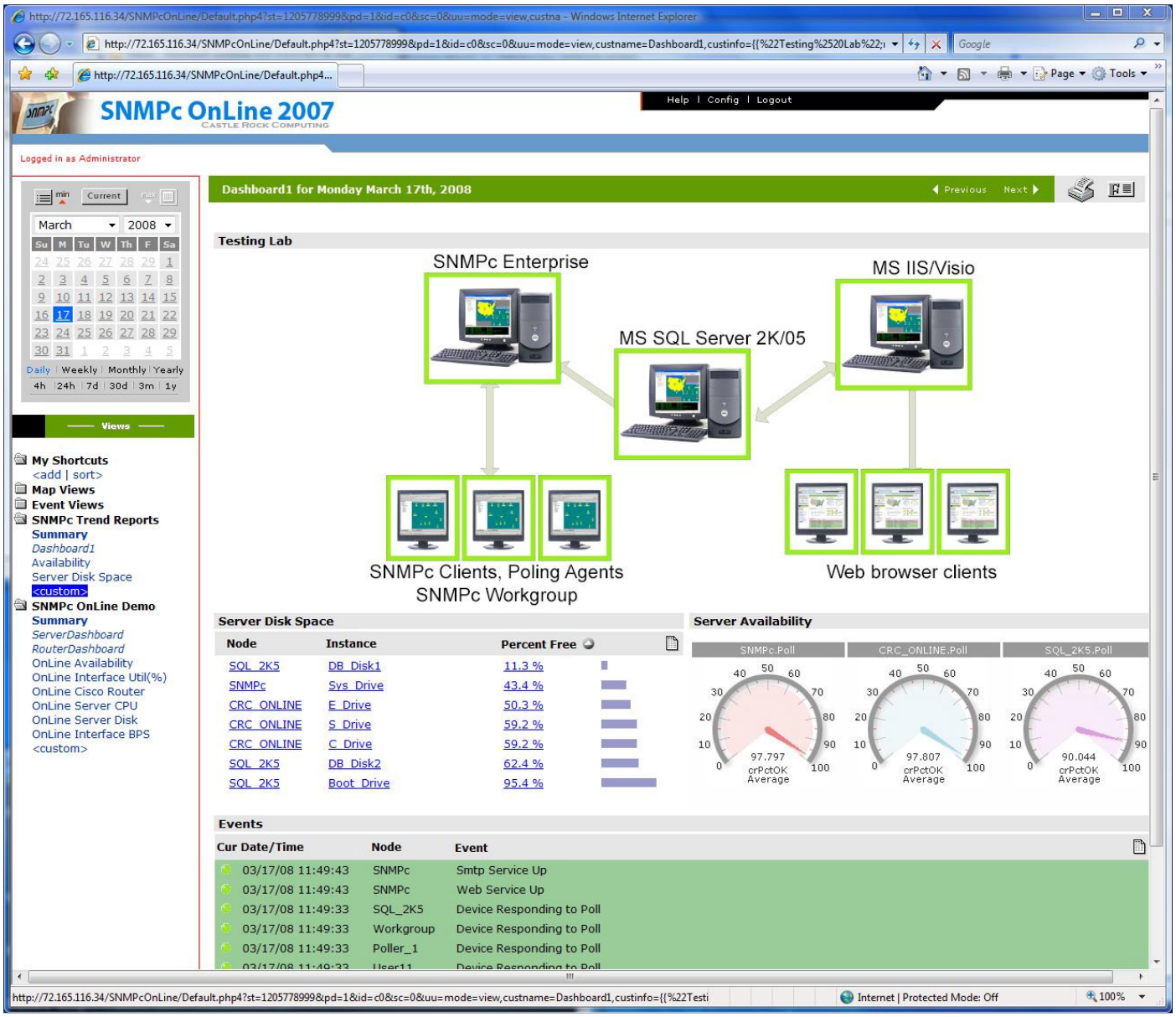
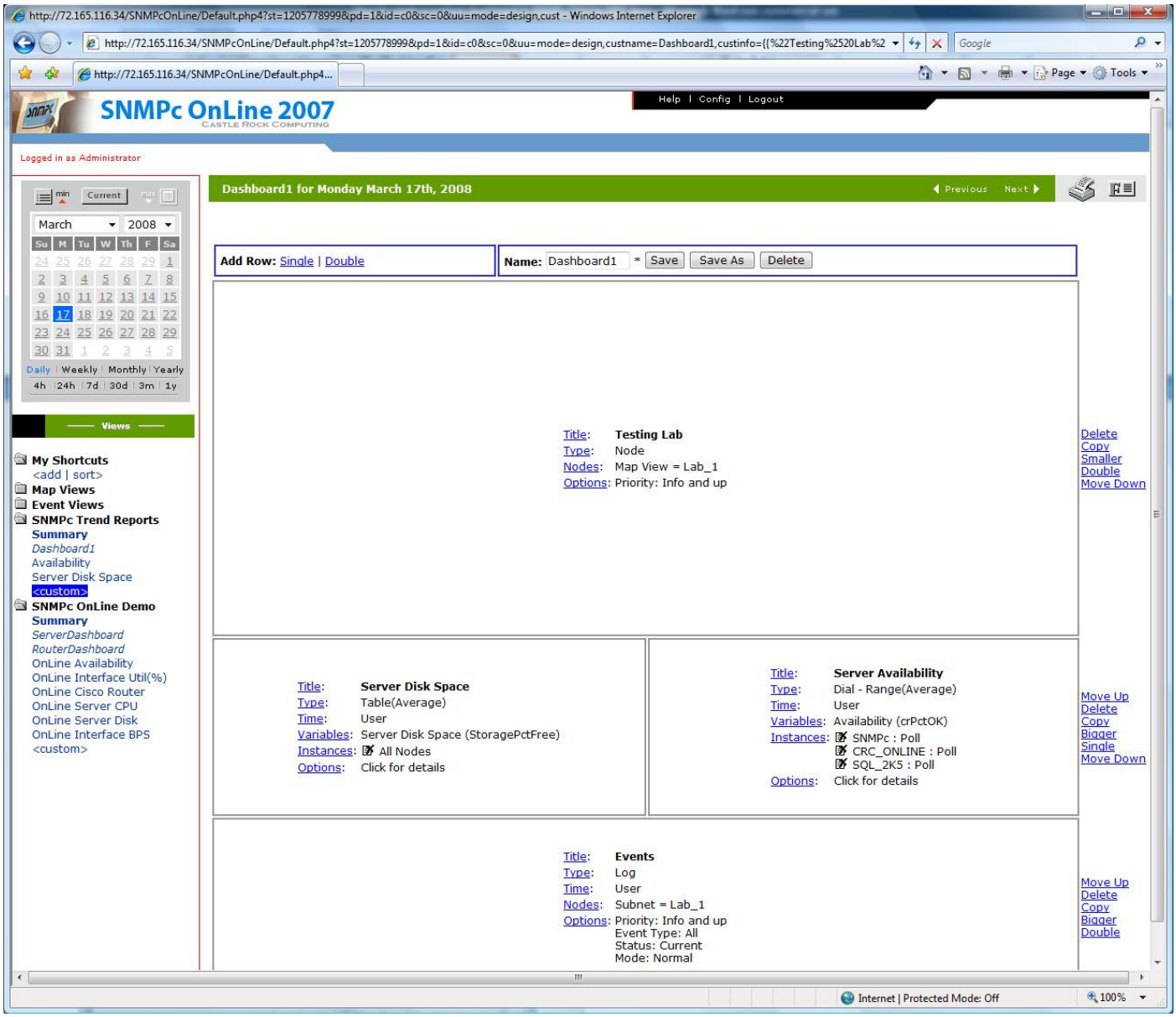
How to create custom dashboards in SNMPc OnLine 2007

The dashboard feature in SNMPc OnLine allows you to create a custom screen comprised of individual maps, event views and trend reports (widgets). This feature allows you to design screen views that feature just the information that you need.

An example dashboard and the configuration behind it are displayed below.





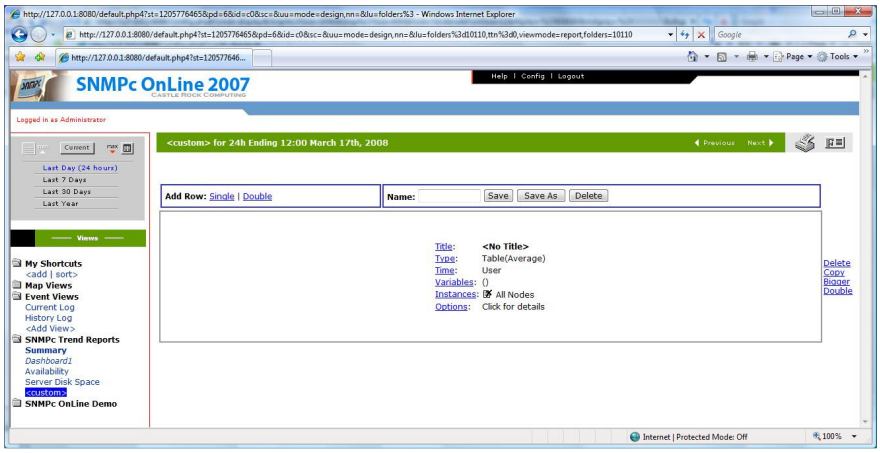
Points to Note regarding Dashboards…

1) To view a Trend Report you must have created the report in SNMPc Enterprise/Workgroup first
2) A dashboard can only view data related to the reporting group in which it is created. So in the initial screenshot I created a dashboard 'Dashboard1' under the reporting group 'SNMPc Trend Reports. This has access to the trend reports named 'Availability' and 'Server Disk Space'. It does not have access to any of the data under the Trend Report group 'SNMPc OnLine Demo'. This is for security reasons so that you can create dashboards and then limit user access to them.
3) You can alter the width and height of the dashboard from the standard 700 x 400 via the *Config →Display* menu in SNMPc OnLine. The screenshot show above use 1054 x 400.

Creating a new Dashboard

To create a new Dashboard expand the relevant trend report group and select *<custom>*

You will then be taken to the dashboard creation screen and the first widget will be displayed.



Use the *Add Row* options to create a new *Single* or *Double* (split) widgets. You can then use the *Delete*, *Copy*, *Bigger* options to edit the rows. Once you have more than one row you will also have the ability to order the rows via the *Move Up* or *Move Down* options.

For each 'widget' you need to configure:

Type (Map, Event, Graph, Table etc)

Variables (These are '*Type'* specific so for the Map and Events it would be the nodes to be Included, Trend Report type data would be configured by time interval, variables to be displayed, instances to be included etc)

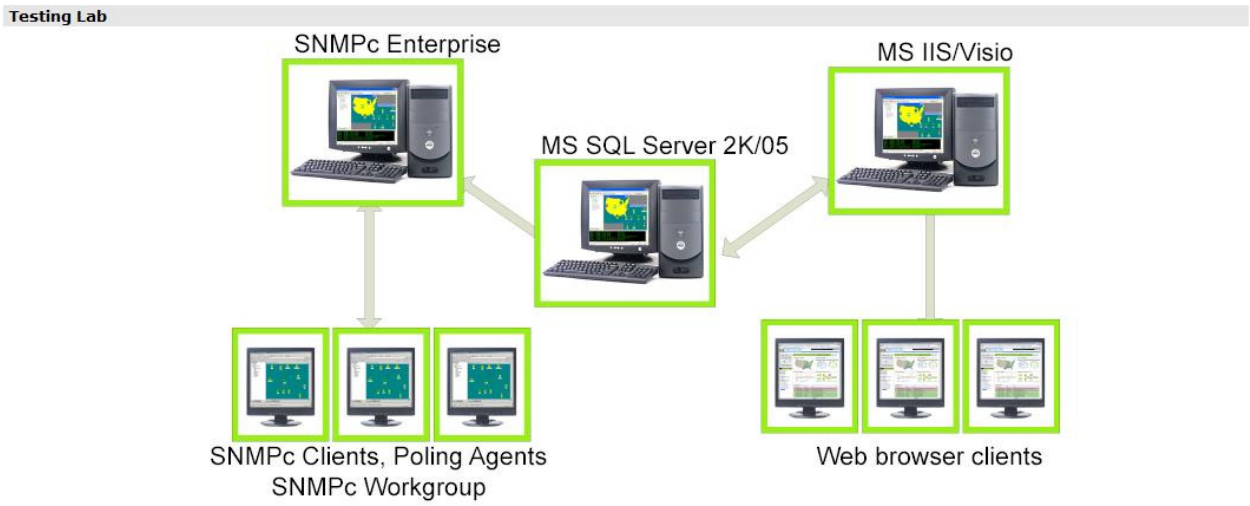
Options (Additional parameters such as the colors to be used (graph), ordering list (table) Alarm Severity Level (map and events)

Once you have created the custom dashboard enter a *Name* and use the *Save* button. The custom dashboard will then be listed in italics under the relevant Trend Report Group.

Tip

When creating a dashboard use the  *button to switch between the configuration and display screens. This allows you to quickly evaluate changes before they are saved.*

Creating the Visio Map View Widget

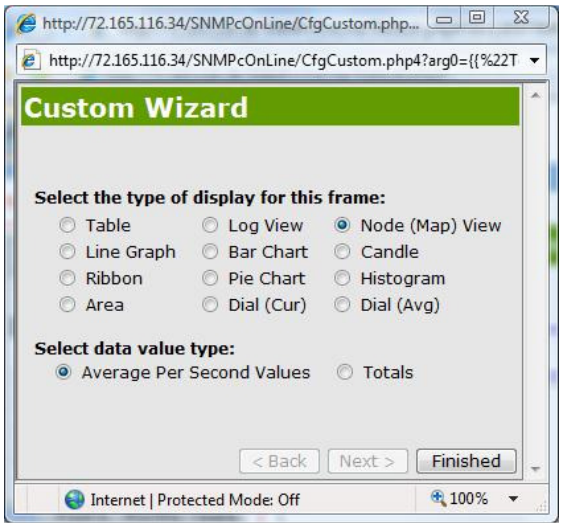


This example uses a previously created Visio/SNMPc Map View called Lab_1. This process to create this is described in the SNMPc Knowledge Base article "Using Mapdraw to create Visio Network Diagrams in SNMPc OnLine 2007". If you have not created such a diagram the nodes will be displayed as a list.

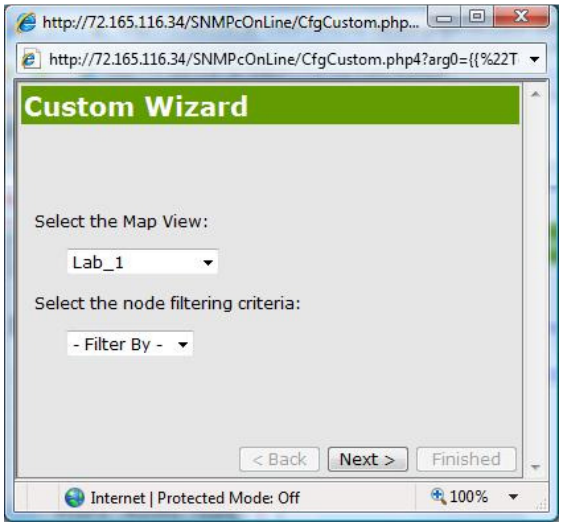
Widget Configuration

Size:	Bigger
Title:	Testing Lab
Type:	Node
Nodes:	Map View = Lab_1
Options:	Priority Info and Up

After entering a *Title* of choice select *Type* and choose Node (Map) View. Select *Finished* to close the Window.



Then select *Nodes* and select the required Map View (in this example the Map View is called Lab_1)

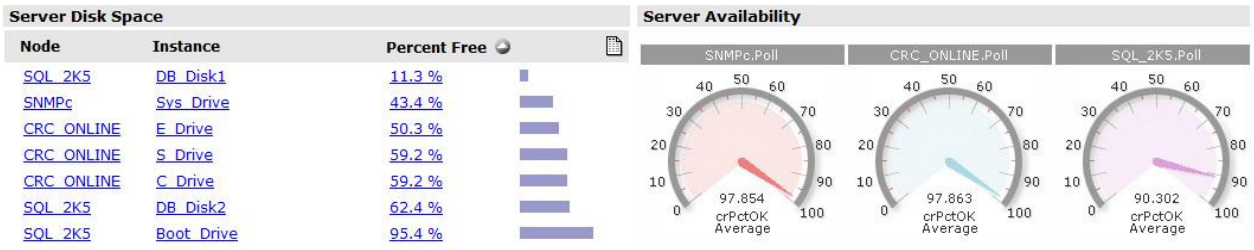


Select *Next* to close the Window

If you have not created a Map View you can use the - *Filter By* - option to list a subset of nodes. Filtering options include; Subnet, Node Group, IP Address, Report, Name and Description. Once you have chosen the criteria select *Next* to see available options.

Using *Options* you can specify which severity of events will be displayed. In this scenario we want all events to be displayed so the default 'Priority: Info and up' can be used.

Creating the Trend Report Widgets



The first example creates a table display based on a 'Disk Space' Trend Report and orders the report based on the minimum disk space available.

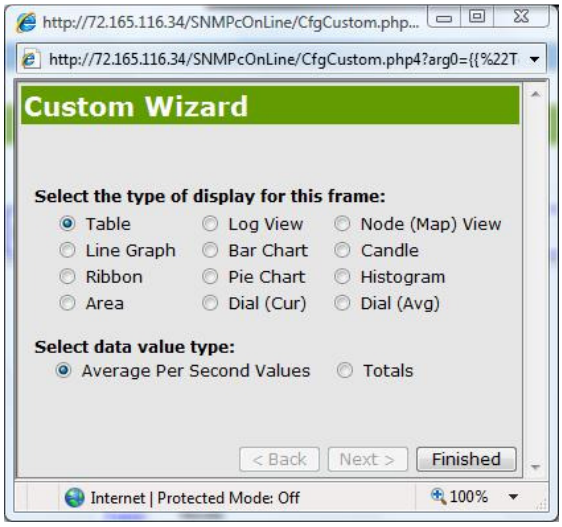
The second example creates a Dial display to show the average percentage availability of the three primary servers over the monitored time period.

To create the split widgets choose the Add Row Double option

Disk Space Widget Configuration

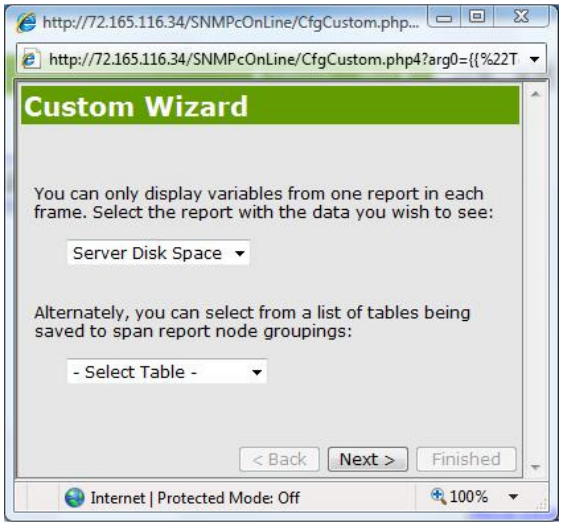
Title:	Server Disk Space
Type:	Table (Average)
Time:	User
Variables:	Server Disk Space (StoragePctFree)
Instances:	All Nodes
Options:	Primary sort variable – Percent Free
	Sort Direction – Ascending

After entering a *Title* of choice select *Type* and choose Table (Average). Select *Finished* to close the Window.



The default for *Time* is User which allows the user to control the time period that is displayed on the dashboard via the calendar. If you want the dashboard to display a fixed time period (for example last 7 days) then this can be edited accordingly.

To define which Trend Report the display is based on select *Variable* and then the name of the Trend Report from the pull down list (Server Disk Space in this example). The 'name' is the title given to the Trend report when it was originally created in SNMPc.



Alternatively you can use the –Select Table – option to choose from a pull down list of all SNMP Tables that are being recorded in the underlying SQL database.

Select *Next* to define the variables to be displayed in the Table.

SNMPc OnLine has standardized views for many common Trend Reports. (Disk Space, Server CPU, Interface Utilization etc). Therefore you can normally just select which report you are interested in and SNMPc will display it in the most efficient manner. With this Disk Space example we select 'Space Free' as the required view.

If you prefer a different set of variables to be included in the table then you can individually define them using the *Variable* pull-downs

Select *Finished* to return to the dashboard.

The *Instances* option allows you to select which nodes are included in the table. In this first example we want all nodes that are in the SNMPc created Trend Report to be included so this can be left at the default 'All Nodes'.

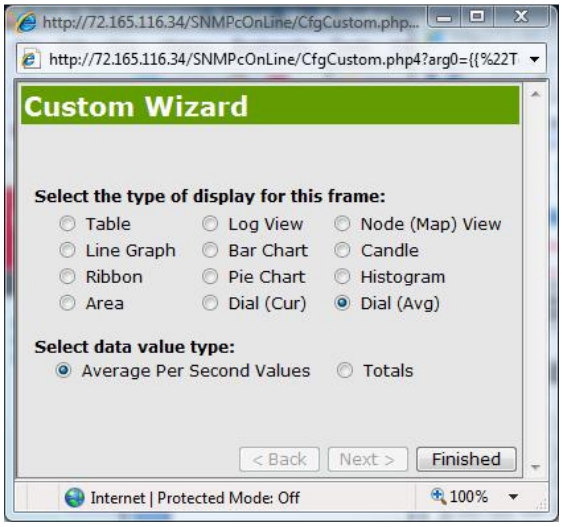
When creating a Table view *Options* allows you to select the Primary Sort Variable and the Sort Direction. Our example shows the server with the lowest disk space listed first so the Options are configured thus:

Tip
When creating the Trend Report in SNMPc use the Instances option to name the interfaces in the report. This is how in the screenshots the various disks are given titles rather than simple C:\, D:\ etc

Server Availability Widget Configuration

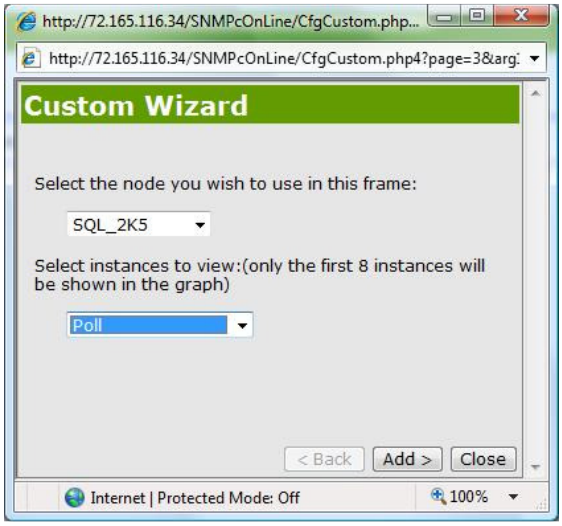
Title:	Server Availability
Type:	Dial - Range (Average)
Time:	User
Variables:	Availability (crPctOK)
Instances:	SNMPc : Poll
	CRC_ONLINE : Poll
	SQL_2K5 : Poll
Options:	Color Selection of Min/Max values

This example creates uses dial gauges to show the uptime availability for the three servers displayed in the network map. The *Type* this time is Dial Range (Average)



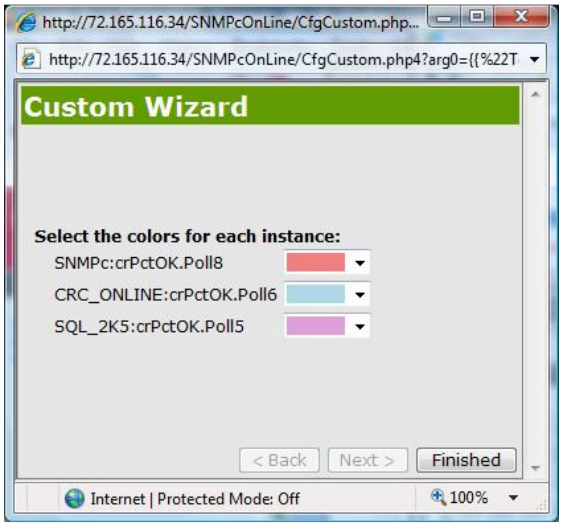
Tip
If you were monitoring a value such as network utilization rf CPU utilization where you want to see the latest polled value then you would select Dial (Cur).

The Availability trend report in this example features all devices in the network map and also multiple variables. As we only want to display the percentage uptime for the three servers we use the *Instances* option to define this.



Select the Node that you want to add to the widget and also for this example define 'Poll' as the variable to use. Once you have added the required nodes select Close. To remove the rest of the nodes from the display select beside 'All Nodes'.

Options can be used to select the color for Minimum/Maximum values



Creating the Event View

In this example we want to create an Event View based on all nodes in the Visio Map View. This view is based on a subnet in SNMPc called Lab_1

Events

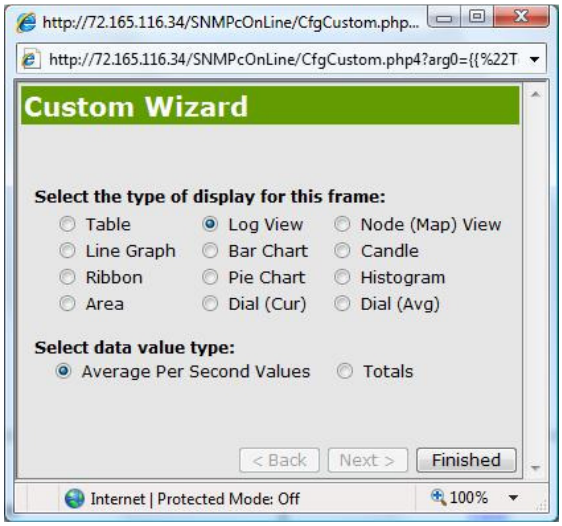
Cur Date/Time	Node	Event
03/17/08 11:49:43	SNMPc	Smtp Service Up
03/17/08 11:49:43	SNMPc	Web Service Up
03/17/08 11:49:33	SQL_2K5	Device Responding to Poll
03/17/08 11:49:33	Workgroup	Device Responding to Poll
03/17/08 11:49:33	Poller_1	Device Responding to Poll
03/17/08 11:49:33	User11	Device Responding to Poll
03/17/08 11:49:33	User12	Device Responding to Poll
03/17/08 11:49:33	Client1	Device Responding to Poll
03/17/08 11:49:33	User1	Device Responding to Poll
03/17/08 11:49:33	SNMPc	Device Responding to Poll

More (46 total)...

Widget Configuration

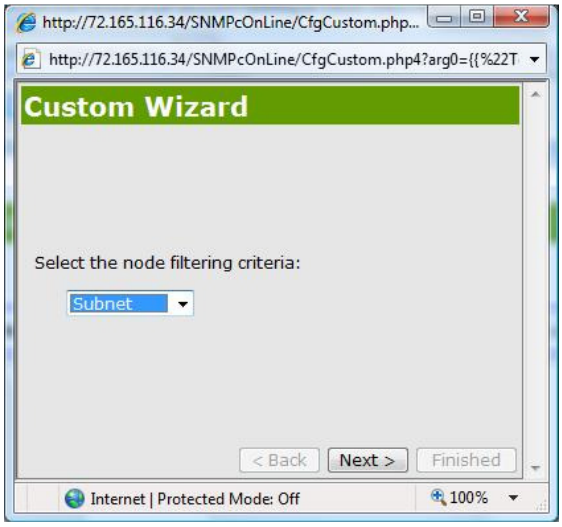
Title:	Events
Type:	Log
Time	User
Nodes:	Subnet = Lab_1
Options:	Priority Info and Up
	Event Type: All
	Status: Current
	Mode: Normal

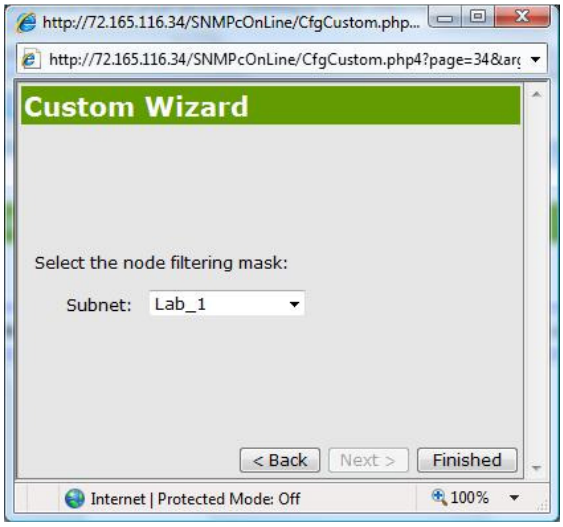
Select Log as the Type



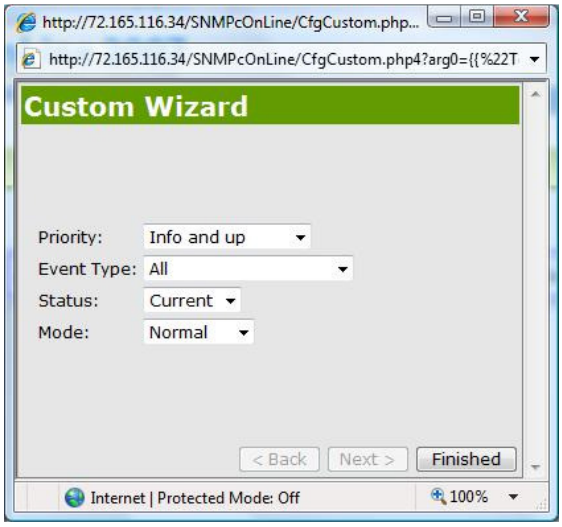
As we want to show the current status of all the nodes in the network it is common to leave *Time* on User

The event list is to be based on all the nodes in a subnet 'Lab_1'. Select the *Nodes* option to configure this. After selecting Subnet for the filtering criteria select *Next* and then choose the required subnet via the pull down.





Options allows to change which information is displayed in the logfile

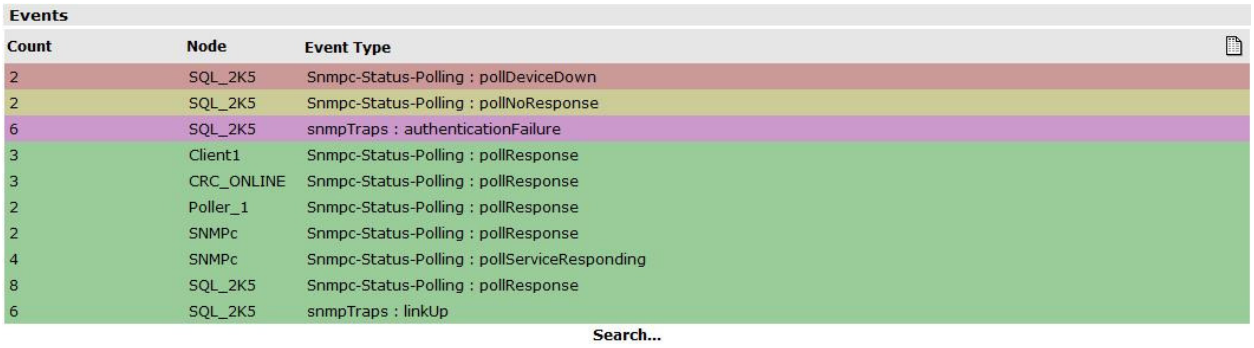


Priority allows you to configure the severity level of the events to be displayed. The default 'Info and Up' would display all events. If you just wanted information on traps and devices that were down for example you could select 'Minor and Up'.

Further configuration on the events that will be displayed is available via *Event Type*. As default all event will be displayed as long as they meet the severity level defined under Priority. You can restrict this to various classifications of events including status polling events (device up/down); received SNMP traps or system messages.

Status allows you to define whether the event view is based on the SNMPc maintained ‘Current’ log status or ‘Historical’ log status. As an example if a device is online, then fails and then comes back online again in the Current logfile it is up. In the Historical logfile it was up, then it when down and then it came back again.

The *Mode* can be either Normal or Summary. In Normal the events are listed in the order that they are detected. In Summary mode a listing of all events is created along with a count of how many times they have occurred. An example Summary event view is listed below.



Events

Count	Node	Event Type
2	SQL_2K5	Snmpc-Status-Polling : pollDeviceDown
2	SQL_2K5	Snmpc-Status-Polling : pollNoResponse
6	SQL_2K5	snmpTraps : authenticationFailure
3	Client1	Snmpc-Status-Polling : pollResponse
3	CRC_ONLINE	Snmpc-Status-Polling : pollResponse
2	Poller_1	Snmpc-Status-Polling : pollResponse
2	SNMPc	Snmpc-Status-Polling : pollResponse
4	SNMPc	Snmpc-Status-Polling : pollServiceResponding
8	SQL_2K5	Snmpc-Status-Polling : pollResponse
6	SQL_2K5	snmpTraps : linkUp

Search...