



High CPU Utilization in Newer Windows Versions

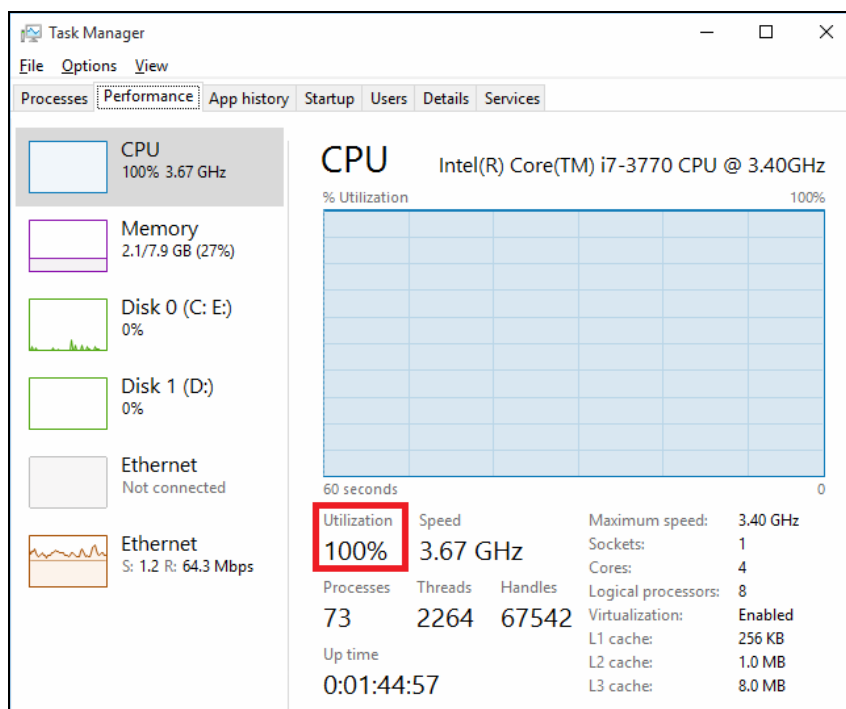
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Applied to

Windows 8 and later versions
Windows Server 2012 and later versions

Symptoms

In newer Windows versions, the Performance tab in Task Manager often shows a CPU utilization of 100% when running GeoVision software with GeoVision dongles or capture cards installed.





Explanation

In newer Windows versions, the **CPU utilization** takes into account of the CPU speed and is not calculated the same way as the **CPU usage** seen in Windows 7 and older versions. A 100% CPU utilization in Windows 10 is not the same as a 100% CPU usage in Windows 7.

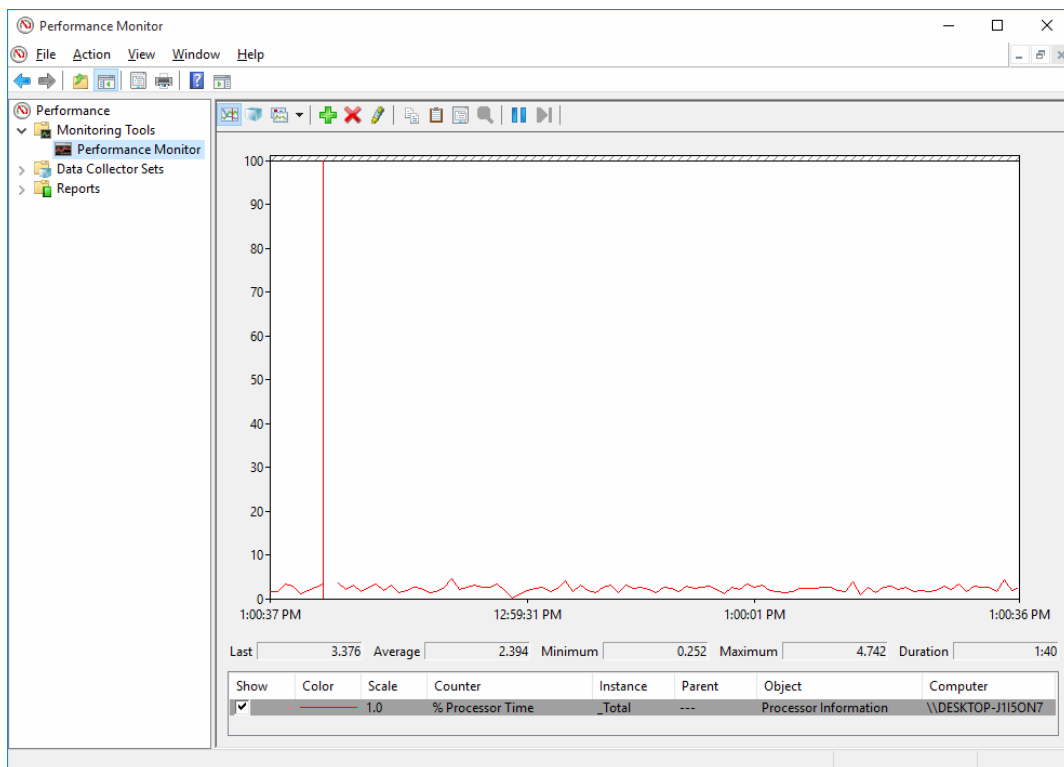
When running GeoVision software with GeoVision dongles or capture cards, the power saving mode of the computer is automatically disabled in order to avoid stability issues. **Do not restore the power plan to default settings**, which will enable the power saving mode again, even though the CPU utilization will appear lower in the Performance tab of Task Manager due to the lower CPU speed used during power saving mode.

Looking Up the CPU Usage

There are two ways to see the actual CPU usage in newer Windows versions.

Method 1: Using Windows' Performance Monitor

1. Click **Start**, type **perfmon** in the Search box, and then press Enter.
2. Under Monitoring Tools, click **Performance Monitor**. The CPU usage is displayed.





Method 2: Using System Idle Process in Task Manager

1. Open Task Manager (Ctrl-Alt-Delete) and click the **Details** tab.
2. Look for System Idle Process in the list and subtract its CPU usage from 100% to obtain the current CPU usage.

Name	PID	Status	User name	CPU	Memory (p...	Description
System Idle Process	0	Running	SYSTEM	98	4 K	Percentage of time t...
System	4	Running	SYSTEM	01	3,228 K	NT Kernel & System
IPCamDLLEXE.exe	4580	Running	SYSTEM	01	89,820 K	IPCamDLLEXE MFC ...
CodecExe.exe	5408	Running	test273	00	42,964 K	CodecExe MFC Appl...
Taskmgr.exe	2912	Running	test273	00	9,888 K	Task Manager
System interrupts	-	Running	SYSTEM	00	0 K	Deferred procedure ...
GVPlayback.exe	7024	Running	test273	00	25,100 K	Geo Playback (No U...
svchost.exe	1280	Running	NETWORK...	00	3,832 K	Host Process for Wi...

The CPU usage listed for System Idle Process represents the percentage of CPU that is currently idle and not in use. In the figure above, the current CPU usage would be 2%.

$$(100 \% - 98\% = 2\%)$$