

Lab – Windows Task Manager

Introduction

In this lab, you will explore Task Manager and manage processes from within Task Manager.

Part 1: Working in the Processes tab

Part 2: Working in the Services tab

Part 3: Working in the Performance tab

Background / Scenario

The Task Manager is a system monitor program that provides information about the processes and programs running on a computer. It also allows the termination of processes and programs and modification of process priority.

Required Resources

- A Windows PC with Internet access

Part 1: Working in the Processes tab

- a. Open a command prompt and a web browser.

Microsoft Edge is used in this lab; however, any web browser will work. Just substitute your browser name whenever you see Microsoft Edge.

- b. Right-click the Task bar to open **Task Manager**. Another way to open the Task Manager is to press **Ctrl-Alt-Delete** to access the Windows Security screen and select **Task Manager**.

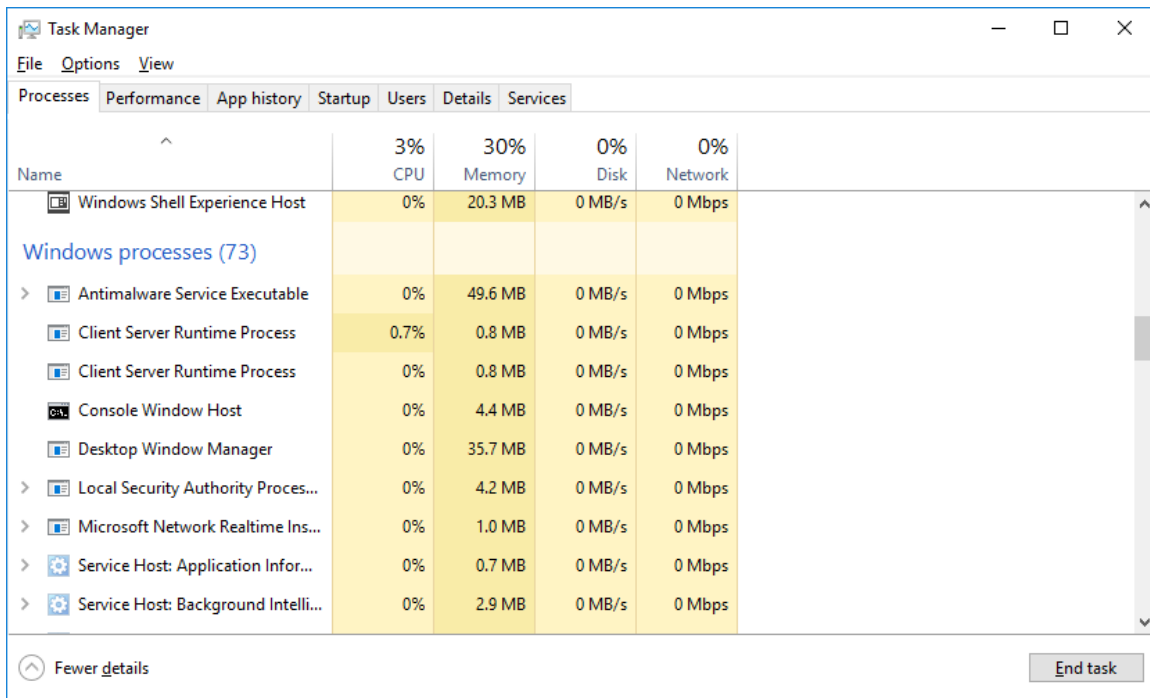
- c. Click **More details** to see all the processes that are listed in the Processes tab.

Name	4% CPU	30% Memory	0% Disk	0% Network
Apps (3)				
Microsoft Edge	0%	11.5 MB	0 MB/s	0 Mbps
Task Manager	0.4%	11.6 MB	0 MB/s	0 Mbps
Windows Command Processor	0%	0.4 MB	0 MB/s	0 Mbps
Background processes (20)				
Application Frame Host	0%	5.9 MB	0 MB/s	0 Mbps
Browser_Broker	0%	2.2 MB	0 MB/s	0 Mbps
COM Surrogate	0%	1.4 MB	0 MB/s	0 Mbps
Cortana	0%	56.7 MB	0 MB/s	0 Mbps
Host Process for Windows Tasks	0%	3.6 MB	0 MB/s	0 Mbps
Microsoft Edge	0%	3.8 MB	0 MB/s	0 Mbps

- d. Expand the Windows Command Processor heading. What is listed under this heading?
-
- e. There are three categories of processes listed in the Processes tab: Apps, Background processes, and Windows processes.
- The Apps are the applications that you have opened, such as Microsoft Edge, Task Manager, and Windows Command Processor, as shown in the figure above. Other applications that are opened by the users, such as web browsers and email clients, will also be listed here.
 - The Background processes are executed in the background by applications that are currently open.
 - The Windows processes are not shown in the figure. Scroll down to view them on your Windows PC. Windows processes are Microsoft Windows services that run in the background.

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Some of the background processes or Windows processes may be associated with foreground processes. For example, if you open a command prompt window, the Console Window Host process will be started in the Windows process section, as shown below.

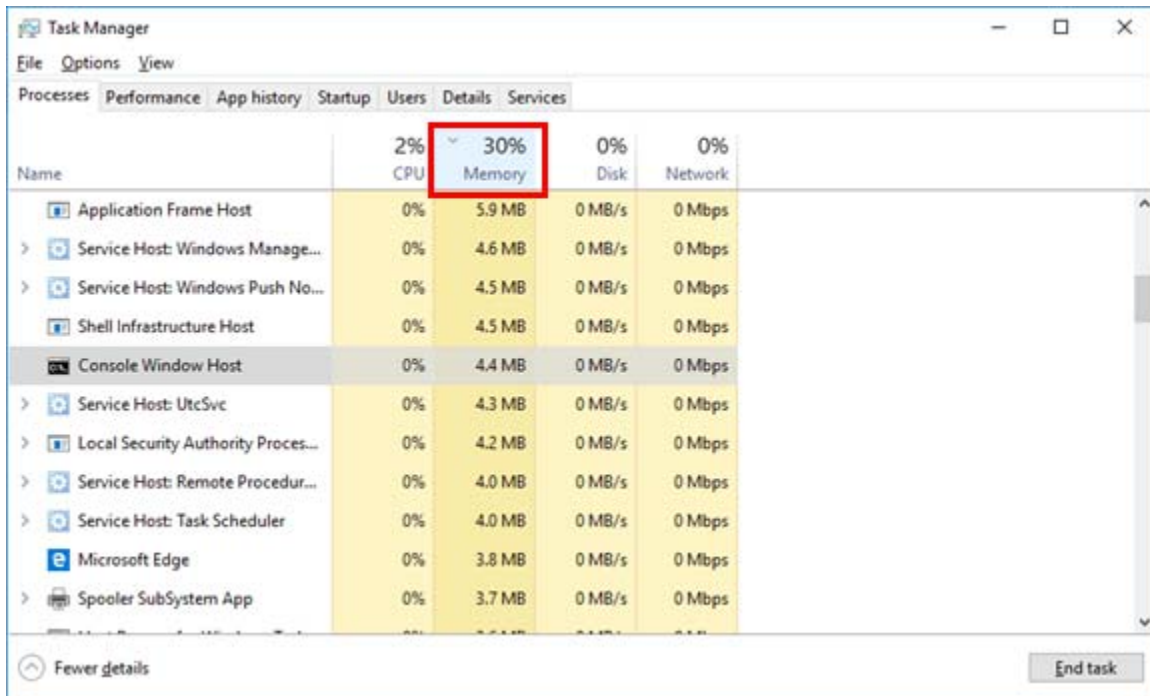


Name	3% CPU	30% Memory	0% Disk	0% Network
Windows Shell Experience Host	0%	20.3 MB	0 MB/s	0 Mbps
Windows processes (73)				
> Antimalware Service Executable	0%	49.6 MB	0 MB/s	0 Mbps
Client Server Runtime Process	0.7%	0.8 MB	0 MB/s	0 Mbps
Client Server Runtime Process	0%	0.8 MB	0 MB/s	0 Mbps
Console Window Host	0%	4.4 MB	0 MB/s	0 Mbps
Desktop Window Manager	0%	35.7 MB	0 MB/s	0 Mbps
> Local Security Authority Proces...	0%	4.2 MB	0 MB/s	0 Mbps
> Microsoft Network Realtime Ins...	0%	1.0 MB	0 MB/s	0 Mbps
> Service Host: Application Infor...	0%	0.7 MB	0 MB/s	0 Mbps
> Service Host: Background Intelli...	0%	2.9 MB	0 MB/s	0 Mbps

- f. Right-click **Console Window Host** and select **Properties**. What is the location of this filename and location of this process?
-
- g. Close the command prompt window. What happens to Windows Command Processor and Console Window Host when the command prompt window is closed?
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- b. Click the **Memory** heading. Click the **Memory** heading a second time.



The screenshot shows the Windows Task Manager Performance tab. The 'Memory' heading is selected and highlighted with a red box. The table below lists various system components and their resource usage.

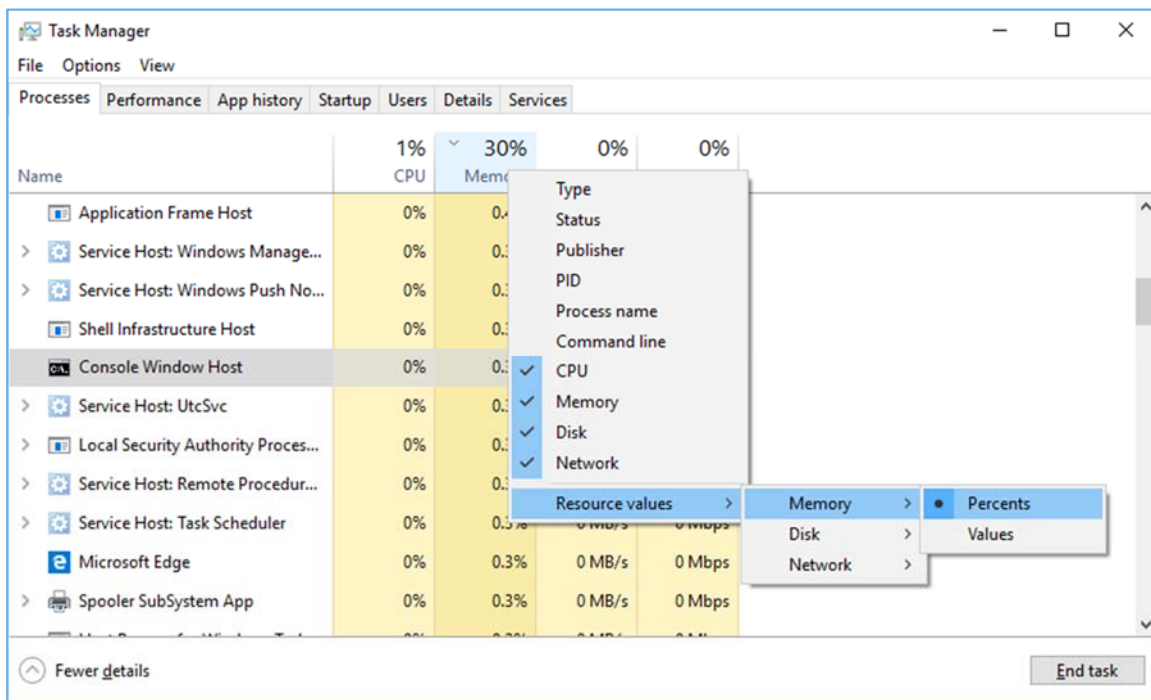
Name	2% CPU	30% Memory	0% Disk	0% Network
Application Frame Host	0%	5.9 MB	0 MB/s	0 Mbps
> Service Host: Windows Manage...	0%	4.6 MB	0 MB/s	0 Mbps
> Service Host: Windows Push No...	0%	4.5 MB	0 MB/s	0 Mbps
Shell Infrastructure Host	0%	4.5 MB	0 MB/s	0 Mbps
Console Window Host	0%	4.4 MB	0 MB/s	0 Mbps
> Service Host: UtcSvc	0%	4.3 MB	0 MB/s	0 Mbps
> Local Security Authority Proces...	0%	4.2 MB	0 MB/s	0 Mbps
> Service Host: Remote Procedur...	0%	4.0 MB	0 MB/s	0 Mbps
> Service Host: Task Scheduler	0%	4.0 MB	0 MB/s	0 Mbps
Microsoft Edge	0%	3.8 MB	0 MB/s	0 Mbps
> Spooler SubSystem App	0%	3.7 MB	0 MB/s	0 Mbps

At the bottom of the window, there is a 'Fewer details' button on the left and an 'End task' button on the right.

What effect does this have on the columns?

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- c. Right-click on the **Memory** heading, and then select **Resource values > Memory > Percents**.

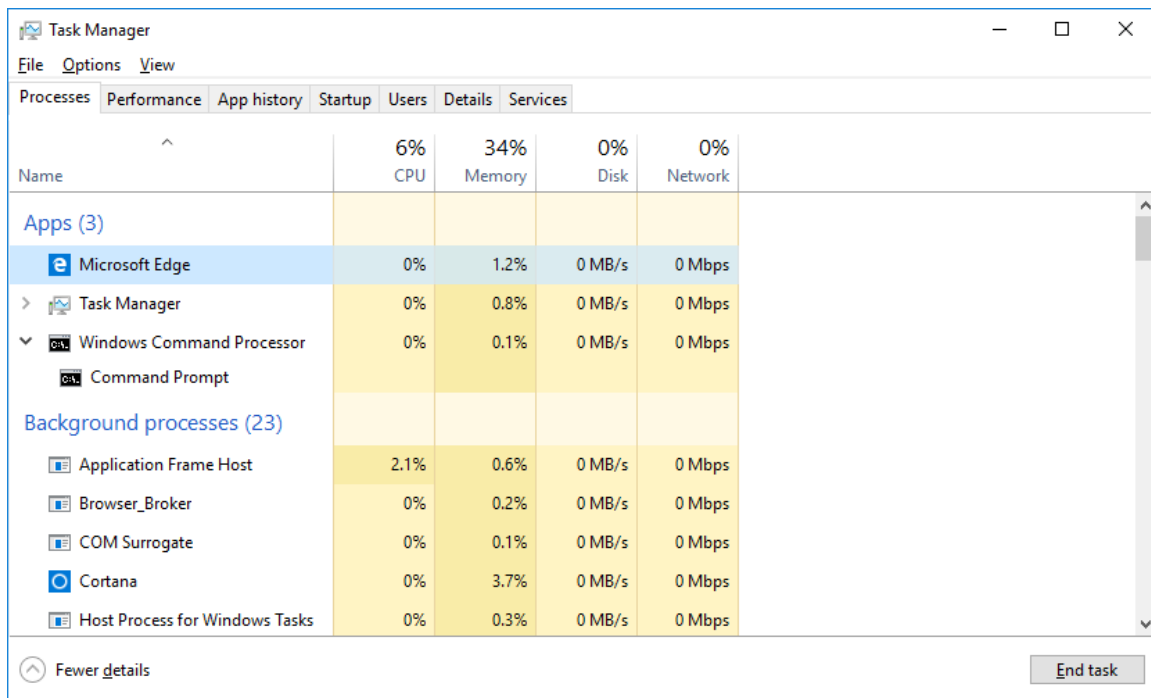


What affect does this have on the Memory column?

How could this be useful?

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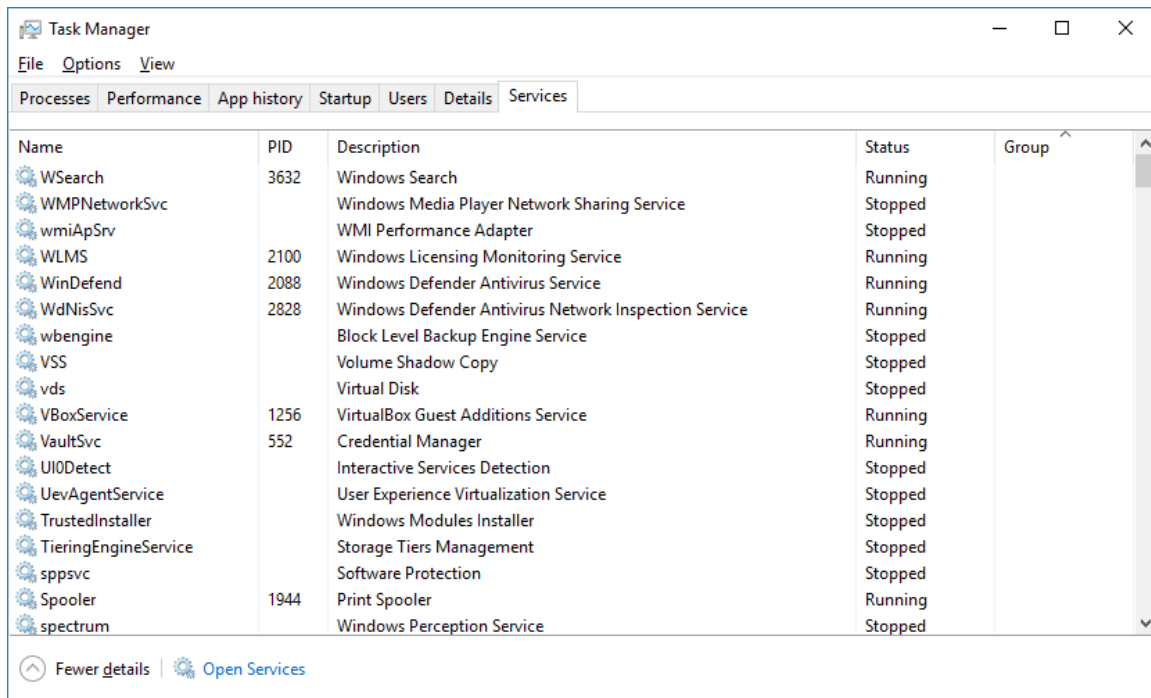
- d. Return to the **Task Manager**. Click the **Name** heading.



- e. Double-click the Microsoft Edge. What happens?
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- f. Right-click **Microsoft Edge**, and select **End task**. What happens to the web browser windows?
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Part 2: Working in the Services tab

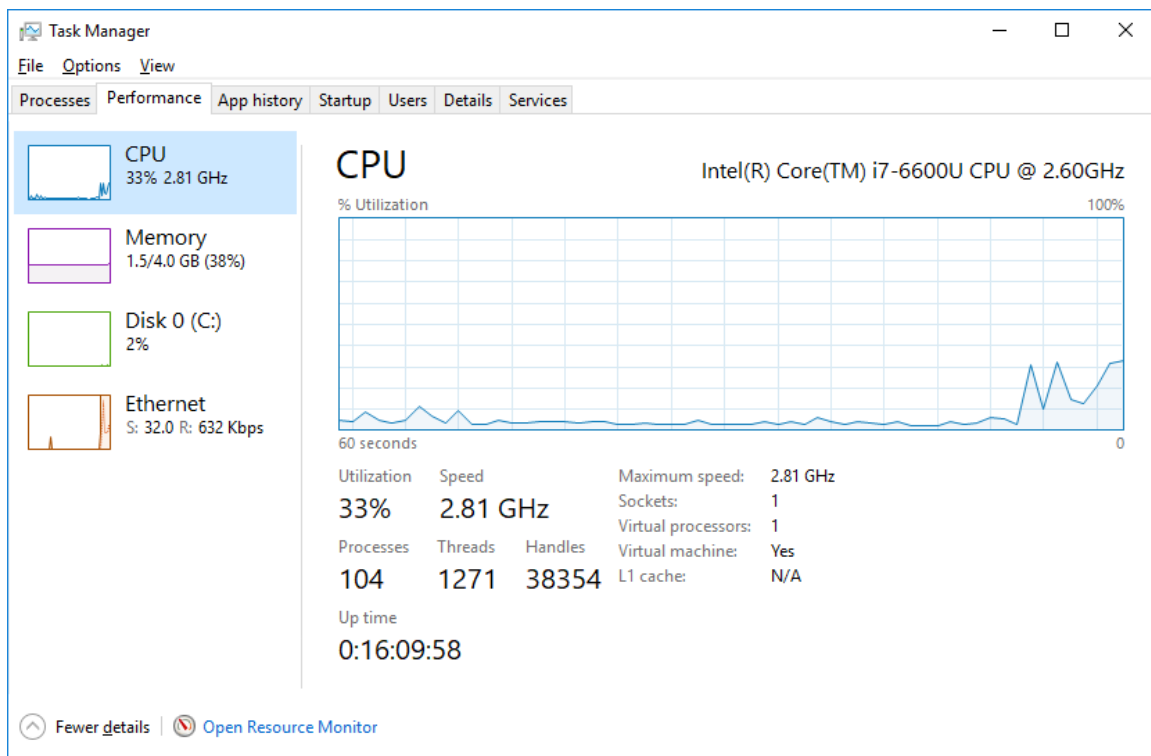
- Click the **Services** tab. Use the scroll bar on the right side of the **Services** window to view all the services listed.



What statuses are listed?

Part 3: Working in the Performance tab

- a. Click the **Performance** tab.

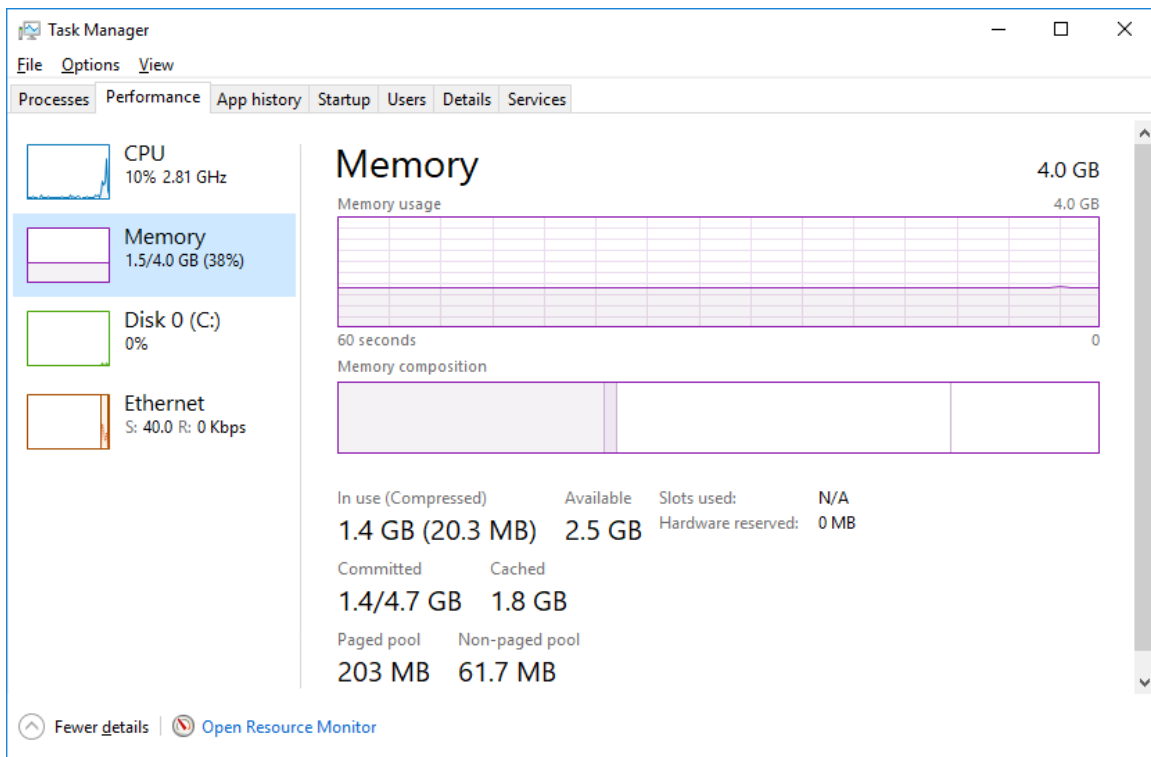


How many threads are running?

How many processes are running?

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- b. Click the **Memory** in the left panel of the **Performance** tab.



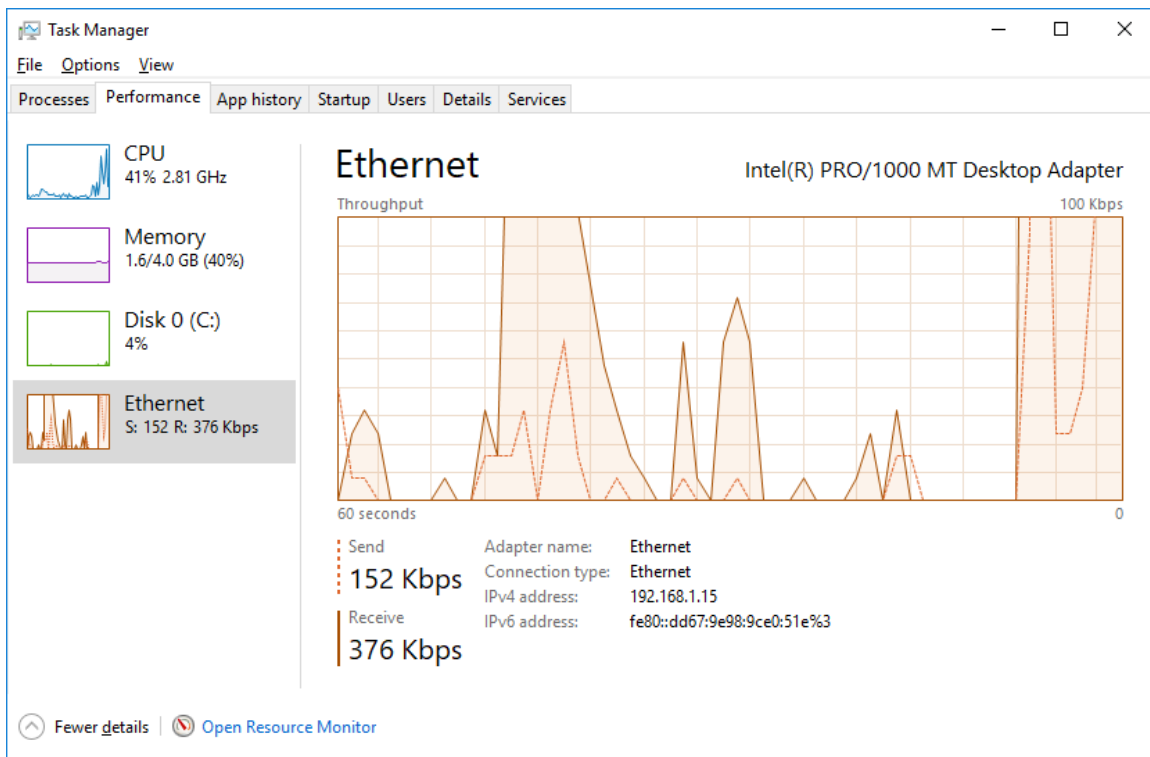
What is the total physical memory (MB)?

What is the available physical memory (MB)?

How much physical memory (MB) is being used by the computer?

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- c. Click the **Ethernet Chart** in the left panel of the **Performance** tab.

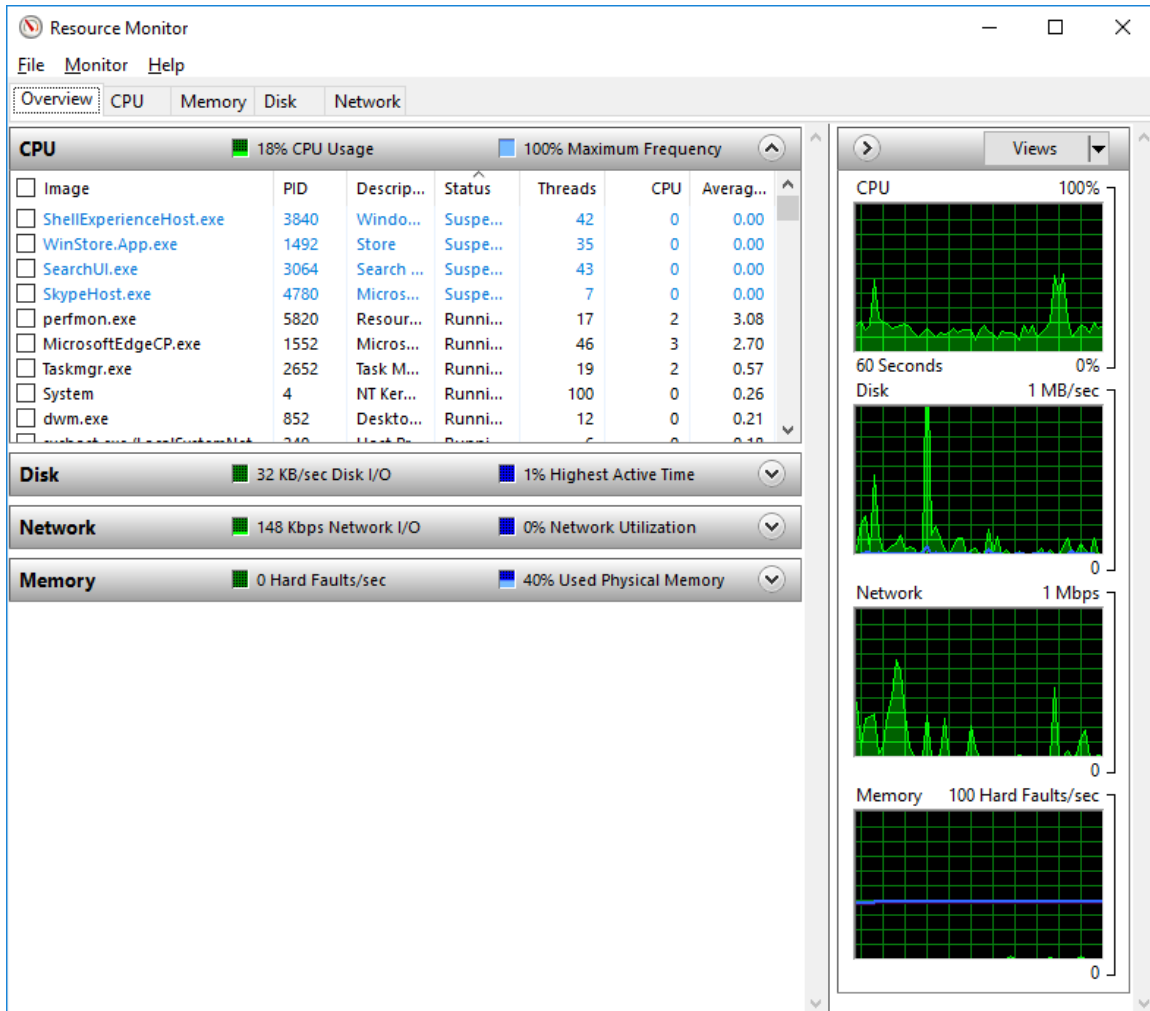


What is the link speed?

What is the IPv4 address of the PC?

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- d. Click **Open Resource Monitor** to open the Resource Monitor utility from the Performance tab in Task Manager.



Reflection

Why is it important for an administrator to understand how to work within the Task Manager?
