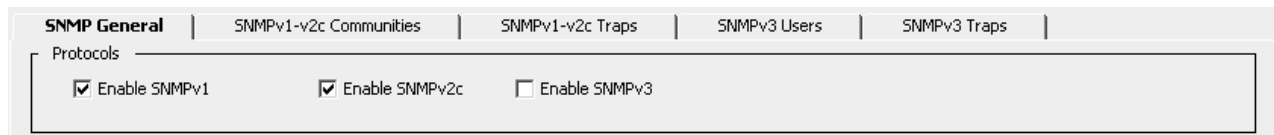




This document describes the necessary steps to have NetVoyant polling a BlueCoat ProxySG, collecting data and provide reporting. The Goal is to get Memory Utilization into NetQoS NetVoyant. I did use SGOS 5.5.3.1, NetQoS NetVoyant 7.1.21 & NetQoS Performance Center 6.1.158

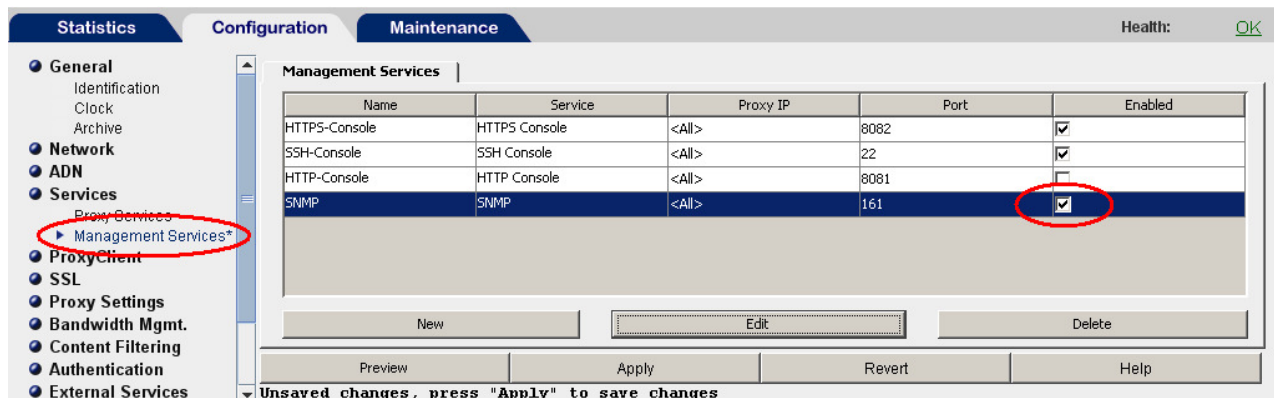
Configure BlueCoat Proxy to enable SNMP Access

Under MAINTENANCE -> SNMP you can enable different or all Versions and redefine Communities.

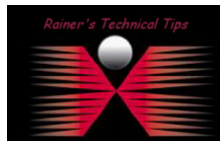
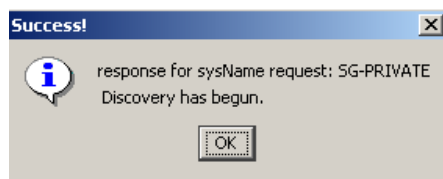


There is one disabled SNMP listener defined by default on the BlueCoat ProxySG, which you can delete or enable, as needed. You can even secure, what IP Addresses are allowed to contact the device

You can also add additional SNMP services and listeners. Although you can configure traps and informs to go out if all the SNMP listeners are deleted or disabled, configuring SNMP listeners sets up the UDP ports the ProxySG uses to listen for SNMP commands. The service ports set up for *listening* to SNMP requests are independent of the trap or inform addresses and ports specified for *sending* traps.



You need to enable SNMP under SERVICES -> MANGEMENT SERVICES. After enabling SNMP, NetVoyant is able to contact this BlueCoat Proxy via SNMP



DISCLAIMER

This Technical Tip or TechNote is provided as information only. I cannot make any guarantee, either explicit or implied, as to its accuracy to specific system installations / configurations. Readers should consult each Vendor for further information or support.




Although I believe the information provided in this document to be accurate at the time of writing, I reserve the right to modify, update, retract or otherwise change the information contained within for any reason and without notice. This technote has been created after studying the material and / or practical evaluation by myself. All liability for use of the information presented here remains with the user.

For NetVoyant to poll and transform data from a MIB that is currently not configured, three main steps must be performed:











- The MIB must be compiled - this gives NetVoyant the definition of the MIB, where to find particular pieces of data, what data-type the data uses, and so on.
- At least on Dataset must be created - the Datasets actually tell NetVoyant what to poll, how to mathematically or logically transform the data, and also contains other configuration information about the polling of the MIB
- At least one View must be created - The Views are the graphs and tables that display the data in the web GUI. Without the Views, NetVoyant will collect the data but have no way of displaying it.

Compiling the MIB

I have downloaded the complete set of MIBs for the current version; I'm running on my private ProxySG. Private MIBs can usually be obtained from the manufacturer, in this case directly from BlueCoat.

Efficiency	Device
Identification Appliance Name: ProxySG-210 IP Address: 192.168.10.151 Serial Number: 0408063275 Software Version: SG 5.5.3.1 Release ID: 46382	Statistics CPU Utilization: 2%  Memory Utilization: 41%  Concurrent Users: 3  ADN: Disabled ProxyClient: Client Manager Disabled

I do have a couple of private MIBs and I need to figure out what MIB to be used and where dependencies are related

Name	Type	Size
 BLUECOAT-MIB	Text Document	3 KB
 BLUECOAT-SG-ATTACK-MIB	Text Document	5 KB
 BLUECOAT-SG-DISK-MIB	Text Document	7 KB
 BLUECOAT-SG-HEALTHCHECK-MIB	Text Document	3 KB
 BLUECOAT-SG-HEALTHMONITOR-MIB	Text Document	3 KB
 BLUECOAT-SG-POLICY-MIB	Text Document	3 KB
 BLUECOAT-SG-PROXY-MIB	Text Document	25 KB
 BLUECOAT-SG-SENSOR-MIB	Text Document	10 KB
 BLUECOAT-SG-USAGE-MIB	Text Document	6 KB
 BLUECOAT-SG-WCCP-MIB	Text Document	6 KB

In order to know if the MIB contains the objects desired, it must be inspected. The BLUECOAT-SG-PROXY-MIB has the object needed for the CPU utilization.

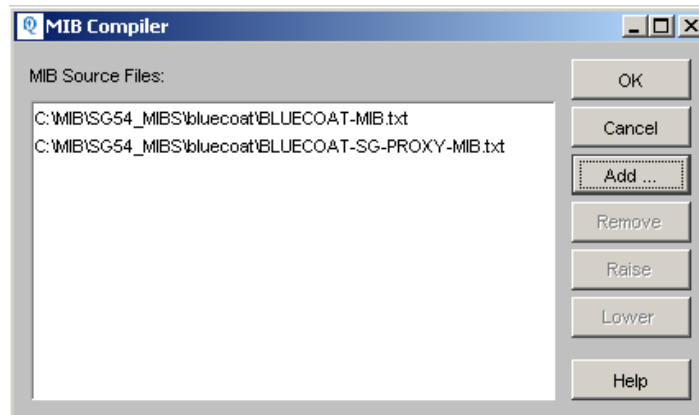
```
sgProxyCpuBusyPerCent OBJECT-TYPE
    SYNTAX          Gauge32
    UNITS           "Percentage"
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION     "The busy CPU time as a percentage, averaged over
                    one minute."
    ::= { sgProxyCpu 7 }
```

Also, not to forget the check IMPORTS as well, to satisfy dependencies.

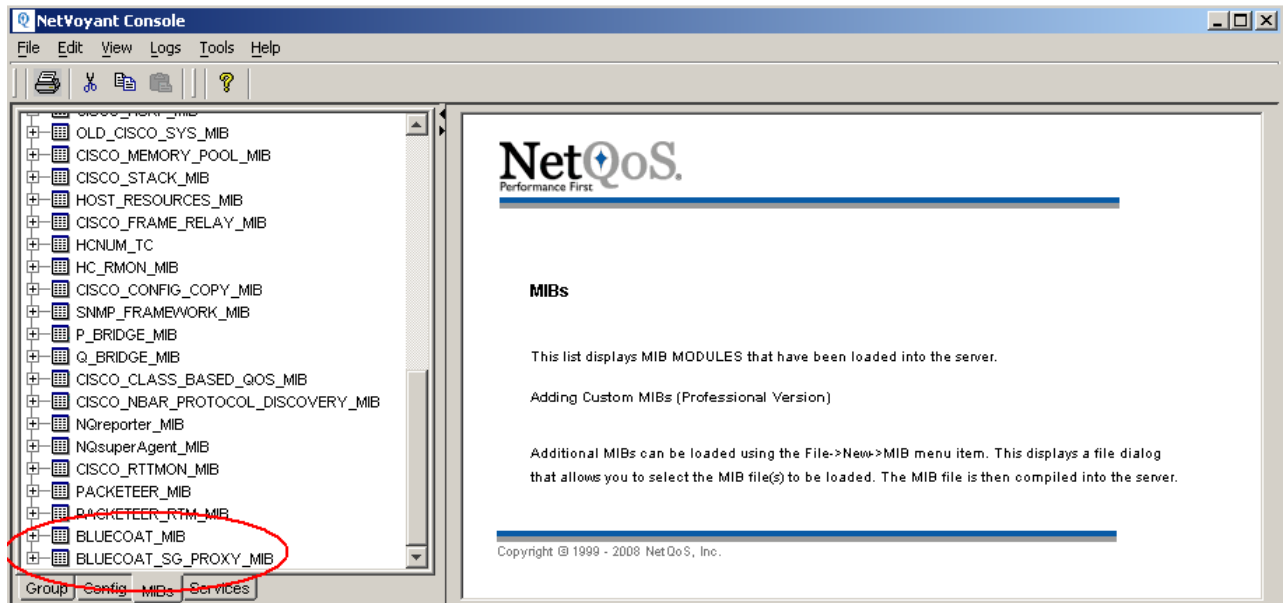
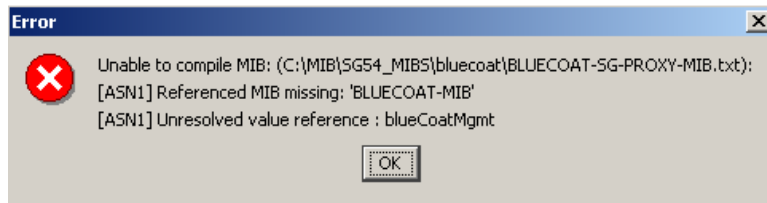
```
BLUECOAT-SG-PROXY-MIB DEFINITIONS ::= BEGIN

IMPORTS
    MODULE-IDENTITY, OBJECT-TYPE, Counter64, Gauge32
        FROM SNMPv2-SMI
    DisplayString
        FROM SNMPv2-TC
    blueCoatMgmt
        FROM BLUECOAT-MIB;
```

From the IMPORTS, I see that BLUECOAT-MIB needs to be compiled as well. Compile the MIB by clicking FILE -> NEW -> MIB in the NetVoyant console. Add the MIB and any dependencies. SNMPv2-SMI and SNMPv3-TC is already loaded (to be verified at the MIB view). Only BLUECOAT-MIB as a dependency will need to be added.

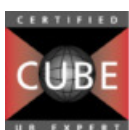
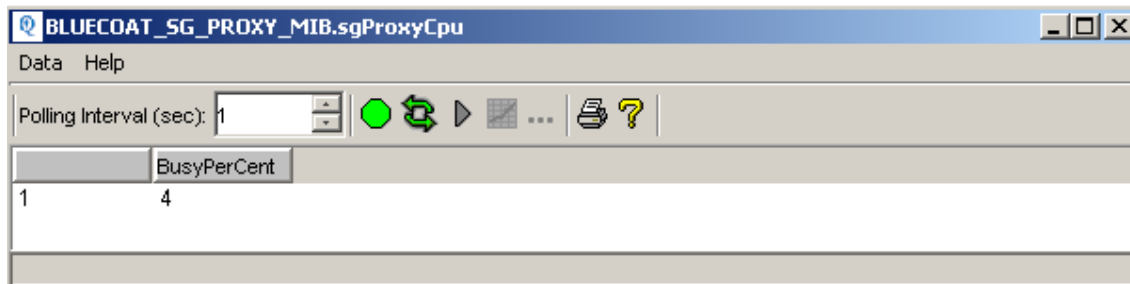


Next, click on OK and have the compiler doing it's job. You should see the new MIBs added at the end of the tree. If you get this error, than you added MIBs in the wrong order. First always add the dependencies!



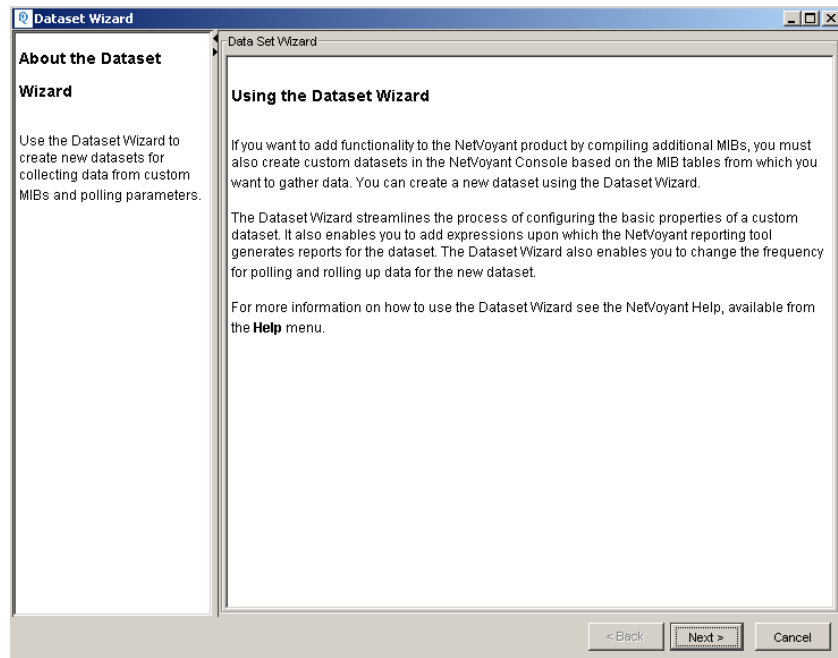
When done, you could do a RAW Poll using the integrated MIB Browser. The return is 4 % - Remember the Object-Type?

```
sgProxyCpuBusyPerCent OBJECT-TYPE
    SYNTAX          Gauge32
    UNITS           "Percentage"
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION     "The busy CPU time as a percentage, averaged over
                    one minute."
    ::= { sgProxyCpu 7 }
```

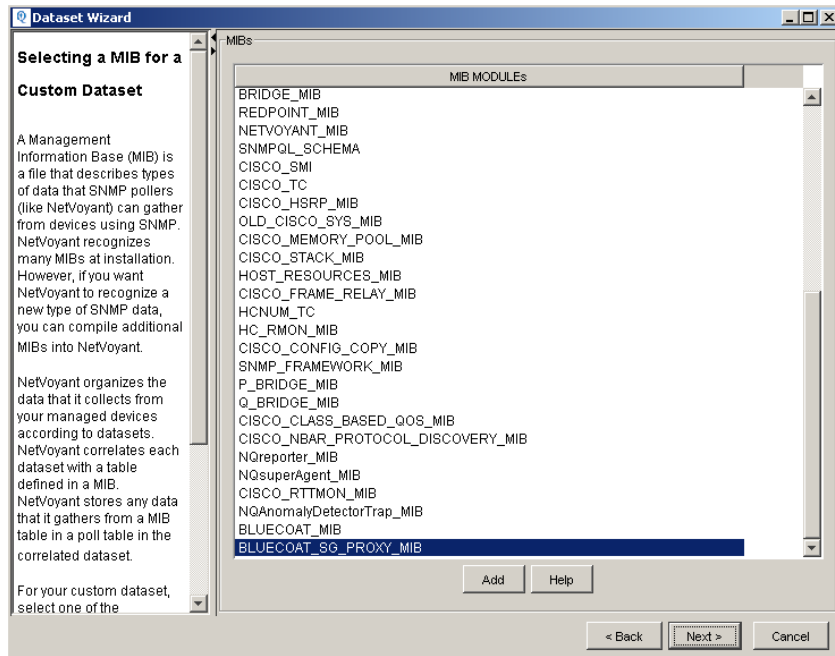


Creating a Dataset

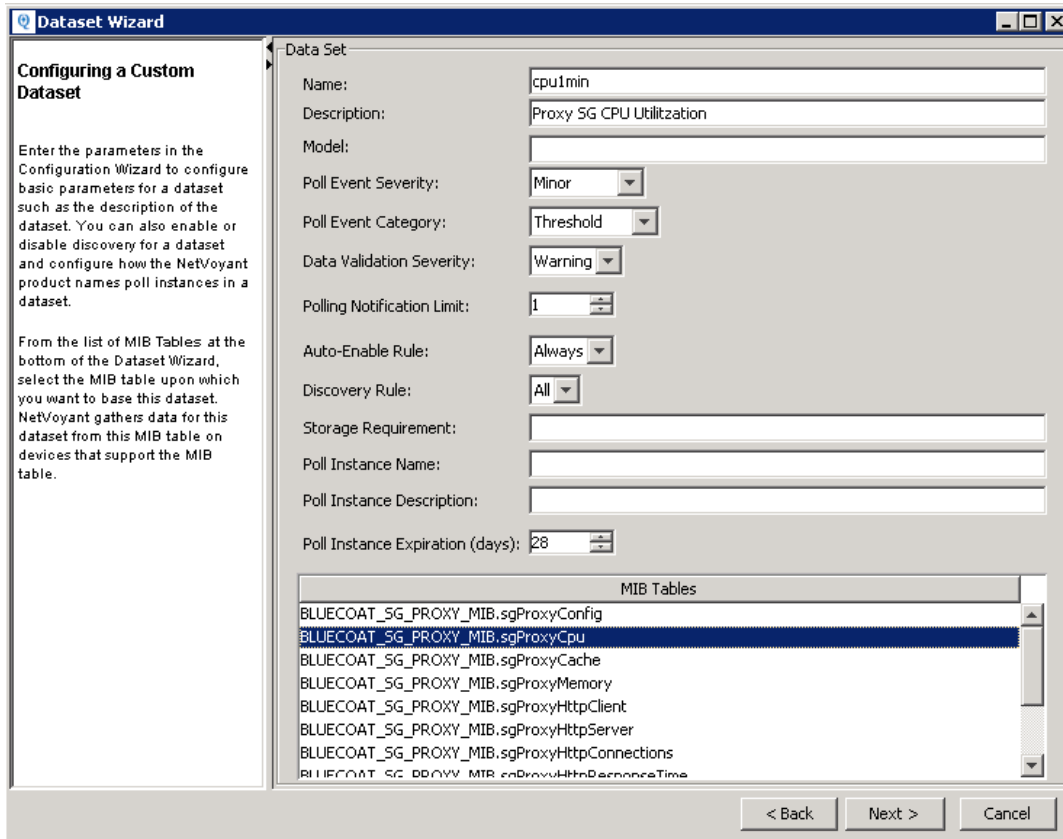
To create a Dataset, NetVoyant has a Wizard to help you. Click on **FILE -> NEW -> DATASET** and the Wizard starts.



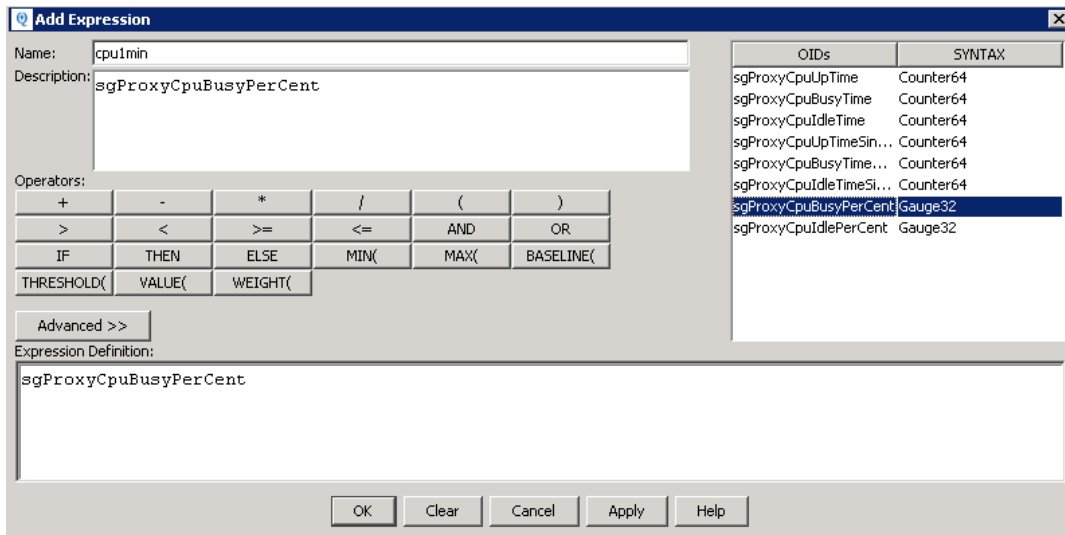
Choose the desired MIB Table. This will be needed to create the dataset. In this case, I have used BLUECOAT_SG_PROXY_MIB



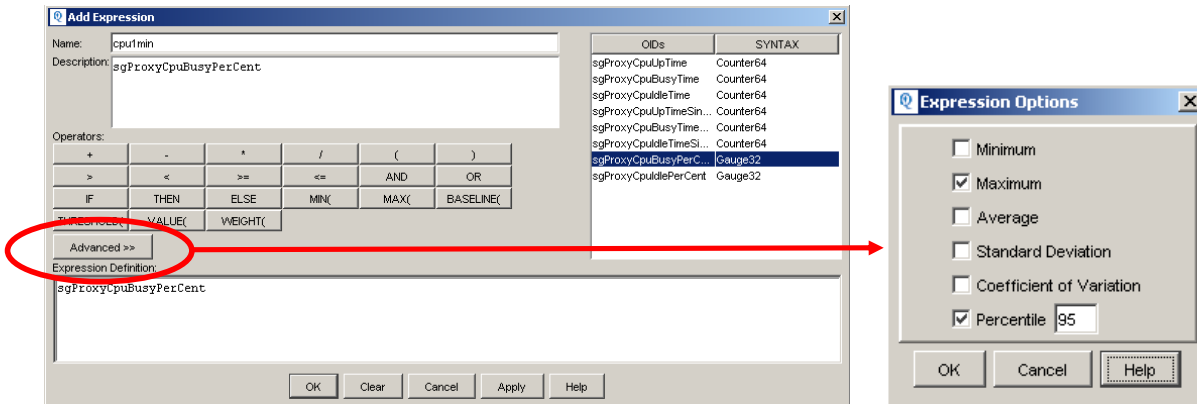
Click on Next and fill in some information.



Click on **NEXT** and then on **ADD** Highlight the OID (sgProxyCpuBusyPerCent) and double click



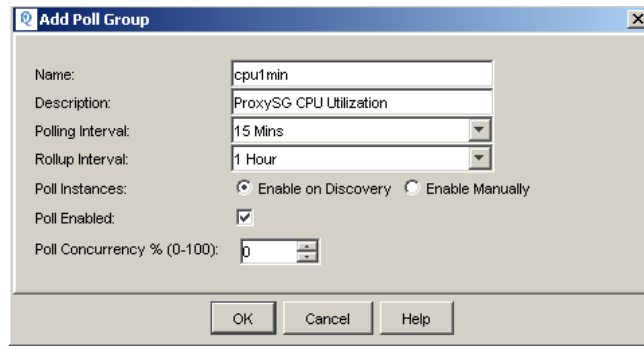
Click on the **Advanced** button



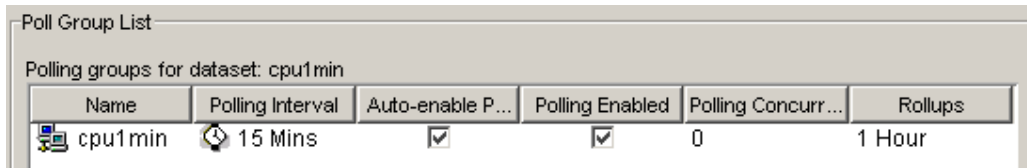
This will finish the Expression to the dataset.

Expressions for Dataset: cpu1min	
Name	Expression
cpu1min	sgProxyCpuBusyPerCent

Next, we need to define the frequency for that polling. Click on **Next** and **Add**



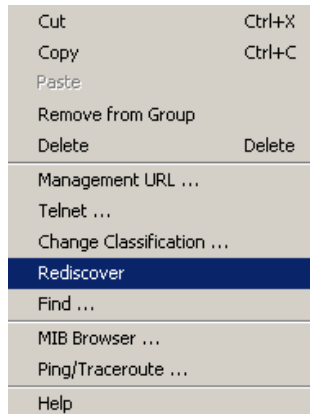
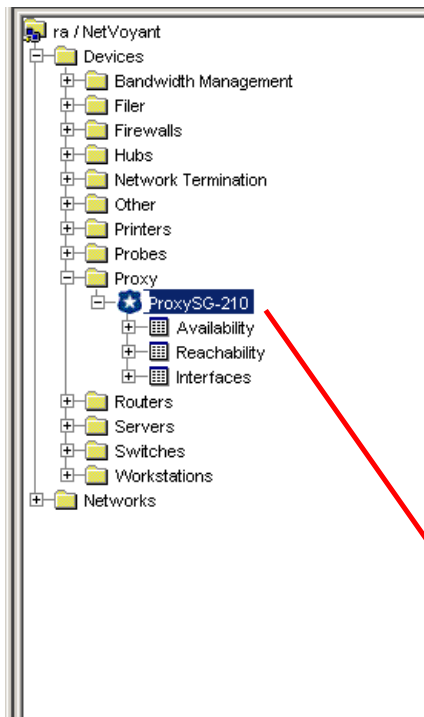
You can accept the default values or change on your specific requirements.



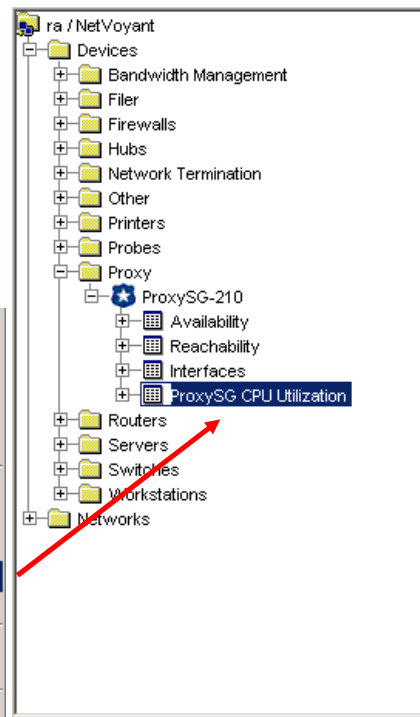
That's it for the dataset creation. You will be asked at the end, if you want to enable polling for this dataset. Click on **YES**

Now you will want to test discovery and support of your new dataset. To do this, you will need to go back to the Group tab, select a target device, right click on the device and select Rediscover.

Before new dataset

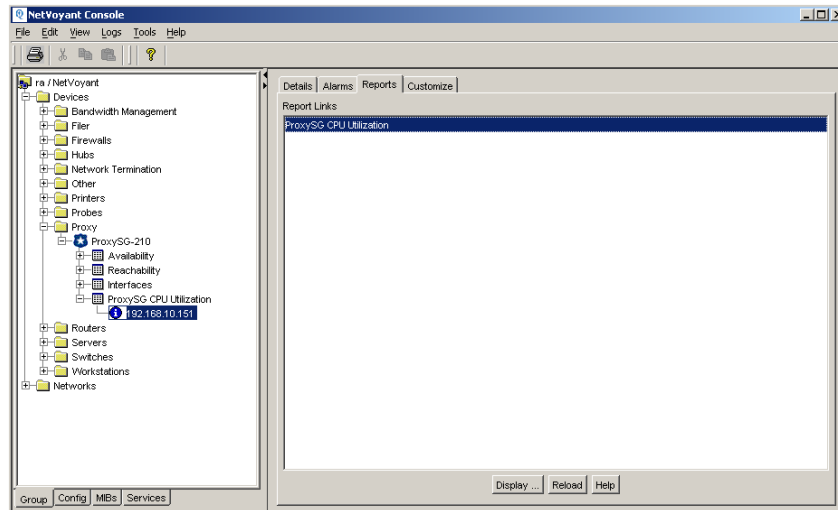


After new dataset

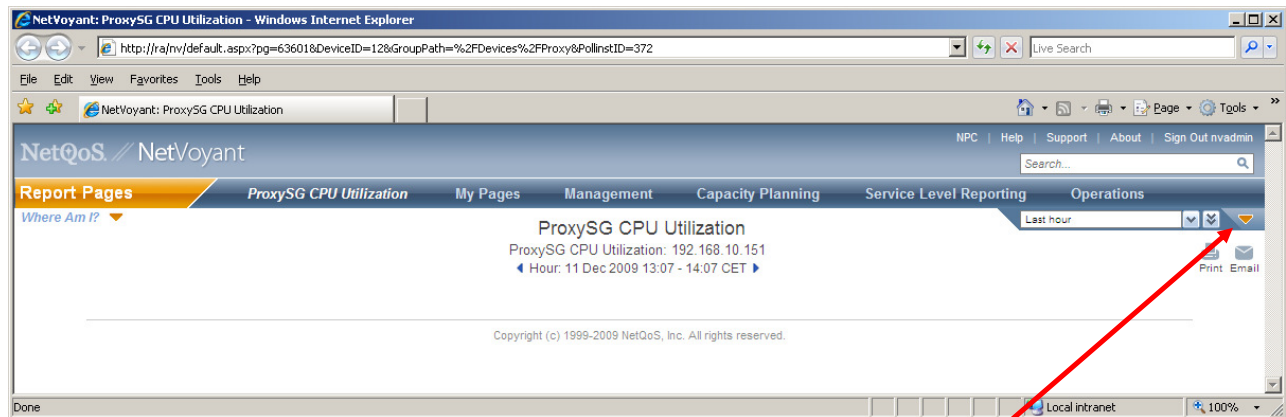


Creating a View

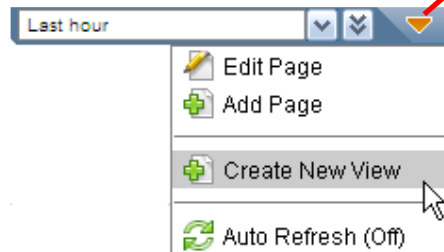
NetVoyant's Custom View Editor allows you to create new views and to edit existing views. While most NetVoyant views are editable with the Custom View Editor, there are some, such as the gauge style views, that are not editable. Under the Reports tab, double click on the default report context displayed



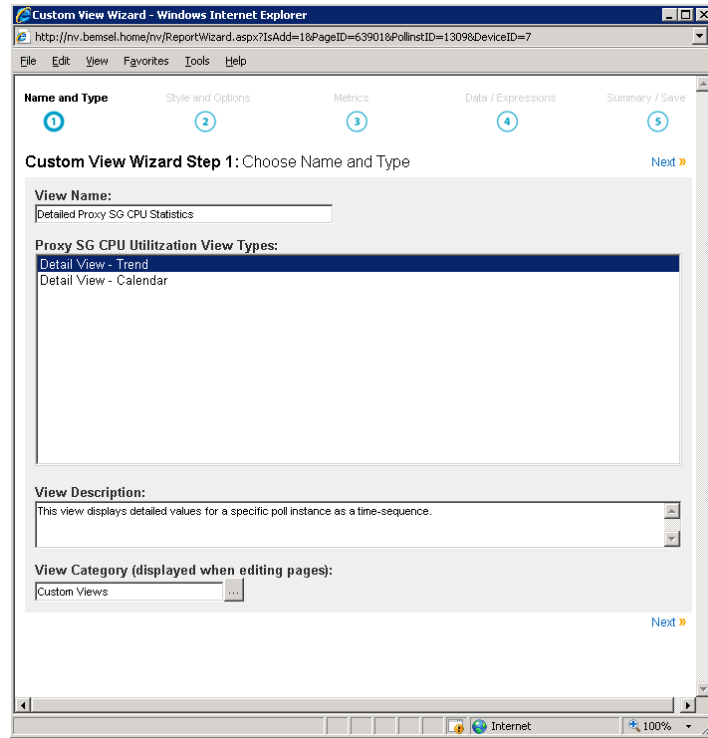
This will open the new Report Template of ProxySG CPU Utilization.



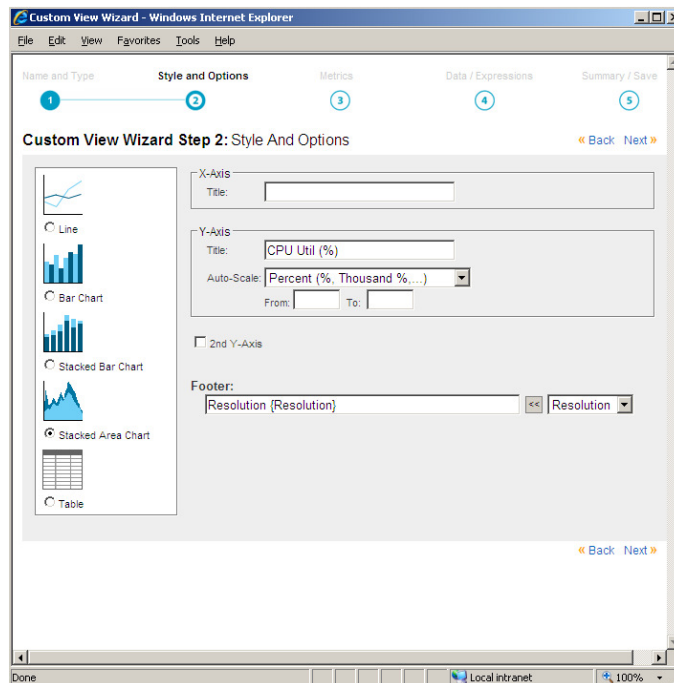
If you click on the orange arrow on the right corner, you will get the option to create a new view



This will start the Custom View Wizard

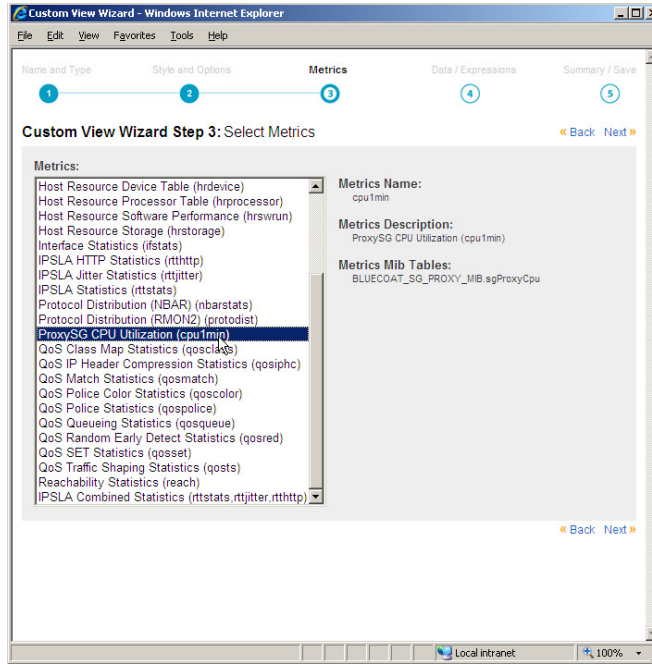


Type a *View Name*, choose a *View Type*, choose a *Category* or leave default and click on **Next**
At Step 2, you define the *Style* and the *Options*



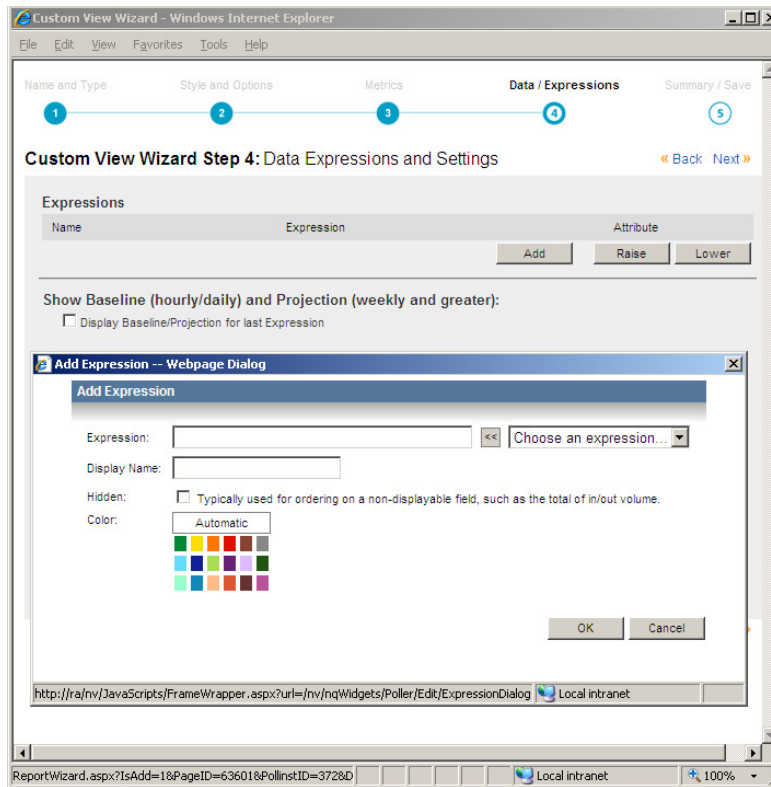
You could add a title for the X-Axis and Y-Axis. I only added *CPU Util (%)* for the Y-Axis and Percent for the Auto-Scale. I also added a Footer called *"Resolution:"* and chosen Resolution from the Pull-Down Menu

Click on **Next** and select the previously created dataset ProxySG CPU Utilization (cpu1min)

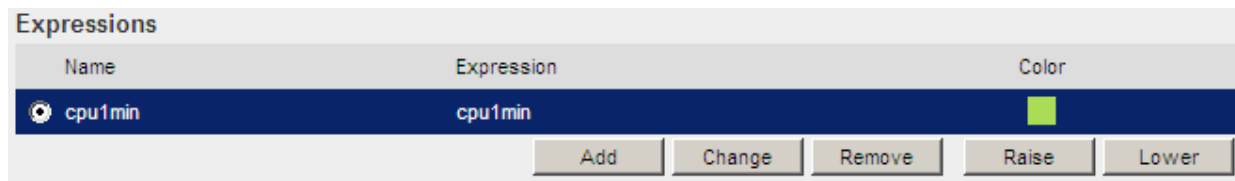


Click on **Next**

In Step 4, Data Expressions and Settings are required. Click on Add

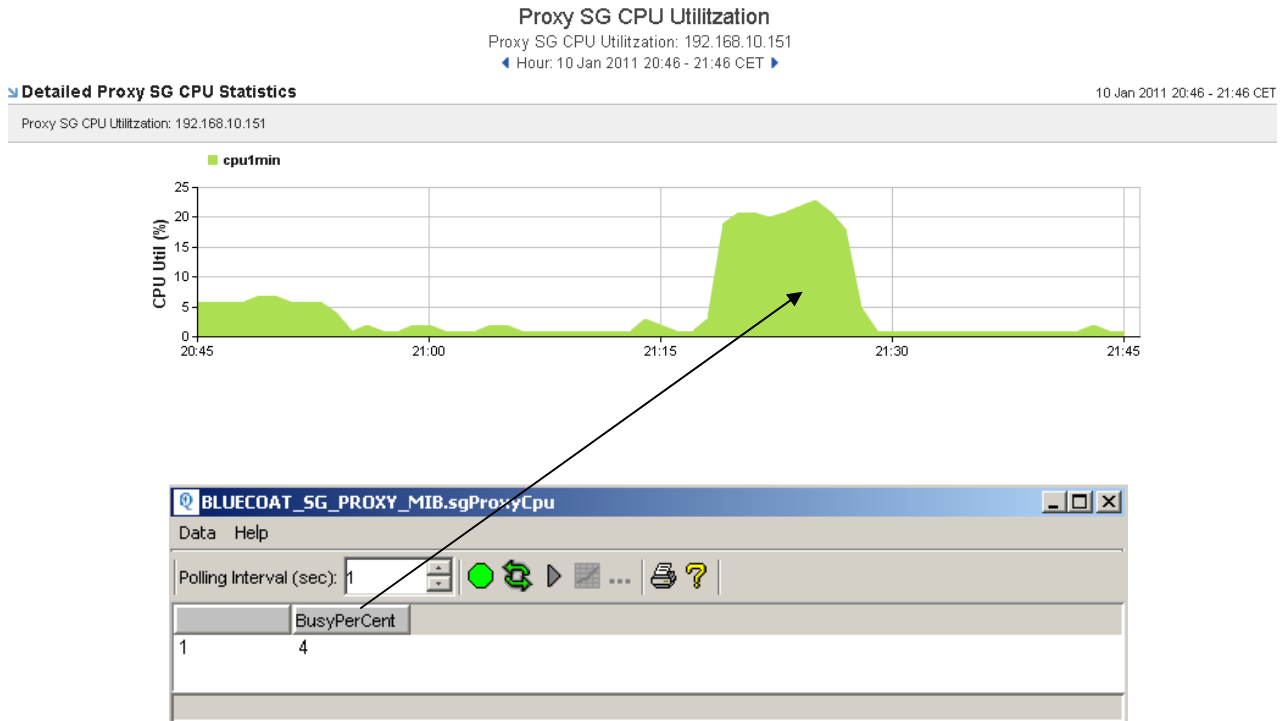


cpu1min should be the choice in this example. You leave the display name or change it with a different name



Finally you the option to review. Click on **Save** and you are done

Final View



If you want to get the view into NetQoS Performance Center, please request NPC Integration Setup Files from CA Support.