







root@foggy: ~ Terminal

root@foggy:~# apt install software-properties-common Reading package lists... Done **Building dependency tree... Done** Reading state information... Done

The following additional packages will be installed: python3-software-properties

The following packages will be upgraded:

python3-software-properties software-properties-common

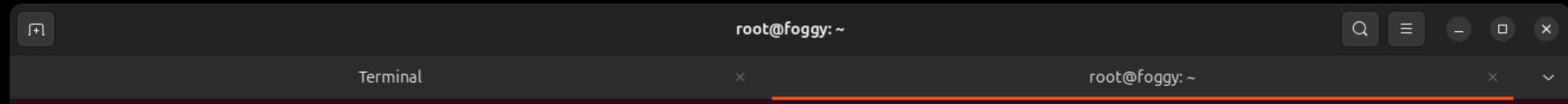
2 upgraded, 0 newly installed, 0 to remove and 160 not upgraded.

Need to get 42.9 kB of archives.

After this operation, 5,120 B of additional disk space will be used.

Do you want to continue? [Y/n]

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root@foggy:~# tar -xvzf 1.5.10.1629



root@foggy: ~/FOGProject-fogproject-831a95f







root@foggy:~# ls

1.5.10.1629 FOGProject-fogproject-831a95f snap

Terminal

root@foggy:~# rm 1.5.10.1629

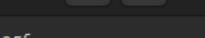
root@foggy:~# cd FOGProject-fogproject-831a95f/

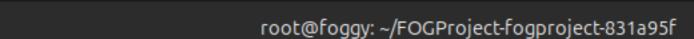
root@foggy:~/FOGProject-fogproject-831a95f#











```
root@foggy:~# ls
```

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1.5.10.1629 FOGProject-fogproject-831a95f snap

Terminal

root@foggy:~# rm 1.5.10.1629

root@foggy:~# cd FOGProject-fogproject-831a95f/

root@foggy:~/FOGProject-fogproject-831a95f# ./bin/installfog.sh

```
root@foggy: ~/FOGProject-fogproject-831a95f
```

```
##:::###:::...#. .. .#...#. #...#::::.
            ..##....##::## .. #
            ...##:,;##;:::#: ... ##..
           .:;####;::::.##:::;#:..
                       ..:;###..
   Free Computer Imaging Solution
Credits: http://fogproject.org/Credits
    http://fogproject.org/Credits
    Released under GPL Version 3
```

**Version: 1.5.10.1629 Installer/Updater** 

What version of Linux would you like to run the installation for?

- 1) Redhat Based Linux (Redhat, Alma, Rocky, CentOS, Mageia)
- 2) Debian Based Linux (Debian, Ubuntu, Kubuntu, Edubuntu)
- 3) Arch Linux

**Choice:** [2] 2





Terminal

root@foggy: ~/FOGProject-fogproject-831a95f

- 2) Debian Based Linux (Debian, Ubuntu, Kubuntu, Edubuntu)
- 3) Arch Linux

**Choice:** [2] 2

Starting Debian based Installation

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

root@foggy: ~/FOGProject-fogproject-831a95f

# Starting Debian based Installation

## 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:

\* ens4 - 144.38.199.92/28

Would you like to change the default network interface from ens4? If you are not sure, select No. [y/N] N

Terminal

×

root@foggy: ~/FOGProject-fogproject-831a95f

## 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:

\* ens4 - 144.38.199.92/28

Would you like to change the default network interface from ens4? 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

root@dhcp-server: ~

×

root@foggy: ~/FOGProject-fogproject-831a95f

## 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:

\* ens4 - 144.38.199.92/28

Would you like to change the default network interface from ens4? 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? [144.38.199.81]144.38.199.82

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: \* ens4 - 144.38.199.92/28

Would you like to change the default network interface from ens4? 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? [144.38.199.81]144.38.199.82

Would you like DHCP to handle DNS? [Y/n] Y
What DNS address should DHCP allow? [127.0.0.53] 8.8.8.8

\* 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:

root@dhcp-server: ~

\* ens4 - 144.38.199.92/28

Would you like to change the default network interface from ens4? 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? [144.38.199.81]144.38.199.82

Would you like DHCP to handle DNS? [Y/n] Y
What DNS address should DHCP allow? [127.0.0.53] 8.8.8.8

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



root@dhcp-server: ~

root@foggy: ~/FOGProject-fogproject-831a95f

# 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: \* ens4 - 144.38.199.92/28

Would you like to change the default network interface from ens4? 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? [144.38.199.81]144.38.199.82

Would you like DHCP to handle DNS? [Y/n] Y
What DNS address should DHCP allow? [127.0.0.53] 8.8.8.8

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

This version of FOG has internationalization support, would you like to install the additional language packs? [y/N] N



root@dhcp-server: ~

root@foggy: ~/FOGProject-fogproject-831a95f

Using encrypted connections is state of the art on the web and we 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] N

Which hostname would you like to use? Currently is: foggy 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] N FOG would like to collect some data:

We would like to collect the following information:

- 1. OS Name (CentOS, RedHat, Debian, etc....)
- 2. OS Version (8.0.2004, 7.2.1409, 9, etc....)
- 3. FOG Version (1.5.9, 1.6, etc....)

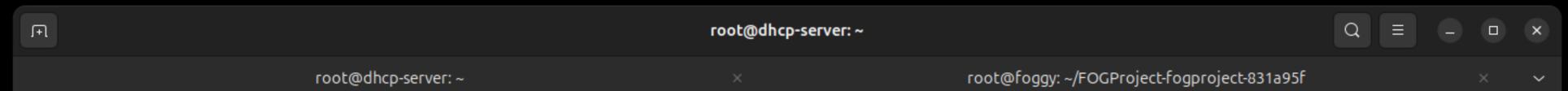
What is this information used for? We would like to simply track the common types of OS being used, along with the OS Version, and the various versions of FOG being used.

Are you ok with sending this information? [Y/n] n

- \* Here are the settings FOG will use:
- \* Base Linux: Debian
- \* Detected Linux Distribution: Ubuntu
- \* Interface: ens4
- \* Server IP Address: 144.38.199.92
- \* Server Subnet Mask: 255.255.255.240
- \* Hostname: foggy
- \* Installation Type: Normal Server
- \* Internationalization: No
- \* Image Storage Location: /images
- \* Using FOG DHCP: No
- \* DHCP will NOT be setup but you must setup your
- | current DHCP server to use FOG for PXE services.
- \* On a Linux DHCP server you must set: next-server and filename
- \* On a Windows DHCP server you must set options 066 and 067
- \* Option 066/next-server is the IP of the FOG Server: (e.g. 144.38.199.92)
- \* Option 067/filename is the bootfile: (e.g. undionly.kkpxe or snponly.efi)
- \* Send OS Name, OS Version, and FOG Version: No
- \* Are you sure you wish to continue (Y/N) Y

root@dhcp-server:~# echo "I am on my dhcp server, adding the options so fog will work"
I am on my dhcp server, adding the options so fog will work
root@dhcp-server:~# vi /etc/dhcp/dhcpd.conf

```
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                                                  root@dhcp-server: ~
                                                                     root@foggy: ~/FOGProject-fogproject-831a95f
                      root@dhcp-server: ~
   subnet 10.0.29.0 netmask 255.255.255.0 {
     option routers rtr-29.example.org;
   pool {
     allow members of "foo";
     range 10.17.224.10 10.17.224.250;
   pool {
     deny members of "foo";
     range 10.0.29.10 10.0.29.230;
subnet 144.38.199.80 netmask 255.255.255.240 {
range 144.38.199.83 144.38.199.86;
option subnet-mask 255.255.255.240;
option routers 144.38.199.81;
next-server 144.38.199.92;
filename "undionly.kkpxe";
include "/etc/dhcp/it3100.txt";
"/etc/dhcp/dhcpd.conf" 121L, 3882B
                                                                                           117,1
                                                                                                           Bot
```



root@dhcp-server:~# service isc-dhcp-server restart
root@dhcp-server:~# service isc-dhcp-server status

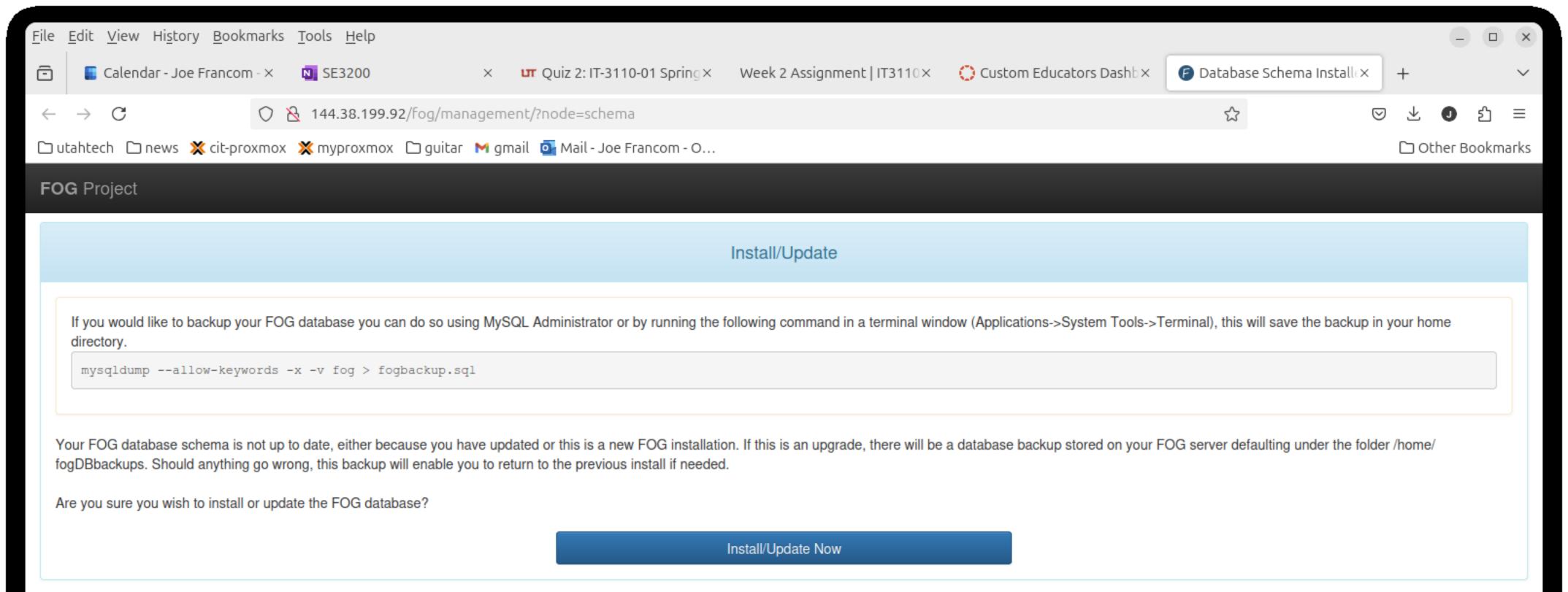
1000@0	incp-server. ~	^	100t@10ggy. ~/FOGP10ject-10gp10ject-83		
Testing and removing	symbolic links i	f found	OK		

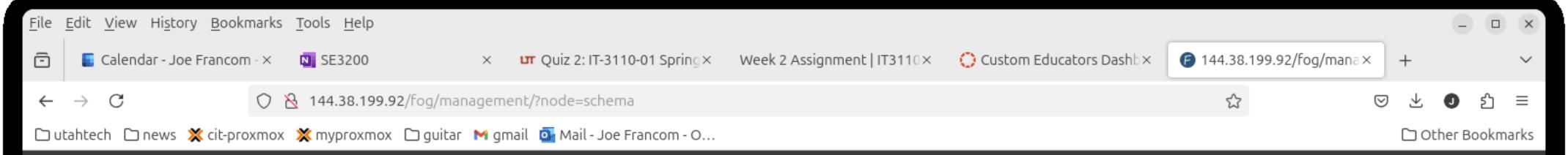
- \* Backing up old data.....OK
- \* Copying new files to web folder.....OK
- \* Creating config file.....OK
- \* Creating redirection index file......OK
- \* Downloading kernel, init and fog-client binaries.......Done
- \* Copying binaries to destination paths......OK
- \* Enabling apache and fpm services on boot..........OK
- \* Creating SSL CA.....OK
- \* Creating SSL Private Key.....OK
- \* Creating SSL Certificate.....OK
- \* Creating auth pub key and cert......OK
- \* Resetting SSL Permissions.....OK
- \* Setting up Apache virtual host (no SSL)...........OK
- \* Starting and checking status of web services......OK
- \* Changing permissions on apache log files............OK
- \* Backing up database.....Done
- \* You still need to install/update your database schema.
- \* This can be done by opening a web browser and going to:

http://144.38.199.92/fog/management

 $\Box$ 

\* Press [Enter] key when database is updated/installed.





## FOG Project

Install / Update Successful!

Click here to login







root@dhcp-server: ~

root@foggy: ~/FOGProject-fogproject-831a95f

# 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://144.38.199.92/fog/management

Default User Information

Username: fog

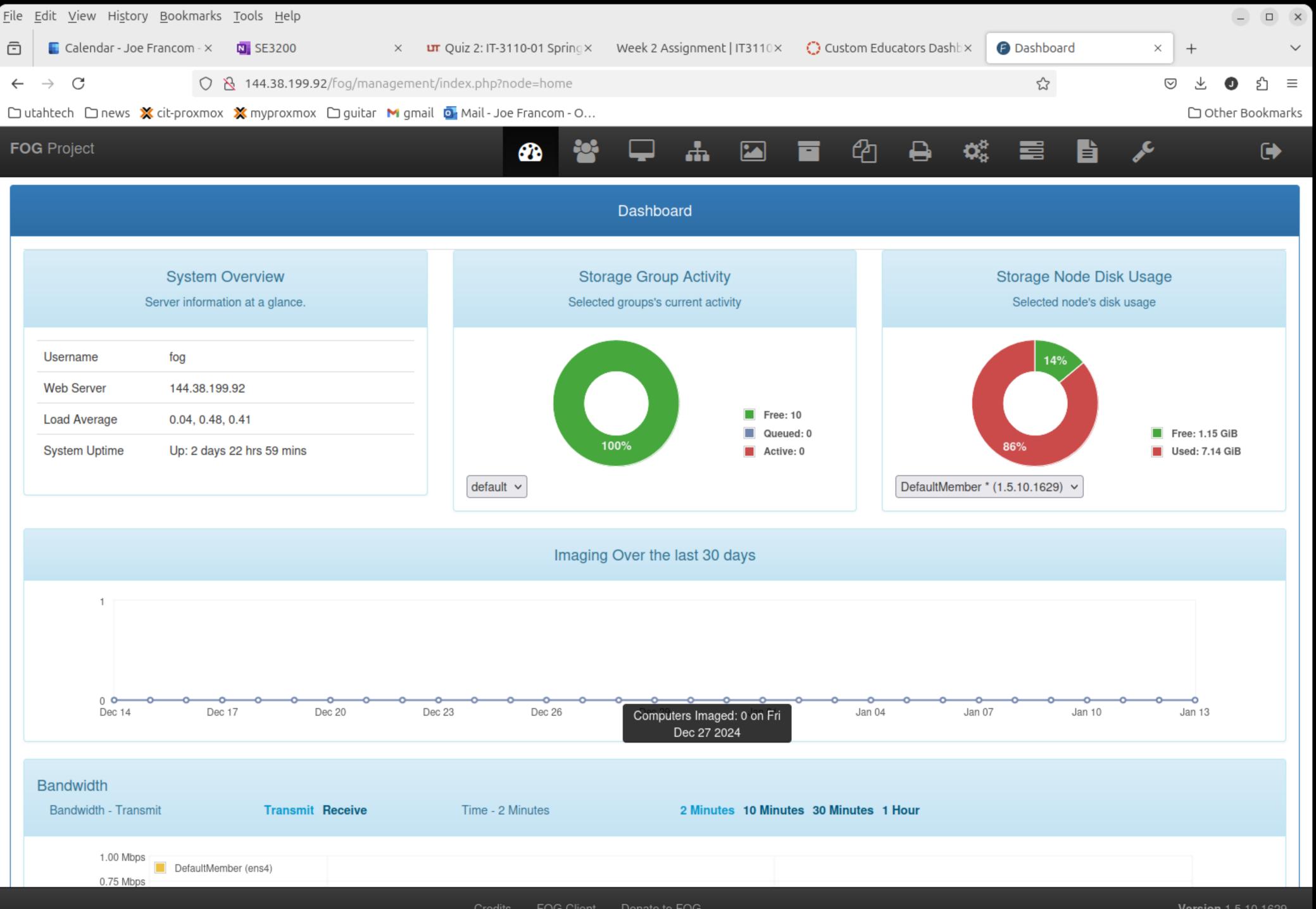
Password: password

Changed configurations:

The FOG installer changed configuration files and created the following backup files from your original files:

- \* /etc/vsftpd.conf <=> /etc/vsftpd.conf.1736785723
- \* /etc/exports <=> /etc/exports.1736785723

root@foggy:~/FOGProject-fogproject-831a95f# echo "Change the default password" Change the default password root@foggy:~/FOGProject-fogproject-831a95f#

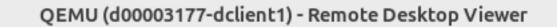


Credits FOG Client Donate to FOG Version 1.5.10.1629

```
root@dhcp-server:~# service isc-dhcp-server restart
root@dhcp-server:~# echo "now test netboot a client"
now test netboot a client
root@dhcp-server:~#
```

```
Terminal
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                                      root@foggy: ~/FOGProject-fogproject-831a95f
                                                                                 Terminal
           root@dhcp-server: ~
d00003177@edmund:~$ citv showvm
Virtual machines created for d00003177.
            Machine Name RAM(MB) CPU VNC:PORT VLAN MAC
                                                                                   Running Course
                                                                        B ROM
                                   1 othello:5973
                                                    2006 52:54:00:08:00:48 c None
                    dhcp
                            1024
                                                                                           1/1 IT3100
                dclient1
                           1024
                                   1 None:5974
                                                 2006 52:54:00:08:00:49
                                                                                        0/0 IT3100
                fclient1 1024
                                                                                        0/0 IT3100
                                   1 None:5975
                                                 2006 52:54:00:08:00:4A
               f windows 8192
                                                 2006 52:54:00:08:00:57
                                   1 None:5988
                                                                                        0/0 IT3100
               d windows 8192
                                   1 None:5989
                                                                                        0/0 IT3100
                                                 2006 52:54:00:08:00:58
s25-large-disk-ubuntu-template
                                  4096
                                         1 None:6132
                                                       2006 52:54:00:08:00:E7
                                                                                              0/0 IT31
00
         foggy-large-s25
                            4192
                                   1 cleopatra:6134
                                                      2006 52:54:00:08:00:E9 c None
                                                                                             1/1 IT310
d00003177@edmund:~$ echo "I will try to register my dynamic linux client"
I will try to register my dynamic linux client
d00003177@edmund:~$ citv bootvm dclient1 n
usr/bin/ssh -q cleopatra "/qemu/bin/qemu-boot 74 'd00003177-dclient1' 1024 '52:54:00:08:00:49'/
 '' 'n' 1 1 2006 '/qemu/images' 1;"
```

User(d00003177) has booted machine(dclient1) on server(cleopatra:74) with 1024 memory. d00003177@edmund:~\$











Connect









Send Ctrl-Alt-Del

#### Host is NOT registered!

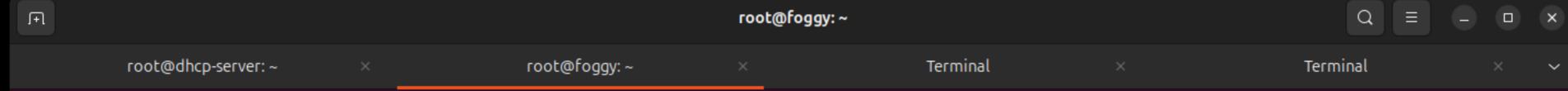
Boot from hard disk

#### Run Memtest86+

Perform Full Host Registration and Inventory Quick Registration and Inventory Deploy Image Join Multicast Session Client System Information (Compatibility)



Open Source Computer Cloning Solution

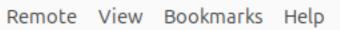


root@foggy:~# echo "You may have to hurry to get to that screen"
You may have to hurry to get to that screen
root@foggy:~#











Connect







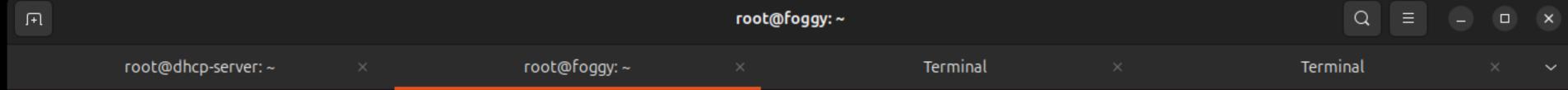




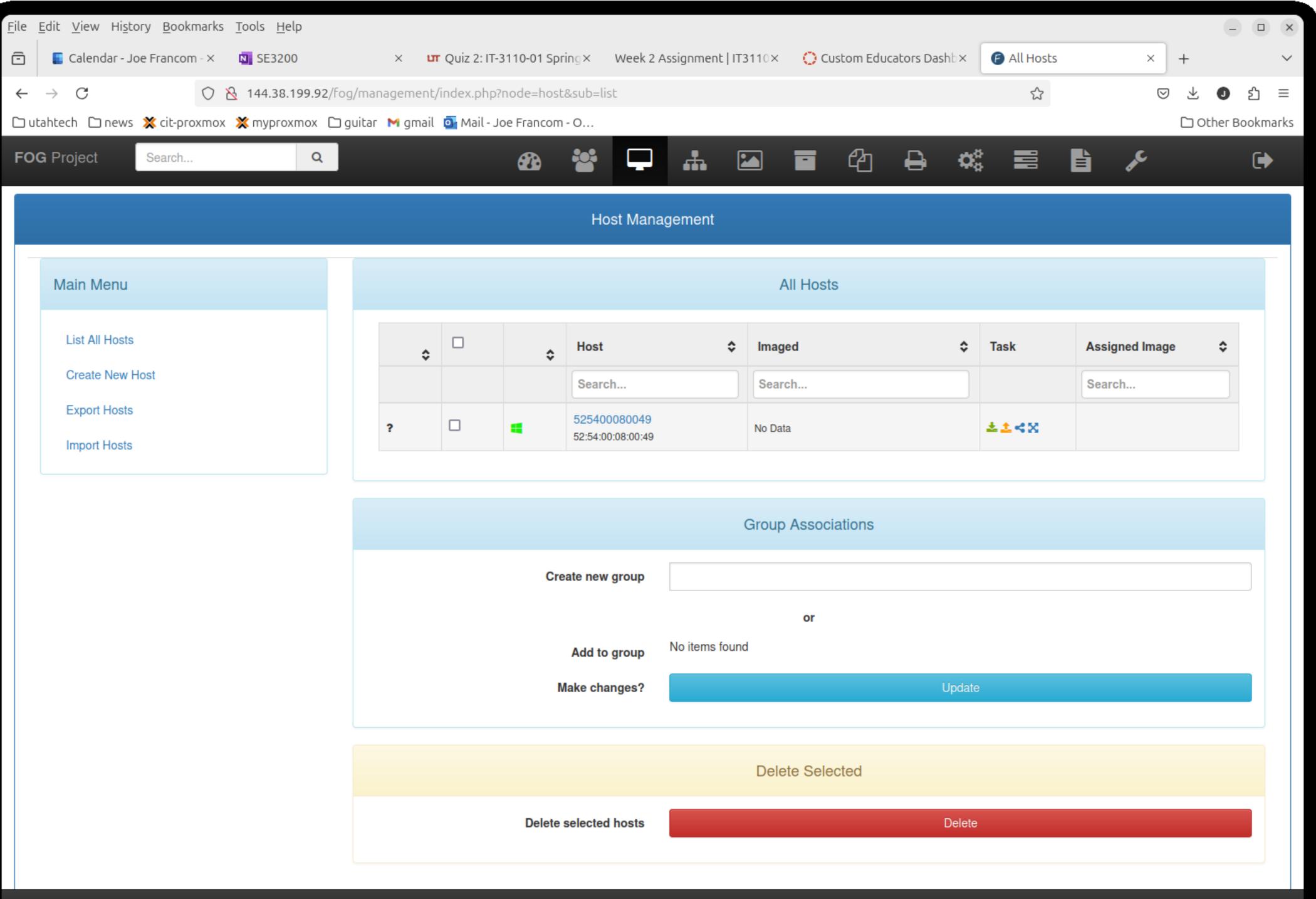


Send Ctrl-Alt-Del

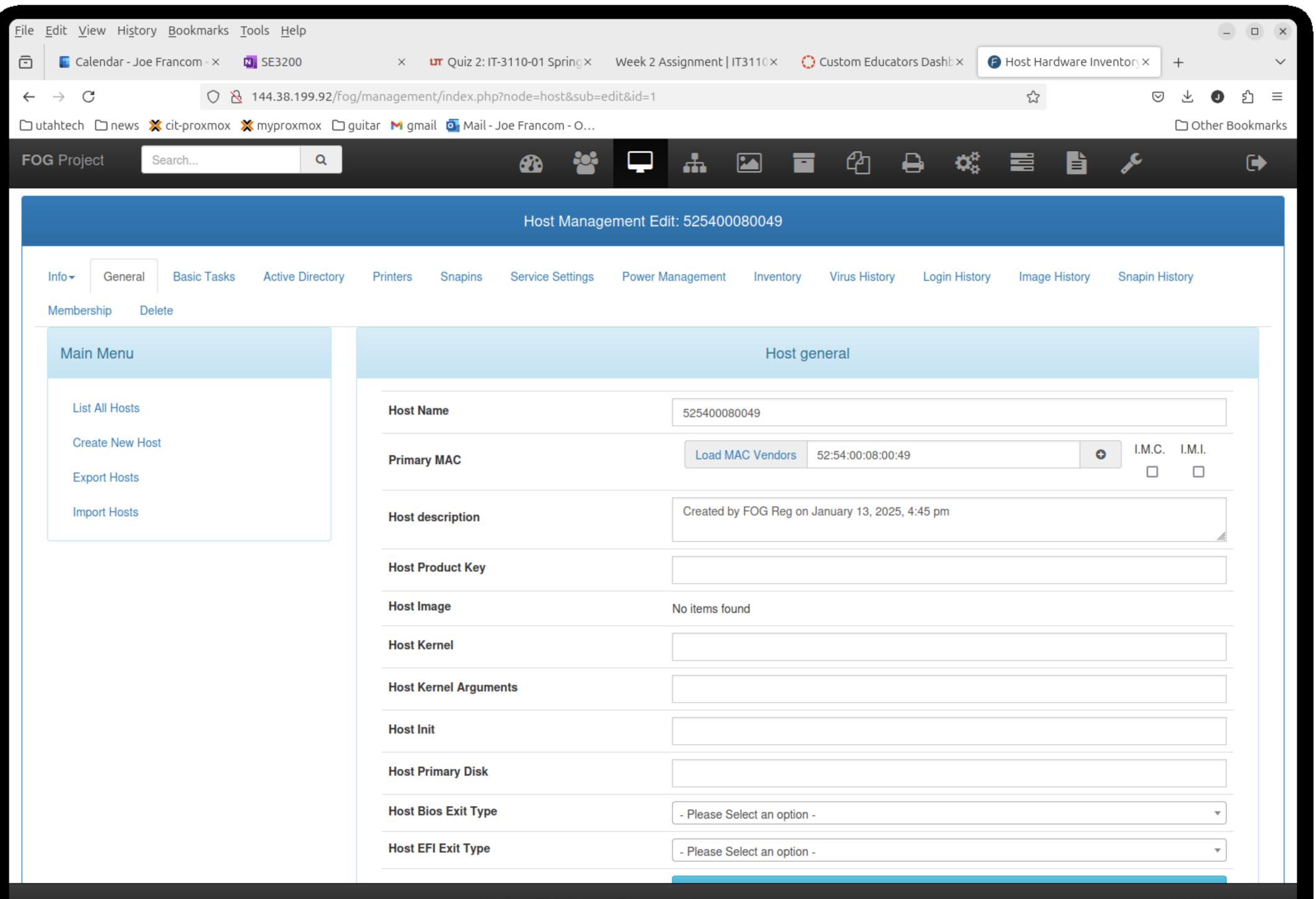
×	Runni	ing post in	nit sc	ripts	·			Done	3
	=======================================								
	===	===:	= =	====		====			
	===	=======	==	===	==	===			
	===	======	====	==	====	===			
	===	======	====	==	=====	====			
	===	====	====	==	=====	====			
	===	======	====	==	===	===			
	===	======	====	==	====	===			
	===	=======	==	===	==	===			
	===	=======	= =	====		====			
	=====	=======	=====	=====	=====	====			
	=====	Free Oper	nsourc	e Gho	ost ==	====			
	=====	========	=====	=====	=====	====			
	======= Credits ========								
	= https://fogproject.org/Credits =								
	=====	========	=====	=====	=====	====			
	== Re	eleased und	der GP	L Ver	rsion	3 ==			
	=====	=======	=====	=====	=====	====			
	Versi	ion: 1.5.10	9.1629						
	Init	Version: 2	202409	05					
*	Using	g disk devi	ice					/dev	√sda
		nost regi							
		npting to i			st			Done	2
	(sys	_							

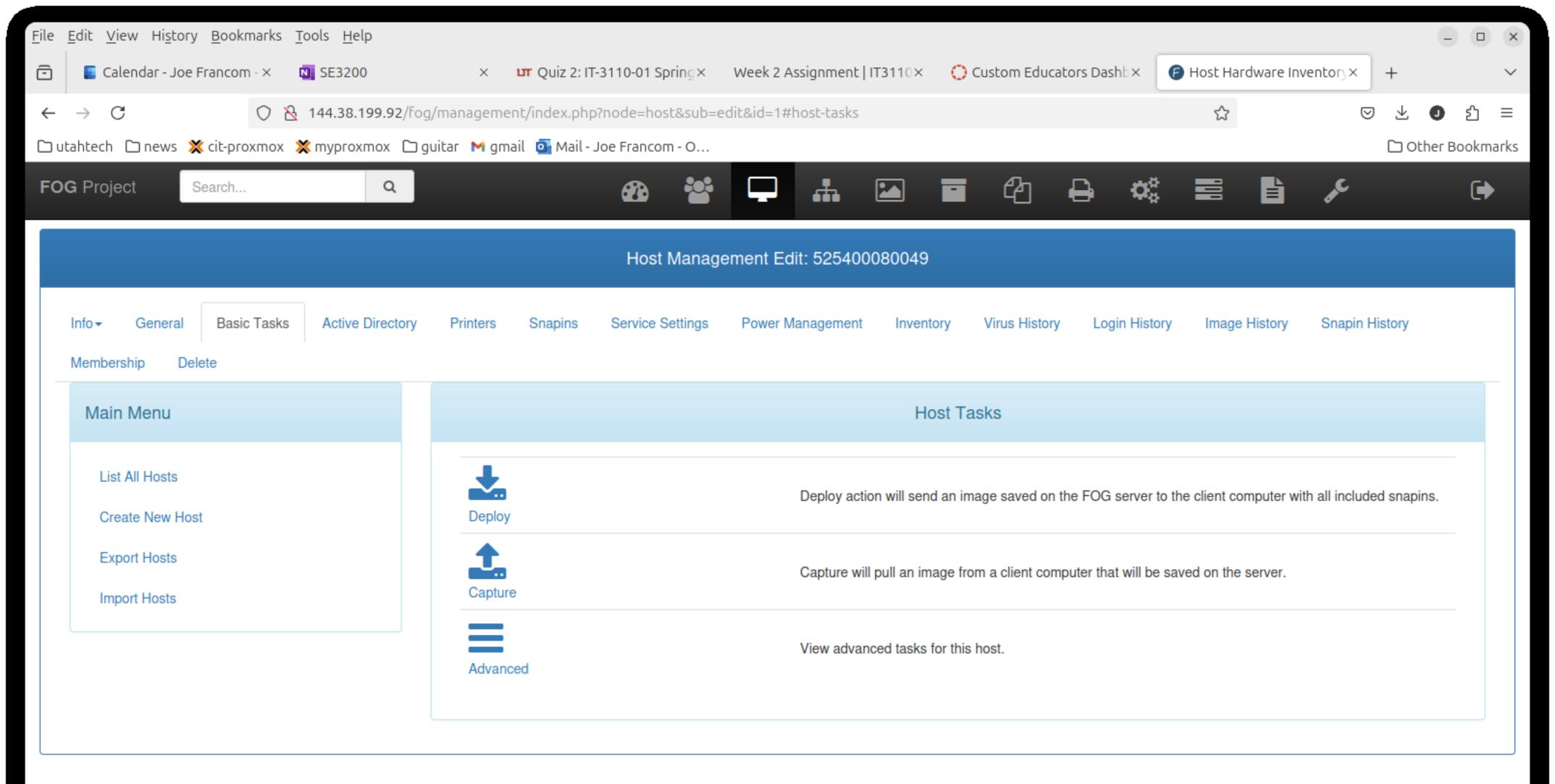


root@foggy:~# echo "It shuts down the machine after inventorying it"
It shuts down the machine after inventorying it
root@foggy:~#

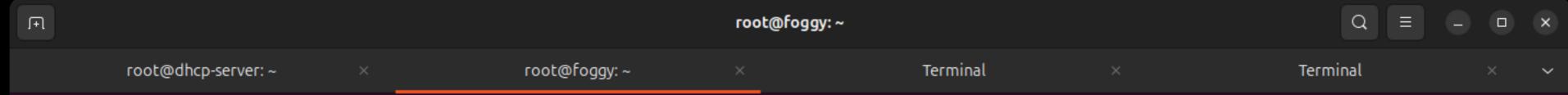


Credits FOG Client Donate to FOG Version 1.5.10.1629

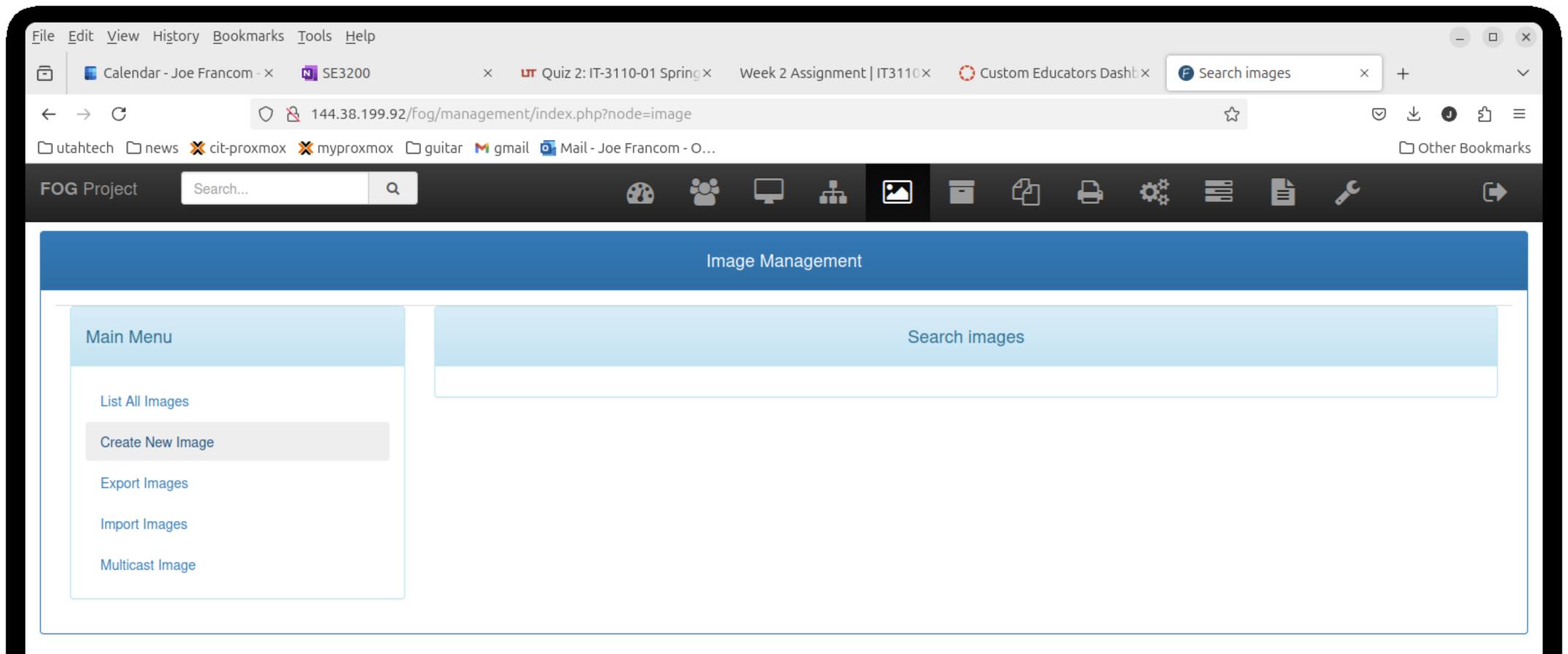


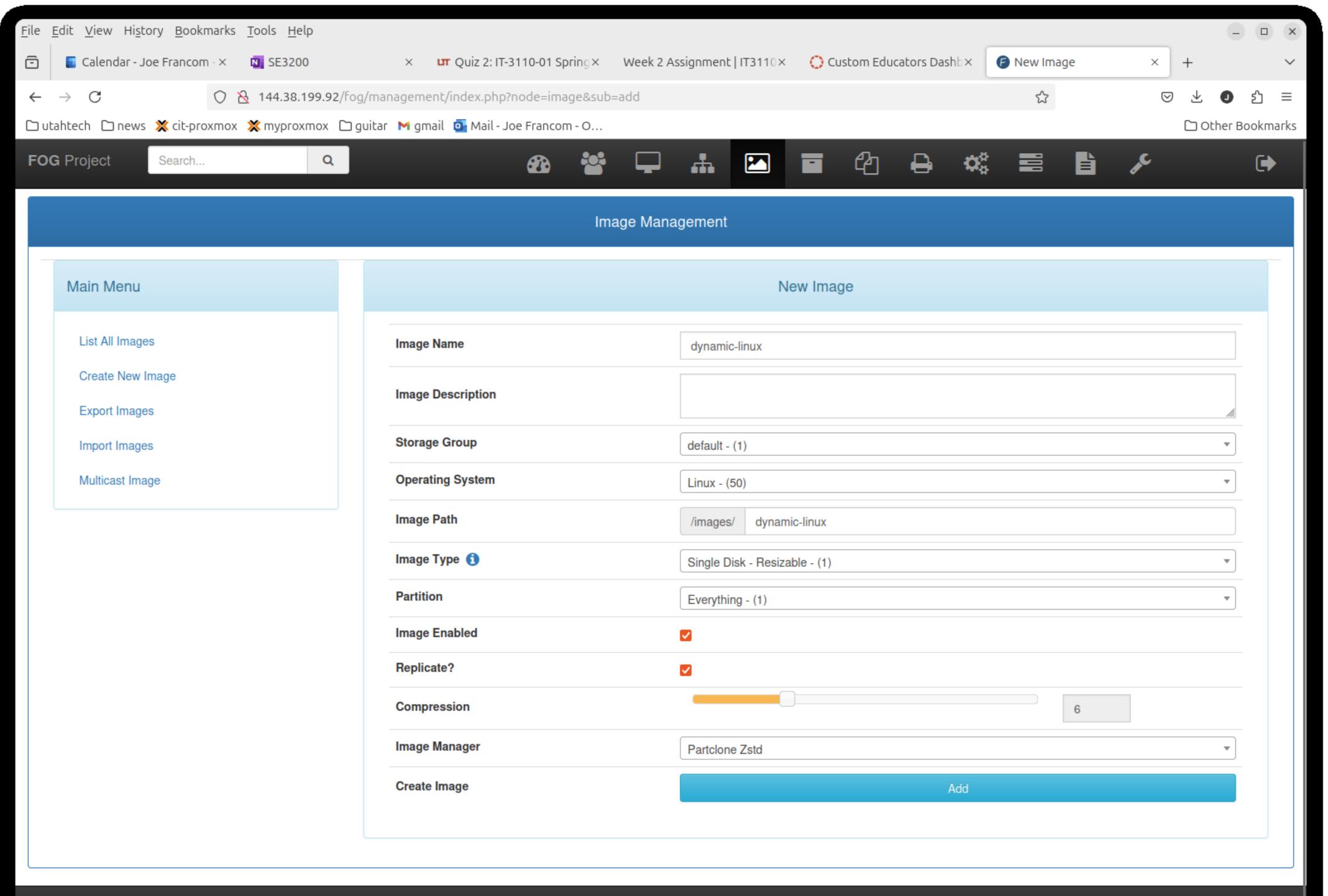


Credits FOG Client Donate to FOG Version 1.5.10.1629

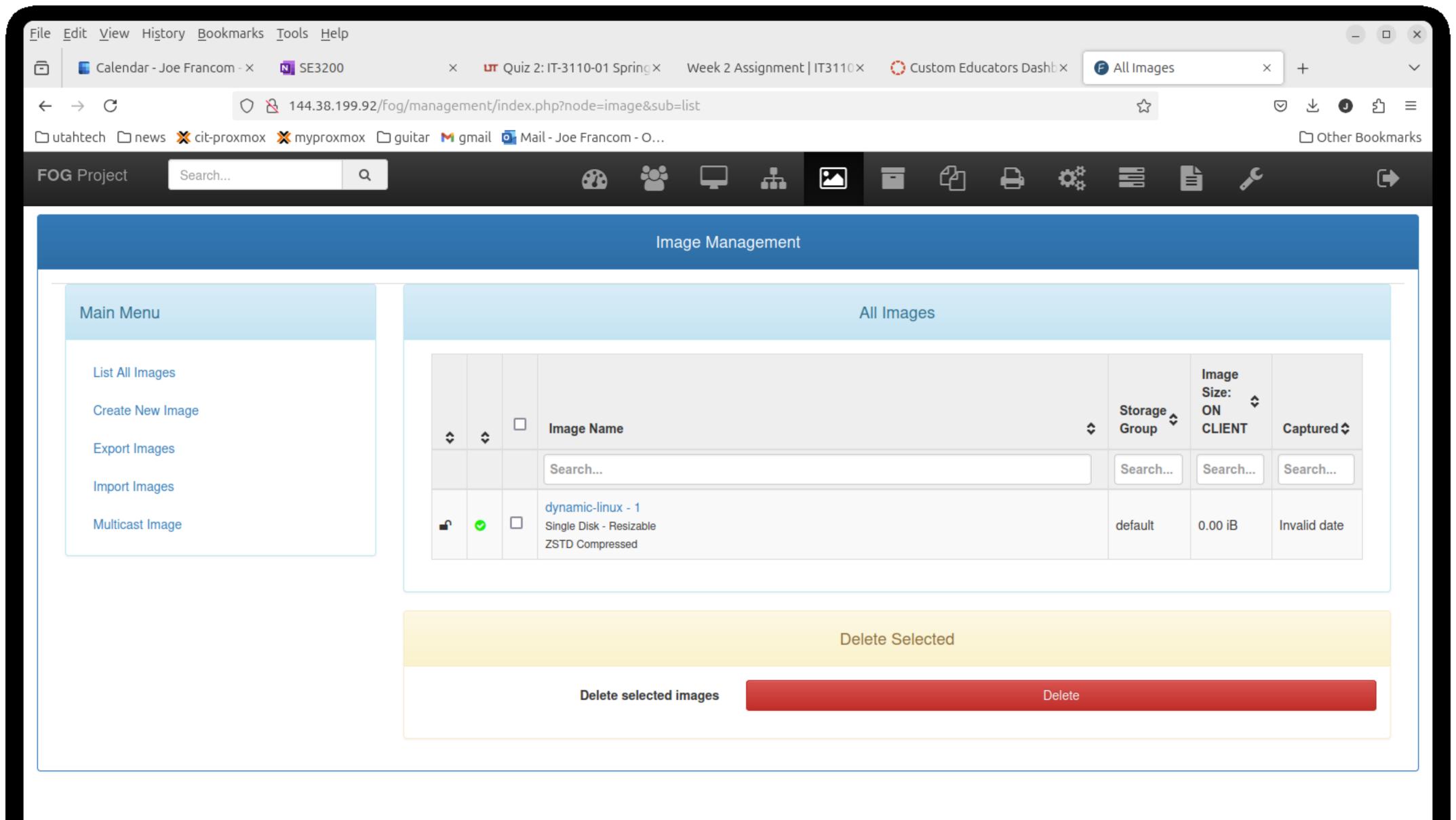


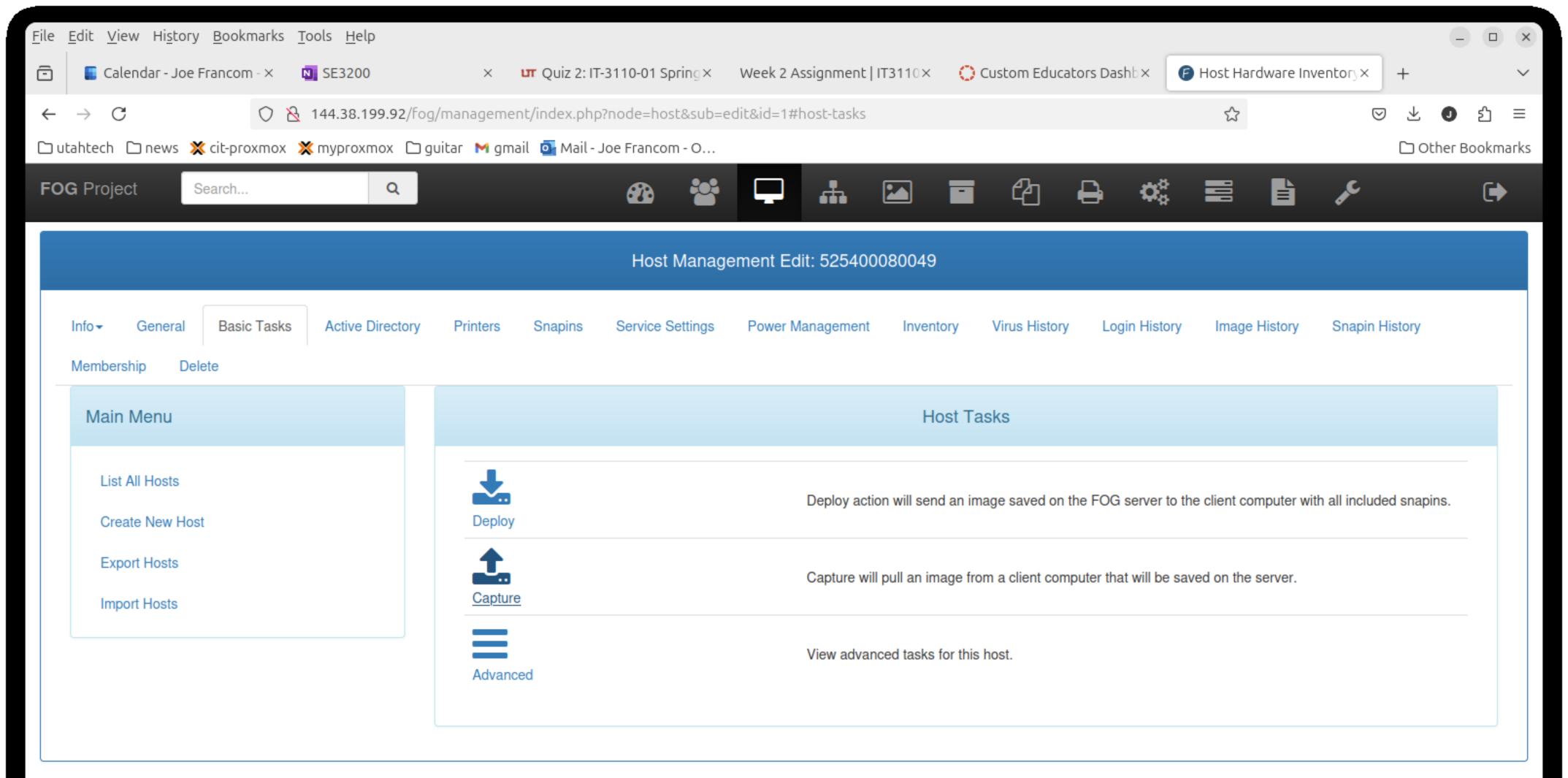
root@foggy:~# echo "Create an image before you try to capture"
Create an image before you try to capture
root@foggy:~#



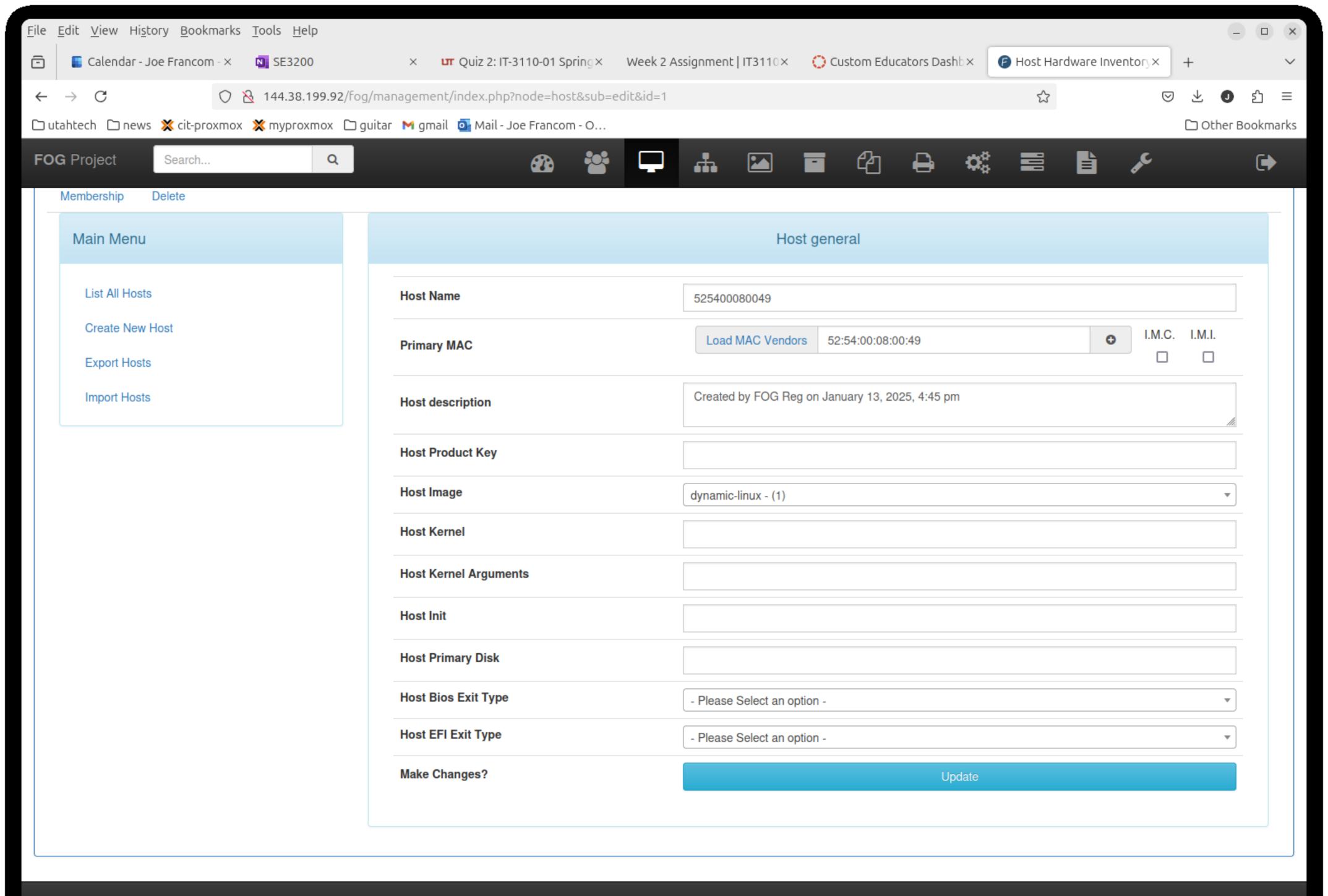


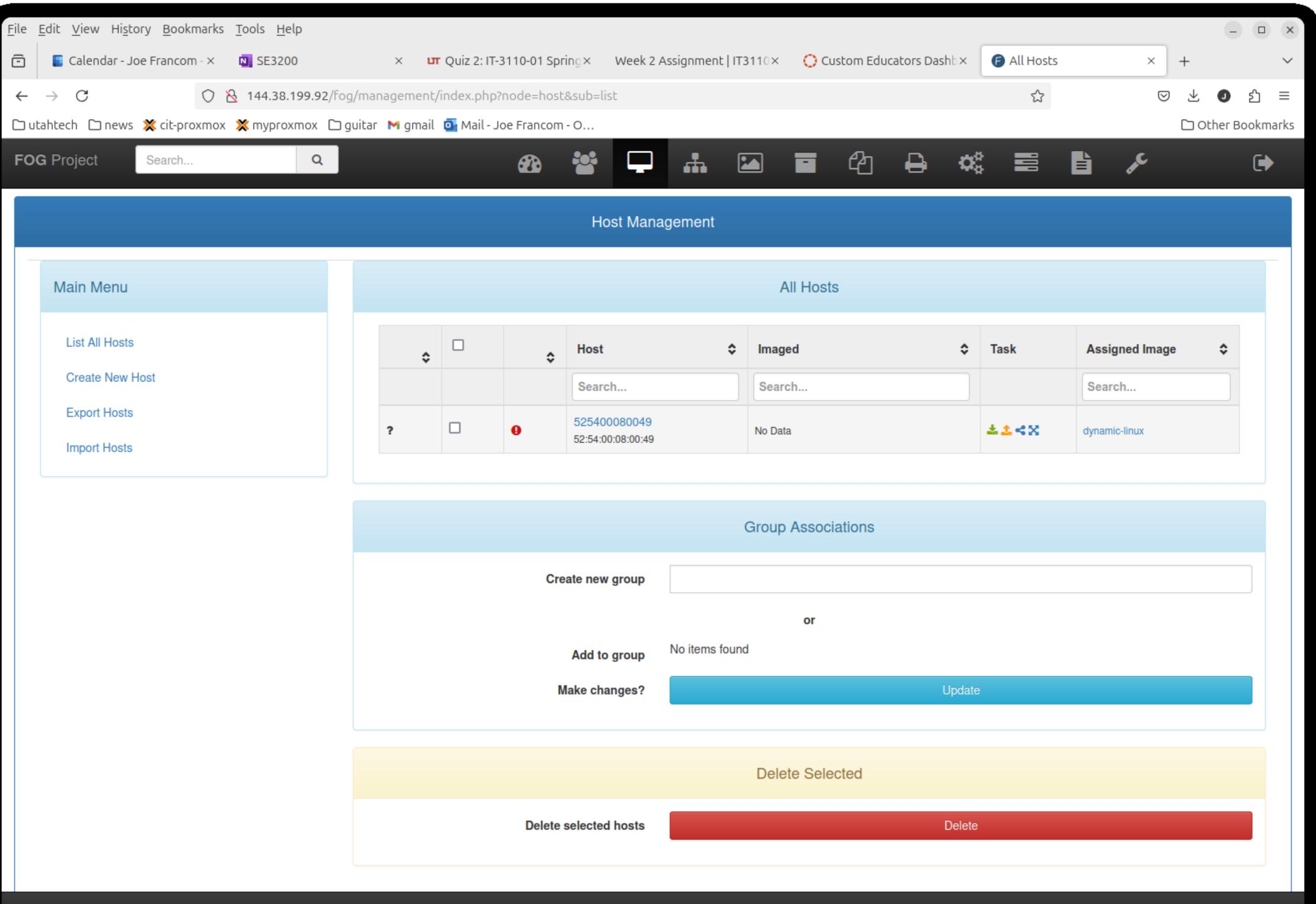
Credits FOG Client Donate to FOG Version 1.5.10.1629

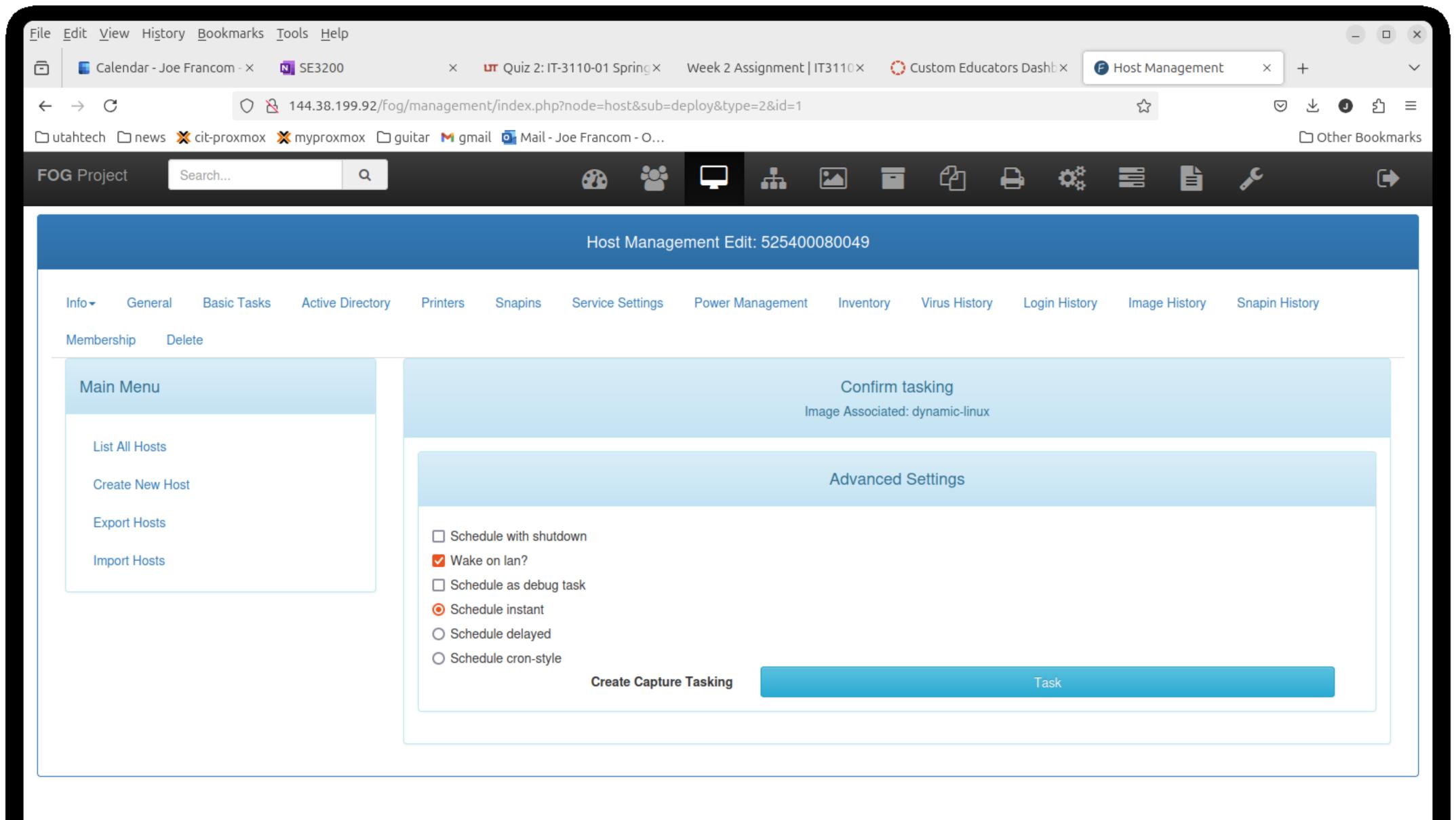




Credits







## Remote View Bookmarks Help



Connect











Send Ctrl-Alt-Del

```
net0: 144.38.199.84/255.255.255.240 gw 144.38.199.81
net0: 2001:1948:e10:2005:5054:ff:fe08:49/64 gw fe80::d62c:44ff:fe0e:83c0
net0: fe80::5054:ff:fe08:49/64
Next server: 144.38.199.92
Filename: undionly.kkpxe
tftp://144.38.199.92/undionly.kkpxe... ok
undionly.kkpxe : 105458 bytes [PXE-NBP]
PXE->EB: !PXE at 9C64:0750, entry point at 9C64:0160
         UNDI code segment 9C64:0842, data segment 9CEC:2D10 (625-639kB)
         UNDI device is PCI 00:04.0, type DIX+802.3
         625kB free base memory after PXE unload
iPXE initialising devices...
```

iPXE 1.21.1+ (g5de5d) -- Open Source Network Boot Firmware -- https://ipxe.org Features: DNS FTP HTTP HTTPS iSCSI NFS TFTP VLAN AGE ELF MBOOT PXE bzImage Menu PXEXT Configuring (net0 52:54:00:08:00:49)..... ok Received DHCP answer on interface net0 tftp://144.38.199.92/default.ipxe... ok http://144.38.199.92/fog/service/ipxe/boot.php... ok bzImage... ok init.xz... ok

Remote View Bookmarks Help



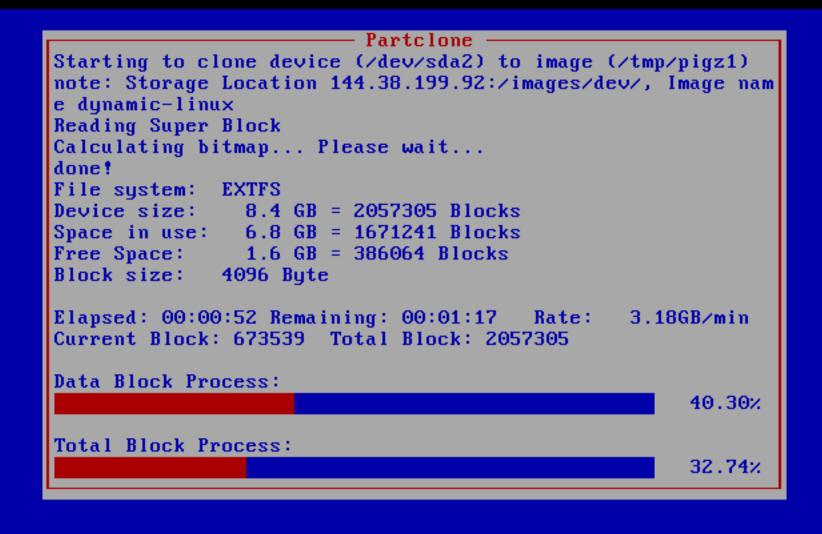


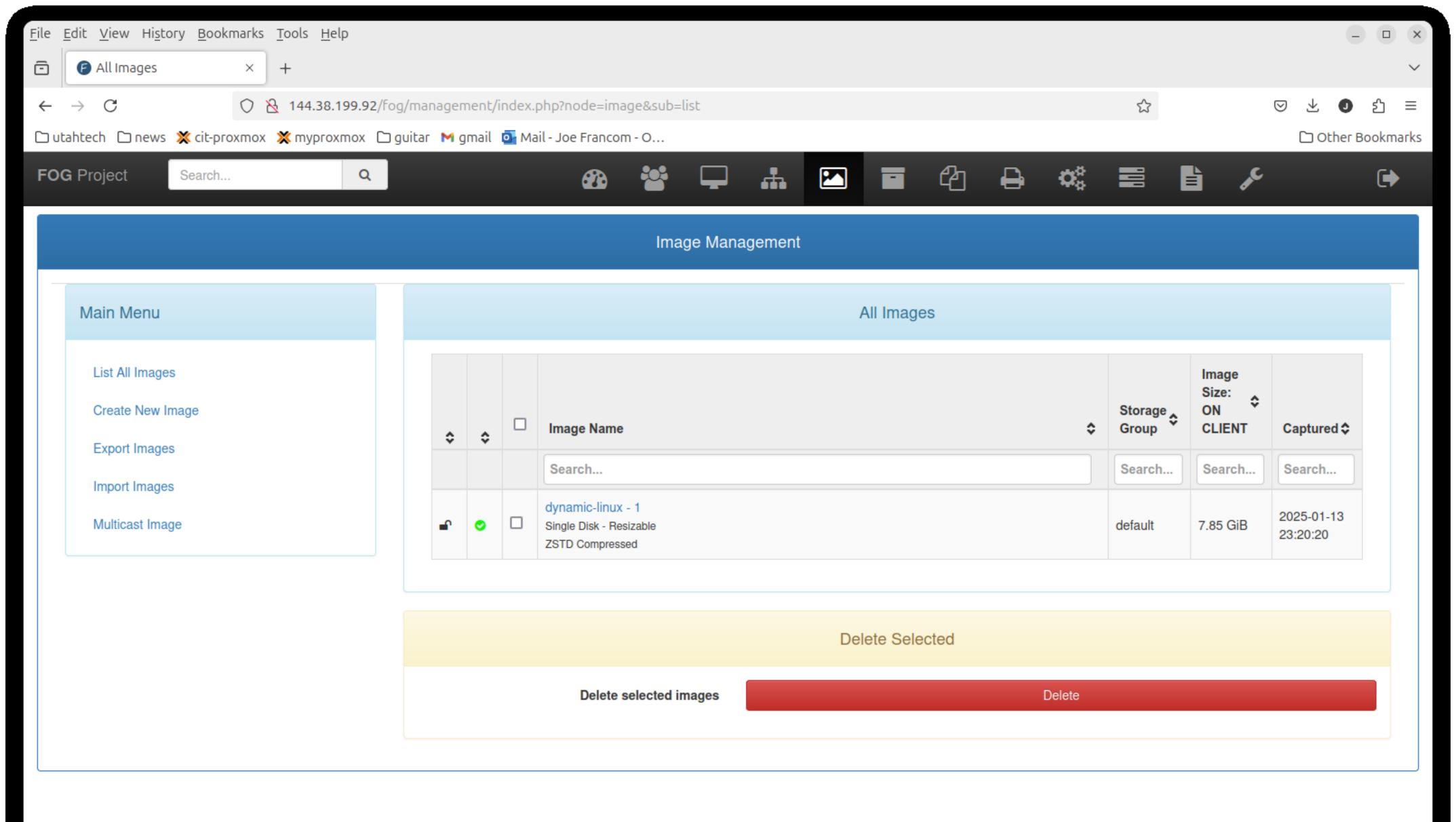


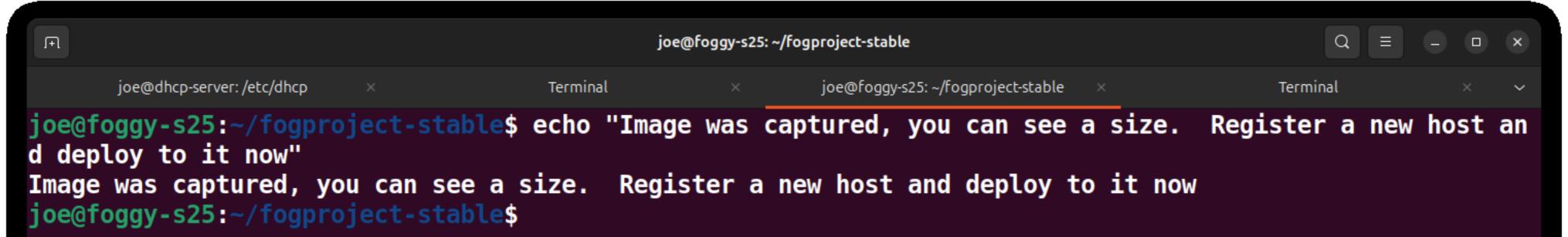














Terminal







d00003177@edmund:~\$ citv createvm testnetboot 4096 2006

A machine name, RAM(MB) size, disk size(GB), VLAN(number) must be specified.

Terminal

A CPU count may be specified.

joe@dhcp-server: /etc/dhcp

d00003177@edmund:~\$ citv createvm testnetboot 4096 16 2006

/qemu/bin/qemu-new-image d00003177-testnetboot 16 /qemu/images;

Formatting '/qemu/images/d00003177-d00003177-testnetboot.img', fmt=raw size=17179869184

User d00003177 has created the machine testnetboot : 265 with 4096 memory

d00003177@edmund:~\$ citv bootvm testnetboot n

/usr/bin/ssh -q edmund "/qemu/bin/qemu-boot 265 'd00003177-testnetboot' 4096 '52:54:00:08:01:08' '' ''

joe@foggy-s25: ~/fogproject-stable

' 'n' 1 1 2006 '/qemu/images' 1;"

User(d00003177) has booted machine(testnetboot) on server(edmund:265) with 4096 memory.

d00003177@edmund:~\$

\_ \_

Remote View Bookmarks Help

Connect

FG 3F M2 3M

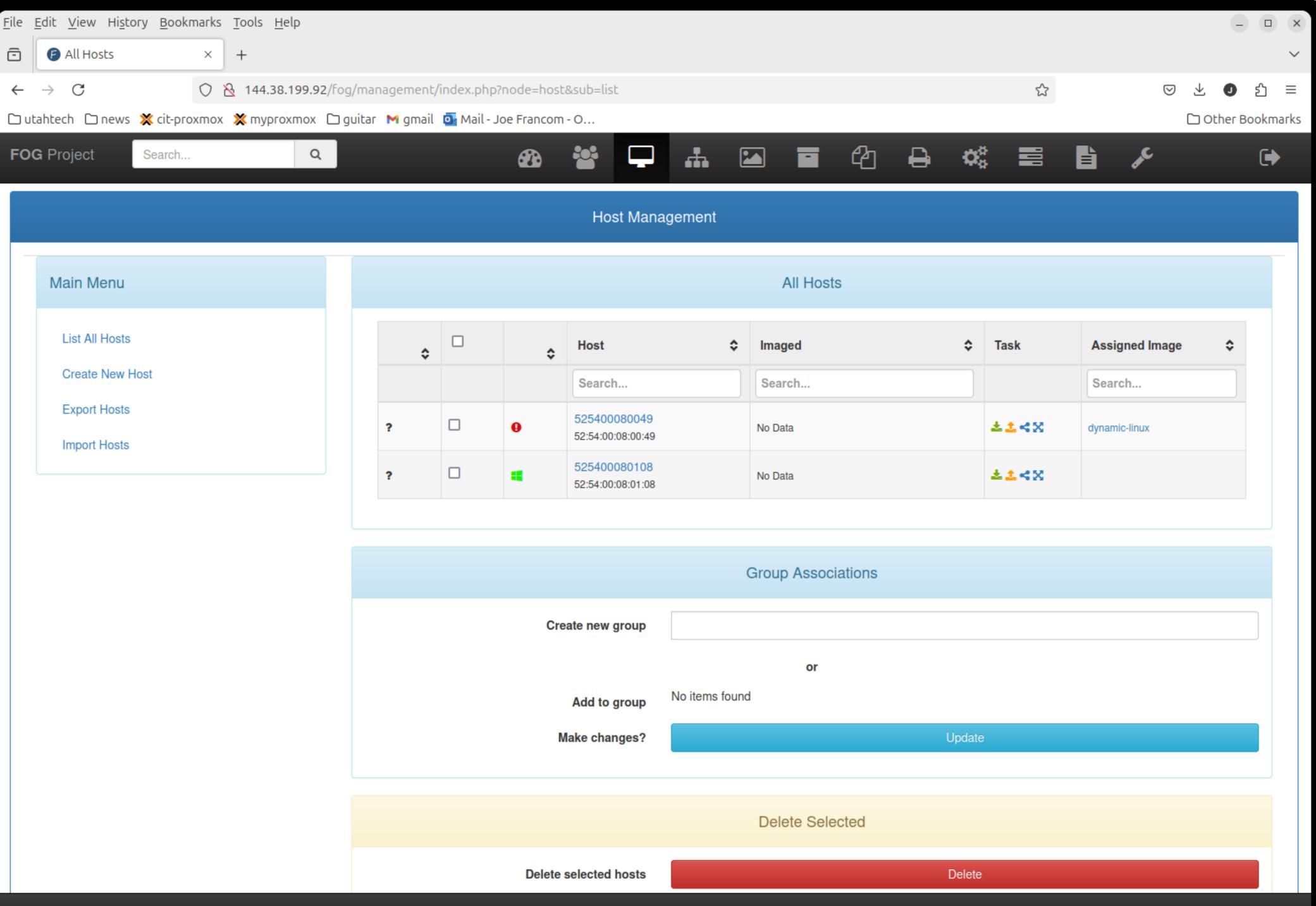


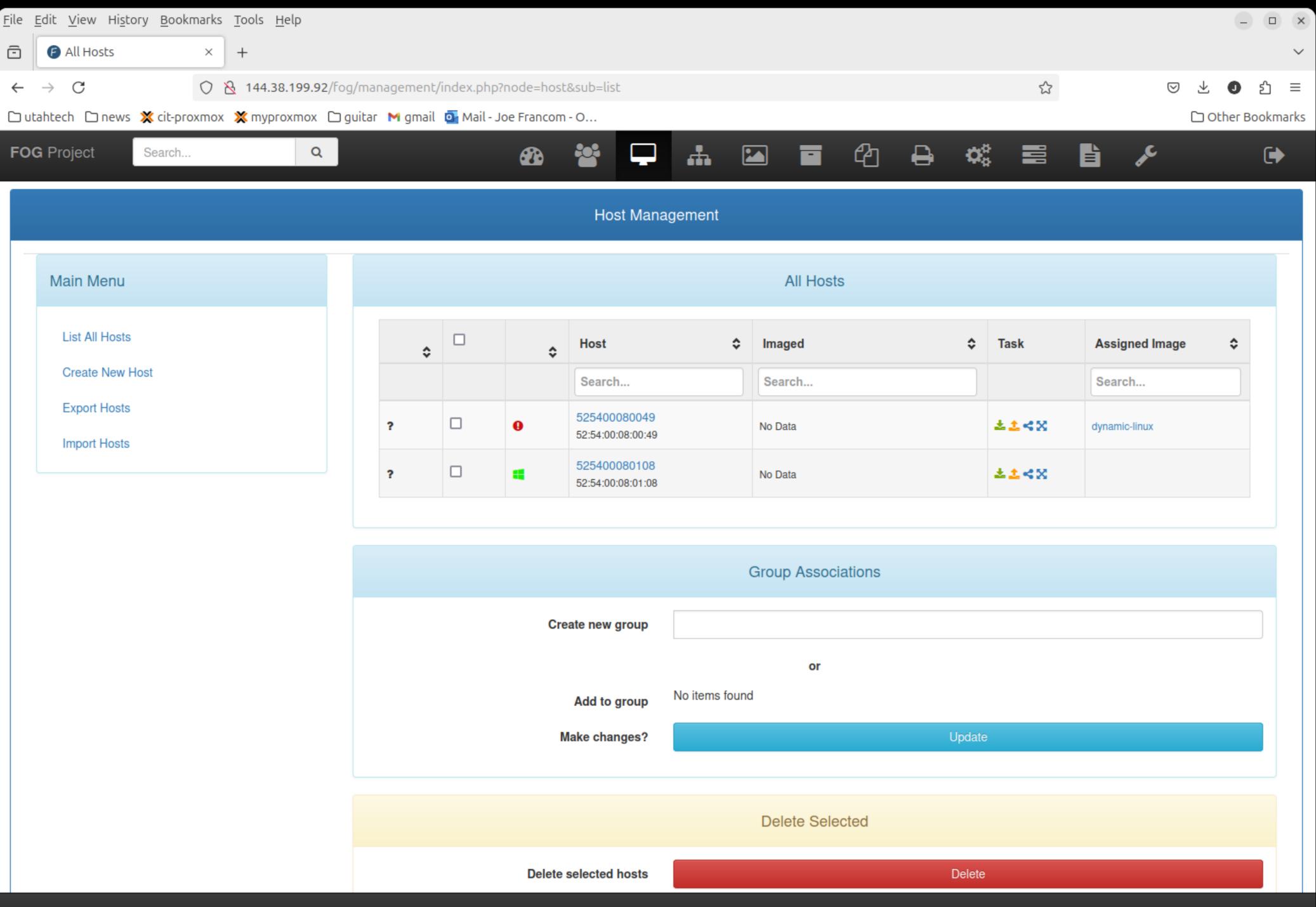


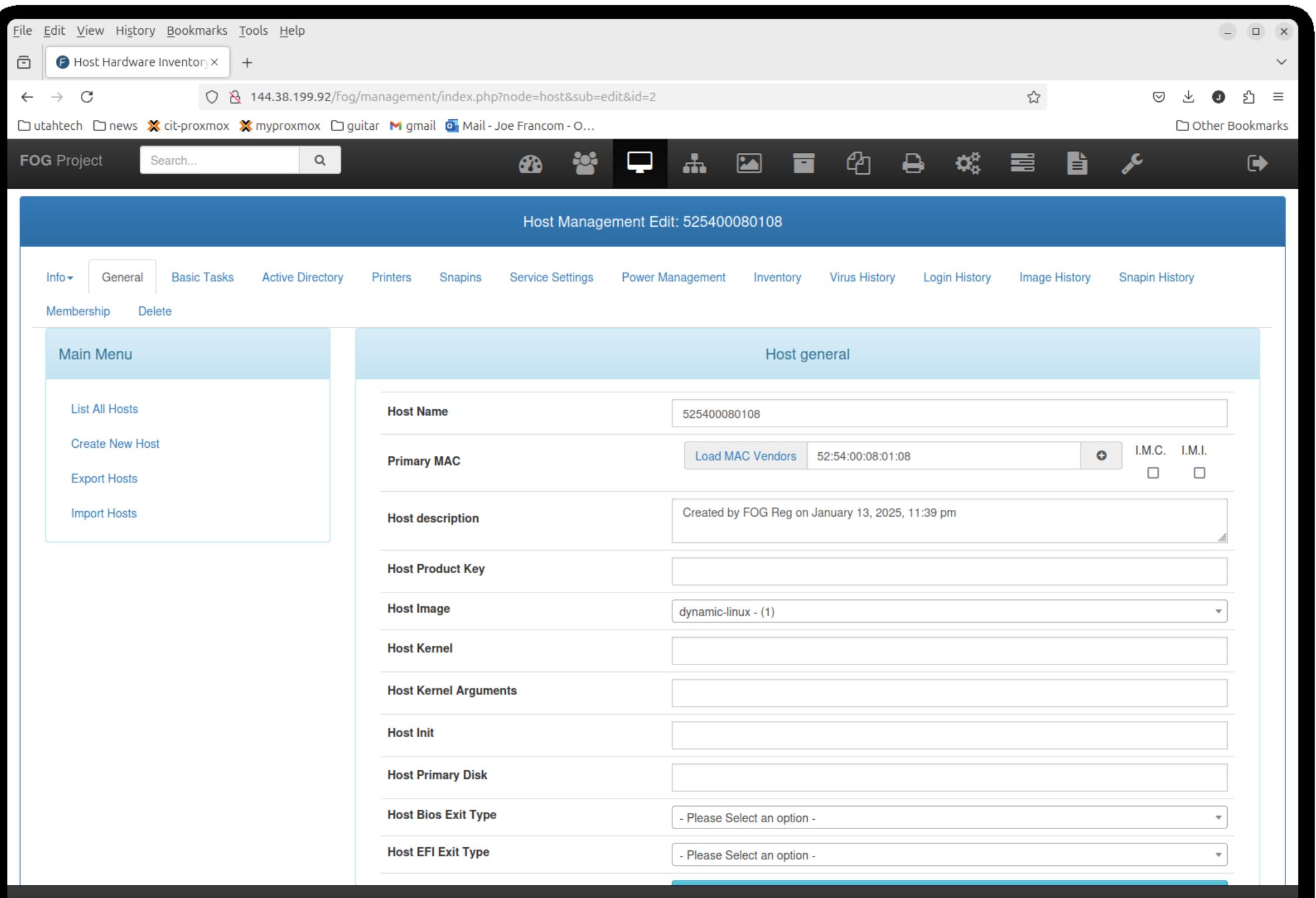


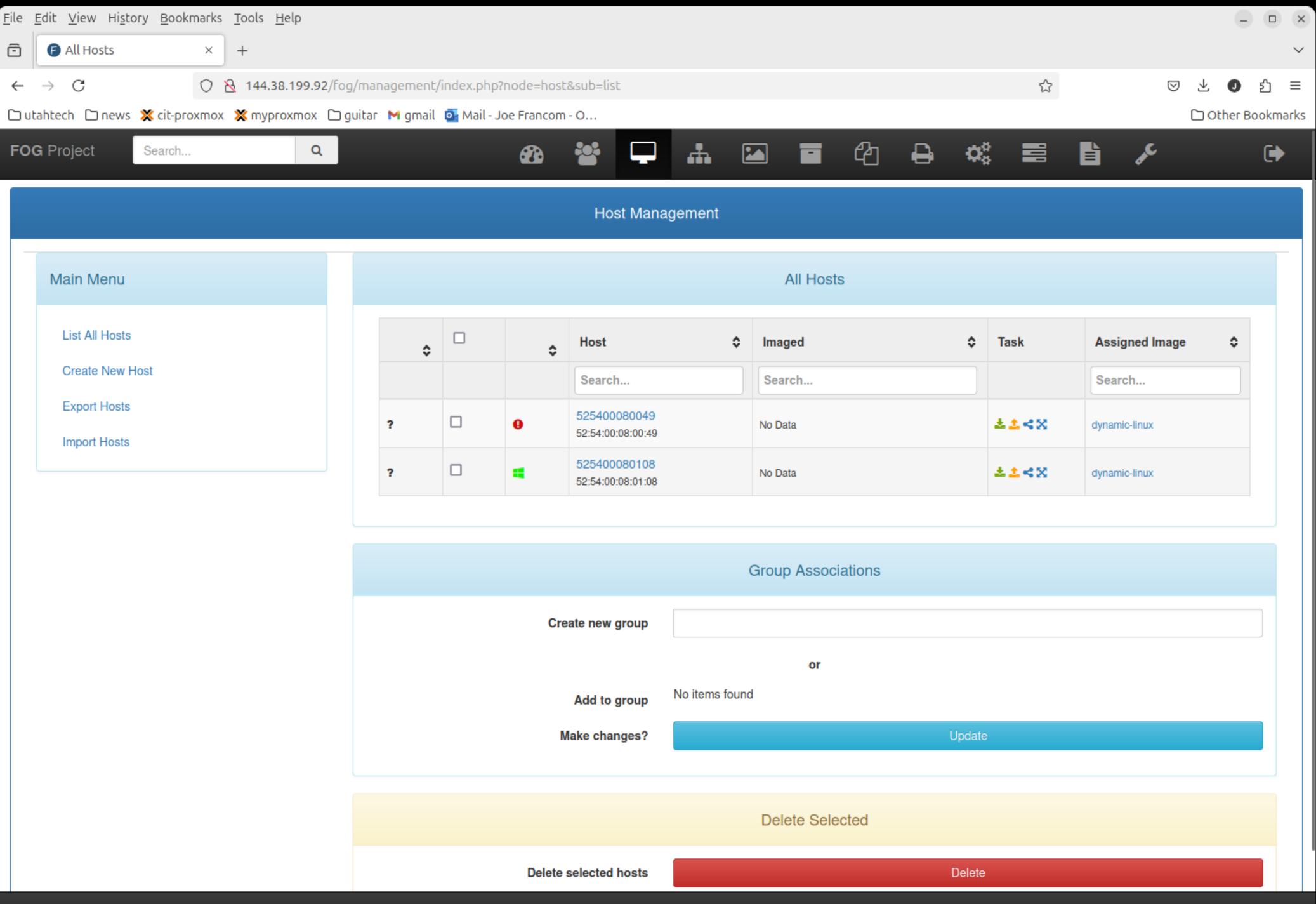
Send Ctrl-Alt-Del

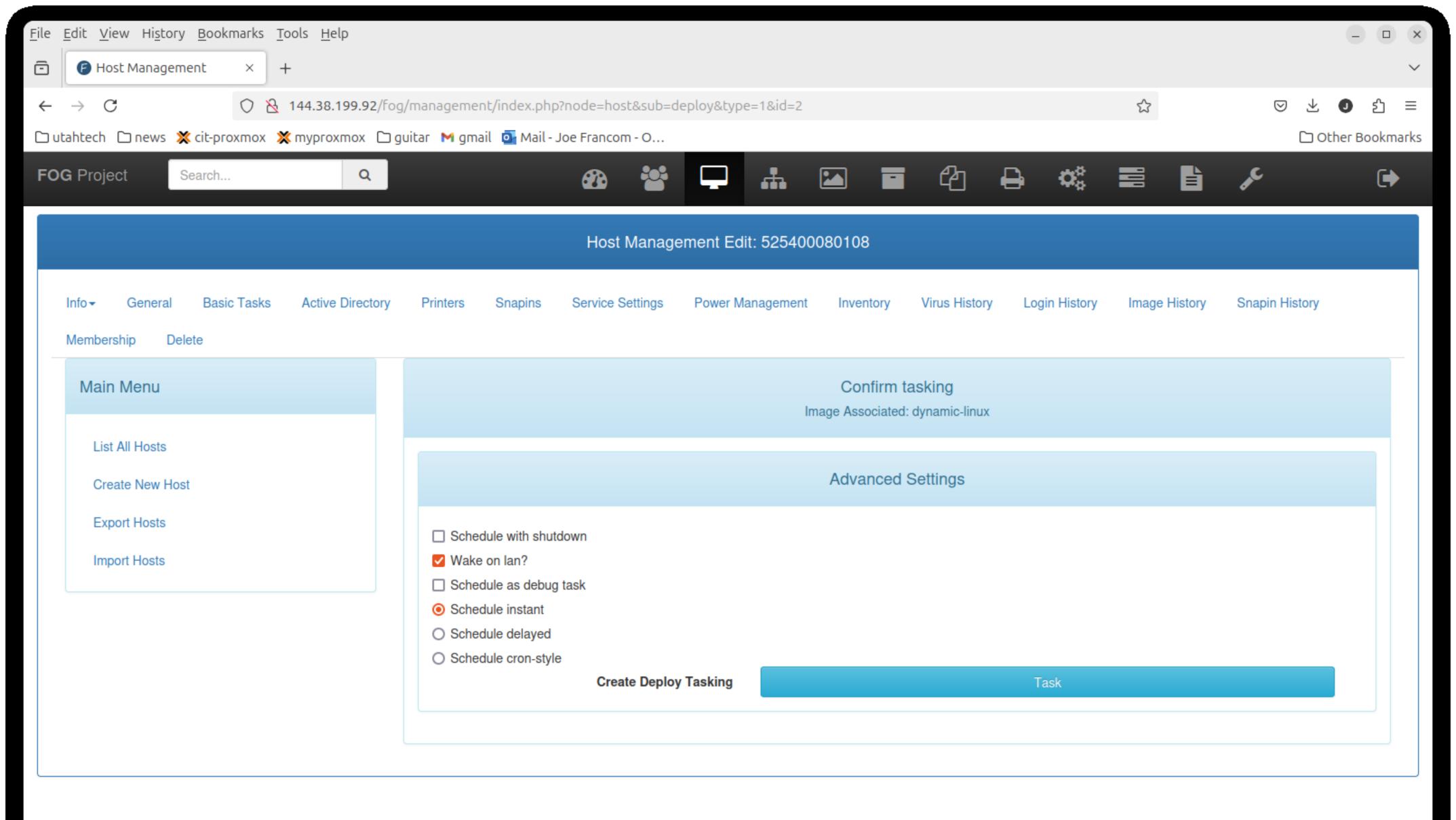
OK ==== ===== === ==== ======== == == ==== === == ====== === === ======== ===== ===== Free Opensource Ghost ====== ======= Credits ======== = https://fogproject.org/Credits = == Released under GPL Version 3 == Version: 1.5.10.1629 Init Version: 20240905 \* Using disk device...../dev/sda Starting host registration \* Attempting to register host.....\_











\_ D X

Remote View Bookmarks Help

Connect









Send Ctrl-Alt-Del

	Init Version: 20240905
*	Verifying network interface configurationDone
×	Checking Operating SystemLinux
×	Checking CPU Cores1
	Send methodNFS
	Attempting to check in
¥	Mounting File SystemDone
	Checking Mounted File System
	Checking img variable is set
*	Attempting to send inventory
	Using Image: dynamic-linux
*	Looking for Hard Disk(s)Done
×	Using Disk: /dev/sda
*	Enabling write cacheEnabled
	Using Hard Disk: /dev/sda
	Preparing Partition layout
	Erasing current MBR/GPT Tables
	Restoring Partition Tables (GPT)Done
¥	Attempting to expand/fill partitionsDone
	++
	Attempting to deploy image
	<b>+</b> +
	Using Partclone
	++

Remote View Bookmarks Help



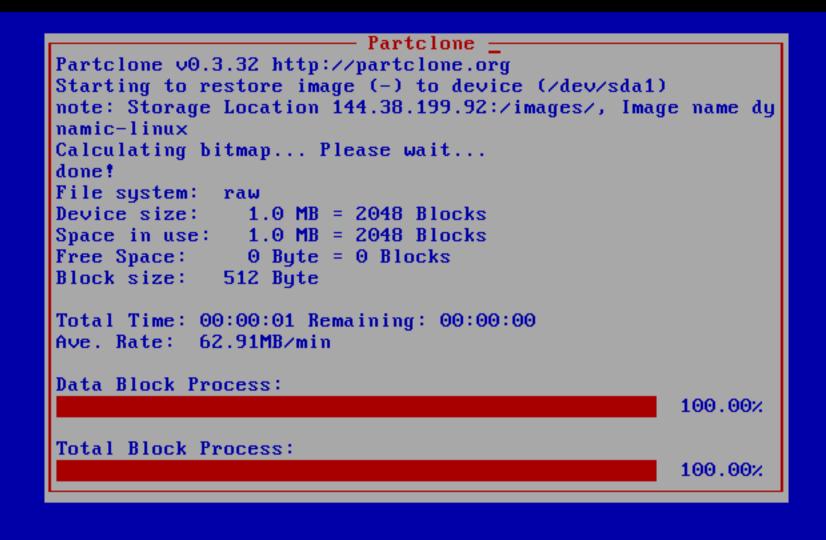








Send Ctrl-Alt-Del



joe@foggy-s25:~/fogproject-stable\$ echo "After that finishes, hopefully you can boot from c drive"
After that finishes, hopefully you can boot from c drive
joe@foggy-s25:~/fogproject-stable\$