

Linux Desktop: Using DPMS to reduce your power-bill

by GweeDo767

DPMS is used to communicate between your monitor and computer to make your computer turn off your monitor when you have been neglecting it for a given period of time. Recently I have been surprised to find out how many people don't seem to have DPMS setup on their Linux Desktops and it seems to be partially just cause they don't know how. So lets fix that.

by GweeDo767

Note: This is Part 1 of 2 for my Power Saving in Linux guides. Next I will talk about automatic cpu frequency and voltage scaling in Athlon XP-M and P4 Mobile processors.

First of all, what is DPMS? DPMS is the interface to the Energy Star power saving functions for your monitor. Basically it lets your monitor suspend and power off automatically from inactivity. It is nice :) So lets see how we set it up!

First, the requirements. You will need X Windows (XFree86 4.x or X.org 6.7 or greater). You will also need an X Server that supports the DPMS calls (to the best of my knowledge basically every X Server out there supports this now).

Next we need to make a few modifications to our X config file (XF86Config, XF86Config-4 or xorg.conf).

In the Monitor section add:

```
Option "DPMS" "true"
```

Next, in the `ServerLayout` section add:

```
Option "StandbyTime" "10"  
Option "SuspendTime" "20"  
Option "OffTime" "30"
```

You can actually use only one of these lines or any combination of the three. I personally only use "OffTime" and have it set to "10". Feel free to just play with these to see what you like best.

After you have set those simple options DPMS should be working in X Windows for you. Enjoy your cooler room and lower power bill :)

Fun with xset

So...now you want to change your DPMS settings on the fly do you? Well good thing for xset! ([manual page](#)) If you just type xset one of the help sections show this:

```
To control Energy Star (DPMS) features:  
-dpms Energy Star features off  
+dpms Energy Star features on  
dpms [standby [suspend [off]]]  
force standby  
force suspend  
force off  
force on  
(also implicitly enables DPMS features)  
a timeout value of zero disables the mode
```

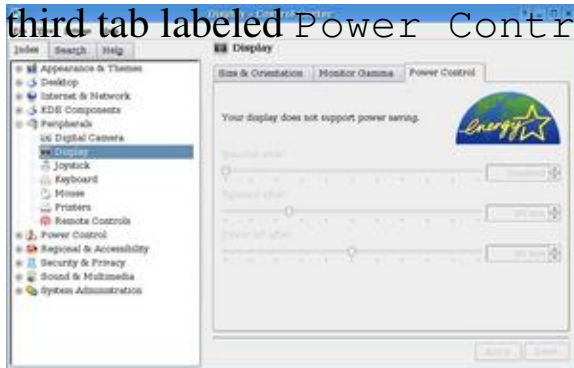
I believe you can also do something like

```
xset dpms 300 600 900
```

This says standby after 300 seconds, suspend at 600, and off at 900.

DPMS in KDE

KDE makes it even easier by having a Control Center module for setting this stuff. You can find it under Peripherals -> Display. It is the third tab labeled "Power Control".



As you can see it lets you set times for all three modes in KDE. These values will override whatever you set in your X Config file. (sure, mine says I can't use it... silly Nvidia drivers!)

Special Notes: Nvidia users... Seems the latest drivers (The 6111 series atleast) don't support the standard DPMS setup. I had to add:

```
Option "DPMS"
```

to my Device section as well. I would imagine the open source "nv" driver doesn't have this catch (nvidias own drivers use the module called nvidia). Your X log will show this if you set it up correctly:

(/var/log/XFree86.0.log if you are using XFree,
/var/log/Xorg.0.log if you use X.Org)

```
(**) Option "dpms" "true"  
(**) NVIDIA(0): DPMS enabled
```

It appears to still use the values set in your ServerLayout section though.



Linux Desktop: Using DPMS to reduce your power-bill (Linux Reviews)

by GweeDo767

> Linux Reviews > Howtos > Power management for laptops and desktops
>
Linux Desktop: Using DPMS to reduce your power-bill