How to create a Trend Report and generate an alert if a threshold is breached.

This information is reproduced from the ‘SNMPc 6 Evaluation Guide’. This document contains information on how to install the evaluation software and a walk through of some of the main features of SNMPc. You can download the full document from here. Although this example deals with creating a Trend Report on Server Disk space you can use this guide to apply to any recorded statistics such as WAN Utilization or Network Latency.

1) To create a trend report on server Disk Space first highlight the server icon you want to record the statistics from. Select the Trend tab on the bottom of the selection tool (the left-hand pane of the main window). Right-click on the folder named SNMPc Trend Reports and select 'Insert Report'.

![Image of SNMPc Management Console]

2) Give your Trend Report a Report Title. SNMPc can record statistics on any SNMP variable but some of the most common reports are available in a drop down list under 'MIB table'. To record server disk space choose the report Server Disk Stats. An overview of other common reports is listed at the end of this How-To.

![Image of Insert Trend Report]

3) Add additional devices to the report or change the poll interval as required.
4) To configure a threshold on the data being recorded select the *Instances*… button.

5) By highlighting an instance and choosing *Add* you can select what instance will be recorded. If you *Add* individual instances you would normally *Exclude* `<All other Instances>`.* In this example we have selected two hard disks to record information on and *Exclude’d* `<All Other Instances>`.
6) The *Edit* button allows you to define thresholds and the names that will be used in the final report.

7) In the pictured example we have highlighted instance number ‘1’ and then selected the *Edit* button. The instance has been named and two thresholds have been configured. One alert will be generated when disk usage goes above 80% capacity and one when disk space falls below 10%. Using SNMPc’s event filters you could then create different actions for each event. When the disk space is 80% full SNMP could send an email to the support team. If disk space falls below 10% a page could be sent to your cell phone or pager.
8) Select OK until you return to the Insert Trend Report configuration screen. Then choose the Export Destinations tab. Here you can control the format of your report. SNMPc Enterprise can automatically produce scheduled hourly, daily, weekly, and monthly reports. Report formats include graph, pie, bar chart, distribution, and summary (table). You can also choose how the data is exported. Reports can be automatically sent to a printer, web server or saved to disk. Using ODBC you can also export recorded data to third party databases.

9) From the Page Layout tab you can choose layout options such as axis labels and the position of the Legend.

10) Select OK to save your settings and begin the data collection process.

11) At any time, trend reports can be viewed by right-clicking on the report name in the Trend selection tool and selecting “View Report”. The date range and format of report that you wish to see can then be selected.

12) To view Html reports select the ‘Web Reports…..’ option from the Tools menu. The web report template can only be viewed once the first report has been created.
Overview of Common Report Selections:

**Interface Usage (BPS)**
Records the data transmitted and received on an interface. The data is measured in bits per second (bps). This is the same measurement that network interfaces are rated by. (56Kbps WAN Link, 100Mbps LAN)

**Interface Utilization (%)**
Displays data transmitted as a percentage of the total available bandwidth. This report can record statistics on both LAN and WAN interfaces. This report also records the total errors seen on the interface as a percentage of the overall traffic transmitted. Many customers configure SNMPc to generate an alert when traffic rises above 80% of the available link capacity. This alerts them to large data transfers and possible network slowdowns.

**Server Disk Stats**
Records disk related statistics including total disk capacity and percentage disk space used/free. As with all statistics recorded by SNMPc the system can be configured to automatically generate an alert if disk capacity breaches a preset threshold.

**Server CPU Stats**
The server CPU utilization expressed as a percentage. By setting a threshold for above 90% Utilization you can be alerted to potential servers hangs.

**Response - IP/SNMP**
Records device or application availability as a percentage. This is useful for SLA reporting. The time taken for a packet to be transmitted between SNMPc and the device is also recorded as a measure of network latency. Using the distributed polling functionality of SNMPc Enterprise the network latency can be measured from strategic points in the network.