Analyze servers and get support

Linux #redhat #support

- Anytime you have an issue with your Linux Redhat server you will have to through the monitoring commands such as `top`, `free`, `df`, `du`, etc. A system administrator should also review the system logs in `/var/log` directory and then reach out to Redhat technical support for more help
- Redhat has made it easier for system administrator to use a web-based application named **Cockpit** to manage and analyze server
- To get support from Redhat, a system administrator can run the utility `sosreport` or in newer version "`sos report`" on Linux system as root which will collect the logs and configuration file and then transfer them over to Redhat support server. Now with Cockpit application, the report can be generated at the web-based portal
  - The `sosreport` command has been deprecated in newer RHEL versions.
  - The newer command is just `sos` with the option `report`
- Cockpit web-based interface provides many other functionality aside from monitoring and getting support from Redhat

Example using `sos` command:

```
[root@localhost ~]# sos report
```

Output:

```
sosreport (version 4.7.1)

This command will collect diagnostic and configuration information from
this Red Hat Enterprise Linux system and installed applications.

An archive containing the collected information will be generated in
/var/tmp/sos.03d3yix2 and may be provided to a Red Hat support
representative.

Any information provided to Red Hat will be treated in accordance with
the published support policies at:

        Distribution Website : https://www.redhat.com/
        Commercial Support   : https://access.redhat.com/

The generated archive may contain data considered sensitive and its
content should be reviewed by the originating organization before being
passed to any third party.

No changes will be made to system configuration.

Press ENTER to continue, or CTRL-C to quit.
```

- If you already reached to Red Hat technical support you probably have already generated a case ID, this case ID is asked when you hit Enter after running the `sos report` command
  - A prerequisite to run the `sos report` command is to create a technical support ID
- After entering the case ID it can take anywhere from 2-10 minutes.

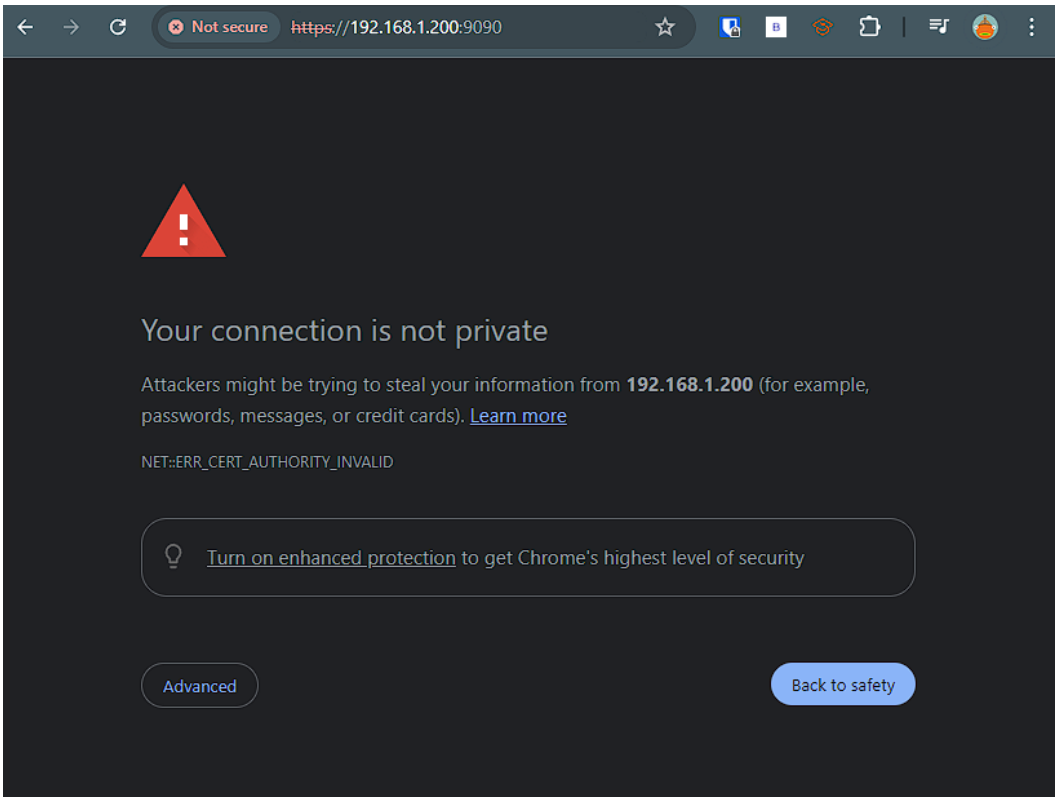
- After finishing running the plugins it creates a compressed archive and now you can simply transfer this file from this Linux machine to your desktop and you could transfer over to the Red Hat support.

Cockpit

- Cockpit is a server administration tool sponsored by Red Hat, focused on providing a modern-looking and user-friendly interface to manage and administer servers
- Cockpit is the easy-to-use, integrated, glanceable, and open web-based interface for your servers
- The application is available in most of the Linux distributions such as, CentOS, Redhat, Ubuntu and Fedora
- It is installed in Redhat 8 by default and it is optional in version 7
- It can monitor system resources, add or remove accounts, monitor system usage, shut down the system and perform quite a few other tasks all through a very accessible web connection
- You can also get the terminal within this same interface.

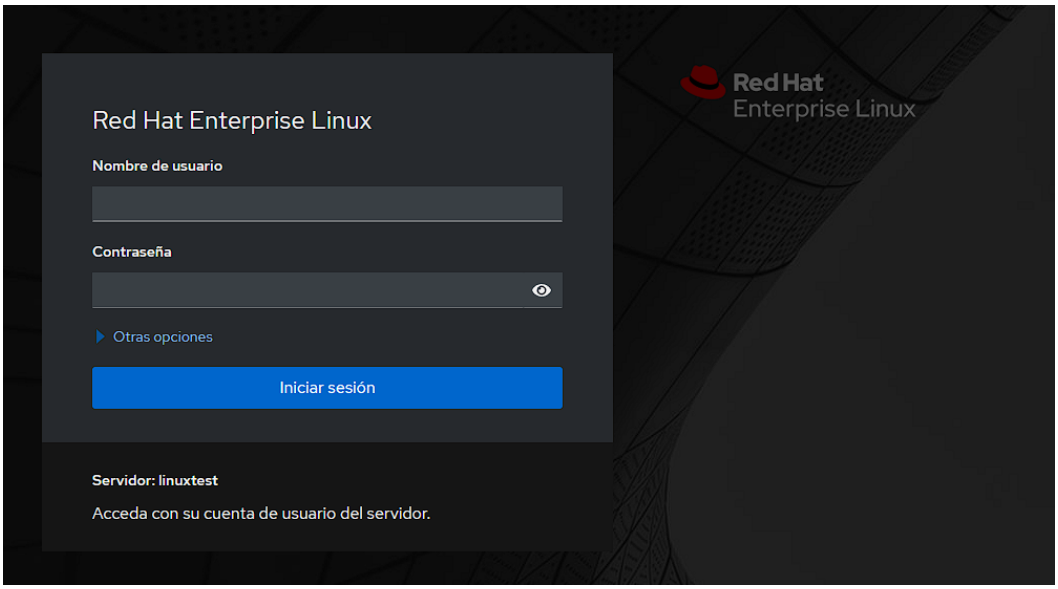
Install, Configure and Manage Cockpit

- Check for network connectivity (Both server and client)
  - `ping www.google.com`
- Install cockpit package as root (Both server and client)
  - It is a good practice to first check if the package is already installed by running `rpm -qa | grep cockpit` (RH includes it)
  - `yum/dnf install cockpit -y` (For RH or CentOS)
  - `apt-get install cockpit` (For Ubuntu)
- Start and enable the service (Both server and client)
  - It is a good practice to first check the status of the service by running `systemctl status cockpit`
  - `systemctl start cockpit`
  - `systemctl enable cockpit`
- Access the web-interface
  - Stop the firewalld service
    - `systemctl stop firewalld`
  - Type URL in your desktop browser:
    - `https://192.168.1.x:9090`
      - Replace the IP with your own IP of the Linux machine.
      - This cockpit application runs on port 9090.



- We got a potential security risk message which means we are accessing through the secure website port 443.
- When this appears you should click on Advance, then click on "Proceed to 192.168.1.200(unsafe)", which is the IP of your Linux machine.

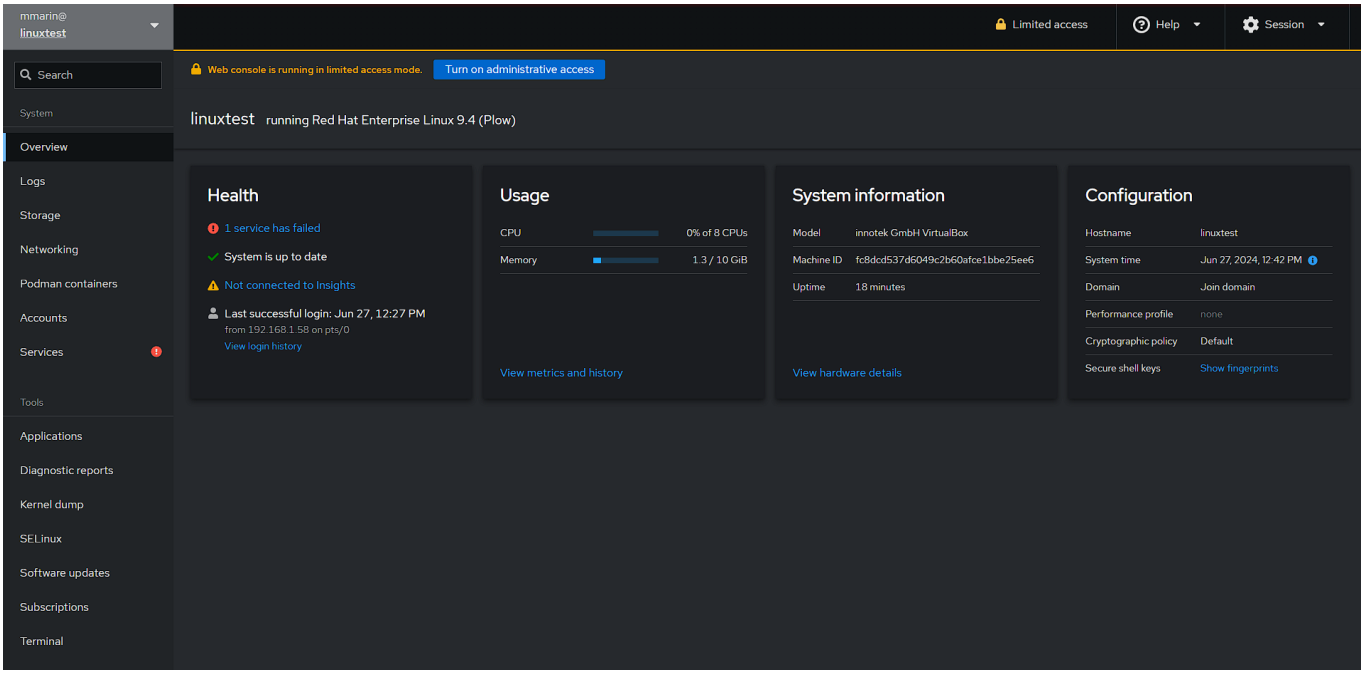
Log in



- This is our RHEL 9 machine
- Here you can log in as yourself (or any local user)
- Or you could simply log in as root.
  - By default my instance of RHEL was not able to log in as root in this interface but it worked for any local user.
    - To enable log in on root you can modify the following file: `/etc/cockpit/disallowed-users`
      - To do this you can use `vi` file editor and remove or comment out the word `root` from the file.

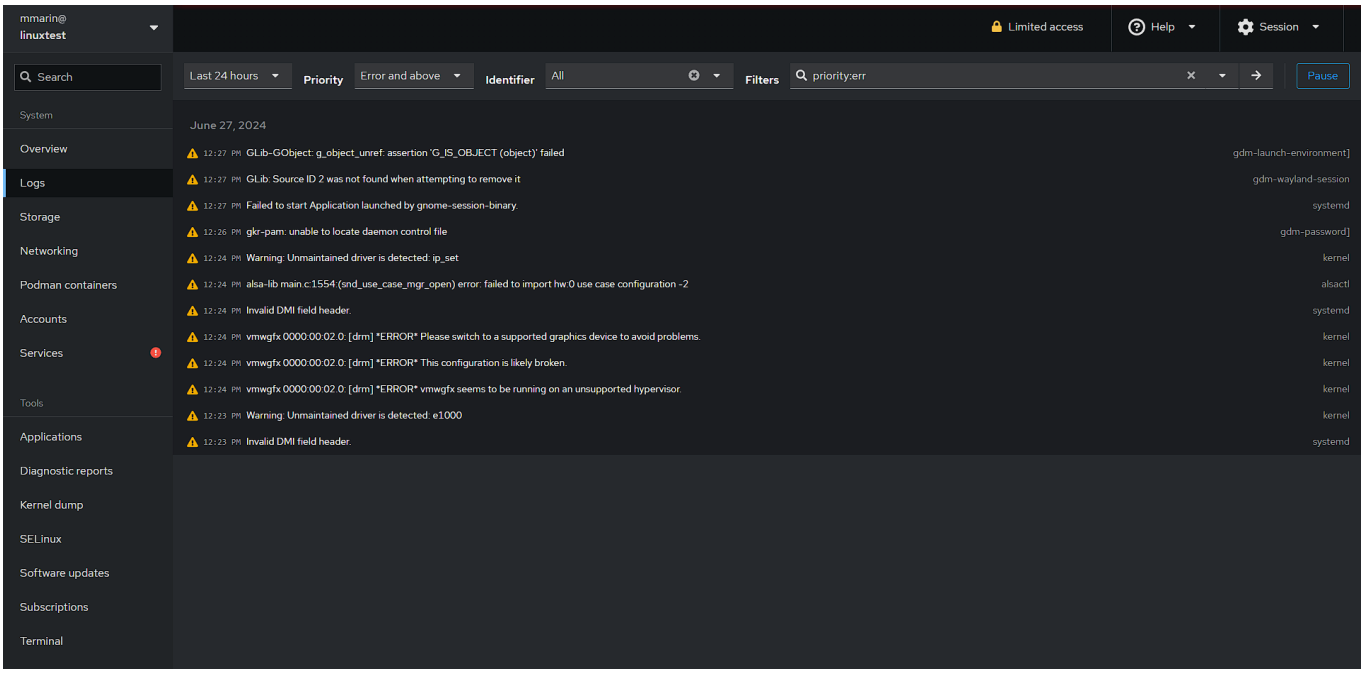
- Run: `vi /etc/cockpit/disallowed-users` to modify the file.
- Then stop and start the cockpit service.
- Now you should be able to log in as root user.

Overview



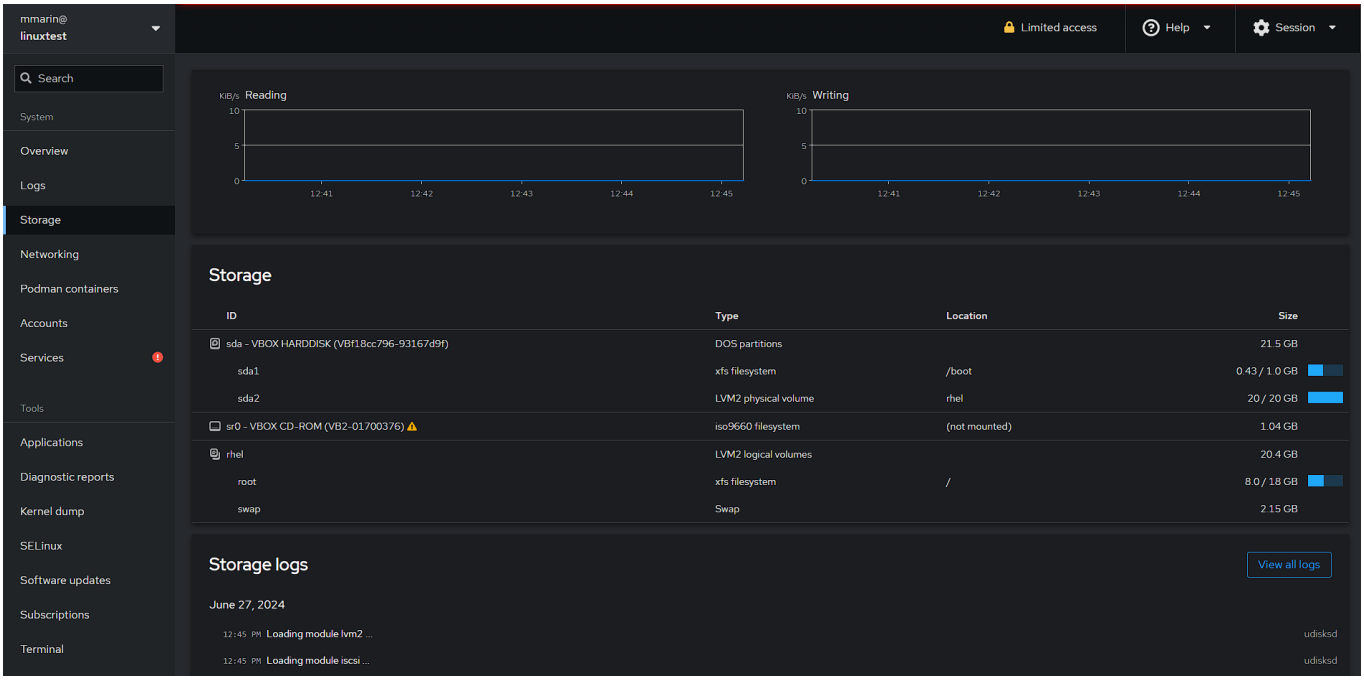
- You will find a lot of information about your server here.
- Right from this page you could reboot the machine or shut down the machine as well.
    - As a regular user you will not get these two options (you have to be root)

Logs



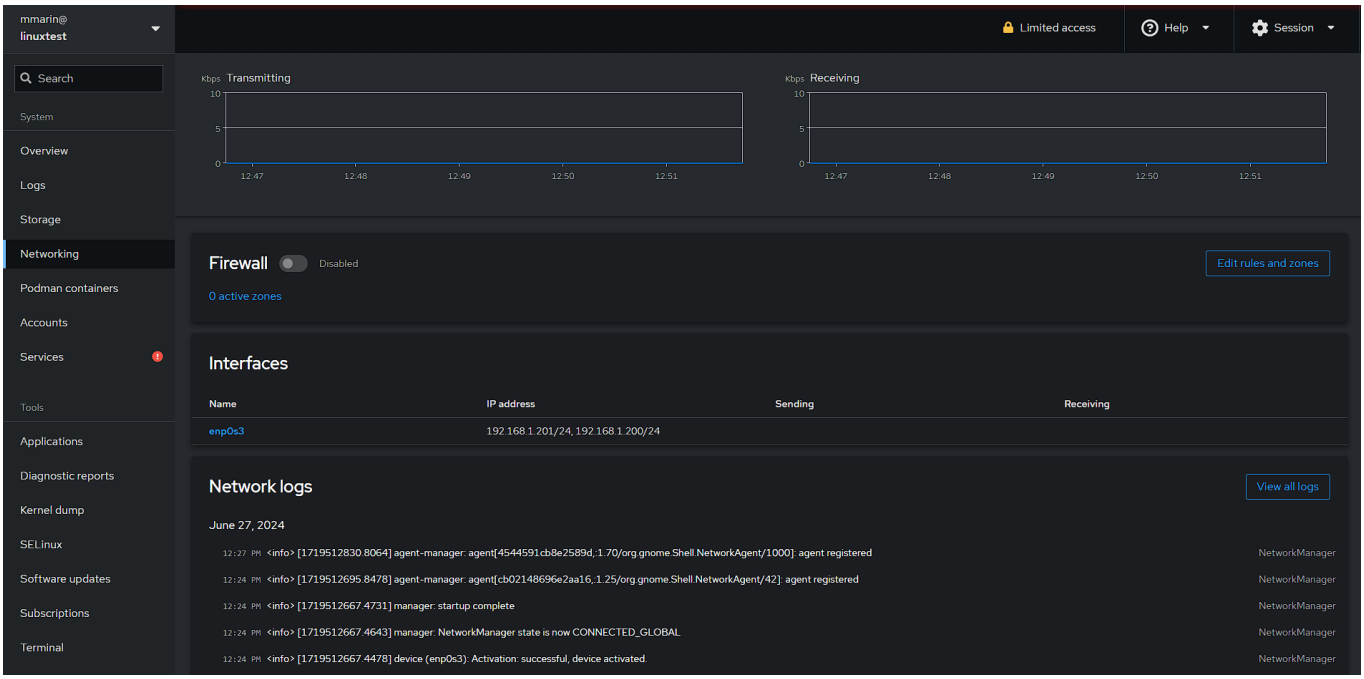
- The log tab contains the logs that we have available.
- If you wanted to see error and above, critical only, emergency only, you could see all of that, you could modify if you want.

Storage



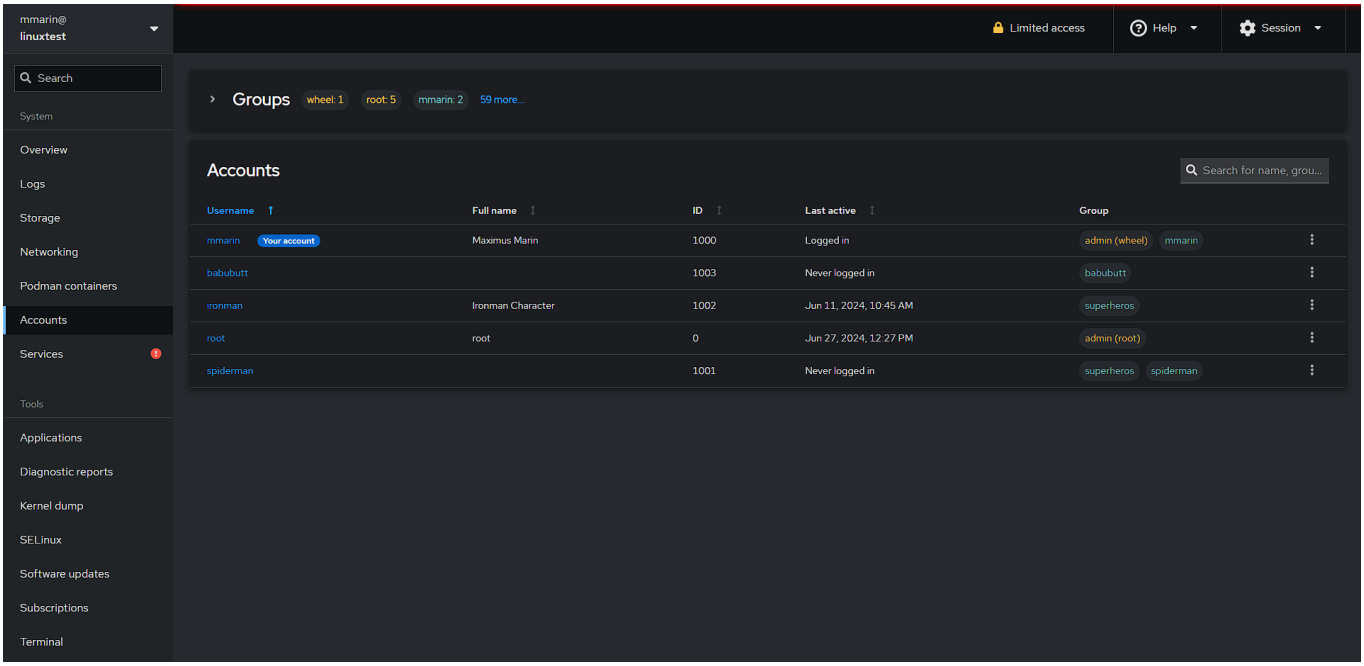
- The storage tab will tell you your storage information and your device name.
- Where is it mounted, What's the size.
- This is exactly as if you are running `df -h` command.
  - You'll get both of the partition.
- You have more information about your storage here. And you get some information about your reading and writing performance.

Networking



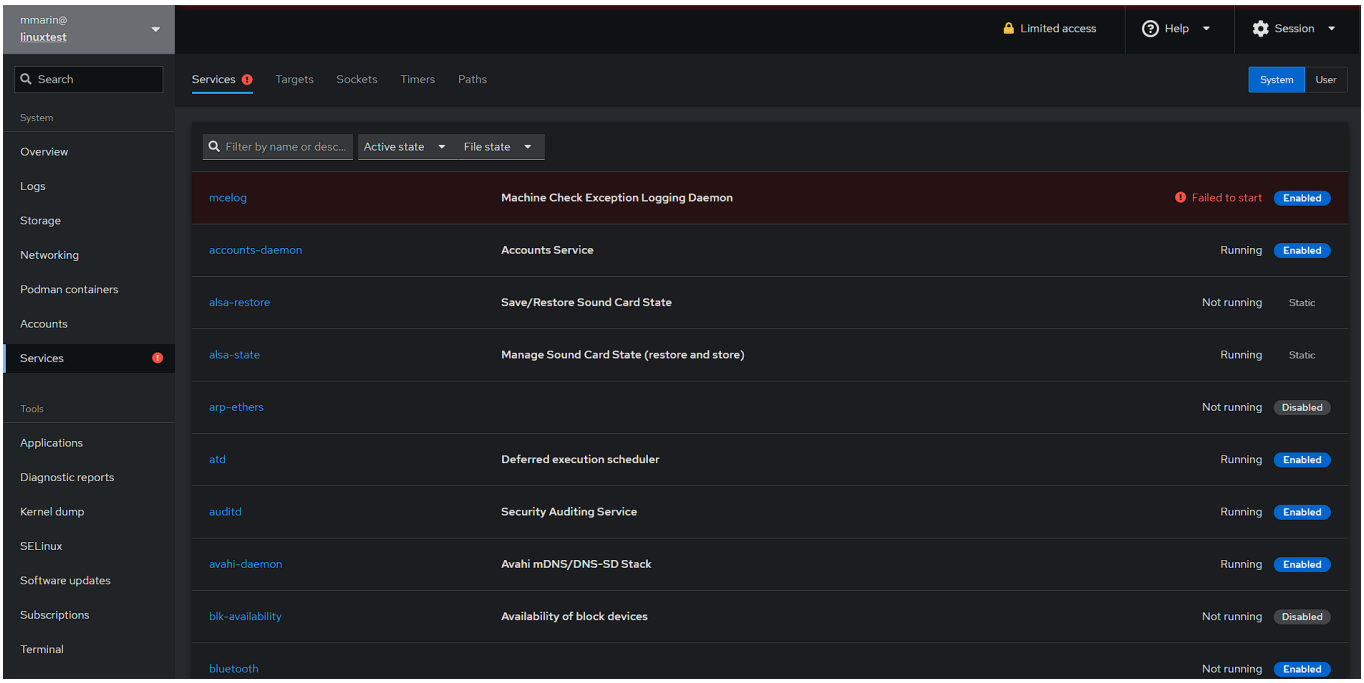
- It will show you all of your network interfaces.
- You could create a bond or a team if you have two or more interfaces.
- You could also create a bridge or add a VLAN.
- This can all be done through this web interface.

Accounts



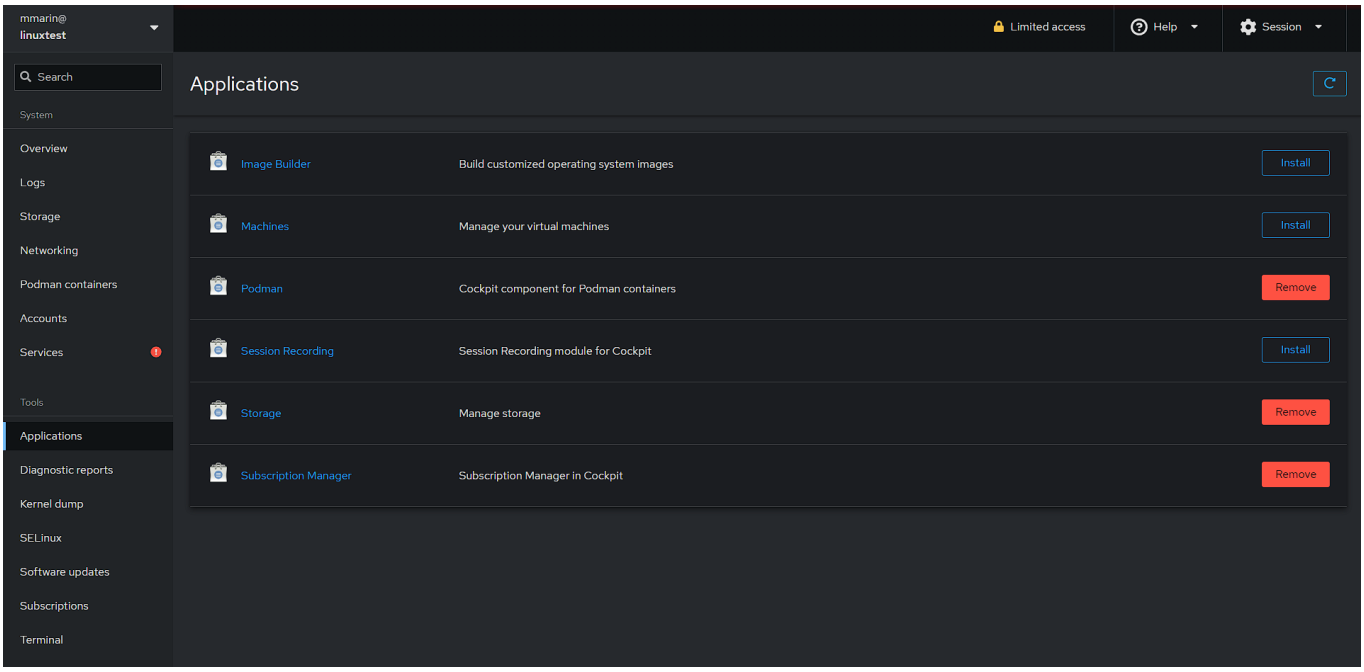
- if you wanted to create more accounts on your system you have to log in as root and the option "Create new account" will appear.

Services



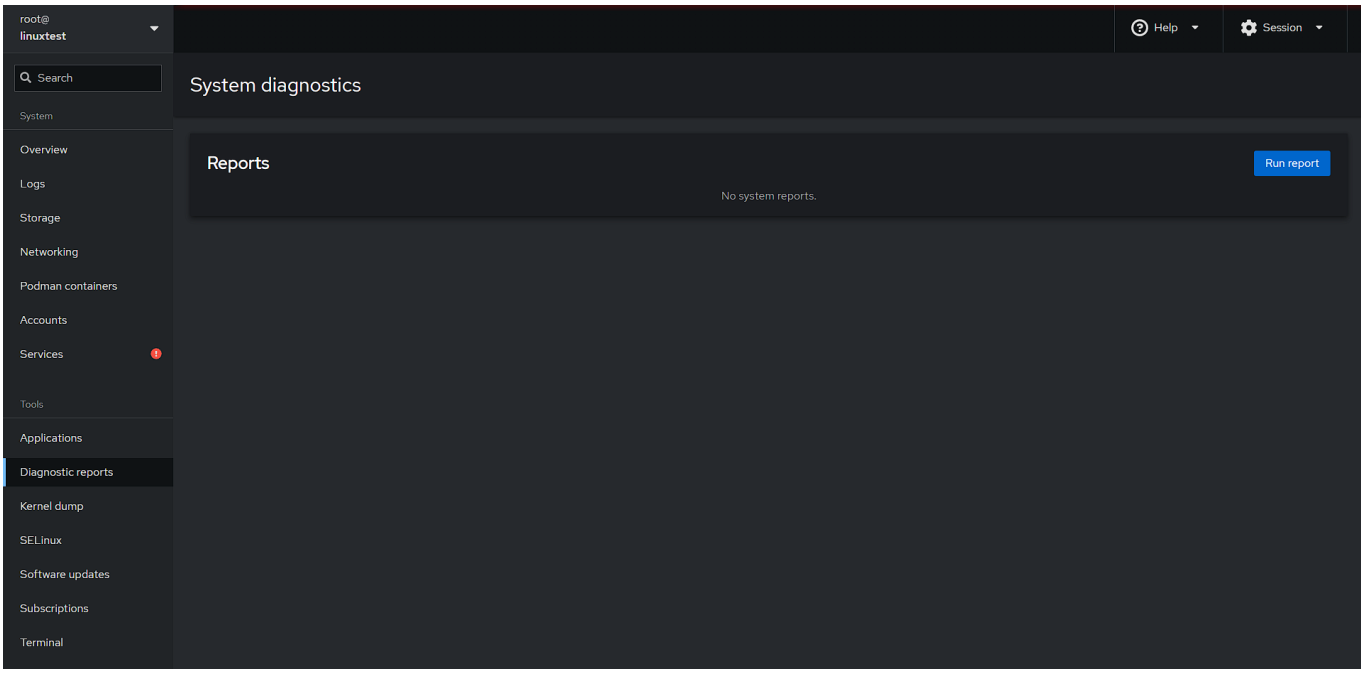
- These are all the services we have running in our Linux machine
- You could click on the service and start or stop the service or enable or disable the service.
- You could manage the services right here.

Applications



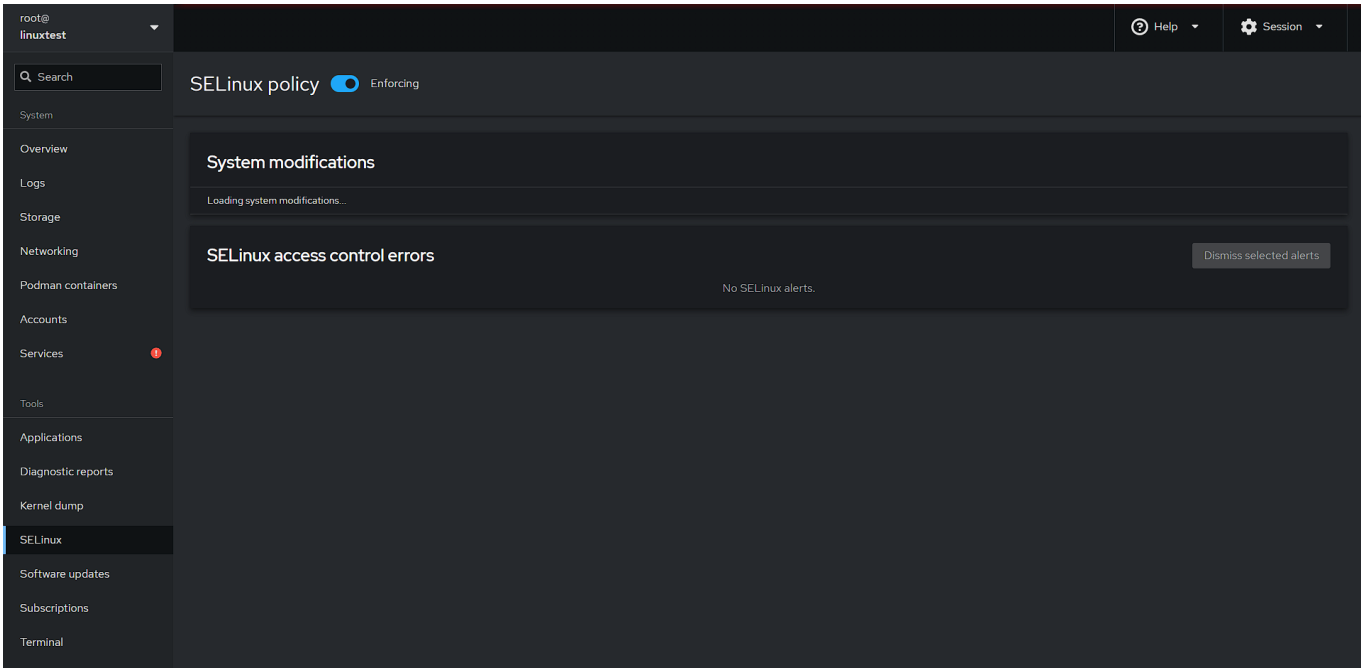
- Here you have a list of applications that we have installed.
- You could remove or install them.

Diagnostic reports



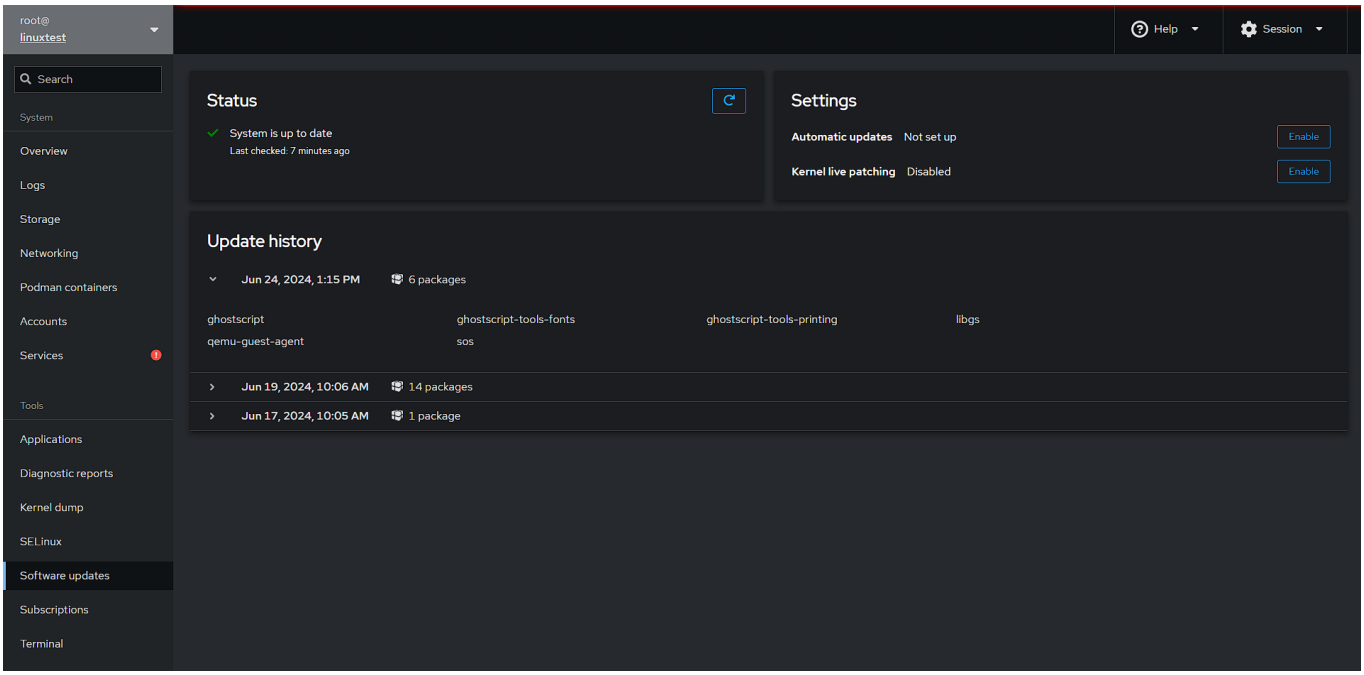
- This is where if you are troubleshooting anything in your computer and you wanted to collect the logs or configuration files, just like `sos report` command, then you will have to create or generate this report right here by clicking "Create report". (You have to be root or have administrative access).
- This could take anywhere from 2 minutes to 10 minutes depending on the size of your system. Once you have the report generated you could download it and send it out to Red Hat support so they could take a look.

SELinux



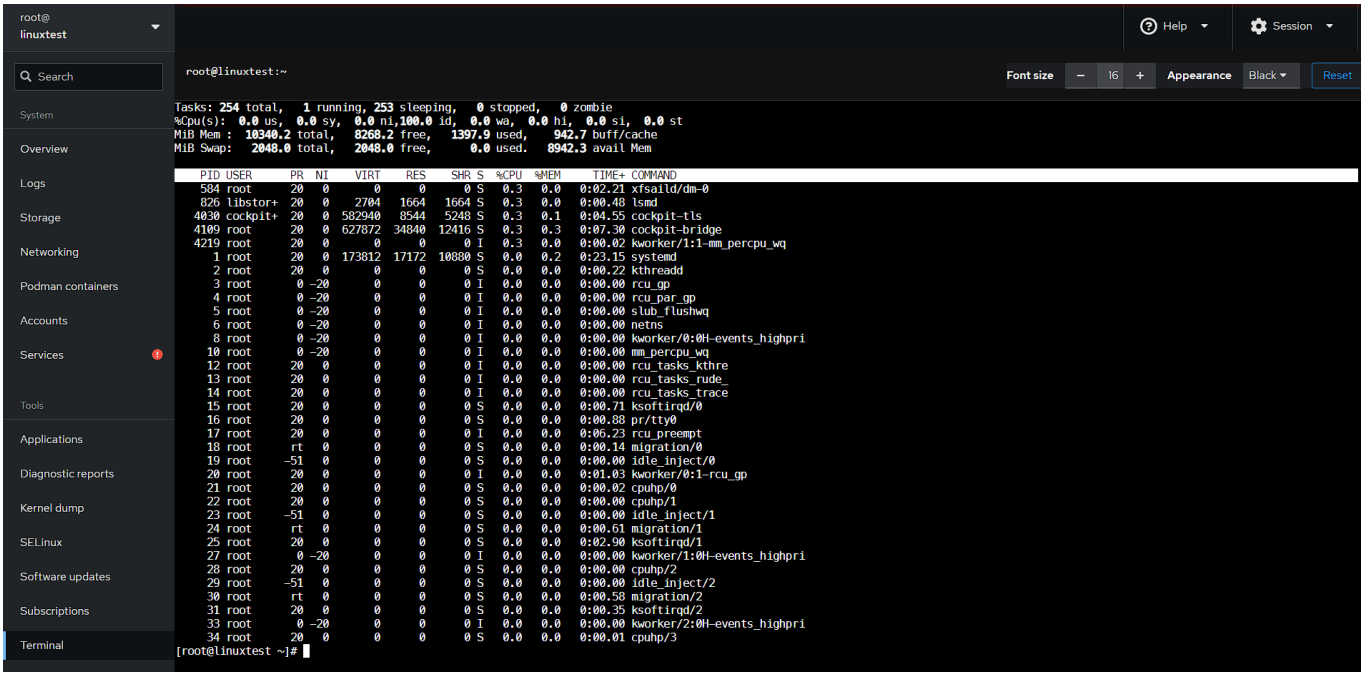
- SCLinux functionality can be pulled from right here.
- You could control your SCLinux, how you can assign, you can enforce it or disable it, or provide permissive information.

Software updates



- Whatever the updates that is available to you, you could download and you could install all updates in one shot just like you were running `yum/dnf update/upgrade`

Terminal



- You could run the same commands that you would run on your PuTTY or any other console terminal.