

# Install GNS3 for Linux (Ubuntu)

## Contents

<b>1 Objective</b>	<b>1</b>
<b>2 Installing GNS3</b>	<b>1</b>
2.1 First time you run GNS3 . . . . .	2
<b>3 Set up folders and files to run GNS3</b>	<b>2</b>
<b>4 Run GNS3 locally on your machine</b>	<b>3</b>
<b>5 Run GNS3 locally and view a dynamips configuration running remotely.</b>	<b>4</b>

## 1 Objective

You are going to install the GNS3 network simulator that will run on your local machine, but which we will configure to talk to a running dynamips instance on your workshop server. In this manner you will have a graphical interface available to view the real-time status of your virtual network and to manipulate routers and switches.

<http://www.gns3.net/download/>

## 2 Installing GNS3

You can always find the GNS3 Linux installation program at:

<http://www.gns3.net/download/>

However it's easily simpler to install GNS3 using your Linux versions package system. To install GNS3 on Ubuntu open a terminal window and do:

```
sudo apt-get update
sudo apt-get install dynamips gns3
```

Once this completes GNS3 is installed. You can always start GNS3 by going to a terminal window and typing "gns3" from the command line. Depending on your flavor of linux you can then make it a permanent item on a task bar once it's started.

## 2.1 First time you run GNS3

You can open a terminal window and type "gns3" to run GNS3 directly. If prompted to update or configure just skip these steps. Don't update GNS3 if prompted.

We suggest you close GNS3 now as you will be starting it again shortly.

## 3 Set up folders and files to run GNS3

- On your Desktop create a folder called GNS3
- Inside this folder create two folders:
  - NMM
  - CND

Now go to the Git repositories web interface on [wsnoc.nsrc.org](http://wsnoc.nsrc.org) to log in and download two routers.net files. Go to:

```
http://wsnoc.nsrc.org:8000
```

Username and password are:

```
Username: trainers
password: <CLASS_PASSWORD>
```

Now download the following routers.net file to the GNS3/NMM directory on your desktop:

```
http://wsnoc.nsrc.org:8000/nsrc/workshop-kit/blob/master/conf/dynagen/nmm/routers.net
```

You may find that you have to manually copy and paste the contents of the file in to a file on your local machine.

Next download the following routers.net file to the GNS3/CND directory on your desktop

```
http://wsnoc.nsrc.org:8000/nsrc/workshop-kit/blob/master/conf/dynagen/cnd/routers.net
```

You may find that you have to manually copy and paste the contents of the file in to a file on your local machine.

Next edit the file:

```
GNS3/NMM/routers.net
```

and comment out the line that reads:

```
workingdir = /home/nsrc/dynamips/nmm/work
```

and change the line:

```
[s1.ws.nsrc.org]
```

to be:

```
[localhost]
```

and change the line that reads:

```
image = /home/nsrc/binary-images/...
```

to read:

```
image = ...
```

Now you are ready to run GNS3 on your machine.

## 4 Run GNS3 locally on your machine

Open a terminal and run GNS3:

```
gns3
```

From within GNS3 select Open a Project and find the GNS3/NMM/routers.net file and open this.

You should see GNS3 start and it will present you with a few routers and a simple network topology. You can right click on the routers to view more information, open consoles, etc..

## 5 Run GNS3 locally and view a dynamips configuration running remotely.

For this exercise only one person can do this at a time in your group.

First, on your workshop server be sure of the following:

- dynamips is running
- dynagen is *not* running

Open a terminal and run GNS3:

```
gns3
```

From within GNS3 select Open a Project and find the GNS3/CND/routers.net file and open this.

This may take a minute to complete loading but you now you will see the complete set of network devices for the Campus Network Design workshop up and running in your local GNS3 instance. The actual work, however, is being done on the remote s1.ws.nsrc.org workshop server!

You'll notice that the devices map is a big blob of items. If you'd like to see a nicely formatted version of this (one that we have updated and saved out) first stop GNS3, then download the file:

```
http://wsnoc.nsrc.org:8000/nsrc/workshop-kit/blob/master/conf/dynagen/cnd/routers-gns3.net
```

to your GNS3/CND directory.

Open a terminal and run GNS3:

```
gns3
```

From within GNS3 select Open a Project and find the GNS3/CND/routers-gns3.net file and open this.

You can play with the devices the same as in the previous section.