INSTALLING GNS3 ON KALI LINUX(DEBIAN BASED DISTRIBUTION 64 BIT ONLY)

Below are the steps to install GNS3 on Kali Linux:

Step 1: First you must have Kali Linux installed in your machine, if you have not installed Kali Linux before, please check out the
following video in youtube or article of sysnettechsolutions.
Article -->https://www.sysnettechsolutions.com/
Video -→https://www.youtube.com/watch?v=kUo1v...

Step 2: To install the latest version 2.1.21 of GNS3 on Kali Linux, first download the GNS3 to your computer by visiting the link below.
 -→https://www.gns3.com/software

 Step 3: After downloading GNS3 for Kali Linux, open Terminal and add the following addresses to sources.list .

First, execute "nano /etc/apt/sources.list" in Terminal.

deb http://ppa.launchpad.net/gns3/ppa/ubuntu trusty main
deb-src http://ppa.launchpad.net/gns3/ppa/ubuntu trusty main

Step 4: After editing Kali Linux sources.list, save the changes by pressing Ctrl + O + Ctrl + X and then press the Enter button to confirm the changes in the file.

Step 5: You must install dirmngr to run GNS3 in Kali. To install the Dirmngr package, run the following command in Terminal.
--> apt-get install dirmngr

Step 6: After installing the dirmngr package on Kali Linux, add the Ubuntu global key to Kali by following the command below.
--> apt-key adv --keyserver keyserver.ubuntu.com --recv-keys F88F6D313016330404F710FC9A2FD067A2E3EF7B

Step 7: Run the "apt-get update" command to update the Kali package list.
--> apt-get update

Step 8: In order to install GNS3 2.1.21 on Kali, execute the following commands in Terminal.
--> apt-get install gns3-gui
-->pip3 install gns3-gui
-->pip3 install gns3-server

-After installing GNS3 on Kali Linux you need to install Docker which will help you to run light virtual machines replacing heavy Qemu VMs or VPCS when tools like telnet, nmap etc. are needed.
Docker allows you to package an application with all of its dependencies into a standardized unit for software development.
Below are steps to install docker in kali linux:

1.First uninstall older versions using the command below:
-->sudo apt-get remove docker docker-engine docker.io

2. Then install these dependencies, if not already present:
sudo apt-get install apt-transport-https ca-certificates \
curl gnupg2 software-properties-common telnet

3.Import the official Docker GPG key:
curl -fsSL https://download.docker.com/Linux/$(. /etc/os-release; echo
"$ID")/gpg | sudo apt-key add -

4.Set up the repository:
sudo add-apt-repository \
"deb [arch=amd64] https://download.docker.com/linux/$(. /etc/os-release; echo
"$ID") \
$(lsb_release -cs) \
stable"

5. Install docker using the following commands:
  -->sudo apt-get update
  -->sudo apt-get install docker-ce

If any permissions errors are encountered, ensure your user belongs to the
following groups:
-->ubridge docker wireshark
If your user doesn't belong to any of the above groups, use the following
command to add it to them:
-->sudo usermod -aG group username