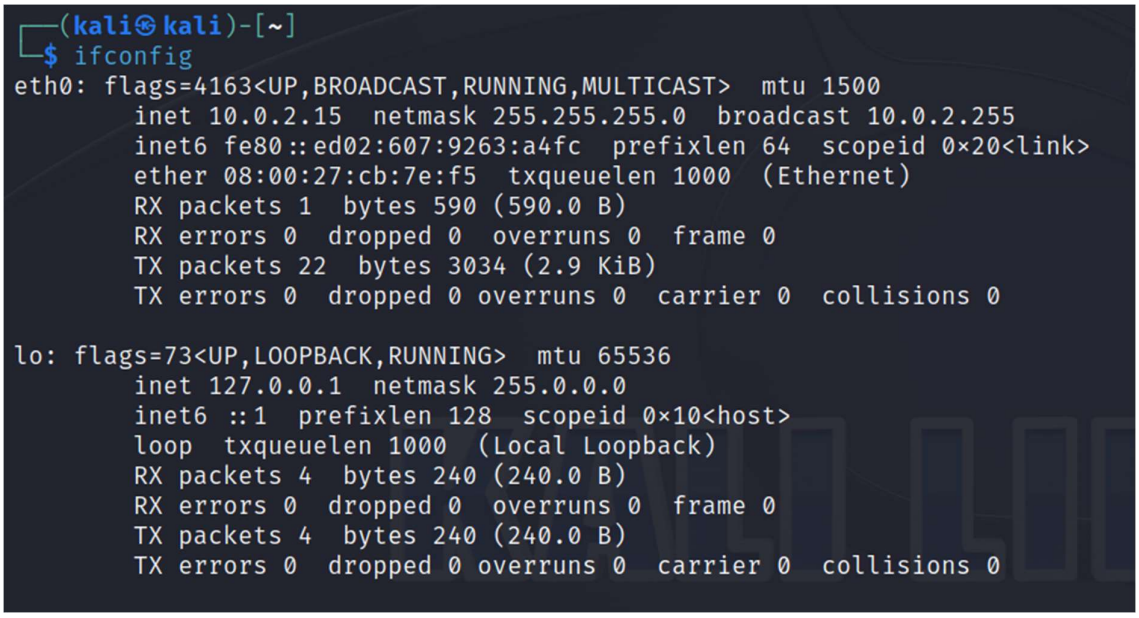
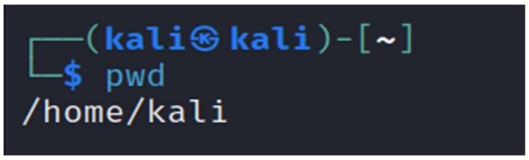
Commands in Kali Linux and Programming

Execute the following commands on the Kali Linux virtual machine.

ifconfig: Displays information about network interfaces, including their IP addresses, MAC addresses, and network statistics.



pwd: Prints the current working directory (the directory you are currently in).

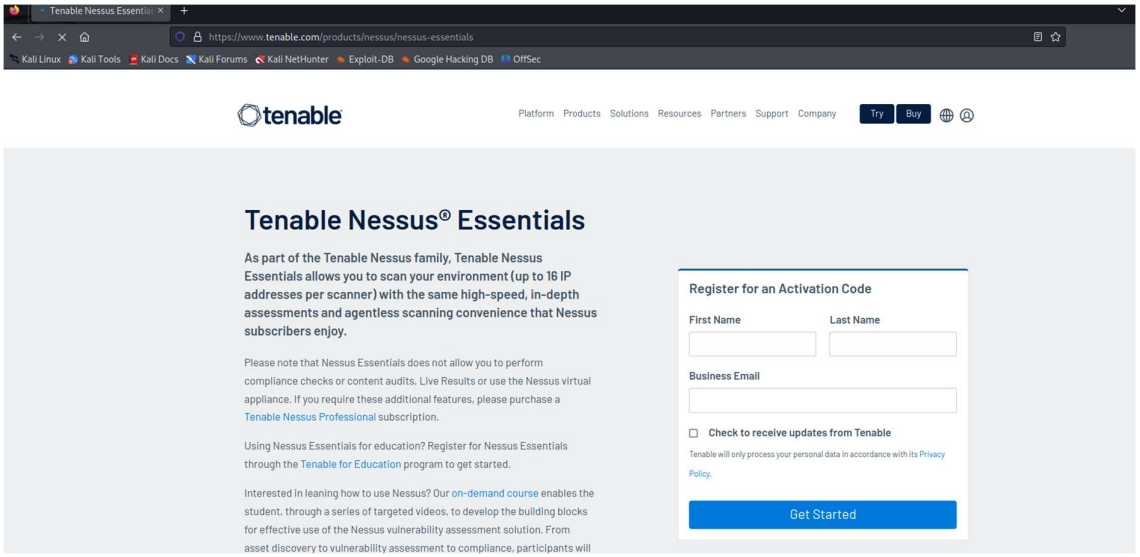


echo $SHELL: Prints the path to the shell you are currently using (in this case, **/usr/bin/zsh**).

Installing and configuring Nessus Scanner on a Kali Linux system. The following steps are carried out.

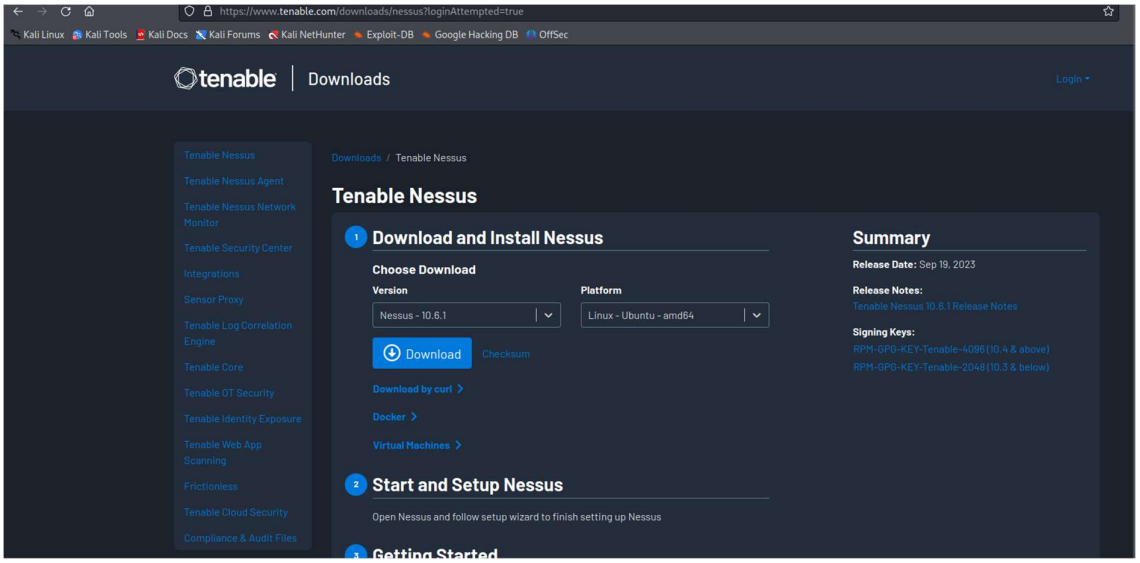
1. Register for Nessus:

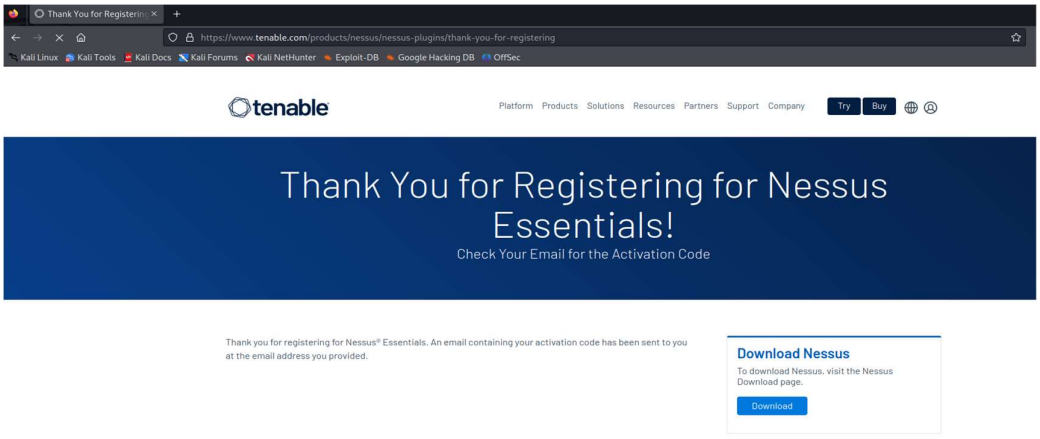
- Go to the Nessus registration page: [Nessus Essentials Registration] (https://www.tenable.com/products/nessus/nessus-essentials).
- Follow the registration process to create an account and obtain a Nessus Essentials activation code.

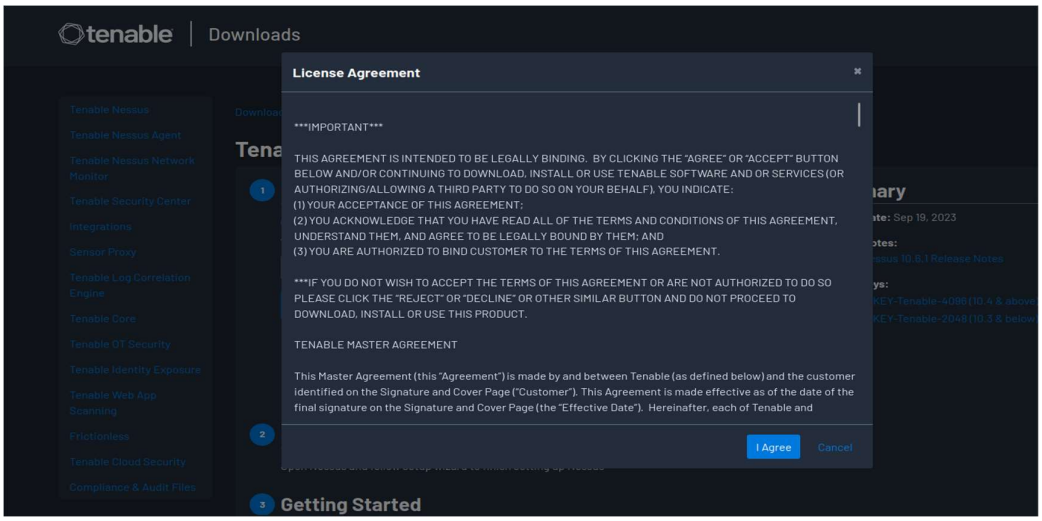


2. Download Nessus:

- After registration, download the Nessus Scanner package for Ubuntu from the Nessus download page.

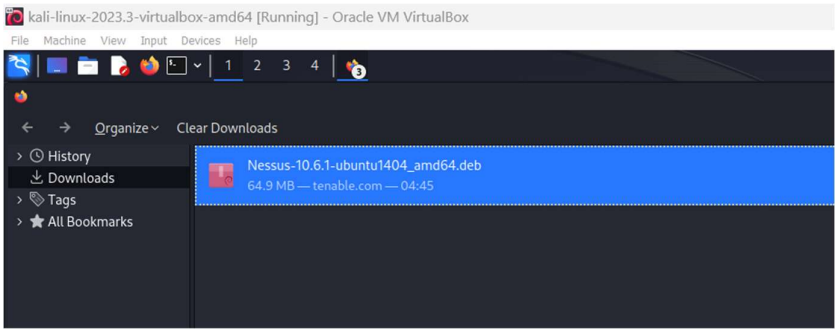


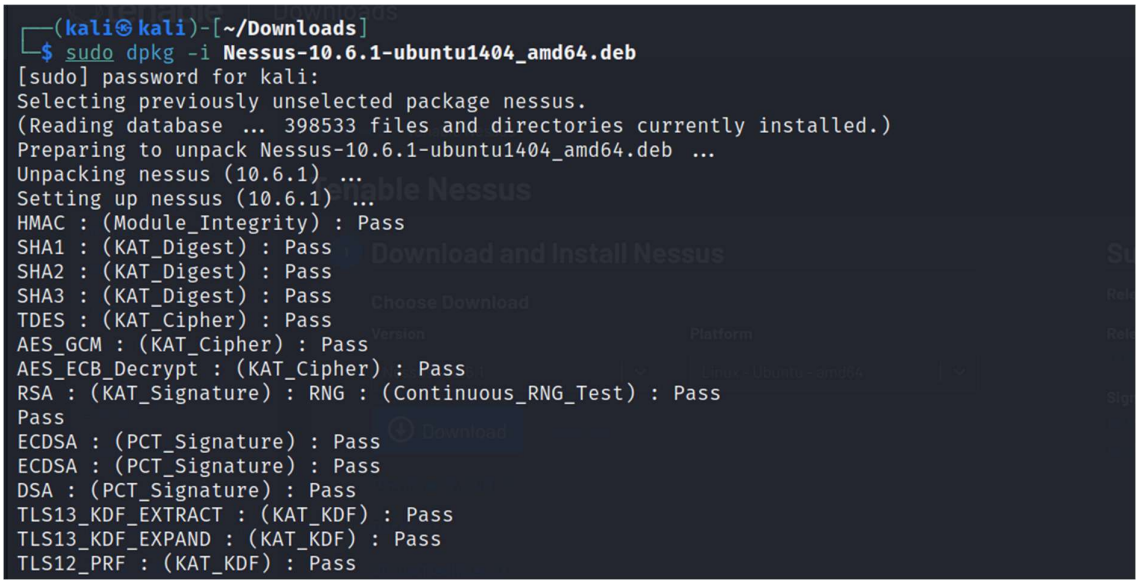




3. Install Nessus:

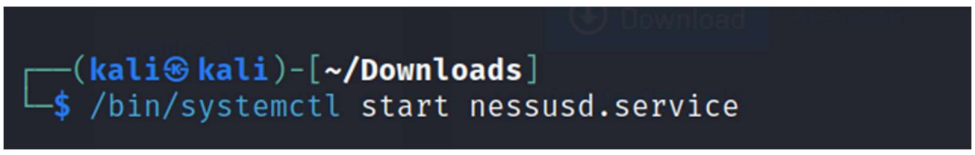
- Open a terminal in Kali Linux.
- Navigate to the directory where you downloaded the Nessus package.
- Install Nessus using the 'dpkg' command: **sudo dpkg -i Nessus-10.6.1-ubuntu1404_amd64.deb**





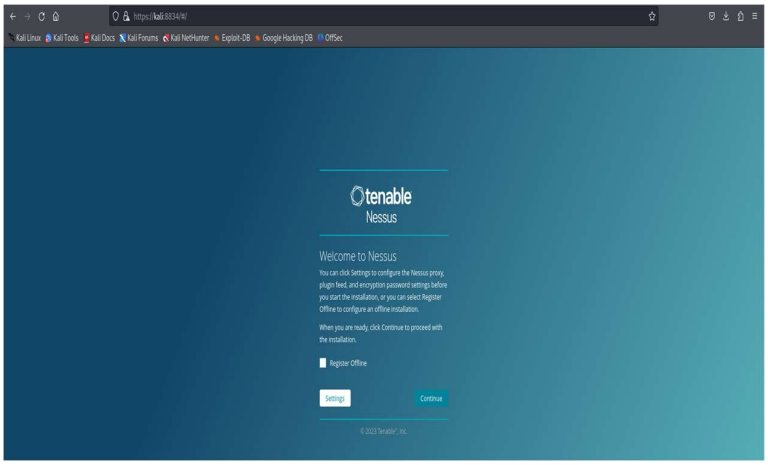
4. Start Nessus Scanner:

- Start the Nessus Scanner service by running the following command:
  /bin/systemctl start nessusd.service



5. Configure Nessus:

- Open a web browser and go to **'https://kali:8834/'**.
- Log in with the credentials you created during the registration process.
- Follow the on-screen instructions to complete the initial configuration of Nessus Scanner.


https://kali:8834/#/
Kali Linux
Kali Tools
Kali Docs
Kali Forums
Kali NetHunter
Exploit-DB
Google Hacking DB
OffSec
tenable
Nessus
Welcome to Nessus
You can click Settings to configure the Nessus proxy, plugin feed, and encryption password settings before you start the installation, or you can select Register Offline to configure an offline installation.
When you are ready, click Continue to proceed with the installation.
Register Offline
Settings
Continue
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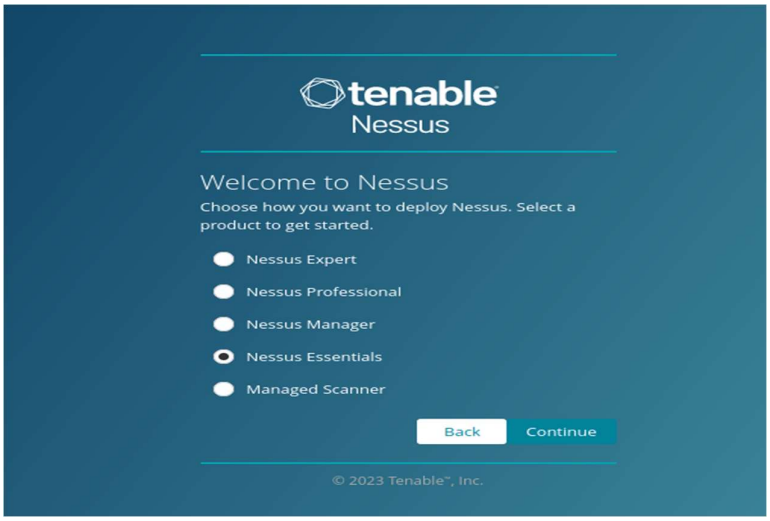
tenable
Nessus
Welcome to Nessus
Choose how you want to deploy Nessus. Select a product to get started.
Nessus Expert
Nessus Professional
Nessus Manager
Nessus Essentials
Managed Scanner
Back
Continue
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tenable
Nessus Essentials
Register Nessus
Enter your activation code.
Activation Code *
GEMU-DA9F-DLS6-DG6C-95YF
Back
Continue
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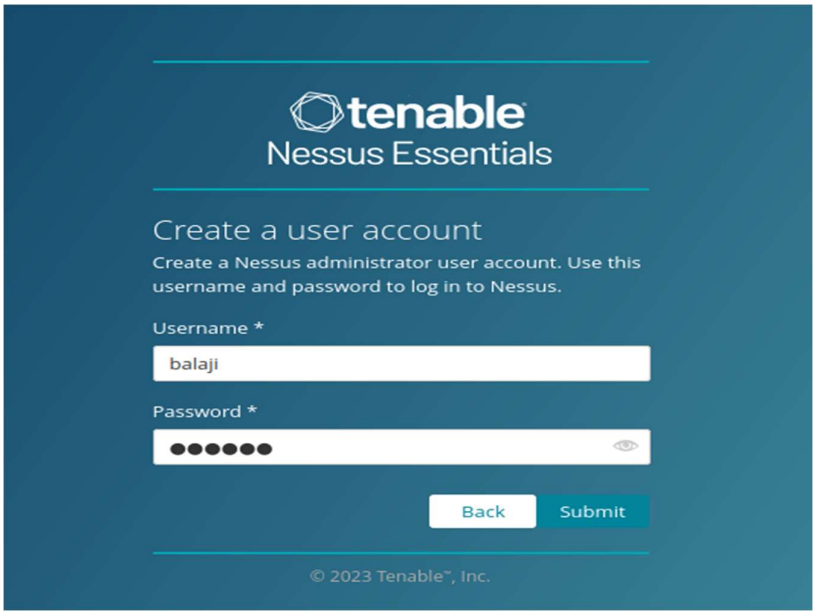
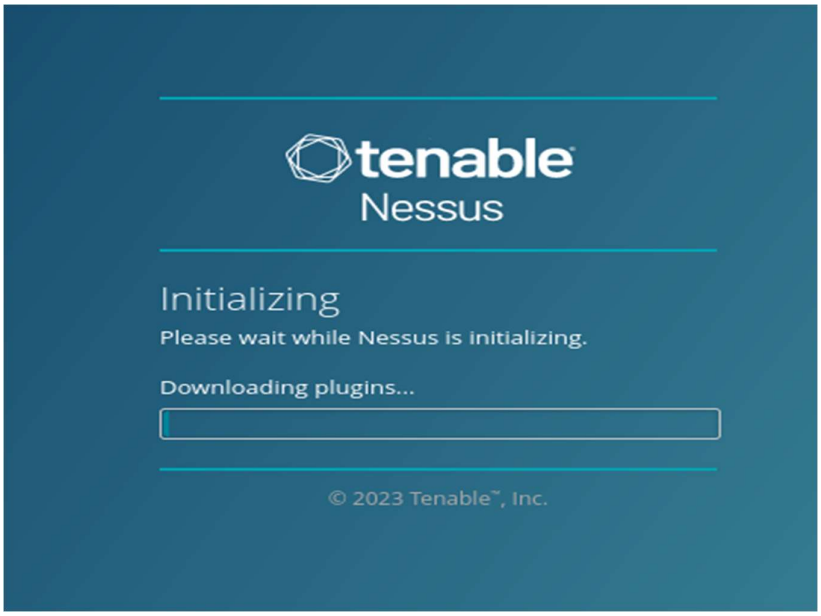
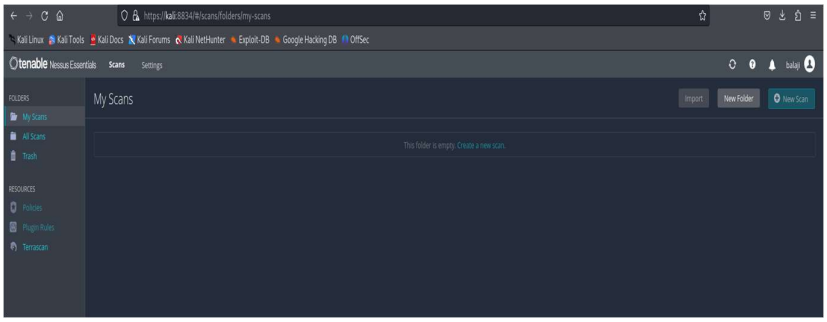

tenable
Nessus Essentials
Create a user account
Create a Nessus administrator user account. Use this username and password to log in to Nessus.
Username *
balaji
Password *
Back
Submit
© 2023 Tenable™, Inc.

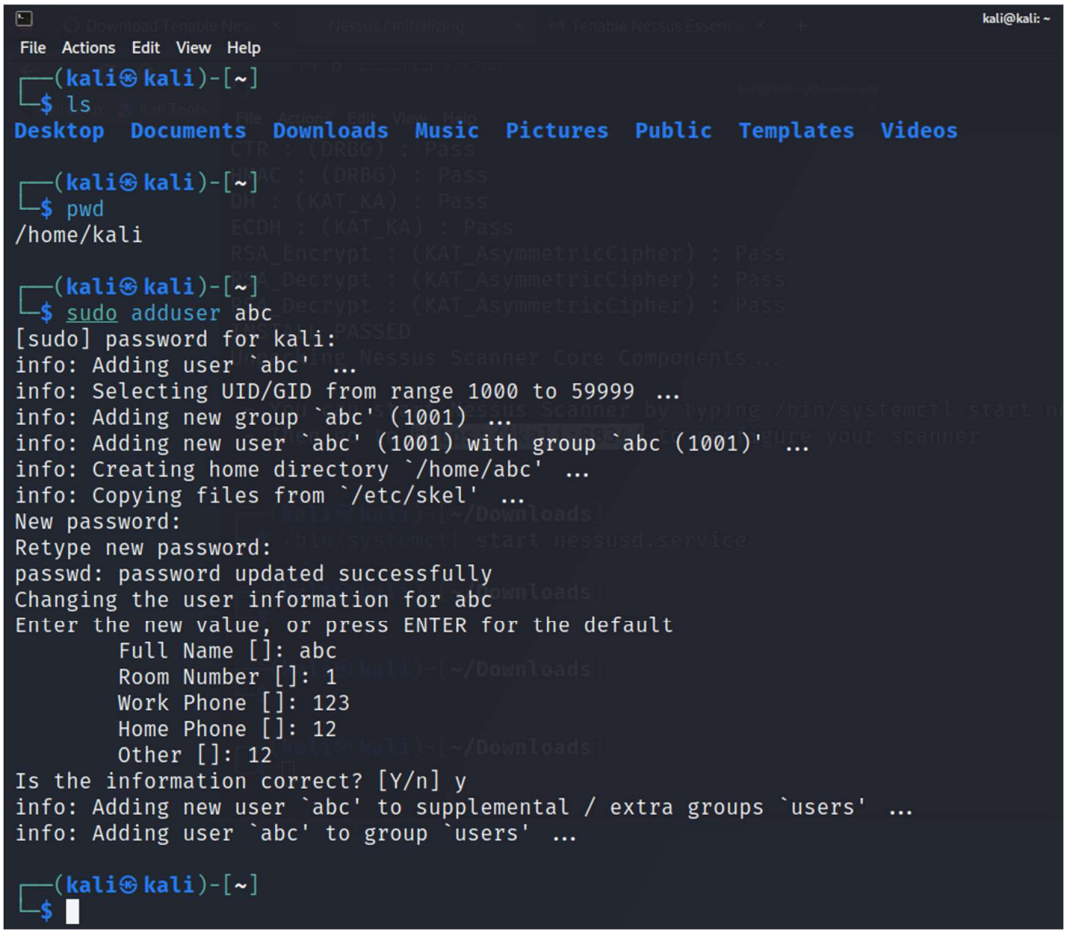

tenable
Nessus
Initializing
Please wait while Nessus is initializing.
Downloading plugins...
© 2023 Tenable™, Inc.

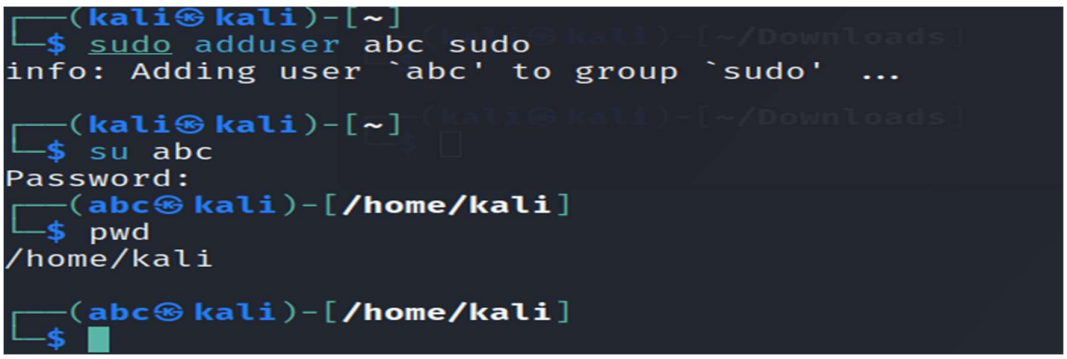

https://kali:8834/#/scans/folders/my-scans
Kali Linux
Kali Tools
Kali Docs
Kali Forums
Kali NetHunter
Exploit-DB
Google Hacking DB
OffSec
tenable Nessus Essentials
Scans
Settings
balaji
FOLDERS
My Scans
All Scans
Trash
RESOURCES
Policies
Plugin Rules
Terrascan
My Scans
Import
New Folder
New Scan
This folder is empty. Create a new scan.

Open the Terminal and continue with other commands.

ls: This command will display a list of files and directories in the current working directory.

sudo adduser abc: This command creates a new user named "abc" on the system. It assigns a unique User ID (UID) and Group ID (GID), creates a home directory, sets a password, and optionally collects user information such as full name, room number, and phone numbers. The user is also added to the "users" group.

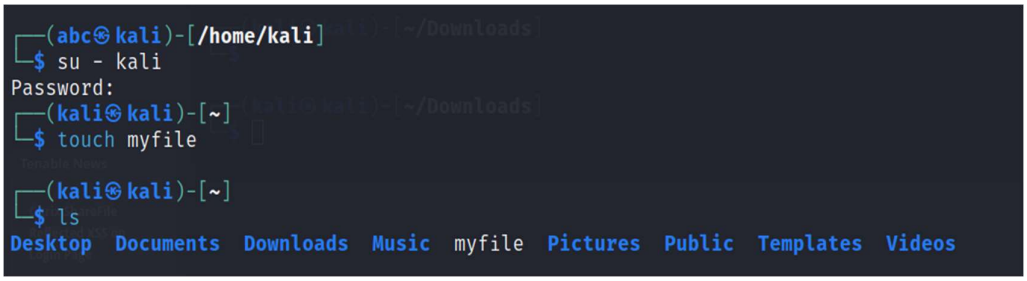




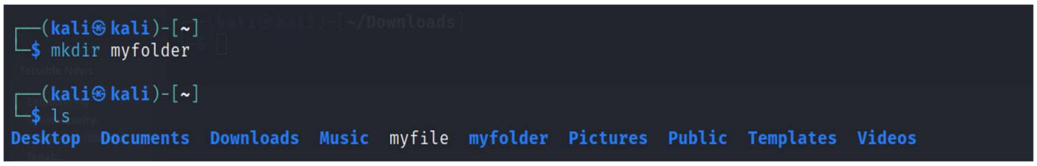
In Kali Linux or any Linux distribution, you can create an empty file called myfile using the touch command, copy and move files using cp and mv, and remove files using rm. Here are the basic commands for these operations:

Create an Empty File:

To create an empty file named myfile, open your terminal and run the following command:



New Directory can be created by command: **mkdir folderName**



Copy Files:

To copy a file from one location to another, use the **cp** command. For example, to copy myfile to a folder called myfolder, run: **cp myfile myfolder/**

Check whether myfile is available inside the myfolder by running: **ls myfolder**

If you want to copy a directory and its contents recursively, use the -r (or -R) option:
cp -r sourcedir/ destination/

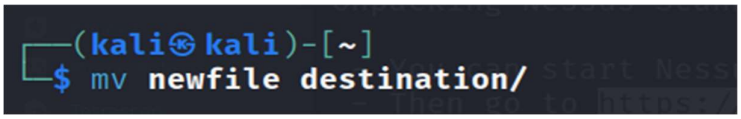
Move (Rename) Files:

To move a file or rename it, use the mv command. For example, to rename myfile to newfile, run:

mv myfile newfile

To move a file to a different directory, specify the destination:

mv newfile destination/

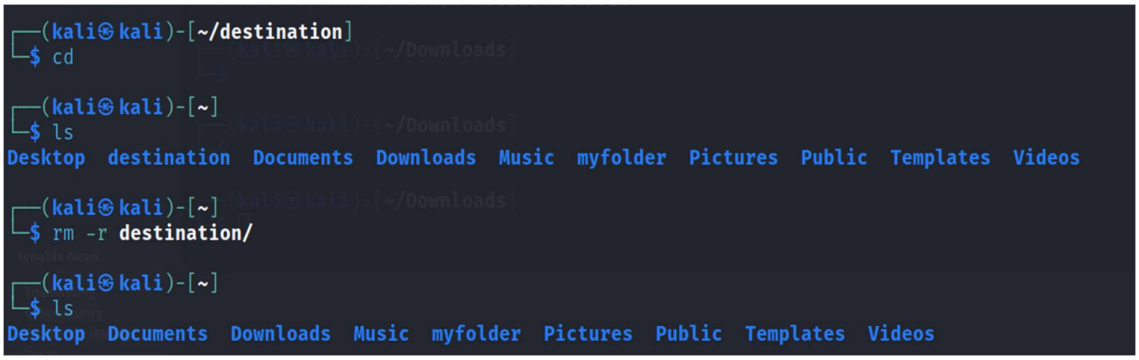


Remove Files:

To remove a file, use the rm command. For example, to delete myfile, run: **rm myfile**

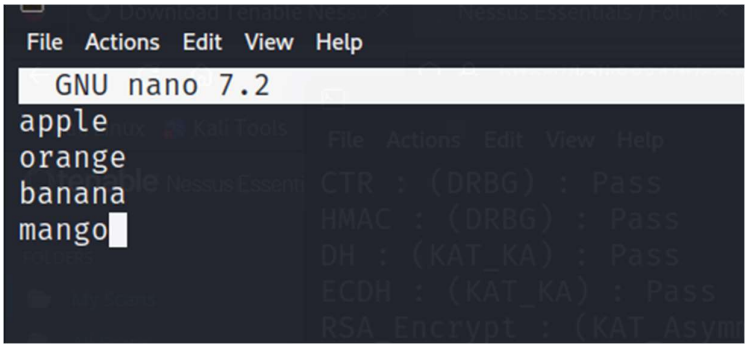
If you want to remove a directory and its contents recursively, use the -r (or -R) option:

rm -r destination/



grep Command: grep is used to search for text patterns within files. Here's a basic example:

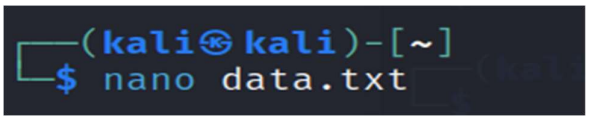
Create a file called sample.txt using command **nano sample.txt** and add contents into it.

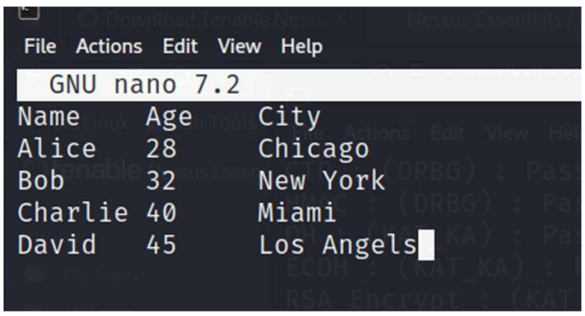


This command **grep "apple" sample.txt** will search for the word "apple" in the sample.txt file and display all lines containing that word. If you want to perform a case-insensitive search and display line numbers, you can use the **-i** (ignore case) and **-n** (line numbers) options: **grep -i -n "apple" sample.txt**

awk Command: awk is a powerful text processing tool that allows you to manipulate text data.

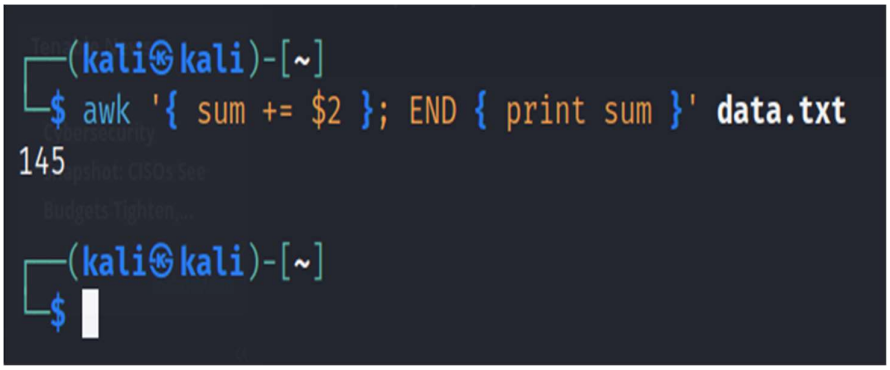
Create a file called data using command **nano data.txt** and add contents into it.





This command **awk '{print $2, $3}' data.txt** uses AWK to print the second and third columns from each line of data.txt.

This command **awk '{ sum += $2}; END { print sum }' data.txt** calculates the sum of values in the second column of data.txt and prints it when processing is complete.



Result

This comprehensive guide on Kali Linux provides essential commands and procedures for effective utilization of the operating system. It covers network configuration using ifconfig, system navigation with **pwd**, and shell information retrieval via **echo $SHELL**. Additionally, it includes installation and configuration instructions for the **Nessus Scanner**, a valuable vulnerability assessment tool. The guide also covers file and directory management, including copying, moving, and removal operations, and introduces powerful text processing commands like **grep** and **awk.** With these fundamental skills, users can confidently manage Linux systems and tackle programming tasks.