How To: List Hardware From The Terminal (lshw)

You may not always have inxi available. The person trying to help you may want more specific info. You may need more information about your hardware. Who knows? There's all sorts of reasons to use 'lshw' in your day-to-day computing.

Today is another short and easy article (you're welcome). It's just a very brief command, one of several, that we're going to learn how to use. The command in question is 'lshw'. The manual helpfully defines it as:

   lshw — list hardware

Which, now that you look at it, makes perfectly good sense. This is one of those Linux commands that's not at all cryptic when you think about it. It looks like what it does, it does what you'd intuitively think it does. (It's actually a subset of the info you get with 'hwinfo', but that's not important right now!)

What is important is that there are two realistic ways to use it — and both of them should be run as an administrator. The first is just as you'd expect:

[code]sudo lshw[/code]

That will output a ton of information about the hardware you have in (or connected to) your computer. It's rather overwhelming and it's not often that you'll be asked to post all of it. You may be asked to (or want to) run it with the -C option, such as:

[code]sudo lshw -C cpu[/code]

You may even be asked to use grep with it, such as:

```
sudo lshw | grep wireless
```

Then, there's one more way to run the program (under normal circumstances) and that's to run the whole thing and to get the whole output in a shorter format. The command is probably just like you'd expect.

```
sudo lshw -short
```

Lo and behold! Would you look at that! Ha! Isn't that fantastic? You actually get readable output that's suitable for your normal user who just wants to know what sorta hardware they're working with while getting a few extra bits of info! It even includes juicy nuggets like:

```
/1 wlxe4beed0e5f5c network Wireless interface
```

Now, if you want to refine it even further, why not try this:

```
sudo lshw -short | grep network
```

And, there you have it… You have another way to see your hardware in the terminal and it should be consistent across any major distro you touch. You shouldn't have any trouble using the command and it's easy to remember when you want to 'list the hardware'. There are other uses, but those two are the most common. For more information about the lshw command try:

```
man lshw
```

or

```
info lshw
```

Like always, thanks for reading. Feel free to subscribe to the newsletter. I promise to not give away your private information – and you never know what sorta incentives I may stick in there. See? I told you this one would be short and easy!

Linux Foundation Support for Asian Communities

The Linux Foundation and its communities are deeply concerned about the rise in attacks against Asian Americans and condemn this violence. It is devastating to hear over and over again of the attacks and vitriol against Asian communities, which have increased substantially during the pandemic.

We stand in support with all those that have experienced this hate, and to the families of those who have been killed as a result. Racism, intolerance and inequality have no place in the world, our country, the tech industry or in open source communities.

We firmly believe that we are all at our best when we work together, treat each other with respect and equality and without hate or vitriol.

The post Linux Foundation Support for Asian Communities appeared first on Linux Foundation.

USN-4884-1: Linux kernel (OEM) vulnerabilities

Loris Reiff discovered that the BPF implementation in the Linux kernel did
not properly validate attributes in the getsockopt BPF hook. A local

attacker could possibly use this to cause a denial of service (system
crash). (CVE-2021-20194)
It was discovered that the priority inheritance futex implementation in the
Linux kernel contained a race condition, leading to a use-after-free
vulnerability. A local attacker could use this to cause a denial of service
(system crash) or possibly execute arbitrary code. (CVE-2021-3347)

It was discovered that the network block device (nbd) driver in the Linux
kernel contained a use-after-free vulnerability during device setup. A
local attacker with access to the nbd device could use this to cause a
denial of service (system crash) or possibly execute arbitrary code.
(CVE-2021-3348)

USN-4883-1: Linux kernel vulnerabilities

Adam Nichols discovered that heap overflows existed in the iSCSI subsystem
in the Linux kernel. A local attacker could use this to cause a denial of
service (system crash) or possibly execute arbitrary code. (CVE-2021-27365)
Adam Nichols discovered that the iSCSI subsystem in the Linux kernel did

not properly restrict access to iSCSI transport handles. A local attacker
could use this to cause a denial of service or expose sensitive information
(kernel pointer addresses). (CVE-2021-27363)

Adam Nichols discovered that an out-of-bounds read existed in the iSCSI
subsystem in the Linux kernel. A local attacker could use this to cause a
denial of service (system crash) or expose sensitive information (kernel
memory). (CVE-2021-27364)

How Linux Got Its Name

I am otherwise engaged and I still want to get out an article every other day, so today I'm pretty much going to copy/paste a Wikipedia article and call it good.

If you've ever wondered where the Linux name came from, and how it got to be that way, then you'd have looked it up already! Well, if you haven't and you've just made assumptions this entire time, you might be in for a surprise. Linux wasn't originally called Linux – sorta.

Like I said, I'm just going to cheat and let Wikipedia do its thing. They wrote it better than I can, and I'm sorely lacking time today.

> *Linus Torvalds had wanted to call his invention "Freax", a portmanteau of "free", "freak", and "x" (as an allusion to Unix). During the start of his work on the system, some of the project's makefiles included the name "Freax" for about*

half a year. Torvalds had already considered the name "Linux", but initially dismissed it as too egotistical.

In order to facilitate development, the files were uploaded to the FTP server (ftp.funet.fi) of FUNET in September 1991. Ari Lemmke, Torvalds' coworker at the Helsinki University of Technology (HUT), who was one of the volunteer administrators for the FTP server at the time, did not think that "Freax" was a good name, so he named the project "Linux" on the server without consulting Torvalds.[52] Later, however, Torvalds consented to "Linux".

According to a newsgroup post by Torvalds,[9] the word "Linux" should be pronounced (/ˈlɪnʊks/ (About this soundlisten) LIN-uuks) with a short 'i' as in 'print' and 'u' as in 'put'. To further demonstrate how the word "Linux" should be pronounced, he included an audio guide (About this soundlisten (help·info)) with the kernel source code.[53] Contradictory, in this recording, he pronounces 'Linux' (/ˈlinʊks/ (About this soundlisten) LEEN-uuks with a short but close unrounded front vowel.

Source: Wikipedia

And, there you have it. That's also the entirety of today's article! Thanks for reading and don't forget to sign up for the newsletter! (Don't worry, I'll write better stuff. I'm just really short on time.)