USEFUL COMMANDS USED IN LINUX

YOU MIGHT COME ACROSS THESE COMMANDS WHILE INSTALLING GRAFANA.

What is reverse proxy nginx?

Reverse Proxy (Nginx): Think of a reverse proxy like a helpful middleman for websites. Imagine you're ordering food online. Instead of talking directly to the restaurant, you talk to a person who takes your order and then passes it to the restaurant. When your food is ready, this middleman brings it to your doorstep.

In this analogy:

You: You're like a person using the internet to visit a website.

The Restaurant: This is the web server where the website is hosted.

The Middleman (Nginx): This is the reverse proxy. It takes your request, figures out which part of the website you want, talks to the web server on your behalf, and then gives you the website's response.

Why is this useful?

Security: It hides the restaurant's address (web server) so that no one can find it easily. This makes it harder for bad guys to mess with the restaurant directly.

Speed: The middleman can help make your food (web pages) arrive faster by optimizing things. For example, it can put your food in a nice package (compressing data) or take your order even if you speak a different language (handling different protocols).

Managing Lots of Orders: If the restaurant gets very busy, the middleman can share orders between several restaurants (load balancing). This way, you get your food faster, even during rush hour.

So, Nginx, the reverse proxy, is like a smart waiter that makes sure you get your web pages quickly, safely, and efficiently when you browse the internet.

What does the following command do?

echo "deb [signed-by=/etc/apt/keyrings/grafana.gpg] https://apt.grafana.com stable main" | sudo tee -a /etc/apt/sources.list.d/grafana.list

The command echo "deb [signed-by=/etc/apt/keyrings/grafana.gpg] https://apt.grafana.com stable main" | sudo tee -a /etc/apt/sources.list.d/grafana.list adds a new repository to your APT sources list for the Grafana monitoring software.

Broken down:

echo: This command prints the text that follows it to the standard output.

deb [signed-by=/etc/apt/keyrings/grafana.gpg] https://apt.grafana.com stable main: This text specifies the new repository to be added to the APT sources list. The signed-by option specifies the GPG key to be used to verify the integrity of the packages from the repository.

|: This pipe operator sends the output of the echo command to the input of the next command.

sudo tee -a /etc/apt/sources.list.d/grafana.list: This command appends the text from the previous command to the file /etc/apt/sources.list.d/grafana.list. The sudo option is required because the APT sources list file is protected.

Once you have run this command, you need to update your APT package cache and install the Grafana package:

sudo apt update

sudo apt install grafana

Once you have installed Grafana, you can start the service and visit the Grafana web interface at http://localhost:3000.

In simple words:

This command adds a new repository for Grafana to your APT sources list. This allows you to install Grafana using the standard APT package manager.

Can I install both open-source version of Grafana and Enterprise version of Grafana on same system and still work on both of them when required?

Yes, it is possible to install both the open-source version of Grafana and the Enterprise version of Grafana on the same system and use them as needed. However, there are some important considerations:

Port Configuration: By default, both Grafana versions might try to use the same port (usually 3000) for web access. To run both versions simultaneously, you would need to configure one of them to use a different port. You can change the port in Grafana's configuration file.

Data and Configuration Separation: It's essential to keep their data and configuration directories separate. Each Grafana instance should have its own data directory and configuration files to avoid conflicts.

Resource Management: Running both versions simultaneously may consume more system resources (CPU, memory). Ensure that your system has enough resources to handle both Grafana instances effectively.

License: The Enterprise version of Grafana typically requires a paid license. Make sure you have the appropriate licenses for the Enterprise features you intend to use.

Service Management: You may need to manage them as separate services, so you can start and stop them independently when needed.

To summarize, while it's technically possible to run both versions on the same system, it requires careful configuration and resource management. Be mindful of potential conflicts, especially with port usage and data directories. It's common for users to choose one version based on their needs, but if you have specific use cases for both, it can be done with proper setup and management.

What is sudo apt-get update?

1. "sudo": Think of "sudo" as a magic word that makes your computer listen to you, even if it's doing something important. It stands for "Super User Do" and gives you special powers.

2. "apt-get": This is like a tool or command that lets you manage the software on your computer. It helps you install, update, and remove programs.

3. "update": When you tell your computer to "update," it's like asking it to check if there are any new or changed versions of the software available on the internet.

So, when you put it all together, "sudo apt-get update" is like saying:

"Hey computer, I'm in charge now (thanks to 'sudo'). Use your special software tool ('apt-get') to check if there are any new or updated software versions available online."

In other words, it's a way to make sure your computer knows about the latest and greatest software that's out there, so you can keep your system up to date and secure.

What is Linux server terminal command sudo lsof-i-P?

Let's simplify the command sudo lsof -i -P:

1. "sudo": This is like a magic word that gives you special powers on your computer. It stands for "Super User Do" and allows you to run commands with administrative privileges.

2. "lsof": This is a tool that helps you see what files and network connections are currently being used by your computer's processes. It's like peeking into what your computer is doing.

3. "-i": This is like telling the tool to focus on network connections. It means "show me information about network-related stuff."

4. "-P": This option tells the tool to display network port numbers in their numeric form, rather than resolving them to names. It's useful for seeing the exact numbers.

So, when you put it all together, sudo lsof -i -P is like saying:

"Hey computer, with my special powers ('sudo'), use the tool that shows what files and network connections are in use ('lsof'). Focus on the network stuff ('-i') and show me the network port numbers as numbers, not names ('-P')."

In simpler words, it's a way to check which network connections are active on your computer, along with their port numbers, which can be helpful for troubleshooting network issues or monitoring network activity.

What is the new way to monitor and collect data from your system specially using Prometheus, without needing to install additional Grafana software agents?

a new way to monitor and collect data from your systems, especially using Prometheus, without needing to install additional software agents.

Here's the breakdown:

Agentless Monitoring: They've introduced a method where you don't have to install extra software agents (like Grafana Agent) on your servers to gather performance data.

Metrics Endpoint Integration: They've created a way to directly collect metrics (like data about how your systems are performing) from any suitable source on the internet. It's like having a direct connection to grab this data.

Grafana Cloud Solutions: Grafana Cloud offers tools to help you keep an eye on your computer systems. You get pre-made dashboards, rules, and alerts to see what's going on and get warnings if something's not right.

No Need for Extra Software: Usually, with these monitoring tools, you had to install an extra piece of software (an agent) on your servers to send data to the cloud. But now, you can skip that step and still get all the benefits of monitoring.

So, in simple words, they've made it easier to watch over your computer systems and collect data without the hassle of installing extra stuff. It's like they found a faster and more direct way to keep an eye on things.