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Fixing "Key is stored in legacy trusted.gpg keyring" Issue in Ubuntu

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Conclusion

If you use a PPA or add an external repository in Ubuntu 22.04 and later versions, chances are that you will see a message like this:

```
W: https://packagecloud.io/slacktechnologies/slack/debian/           ea
```

Membership

First thing first. It is not an error, it is a warning message. A warning does not stop the procedure. You can continue upgrading your system even if you see this warning message during an update.

If you don't like seeing the warning message, you can take some manual steps to get rid of it.

There are two ways; the proper way and the quick and dirty way. Read both methods and see which one you feel comfortable with.

Method 1: Import the key [Proper but complicated way]

First, list all the GPG keys added to your system.

```
sudo apt-key list
```

This will show a huge list of keys stored in your system. What you have to do here is to look for

the keys associated with the warning message.

```
abhishek@itsfoss:~$ sudo apt-key list
[sudo] password for abhishek:
Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead
/etc/apt/trusted.gpg
--------------------
pub    rsa4096 2014-01-13 [SCEA] [expired: 2019-01-12]
       418A 7F2F B0E1 E6E7 EABF  6FE8 C2E7 3424 D590 97AB
uid            [ expired] packagecloud ops (production key) <ops@packagecloud.:

pub    rsa4096 2016-02-18 [SCEA]
       DB08 5A08 CA13 B8AC B917  E0F6 D938 EC0D 0386 51BD
uid            [ unknown] https://packagecloud.io/slacktechnologies/slack (http
sub    rsa4096 2016-02-18 [SEA]

/etc/apt/trusted.gpg.d/audio-recorder-ubuntu-ppa.gpg
-------------------------------------------------------
pub    rsa4096 2015-08-30 [SC]
       42EF 41ED 9813 B713 D4F1  F06D 5CF1 2638 ACF9 669F
uid            [ unknown] Launchpad PPA for Team audio-recorder

/etc/apt/trusted.gpg.d/danielrichter2007-ubuntu-grub-customizer.gpg
----------------------------------------------------------------------
pub    rsa1024 2010-10-08 [SC]
       59DA D276 B942 642B 1BBD  0EAC A8AA 1FAA 3F05 5C03
```

How do you do that? Read the message carefully.

```
W: https://packagecloud.io/slacktechnologies/slack/debian/dists/jessie/InRelea
```

In my case, the repository has keywords like packagecloud, slacktechnologies. It is shown at the top of the apt-key list output. You may have to scroll a bit in your case.

In this rare case, the external repository added by Slack, has two GPG keys. One of them is expired and I'll ignore it. You may not have such a situation.

You should the last 8 characters (excluding the space) under the line after pub.

```
/etc/apt/trusted.gpg
--------------------
pub    rsa4096 2014-01-13 [SCEA] [expired: 2019-01-12]
       418A 7F2F B0E1 E6E7 EABF  6FE8 C2E7 3424 D590 97AB
uid           [ expired] packagecloud ops (production key) <ops@packagecloud.:

pub    rsa4096 2016-02-18 [SCEA]
       DB08 5A08 CA13 B8AC B917  E0F6 D938 EC0D 0386 51BD
uid           [ unknown] https://packagecloud.io/slacktechnologies/slack (http
```
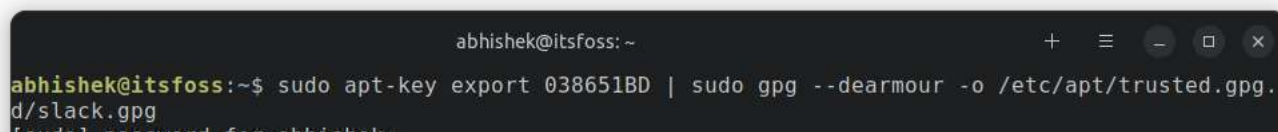
So from the line "DB08 5A08 CA13 B8AC B917 E0F6 D938 EC0D 0386 51BD", I'll take the last 8 characters "0386 51BD", remove the space and then use it to import the GPG key in its dedicated file under the /etc/apt/trusted.gpg.d directory:

```
sudo apt-key export 038651BD | sudo gpg --dearmour -o /etc/apt/trusted.gpg.d/s
```

I created a new file slack.gpg here, in case you didn't notice it. I named it slack.gpg because it is associated with Slack application I installed earlier. The filename does not matter but it's good for identification.

If the command runs successfully, you won't see any message. You can verify that by checking if the newly created gpg file exists or not.

import gpg key to trusted ubuntu

Run the update again and now you should not see the warning message anymore.

Method 2: Copy to the trusted.gpd.d directory [Quick and dirty way]

If you don't feel comfortable doing all the above stuff manually, well, you can ignore the warning message. I mean, ignoring it is always an option.

Another option is to copy the /etc/apt/trusted.gpg file to /etc/apt/trusted.gpg.d directory. After all, Ubuntu only complains that it needs the GPG keys in /etc/apt/trusted.gpg.d directory.

You'll still have to use the terminal. Open it and use the following command:

```
sudo cp /etc/apt/trusted.gpg /etc/apt/trusted.gpg.d
```

Now, if you run the update, you won't see the "Key is stored in legacy trusted.gpg keyring" warning message anymore.

```
Hit:7 http://security.ubuntu.com/ubuntu kinetic-security InRelease
Hit:9 http://us.archive.ubuntu.com/ubuntu kinetic-updates InRelease
Hit:10 http://us.archive.ubuntu.com/ubuntu kinetic-backports InRelease
Get:12 https://mega.nz/linux/repo/xUbuntu_22.04 ./ InRelease [2,961 B]
Hit:11 https://packagecloud.io/slacktechnologies/slack/debian jessie InRelease
Fetched 2,961 B in 3s (931 B/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
1 package can be upgraded. Run 'apt list --upgradable' to see it.
abhishek@LHB:~$
```

Conclusion

I have written a detailed article on apt-key deprecation. Apparently, that article had some readers confused and hence I wrote this one to give them direct steps for getting rid of the message.

As I said before, it is a warning message and can be ignored for now. The onus to 'fix' this issue lies on the external software developers and Ubuntu developers. The external software developers should make sure that their GPG keys are no longer added in the /etc/apt /trusted.gpg file.

The end users should not take the pain for their laziness.

So, which method did you use to get rid of the 'key is stored in legacy' warning message? The first one or the second one?

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Luiz   24 days ago

And its already obsolete. https://manpages.debian.org/buster
/apt/sources.list.5.en.html#DEB822-STYLE_FORMAT deb822 is better, all in one place, no
need to edit existing files, no need to install gpg, no need for anything except perhaps

need to edit existing files, no need to install gpg, no need for anything except perhaps debian itself and curl

0   0   Reply

Daniel   1 month ago

The second one. At my age, saving time and effort is a high priority.

Thanks for providing both!

0   0   Reply

Luiz   24 days ago

I wanted to know why this system is better than the pk used in https. its kinda funny... and its as secure as https itself.

Perhaps it saves poor people some money on certificates and domains or something.

I'm not of age, but I'm starting to not care about those things.

0   0   Reply

Abhishek   Admin   1 month ago

Happy to be of help, Daniel.

0   0   Reply

Tango   1 month ago

The first method is so beautiful and organized that I couldn't do the second, no matter how easier it were.

0   0   Reply

Abhishek   Admin   1 month ago

Glad you found it easy to follow :)

0   0   Reply

Md Samiul Alam Sumel   2 months ago

use 2nd. is it any problem occur in future

0   0   Reply

shreyas koli   2 months ago

thanks man
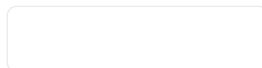
0   0   Reply

Abhishek   Admin   2 months ago

Abhishek • Admin • 2 months ago

You are welcome :)

0   0   Reply

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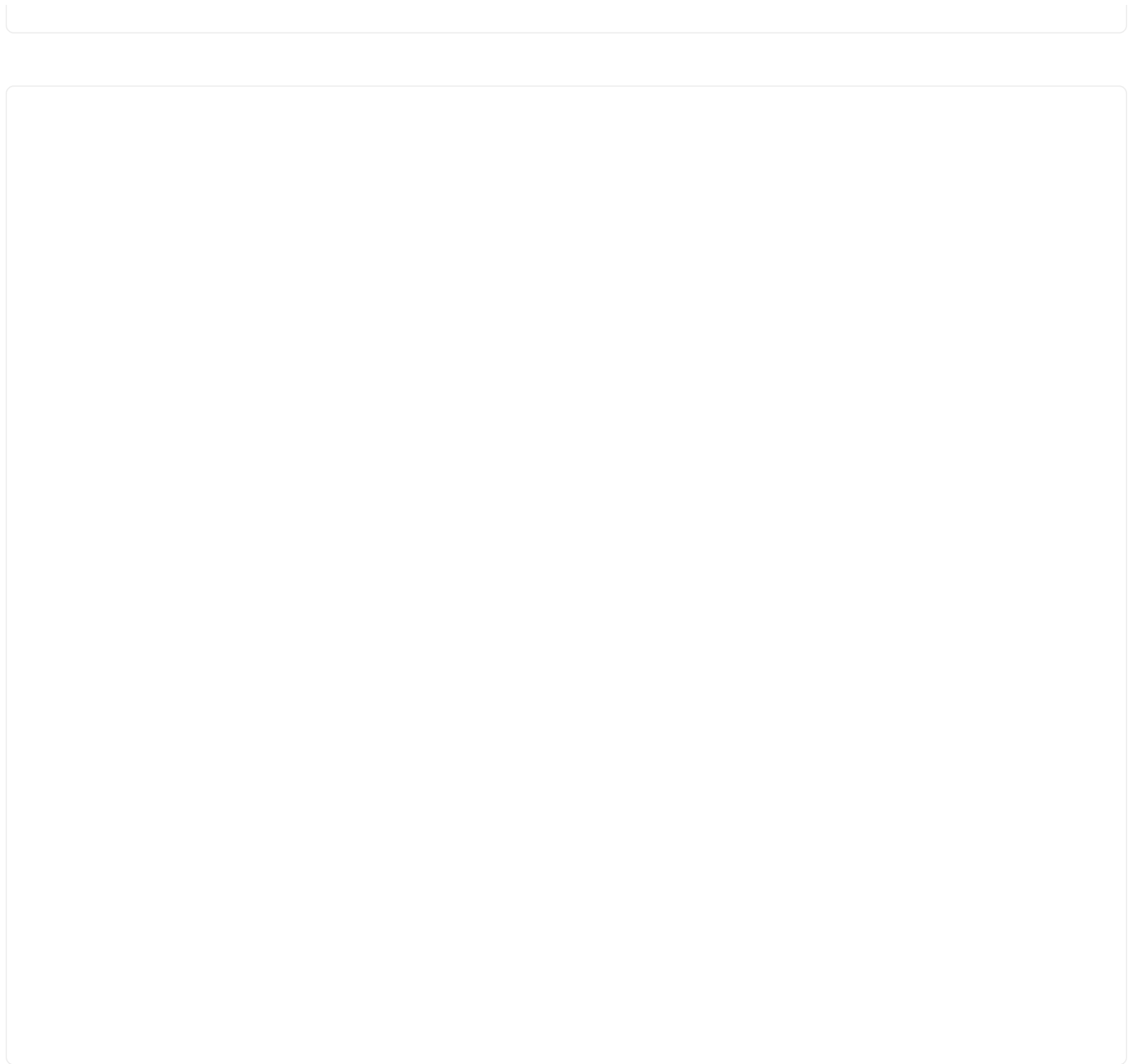### How to Stress Test CPU in Linux

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