

Installation Ubuntu 22.04

Run as ROOT

1. Install python >= 3.8 and setuptools
\$ sudo add-apt-repository ppa:gns3/ppa -y
\$ sudo apt update
\$ sudo apt install -y python3 python3-pip python3-setuptools
\$ sudo apt install -y qemu qemu-kvm qemu-utils ubridge vpc libpcap-dev
\$ sudo apt install -y qemu-kvm libvirt-daemon-system libvirt-daemon virtinst bridge-utils libosinfo-bin

Reboot to apply changes

2. \$ cd ~
\$ git clone <https://github.com/GNS3/gns3-server.git>
\$ cd gns3-server
\$ python3 -m pip install -r requirements.txt
\$ python3 -m pip install .
\$ gns3server

\$ Ctrl + C

3. \$ cd ~
\$ git clone https://github.com/GNS3/ubridge.git
\$ cd ubridge
\$ make
\$ sudo make install

\$ newgrp kvm

\$ newgrp libvirt

\$ reboot

4. Create user
\$ sudo adduser gns3
set password as: gns3

\$ sudo usermod -aG kvm,libvirt gns3

5. Create Daemon
\$ cd ~
\$ cd gns3-server/init

```
$ cp gns3.service systemd /lib/systemd/system/gns3.service
$ chown root /lib/systemd/system/gns3.service
$ sudo systemctl start gns3
$ sudo systemctl enable gns3
```

6. Copy configuration files to user gns3

```
$ cd ~
$ cd gns3-server/conf
```

```
#Copy gns3_server.conf to the user gns3 config location
$ sudo cp gns3_server.conf /home/gns3/.config/GNS3/2.x/
```

```
$ sudo chown gns3:gns3 /home/gns3/.config/GNS3/2.x/gns3_server.conf
$ systemctl restart gns3
```

*you can also set auth = True, username and password

7. Upload VyOS appliance

- a. Goto GNS3 UI <http://<ip-address>:3080>
- b. Create a "Test" project
- c. Select the "+" sign
- d. Select: New template
- e. Select: Install new appliance from the GNS server
- f. On the filter search: VyOS then select install
- g. Select: Install the appliance locally
- h. On the installed required files select the import button for **vyos-x.x.x-kvm-amd64.qcow2**
- i. Import: Download here: <https://cdn.as212934.net/routers/VyOS/>
- j. Click Create
- k. Add Template name: VyOS
- l. *Optional* Change symbol: Projects > Go to Preferences > Qemu > VyOS > General Settings > Symbol > search for a router symbol