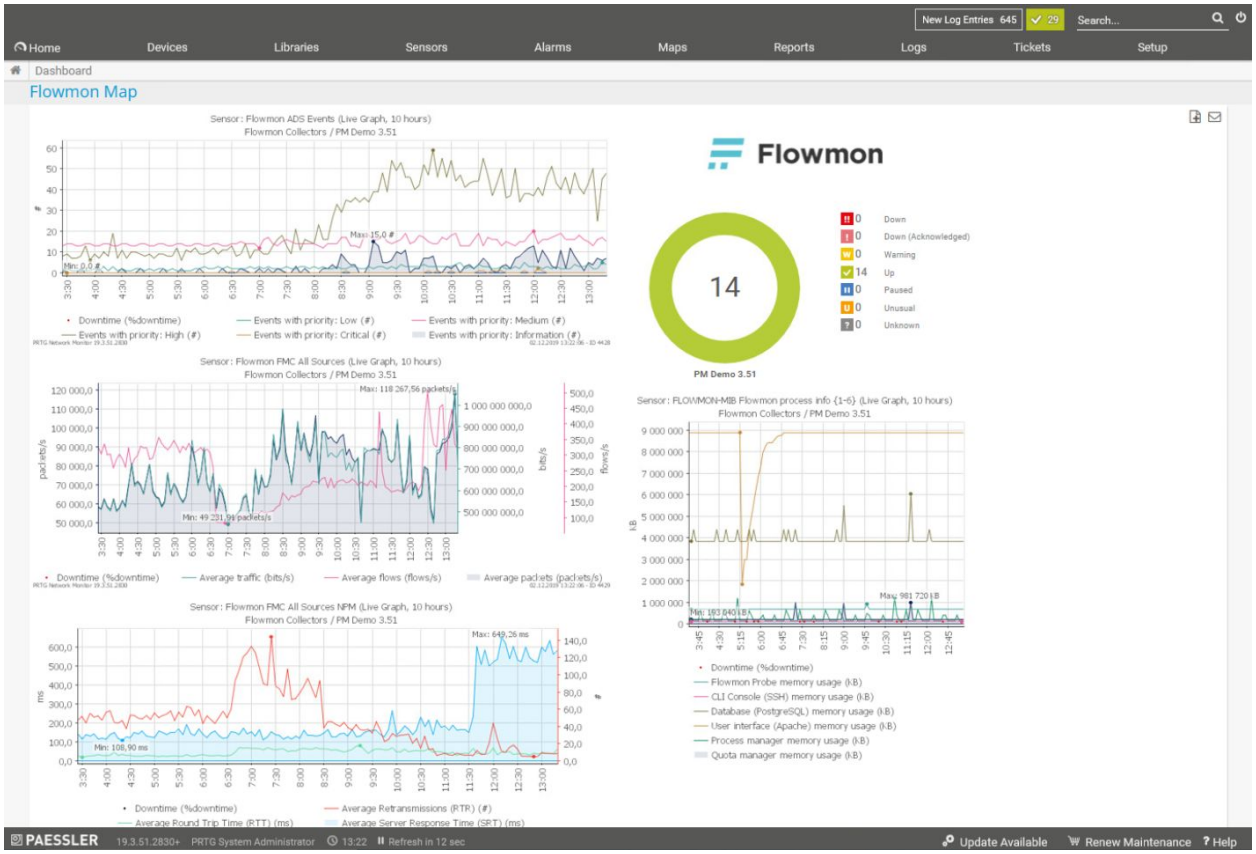
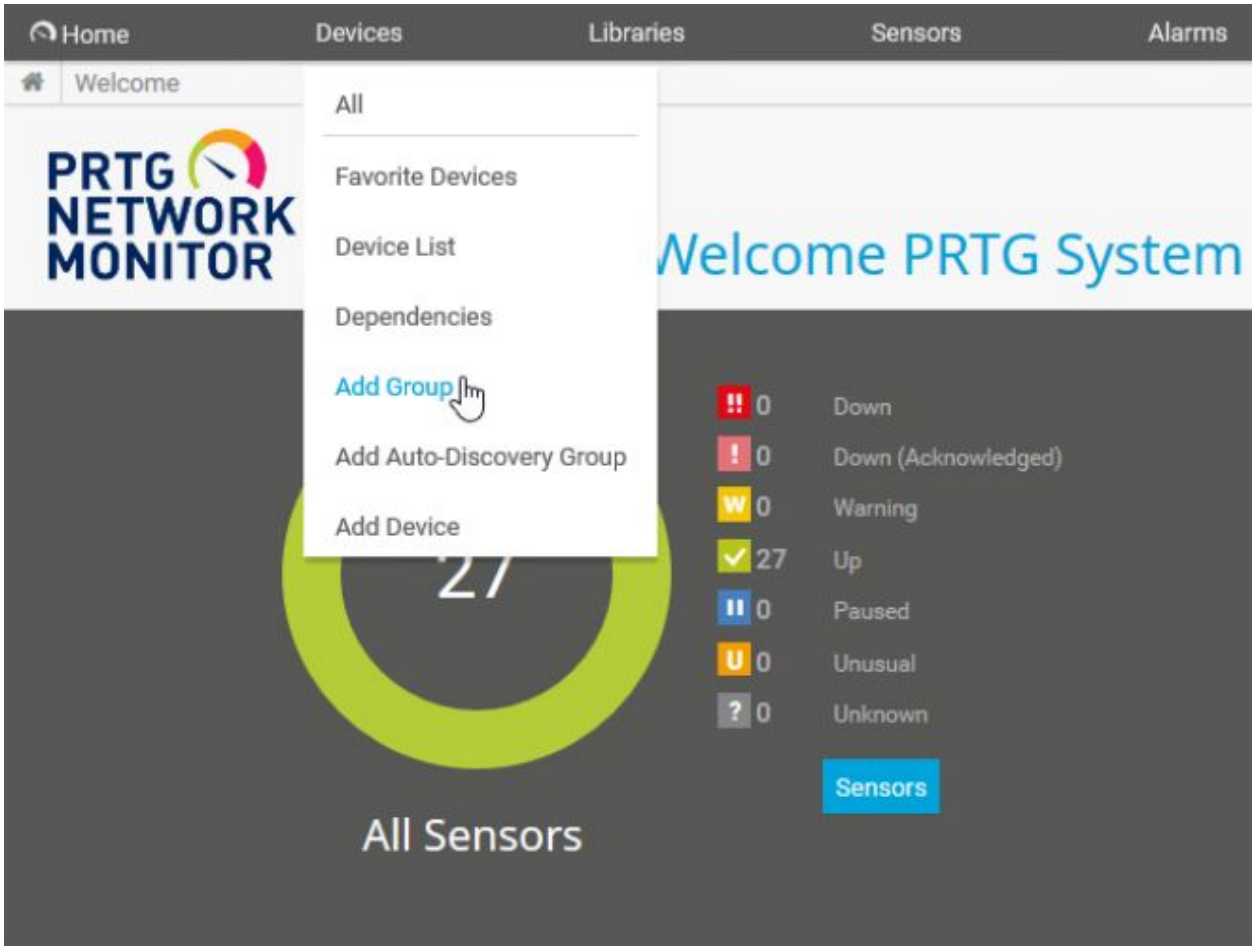
Integrating Flowmon with PRTG

Flowmon customers using Paessler's PRTG Network Monitor can now monitor their Flowmon appliances via SNMP sensors, and ADS Event Statistics and FMC All Sources Profile with NPM statistics using a Python Script Advanced sensor provided by Flowmon. These sensors can be downloaded from Flowmon Portal as a zip file. After decompressing it, follow this guide to import all the useful information from Flowmon into your PRTG Network Monitor (Flowmon Python scripts are functional from PRTG version 20.1.55.1775+).

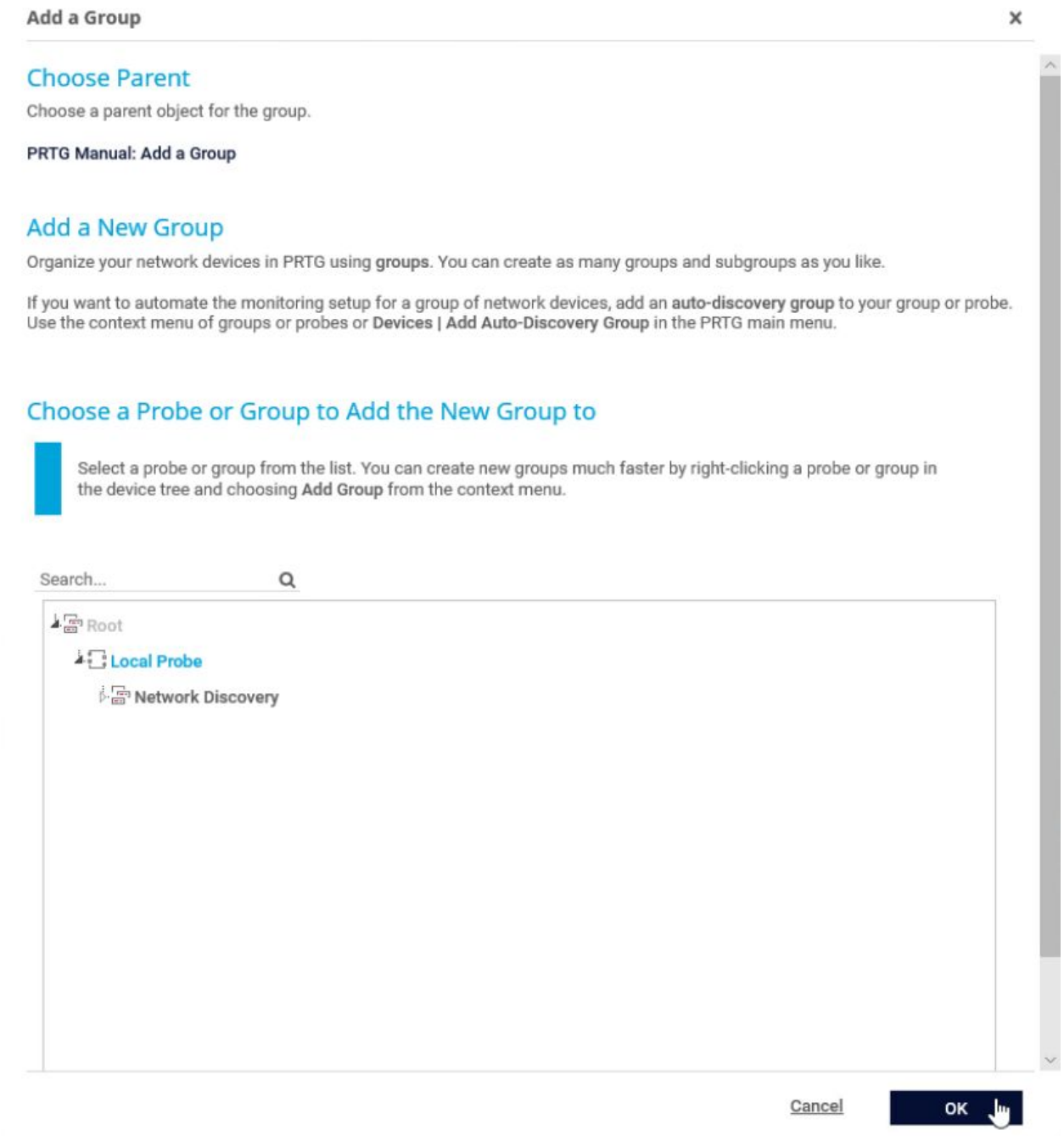


Adding Flowmon appliance to PRTG devices

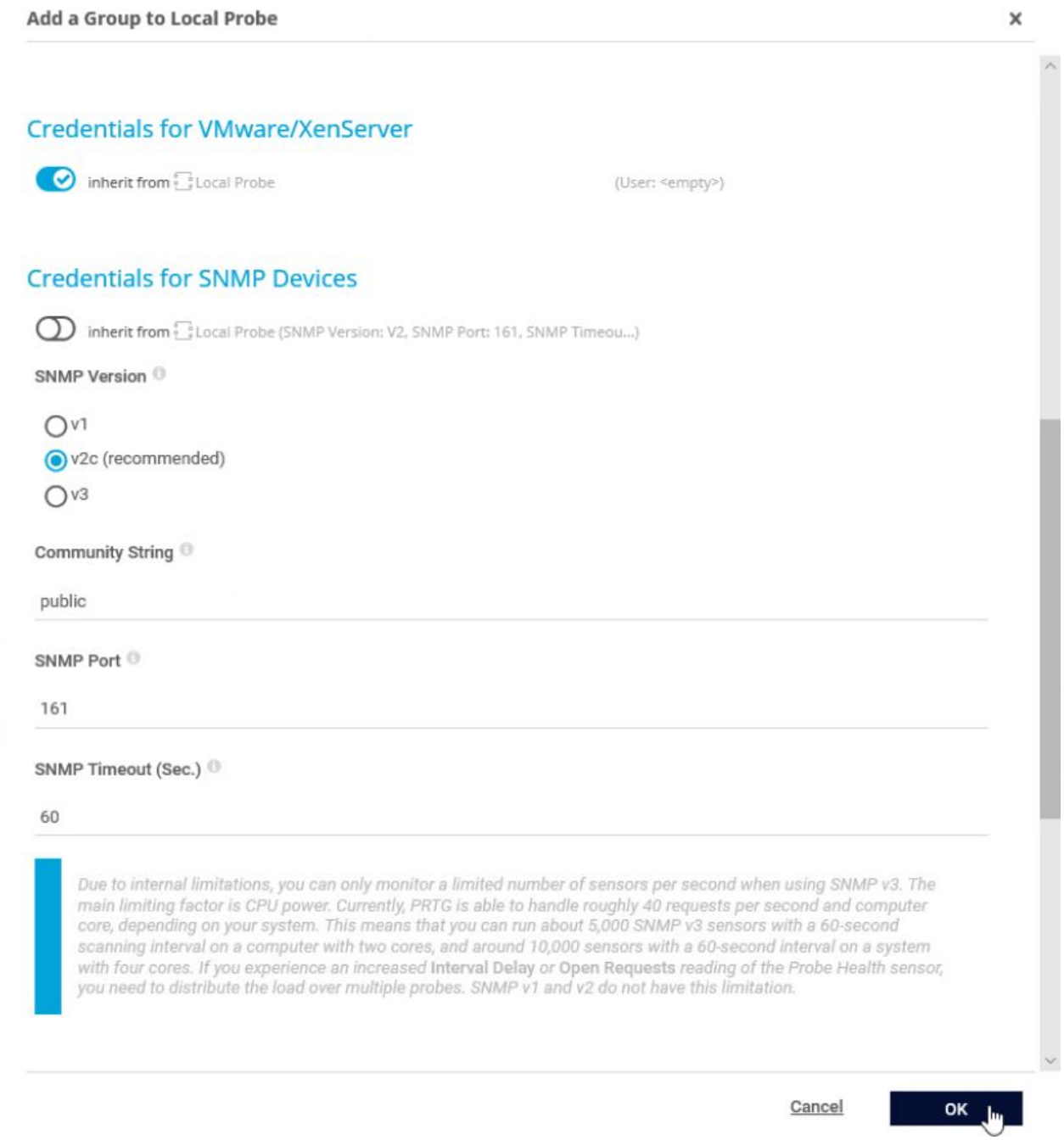
Copy the "**Flowmon_logo_small.png**" file from the unzipped folder to the \webroot\icons\devices subfolder of your PRTG program directory (default path is ***C:\Program Files (x86)\PRTG Network Monitor*\webroot\icons\devices**). Open the PRTG GUI in your browser (127.0.0.1), log in with default credentials and add a new Group by clicking on **Devices** in the upper menu and then on **Add Group**.



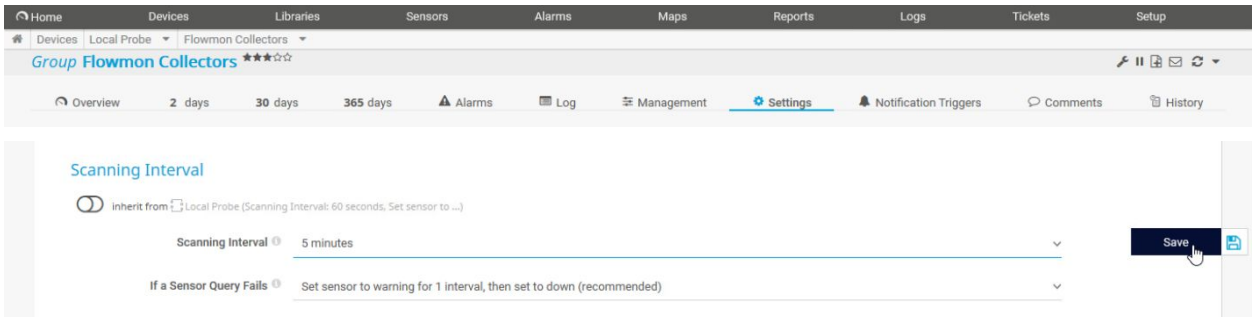
In section “**Choose a Probe or Group to Add the New Group to**” select a parent for the new group. For example, you can choose “Local Probe”. Then click on the **OK** button.



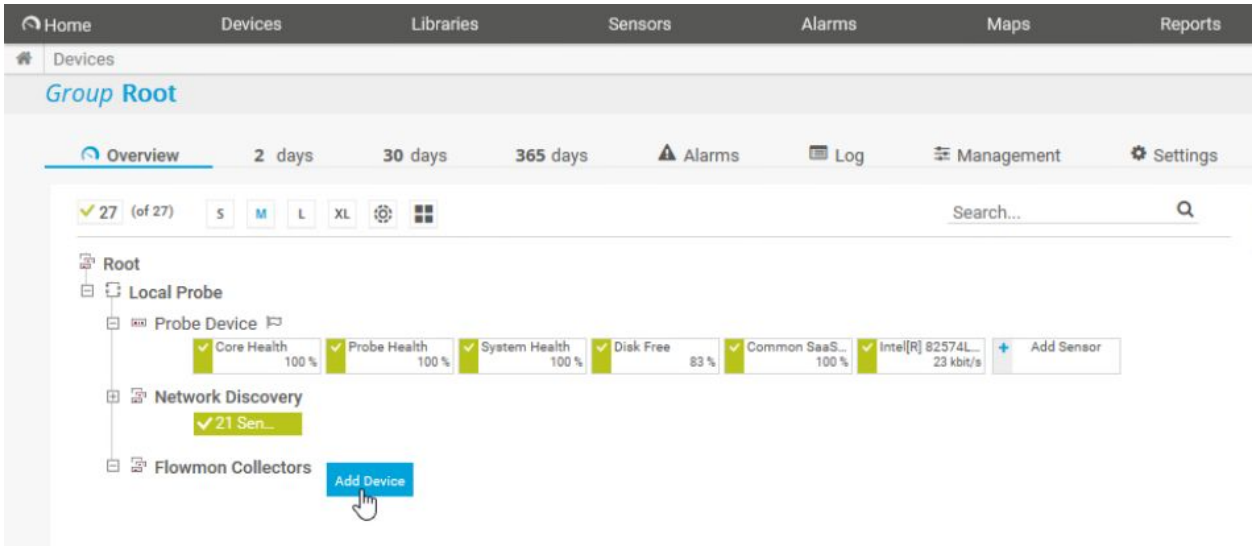
Enter the **Group Name**, for example "*Flowmon Collectors"* (this represents a set of devices in the GUI) and change the **Credentials for SNMP Devices** - set the **SNMP Version, Community String and SNMP Port according to** the settings of **your Flowmon appliance,** and set the **SNMP Timeout** to **60 seconds**. Then click on the **OK** button.



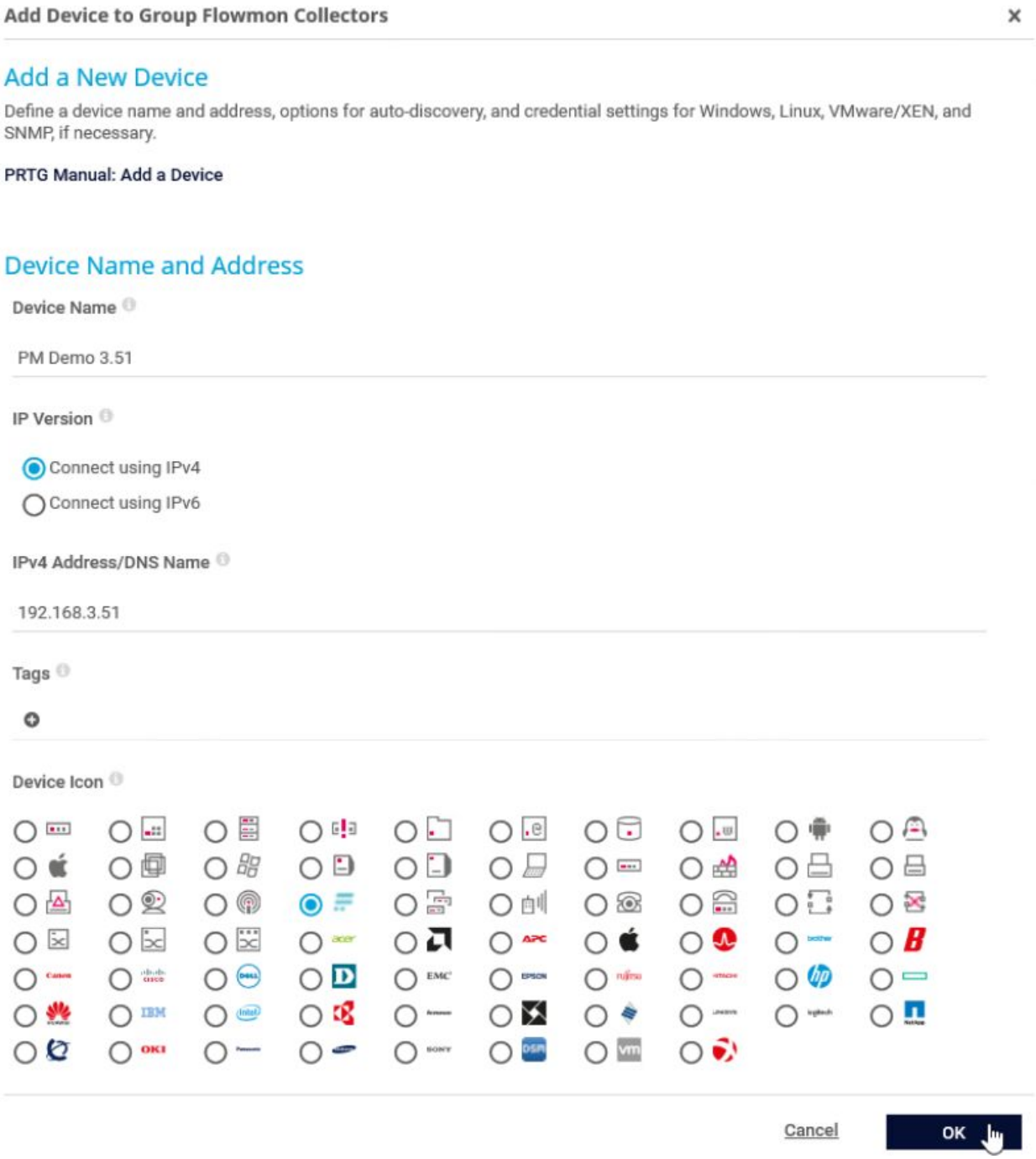
Go to the **Settings** of the newly created group and change the **Scanning Interval** to **5 minutes.** Then click on the **Save** button. Now the group settings are correctly set and the objects defined within this group will inherit the group settings.



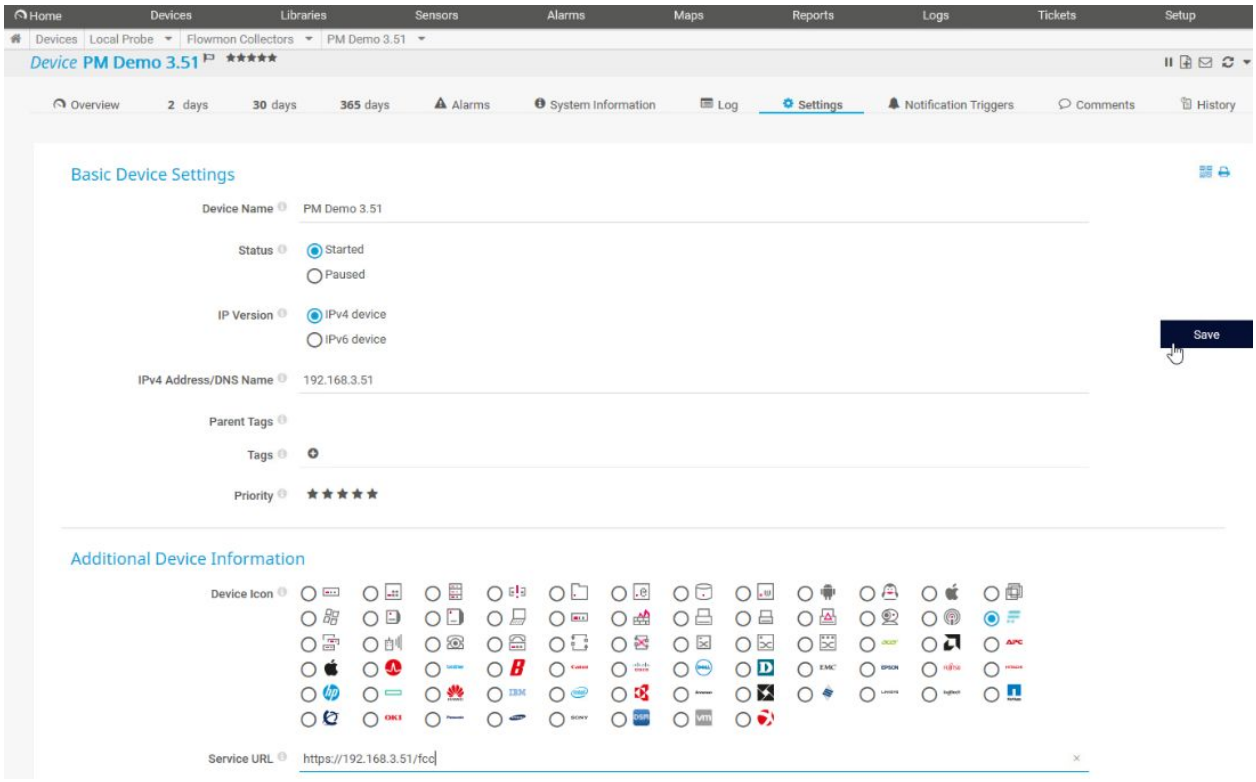
To add your Flowmon appliance to the monitored devices, click on the **Add Device** button next to the newly created group.

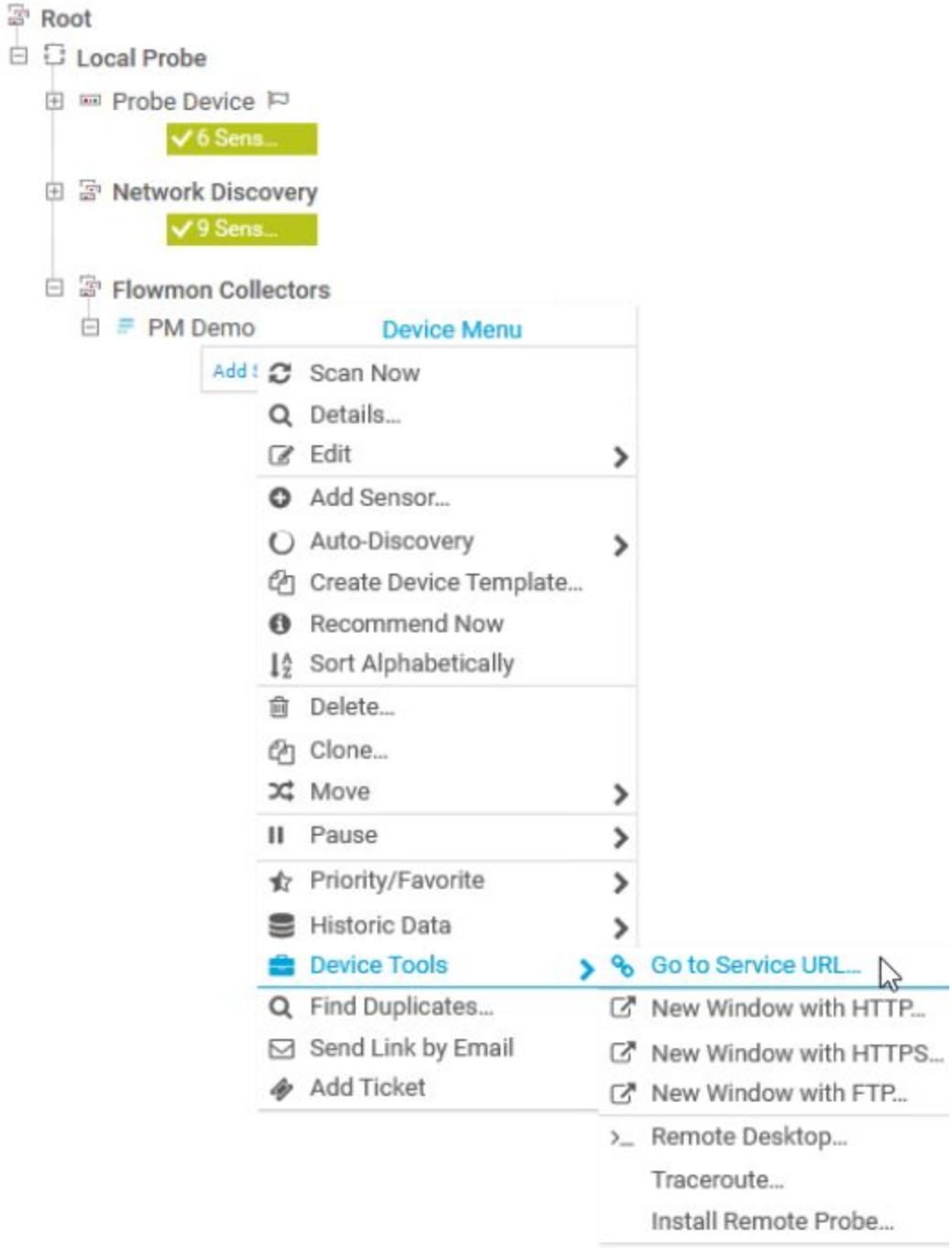


Enter the **Device Name**, **IP Version**, **IP Address/DNS Name** of the Flowmon appliance and choose the **Flowmon logo as the *Device Icon***. Then click on the **OK** button.



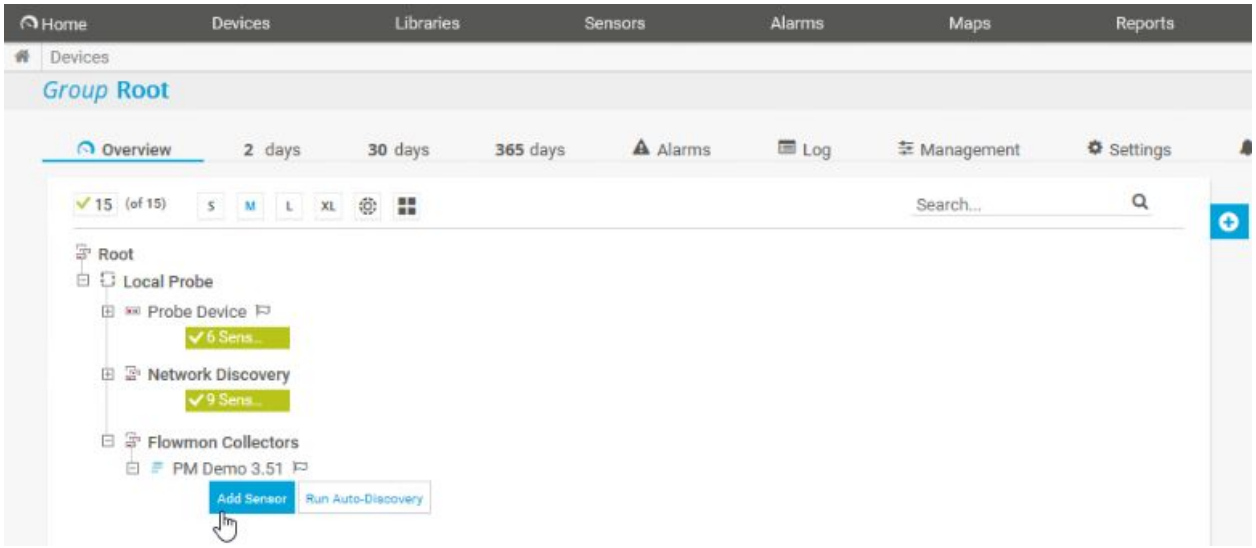
Now go to the **Settings** of the newly added Flowmon appliance and enter the URL (with “https://” prefix) of this Flowmon device in **Service URL**. This will allow you to go to the settings of your Flowmon device in just 2 clicks directly from PRTG (Right click on the device, *Device Tools*, click on *Go to Service URL*)



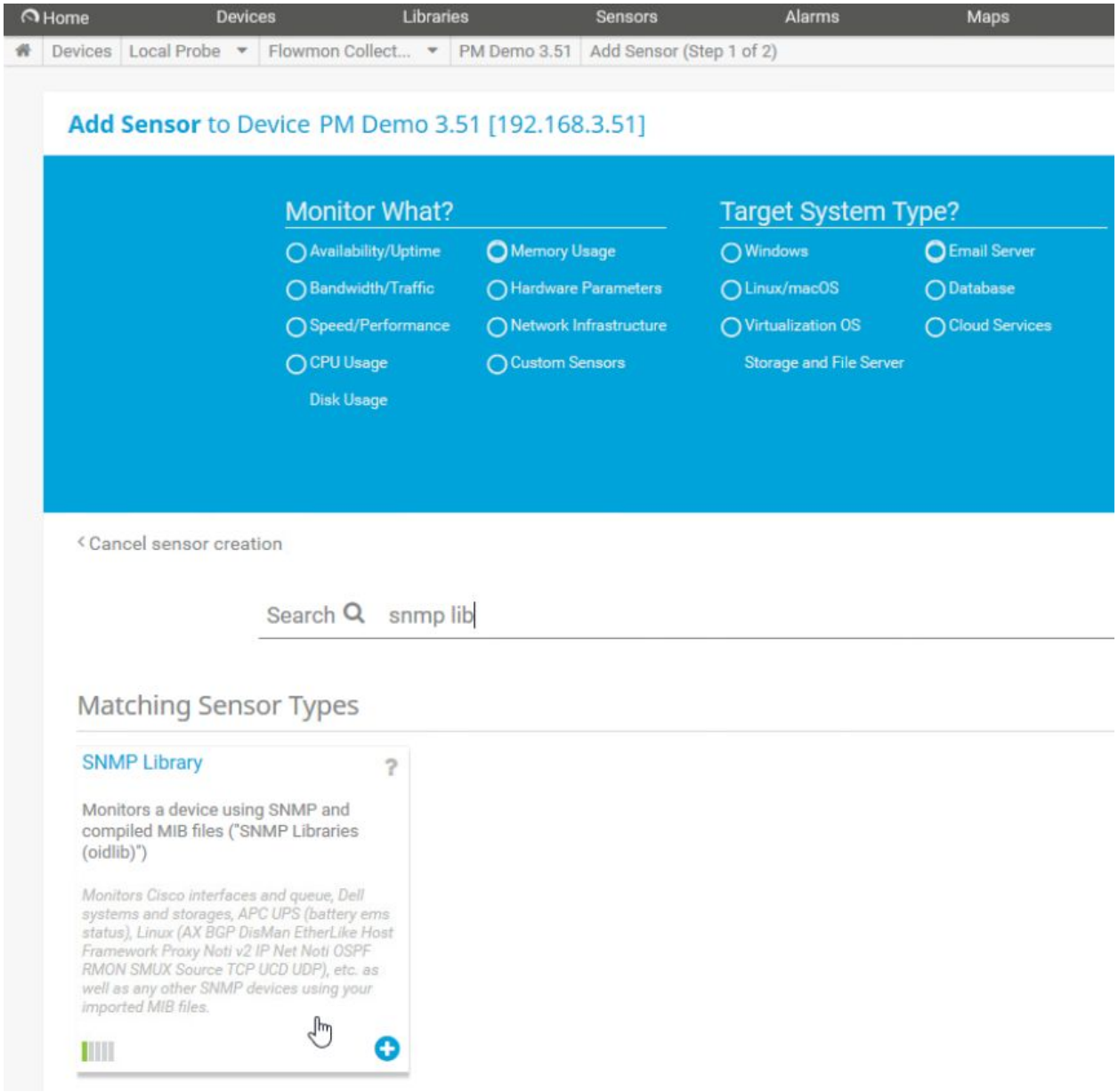

Root
Local Probe
Probe Device
6 Sens...
Network Discovery
9 Sens...
Flowmon Collectors
PM Demo
Device Menu
Scan Now
Details...
Edit
Add Sensor...
Auto-Discovery
Create Device Template...
Recommend Now
Sort Alphabetically
Delete...
Clone...
Move
Pause
Priority/Favorite
Historic Data
Device Tools
Find Duplicates...
Send Link by Email
Add Ticket
Go to Service URL...
New Window with HTTP...
New Window with HTTPS...
New Window with FTP...
Remote Desktop...
Traceroute...
Install Remote Probe...

SNMP monitoring of Flowmon in PRTG

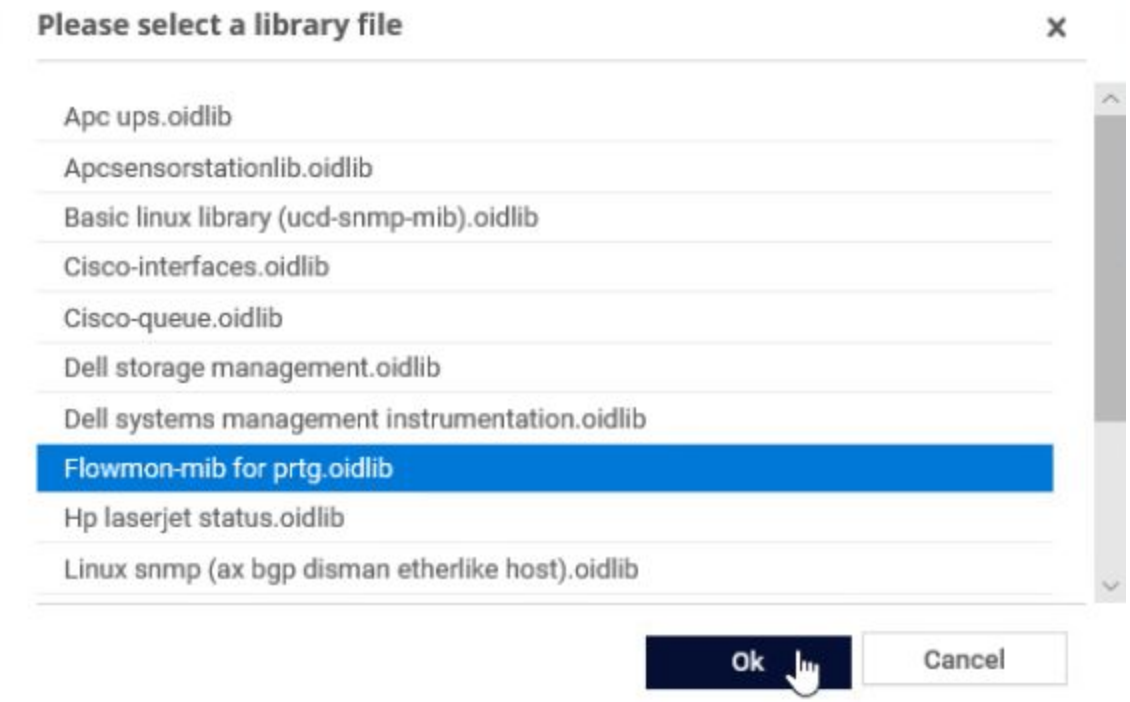
To monitor your Flowmon appliance in PRTG through SNMP, open the downloaded and unzipped Flowmon_PRTG_Package folder, open the SNMP folder and copy the "**FLOWMON-MIB for PRTG.oidlib"** file to the snmplibs directory of your PRTG system (default path is ***C:\Program Files (x86)\PRTG Network Monitor\snmplibs***).
To add new sensors to the device, click on the **Add Sensor** button.



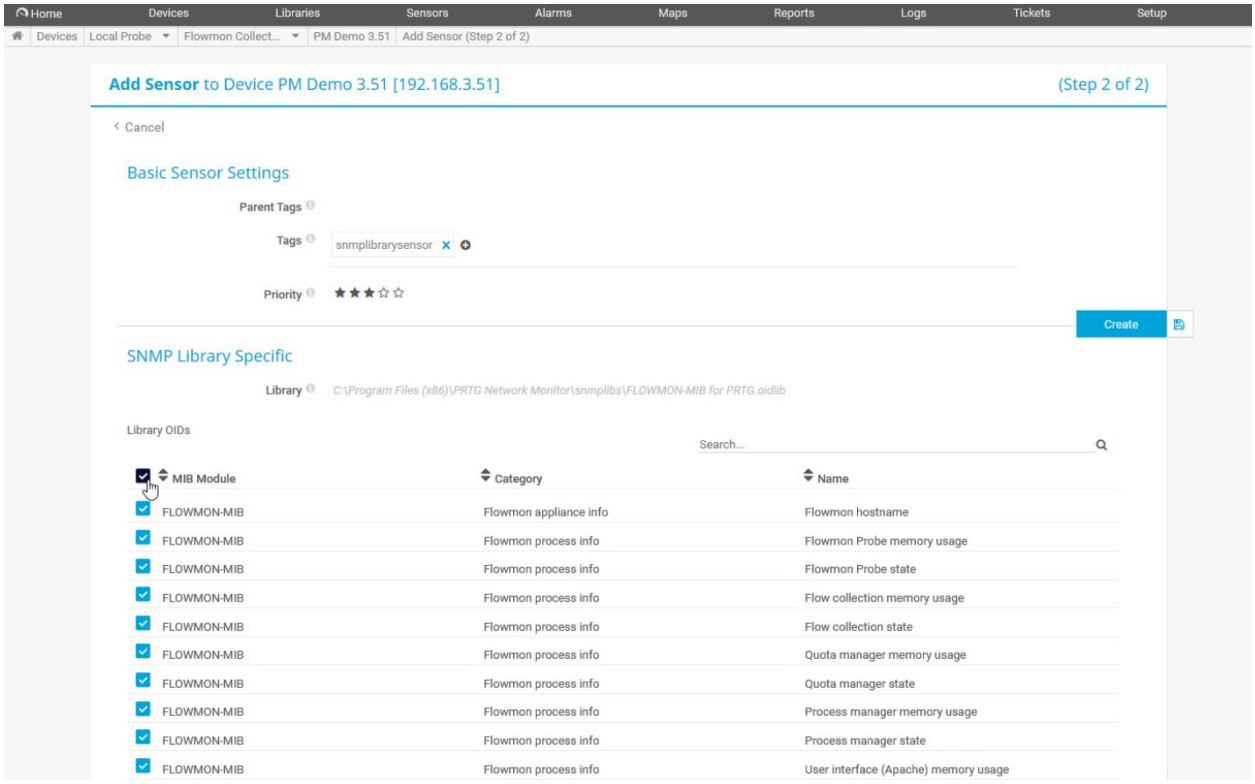
Search for the “**SNMP library**” sensor type and click on it:



Select the “**Flowmon-mib for prtg.oidlib**” file and click on the **OK** button.



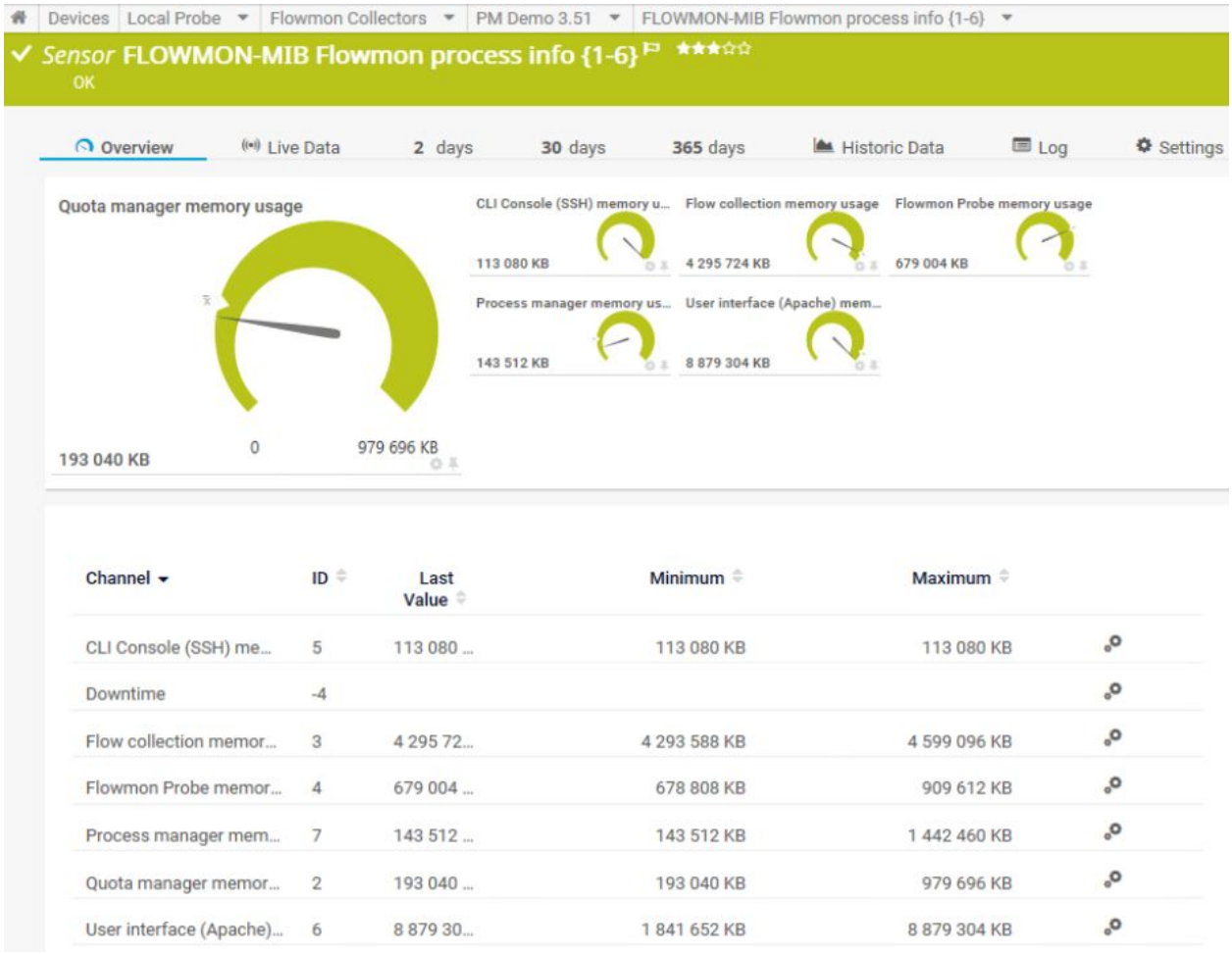
Select the items you want to monitor (we recommend **selecting all items**) and click on the **Create** button.



In a few minutes, all the sensors should be up and running and you can start monitoring your Flowmon appliance.

Pos	Sensor	Status	Message	Graph	Priority
1.	CLI Console (SSH) state	Up	active	Response Tin 21 msec	★★★☆☆
2.	Database (PostgreSQL) state	Up	active	Response Tin 22 msec	★★★☆☆
3.	Flow collection state	Up	active	Response Tin 7 568 msec	★★★☆☆
4.	Flowmon hostname	Up	demopm.localdomain	Response Tin 13 msec	★★★☆☆
5.	Flowmon load	Up	load average: 1.57, 1.51, 1.54	Response Tin 30 msec	★★★☆☆
6.	Flowmon Probe state	Up	active	Response Tin 786 msec	★★★☆☆
7.	Flowmon uptime	Up	up 1 week, 21 hours, 1 minute	Response Tin 30 msec	★★★☆☆
8.	Process manager state	Up	active	Response Tin 2 584 msec	★★★☆☆
9.	Quota manager state	Up	active	Response Tin 21 msec	★★★☆☆
10.	User interface (Apache) sta...	Up	active	Response Tin 18 msec	★★★☆☆
11.	FLOWMON-MIB Flowmon p...	Up	OK	Quota manag 193 040 KB	★★★☆☆

For the first 10 sensors, the main thing to monitor is the “Message” column. To monitor the memory usage of processes, click on the sensor “FLOWMON-MIB Flowmon process info {1-6}”. There you can see the minimum, maximum and a last value of the services memory usage, as well as a graph of memory usage.


Devices
Local Probe
Flowmon Collectors
PM Demo 3.51
FLOWMON-MIB Flowmon process info {1-6}
Sensor FLOWMON-MIB Flowmon process info {1-6}
OK
Overview
Live Data
2 days
30 days
365 days
Historic Data
Log
Settings
Quota manager memory usage
193 040 KB
0
979 696 KB
CLI Console (SSH) memory u...
113 080 KB
Flow collection memory usage
4 295 724 KB
Flowmon Probe memory usage
679 004 KB
Process manager memory us...
143 512 KB
User interface (Apache) mem...
8 879 304 KB
Channel
ID
Last Value
Minimum
Maximum
CLI Console (SSH) me... 5 113 080 ... 113 080 KB 113 080 KB
Downtime -4
Flow collection memor... 3 4 295 72... 4 293 588 KB 4 599 096 KB
Flowmon Probe memor... 4 679 004 ... 678 808 KB 909 612 KB
Process manager mem... 7 143 512 ... 143 512 KB 1 442 460 KB
Quota manager memor... 2 193 040 ... 193 040 KB 979 696 KB
User interface (Apache)... 6 8 879 30... 1 841 652 KB 8 879 304 KB


Sensor FLOWMON-MIB Flowmon process info {1-6}
OK
Overview
Live Data
2 days
30 days
365 days
Historic Data
Log
Settings
Notification Triggers
Comments
History
Last Scan: 108 s
Last Up: 108 s
Last Down: 4 d 14 h 15 m
Uptime: 100,0000%
Downtime: 0,0000%
Coverage: 86%
Sensor Type: SNMP Custom Advanced
Dependency: Parent
Interval: 5 m
ID: #4398
Downtime
Quota manager memory us...
Flow collection memory us...
Flowmon Probe memory us...
CLI Console (SSH) memory...
User interface (Apache) me...
Process manager memory ...
Show all
Hide all

Preparing the PRTG environment for Flowmon Python scripts

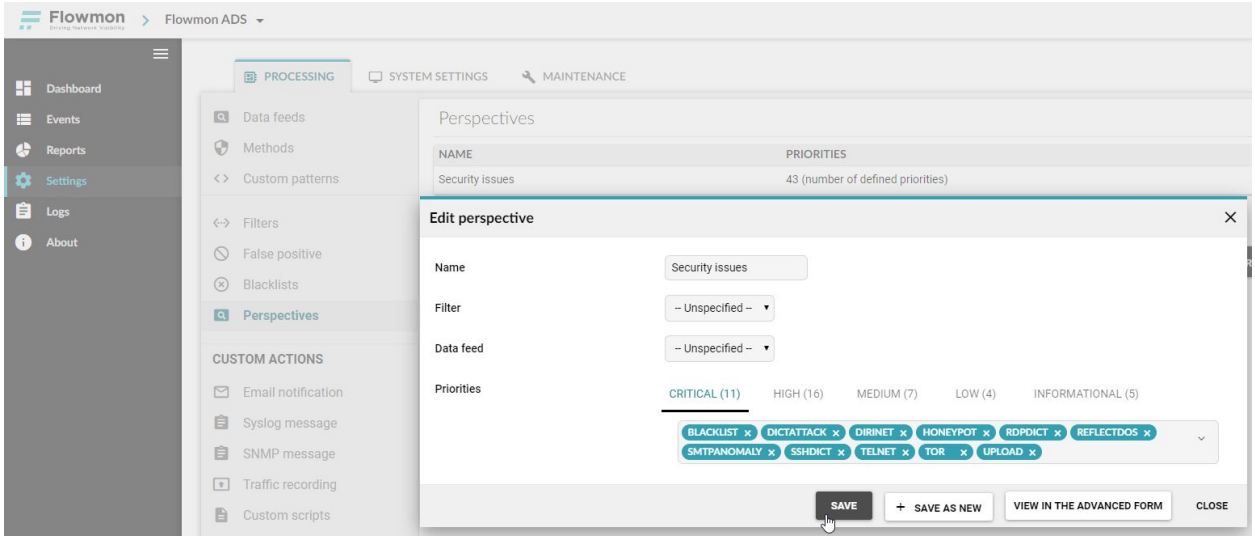
To run the sensors provided by Flowmon on PRTG, you will need to **add the Python requests library** to the PRTG's own Python runtime. To do this, just **follow these six steps**:

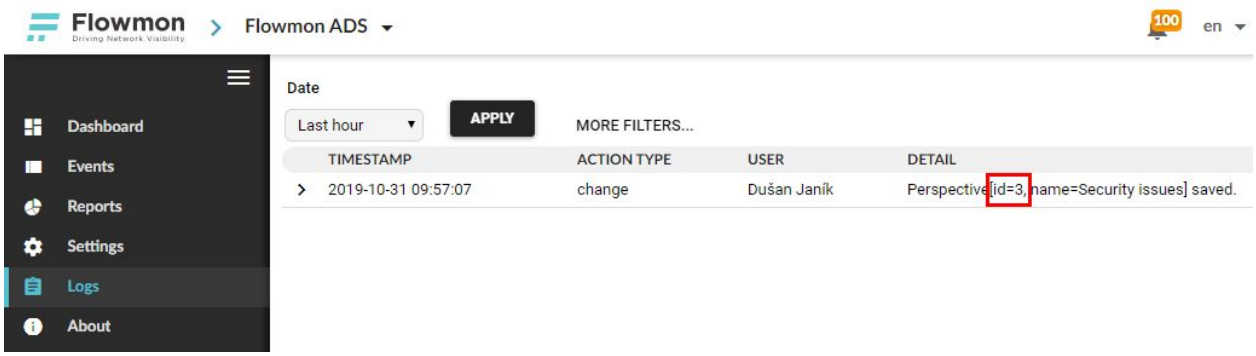
1. Copy the get-pip.py file from the zip into PRTG's Python directory C:\Program Files (x86)\PRTG Network Monitor\python\
2. Open the command line as administrator and run the following commands
3. cd C:\Program Files (x86)\PRTG Network Monitor\python\
4. python.exe get-pip.py
5. cd Scripts
6. pip install requests

ADS Event Statistics in PRTG

To display ADS event statistics in PRTG, Flowmon provides you with a Python script that can be run in PRTG as a Python Script Advanced Sensor. Open the ADS directory in the downloaded and unzipped directory. This directory contains 2 files - *FlowmonADS_EventsByPriority.py* and *FlowmonADS_config.py*.
When you have successfully installed the requests library, open the **FlowmonADS_config.py** file and set the attributes in it. These attributes are the **username and password for the REST API** client and **ID of the ADS perspective**. To get the ID of the ADS perspective, follow these steps:

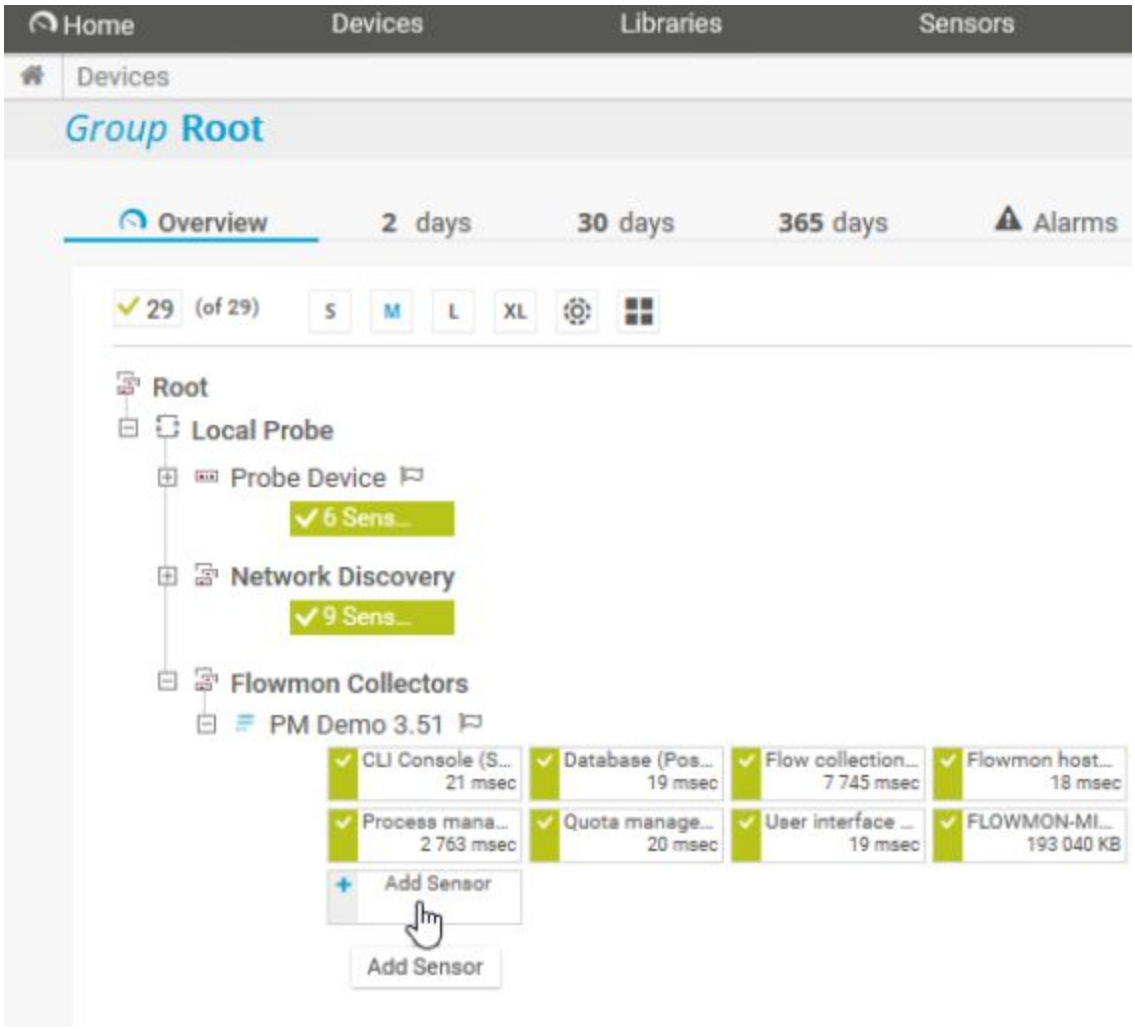
1. Go to **Flowmon ADS / Settings / Processing tab / Perspectives** and click on the **Edit** button of the perspective you want to see in PRTG. In the **Edit perspective** window, just click on the **Save** button, you don't need to edit anything if you don't want to.
2. Go to **Flowmon ADS / Logs**. A few seconds after clicking **Save** in the previous step, a log will be created. The detail of this log will contain the ID of the perspective. This ID needs to be set in the **FlowmonADS_config.py** file.



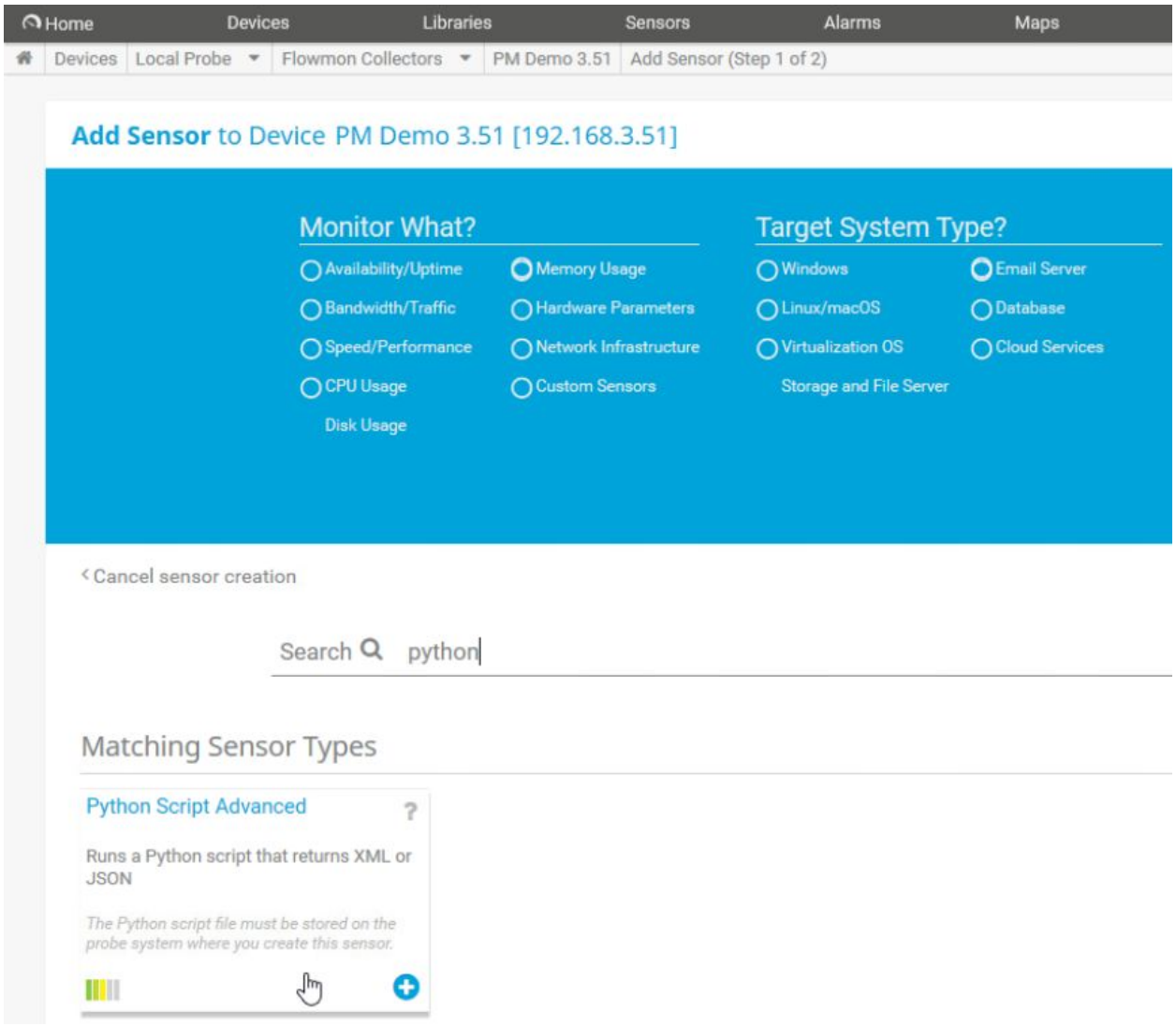


Now **copy the FlowmonADS_EventsByPriority.py** file and **the edited FlowmonADS_config.py** file to the ***C:\Program Files (x86)\PRTG Network Monitor\Custom Sensors\python*** directory.

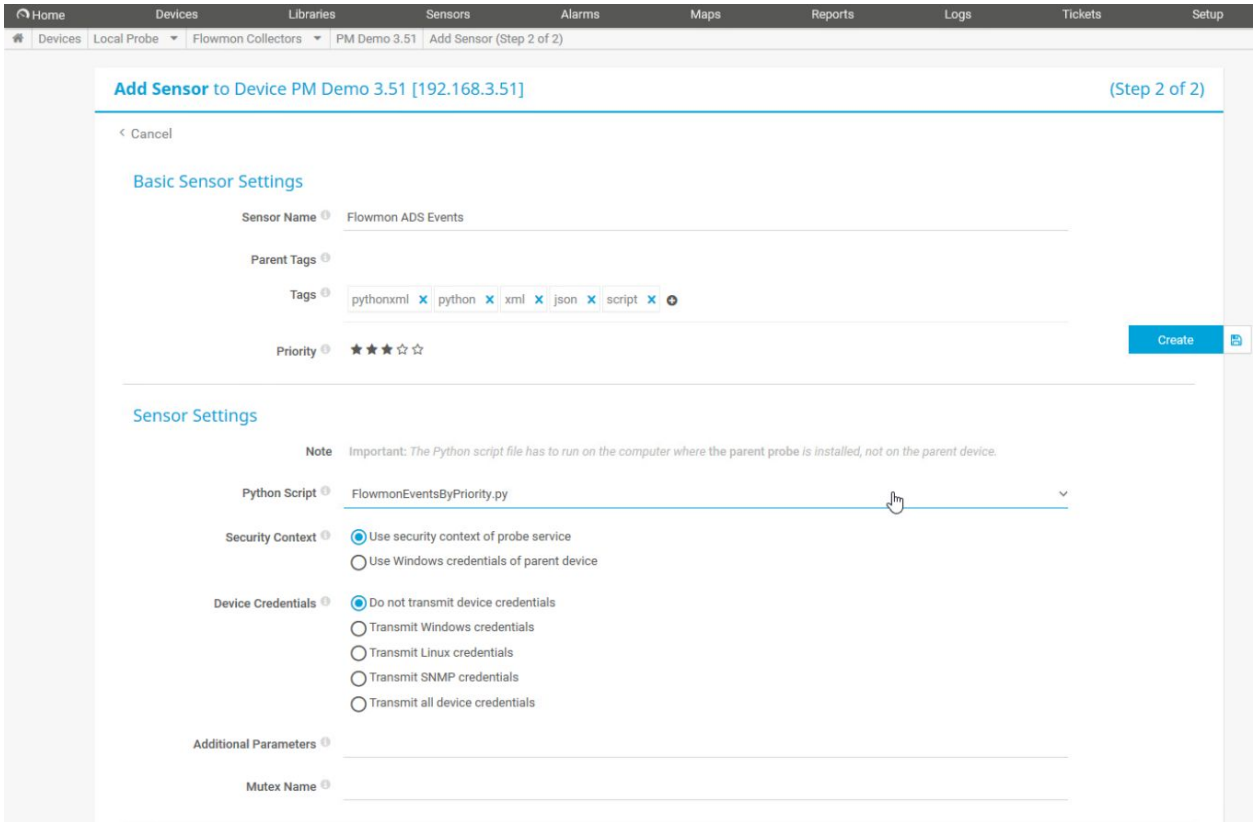
Open the PRTG GUI and click on the **Add Sensor** button below your Flowmon device.



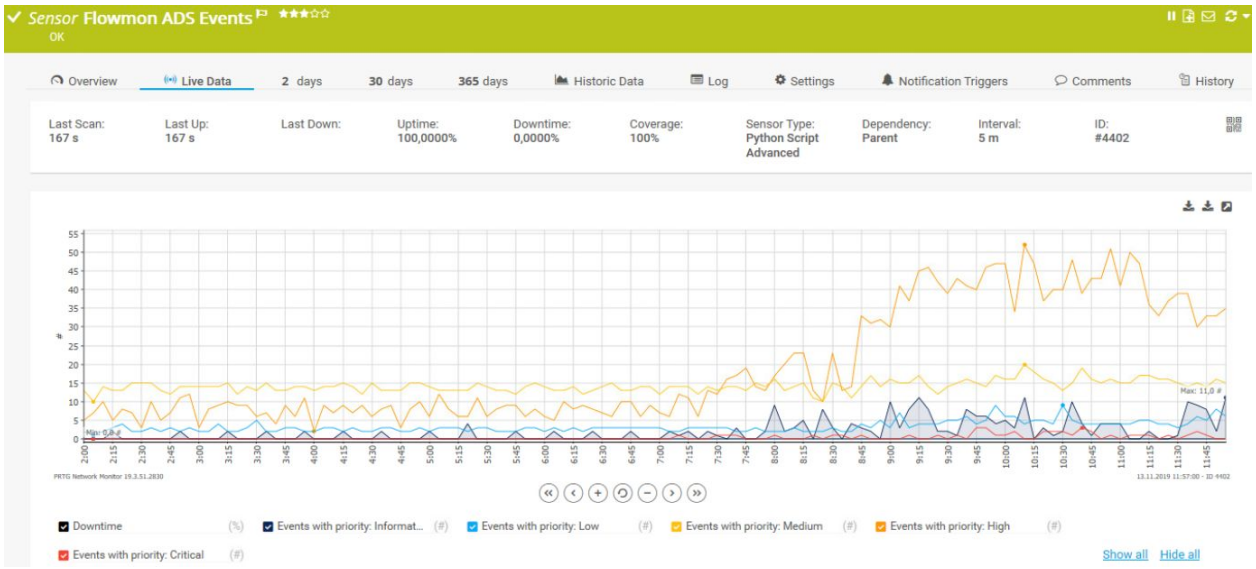
Search for the “**Python Script Advanced**” sensor and click on it:



Enter the **Sensor Name** (e.g. Flowmon ADS Events), choose the **FlowmonADS_EventsByPriority.py** as **Python Script** file and click on the **Create** button.

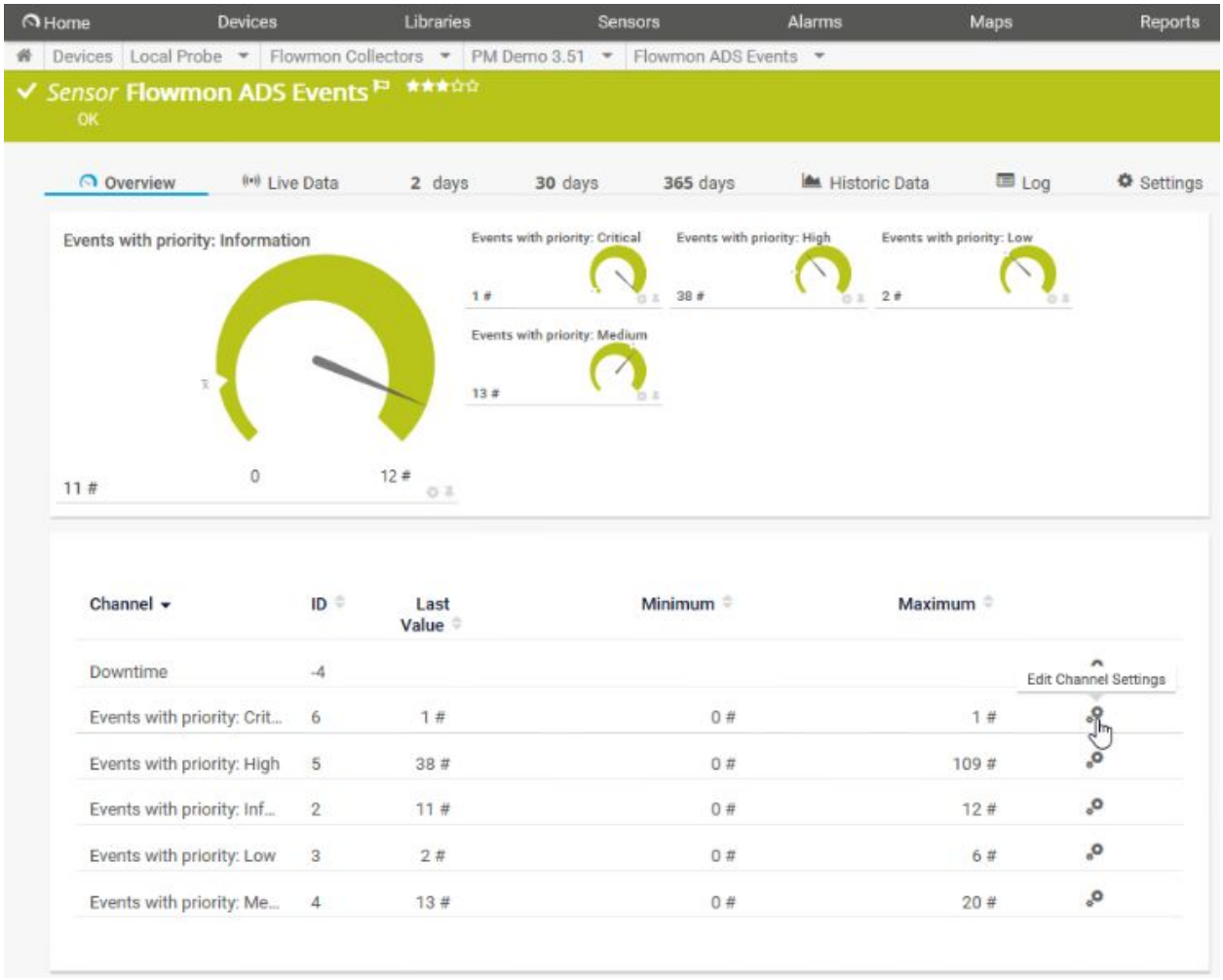


After a few minutes the sensor should be up and running. There will be 5 channels added, one to every event priority based on the chosen perspective.



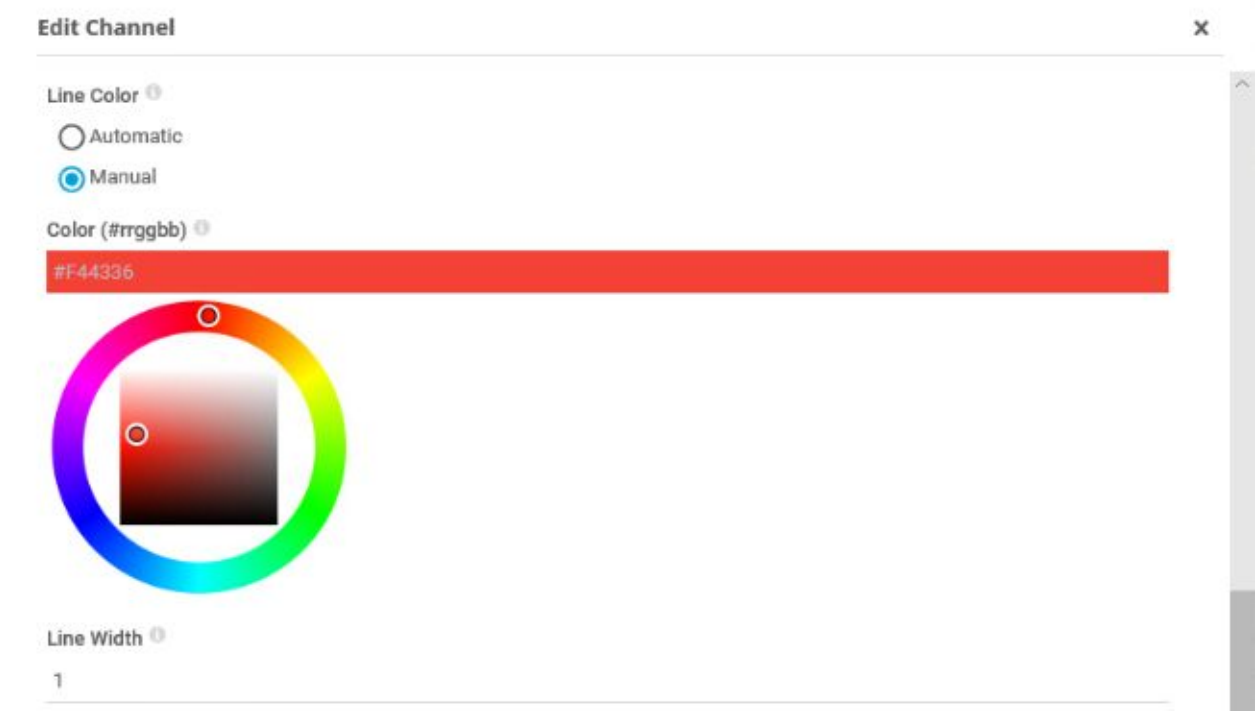
Recommended step

When the first scan is completed, 5 channels will be created. We recommend that you change the channel colors to match the colors of Flowmon ADS - click on the **Edit Channel Settings** button next to the channel:



Then change the **Line Color** to **Manual** and set the **color** as follows:

Critical: f44336
High: ff9800
Medium: ffc107
Low: 4caf50
Informational: 03a9f4
Downtime: 000000

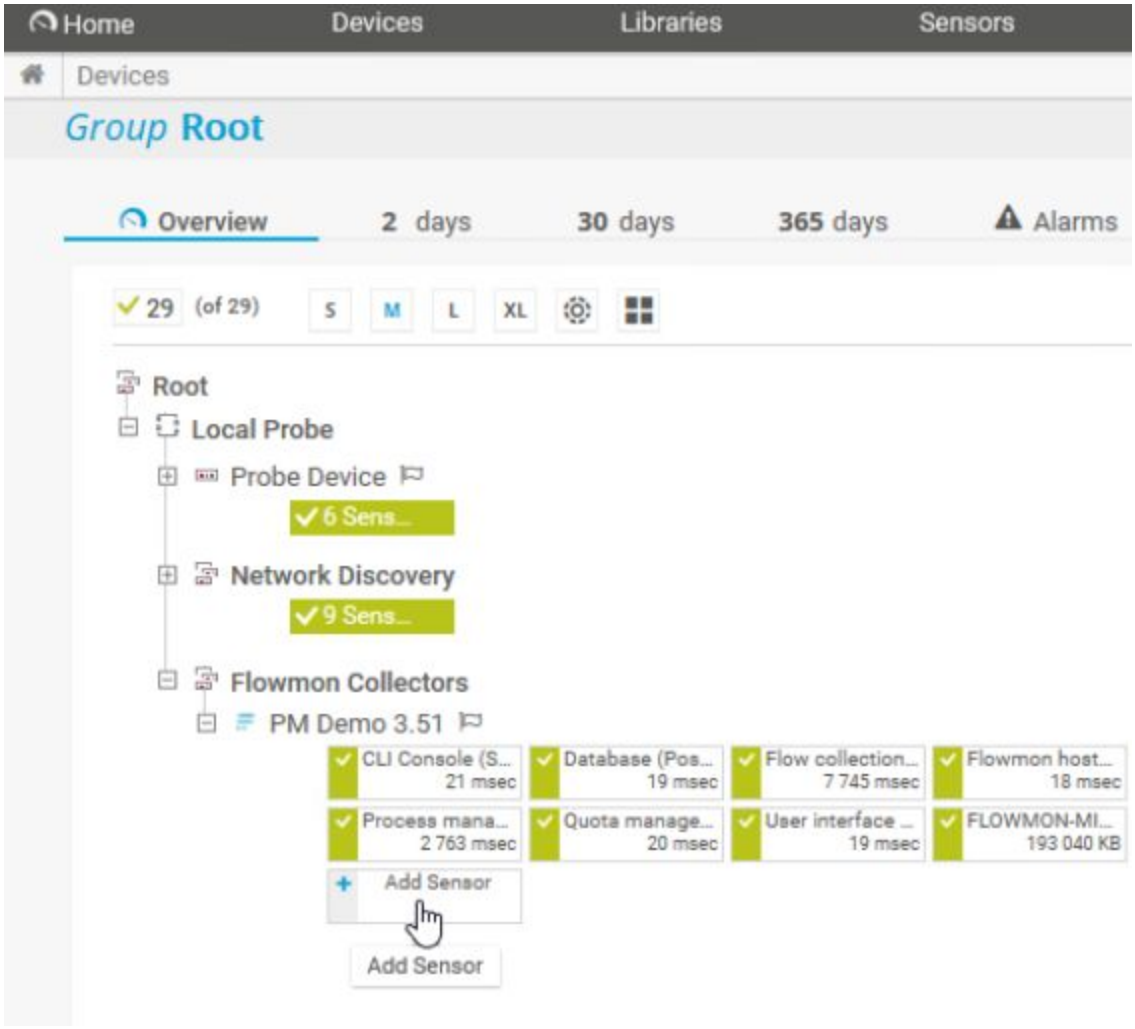


FMC Statistics in PRTG

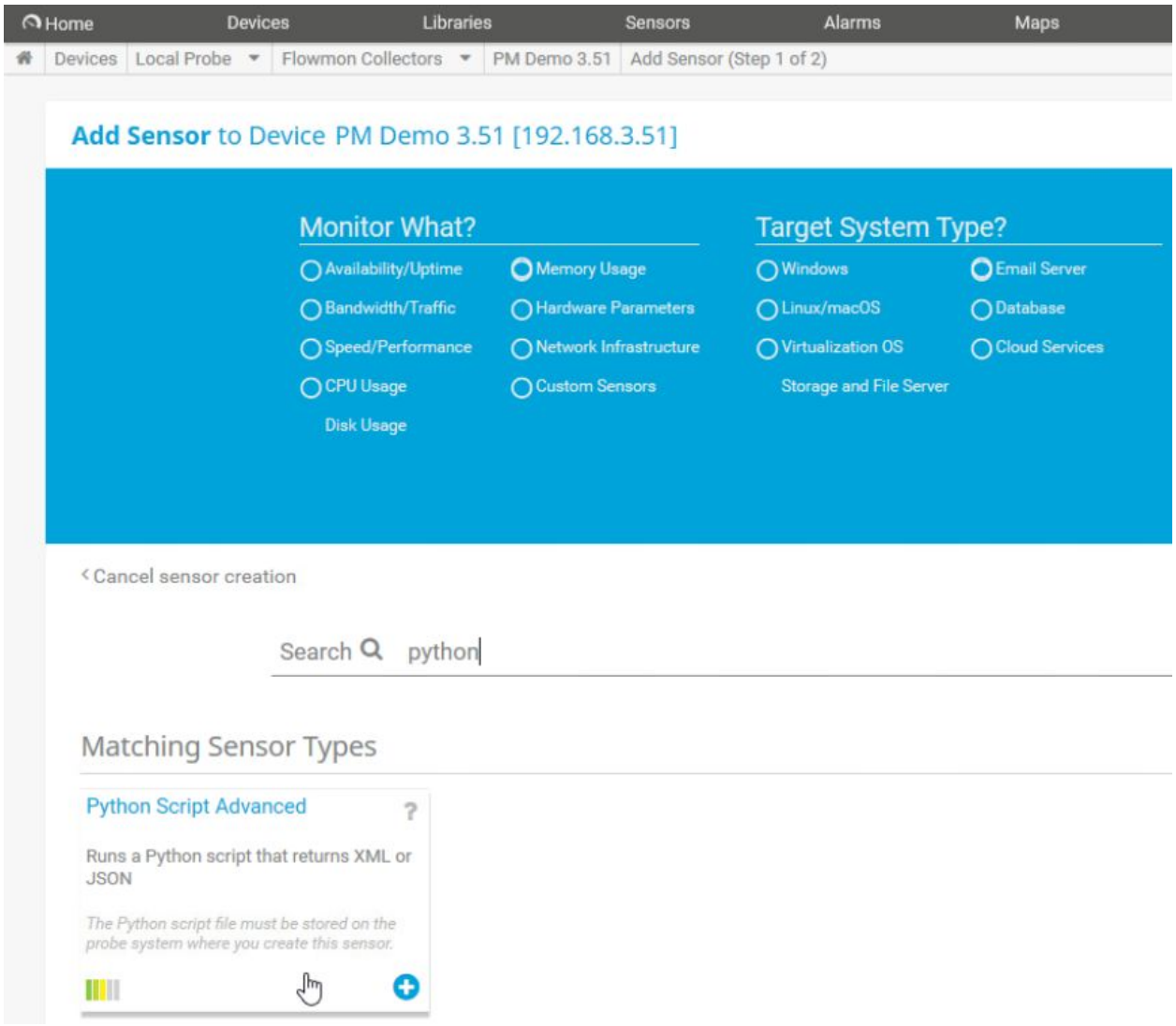
To display FMC statistics in PRTG, Flowmon provides you with a Python script that can be run in PRTG as a Python Script Advanced Sensor. Open the FMC folder in the downloaded and unzipped folder. This folder contains 3 files - *FlowmonFMC_AllSources.py, FlowmonFMC_AllSourcesNPM.py* and *FlowmonFMC_config.py*.
When you have successfully installed the requests library, open the **FlowmonFMC_config.py** file and set the attributes in it. These attributes are the **username and password for the REST API** client.

Now **copy all three files: FlowmonFMC_AllSources.py, FlowmonFMC_AllSourcesNPM.py and the edited FlowmonFMC_config.py** file to the ***C:\Program Files (x86)\PRTG Network Monitor\Custom Sensors\python*** directory.

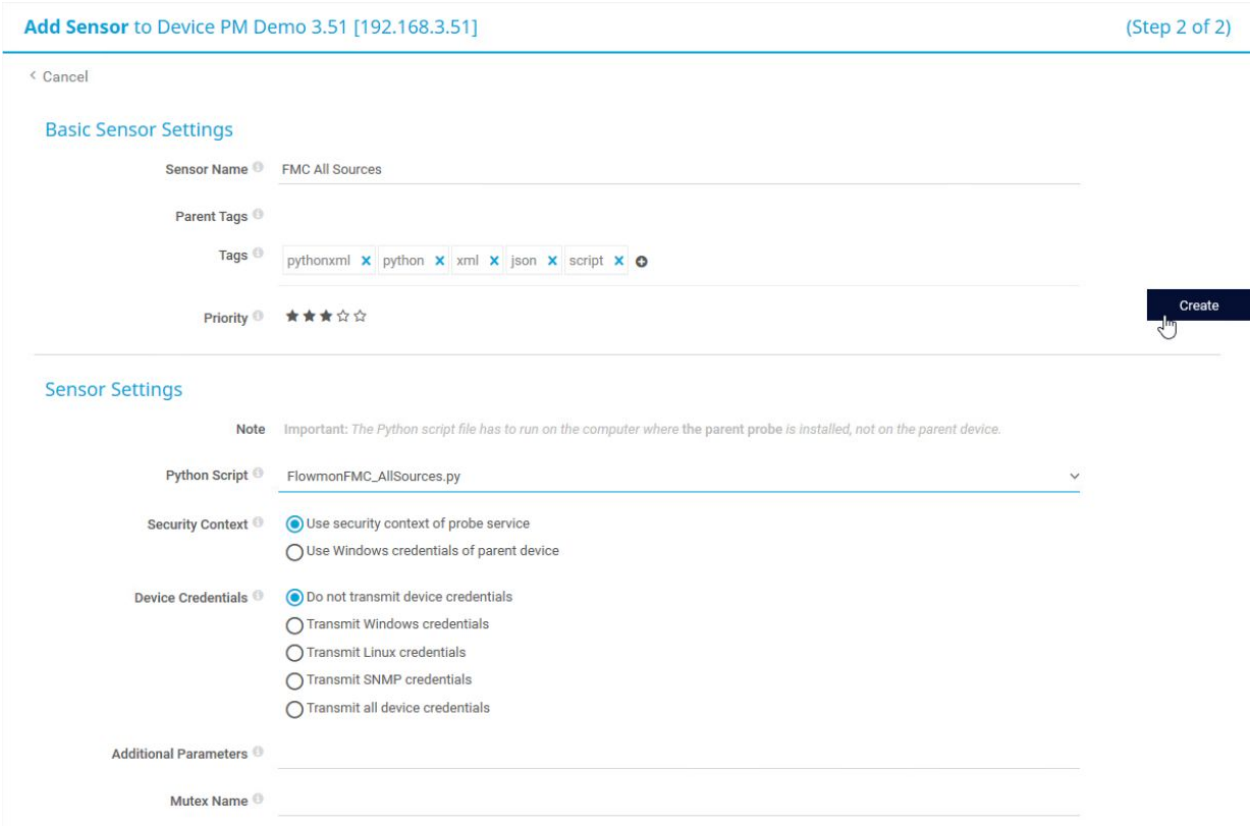
Open the PRTG GUI and click on the **Add Sensor** button below your Flowmon device.



Search for the “**Python Script Advanced**” sensor and click on it:

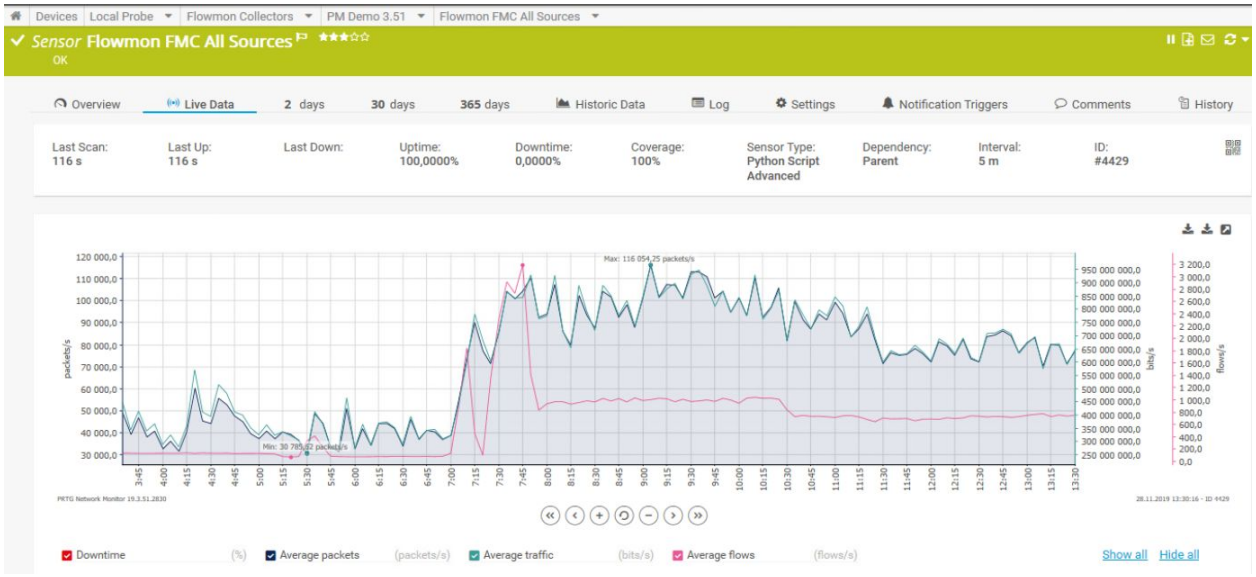


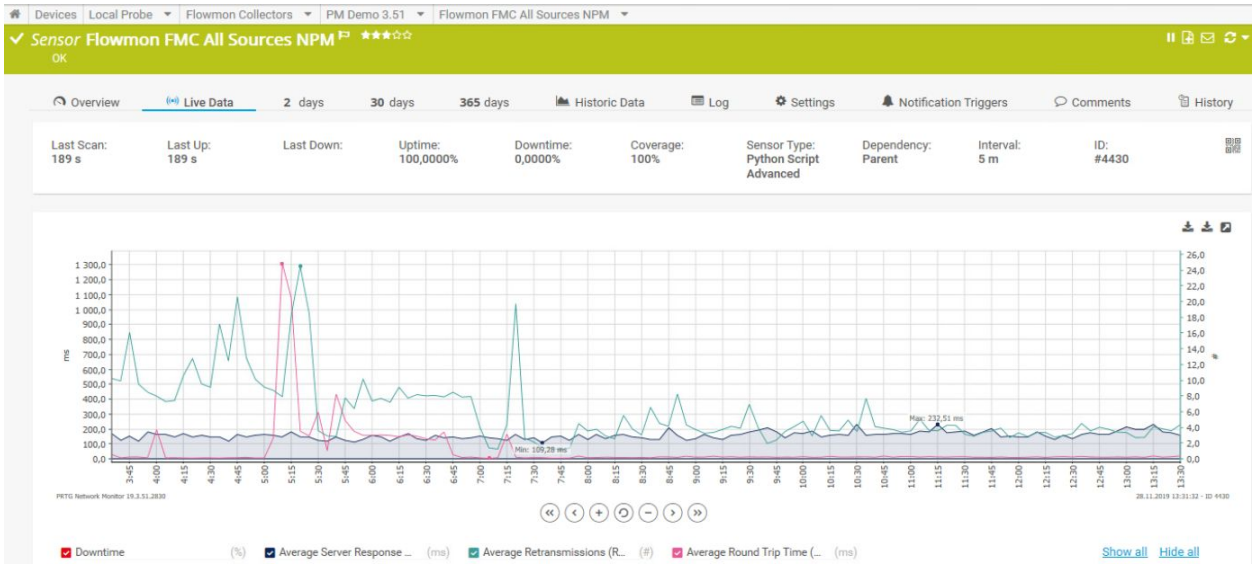
Enter the **Sensor Name** (e.g. Flowmon FMC All Sources), choose the **FlowmonFMC_AllSources.py** as **Python Script** file and click on the **Create** button.



After a few minutes the sensor should be up and running.

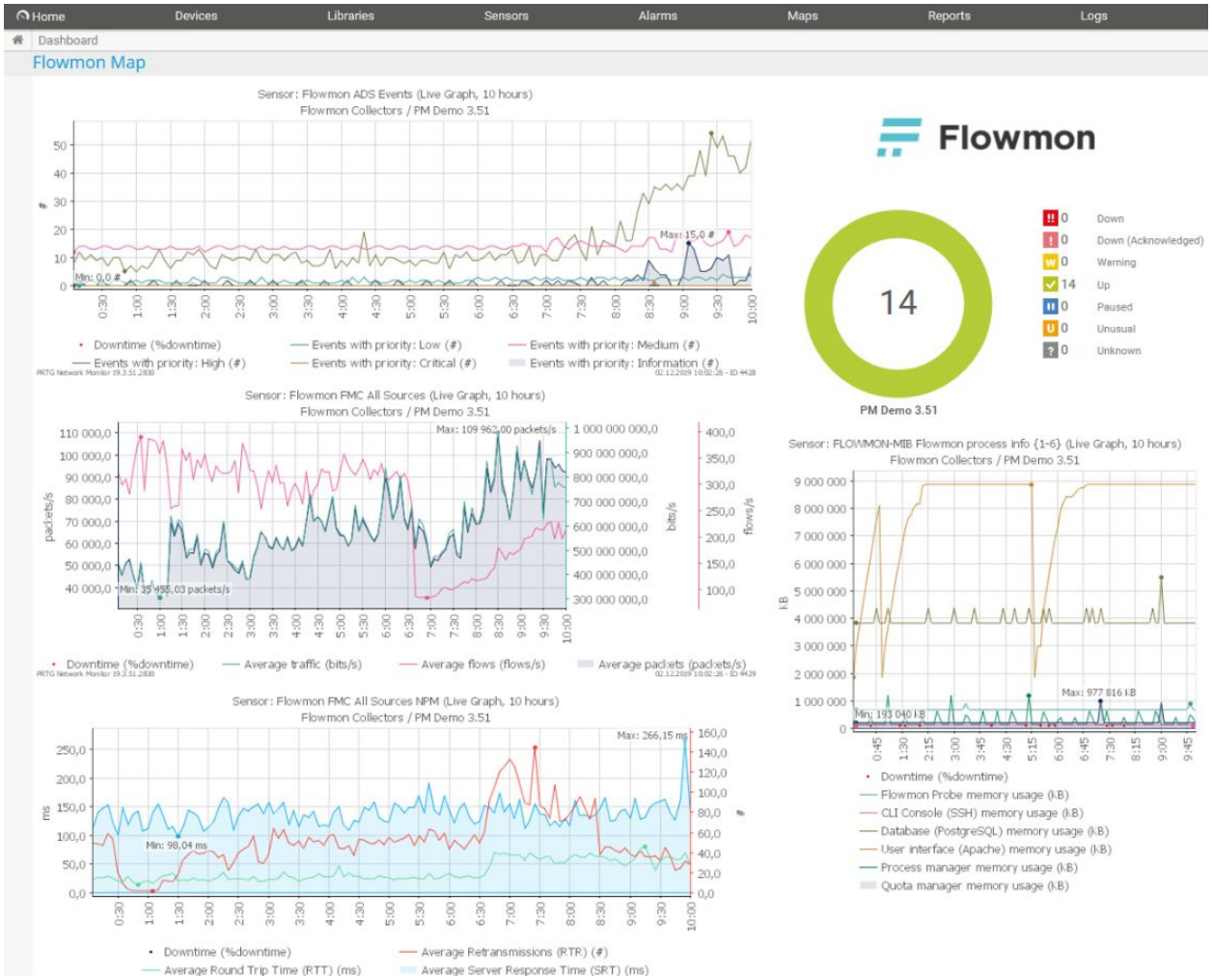
To create another sensor for NPM statistics from the FMC All Sources profile, just **repeat the steps and choose the FlowmonFMC_AllSourcesNPM.py file as a Python Script**.


Devices
Local Probe
Flowmon Collectors
PM Demo 3.51
Flowmon FMC All Sources
Sensor Flowmon FMC All Sources
OK
Overview
Live Data
2 days
30 days
365 days
Historic Data
Log
Settings
Notification Triggers
Comments
History
Last Scan: 116 s
Last Up: 116 s
Last Down:
Uptime: 100,0000%
Downtime: 0,0000%
Coverage: 100%
Sensor Type: Python Script Advanced
Dependency: Parent
Interval: 5 m
ID: #4429
packets/s
bits/s
flows/s
Downtime (%)
Average packets (packets/s)
Average traffic (bits/s)
Average flows (flows/s)
Show all
Hide all


Devices
Local Probe
Flowmon Collectors
PM Demo 3.51
Flowmon FMC All Sources NPM
Sensor Flowmon FMC All Sources NPM
OK
Overview
Live Data
2 days
30 days
365 days
Historic Data
Log
Settings
Notification Triggers
Comments
History
Last Scan: 189 s
Last Up: 189 s
Last Down:
Uptime: 100,0000%
Downtime: 0,0000%
Coverage: 100%
Sensor Type: Python Script Advanced
Dependency: Parent
Interval: 5 m
ID: #4430
ms
Downtime (%)
Average Server Response ... (ms)
Average Retransmissions (R... (#)
Average Round Trip Time (... (ms)
Show all
Hide all

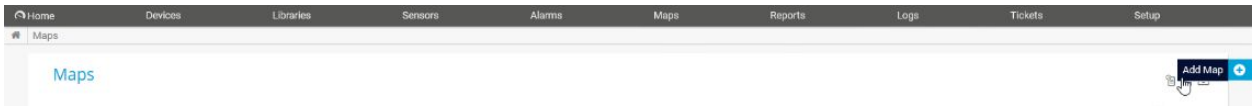
Adding Widgets to the PRTG Dashboard

To see all the important information about your monitored Flowmon appliance in one place, create a PRTG Map with graphs and other information from the sensors of the monitored appliance.

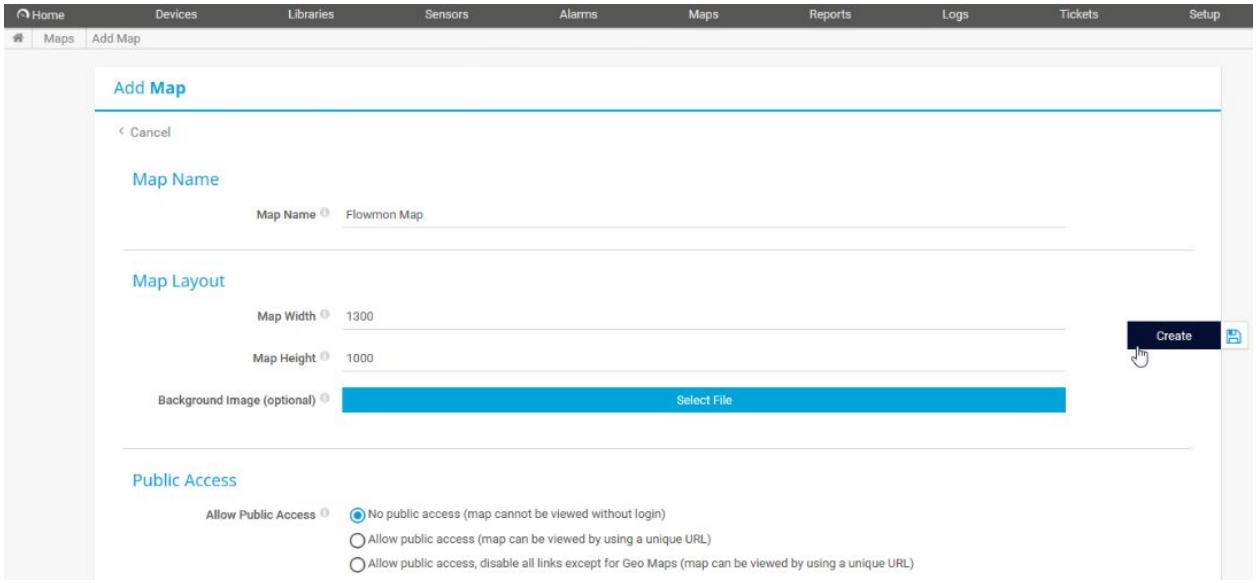


Locate the **Flowmon_logo_big.png** file in the unzipped Flowmon_PRTG_Package folder and **copy** it to the ***C:\Program Files (x86)\PRTG Network Monitor\webroot\mapicons\iconset7*** directory.

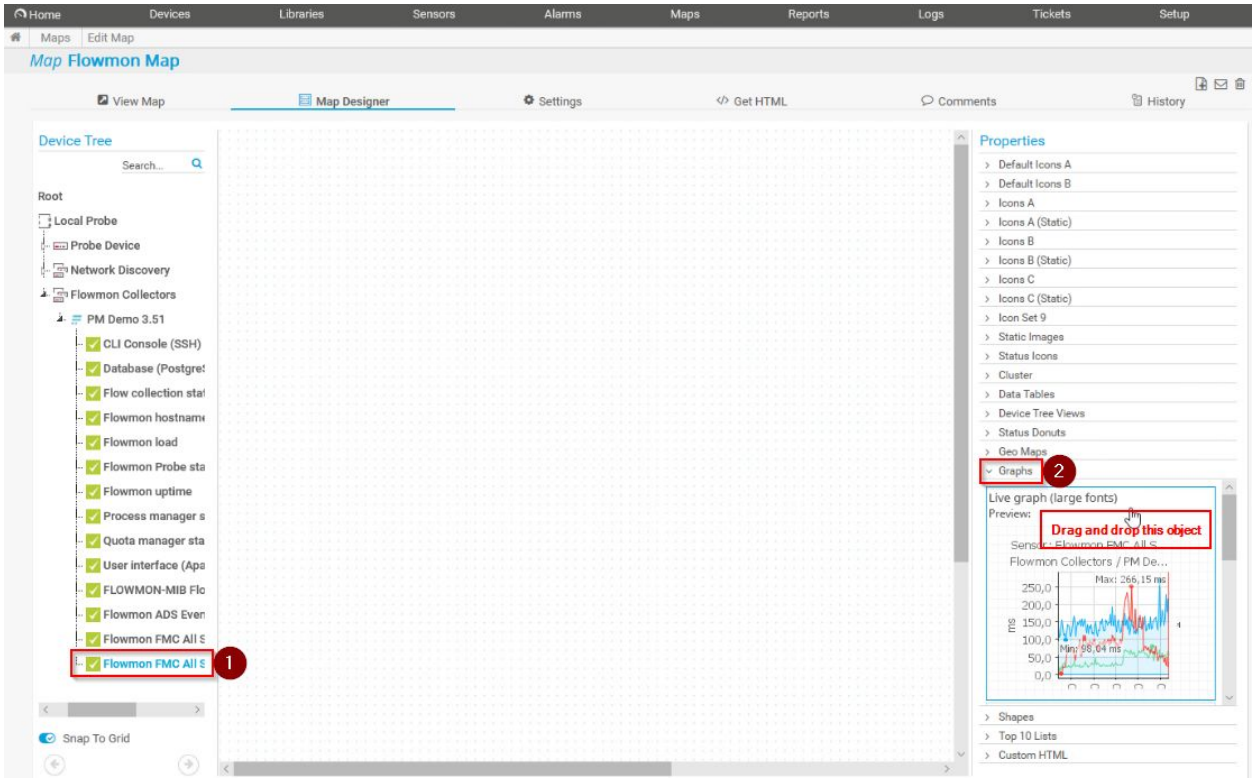
To create a new Map, click on the **Maps** button in the upper menu and then click on the **Add Map** button on the right side of the screen.



Now enter the **Map Name** (e.g. Flowmon Map) and the **Map Width** and **Height** (e.g. 1300x1000) and click on the **Create** button.

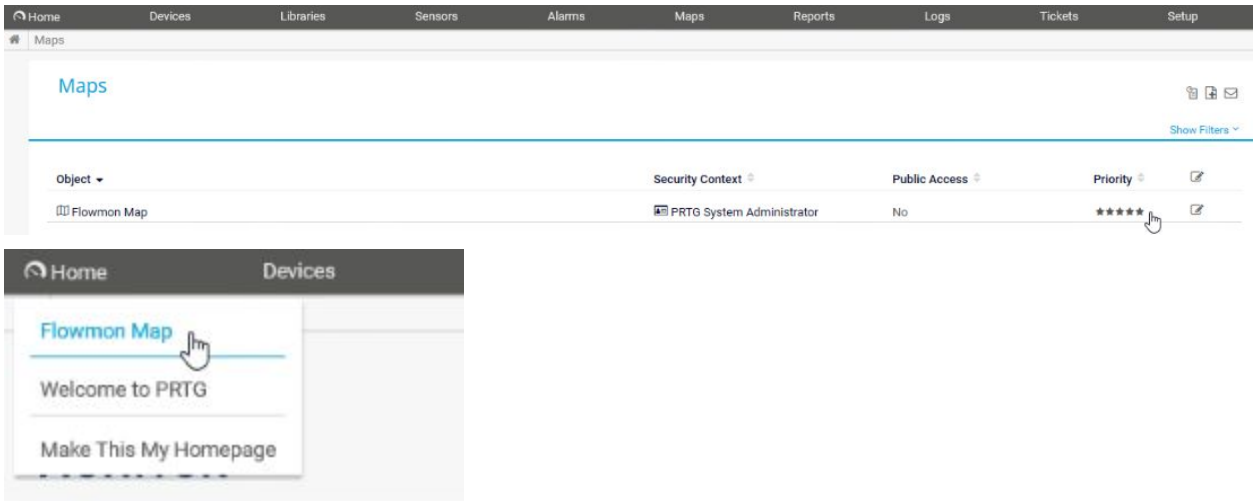


After clicking on the **Create** button, Map Designer will open. There you can add widgets that will be displayed on the map. To add widgets of your Flowmon device, go to your Flowmon device in the **device tree** on the left side of the screen and click on the sensor from which you want to display information on the dashboard. To see the live graph of the chosen sensor, drag and drop a *Live graph* object in the *Graphs* group from the items list to the right of the main window of the Map Designer. To see the sensor states, choose the device in the device tree on the left and then drag and drop *All sensor states with name (dark text)* from the *Status Donuts* group in the right menu.



To add the Flowmon logo to the dashboard, drag and drop the logo from *Icon Set 9* in the items list to the right of the main window of the Map Designer.

To add the Flowmon Map to the home menu for quick access, **change the priority of the Flowmon Map to 5 stars**.



For a detailed description on how to work with PRTG Maps, see the manual here.