

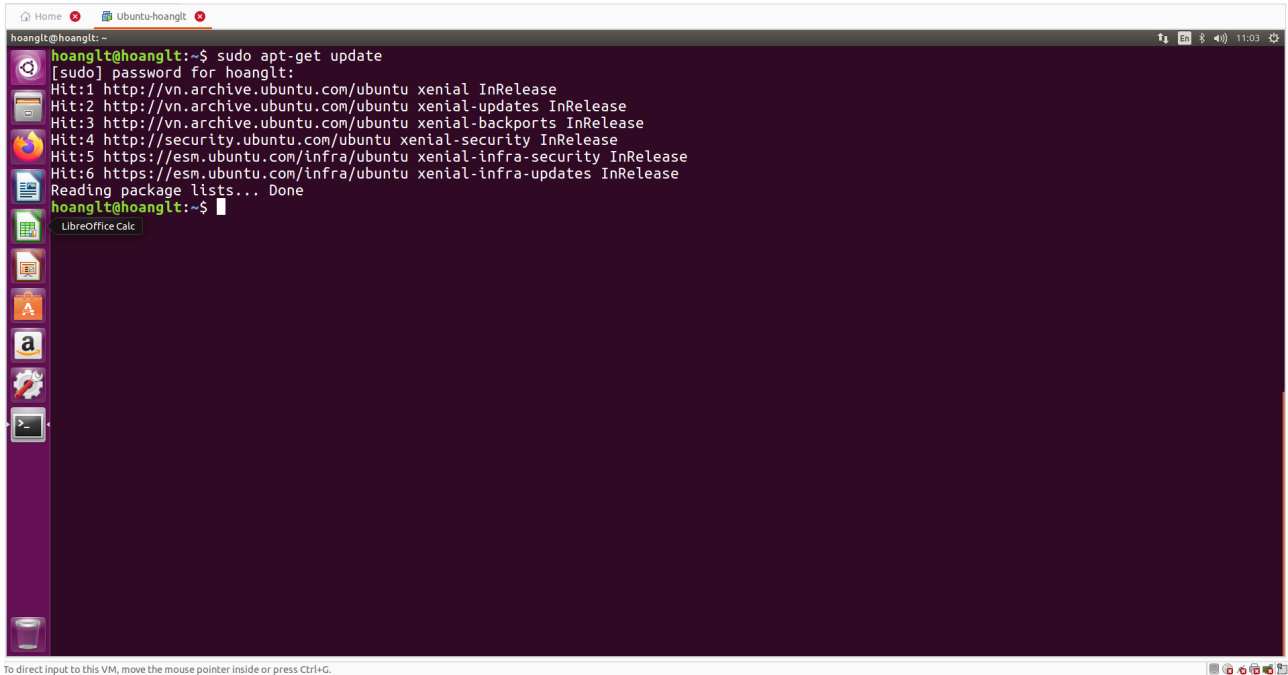
INSTALL FOG

Class: IA1605

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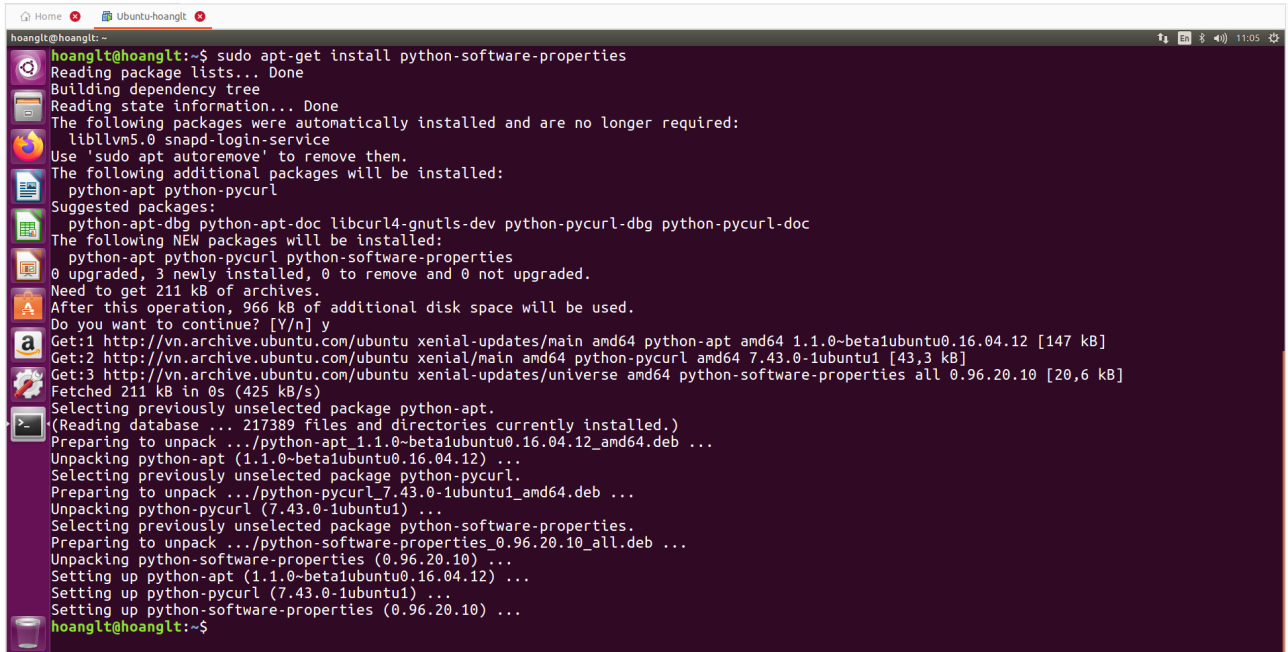
Mentor: Mai Hoang Dinh



```
hoanglt@hoanglt:~$ sudo apt-get update
[sudo] password for hoanglt:
Hit:1 http://vn.archive.ubuntu.com/ubuntu xenial InRelease
Hit:2 http://vn.archive.ubuntu.com/ubuntu xenial-updates InRelease
Hit:3 http://vn.archive.ubuntu.com/ubuntu xenial-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu xenial-security InRelease
Hit:5 https://esm.ubuntu.com/infra/ubuntu xenial-infra-security InRelease
Hit:6 https://esm.ubuntu.com/infra/ubuntu xenial-infra-updates InRelease
Reading package lists... Done
hoanglt@hoanglt:~$
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

Install python: `sudo apt-get install python-software-properties`



```
hoanglt@hoanglt:~$ sudo apt-get install python-software-properties
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  liblvm5.0 snapd-login-service
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  python-apt python-pycurl
Suggested packages:
  python-apt-dbg python-apt-doc libcurl4-gnutls-dev python-pycurl-dbg python-pycurl-doc
The following NEW packages will be installed:
  python-apt python-pycurl python-software-properties
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 211 kB of archives.
After this operation, 966 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://vn.archive.ubuntu.com/ubuntu xenial-updates/main amd64 python-apt amd64 1.1.0-beta1ubuntu0.16.04.12 [147 kB]
Get:2 http://vn.archive.ubuntu.com/ubuntu xenial/main amd64 python-pycurl amd64 7.43.0-1ubuntu1 [43,3 kB]
Get:3 http://vn.archive.ubuntu.com/ubuntu xenial-updates/universe amd64 python-software-properties all 0.96.20.10 [20,6 kB]
Fetched 211 kB in 0s (425 kB/s)
Selecting previously unselected package python-apt.
(Reading database ... 217389 files and directories currently installed.)
Preparing to unpack .../python-apt_1.1.0-beta1ubuntu0.16.04.12_amd64.deb ...
Unpacking python-apt (1.1.0-beta1ubuntu0.16.04.12) ...
Selecting previously unselected package python-pycurl.
Preparing to unpack .../python-pycurl_7.43.0-1ubuntu1_amd64.deb ...
Unpacking python-pycurl (7.43.0-1ubuntu1) ...
Selecting previously unselected package python-software-properties.
Preparing to unpack .../python-software-properties_0.96.20.10_all.deb ...
Unpacking python-software-properties (0.96.20.10) ...
Setting up python-apt (1.1.0-beta1ubuntu0.16.04.12) ...
Setting up python-pycurl (7.43.0-1ubuntu1) ...
Setting up python-software-properties (0.96.20.10) ...
hoanglt@hoanglt:~$
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

```
hoanglt@hoanglt:~$ sudo apt-get install software-properties-common
Reading package lists... Done
Building dependency tree
Reading state information... Done
software-properties-common is already the newest version (0.96.20.10).
The following packages were automatically installed and are no longer required:
  libblvm5.0 snapd-login-service
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
hoanglt@hoanglt:~$
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

```
Text Editor
*interfaces [Read-Only] (/etc/network/interfaces) - gedit
Open Save
# interfaces(5) file used by ifup(8) and ifdown(8)
auto ens33
iface ens33 inet static
address 172.16.5.136
netmask 255.255.255.0
gateway 192.168.2.1
dns-nameserver 8.8.8.8
iface lo inet loopback

hoanglt@hoanglt:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 00:0c:29:ae:2a:3b brd ff:ff:ff:ff:ff:ff
    inet 172.16.5.136/24 brd 172.16.5.255 scope global dynamic ens33
        valid_lft 1364sec preferred_lft 1364sec
    inet6 fe80::ee4a:dc55:a212:7702/64 scope link
        valid_lft forever preferred_lft forever
hoanglt@hoanglt:~$ cd fog_stable/
hoanglt@hoanglt:~/Downloads/fog_stable$ ls
authors.txt bin lib LICENSE packages README.md SELinux src utils
hoanglt@hoanglt:~/Downloads/fog_stable$ gedit /etc/network/interfaces
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

Install Fog on github: git clone <https://github.com/fogproject/fogproject.git>
Move to folder fogproject/bin to install fog by command: sudo ./installfog.sh

[illegible]

Set up some options

A screenshot of a terminal window titled "hoanglt@hoanglt: /opt/fogproject/bin". The terminal shows the output of running a script to install FOG Server. It prompts for confirmation to remove existing files and directories, asks for installation mode selection (Normal or Storage), provides information about the installation, asks for network interface selection, and finally prompts for DHCP server configuration. The user has responded with 'y' for most prompts and 'n' for the storage node option.

```
*** Detected a potential need to reinstall apache and php files.
*** This will remove the /etc/php* and /etc/apache2* directories
*** and remove/purge the apache and php files from this system.
*** If you're okay with this please type Y, anything else will
*** continue the installation, but may mean you will need to
*** remove the files later and make proper changes as
*** necessary. (Y/N):

FOG Server Installation modes:
 * Normal Server: (Choice N)
   This is the typical installation type and
   will install all FOG components for you on this
   machine. Pick this option if you are unsure what to pick.

 * Storage Node: (Choice S)
   This install mode will only install the software required
   to make this server act as a node in a storage group

More Information:
http://www.fogproject.org/wiki/index.php?title=InstallationModes

What type of installation would you like to do? [N/s (Normal/Storage)] n

We found the following interfaces on your system:
 * ens33 - 172.16.5.142/24

Would you like to change the default network interface from ens33?
If you are not sure, select No. [y/N] y
What network interface would you like to use?
 * ens33
Terminal OPTION... PATTERN [FILE]...
Try grep --help for more information.
./lib/common/functions.sh: line 227: /8: syntax error: operand expected (error token is "/8")
grep: 172.16.5.142: No such file or directory

We found the following interfaces on your system:
 * ens33 - 172.16.5.142/24

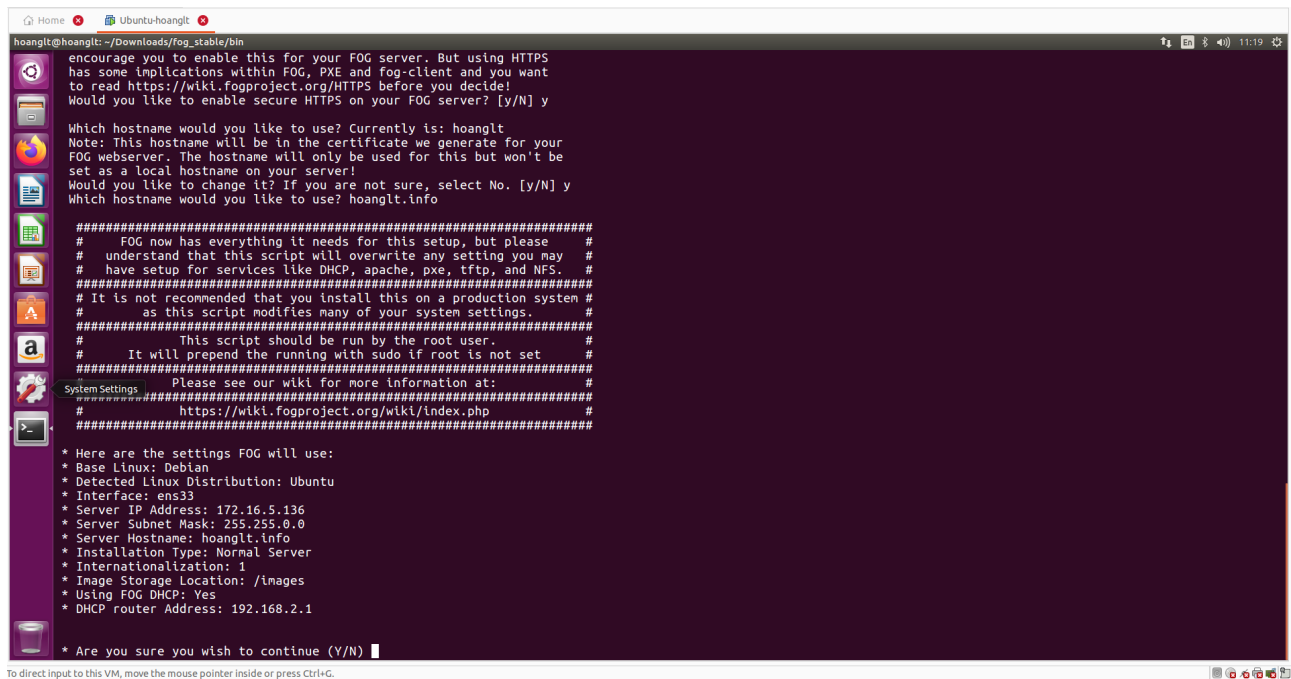
Would you like to change the default network interface from ens33?
If you are not sure, select No. [y/N] n

Would you like to setup a router address for the DHCP server? [Y/n] y
What is the IP address to be used for the router on
the DHCP server? [172.16.5.2]

Would you like DHCP to handle DNS? [Y/n] y
What DNS address should DHCP allow? [172.16.5.2]

Would you like to use the FOG server for DHCP service? [Y/N] y
```

Choose Y to continue install fog



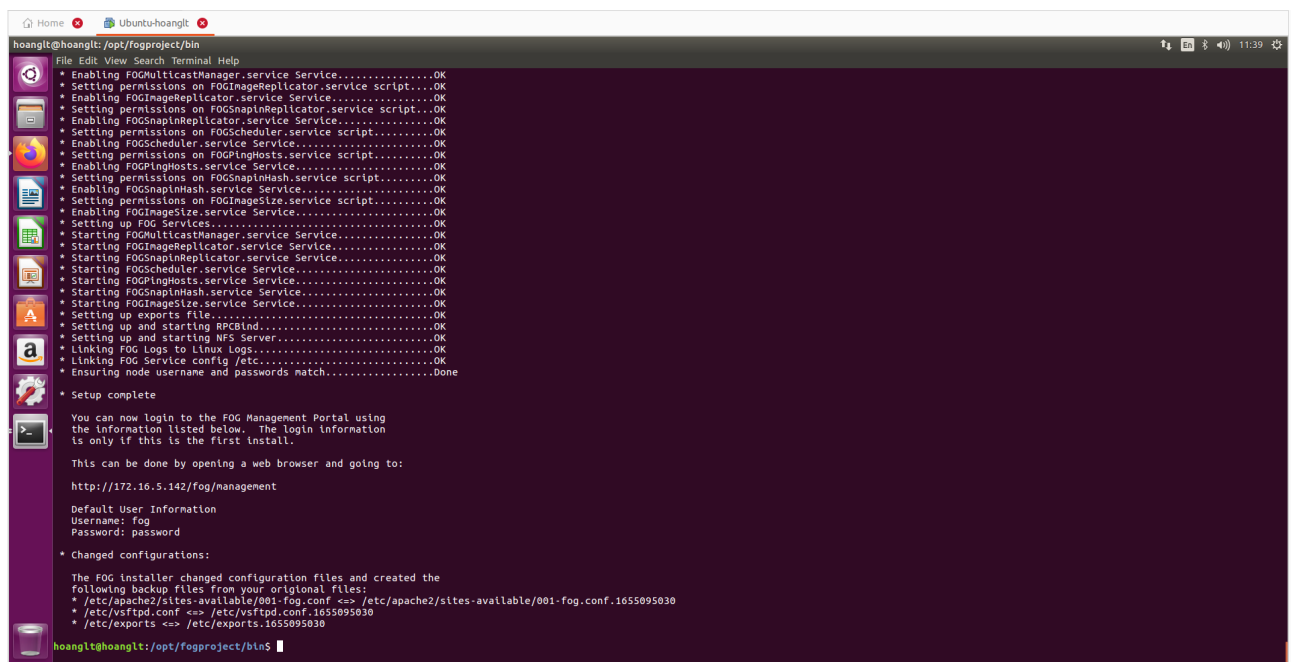
```
hoanglt@hoanglt: ~/Downloads/fog_stable/bin
encourage you to enable this for your FOG server. But using HTTPS
has some implications within FOG, PXE and fog-client and you want
to read https://wiki.fogproject.org/HTTPS before you decide!
Would you like to enable secure HTTPS on your FOG server? [y/N] y

Which hostname would you like to use? Currently is: hoanglt
Note: This hostname will be in the certificate we generate for your
FOG webserver. The hostname will only be used for this but won't be
set as a local hostname on your server!
Would you like to change it? If you are not sure, select No. [y/N] y
Which hostname would you like to use? hoanglt.info

#####
# FOG now has everything it needs for this setup, but please #
# understand that this script will overwrite any setting you may #
# have setup for services like DHCP, apache, pxe, tftp, and NFS. #
#####
# It is not recommended that you install this on a production system #
# as this script modifies many of your system settings. #
#####
# This script should be run by the root user. #
# It will prepend the running with sudo if root is not set #
#####
Please see our wiki for more information at: #
#####
System Settings
# https://wiki.fogproject.org/wiki/index.php
#
#####
* Here are the settings FOG will use:
* Base Linux: Debian
* Detected Linux Distribution: Ubuntu
* Interface: ens33
* Server IP Address: 172.16.5.136
* Server Subnet Mask: 255.255.0.0
* Server Hostname: hoanglt.info
* Installation Type: Normal Server
* Internationalization: 1
* Image Storage Location: /images
* Using FOG DHCP: Yes
* DHCP router Address: 192.168.2.1

* Are you sure you wish to continue (Y/N) █
```

Set up fog successfully with default user is
Username: fog
Password: password



```
hoanglt@hoanglt: /opt/fogproject/bin
File Edit View Search Terminal Help
* Enabling FOGMulticastManager.service Service.....OK
* Setting permissions on FOGImageReplicator.service script....OK
* Enabling FOGImageReplicator.service Service.....OK
* Setting permissions on FOGSnapshotReplicator.service script....OK
* Enabling FOGSnapshotReplicator.service Service.....OK
* Setting permissions on FOGScheduler.service script.....OK
* Enabling FOGScheduler.service Service.....OK
* Setting permissions on FOGPingHosts.service script.....OK
* Enabling FOGPingHosts.service Service.....OK
* Setting permissions on FOGSnapshotHash.service script.....OK
* Enabling FOGSnapshotHash.service Service.....OK
* Setting permissions on FOGImageSize.service script.....OK
* Enabling FOGImageSize.service Service.....OK
* Setting up FOG Services.....OK
* Starting FOGMulticastManager.service Service.....OK
* Starting FOGImageReplicator.service Service.....OK
* Starting FOGSnapshotReplicator.service Service.....OK
* Starting FOGScheduler.service Service.....OK
* Starting FOGPingHosts.service Service.....OK
* Starting FOGSnapshotHash.service Service.....OK
* Starting FOGImageSize.service Service.....OK
* Setting up exports file.....OK
* Setting up and starting RPCbind.....OK
* Setting up and starting NFS Server.....OK
* Linking FOG Logs to Linux Logs.....OK
* Linking FOG Service config /etc.....OK
* Ensuring node username and passwords match.....Done

* Setup complete

You can now login to the FOG Management Portal using
the information listed below. The login information
is only if this is the first install.

This can be done by opening a web browser and going to:

http://172.16.5.142/fog/management

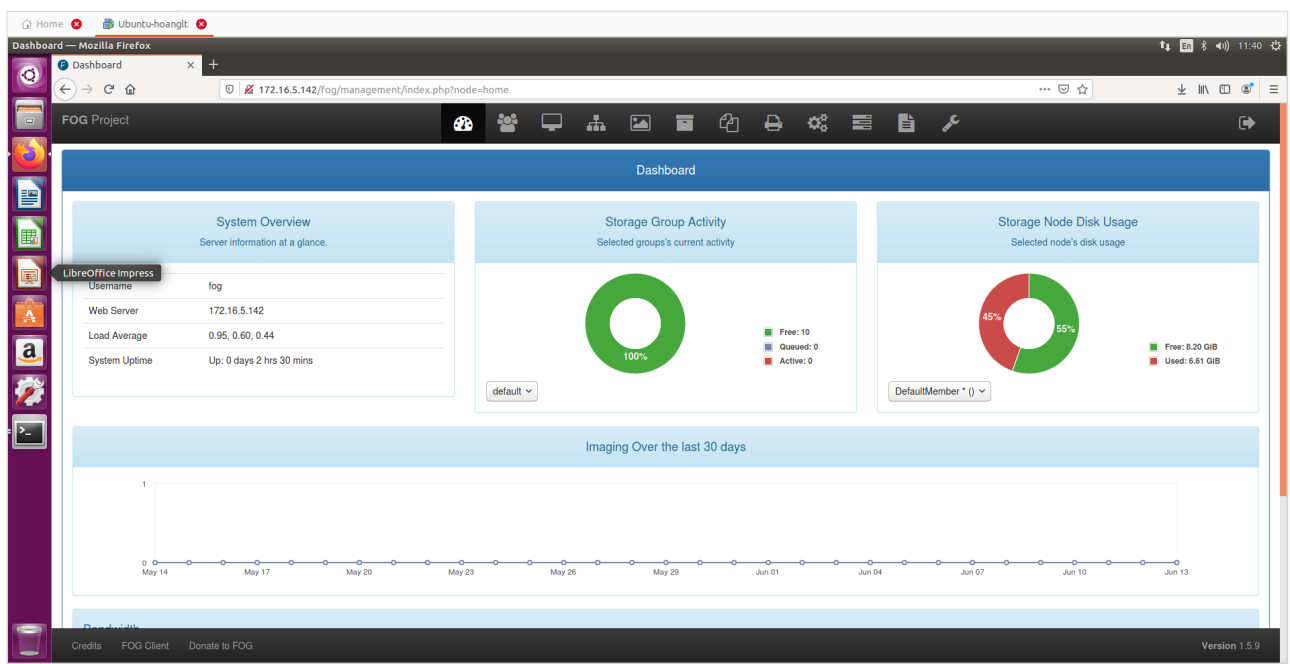
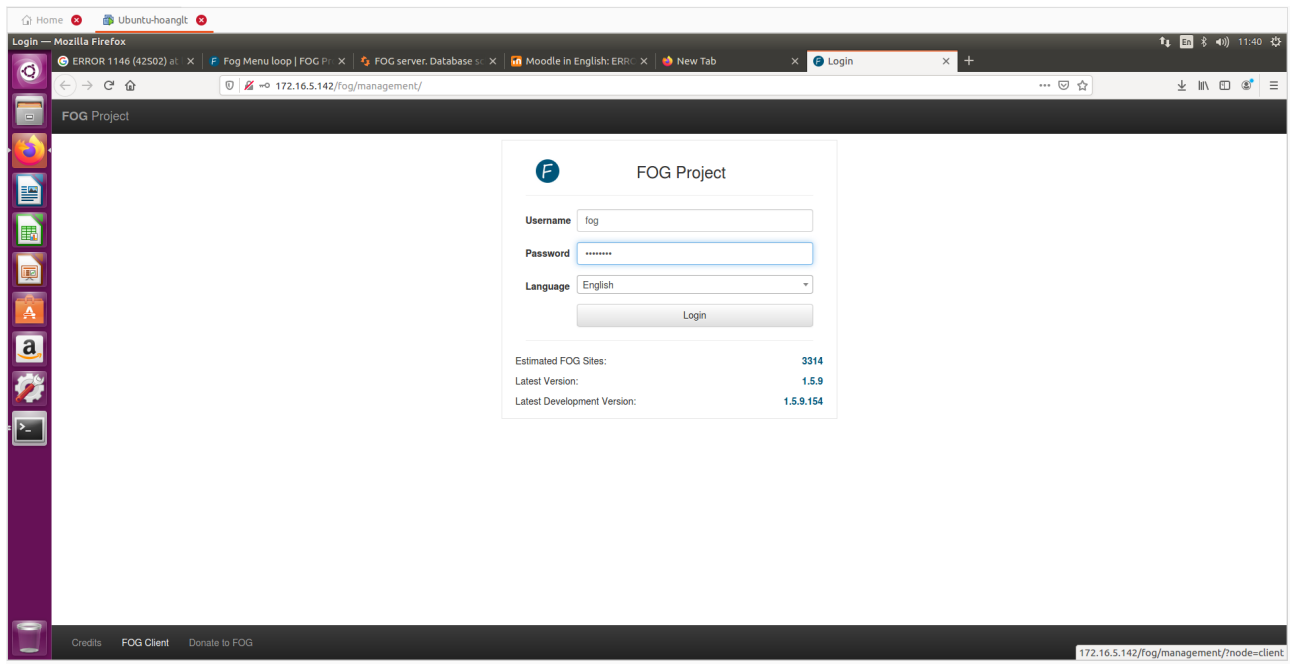
Default User Information
Username: fog
Password: password

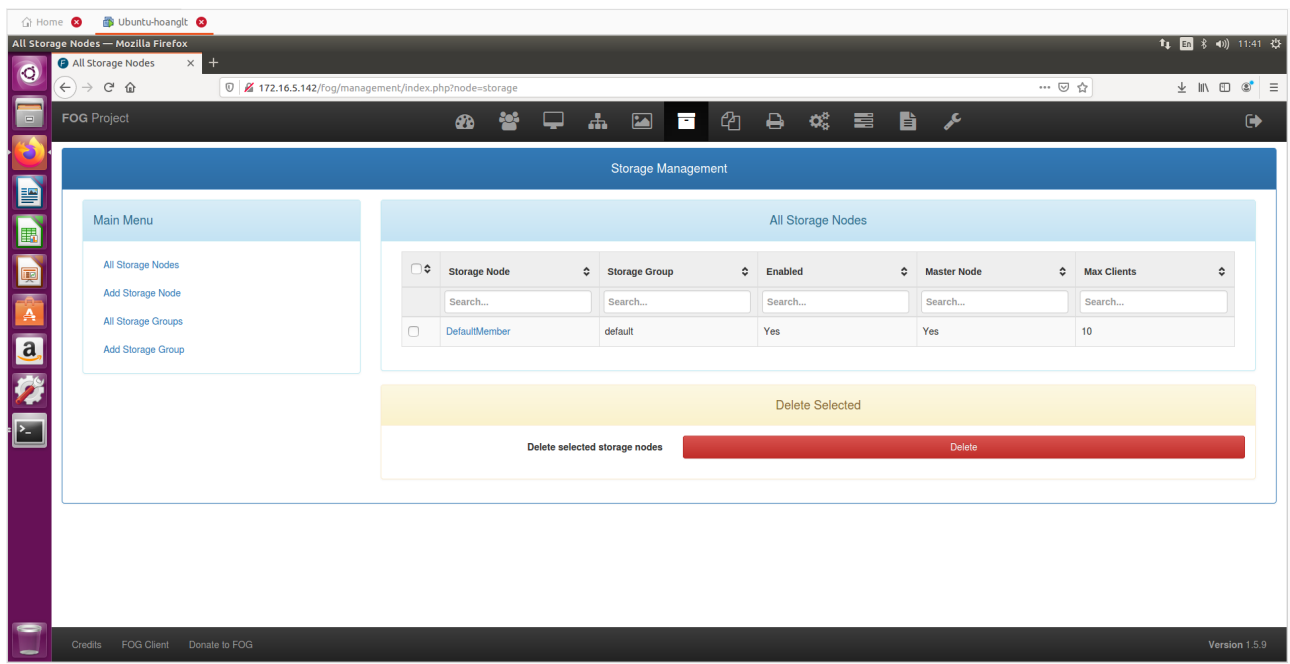
* Changed configurations:

The FOG installer changed configuration files and created the
following backup files from your original files:
* /etc/apache2/sites-available/001-fog.conf <-> /etc/apache2/sites-available/001-fog.conf.1655095030
* /etc/vsftpd.conf <-> /etc/vsftpd.conf.1655095030
* /etc/exports <-> /etc/exports.1655095030

hoanglt@hoanglt: /opt/fogproject/bin █
```

Enter a link: <http://172.16.5.142/fog/management> on web browser to entry for Project
This is a screen log in Fog Project





The End