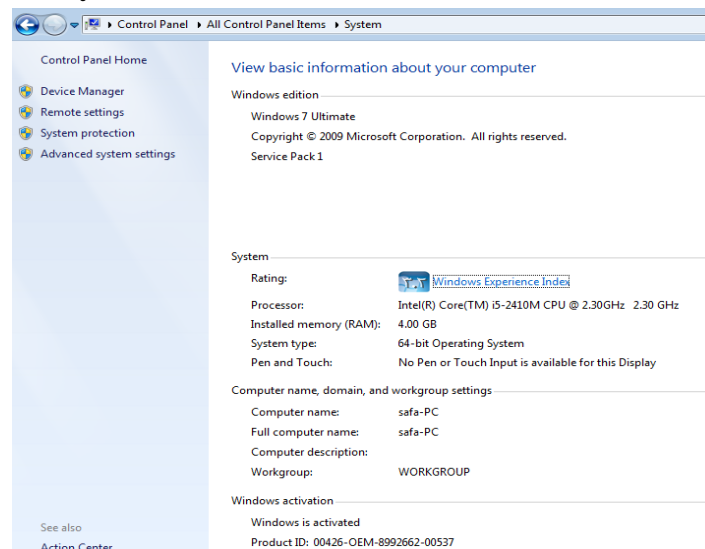


## Windows Performance

You can \* view a summary of important information about your computer by opening System in Control Panel. You can \* see basic hardware information, such as your computer's name, and you can \* change important system settings by clicking the links in the left pane of System.



**System** presents a summary view of basic details about your computer, including:

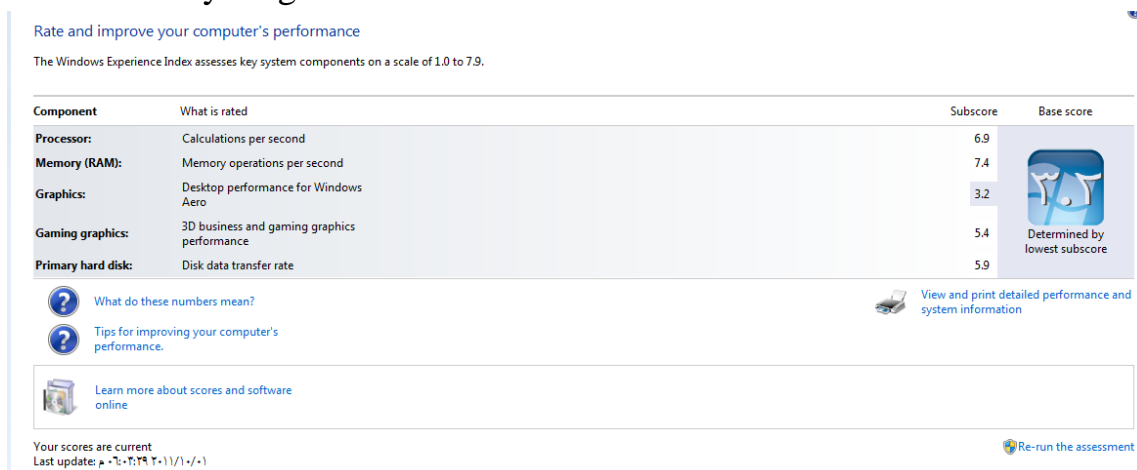
- **Windows edition**. Lists information about the version of Windows running on your computer.
- **System**. Displays your computer's Windows Experience Index base score, which is a number that describes the overall capability of your computer. Your computer's processor type, speed, are listed, if your computer uses multiple processors, for example, if your computer has two processors, you will see "(2 processors)" displayed.
- **Computer name, domain, and workgroup settings**. Displays your computer's name and workgroup or domain information. You can change this information and add user accounts by clicking Change settings.
- **Windows activation**. Activation verifies that your copy of Windows is genuine, which helps prevent software hacking.

Windows 7 comes with the Performance Rating tool that rates your computer based on its processor, RAM, hard disk, regular graphics, and gaming graphics. The result is the Windows Experience Index base score.

## What is the Windows Experience Index?

The Windows Experience Index measures the capability of your computer's hardware and software configuration and expresses this measurement as a number called a **base score**. A higher base score generally means that your computer will perform better and faster than a computer with a lower base score, especially when performing more advanced and resource-intensive tasks .

Each hardware component receives an individual sub-score. Your computer's base score is determined by the lowest sub-score based on the capabilities of different parts of your computer, including [random access memory \(RAM\)](#), [central processing unit \(CPU\)](#), [hard disk](#), general [graphics performance](#) on the desktop, and [3-D graphics](#) capability. For example, if the lowest sub-score of an individual hardware component is 2.6, then the base score is 2.6. The base score is not an average of the combined sub-scores. However, the sub-scores can give you a view of how the components that are most important to you will perform, and can help you decide which components to upgrade . The scores currently range from 1.0 to 7.9.



### ***To view your computer's base score***

1. ***Open Performance Information and Tools.***
2. View the ***Windows Experience Index base score and sub-scores*** for your computer. If you recently upgraded your hardware and want to find out if your score has changed, click Re-run the assessment. If you are prompted for an administrator password or confirmation, type the password or provide confirmation.

If a particular program or Windows 7 experience requires a higher score than your base score, you can upgrade your hardware to meet the necessary base score. If you install new hardware and want to see if your score has changed, click Re-run the assessment. To view detailed information about the hardware on your computer, such as processor

speed, the amount of random access memory (RAM) installed, and hard disk size, click View and print detailed performance and system information.

### *If your base score or sub-scores can't be updated*

The following *conditions might prevent Windows from updating the Windows Experience Index*:

- *Running on battery power*. Windows automatically tries to conserve **الحفاظ** power when running on a battery alone. So if your computer is running on battery power, a performance assessment won't reflect its true capabilities. Plug your computer in, and then re-run the assessment.
- *Not enough free disk space*. The Windows Experience Index assessment tool creates a test file on your hard disk. If there's not enough free disk space to create the test file, the assessment can't be complete. You can use the Disk Cleanup tool to free up disk space.
- *The assessment is already running*. If the Windows Experience Index assessment tool is already running, your scores can't be updated.
- *The display driver is older*. If your computer is using an older version of the display driver, your scores might not be updated.

### *Monitor how much CPU and memory resources are being used*

You can use **Task Manager** to :

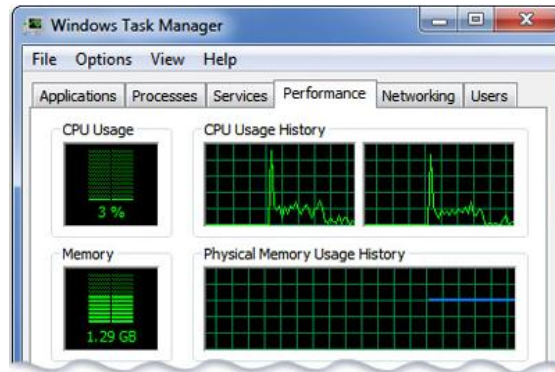
\* *view services that are running on your computer*.

\* *find processes that might be associated with a particular service*.

(A **process** is a *file*, such as an executable file ending with a file name extension of .exe, *that the computer uses to directly start a program or to start other services*).

\* *Performance tab in Task Manager provides advanced details about how Windows and other programs running on your computer using system resources, such as random access memory (RAM) and the central processing unit (CPU).*

1. Open **Task Manager**.
2. Click the **Performance** tab.

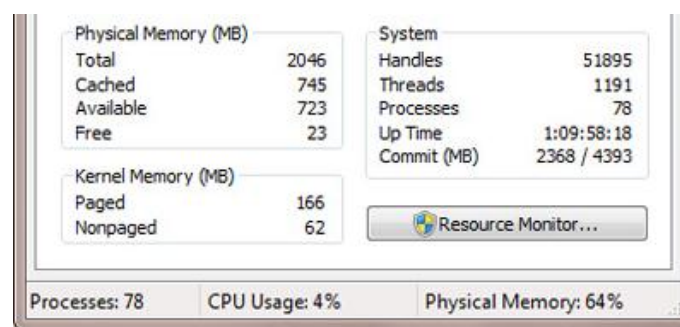


Performance graphs

The Performance tab includes **four graphs**. The **top two graphs** show how much CPU is being used both at the moment and for the past few minutes. A high percentage means that programs or processes are requiring a lot of CPU resources, which can slow your computer. If the percentage appears frozen at or near 100%, then a program might not be responding.

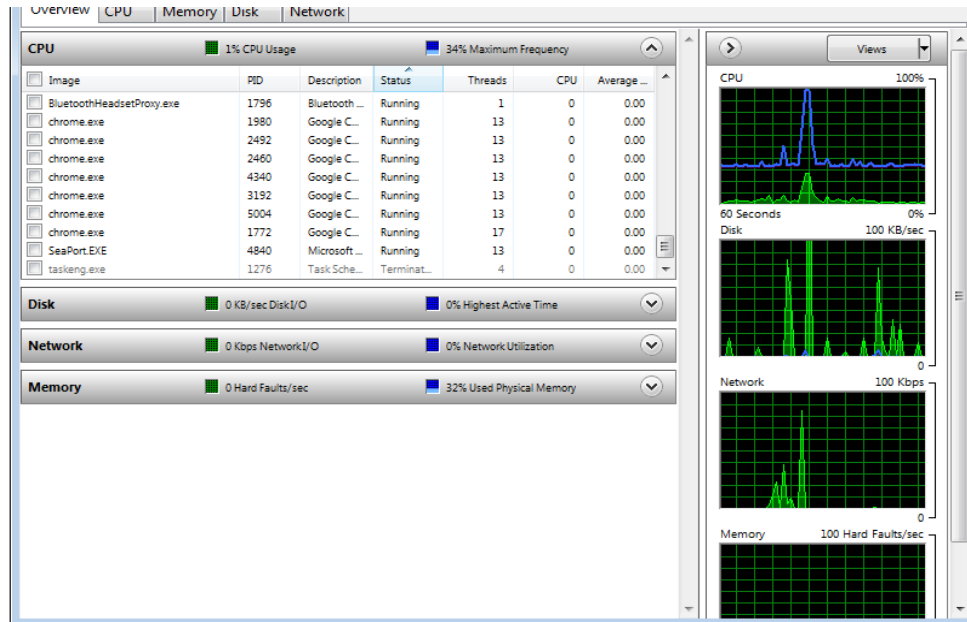
The **bottom two graphs** display how much RAM, or physical memory, is being used in megabytes (MB) both at the current moment and for the past few minutes. The percentage of memory being used is listed at the bottom of the Task Manager window. If memory use seems consistently high or slows your computer's performance noticeably, try reducing the number of programs you have open at one time or install more RAM.

### [Get details about how much memory is being used](#)



Performance tables

To view advanced information about how much memory and CPU resources are being used, click the Resource Monitor button. Resource Monitor shows graphical summaries like those in Task Manager, but in greater detail. It also includes more details about resources, such as disk use and network use.



### *Exit a program that isn't responding*

If a program on your computer stops responding, Windows will try to find the problem and fix it automatically. If you don't want to wait, you can end the program yourself by using Task Manager.

Using Task Manager to end a program yourself might be faster than waiting, but any unsaved changes will be lost. If you have important work that you want to keep, wait a few minutes and let Windows try to fix the problem first.

1. Open **Task Manager**.
2. Click the **Applications** tab, click the *program* that isn't responding, and then click **End Task**.