

Power Plans

Power Plans are how a system will partially or completely shut itself down to save power. Below are the three power plans on Windows 7 and 8 / 8.1 operating systems. Each of the three include directions for how to access the power plans, a brief explanation of what each power plan does, and pros and cons.

Sleep

1. To access: Control Panel > System and Security > Power Options > click one of the *Change plan settings* link (usually the one next to *Balanced - recommended*). For laptops will see additional options for *Dim the Display and Adjust plan brightness*.
2. Everything shuts down except RAM and CPU.
3. Some power is being used. A laptop battery will eventually drain if the laptop is not plugged in.
4. Wakes up quickly because Windows is in RAM.
5. As long as you don't lose power, you won't lose any open and unsaved work. If power is lost, open and unsaved work is lost. Should always save your work though anyway.
6. **Used for both laptops and desktops.**

Hibernate

1. To access: Control Panel > System and Security > Power Options > click one of the *Change plan settings* link (usually the one next to *Balanced - recommended*). For laptops will see additional options for *Dim the Display and Adjust plan brightness*. Next, click *Change Advanced Power Settings*, Advanced Settings tab, expand Sleep option.
2. Everything shuts down.
3. No power is used.
4. Wakes up more slowly than sleep because data needs to be copied back into RAM.
5. Entire contents copied onto hard drive when PC shuts down. Even if you lose power, will not lose open and unsaved work. Should always save your work though anyway.
6. Settings:
 - **Desktops: set to "Never" by default** as there is sometimes incompatibilities between hibernate and some systems.
 - **Laptops: set to "on" by default.** Will hibernate after a pre-determined amount of minutes depending if on battery or plugged in. Used on laptops to prevent batteries from completely draining.

Hybrid Sleep

1. To access: Control Panel > System and Security > Power Options > click one of the *Change plan settings* link (usually the one next to *Balanced - recommended*). For laptops will see additional options for *Dim the Display and Adjust plan brightness*. Next, click *Change Advanced Power Settings*, Advanced Settings tab, expand Sleep option.
2. Like Sleep, it does not shut everything down.
3. Like Sleep, some power is being used.
4. Like Sleep, wakes up quickly.
5. Like Hibernate, entire contents copied onto hard drive. Even if you lose power, will not lose open and unsaved work. Should always save your work though anyway.
6. Settings:
 - **Desktops: set to "On" by default.**
 - **Laptops: set to "Off" by default.** Laptop battery would eventually drain if not plugged in.
7. New in Windows 7.