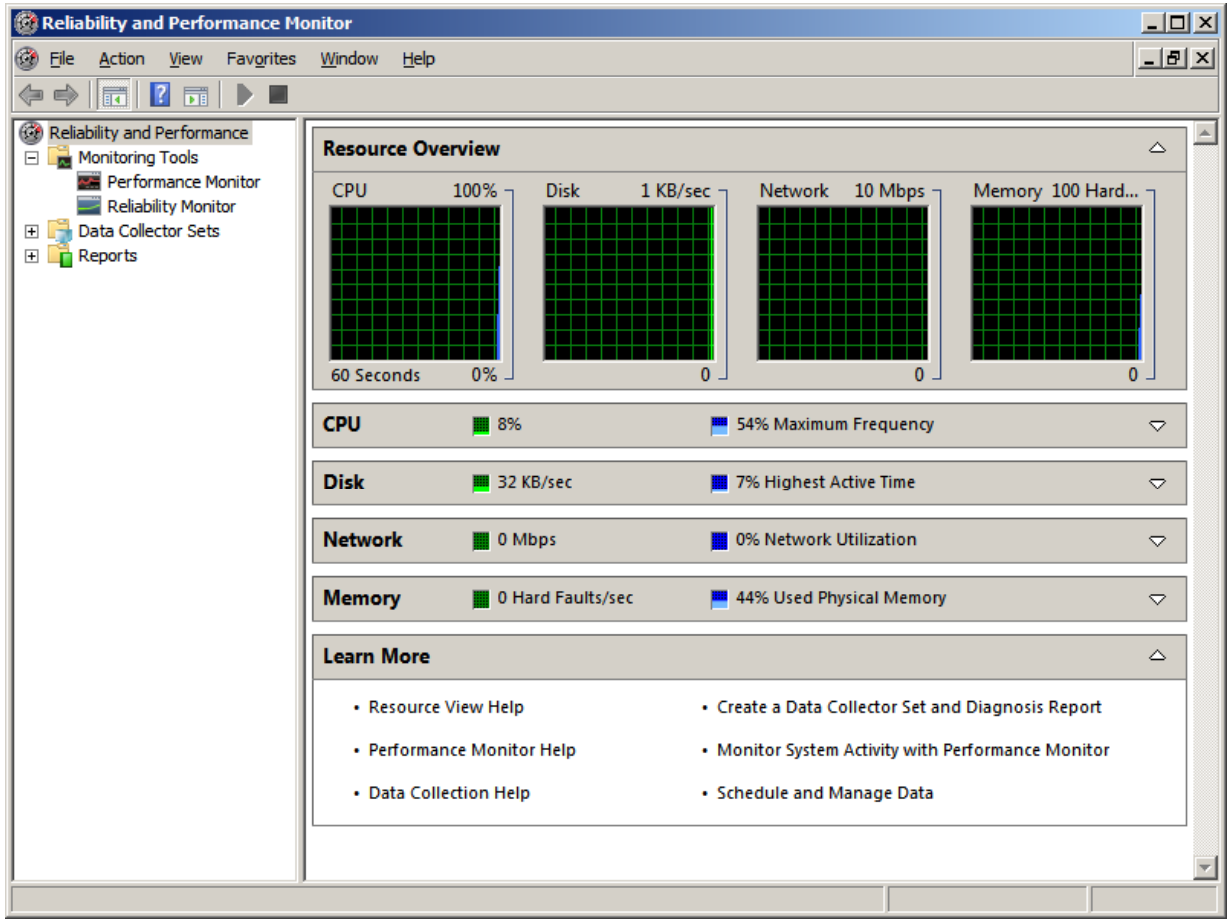
Reliability and Performance Monitoring

June 19, 2012

Reliability and Performance Monitor Window

To open the Reliability and Performance Monitor window, we go to Administrative Tools on the start menu.

This window is very similar to the Resource Monitor on the Windows Task Manager.

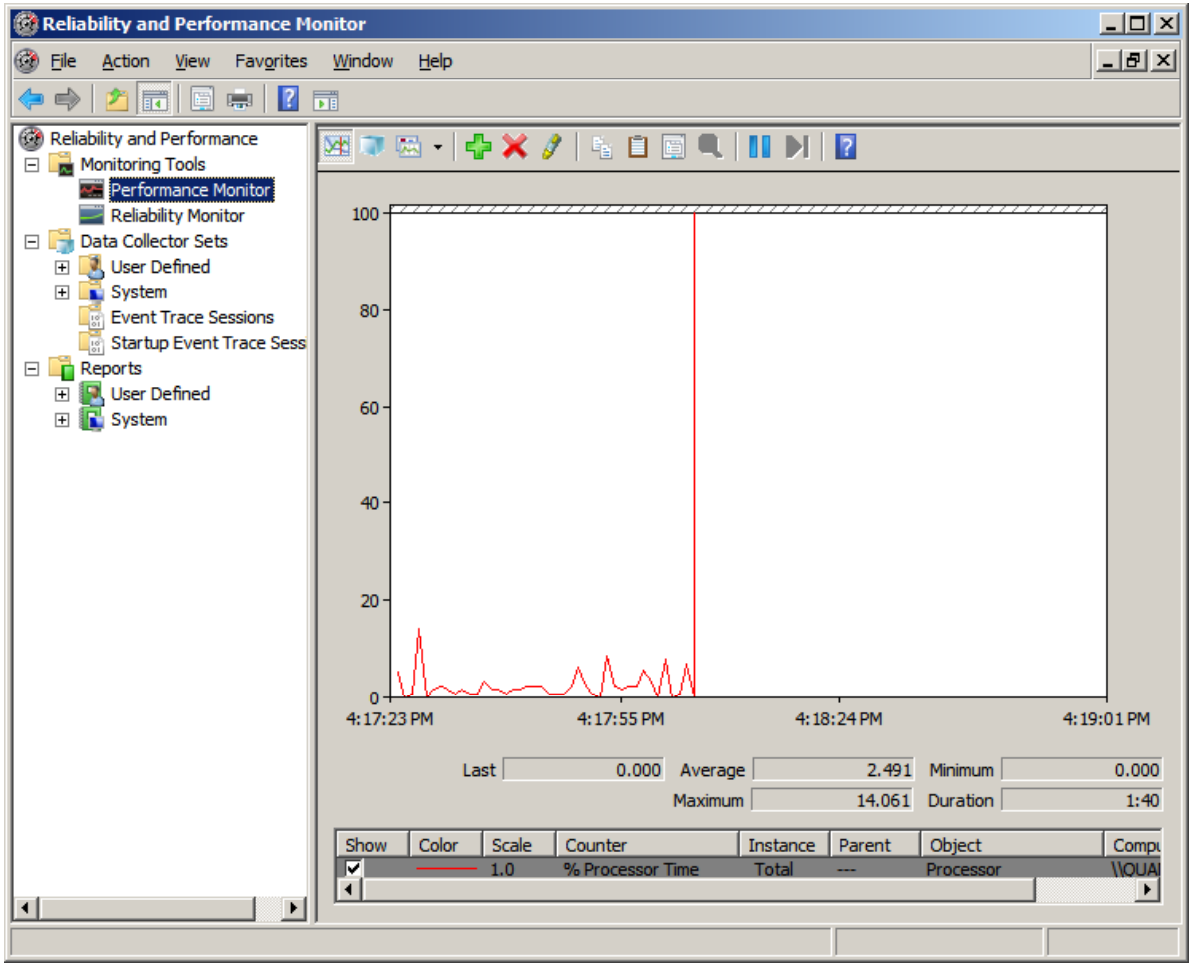


Performance Monitor

There are two monitoring tools on the Reliability and Performance Monitor window which are the Performance monitor and Reliability monitor.

When we highlight the Performance Monitor in the left pane, a graph will appear in the right pane showing a real-time graph of the percent of processor time.

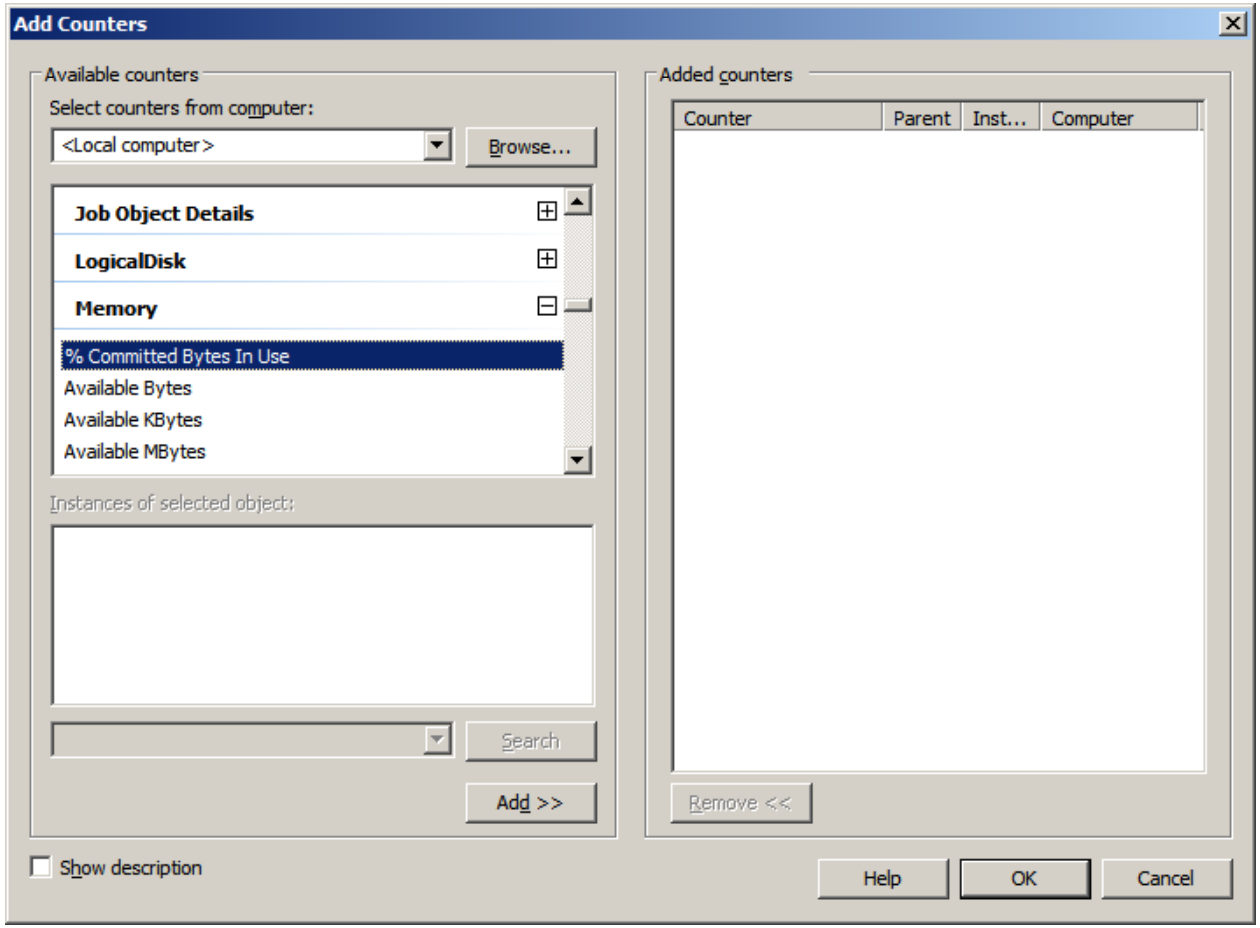
To track another function, we can click on the green plus (+) sign above the graph.



Add Counters Window

When we click on green plus sign, the Add Counters window will open.

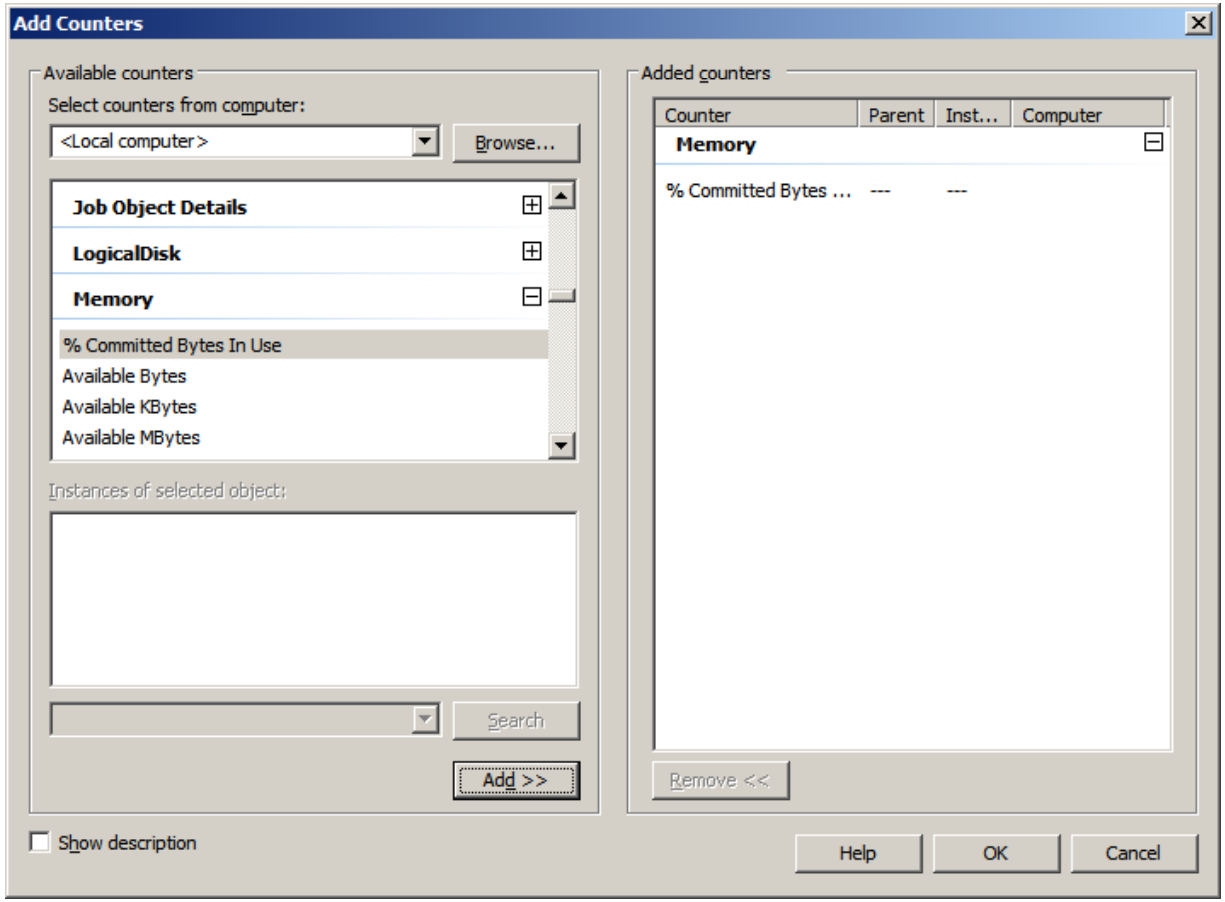
Counters are categorized in the left pane and in this example we will expand the memory category. We will highlight the Percent Committed Bytes in use function.



Add Counters

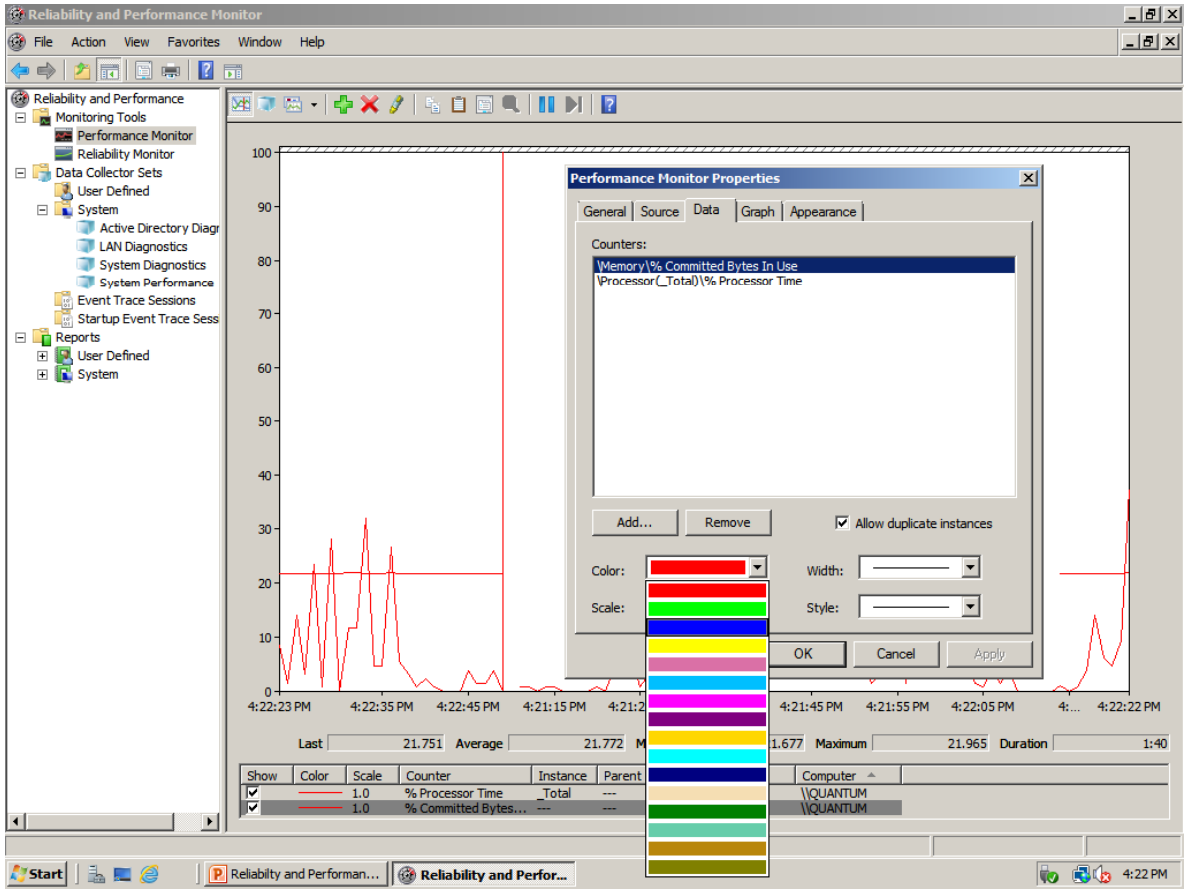
After we highlight a counter to track on the performance graph, we press the Add button to send the function to the Add counters list.

We press the OK button to return to the Performance Monitor window.



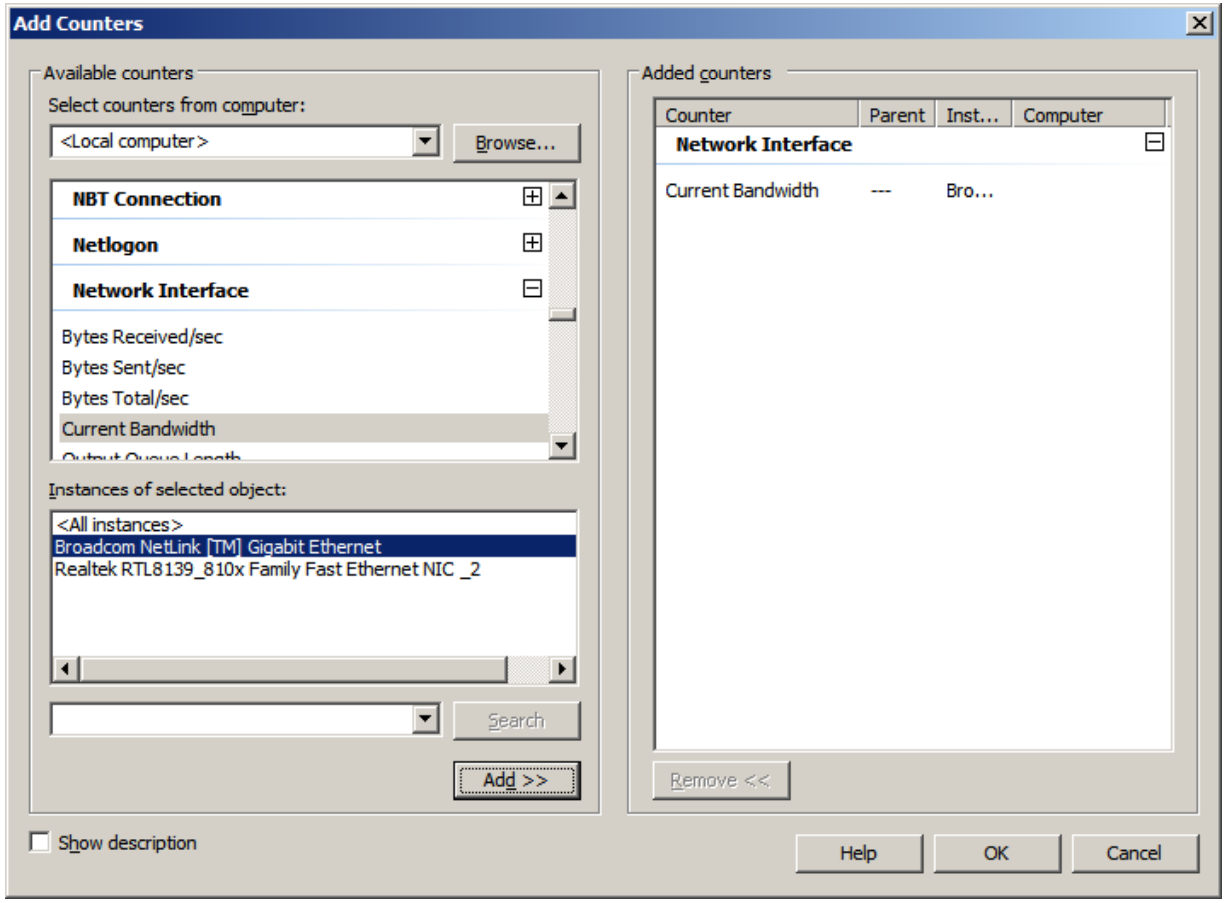
Performance Monitor Properties

We right click on the Percent Committed Bytes and the Performance Monitor Properties window will appear. Presently, the line for this function is the same as the Percent Processor Time function. We select the color list box and we pick blue. We press the OK button to close the properties dialog box.



Add Another Counter

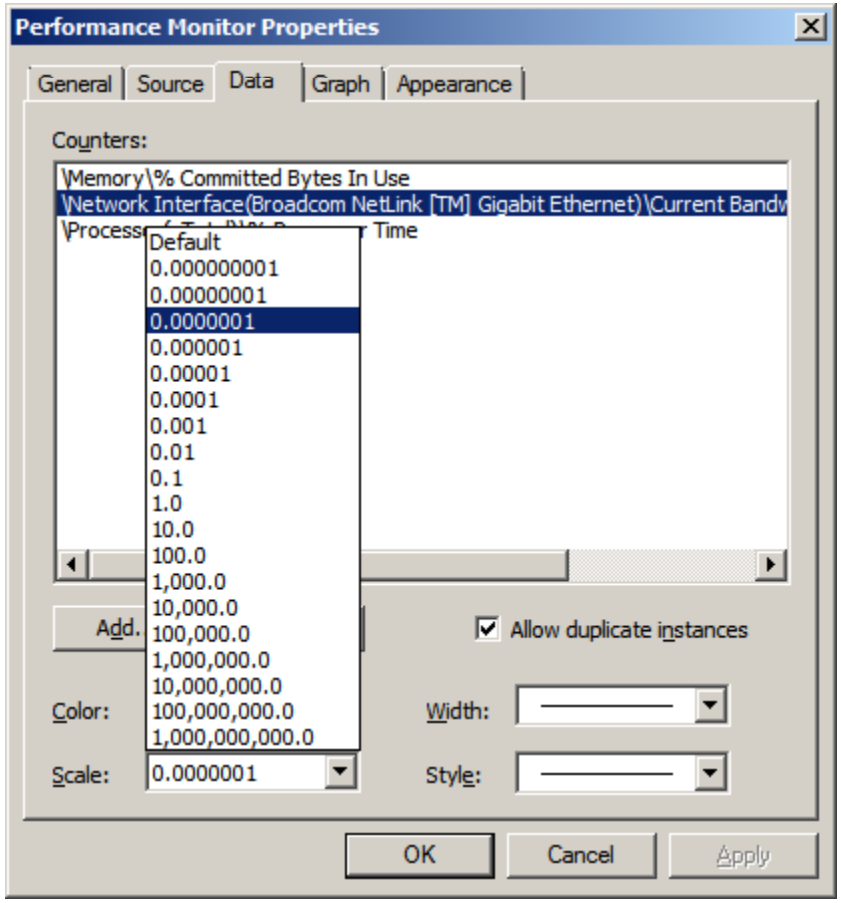
To add another counter to be graphed on the performance monitor chart, again we select the green plus sign (+). This time we select the Network Interface category and current bandwidth. In our example, we only pick one Network Interface Card and we press the Add button to place it in the Add counters list. We press OK to return to the Performance Monitor.



Performance Monitor Properties

We visit the Performance Monitor Properties window and we can see the that we can change the readings scale from 0.000000001 to 1,000,000,000.0 or pick default. We will pick 0.0000001 for our scale to customize the graph.

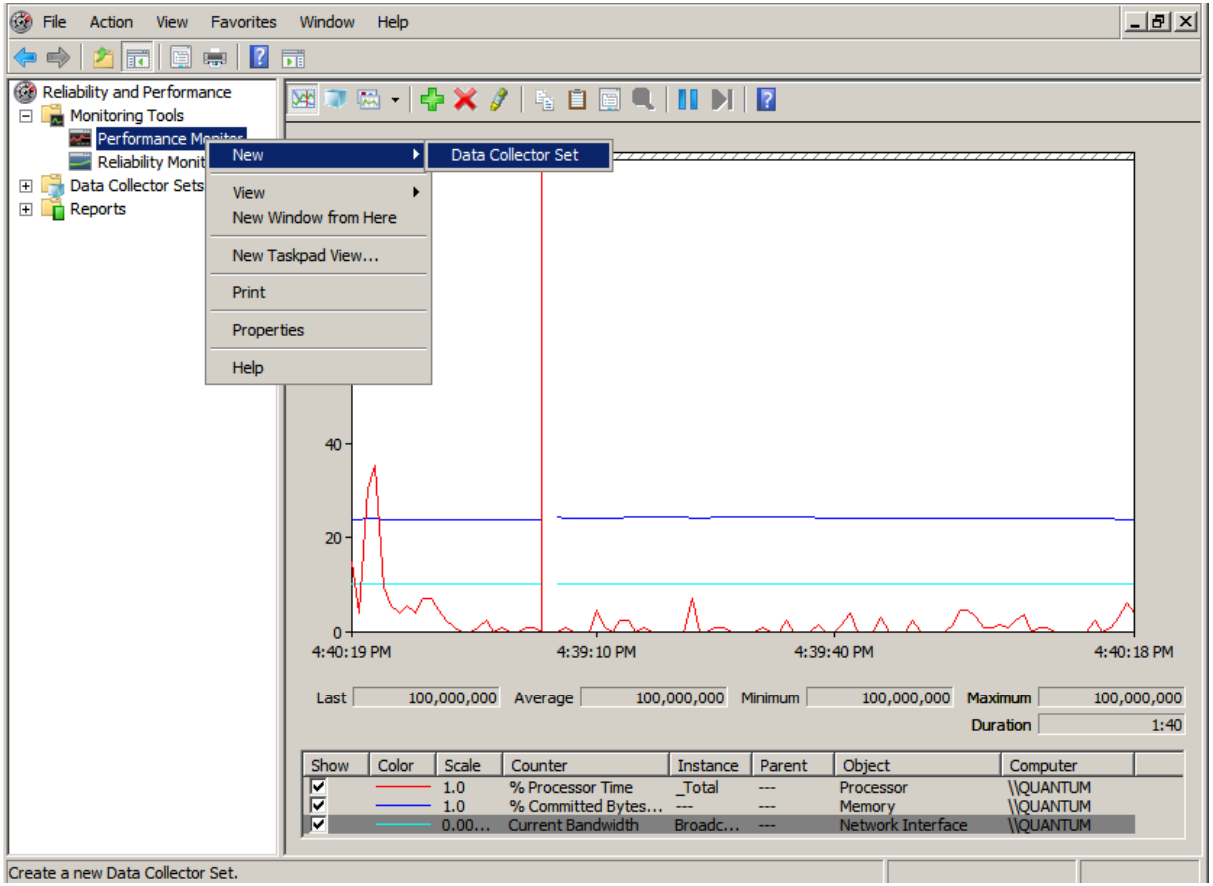
We will select the color list box and we pick green. We press the OK button to close the properties dialog box.



Data Collector Set

Data collector sets are files that hold our performance statistics.

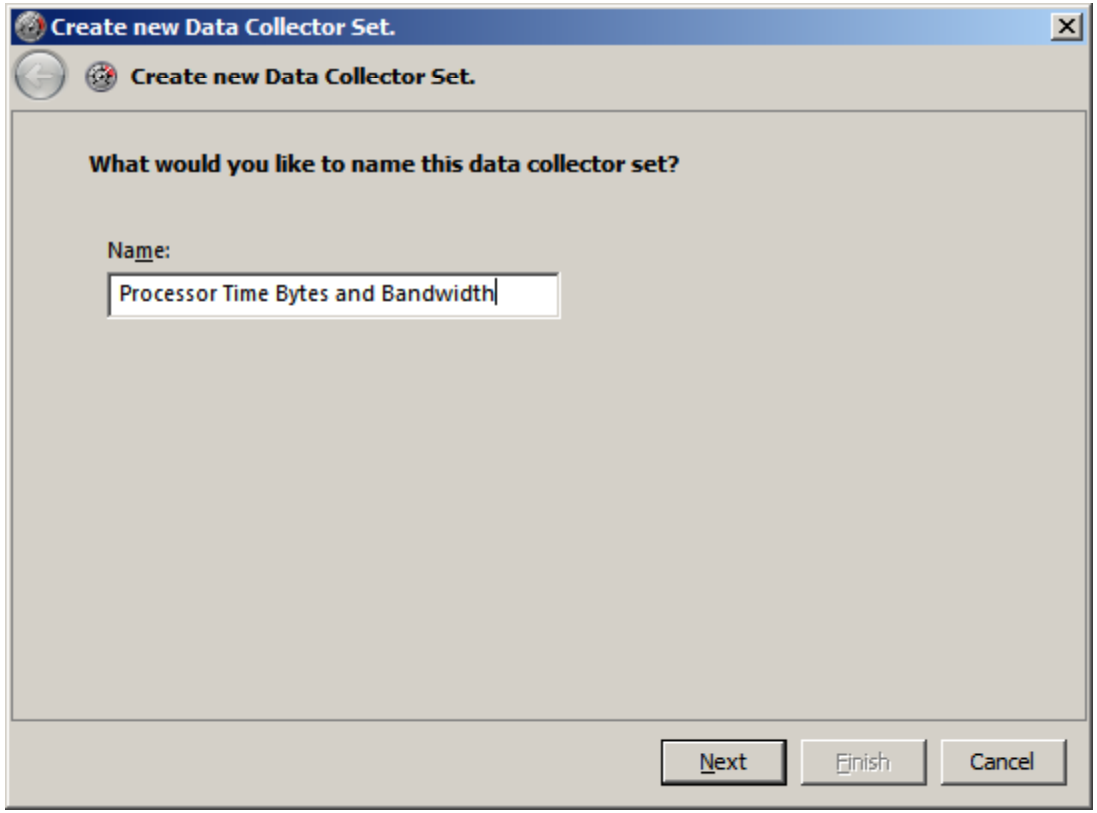
To create a new data collector set, we right click on Performance Monitor and the left pane and select New from the menu and Data Collector Set.



Create New Data Collector Set

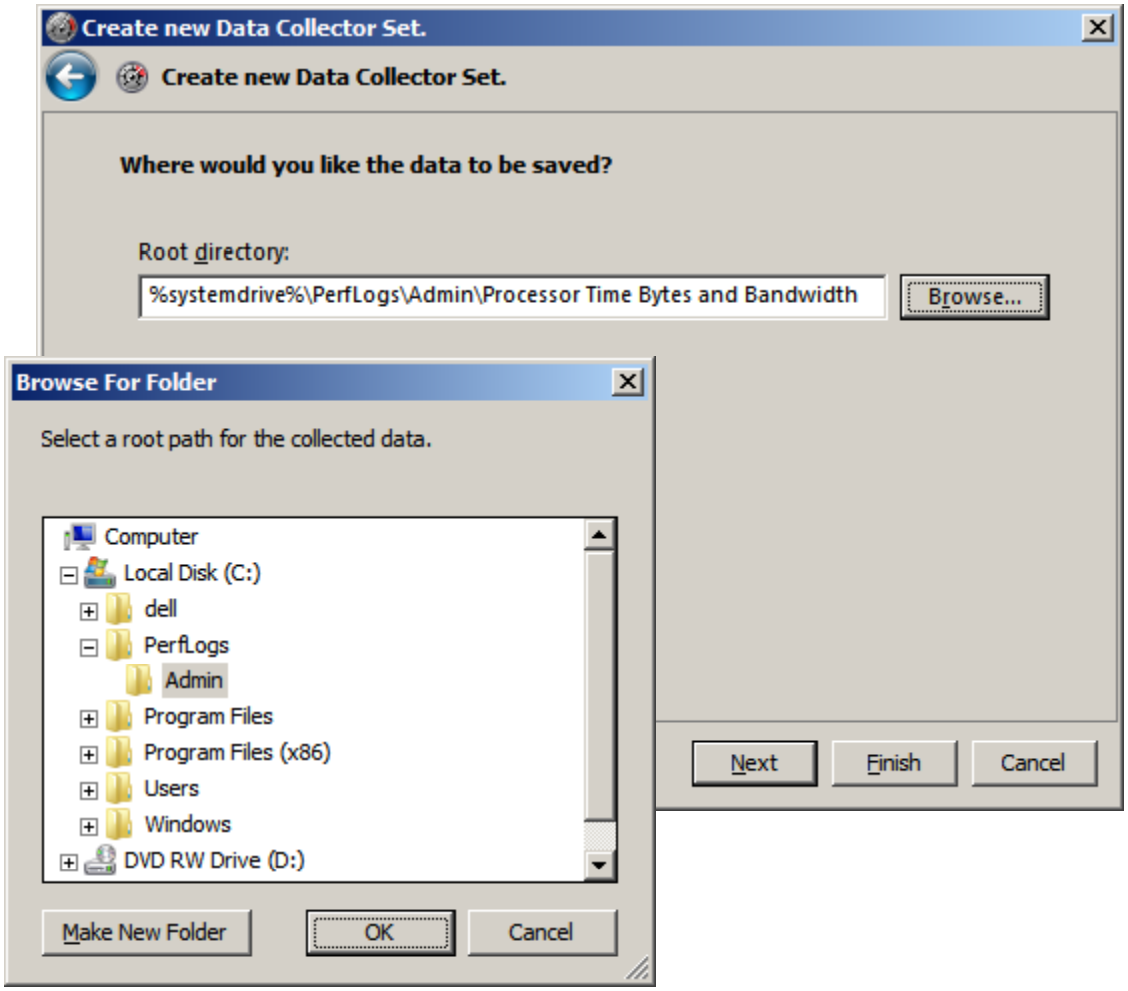
We will name our new data collection set Processor Time Bytes and Bandwidth.

We should press the Next button to continue.



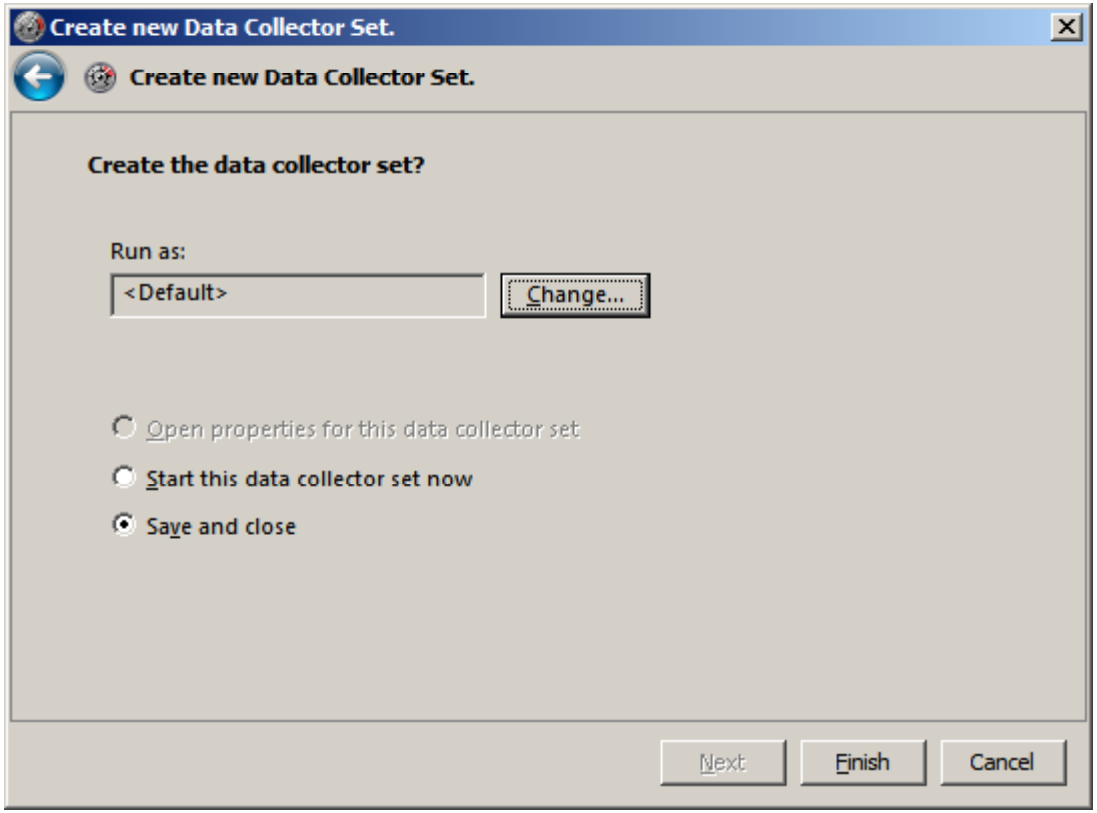
Save New Data Collector Set

We can save new data collector set to the Admin folder inside the PerfLogs folder on the C: drive or we can browse for another location. We choose the default location and we push the Next button to advance.



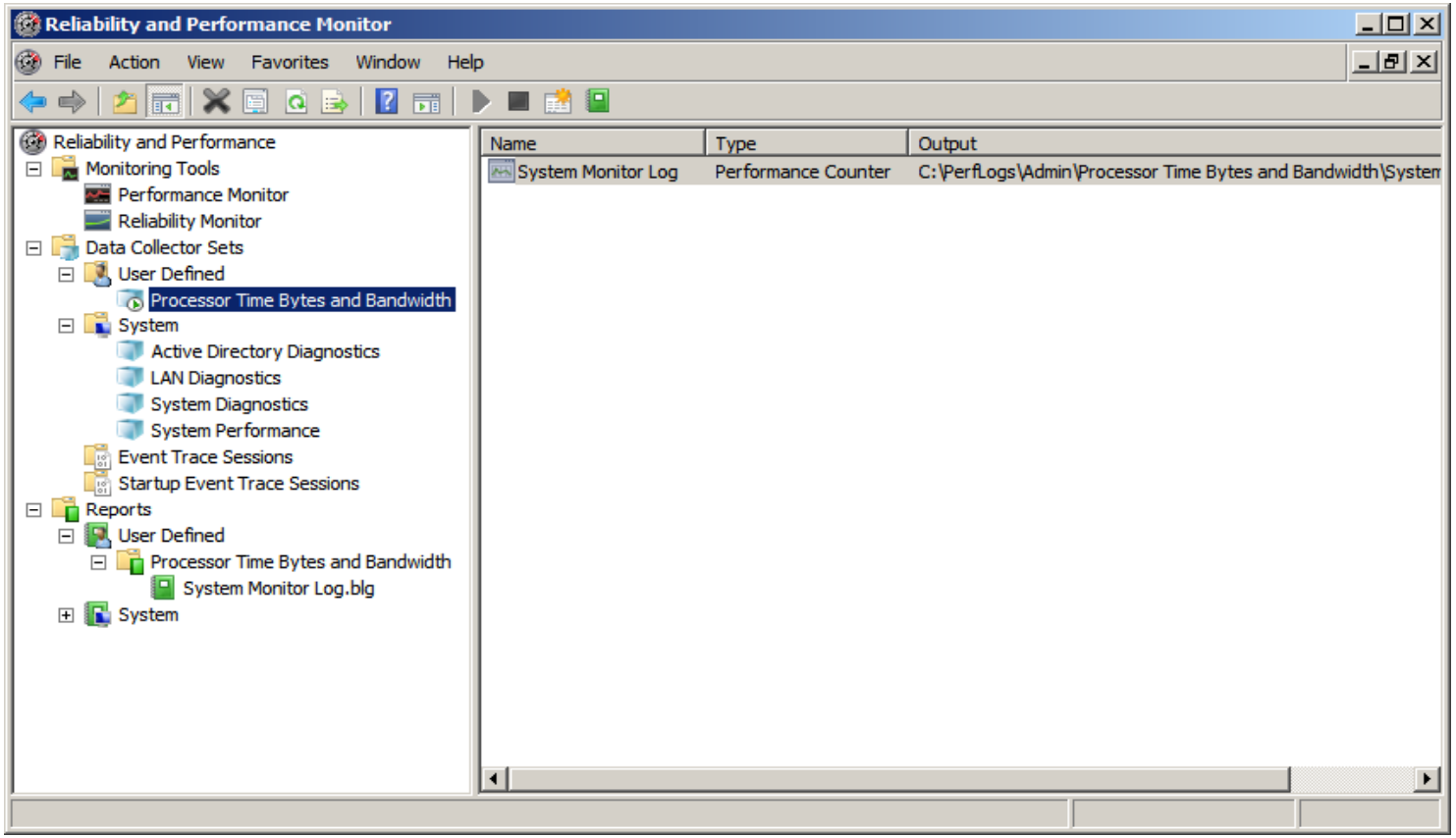
Save and Close the Wizard

We will save and close the new data collector set and finish the process.



User Defined Data Collector Sets

We can find our Processor Time Bytes and Bandwidth data collector set under the User Defined folder of Data Collectors Sets in the left pane of the Reliability and Performance Monitor window.

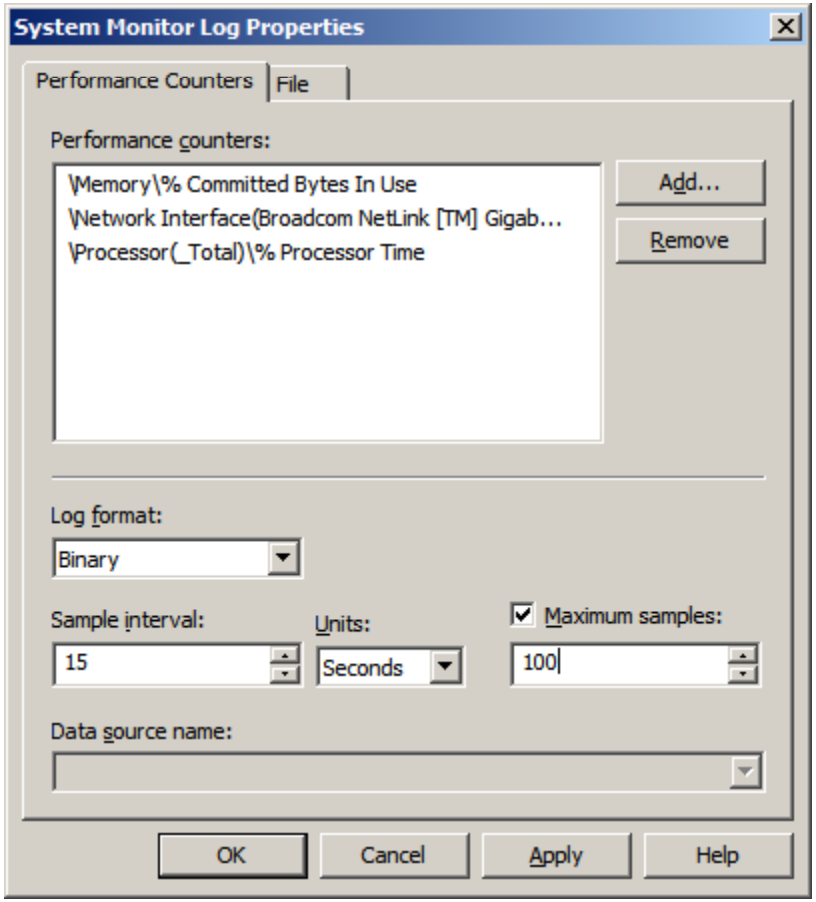


System Monitor Log Properties Window

We right click on the recently made data collector set and we select properties to open the System Monitor Log Properties window.

We will change the sample interval from one second to 15 seconds and we will annotate the Maximum samples checkbox and set the value to 100.

We press the Apply button to make the changes permanent.

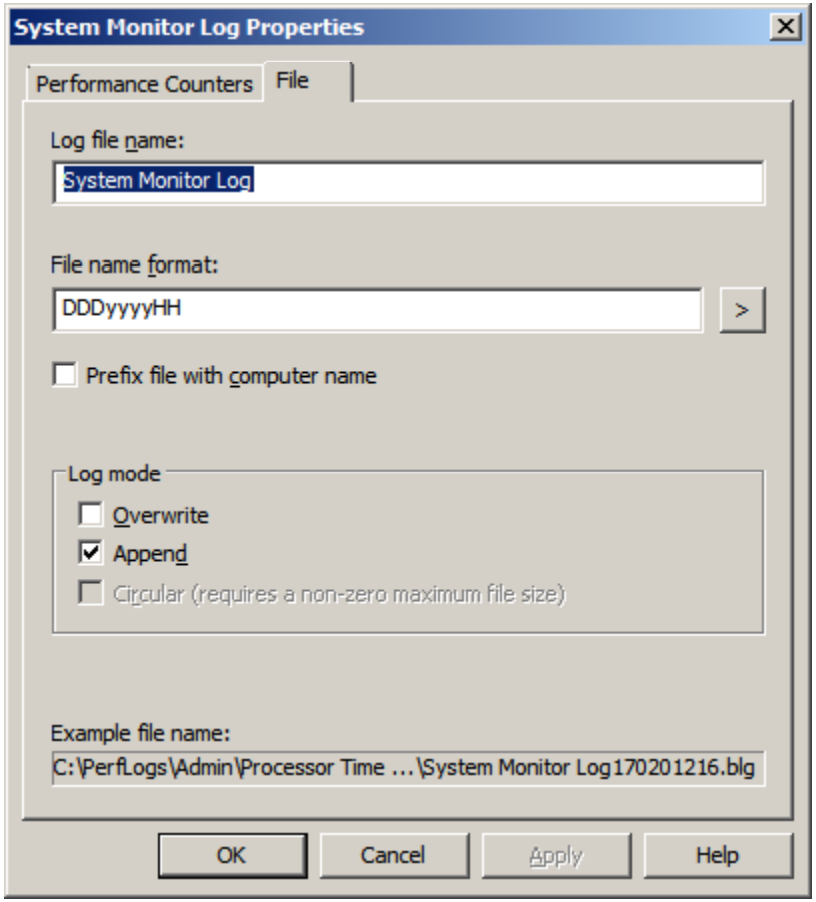


System Monitor Log Properties Window

We click on the File tab of the System Monitor Log Properties window. We will name the file 170201217 with the file name format of DDD for day of the tear (170), yyyyy for the year (2012) and HH for the 24 hour clock hour (17 or 5 pm).

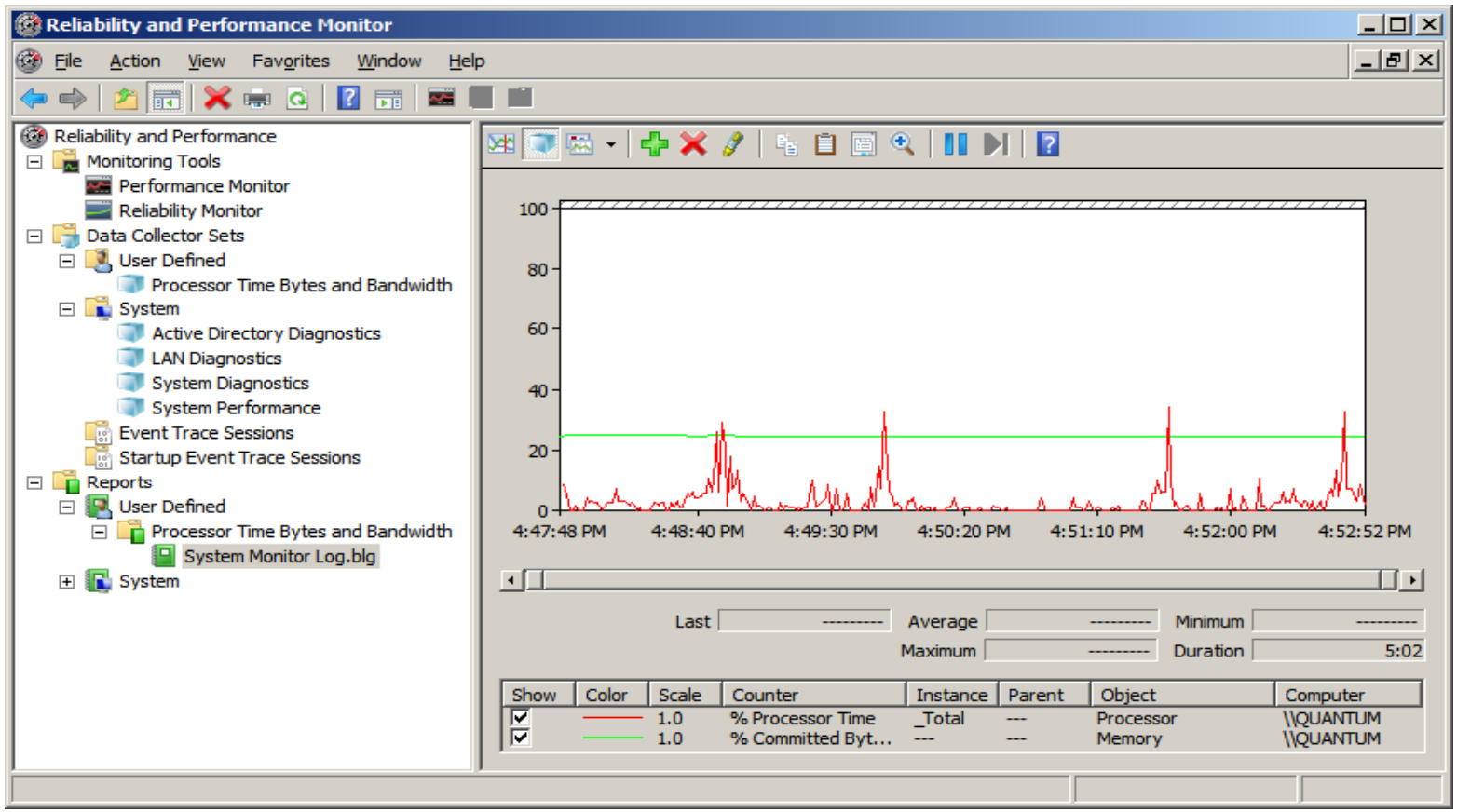
We will append the data instead of overwriting over an older file.

We press the OK button to return to the Reliability and Performance Monitoring window.



Reliability and Performance Monitor Report

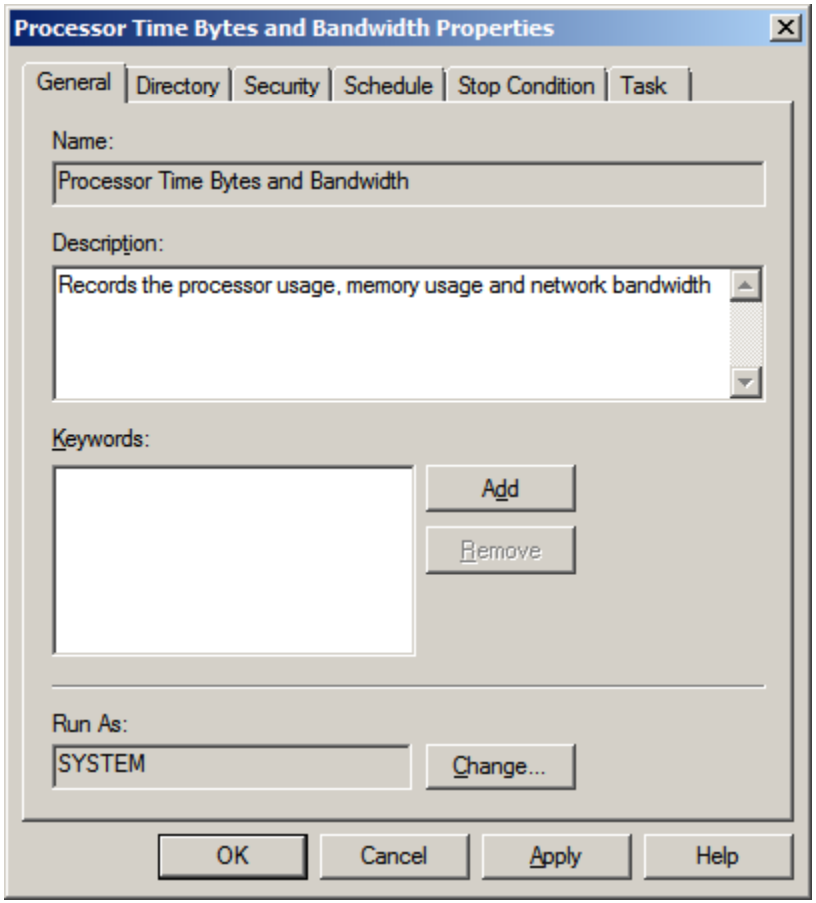
In the Reports folder on the Reliability and Performance Monitor window, we can see our newly made report in the left pane. We highlight the report and we can see the graph representing the data collection set. Right click on the report and select properties from the menu so we can schedule the report.



User Defined Report Properties – General Tab

On the General tab of our user-defined report properties window, we can add a scratch and any keywords to run the report.

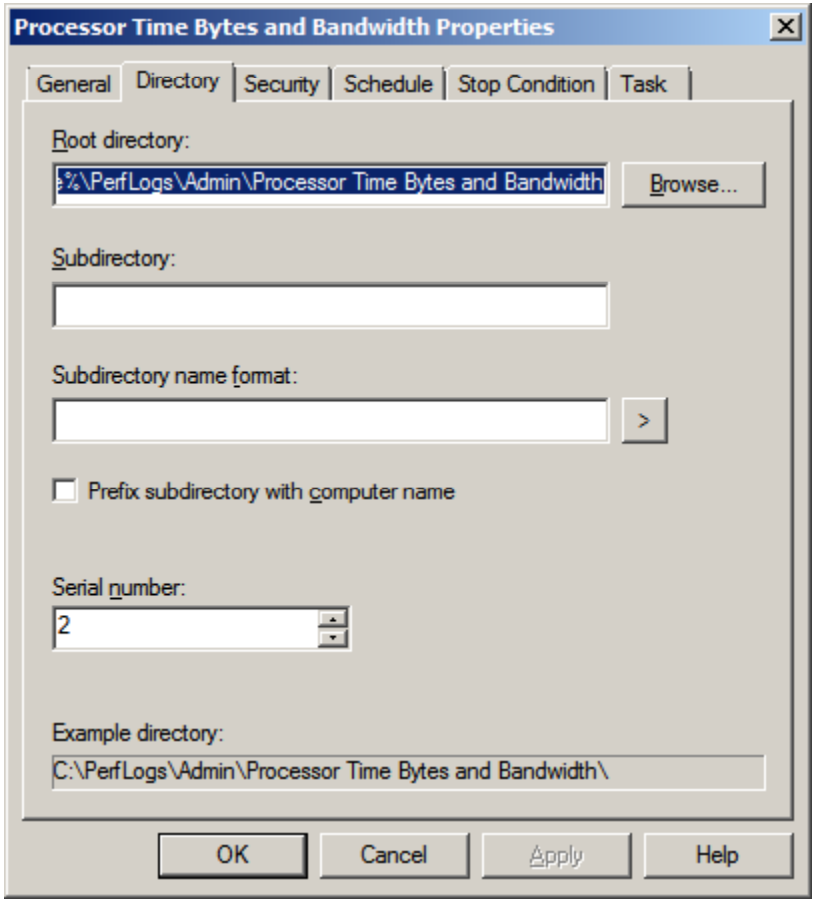
We should press the Apply button to make the changes permanent.



User Defined Report Properties – Directory Tab

On the Directory tab of our user-defined report properties window, we can make changes to the root directory and make subdirectories. We keep the default settings.

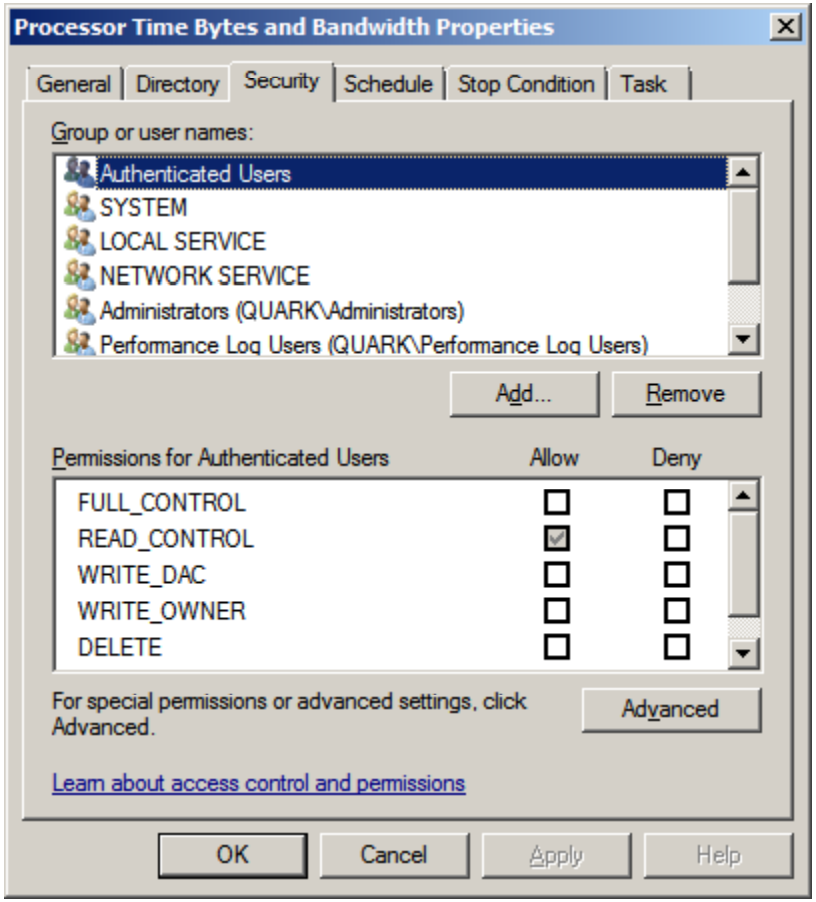
We should press the Apply button to make the changes permanent.



User Defined Report Properties – Security Tab

On the Security tab of our user-defined report properties window, we can add users that can read or have full control of the report. We keep the default settings.

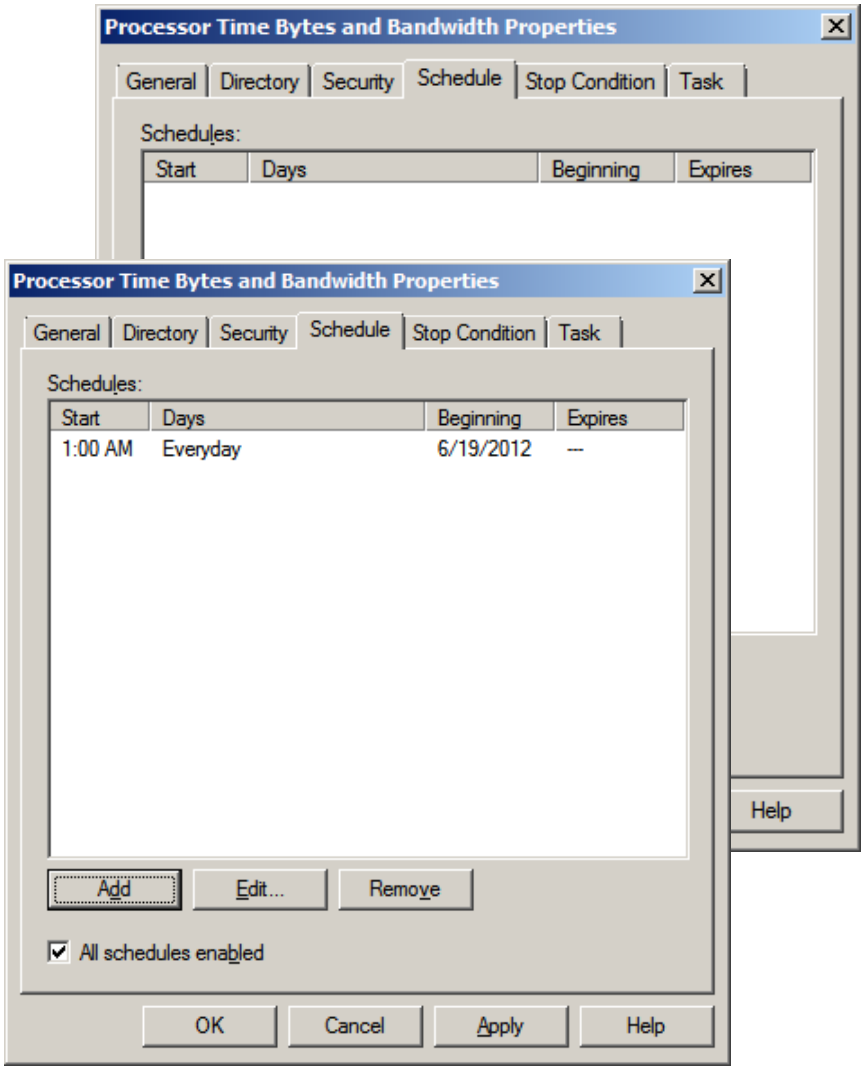
We should press the Apply button to make the changes permanent.

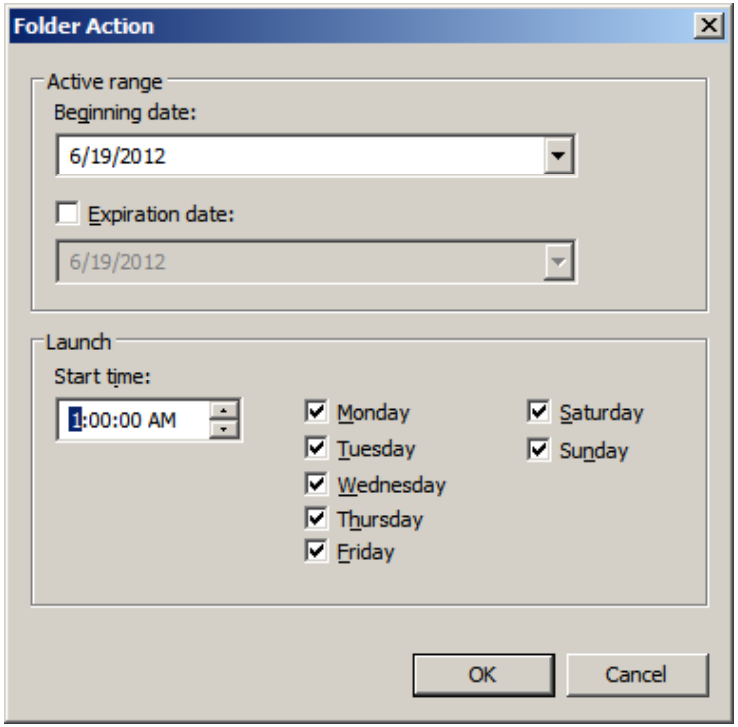


User Defined Report Properties – Schedule Tab

On the Schedule tab of our user-defined report properties window, we press the Add button and we will launch the data collection set at 1 am daily.

We should press the OK button and the Apply button to make the changes permanent.

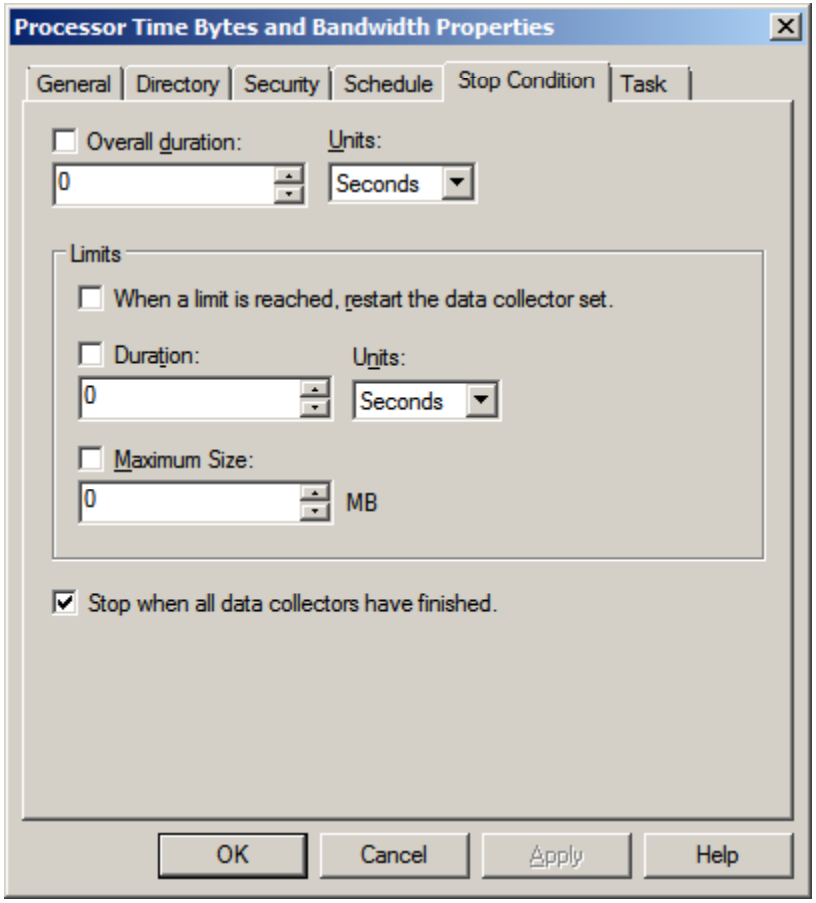




User Defined Report Properties – Stop Condition Tab

On the Stop Condition tab of our user-defined report properties window, we stop the data collection when all collectors are finished. Remember, we set our user defined data collection for 100 samples.

We should press the Apply button to make the changes permanent.

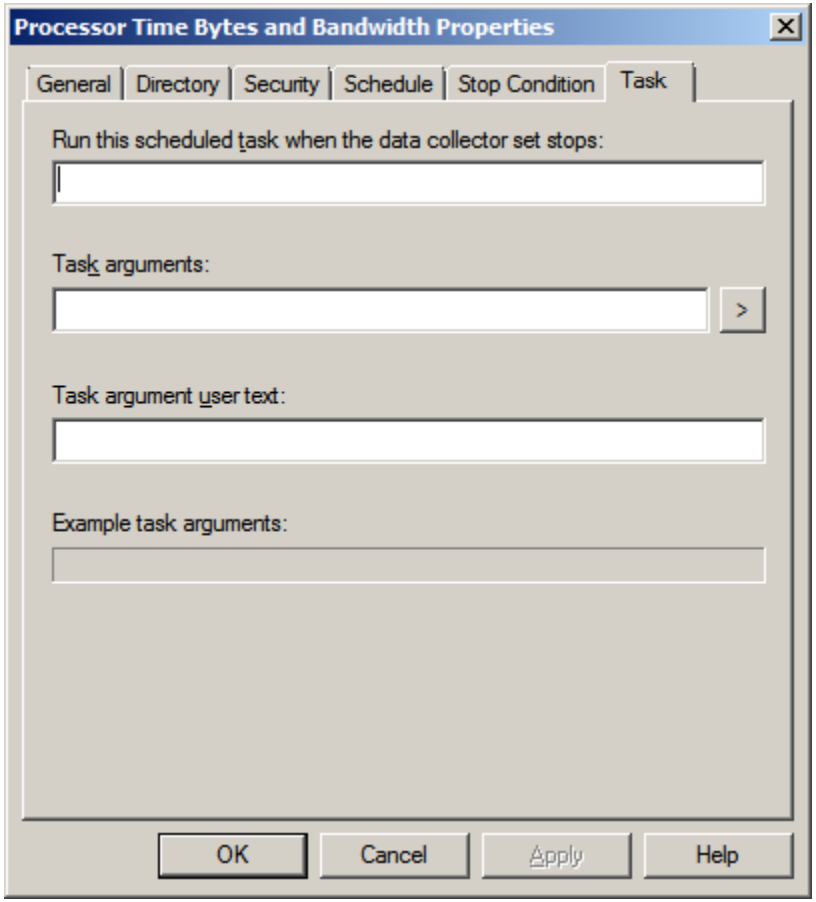


User Defined Report Properties – Task Tab

We could run a task such as printing reports or emailing them in Outlook if desired.

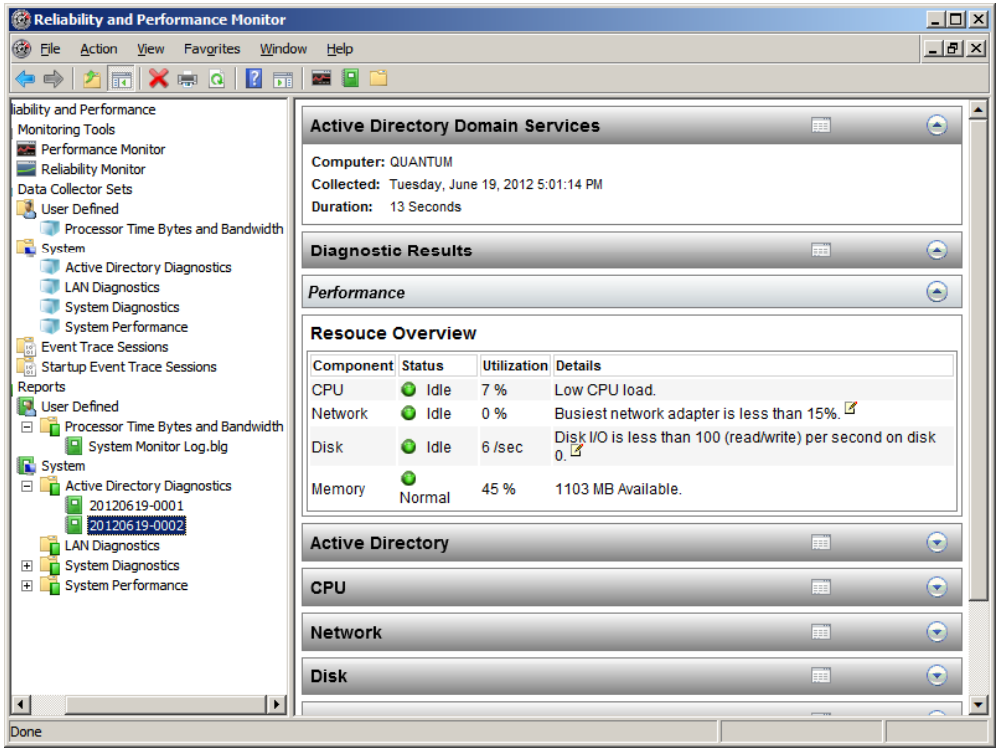
We will not schedule a task presently and except the defaults.

We press OK to close the properties window.



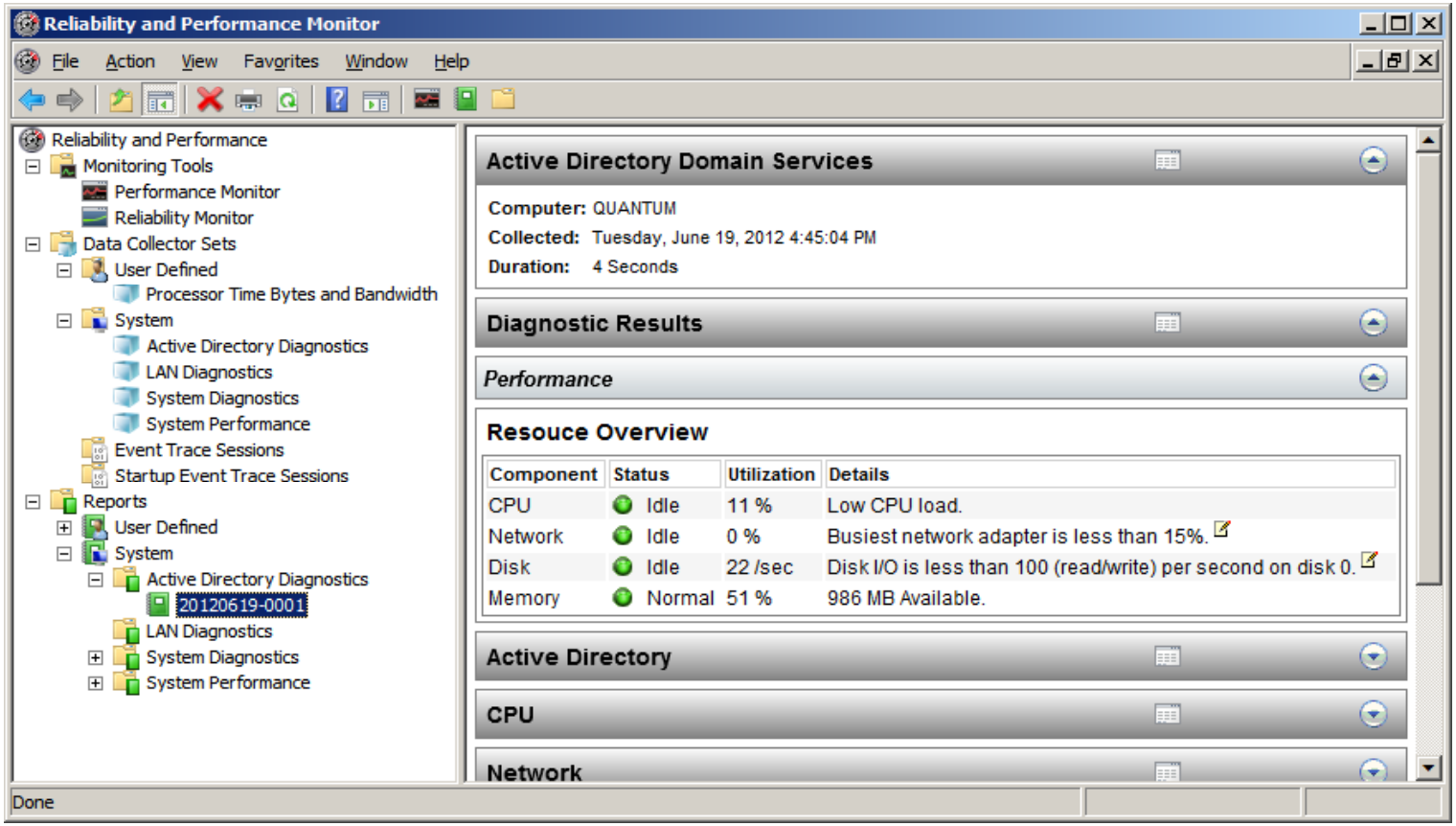
Active Directory Diagnostics Report

We can run the same report manually again or schedule the report as we did with our custom report. Under the System folder of the Data Collector Sets, we see Active Directory Diagnostics and we right click it and select start and then stop to make a short 13 second report. We can view the diagnostic results under the System folder and Active Directory Diagnostics by selecting the file. We can view the CPU, network, disk and memory report in the right pane.



Active Directory Diagnostics Report

Under the System folder of the Data Collector Sets, we see four reports. They are Active Directory Diagnostics, LAN Diagnostics, System Diagnostics, and System Performance. We right click on Active Directory Diagnostics and select start and then stop to make a short 4 second report. We can view the diagnostic results under the System folder and Active Directory Diagnostics by selecting the file. We can view the CPU, network, disk and memory report in the right pane.



Reliability Monitor

The Reliability Monitor has similar functions as the Performance Monitor. We can see System errors on the chart and create user defined data collection sets and reports.