

# Lab 1: Performance Monitoring

NET311 - Computer Networks Management

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## Objectives

1. Get introduced to network management functions.
2. Use operating system's built-in monitoring tools.

## References

1. 70-411 Administering Windows Server 2012 R2 Lab Manual, Lab 3, Microsoft Official Academic Course.
2. Administering Windows Server 2012 R2 Training Guide, Lesson 10, Orin Thomas.

## Instructions

1. Read the lab instructions.
2. Provide question answers and screenshots in the supplied answer sheet.
3. After finishing the lab, upload your saved answer sheet to LMS.

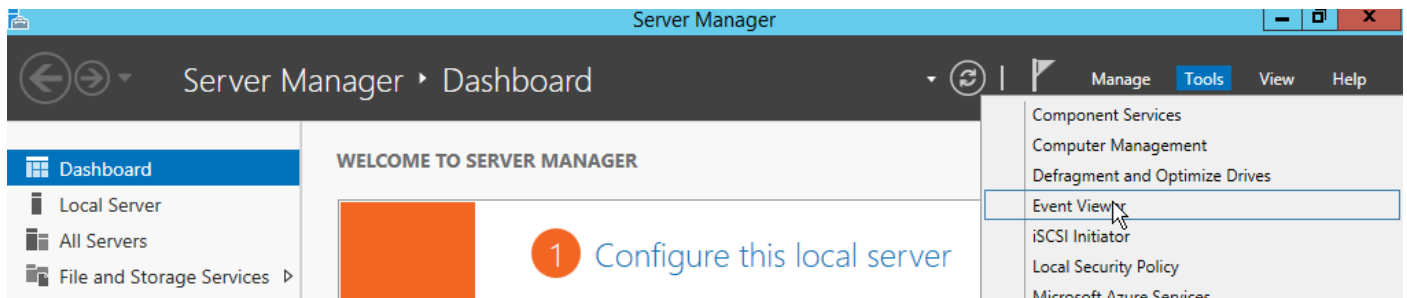
## Part 1: Using Event Viewer

1. Login to Windows Server.

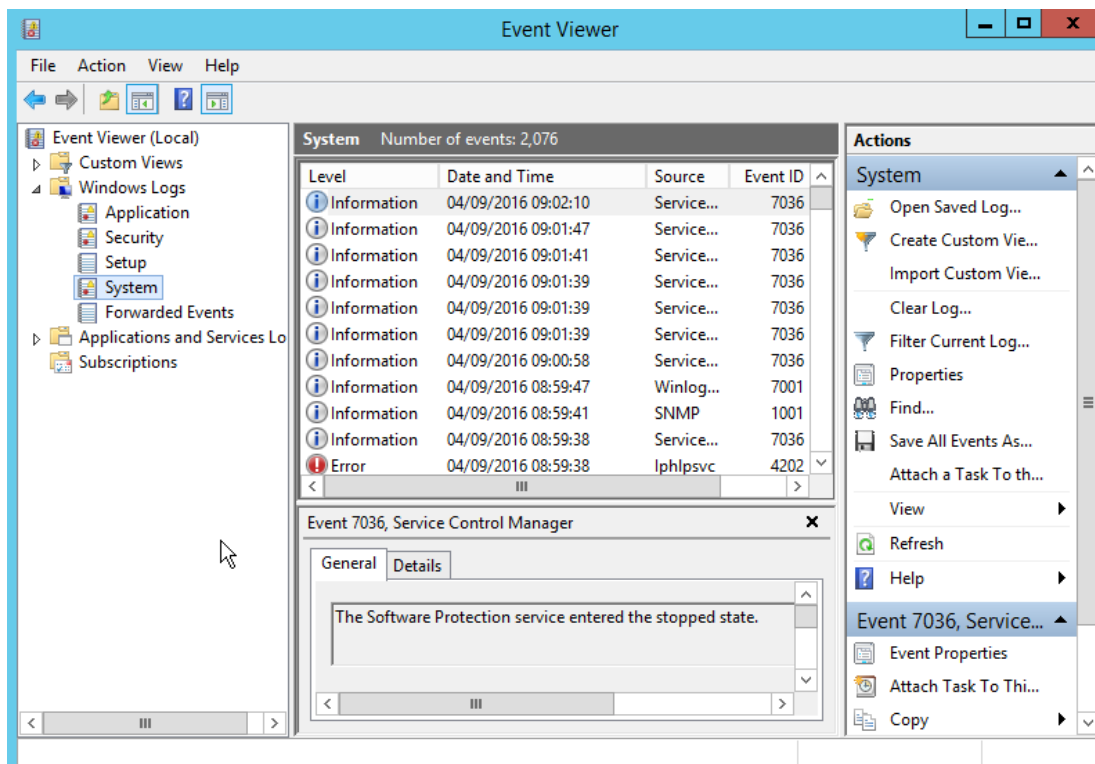
2. Run **Server Manager**.



3. Using Server Manager, click **Tools > Event Viewer**.



4. Expand **Windows Logs** folder and click on **System log**.



Lab sheet 1.1: provide a screenshot showing the System log.

5. Click on **Filter Current Log**.

System Number of events: 2,076 (!) New events available				
Level	Date and Time	Source	Event ID	Task C...
Information	04/09/2016 09:02:10	Service Control Manager	7036	None
Information	04/09/2016 09:01:47	Service Control Manager	7036	None
Information	04/09/2016 09:01:41	Service Control Manager	7036	None
Information	04/09/2016 09:01:39	Service Control Manager	7036	None
Information	04/09/2016 09:01:39	Service Control Manager	7036	None
Information	04/09/2016 09:01:39	Service Control Manager	7036	None
Information	04/09/2016 09:00:58	Service Control Manager	7036	None
Information	04/09/2016 08:59:47	Winlogon	7001	(1101)

**Actions**  
System  
Open Saved Log...  
Create Custom View...  
Import Custom View...  
Clear Log...  
Filter Current Log...  
Properties

6. Select the following filter options: Logged: **Last 7 days**. Event level: **Critical, Error, Warning**.

**Filter Current Log**

**Filter** XML

Logged: Last 7 days

Event level: ☒ Critical ☒ Warning ☐ Verbose  
☒ Error ☐ Information

☒ By log Event logs: System

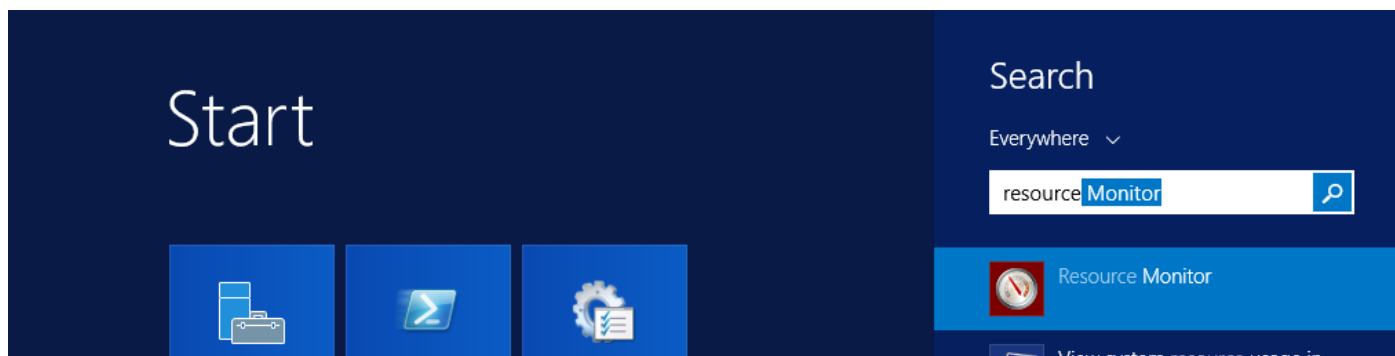
☐ By source Event sources:

Includes/Excludes Event IDs: Enter ID numbers and/or ID ranges separated by commas. To exclude criteria, type a minus sign first. For example 1,3,5-99,-76

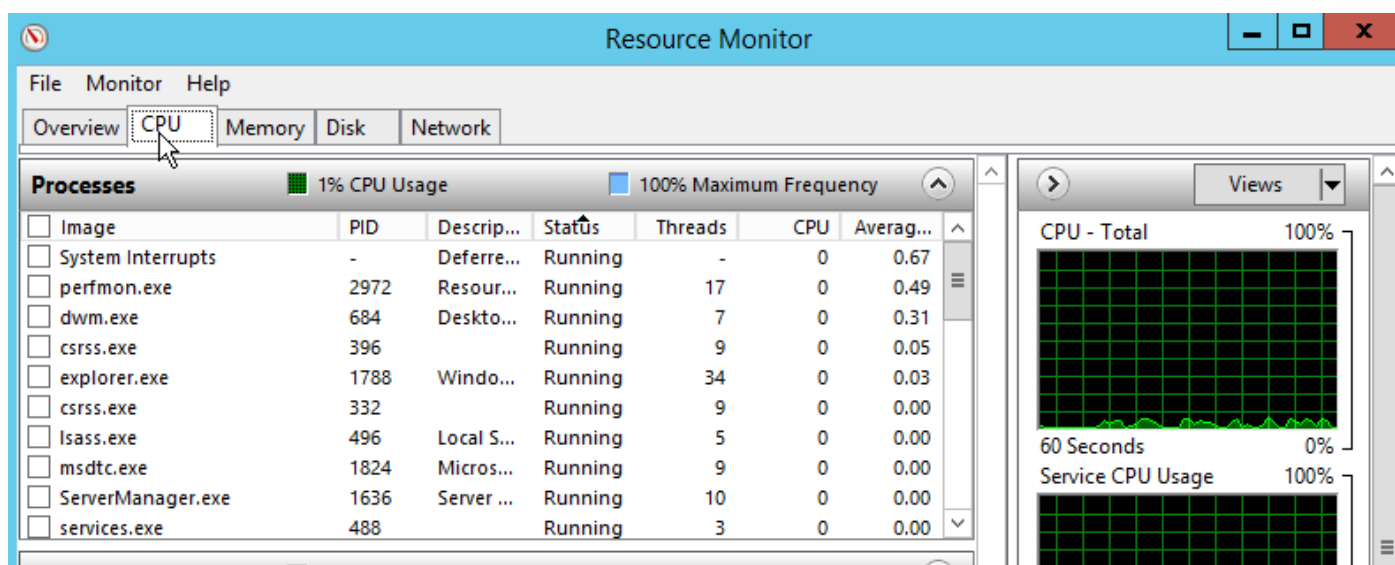
Lab sheet 1.2: provide a screenshot showing the filtered System log.

## Part 2: Using Resource Monitor

1. Click Start, type **resource monitor**, then click Enter.

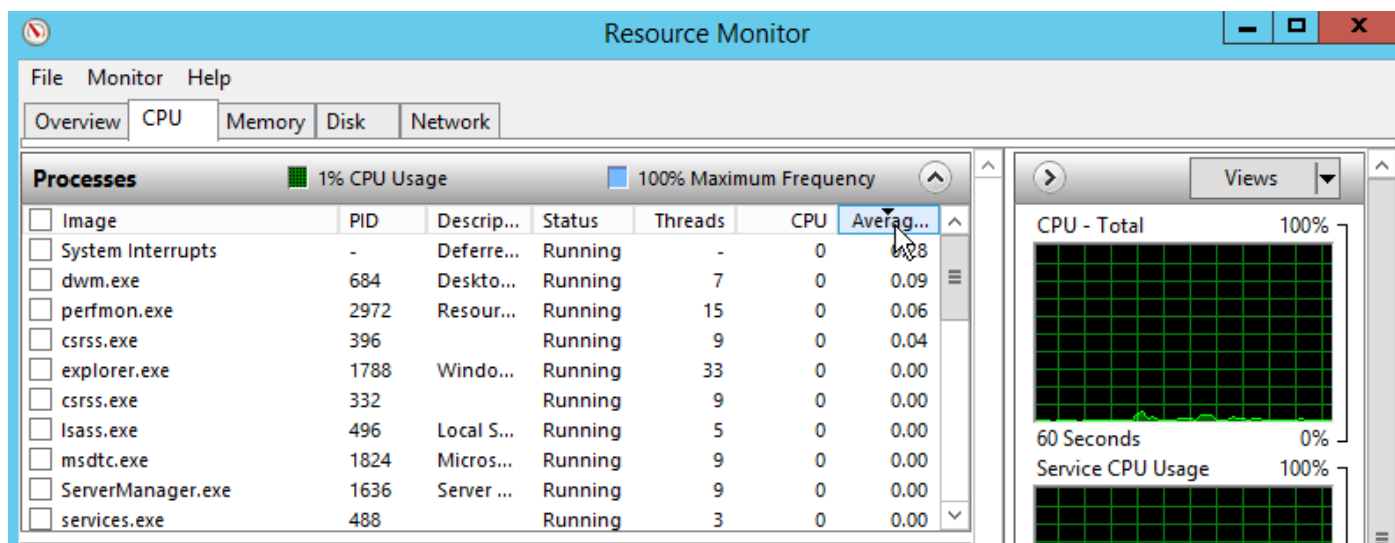


2. Open the **CPU** tab.



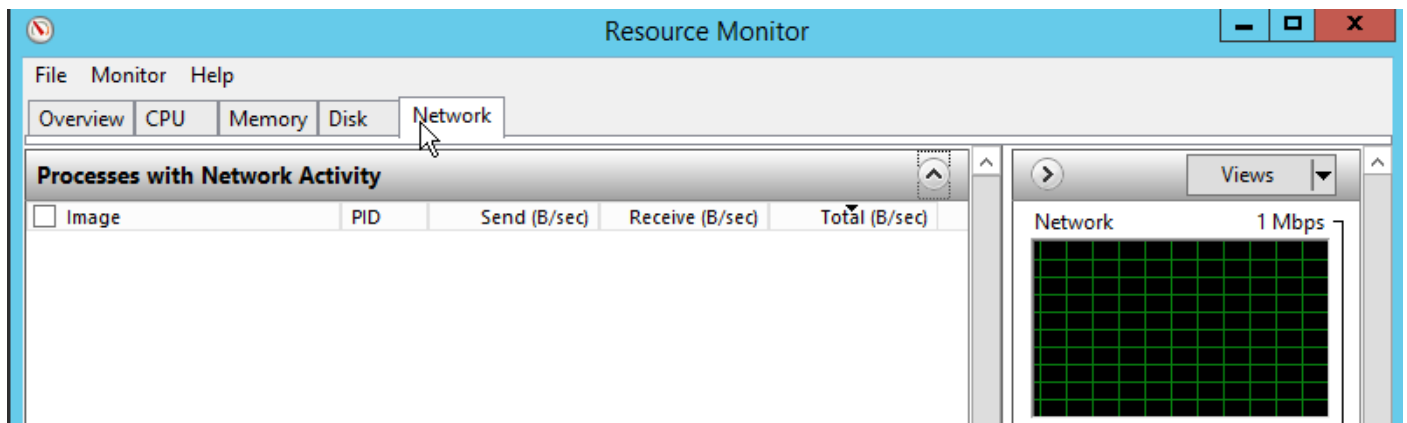
Lab sheet 2.1: provide a screenshot showing the CPU tab in the Resource Monitor.

3. Sort the processes based on the Average CPU usage by clicking on the **Average CPU** column.

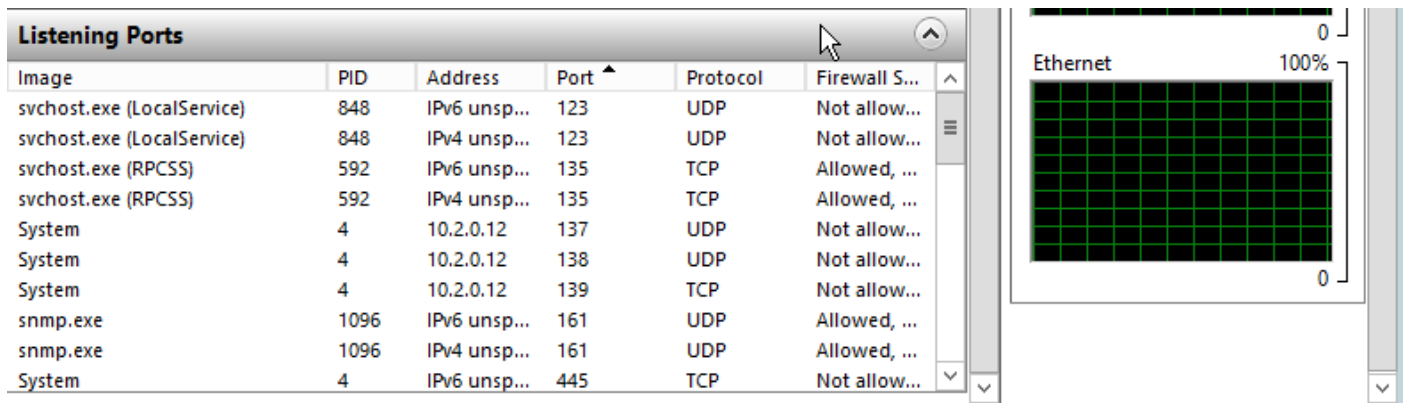


Lab sheet 2.2: type the name of the Image that has the highest Average CPU.

4. Open the **Network** tab.



5. Expand the **Listening Ports** section.



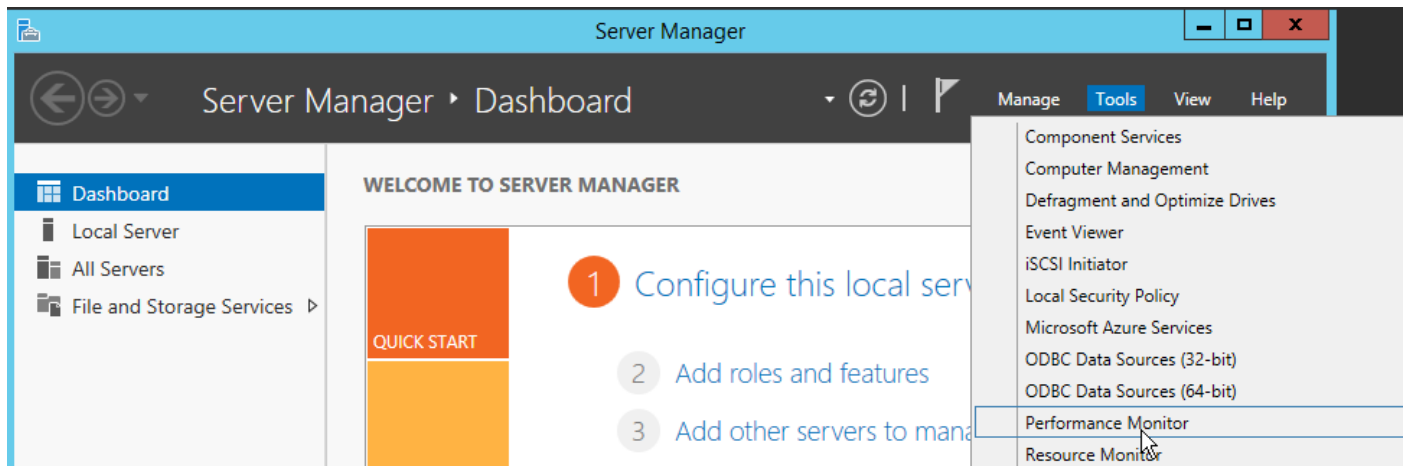
Lab sheet 2.3: provide a screenshot showing the Listening Ports section under the Network tab.

## Part 3: Using Performance Monitor

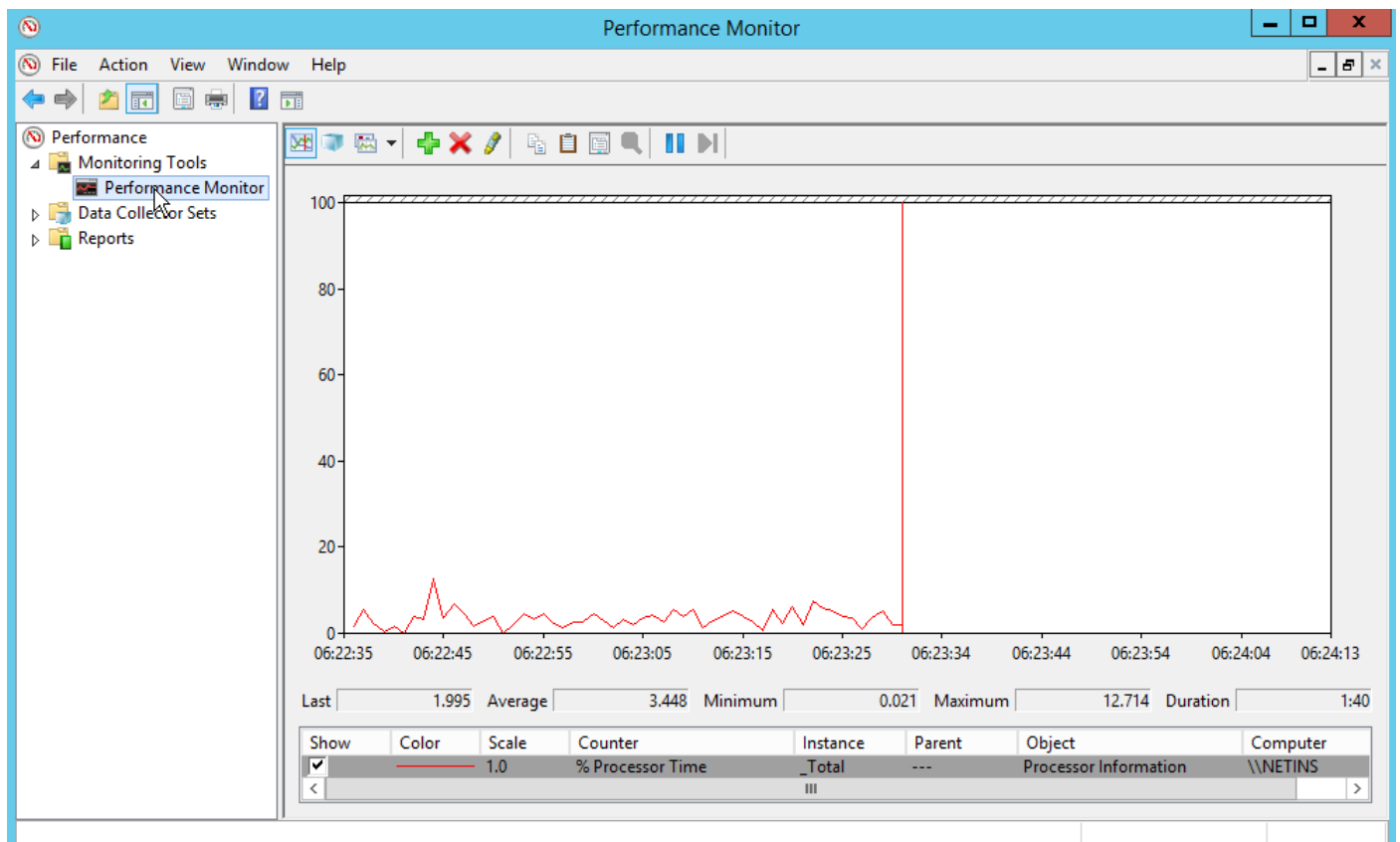
1. Run **Server Manager**.



2. Using Server Manager, click **Tools > Performance Monitor**.

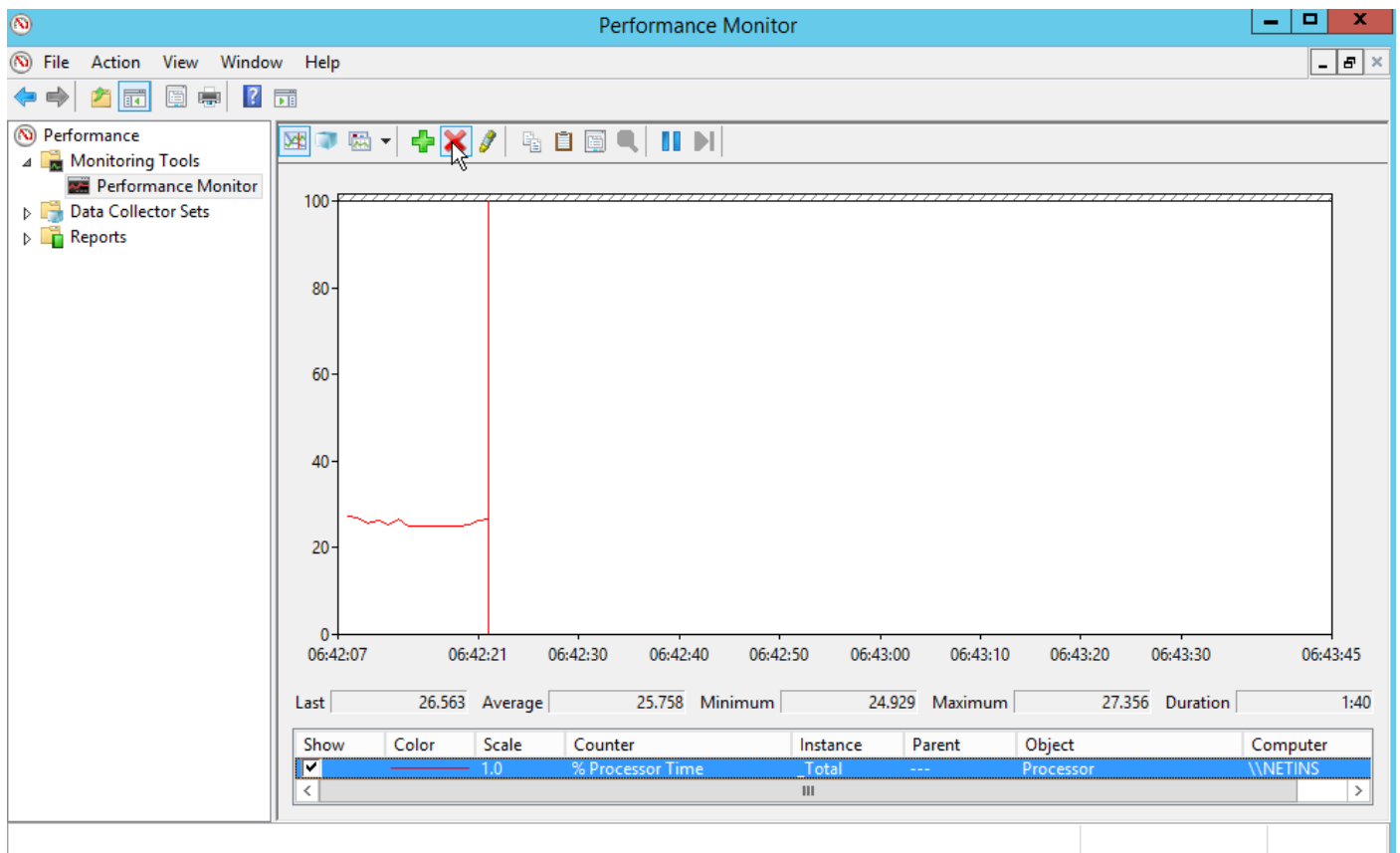


3. Under **Monitoring Tools**, click **Performance Monitor**.

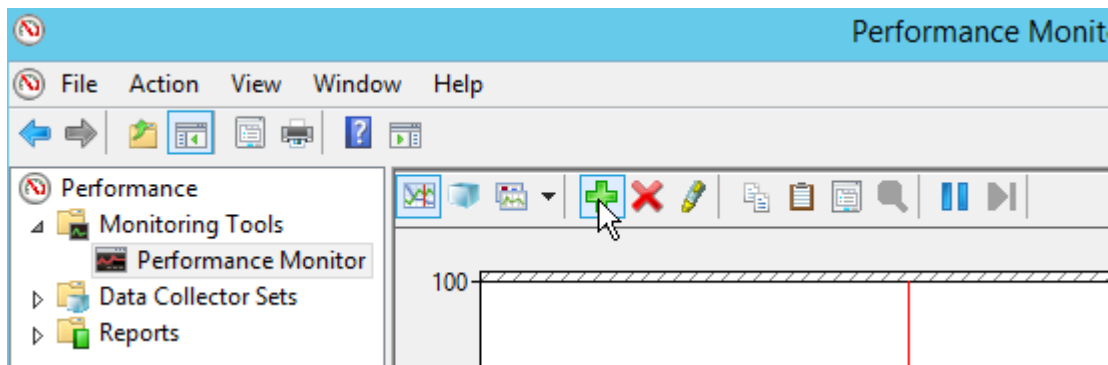


Lab sheet 3.1: provide a screenshot showing Performance Monitor.

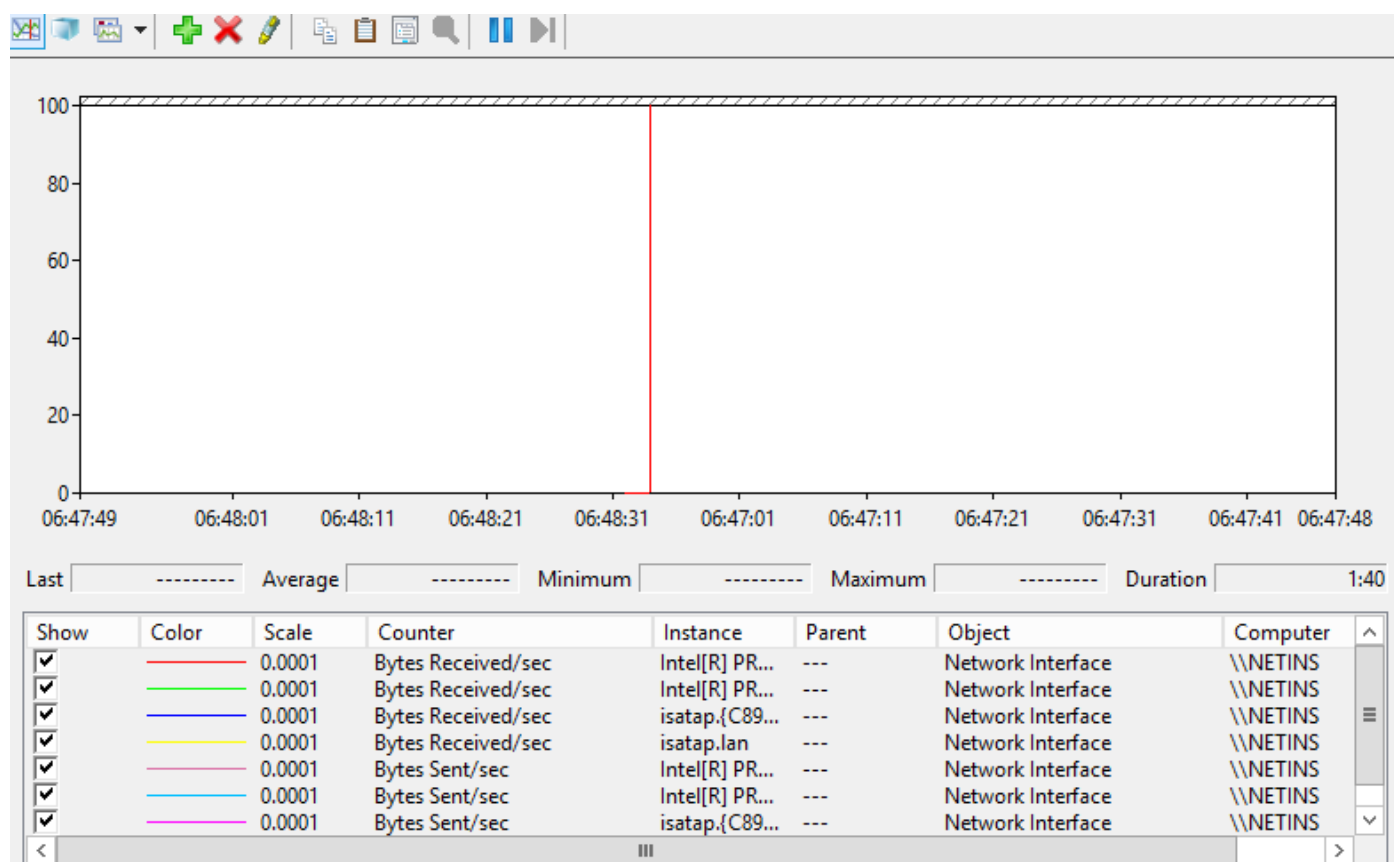
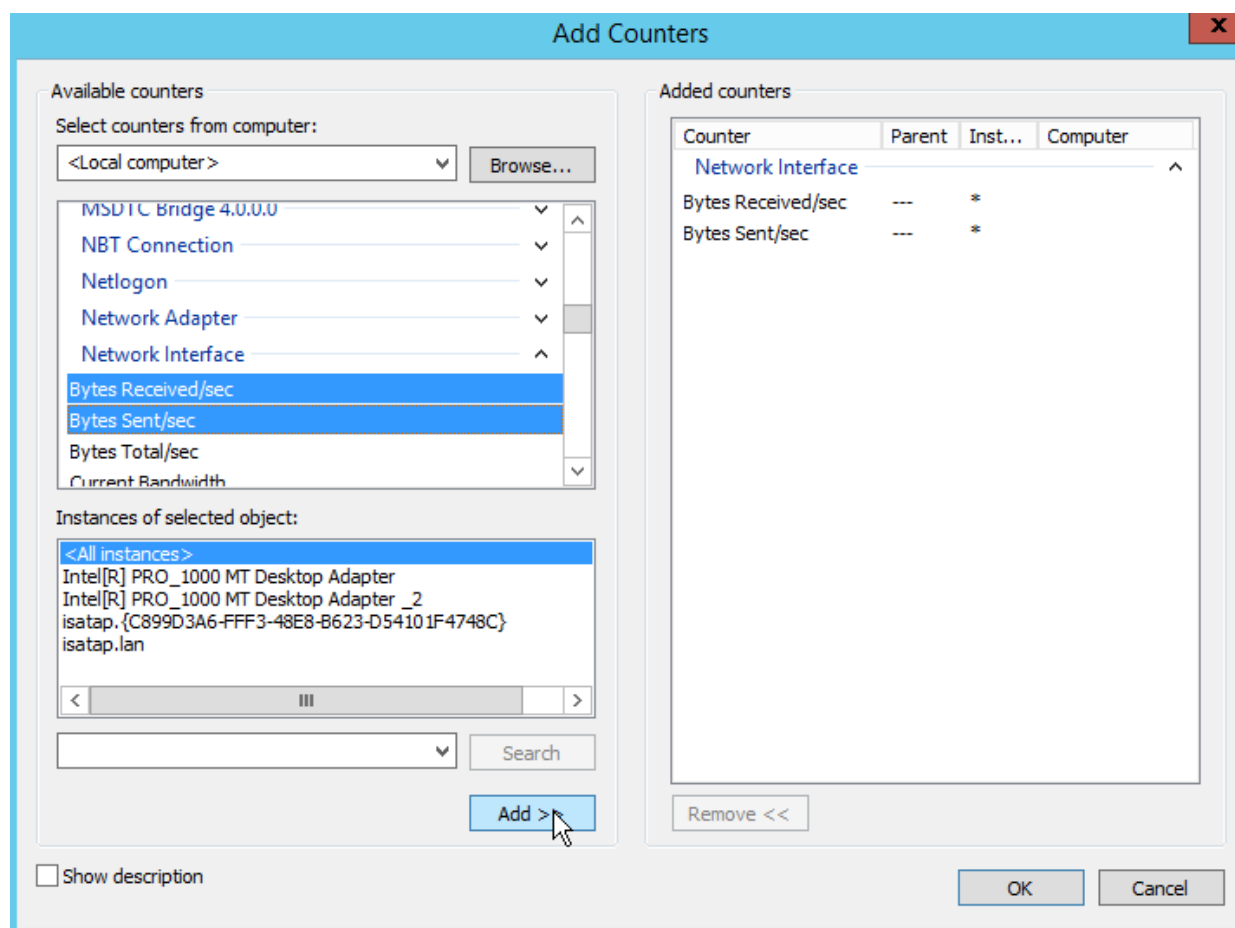
4. While selecting the **%Processor Time** counter, click the **Delete** button on the toolbar.



5. On the toolbar, click the Add button.



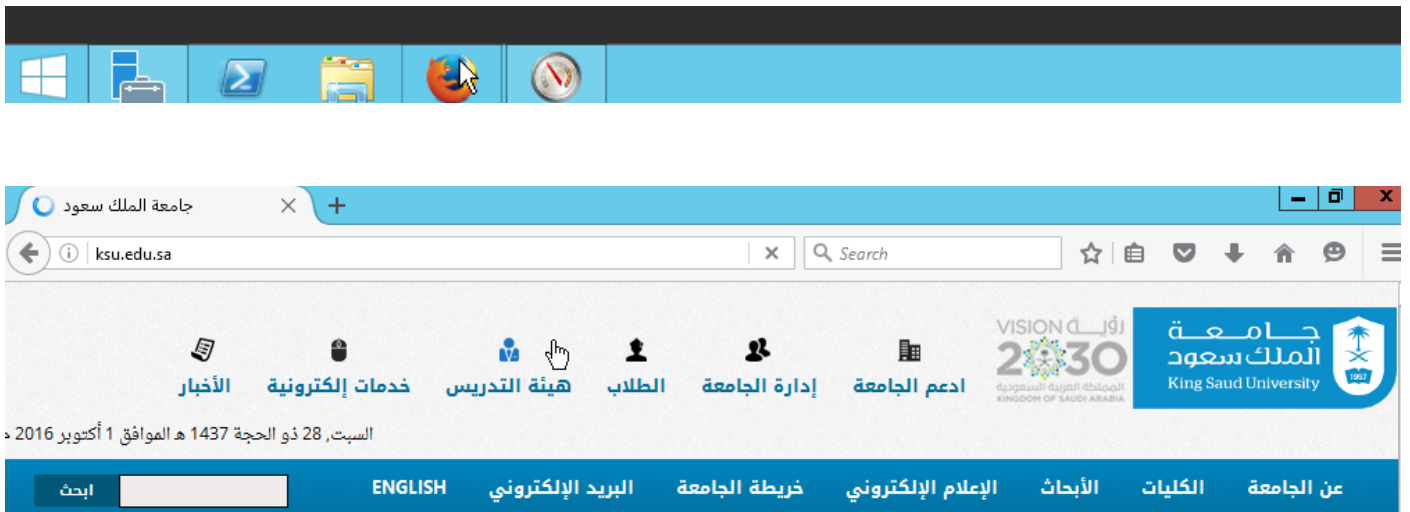
6. Under **Network Interface**, select **Bytes Received/sec** and **Bytes Sent/sec** and click **Add**.



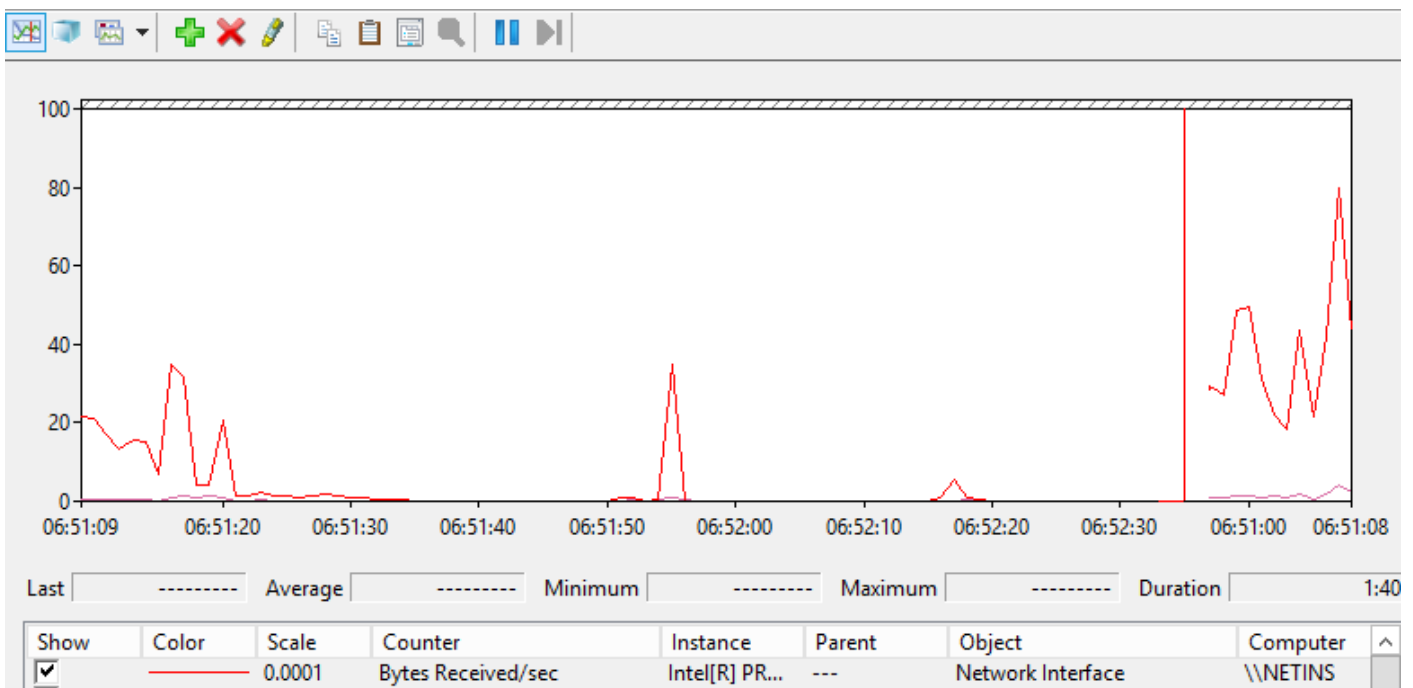
Lab sheet 3.2: provide a screenshot showing the added counters.



7. Open Firefox web browser and browse to a web site of your choice.



8. Check the Bytes Received/sec and Bytes sent/sec counters.



Lab sheet 3.3: provide a screenshot of the Network Interface counters after opening the page.