0	0	0
Total		4	0	0

D

4.3 Statistics on port's traffic

Statistics on the different SG ports are now stored on the SGM and can be displayed as long term statistics curves in StreamView.
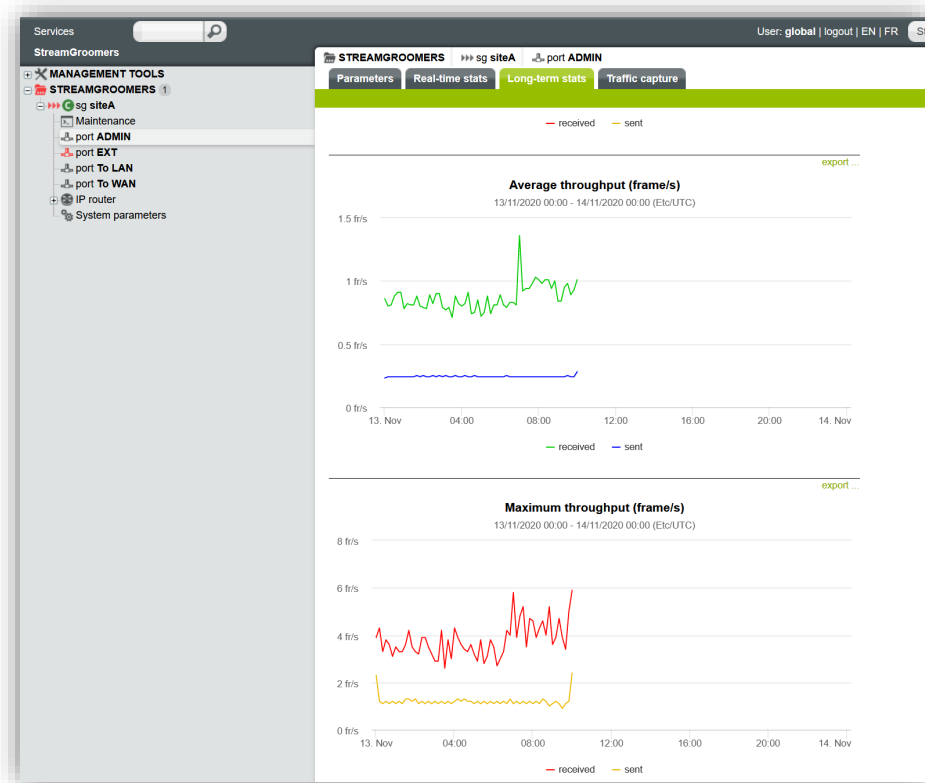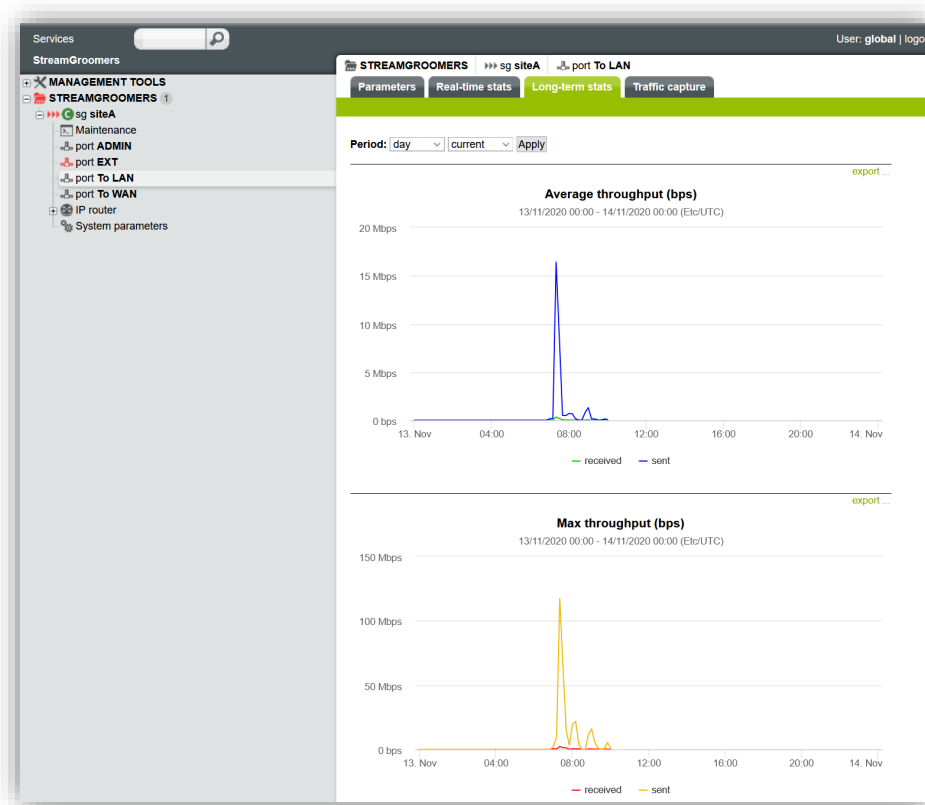
The statistics that are presented:

Throughput in bits/s: average, maximum

Throughput Number of frames per second: average, maximum

The granularity of these curves is the same as for other statistics, 10mn for the shorter period.

Long term statistics are displayed for every port (LAN, WAN but also ADMIN and EXT):
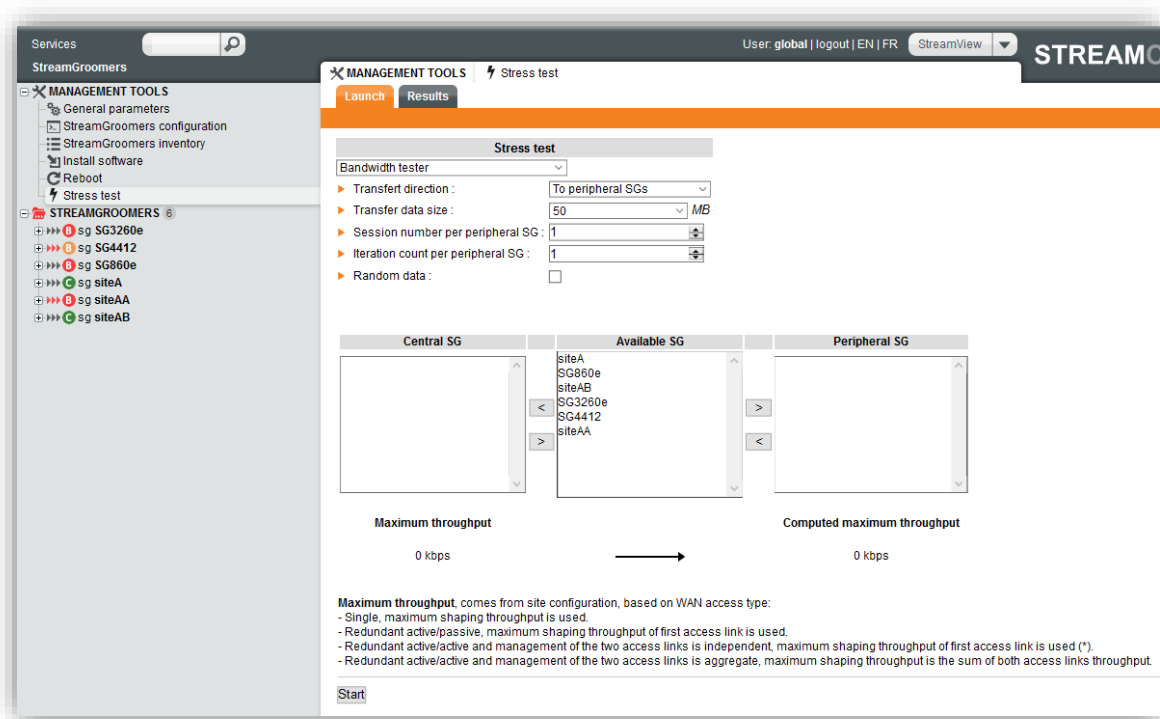
4.4 Stress test

To complement Streamcore set of active tools, a new StreamGroomer MANAGEMENT TOOLS is added to allow the generation of traffic between two or more SG.

This new tool, **Stress test**, provides a mean to check how the WAN link is performing and its total capacity per direction.

It may be used to:

- assess asymmetrical peak capacity of ADSL/LTE links based on local conditions
- set the right level of bandwidth for QoS configuration
- spot any device in the WAN infrastructure unable to deliver the committed throughput whether due to a physical limitation, negotiation mismatch or configuration error
- carry network acceptance tests for new links
- regularly assess exact capacity of links
- load test an infrastructure before activating live traffic on it
- test Fail-over or Disaster Recovery network capacity

WARNING: This test is generating traffic up to the physical capacity of a link (either on the remote site or on the server side). Saturating the link will cause other traffic to be delayed or dropped. It is advisable to carry Stress test sessions when it will not harm critical traffic and usually out of traffic peak hours.

4.4.1 Prerequisite

The SG needs to have one LAN/WAN address configured to be able to generate this flow.

If more than one address are declared on the SG a particular parameter "**In use for diagnosis**" has to be set to "**yes**" on the address that will be used to generate the stress test flow.
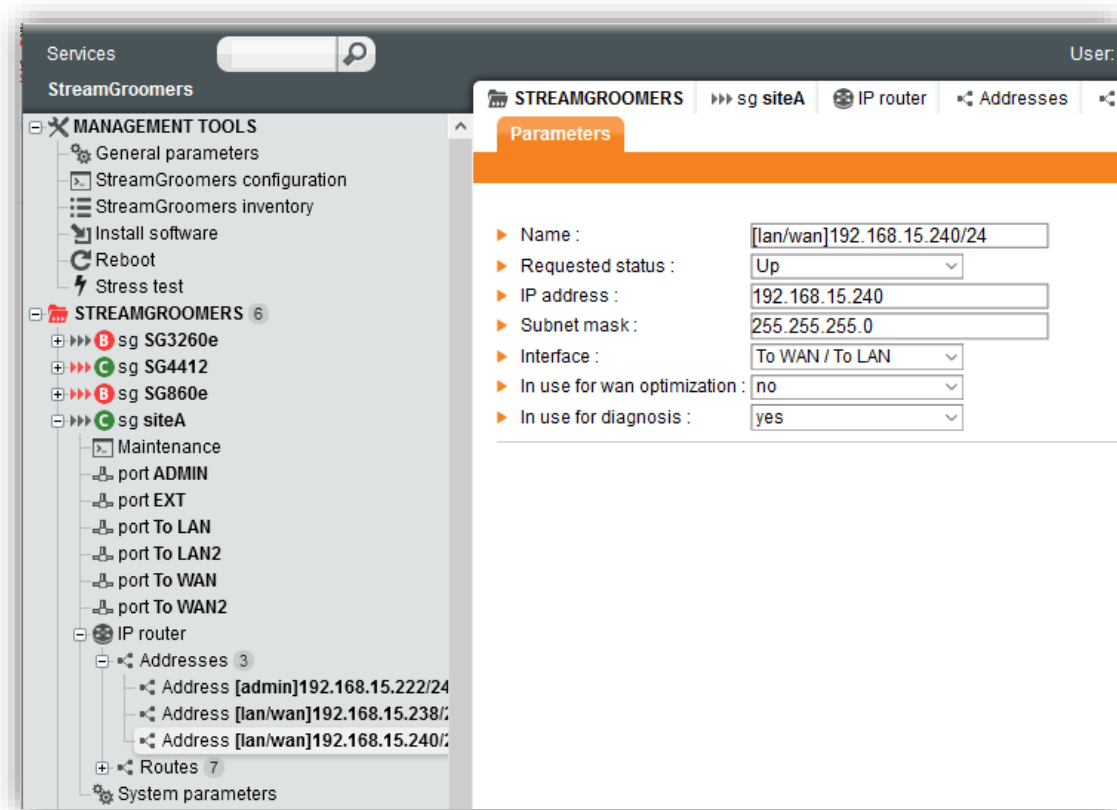
Only one address on a SG can be used for that test.

As the traffic occurs between the Lan/Wan addresses of the SG, traffic is exchanged from the Wan side of one SG to the Wan side of the other SG. This traffic is then not carried through LAN on either side or affected by LAN performances or limitation. It may help diagnose whether a limitation is on the Wan side or the Lan side.

4.4.2 Usage

Choose the direction of the flow, unidirectional (from or to) or bidirectional (from and to):
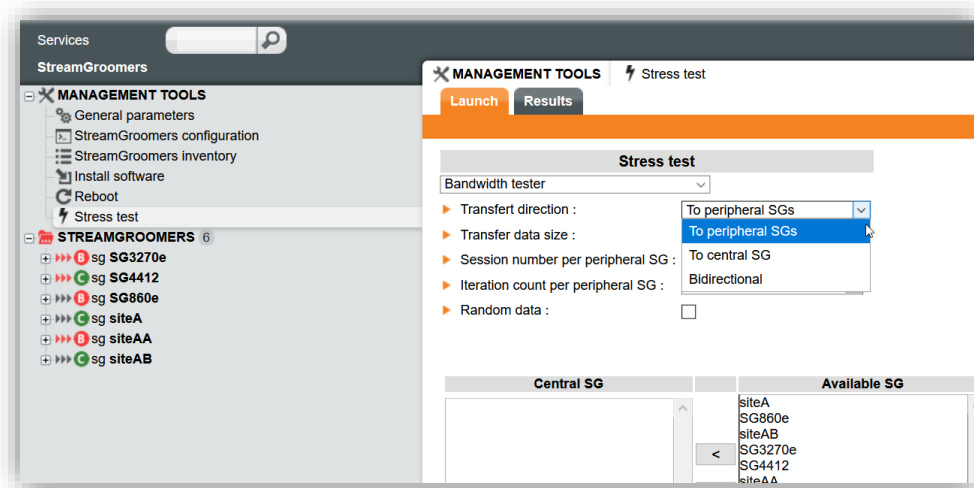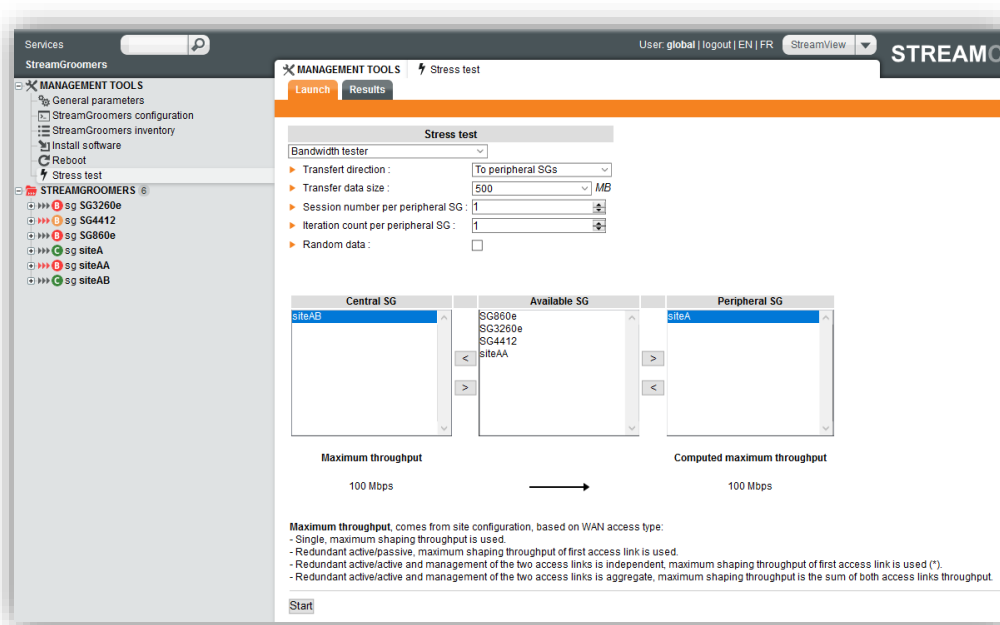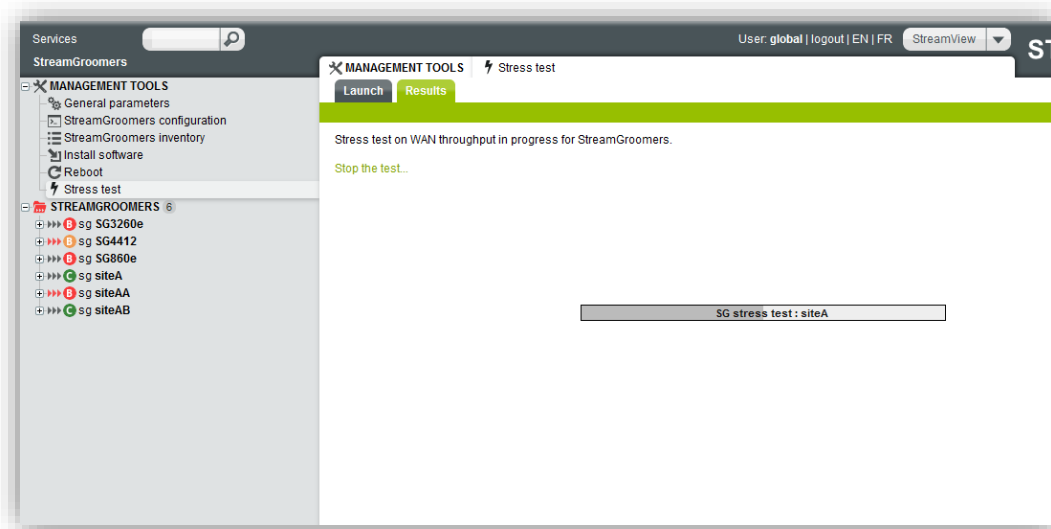

Select the size of the data to be transferred:
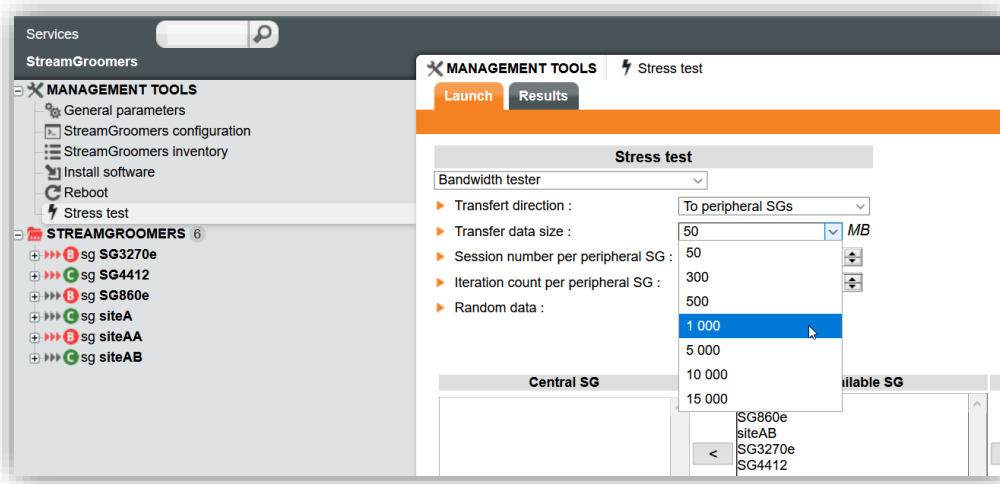
Place Streamgroomer on both sides:

Note: Only one SG can be placed on the Central SG side

On each side, maximum bandwidth will be computed to show whether it is suitable with the test to be carried out.

Launch the test:

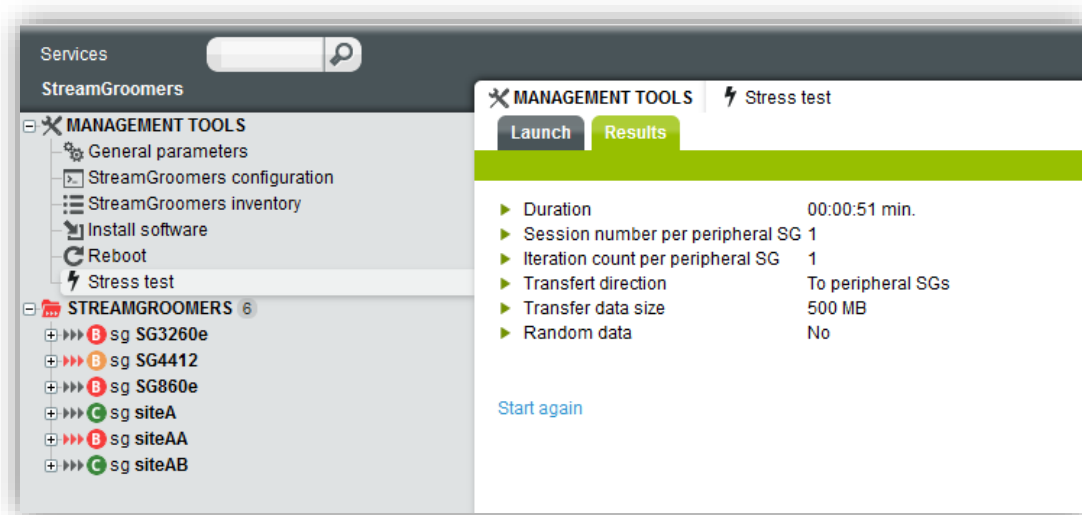N.B: before the flow can be sent the data needs to be created and this can take some time.

The result will give the time needed to send the whole data:

You can also ask for:

- Sending multiple sessions of the same data, increasing the flow and the number of connections

- Loop over the sending

- Generating random data (by default datum are set to zero), this generation will of course need more time to be ready
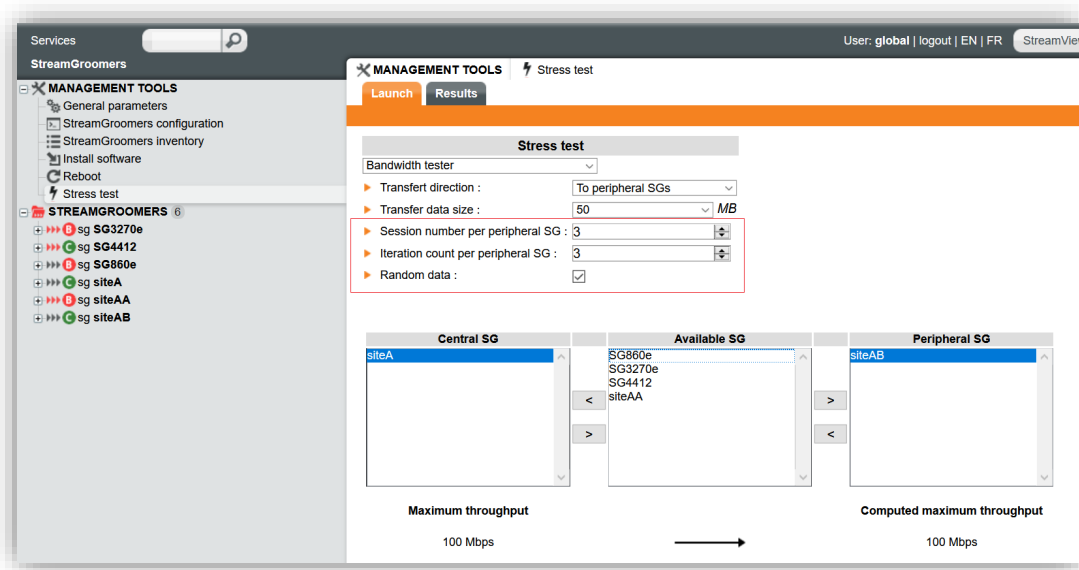
Note: It is advisable to request multiple sessions to multiple remote SG if the network is based on redundant links as load balancing algorithms will not work with a single connection.

4.5 CPU load

The StreamGroomer CPU Load graph will now display some additional curves with the "CPU load" one:

- **QoS CPU load**: the load used by the QoS and queue management
- **Monitoring CPU load**: the classification and filtering working
- **Other CPU load**: a load generated from neither above both activities.
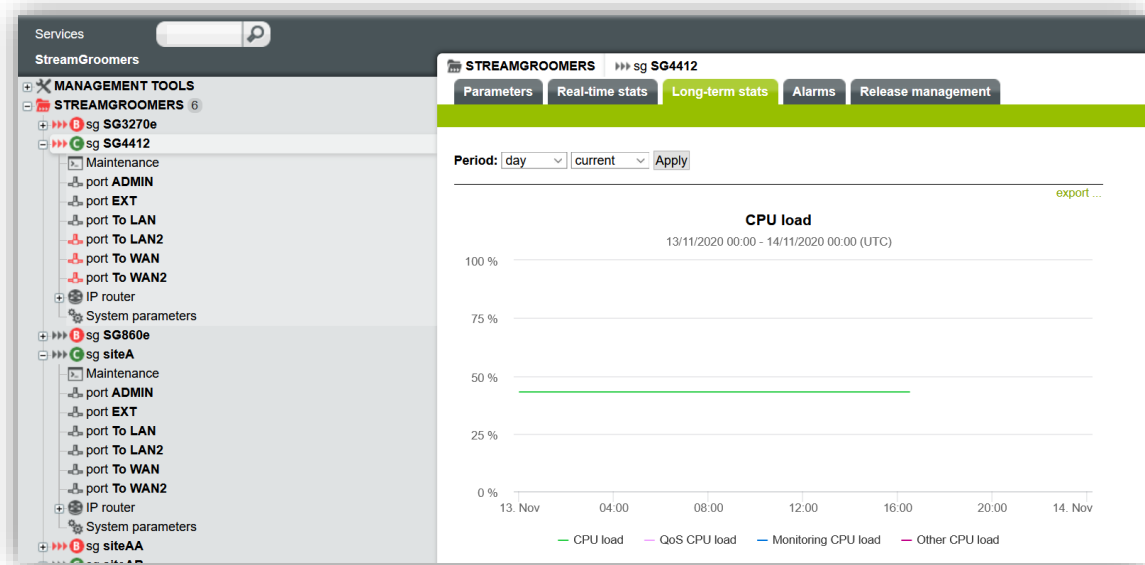
N.B.: these curves are the same as the global CPU load for the moment and a new OPE will need to be installed in order to collect particular data

5 Problems fixed by Software Suite 6–5.T09

All the components of the Software Suite are delivered as updated versions.

Note: In this Software Suite, the BOOT component is **S51**. It will be installed automatically by the SGM when an OPE is deployed on the StreamGroomers.

The following tables list the problems that have been fixed in release 6-5.T09 of the software suite and the new features if declared as [implemented]:

User Problem	Reference	Description of the problem that has been solved (SGM 6-5.T09)
		SGM 6-5.T09
SCC-00001310	FB47266	The backup link throughput definition could not exceed 2 Gb/s. This prevented the creation of a double links site with link throughput above this value. This limit has been cleared.
SCC-00001312	FB47272	[Streamview] Troubleshooting long term connections: filter with an address not effective.
	FB48279	Colours mismatch in some "Top traffic" charts.
	FB48286	SGM Security – Authorized keys even if the SGM is not part of a high availability cluster.
	FB48292	[Streamview] Ports – real time stats: wrong French labels

User Problem	Reference	Description of the problem that has been solved (OPE 6-4.22)
		OPE 6-4.22
	FB47271	[SG PERF] creation of a new thread to handle some frame management
	FB48283	[SG PERF] give a higher priority to the QoS daemon

User Problem	Reference	Description of the problem that has been solved (Boot S51)
		BOOT S51
	FB48291	[SG-USINE] Possibility to launch a script at boot time in order to add some specific configurations

6 Known issues

The table below lists the known issues and provides a workaround if any.

Reference	Component	Known issue description	Workaround
FB46694	StreamView StreamAccess	Since Software Suite 6-4.S08 - Authentication with Radius does not work if the password contains the characters • Double quote " • Quote ' • Slash / • Exclamation point ! • Back slash \ • Brackets [and] • Star *	Change the Radius password avoiding using these characters.
FB42810	SG	StreamGroomers may reboot in a port mirroring configuration when capturing the traffic.	
-	SG	Grooming, dual and tandem mode do not function in high-performance mode.	Do not activate high performance mode.
FB44508	SGM	StreamView – There are no real time statistics on audio/video terminal rule when RTP+MOS measurements is selected.	
-	SG	In the WAN Optimization Profile definition, the FTP handler is not working. Only the control session is optimized.	FTP data traffic can be accelerated only through the Fallback handler.
-	SGM	StreamView – If we declare a server with a certificate while the corresponding SG is unreachable, the application server will not be considered for acceleration.	Work around: re-push the certificate and reboot the SG.
FB47230	SG	With ACC24 and an old OPE (< 6-4.17) each restart (reboot) of the SG will erase the acceleration cache.	Upgrade to OPE 6-417 or later

7 Installation & Deployment

Read carefully the recommendations below:

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

- After having started StreamGroomers in operational software, we strongly recommend checking the LAN and WAN port statistics (speed and duplex mode, CRC errors, collisions…) to avoid any configuration mismatch with interconnected equipment.

- We recommend connecting to the ADMIN port on the LAN side of the StreamGroomer.

- On SG350e, when switching from boot software (bypass closed) to operational software in bypass mode, then the bypass will open and close immediately, inducing 2 interface state changes. This operation may block the traffic for a few seconds.

- Directly connecting peripherals (mouse, keyboard, and screen) on the SGM must only be done for maintenance operations.

8 Software Interoperability Rules

8.1 Upgrade Operation

Any upgrade is allowed 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 Downgrade Operation

Read carefully the rules:

- SGM: operation not allowed (data loss risk)
- SG OPE: operation allowed if the OPE vs Boot/System interoperability rules are met (see table below)
- SG Boot/System: operation not allowed (equipment crash risk)
- ACC Acceleration System: operation not allowed

8.3 Interoperability between components

Interoperability is guaranteed for an SGM in the following cases:

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

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

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

Boot	OPE 6.1	OPE 6.2	OPE 6.3	OPE 6.4
5.1-m22 5.1-m23	Yes	Yes	Yes	Yes
S16 to S25	Yes	Not supported	Not supported	Not supported
From S26	Yes	Yes	Yes	Yes

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

SCO	SGSS 6.1	SGSS 6.2	SGSS 6.3	SGSS 6.4	SGSS 6.5
To 1.2	Yes, for OPE >= 5.3-15	Not Guaranteed	Not Guaranteed	Not Guaranteed	Not Guaranteed
From 1.3	Yes, for OPE >= 5.3-15	Yes, for OPE >= 5.3-15	Yes, for OPE >= 5.3-15	Yes, for OPE >= 5.3-15	Yes, for OPE >= 5.3-15

9 Technical Support

Streamcore Technical Support

By email: support@streamcore.com

By telephone: +33 (0)1.40.90.34.26

Streamcore

Customer Support

Email: support@streamcore.com

Telephone: +33.1.40.90.34.26

Legal address	Postal address
9 Allée de l'Arche	Grande Arche, Paroi Nord
92671 Courbevoie Cedex	1 Parvis de la Défense
France	92044 La Défense
	France