

# Windows Shutdown Explained

## JSutils Technical Note: JSU002

### Applies To: AllOff, AllOff Lite, LANOff, ProcOff

**Operating Systems: Windows 2000, Windows XP, Windows Vista, Windows**

Useful Links: [JSutils Website](#) [Shutdown Utility Index](#)  
[Technical Notes Index](#) [Calculator Index](#)

This is an apparently simple subject that causes a lot of confusion. Changes in what terms mean and the use of different terms do not help this confusion. Some of the states listed below will not be available on some computers, especially older ones, due to hardware restrictions. It is also possible to customise from the windows control panel the details of what some states mean, when they happen and whether they are available.

### Windows 7 & Windows Vista

<b>Sleep:</b>	This is a power-saving state that allows a computer to quickly resume operation when you want to start working again. It eliminates booting the operating system which can take a while. Also referred to as Standby. The computer will still draw power, this will be considerably less than in normal operation, how much is dependent on the hardware. Power consumption will be higher than Hibernate.
<b>Hibernate:</b>	Saves open documents and program information to hard disk before shutting down the computer so that they can be restored on restart. The computer will still draw a small amount of power, how much is dependent on the hardware. Power consumption will be the same as Shutdown.
<b>Hybrid Sleep:</b>	This is a combination of sleep and hibernate. Open documents and program information are retained in memory also saved to the hard disk. The computer is put into the same low power state as Sleep. If a power failure occurs information can still be restored when the computer is restarted. When hybrid sleep is enabled putting your computer into Sleep puts your computer into hybrid sleep. May not be enabled by default on some computers. The computer will still draw power, this will be considerably less than in normal operation, how much is dependent on the hardware. Depending on the hardware and control panel settings this state may not exist. Power consumption will be the same as Shutdown.
<b>Restart:</b>	Not really a shutdown mode but included for completeness. The operating system is shut down completely and then restarted.
<b>Shutdown:</b>	The power supply is turned off after shutting down the operating system. This is the same as Power Off on Windows 2000 and Turn Off on Windows XP. The computer will still draw a small amount of power, how much is dependent on the hardware.

### Windows XP

<b>Sleep:</b>	This is a power-saving state that allows a computer to quickly resume operation when you want
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	to start working again. It eliminates booting the operating system which can take a while. Also referred to as Standby. The computer will still draw power, this will be considerably less than in normal operation, how much is dependent on the hardware. Power consumption will be higher than Hibernate.
<b>Hibernate:</b>	Saves open documents and program information to hard disk before shutting down the computer so that they can be restored on restart. This is accessed by holding down the shift key when the shutdown menu is displayed - Sleep is changed to Hibernate. The computer will still draw a small amount of power, how much is dependent on the hardware. Power consumption will be the same as Turn Off.
<b>Restart:</b>	Not really a shutdown mode but included for completeness. The operating system is shut down completely and then restarted.
<b>Turn Off:</b>	The power supply is turned off after shutting down the operating system. This is the same as Power Off on Windows 2000 and Shutdown on Windows Vista and Windows 7. The computer will still draw a small amount of power, how much is dependent on the hardware.

## Windows 2000

<b>Standby:</b>	This is a power-saving state that allows a computer to quickly resume operation when you want to start working again. It eliminates booting the operating system which can take a while. Also referred to as Sleep. The computer will still draw power, this will be considerably less than in normal operation, how much is dependent on the hardware. Power consumption will be higher than Hibernate.
<b>Hibernate:</b>	Saves open documents and program information to hard disk before shutting down the computer so that they can be restored on restart. Not enabled by default. The computer will still draw a small amount of power, how much is dependent on the hardware. Power consumption will be the same as Power Off.
<b>Restart:</b>	Not really a shutdown mode but included for completeness. The operating system is shut down completely and then restarted.
<b>Shutdown:</b>	The operating system is shutdown and the computer put in a state where it is safe to remove the power. The computer is still drawing power.
<b>Power Off:</b>	The power supply is turned off after shutting down the operating system. This is the same as Shutdown on Windows Vista and Windows 7 and Turn Off on Windows XP. The computer will still draw a small amount of power, how much is dependent on the hardware.