

STUDENT ACTIVITY 5.2_KEY: UNDERSTAND PERFORMANCE MONITORING

MTA Course: 98-365 Windows Server® Administration Fundamentals

Topic: Understanding Performance Monitoring

File name: WinServerFund_SA_5.2_Key

Lesson Objective

5.2: Understand performance monitoring. *This objective may include but is not limited to:* methodology; procedures; creating a baseline; perfmon; Resource Monitor; Task Manager; performance counters

Resources, software, and additional files needed for this lesson

- Windows® Server 2008® R2 (Windows 7® Professional can be substituted)

Directions to the student

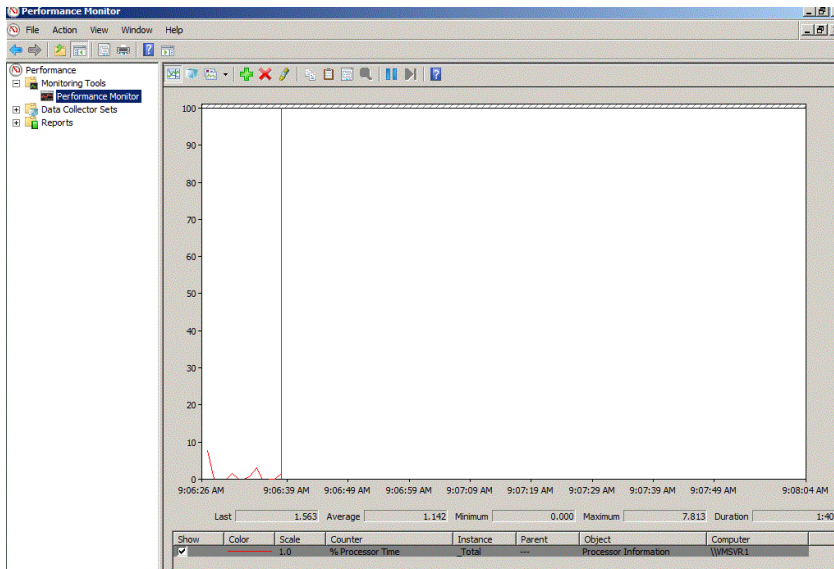
Complete the following activity. Have your instructor verify upon completion.

Content

Monitoring Specific System Activity

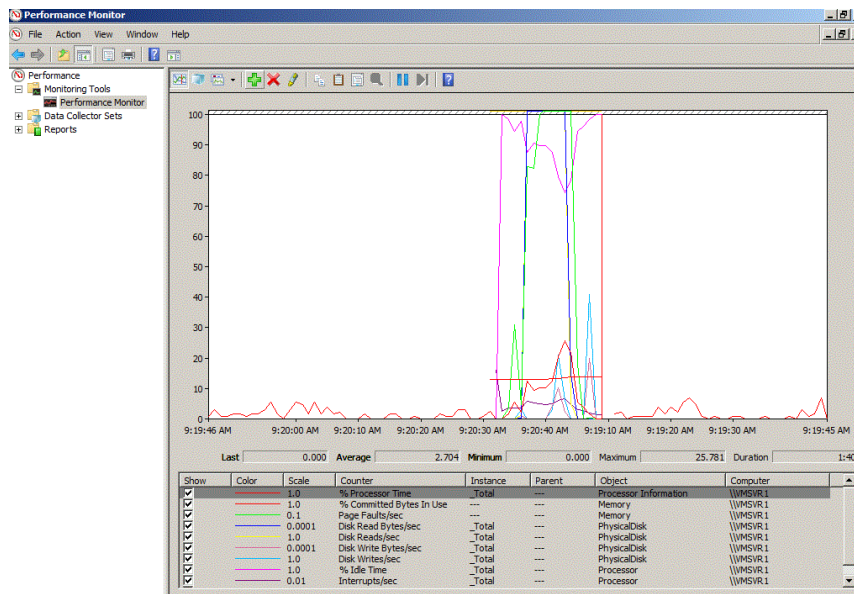
1. Log onto your Windows Server 2008 R2 as Administrator
2. Click Start, click in the Search box, type **perfmon.msc**, and then press Enter.

3. In the navigation tree, expand Monitoring Tools, and then click Performance Monitor (see below).




4. In the menu bar above the Performance Monitor graph display, either click the Add button (+) or right-click anywhere in the graph and click Add Counters... from the menu. The Add Counters dialog box opens.
5. In the Available Counters section, select counters to view in the Performance Monitor display. The following counters are suggested for this example:
 - a. Memory: % Committed Bytes In Use
 - b. Memory: Page Faults/sec
 - c. PhysicalDisk: Disk Read Bytes/sec
 - d. PhysicalDisk: Disk Reads/sec
 - e. PhysicalDisk: Disk Write Bytes/sec
 - f. PhysicalDisk: Disk Writes/sec
 - g. Processor: % Idle Time
 - h. Processor: Interrupts/sec
 - i. System: Threads

- When you are finished selecting counters, click OK. Your Performance Monitor display should look similar to the following:



- Keep these counters active for the next part of this activity

Creating a Data Collector Set from Performance Monitor

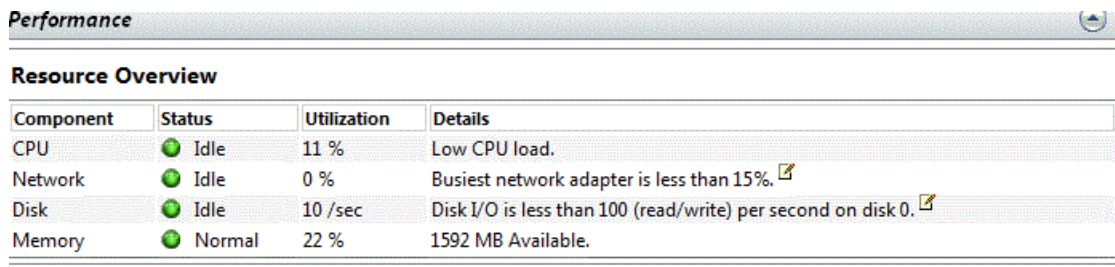
- Begin with the display of counters from the previous activity. If you no longer have these settings, start Performance Monitor and add counters to create a custom view you want to save as a Data Collector Set.
- Right-click on the Performance Monitor icon  , select New, and click Data Collector Set.
- Type the name MyData for your Data Collector Set and click Next.
- The Root Directory will contain data collected by the Data Collector Set.
- Click Finish to save the current settings and exit.
- In Performance Monitor, expand Data Collector Sets, User Defined.
- Right click on MyData and select Start. This will gather data while the system is running.

View the User Defined and System Performance Report

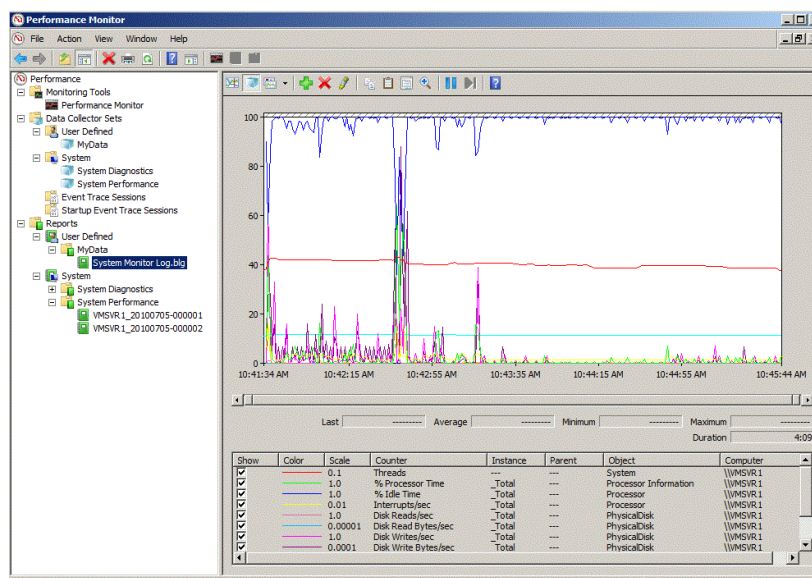
- Start Windows Performance Monitor.
- In the navigation tree, expand Data Collector Sets and expand System.
- Right-click System Performance and click Start. Data collection will begin.

4. In the navigation tree, expand Reports, expand System, expand System Performance, and click the current date/report.
5. When data collection and report generation are complete, the System Performance report will appear in the console pane.
6. Write down the details for the Resource Overview (details should be similar to picture below. Systems will vary.):

- a. CPU _____
- b. Network _____
- c. Disk _____
- d. Memory _____



7. In Performance Monitor, expand Data Collector Sets, User Defined.
8. Right click on MyData and select Stop.
9. Expand Reports, User Defined, MyData and click on System Monitor Log.blg. It should look similar to the following.



10. Have your instructor verify both your System and User Defined reports upon completion.