USEFUL COMMANDS USED IN LINUX

YOU MIGHT COME ACROSS THESE COMMANDS WHILE INSTALLING GRAFANA.

How to know OS version in Linux?

To find out the version of the Linux operating system you're using, you can use the following command in the terminal:

lsb_release -a

Here's what this command does:

lsb_release: This is a command that provides information about the Linux Standard Base (LSB) and distribution-specific information.

-a: This option tells the lsb_release command to display all available information.

When you run this command, you'll see a few lines of information, including the description of the Ubuntu release, its code name, and more. Here's an example of what the output might look like:

No LSB modules are available.

Distributor ID: Ubuntu

Description: Ubuntu 20.04.2 LTS

Release: 20.04

Codename: focal

In this example, it shows that the Ubuntu version is 20.04.2 LTS, and the codename is "focal." This will help you determine the exact version of your Ubuntu OS.

What is sudo command in Linux?

The sudo command in Linux allows users to run commands with the privileges of the root user. This can be useful for tasks such as installing software, modifying system files, and managing users and groups.

To use the sudo command, simply type sudo followed by the command you want to run. For example, to install the apt package manager, you would type the following command:

sudo apt install apt

You will then be prompted to enter your password. Once you have entered your password, the command will be executed with the privileges of the root user.

It is important to note that the sudo command should be used with caution. Running commands with root privileges can potentially damage your system. Therefore, it is important to only run commands that you trust and that you understand the consequences of running.

What does sudo apt-get install do in Linux?

The sudo apt-get install command in Linux is used to install software packages from the Advanced Package Tool (APT) repository. The APT repository is a large collection of software packages that are available for installation on Debian-based Linux distributions, such as Ubuntu, Debian, and Mint.

To use the sudo apt-get install command, simply type the following command followed by the name of the package you want to install:

sudo apt-get install package_name

For example, to install the apt package manager, you would type the following command:

sudo apt-get install apt

You will then be prompted to enter your password. Once you have entered your password, the package will be installed.

The sudo apt-get install command is a powerful tool that can be used to install a wide variety of software packages on Linux systems. However, it is important to note that the sudo command allows users to run commands with the privileges of the root user. Therefore, it is important to only install software packages from trusted sources.

Here are some more examples of how to use the sudo apt-get install command:

To install the firefox web browser:

sudo apt-get install firefox

To install the libreoffice office suite:

sudo apt-get install libreoffice

To install the vlc media player:

sudo apt-get install vlc

To install the python3 programming language:

sudo apt-get install python3

To install the git version control system:

sudo apt-get install git

The sudo apt-get install command is a valuable tool for Linux users. It can be used to install a wide variety of software packages, including desktop applications, development tools, and system utilities.

What is GPG key in Linux?

A GPG key in Linux is a digital key that you can use to encrypt and decrypt your communications, and to sign and verify digital signatures. It's like a lock and key, but for digital information.

To use GPG keys, you need to generate a key pair. This means creating a public key and a private key. The public key is what you share with others, so that they can encrypt messages to you. The private key is what you keep secret, and use to decrypt messages and create signatures.

Once you have a GPG key pair, you can use it to:

Encrypt messages to others, so that only they can read them.

Decrypt messages that have been encrypted with your public key.

Sign messages, so that people can verify that they came from you.

Verify the signatures of other people's messages, to make sure that they haven't been tampered with.

GPG keys are a powerful tool for protecting your privacy and security online. They can be used to secure your email, instant messages, file transfers, and other communications.

Here is a simple analogy to help you understand GPG keys:

Imagine that you have a mailbox with a special lock on it. The lock has two keys: a public key and a private key. You give the public key to your friends and family, so that they can send you letters. Only you have the private key, so that only you can open the mailbox and read the letters.

GPG keys work in a similar way. You share your public key with others, so that they can encrypt messages to you. Only you have the private key, so that only you can decrypt the messages.

GPG keys are a valuable tool for protecting your privacy and security online. By using GPG keys, you can be sure that your communications are secure and that your data is protected from unauthorized access.

What does importing the GPG key do in Linux?

Importing a GPG key in Linux is the process of adding a GPG public key to your local keyring. This allows you to verify the authenticity of signatures made with that key and to encrypt messages to the owner of that key.

In simple words, importing a GPG key is like adding a new contact to your phone book. Once you have imported a GPG key, you can use it to verify the identity of the person who sent you a message, or to encrypt a message that you are sending to them.

Here is an analogy to help you understand importing a GPG key:

Imagine that you are sending a letter to a friend, and you want to make sure that only they can read it. You can do this by encrypting the letter with their public key. To do this, you need to have their public key stored in your address book.

Importing a GPG key is like adding your friend's public key to your address book. Once you have imported their key, you can encrypt letters to them with confidence, knowing that only they will be able to read them.

To import a GPG key in Linux, you can use the following command:

gpg import <key_file>

where <key_file> is the path to the GPG key file. The key file can be a plain text file containing the key or a binary file containing the key in armored format.

What does mkdir-p do in linux?

The mkdir command in Linux is used to create directories. The -p option tells the mkdir command to create any parent directories that do not exist.

In simple words, the mkdir -p command allows you to create a directory, even if the parent directory does not exist. For example, if you want to create the directory /path/to/new/directory, but the directory /path/to/new does not exist, you can use the following command:

mkdir -p /path/to/new/directory

This will create the directories /path/to/new and /path/to/new/directory.

The mkdir -p command is a very useful command for creating directories. It can save you a lot of time and effort, especially if you need to create directories in a nested structure.

What is wget-q-O- in Linux?

The wget -q -O - command in Linux is used to download a file from the internet and print it to the standard output. The -q option tells wget to run quietly, without displaying any output. The -O - option tells wget to print the downloaded file to the standard output, instead of saving it to a file.

In simple words, the wget -q -O - command allows you to download a file from the internet and display it in the terminal. This can be useful for debugging or for quickly viewing the contents of a file.

Here is an example of how to use the wget -q -O - command:

wget -q -O - https://example.com/myfile.txt

This will download the file myfile.txt from the website example.com and print it to the terminal.

You can also use the wget -q -O - command to pipe the downloaded file to another command. For example, the following command will download the file myfile.txt and then pipe it to the grep command to search for the word "foo":

wget -q -O - https://example.com/myfile.txt | grep foo

This will print all of the lines in the file myfile.txt that contain the word "foo".

The wget -q -O - command is a powerful tool for downloading and manipulating files from the internet. By understanding how to use the wget -q -O - command, you can save yourself a lot of time and effort.

What is sudo tee in Linux?

The sudo tee command in Linux is used to write a command's output to both the standard output and to a file, with superuser privileges. This can be useful for logging the output of a command, or for writing the output of a command to a file that is normally owned by the root user.

In simple words, the sudo tee command allows you to write the output of a command to a file, even if you do not have write permission to the file. This can be useful for tasks such as logging the output of a command, or for creating configuration files.

What does following command do?

wget -q -O - https://apt.grafana.com/gpg.key | gpg --dearmor | sudo tee /etc/apt/keyrings/grafana.gpg > /dev/null

wget: This command is like a web downloader. It goes to a website (in this case, "https://apt.grafana.com/gpg.key") and gets a special file from there.

-q: This part tells wget to be quiet and not show lots of messages while it's working. It's like asking it to work silently.

-O -: This part tells wget where to put the file it's downloading. The dash "-" means "put it on the screen" instead of saving it to a file.

https://apt.grafana.com/gpg.key: This is the web address of the file we want to download. It's like telling wget which book we want to get from the library.

|: This symbol is called a "pipe." It's like a tube that connects commands together. It takes what one command does and passes it to the next one.

gpg --dearmor: This command does something special with the file we got. It's like opening a magic box and turning what's inside into something our computer can understand.

|: Another pipe! It takes the magic stuff from the previous command and passes it to the next one.

sudo: This word means "do this as a super user," which is like having special powers on the computer. It's often needed to make important changes.

tee /etc/apt/keyrings/grafana.gpg: This command takes the magic stuff and puts it into a special place on our computer. It's like finding a safe spot to keep a secret key.

> /dev/null: This part is like saying, "Don't show me anything on the screen." It's used to keep things quiet and tidy.

So, in simple terms, this whole command is like going to a library (the website), quietly getting a special book (the key), doing some magic to make it usable, and then securely storing it in a secret place on your computer without making a fuss. This key is needed to trust and install software from Grafana