



streamcore

6-5.T11 Release notes

Version 1.2

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1 Software Suite 6-5.T11

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.T11.

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. The BOOT version will only be active after reboot of the StreamGroomer (see 2.3 Activation of a Boot, ACC and OPE version below)**

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

```
Software Suite: 6-5.T11
Official OPE: 6-4.24
Official OPE: 6-5.06
Official ACC: ACC25 (version 6.1.0-243)
Official Boot M4G64: S53
Official Boot M5G: T07
```

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 ACC25

- The content of the existing cache may be deleted from the StreamGroomer each time this SG is started with ACC25(cf. [Known issues](#)).
- ACC25 can work with others SG in ACC25 or ACC24 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	End of Support
6-3	End of support since November 30th 2018
6-4	December 31 st 2022
6-5	Not planned

OPE	End of Support
6.2	30/11/2018
6.2 highperf	30/12/2023
6.3	End of support since November 30th 2018
6.4	31/12/2024
6.5	Not planned

- 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 SGM 6-5.T11

4.1.1 Long term TOP statistics new presentation

The different screens to obtain TOP have been harmonized.

StreamView offers several places to get information filtered on TOP (Rules, sites, categories). With version T11, all places with ability to produce TOPs will have the same look and feel and capabilities. Metrics may vary depending on where the TOP function is requested.

The ability to search the massive data mart of StreamView with TOPS will improve troubleshooting abilities and reduce time to diagnose. Notably looking for rules that have the biggest numbers of connections for instance.

The new structure will include:

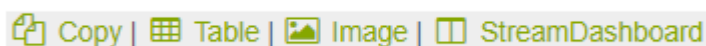
- Standard time navigator similar to other long-term tabs
- Selector of what the TOP is about: application, remote sites, remote categories
- Selector for a given application
- Selector of the metric to rank: all metrics available for the type of rules
- Selector for display: percentage or time

The number of items taken into account to display a TOP is limited to 10.

If there are less than 10 items, they will be all displayed.

If there are more than 10 items, the 9 first ranked will be displayed and the rest will be accumulated in an "other" element.

A new "export" menu has also been harmonized among all the TOP screens:

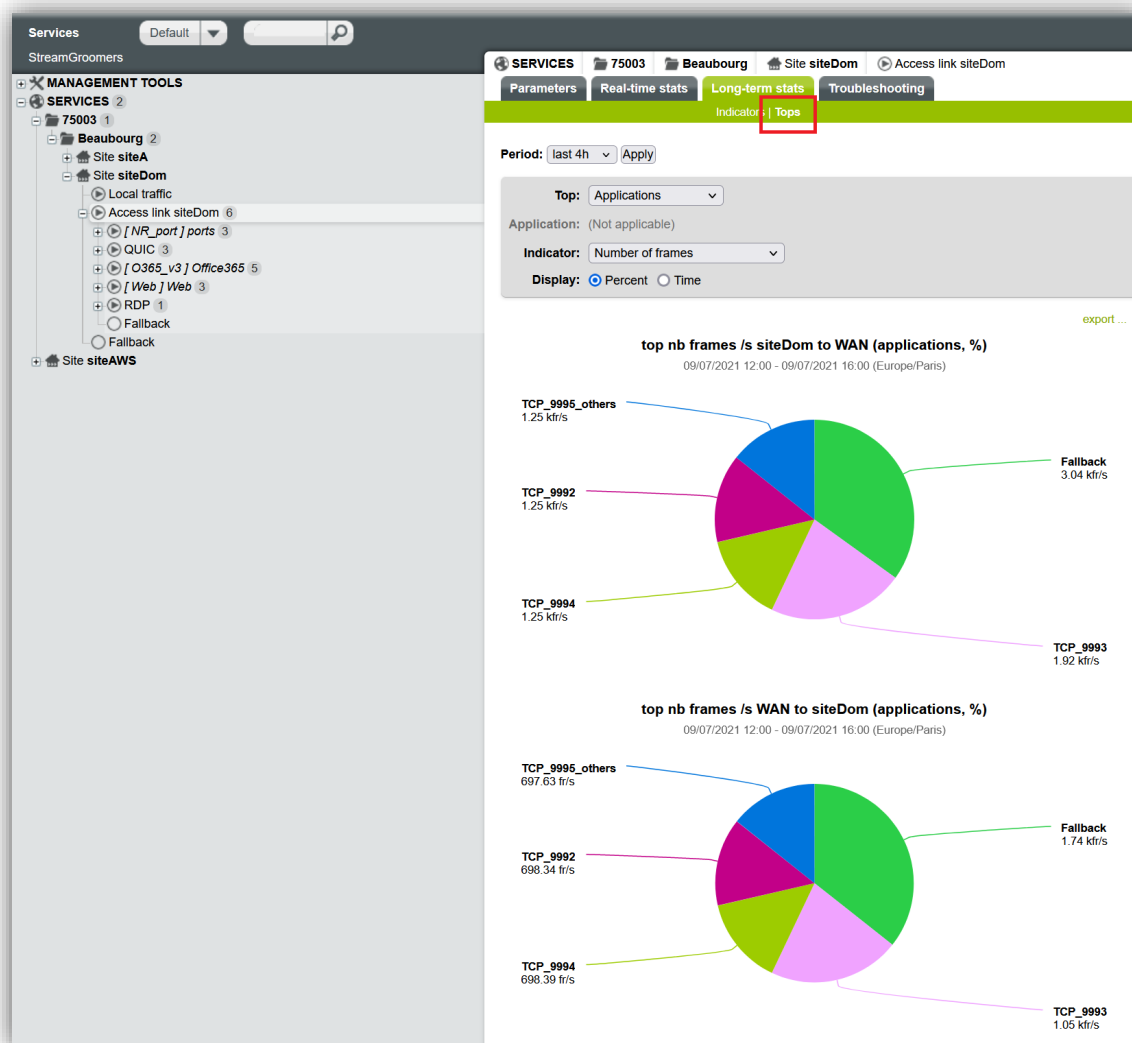


It is now possible to copy the data:

- in the paperclip of the system to save in your preferred software (copy)
- Copy as html (table)
- Save as a PNG image (Image)
- Insert in a StreamDashboard page (StreamDashboard)

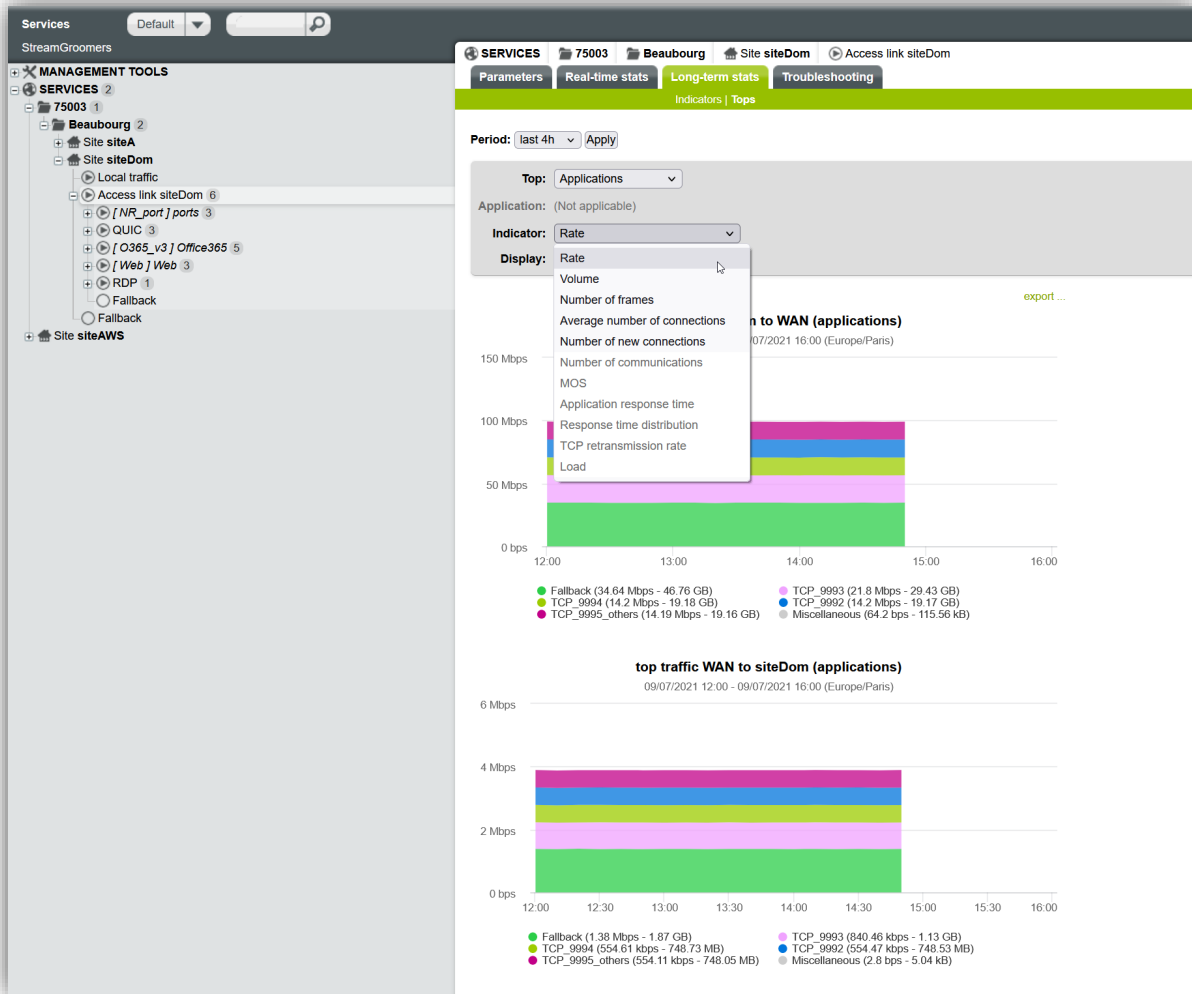
*To gather all these functionalities a specific **Tops** tab is now added to the "Long-term statistics" window.*

This new graphical display is presented below:

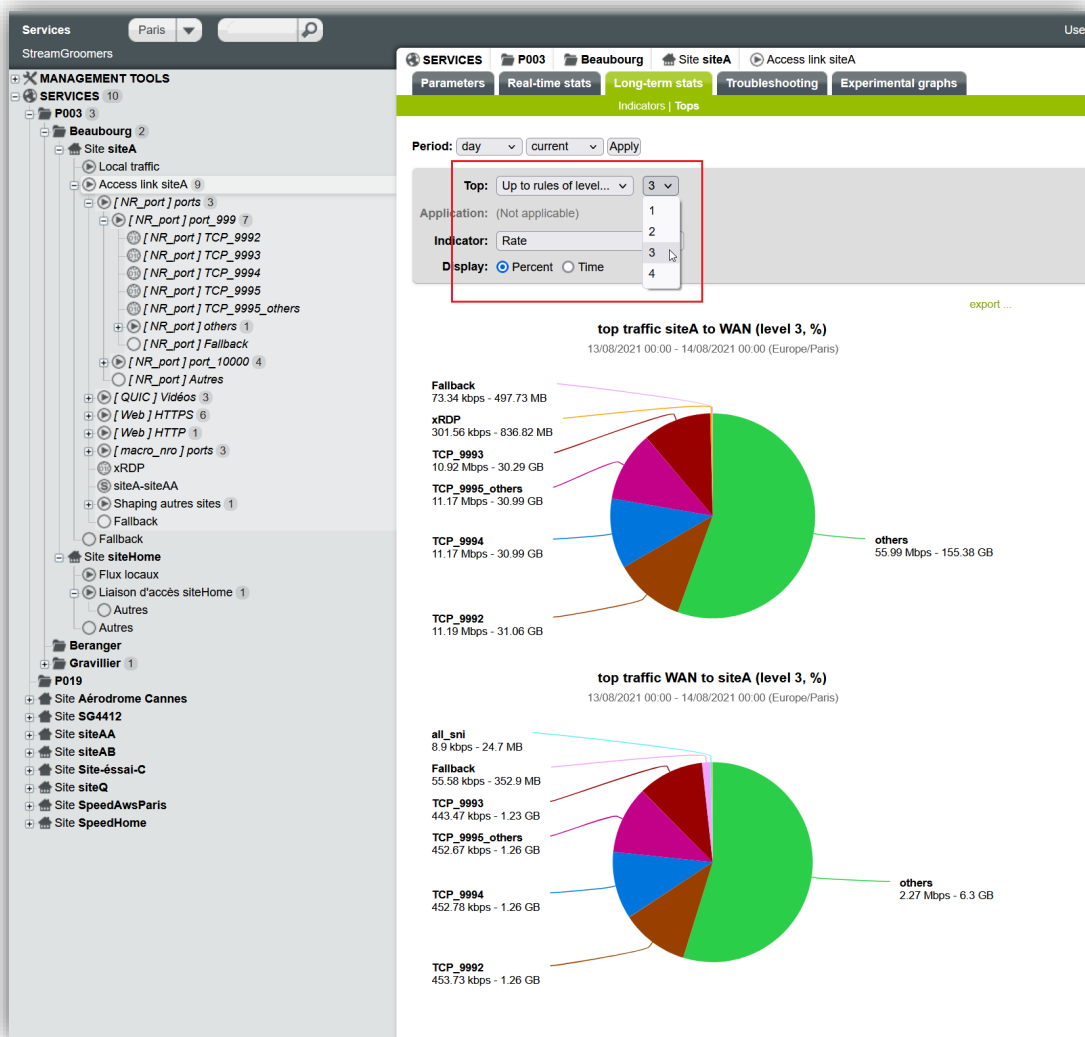


The top for one indicator of different type is possible (see below on a temporal basis).

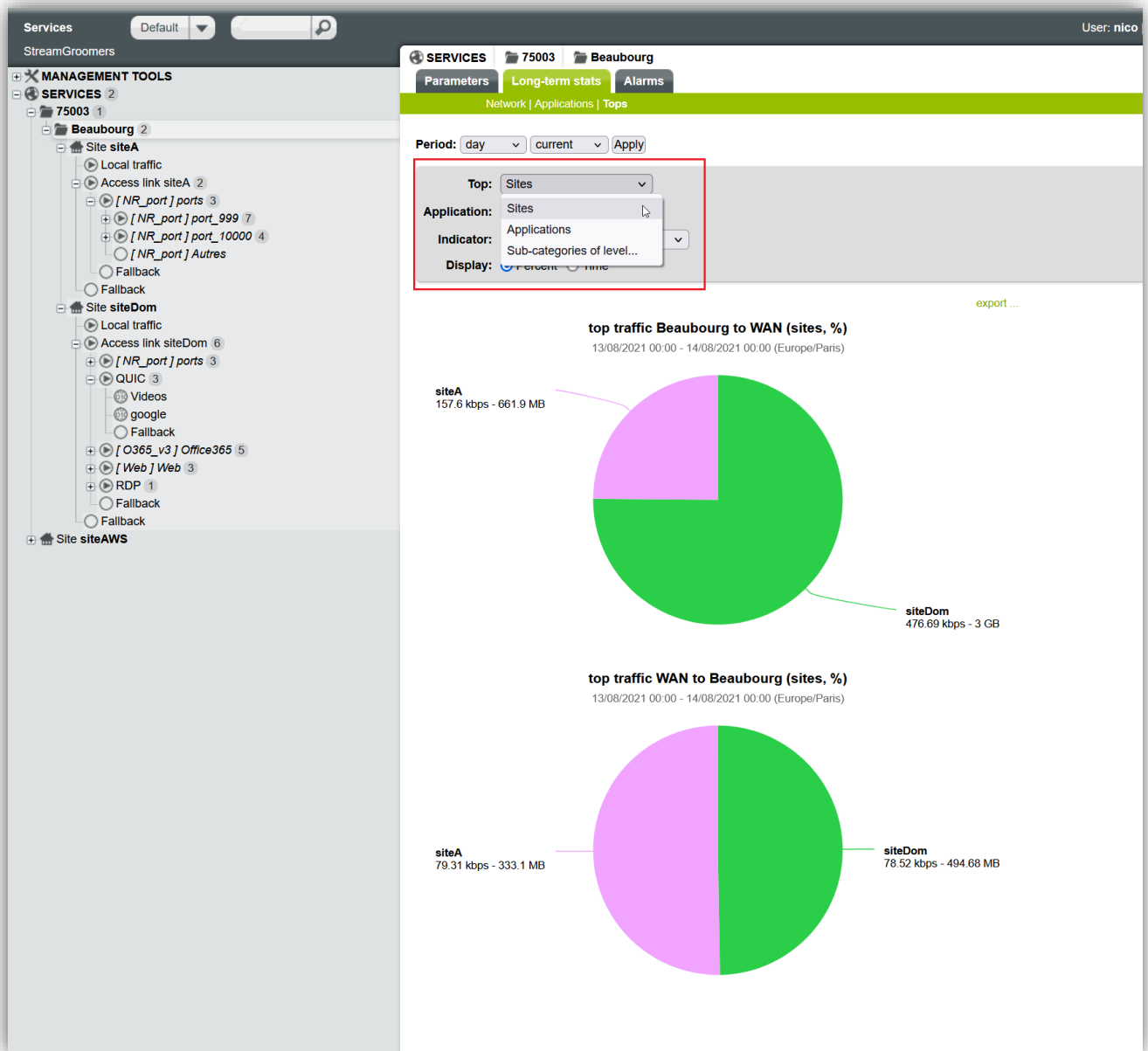
Available types rely on the nature (terminal, VoIP, ...) of the current rule.

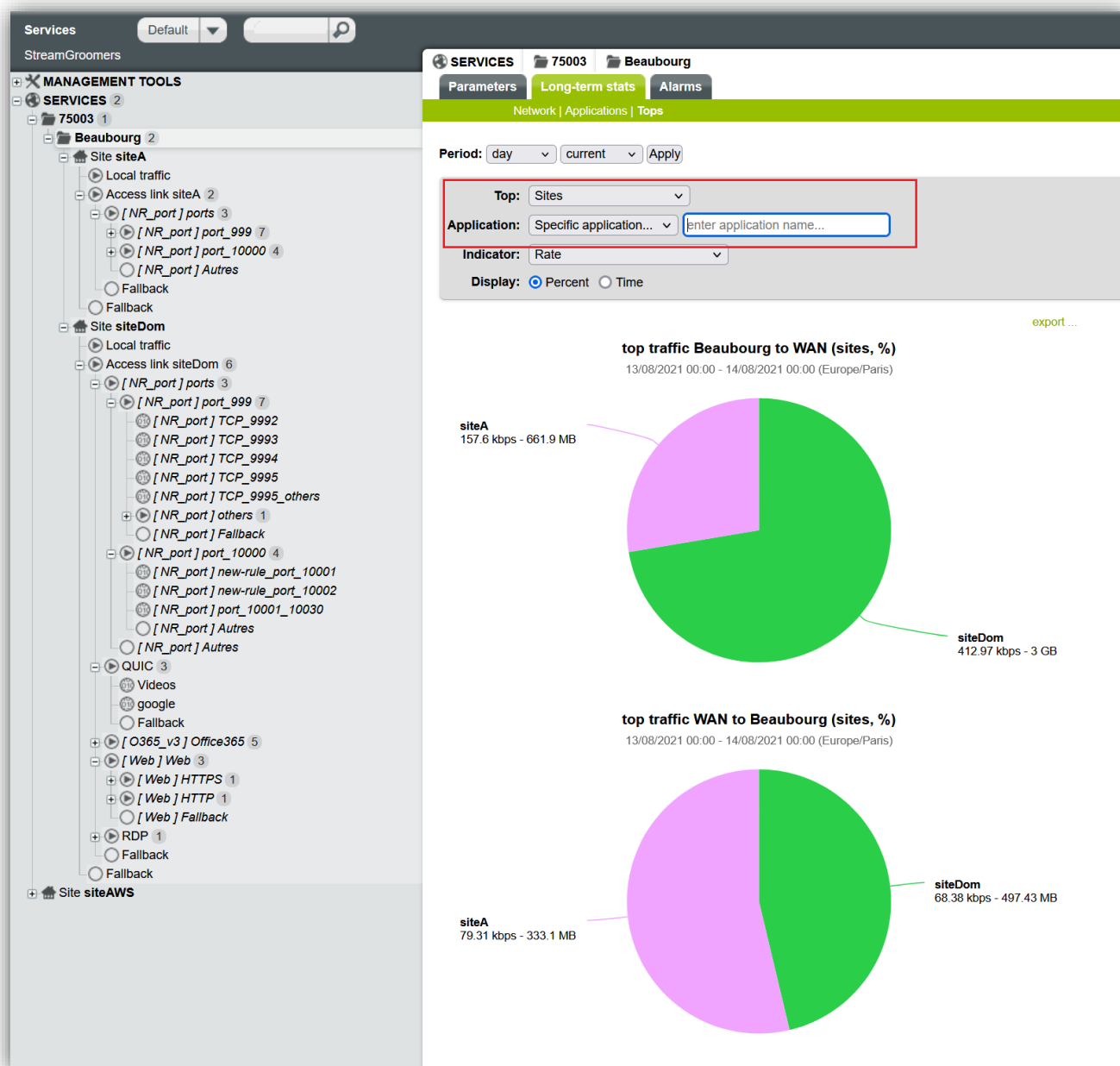


On a rule it is possible to specify up to which sub-rule level the top has to be determined:



From a category the top can be established among the sites for all the applications or for a particular one.





4.1.2 Sites Management

SUMMARY TAB

The look and feel of the Sites Management list follows the same trend as the connections or the rules and filters tables in the previous releases.

This list of sites is presented using a new component that enables

- Selection of fields among all information stored at the rules/filter level
- Reordering columns
- Sorting columns
- Filtering content

- Exporting to excel or copying of the table
- Selection of predefined views

Name	StreamGroomer	Access link From WAN / To WAN	Subnets on LAN side	WAN router IP
SpeedHome	SpeedHome	unlimited / unlimited	81.249.246.235 / 24 192.168.1.19 / 24	81.249.246.254 192.168.1.1
SpeedAwsParis	SpeedAwsParis	100 M / 100 M	0.0.0.0 / 0 15.236.224.100 / 24 15.237.45.233 / 24 35.180.209.0 / 24 35.181.146.221 / 24	
siteQ	SG6512	50 M / 50 M	1.0.0.0 / 24 192.168.15.249 / 32	
siteHome	siteHome	100 M / 100 M	1.0.0.0 / 24 192.168.15.249 / 32	192.168.1.1
siteB	SC3412	20 M / 20 M	1.0.0.0 / 24 192.168.15.249 / 32	
siteAB	siteAB	100 M / 100 M	0.0.0.0 / 0 192.168.15.0 / 24	192.168.15.254
siteAA		10 M / 10 M	172.31.21.39 / 20 192.168.15.0 / 24	192.168.15.254
siteA	siteA	200 M / 200 M	10.64.0.128 / 28 10.64.229.0 / 24 192.168.15.0 / 24	192.168.15.254
Site-essai-C		150 M / 150 M	192.168.15.0 / 24	192.168.15.254
SG4412		10 M / 10 M	1.0.0.0 / 24 192.168.15.0 / 24	192.168.15.254
Aérodrome Cannes		10 M / 10 M	172.19.71.1 / 24	

Clicking on the small **gear** allows to select the column and information to be displayed:

All information available on site should and will be displayed in this inventory screen.

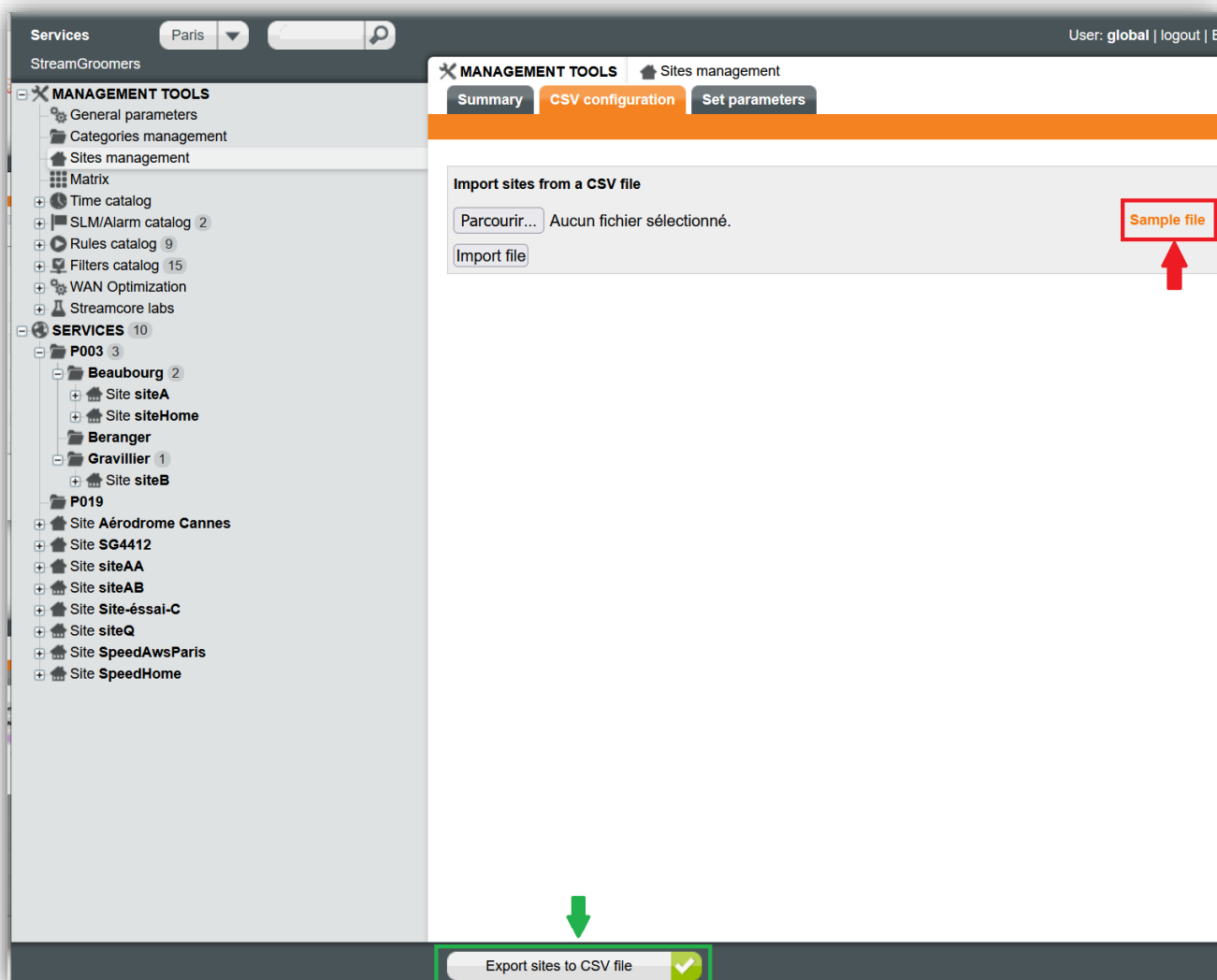
Name	StreamGroomer	Access link From WAN / To WAN	Subnets on LAN side	WAN router IP
SpeedHome	SpeedHome	unlimited / unlimited	81.249.246.235 / 24 192.168.1.19 / 24	81.249.246.254 192.168.1.1
SpeedAwsParis	SpeedAwsParis	100 M / 100 M	0.0.0.0 / 0 15.236.224.100 / 24 15.237.45.233 / 24 35.180.209.0 / 24 35.181.146.221 / 24	
siteQ	SG6512	50 M / 50 M	1.0.0.0 / 24 192.168.15.249 / 32	
siteHome	siteHome	100 M / 100 M	1.0.0.0 / 24 192.168.15.249 / 32	192.168.1.1
siteB	SC3412	20 M / 20 M	1.0.0.0 / 24 192.168.15.249 / 32	
siteAB	siteAB	100 M / 100 M	0.0.0.0 / 0 192.168.15.0 / 24	192.168.15.254
siteAA		10 M / 10 M	172.31.21.39 / 20 192.168.15.0 / 24	192.168.15.254
siteA	siteA	200 M / 200 M	10.64.0.128 / 28 10.64.229.0 / 24 192.168.15.0 / 24	192.168.15.254
Site-essai-C		150 M / 150 M	192.168.15.0 / 24	192.168.15.254
SG4412		10 M / 10 M	1.0.0.0 / 24 192.168.15.0 / 24	192.168.15.254
Aérodrome Cannes		10 M / 10 M	172.19.71.1 / 24	

CSV CONFIGURATION TAB

Alongside, a new **CSV configuration** tab is added to perform the import/export of sites from files.

Click on **Sample file** to download a simple well formatted csv file you can use as a template to create a list of sites file you then will be able to import.

Export sites to CSV file will download the current list of sites from this base in a csv file.

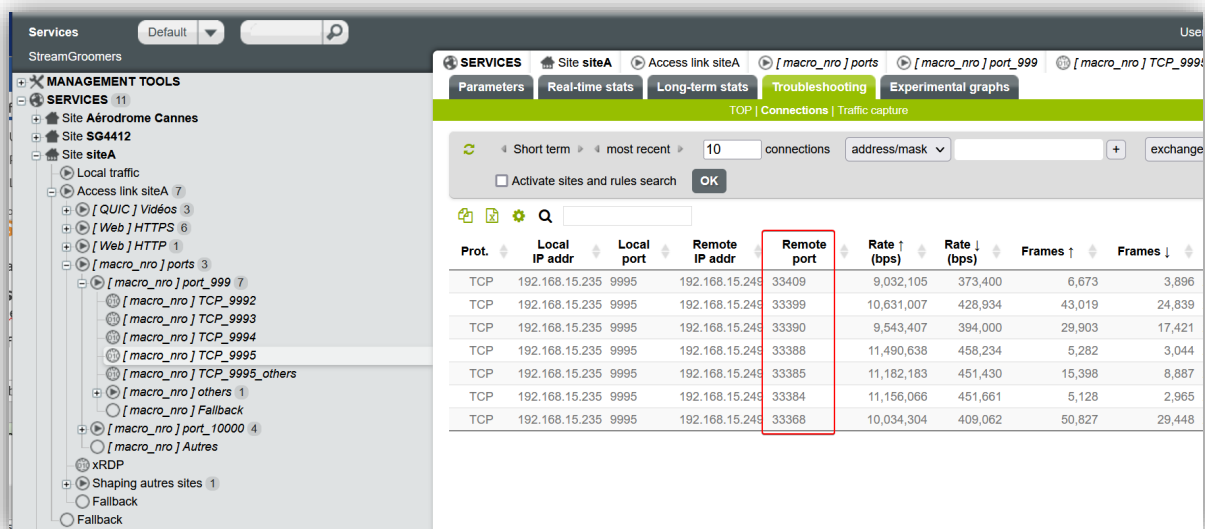
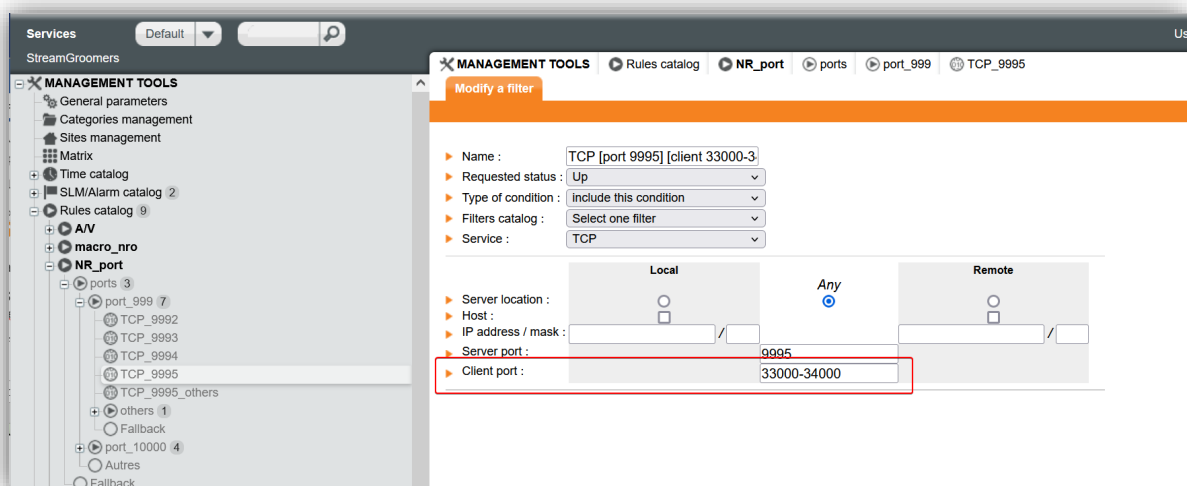


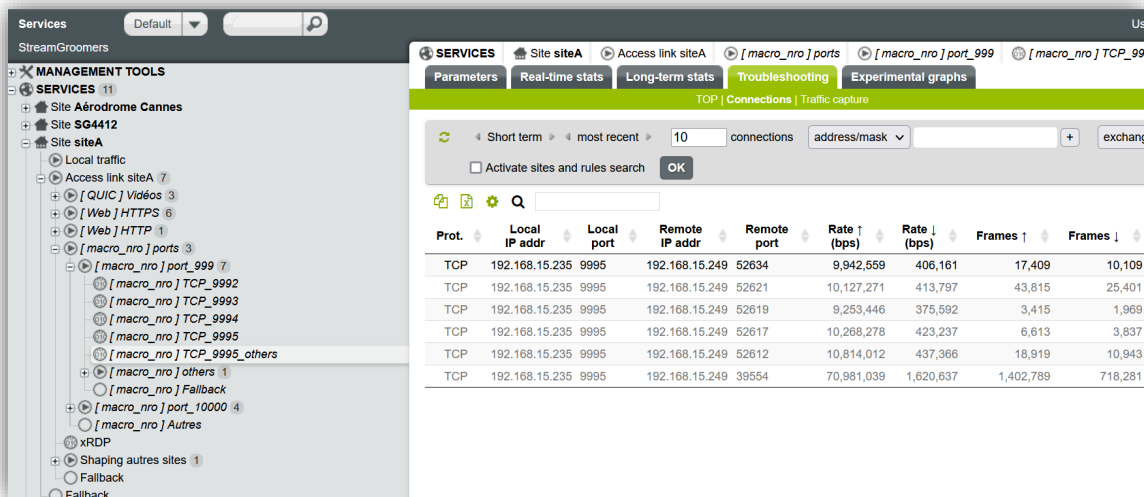
4.1.3 Client port filtering

Prerequisite: SG with OPE 6-4.24 or 6-5.04 and above.

This new feature enables to add filtering on requester ports. It complements the server port criteria.

Some new applications (for instance Teams) limit the number of server ports to reduce efforts on security teams to open dedicated ports for each service. Instead of this they rely on requesting ports that are uncontrolled to segregate type of traffic.



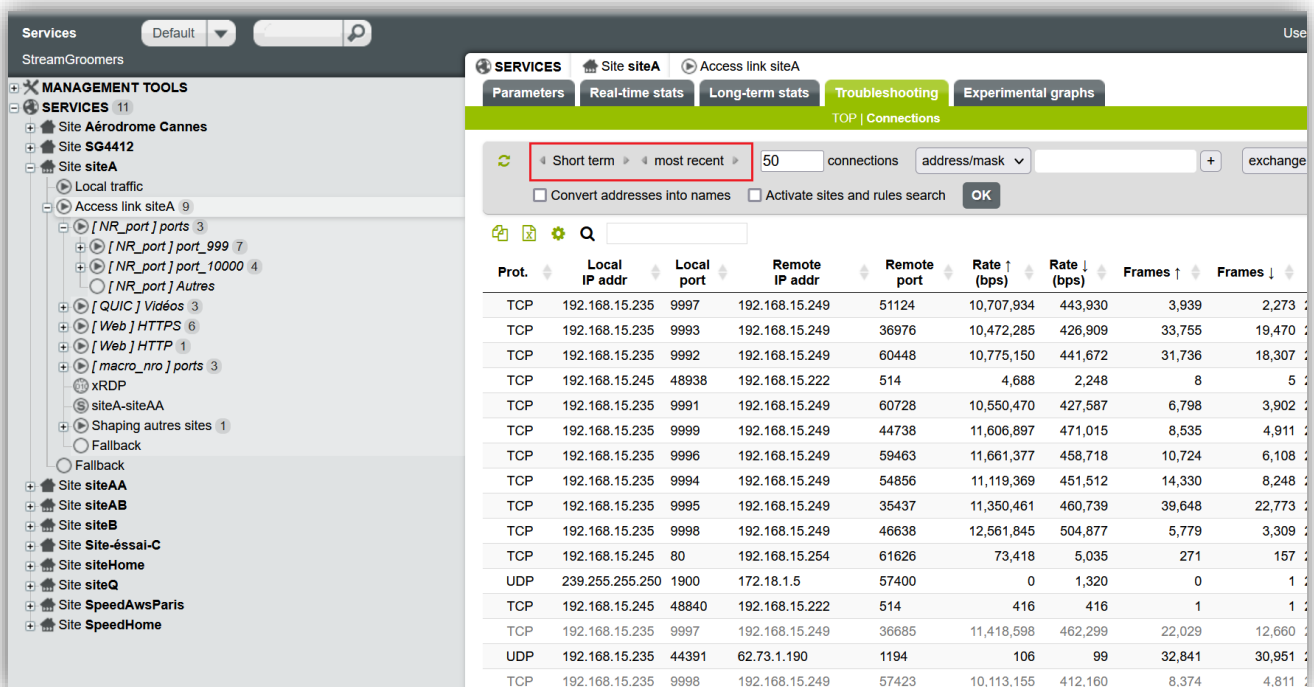


4.1.4 Troubleshooting connections array: most recent by default

Historically, StreamView displayed by default 10 seconds short term connections.

It appears from field feedback that most users switch immediately to most recent and only if needed precise their request to either 10mn, 1mn or 10s.

Changing the default landing screen will save time and still enables access to more precise screens.



4.1.5 Support SG with a DHCP configuration

Prerequisite: SG M5G with BOOT To6 and above.

Streamcore is willing to offer the choice to customers to deploy appliances with either a fixed IP address or a dynamic one.

Each option has benefits and drawbacks, and it is not the role of Streamcore to force the one or the other. Both are now available and can even be mixed between different sites (such as fixed IP for datacenter and DHCP for branches).

This option is only available for network probes running under 5th generation of Streamcore operating System (M5G).

DHCP is simplifying provisioning with the following element:

- No prior allocation of IP address
- Less risk of using an address already allocated (spoofing)
- Ability to prepare configure on a site in the network and deploying it on another site totally preconfigured including calling mode pairing

Current implementation has the following limitations if the DHCP mode is activated:

- No statistics on Admin port
- Active probe is not working
- Netflow tickets are not sent

Those limitations will be waived in subsequent releases.

```
[siteHome > configuration] show conf
Last save date: Thu Aug 05 13:12:31 CET 2021
version          : 1.1
name             : siteHome
admin_dhcp       : no
admin_address    : 192.168.1.151
admin_mask       : 255.255.255.0
admin_gateway    : 192.168.1.1
admin_port_speed : auto
sgm_address      : 15.188.36.98
sgm_address2     : 192.168.1.210
sgm_address3     : 213.41.75.134
sgm_address4     :
secure_com       : no
dns_server1      :
dns_server2      :
dns_suffix1      :
dns_suffix2      :
ssh_port         : 22
peer_sgm         : no
[siteHome > configuration] admin_dhcp yes
[siteHome > configuration] apply
Pending changes:
admin_dhcp       = yes
Apply pending changes? ([y]/n) y
Done
[siteHome > configuration] show conf
```

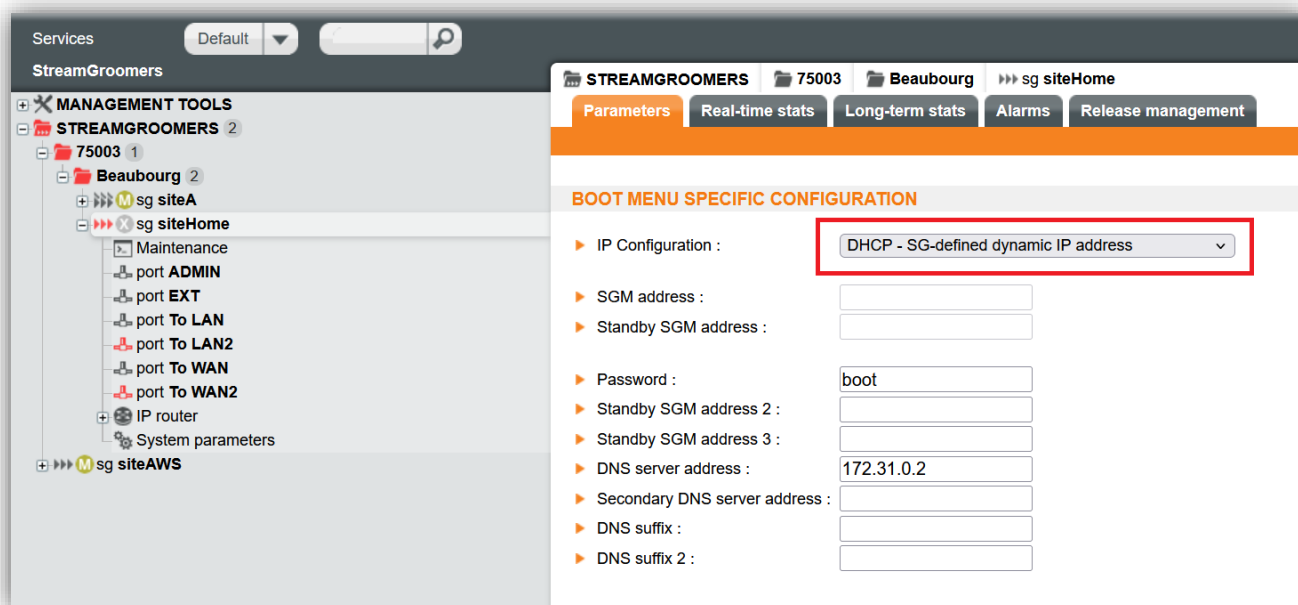
```

[siteHome > configuration] show conf
Last save date: Thu Aug 05 13:21:26 CET 2021
version      : 1.1
name         : siteHome
admin_dhcp   : yes
admin_address : DHCP (waiting for DHCP lease)
admin_mask   : DHCP (255.255.255.0)
admin_gateway : DHCP (waiting for DHCP lease)
admin_port_speed : auto
sgm_address  : 15.188.36.98
sgm_address2 : 192.168.1.210
sgm_address3 : 213.41.75.134
sgm_address4 :
secure_com   : no
dns_server1  : DHCP (192.168.1.1)
dns_server2  : 127.0.0.1
dns_suffix1  :
dns_suffix2  :
ssh_port     : 22
peer_sgm     : no
[siteHome > configuration] show conf
Last save date: Thu Aug 05 13:21:26 CET 2021
version      : 1.1
name         : siteHome
admin_dhcp   : yes
admin_address : DHCP (192.168.1.151)
admin_mask   : DHCP (255.255.255.0)
admin_gateway : DHCP (192.168.1.1)
admin_port_speed : auto
sgm_address  : 15.188.36.98
sgm_address2 : 192.168.1.210
sgm_address3 : 213.41.75.134
sgm_address4 :
secure_com   : no
dns_server1  : DHCP (192.168.1.1)
dns_server2  : 127.0.0.1
dns_suffix1  :
dns_suffix2  :
ssh_port     : 22
peer_sgm     : no
[siteHome > configuration]

```

You can also use a USB key to directly configure the SG in a DHCP mode.

You just need to select this mode when collecting the configuration file to put on the USB key:

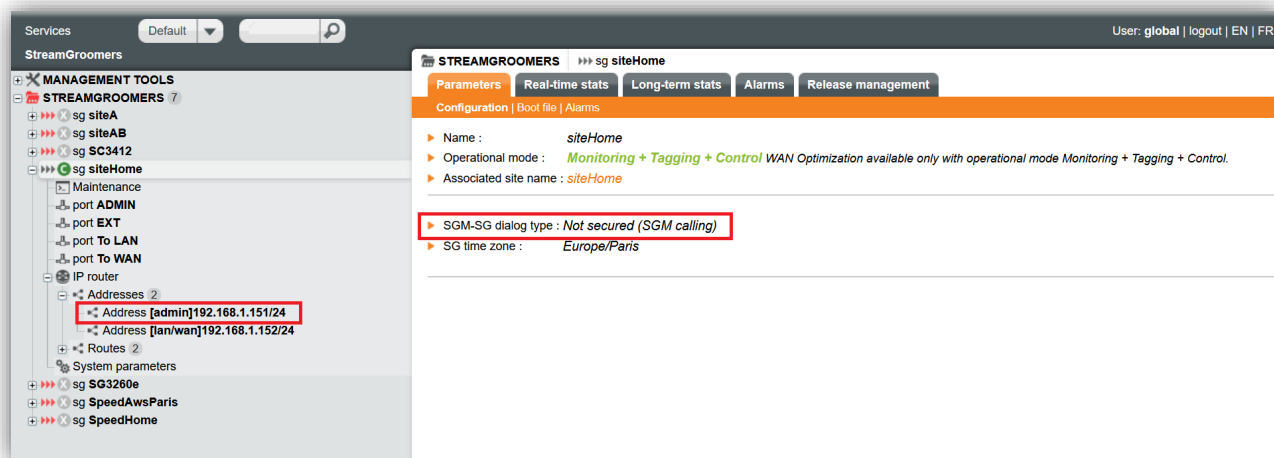


To access the SG from the SGM you can either:

- Configure the SG in a calling SG mode

```
[siteHome > configuration] show conf
Last save date: Thu Aug 05 13:21:26 CET 2021
version          : 1.1
name             : siteHome
admin_dhcp       : yes
admin_address    : DHCP (192.168.1.151)
admin_mask       : DHCP (255.255.255.0)
admin_gateway    : DHCP (192.168.1.1)
admin_port_speed : auto
sgm_address      : 15.188.36.98
sgm_address2     : 192.168.1.210
sgm_address3     : 213.41.75.134
sgm_address4     :
secure_com       : no
dns_server1      : DHCP (192.168.1.1)
dns_server2      : 127.0.0.1
dns_suffix1      :
dns_suffix2      :
ssh_port         : 22
peer_sgm         : no
[siteHome > configuration] peer_sgm
arg must be SGM1 or SGM2
[siteHome > configuration] peer_sgm SGM1
peer SGM 15.188.36.98
Enter password for SG siteHome
A5KG4wYcNmDn
Starting peering phase for siteHome with SGM 15.188.36.98
The authenticity of host '15.188.36.98 (15.188.36.98)' can't be established.
ED25519 key fingerprint is SHA256:1kKhVmQih1D/dIBbj5p2aXwhTp9V9+eOCgpGd6rWIfw.
Are you sure you want to continue connecting (yes/no)?
yes
SGM peering successful
Done
[siteHome > configuration]
```

- Or use the calling SGM connection after configuring the new DHCP admin address of the SG in the Streamview web interface configuration:



4.1.6 Calling SG with high availability SGM

It is now possible to connect one SG in a calling mode to the two SGM forming a high availability cluster.

To add or to just configure a calling SG in a running cluster of two SGM

The SG needs to be connected to the active SGM the very same way as with a simple SGM one.

The connection to the passive SGM will then be automatically activated when the synchronization of the database is launched between the two SGM (that is just after the daily database backup).

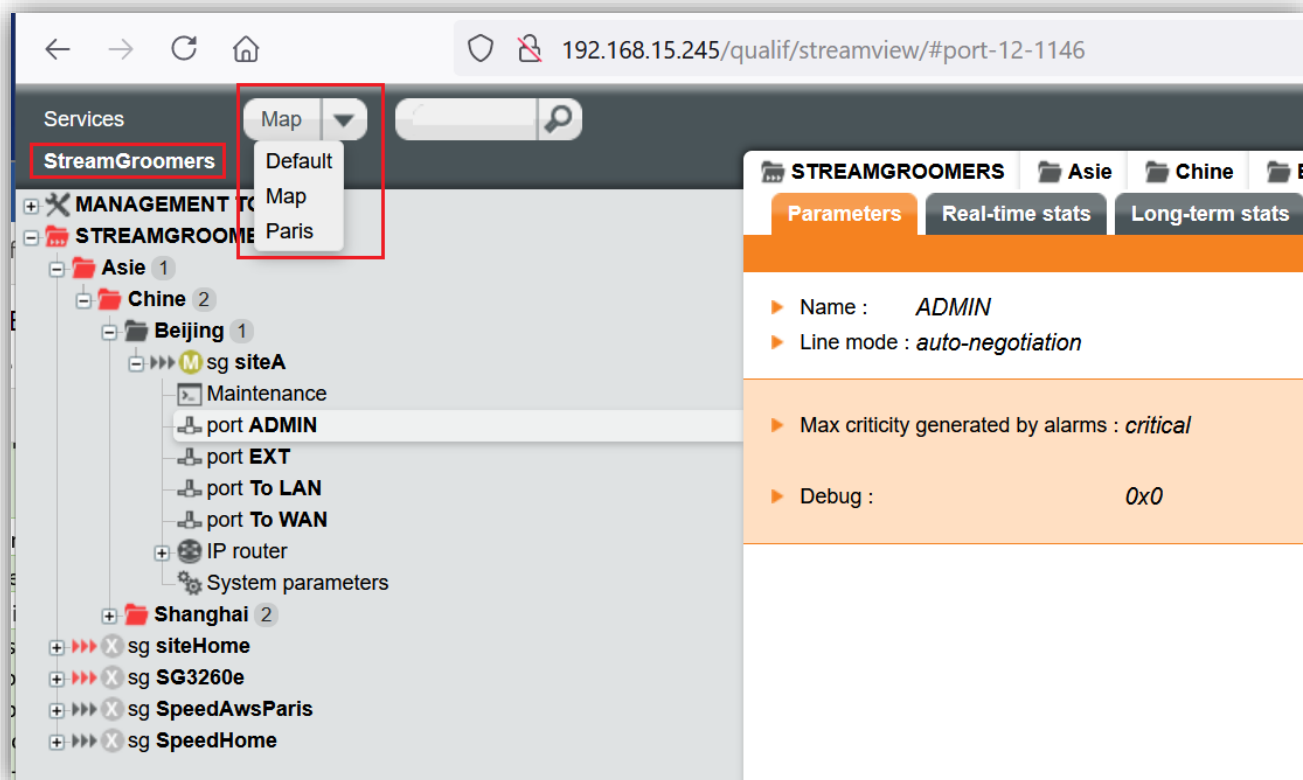
Building a new cluster from an existing simple SGM one

If there are already configured calling SG on the first SGM nothing needs to be done after the new cluster is established.

The connection of the SGs to the new passive SGM will be automatically activated when the synchronization of the database is launched between the two SGM (that is just after the daily database backup).

4.1.7 Categories type selector on StreamGroomers

From this 6-5.T11 version on the tree display of the StreamGroomers inherits the whole set of categories as defined in the Services view. And one can select the type from which he wants to view the categories:



4.1.8 Categories & right management

In StreamAccess, right management have been harmonized between Services and StreamGroomers.

A user can now have access to the Streamgroomer menu in a coherent manner with the Service menu. With either read only or read/write privileges. Rights can be allocated at the global or category level.

To give right only on one single site create a particular category for this site.

4.1.9 Calling SG automatic peering

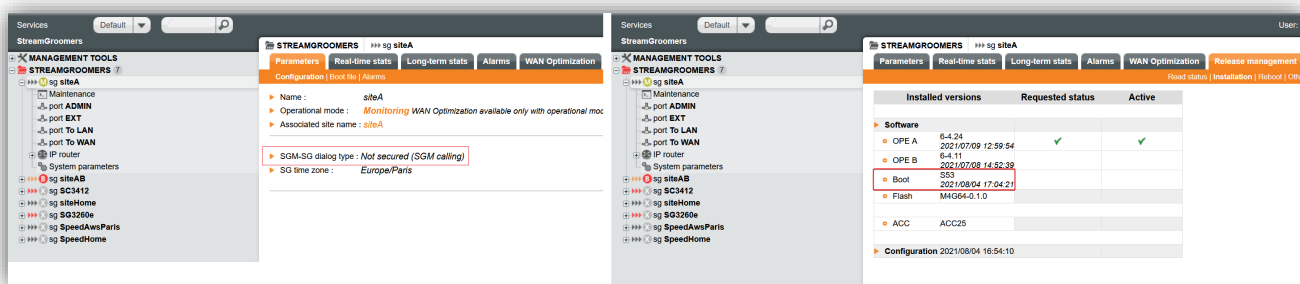
To simplify migration from one mode to the other (from being called by the SGM to calling the SGM), features have been enhanced to avoid physical intervention on site.

Prerequisite: SG with BOOT S53 or T06 and above.

If the SG is already connected to the SGM using the default "SGM calling" mode it is possible to automatically change this connection mode into the "SG calling" one, that means without the need to launch any command on the SG itself.

The mandatory conditions to launch this operation:

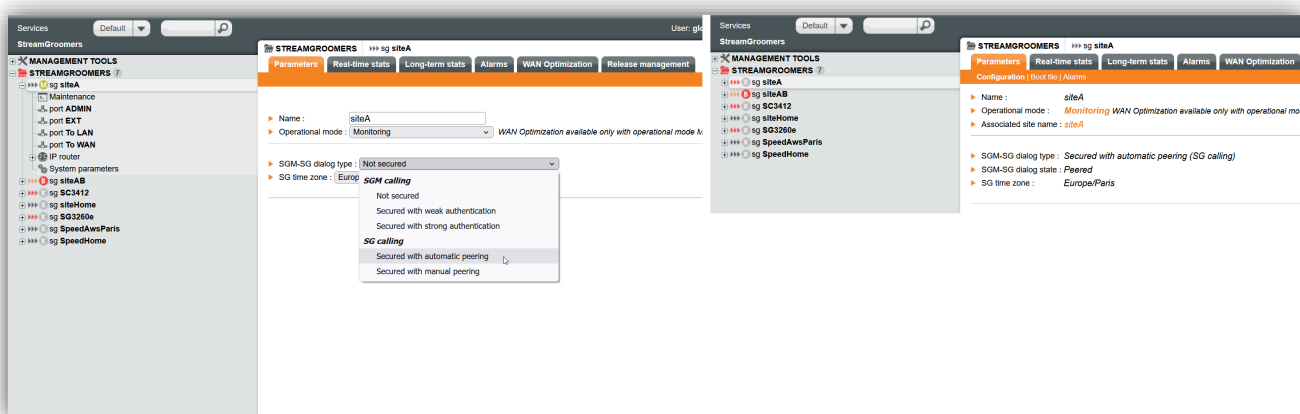
BOOT S53 or T05 (and above) and SG already connected to the SGM



SG not already peered and with the address of the SGM configured as the first one (first SGM address, here 192.168.15.245 in the following picture)

```
[siteA > configuration] show conf
Last save date: Wed Aug 04 15:23:01 CET 2021
version : 1.1
name : siteA
admin_address : 192.168.15.222
admin_mask : 255.255.255.0
admin_gateway : 192.168.15.254
admin_port_speed : auto
sgm_address : 192.168.15.245
sgm_address2 : 15.188.36.98
sgm_address3 :
sgm_address4 :
secure_com : no
dns_server1 :
dns_server2 :
dns_suffix1 :
dns_suffix2 :
ssh_port : 22
default_ext_interface : yes
peer_sgm : no
```

If all these requirements are fulfilled, you can just modify the mode from the Web interface:



Only the Streamview Web interface is used during this configuration.

4.1.10 Cloud images

New images (AMI for AWS and image for Azure) are available for Streamgroomer Manager

4.2 SG: OPE 6-4.24

4.2.1 Client port filtering

Descriptions of this new feature are available in the SGM section 4.1.3 above.

4.2.2 "TLS version" and "QUIC version" listed in the "hostname" field Classification workload indicator

As security over the Internet is paramount, the http protocol will lose traffic share and will be replaced by encrypted protocols such as https or Quic. Thus, the hostname field decoded from the http protocol will be of less and less usage. Streamcore decided to use it to display version of encrypted protocols.

Prot.	Local IP addr	Local port	Remote IP addr	Remote port	Frames ↑	Frames ↓	State	Hostname
UDP	192.168.15.235	55707	142.250.153.189	443	61	91	established	quic:FF00001D
UDP	192.168.15.235	57502	216.58.205.206	443	8	8	established	quic:FF00001D
UDP	192.168.15.235	56378	216.58.212.109	443	10	11	established	quic:FF00001D
UDP	192.168.15.235	37696	216.58.198.67	443	14	14	established	quic:FF00001D
UDP	192.168.15.235	56022	216.58.205.195	443	7	7	established	quic:FF00001D
UDP	192.168.15.235	57631	216.58.205.195	443	7	7	silent	quic:FF00001D
UDP	192.168.15.235	59375	216.58.198.67	443	8	10	silent	quic:FF00001D
UDP	192.168.15.235	47509	216.58.198.78	443	129	124	silent	quic:FF00001D
UDP	192.168.15.235	34839	216.58.211.195	443	59	33	silent	quic:FF00001D
UDP	192.168.15.235	35392	172.217.171.227	443	158	462	silent	quic:FF00001D

Prot.	Local IP addr	Local port	Remote IP addr	Remote port	Frames ↑	Frames ↓	State	Hostname
TCP	192.168.15.235	53122	172.217.18.234	443	21	17	closed	ts:1.3
TCP	192.168.15.235	55450	35.206.49.130	443	14	14	established	ts:1.3
TCP	192.168.15.235	59042	216.58.212.109	443	7	6	established	ts:1.3
TCP	192.168.15.235	46004	172.217.19.142	443	43	51	established	ts:1.3
TCP	192.168.15.235	53156	172.217.18.234	443	17	19	established	ts:1.3
TCP	192.168.15.235	60078	216.58.198.78	443	16	16	established	ts:1.3
TCP	192.168.15.235	56218	172.217.171.202	443	24	24	established	ts:1.3
TCP	192.168.15.235	42030	172.217.171.206	443	19	17	established	ts:1.3
TCP	192.168.15.235	53168	172.217.18.234	443	14	15	established	ts:1.3
TCP	192.168.15.235	57264	172.217.171.229	443	27	29	established	ts:1.3

4.3 SG OPE 6-5.05

4.3.1 Client port filtering

Descriptions of this new feature are available in the SGM section 4.1.3 above.

4.3.2 "TLS version" and "QUIC version" listed in the "hostname" field Classification workload indicator

Descriptions of this new feature are available in the OPE 6-4.24 section 4.2.2 above.

4.3.3 ADMIN with DHCP auto-configuration

From this version of OPE, if the SG is configured using a DHCP address information, this SG is able to automatically check if the current DHCP address has moved to another one and so to adjust it.

4.4 SG OPE 6-5.06

4.4.1 Correction of a performance issue with the SSL flow management

This issue may lead to an unexpected heavy CPU usage on the SG when a very large number of SSL connections is encountered.

4.5 SG: BOOT S53

4.5.1 Calling SG: automatic peering

Please go to the SGM 4.1.9 section above to have a description of this feature.

4.6 SG: BOOT T06

4.6.1 Calling SG: automatic peering

Please go to the SGM 4.1.9 section above to have a description of this feature.

4.6.2 ADMIN with DHCP configuration

Descriptions of this new feature are available here 4.1.5.

4.6.3 Application mode

In M5G, the OPE is now running in application and access Network interface Cards (NIC) through DPDK (DataPlane Development Kit). Adherence to the Kernel is lower and will ease evolution of the software.

4.6.4 Optimization of Fast Path mode

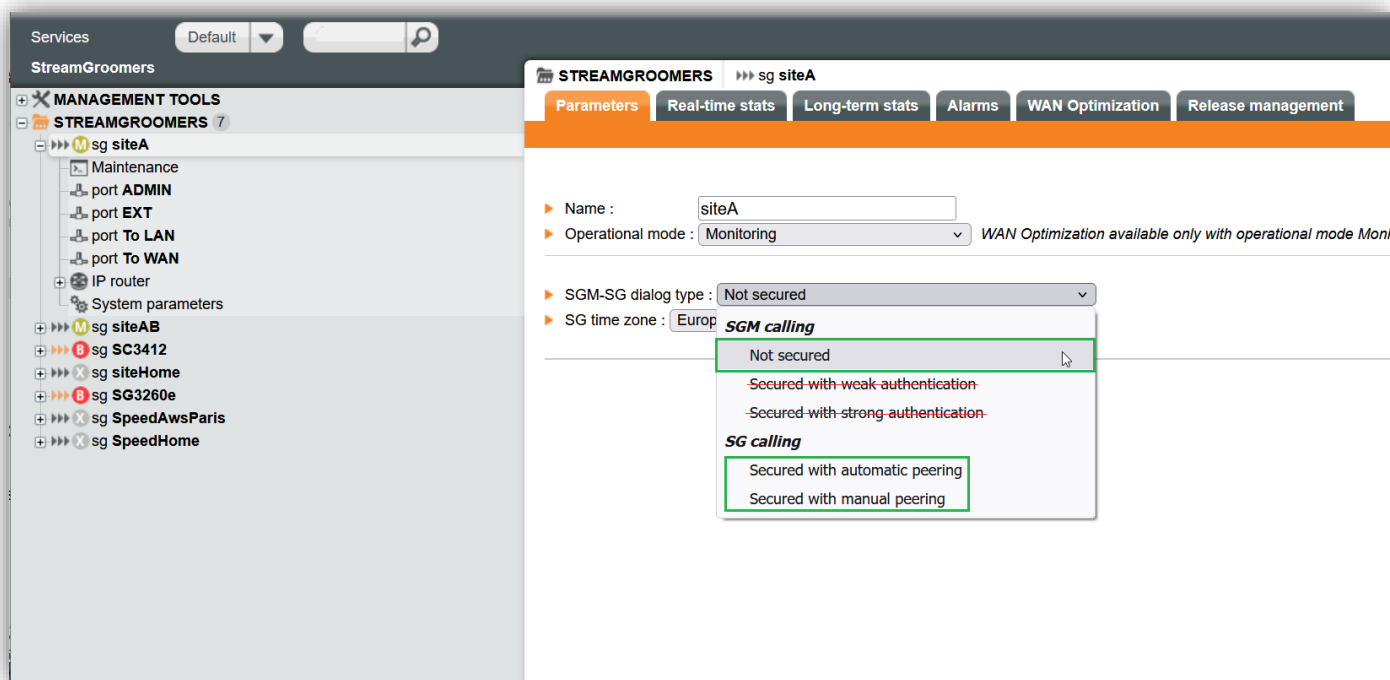
With M5G new application mode version, packet processing has been optimized and prepared for parallelisation.

Calculation of metrics per connection at 10sec, 1min and 10 min can be bypassed to enable higher performances. Calculation of aggregated metrics for rules and detailed metrics for "Most recent connection" are still available

4.6.5 SGM-SG dialog type

With all SG configured with a To# boot version, the "**Not Secured**" dialog type will in fact already use a SSH connection. "Secured" dialog types are not yet supported.

For those To# (M5G) SG usable dialog types are listed below:



▶ Both "**SGM calling Secured**" dialog types are still selectable but will not work.

4.7 SG: BOOT To7

4.7.1 Integration of a new Silicom bypass card

Add the PE210GBPIg-LRD-SD card to the list of manageable hardware for a SG.

N.B. with this version only the 10G mode of this card is supported.

4.8 CLOUD IMAGES

New images (AMI for AWS and image for Azure) are available for M5G version of Streamgroomer.

4.9 ACC 25

- Performance improvements, particularly when accelerating TLS connections with SSL optimization enabled.

- Enhanced TLS Server Name (SNI) filtering capabilities
- Stability improvements when system is under load
- Enhanced configuration options around TLS configuration
- Newer compression, connection handling and logging frameworks

4.10 FEATURE RETIRED

4.10.1 LAN Inventory

The LAN Inventory Tab on the Site level has been removed. This tab was containing tools to scan IP and open ports per IP on a LAN. It is somewhat redundant with ARP table of the Streamgroomer menu that benefit from manufacturer discovery.

Scanning IP and ports were also not compliant with virtual and Cloud environments security policies.

5 Problems fixed by Software Suite 6-5.T11

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

Note: In this Software Suite, the BOOT component is **S53**. 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.T11 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.T11)
		SGM 6-5.T11
	31163	[SNMP] Supervise disk usage
	33264	[Multi-Shaping] "ij_poll" daemon uses too much of memory.
	42685	[Streamview] SG creation: errors in tool tip texts (Help)
	44132	[SGMconf] Restore database: wrong message
	46444	[SGMconf] Change the license text for the Streamcore company
	46651	[Streamview] Import of sites from a file not completely full.
	46703	[StreamAccess] Problem with the de connection of a "restricted" user
	48290	[SGMConf] infinite loop on Reboot SGM from SGMConf
SCC-00001330	48327	Client port filtering. Needs OPE 6-4.24, 6-5.05 or above.
	48346	Manage orphan RRD files (without an attached rule).
	48347	[Streamview] Name of a filter erased after the selection of a service in the configuration of this filter.
	48357	Compatibility on iPad (Chrome, Safari).
	48359	[StreamView] Support SG with a DHCP configuration.
	48363	[Streamview] Categories type selector on StreamGroomers.
	49364	[Streamview] Calling SG: automatic peering - Needs BOOT: M4G-S53 M5G-T05 .
SCC-00001341	49365	Running connection's array: add information bullet on the "rule" column.
	49366	Remove LAN inventory functionality.
SCC-00001349	49367	Calling SG with Tandem and Dual configuration - Needs BOOT: M4G-S53 or M5G-T05 .
	49368	[StreamAccess] New user rights: selection of the Sites and/or StreamGroomers.
	49372	[Streamview : Troubleshooting] Connections array: "most recent" the default setting.
	49375	[StreamView] Piecharts legend may over-write.
	49378	[SGMConf] SNMP configuration issue
SCC-00001356	49381	[Matrix applicative rules] insertion of a new groupe before a rule with an accentuated name failes.
	49397	[License activation] Collection of the system data are not always done
	49398	[Calling SG] with two SGM in high availability mode
	49400	[Calling SG] SG in dual/tandem mode
	49401	[Calling SG] Add streambind logs download in SGMConf

User Problem	Reference	Description of the problem that has been solved (OPE 6-4.24)
OPE 6-4.24		
	FB48337	DPI HTTPS TLSv1.3 on proxy CONNECT: SNI not collected.
	FB48348	QUIC traffic : SNI unavailable.
	FB48349	[QUIC] SNI field
	FB49374	Port client filtering
	FB49376	"TLS version" and "QUIC version" listed in the "hostname" field.
	FB49377	TLS 1.3 - "extended supported versions" field not filled.
SCC-00001355	FB49380	"Retransmission rate" statistics, inconsistent value on 10mn.

User Problem	Reference	Description of the problem that has been solved (OPE 6-5.05)
OPE 6-5-05		
	FB48337	DPI HTTPS TLSv1.3 on proxy CONNECT: SNI not collected.
	FB48348	QUIC traffic : SNI unavailable.
	FB48349	[QUIC] SNI field
	FB49374	Port client filtering
	FB49376	"TLS version" and "QUIC version" listed in the "hostname" field.
	FB49377	TLS 1.3 - "extended supported versions" field not filled.
SCC-00001355	FB49380	"Retransmission rate" statistics, inconsistent value on 10mn.
	FB48361	Support DHCP auto-configuration mode for the ADMIN port
	FB49390	Troubleshooting: connections listed for the present period of time. The 10mn period will really start from 10mn earlier as the present time.
	FB49391	ART statistics: per connection data collection can be deactivated. Add route with name sym it_stat_cnx 0

User Problem	Reference	Description of the problem that has been solved (OPE 6-5.06)
OPE 6-5-06		
		Correct a potential performance issue when dealing with numerous SSL connections.
	FB49418	Correct a configuration mismatch at SG start-up.
		Add QUIC, SSL and IPv6 debug SG statistics (real time statistics).

User Problem	Reference	Description of the problem that has been solved (Boot S53)
Boot S53		
	FB49373	SG not accessible if wrong DNS configuration.
	FB49385	Calling SG with a Tandem or Dual configuration.

User Problem	Reference	Description of the problem that has been solved (Boot S53)
	FB49407	Logrotate not working well

User Problem	Reference	Description of the problem that has been solved (Boot T06)
Boot T06		
	FB47018	Add HDD/SSD SMART information to the system logs
	FB49373	SG not accessible if wrong DNS configuration.
	FB49385	Calling SG with a Tandem or Dual configuration.
	FB48360	[BOOT Menu] Support DHCP auto-configuration mode for the ADMIN port
	FB49404	New types of SG (5512, 5514, 6512)
	FB49407	Logrotate not working well

User Problem	Reference	Description of the problem that has been solved (Boot T07)
Boot T07		
	FB49407	Collect of logs is stopped at 06h30
	FB49421	Add the PE210GBPI9-LRD-SD card (10G only).

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	<p>Since Software Suite 6-4.S08 - Authentication with Radius does not work if the password contains the characters</p> <ul style="list-style-type: none"> • 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 or latter and an old OPE (< 6-4.17) each restart (reboot) of the SG will erase the acceleration cache.	Upgrade to OPE 6-4.17 or later
FB49373	SG	SG could be not accessible from the SGM in case of a wrong DNS configuration on this SG.	Update the DNS configuration of the SG
FB49383	SGM	Possible migration issue to the 6-5.T11 version if the SGM contains more than on base with a very big one.	Contact the Streamcore support in order to manually launched the migration on this very big base.
FB49409	SG	On a SG in Dual/Tandem mode and in a SGM HA environment (SGM's cluster) the change of the communication mode from "calling SG" to "not secured" may rise an error.	Contact the 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 & 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
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 6.4	SGSS 6.5
To 1.2	Not Guaranteed	Not Guaranteed
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

9 Technical Support

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