USN-4728-1: snapd vulnerability

Gilad Reti discovered that snapd did not correctly specify cgroup
delegation when generating systemd service units for various container
management snaps. This could allow a local attacker to escalate privileges
via access to arbitrary devices of the container host from within a
compromised or malicious container.

USN-4727-1: Linux kernel vulnerability

Alexander Popov discovered that multiple race conditions existed in the
AF_VSOCK implementation in the Linux kernel. A local attacker could use
this to cause a denial of service (system crash) or execute arbitrary code.

USN-4726-1: OpenJDK vulnerability

It was discovered that OpenJDK incorrectly handled the direct buffering of
characters. An attacker could use this issue to cause OpenJDK

to crash,
resulting in a denial of service, or cause other unspecified
impact.

Install the non-Snap Version of Chrome/Chromium

So many questions are answered by telling people to skip the snap version and to install the .deb/PPA versions. This is how you do that for Google Chrome and Chromium. Chrome and Chromium are browsers from Google and Chrome is based on Chromium but has more features inside it – and isn't open source. Chromium is open source, and many other browsers are based on it.

This, like many of my articles, is going to be fairly limited in scope. It's only really useful if you're using Debian derivatives like Ubuntu, ElementaryOS, or Mint. In fact, part of it will only apply if you've enabled PPAs on your computer.

PPA, if you're curious, stands for Personal Package Archive. Rather than beat a dead horse, I'll just suggest that you visit this site to learn more about them. It should be noted that PPAs were initially meant for testing and many consider them to be a security risk because you're essentially letting someone else decide what gets installed on your system without the oversight of the official project. Anyone can make a PPA and advertise it.

Anyhow, back to the topic at hand. The process is different for both of them and so we'll go ahead and get started with Chrome.

Chrome:

Chrome is going to be the easiest. Crack open your terminal with CTRL + ALT + T and enter the following:

```
cd Downloads
wget https://dl.google.com/linux/direct/google-chrome-stable_current_amd64.deb
sudo apt install ./google-chrome-stable_current_amd64.deb
```

Tada! You're done. When you finish it up and start Chrome, you'll get to set it as the default browser and stuff like that. On top of that, it will automatically update with the system – as it adds its own repository.
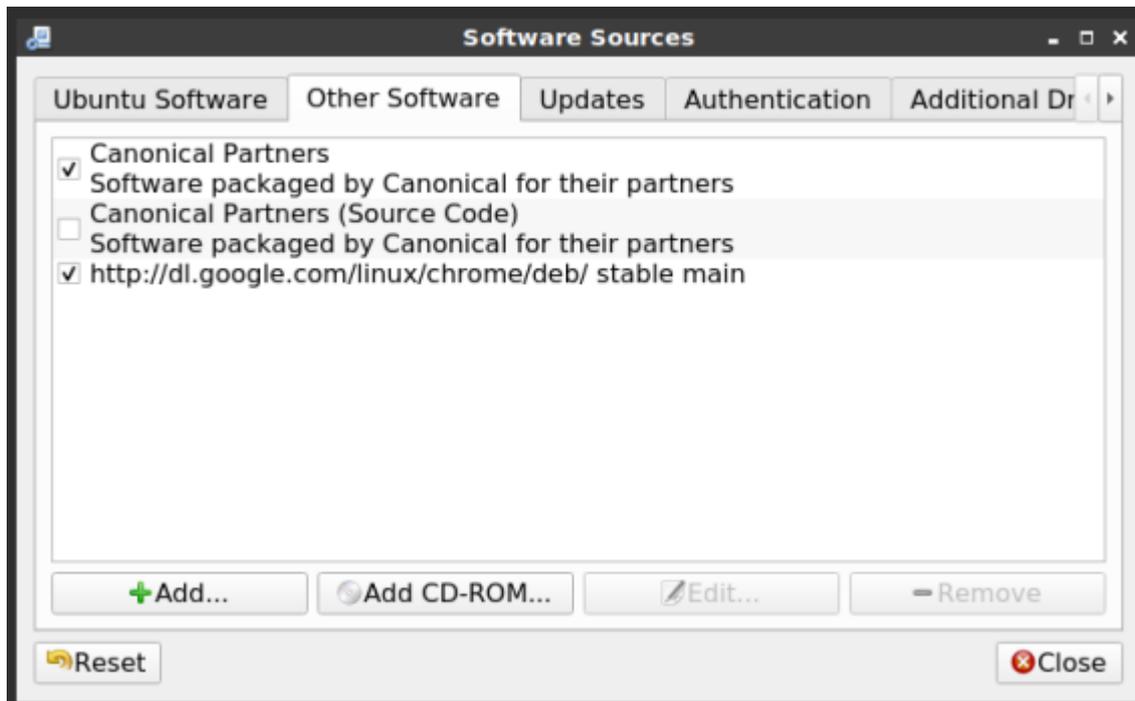
Note, the new repository contains the beta version as well.

Chromium:

Chromium is a bit more complicated. For this one, you'll need to add a PPA first. Once again, open your terminal with CTRL + ALT + T.

Now, let's add the PPA.

```
sudo add-apt-repository ppa:saiarcot895/chromium-beta
```

Yes, I know it says beta. Also, any modern distro should do this for you, but you may need to first update the database of installable packages.

```
sudo apt update
```

Once that's done, or if you don't need to do so, you can go ahead and install Chromium.

```
sudo apt install chromium-browser
```

Then, much like with Chrome, you will have a regularly updated version of Chromium at your disposal. Like always, go ahead and subscribe to be notified of new articles. I promise, I won't send you any spam or give your email addresses away.

Ubuntu Restricted Extras

As I trawl the 'net, I see some confusion about the Ubuntu Restricted Extras package. This post is meant to clear up any confusion. Given the nature of the beast, I assume this is also valid for Ubuntu derivatives – but I've not explored all of them personally (and there are many).

So, what's in the package? It's a package with more than one thing in it and will also download (if allowed) more data along the way. This is what's inside:

gstreamer0.10-ffmpeg
gstreamer0.10-fluendo-mp3

```
gstreamer0.10-pitfdll
gstreamer0.10-plugins-bad
gstreamer0.10-plugins-ugly
gstreamer0.10-plugins-bad-multiverse
gstreamer0.10-plugins-ugly-multiverse
icedtea6-plugin
libavcodec-extra-52
libmp4v2-0
ttf-mscorefonts-installer
unrar
```

Basically, it's a bunch of fonts, codecs (so that you can play patent-encumbered media files), and the ability to open .rar compressed files and use Java applets in the browser. It's some handy stuff, but because it's all non-free Ubuntu doesn't include it by default. Indeed, you won't even find it unless you enable the 'multiverse' repository, like so:

[code]sudo add-apt-repository multiverse[/code]

Then, you'll need to make sure that your system knows (though some more modern releases will do this automatically) about the new software choices.

[code]sudo apt update[/code]

Follow that up with:

[code]sudo apt install ubuntu-restricted-extras[/code]

That's going to download a bunch of stuff and show a screen that trips up a lot of newer users. There's no obvious way to use a mouse and, indeed, you have to use your keyboard to agree to the user agreement. It looks like this:
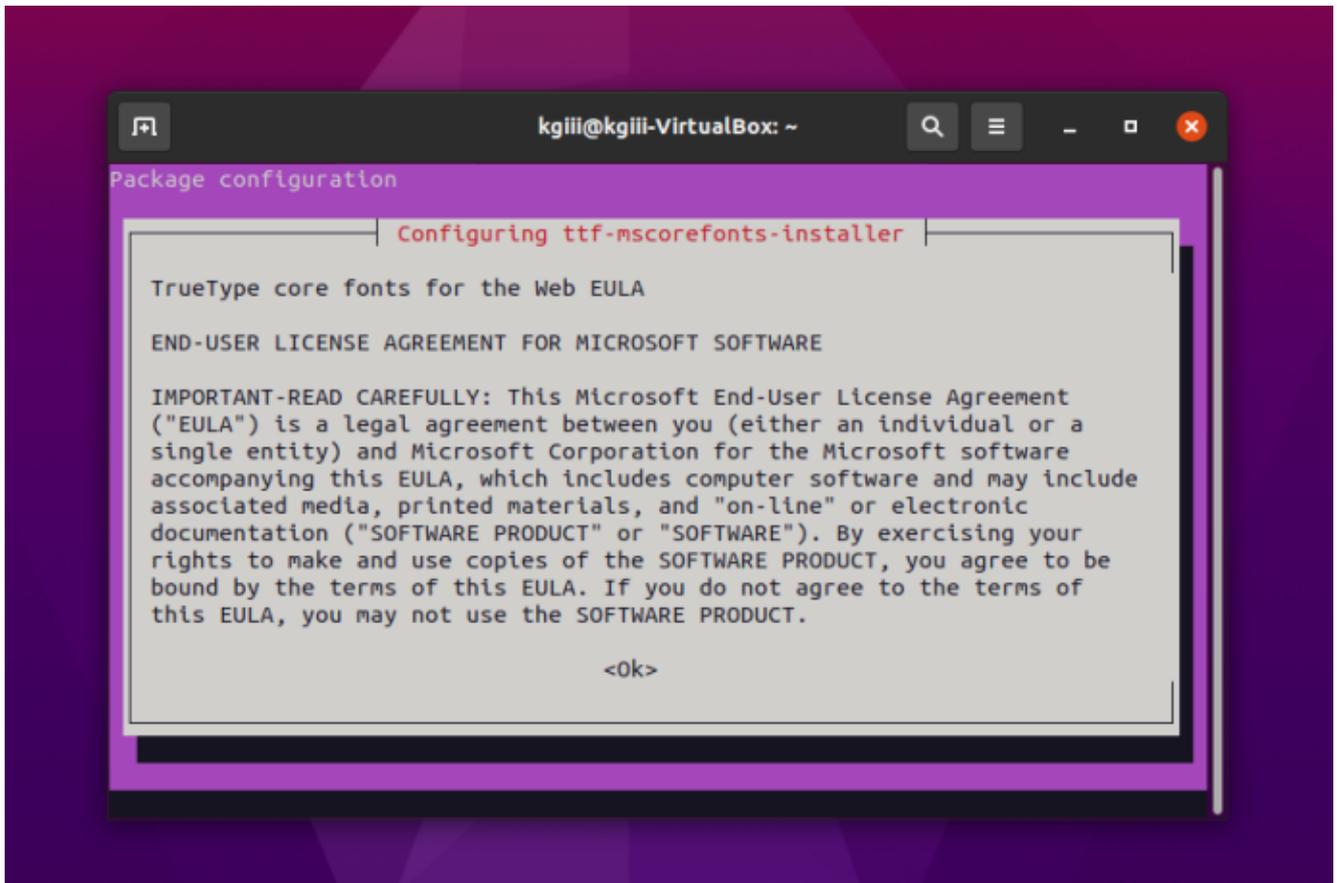
Yes, you have to agree to proceed.

It's okay. Don't give up! You can use your TAB (or arrows) key to make selections and use the ENTER button to submit your answers. You'll do it again on the next screen.
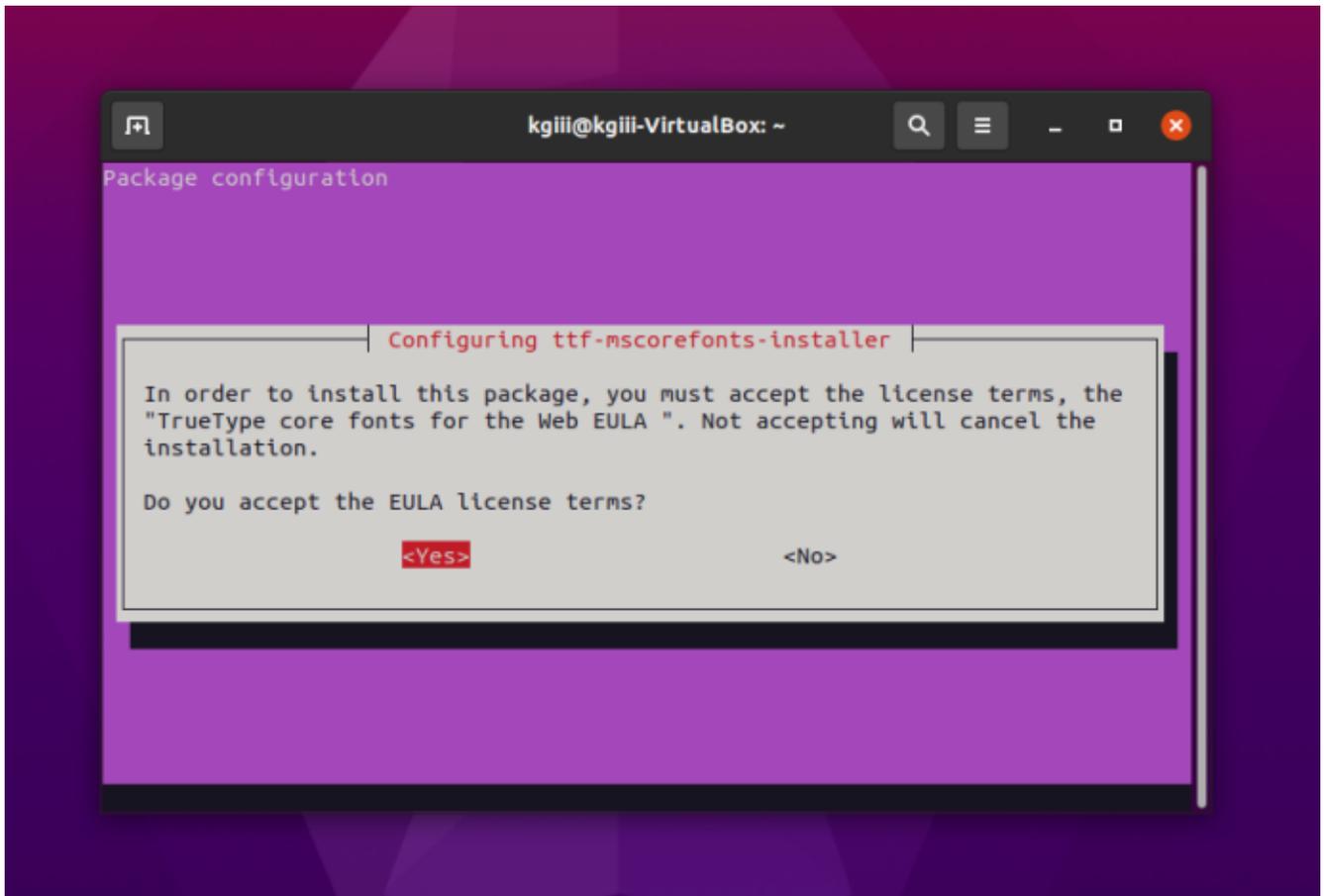
Use the tab or the arrow keys and the enter to agree.

At that point, it'll download some more files with fonts in them and extract them to the right directories so that you can use them. You'll also be able to use the other included files/applications, though they are not 'free' in the sense of the license agreement (which is the reason they're not included by default and you have to jump through hoops to install them).