

Proxmox & Pfsense Installation

1st Step

Followed this settings for VMBox then run it.

1. Create a new Virtualbox Virtual Machine for Proxmox

Sample settings:

Name: Proxmox-vm

OS Type: Linux

Version: Debian (64 bit)

Memory: 6GB

Disk: Use a SSD if possible. Preallocated might provide faster access.

2. Edit the settings

Audio: disable

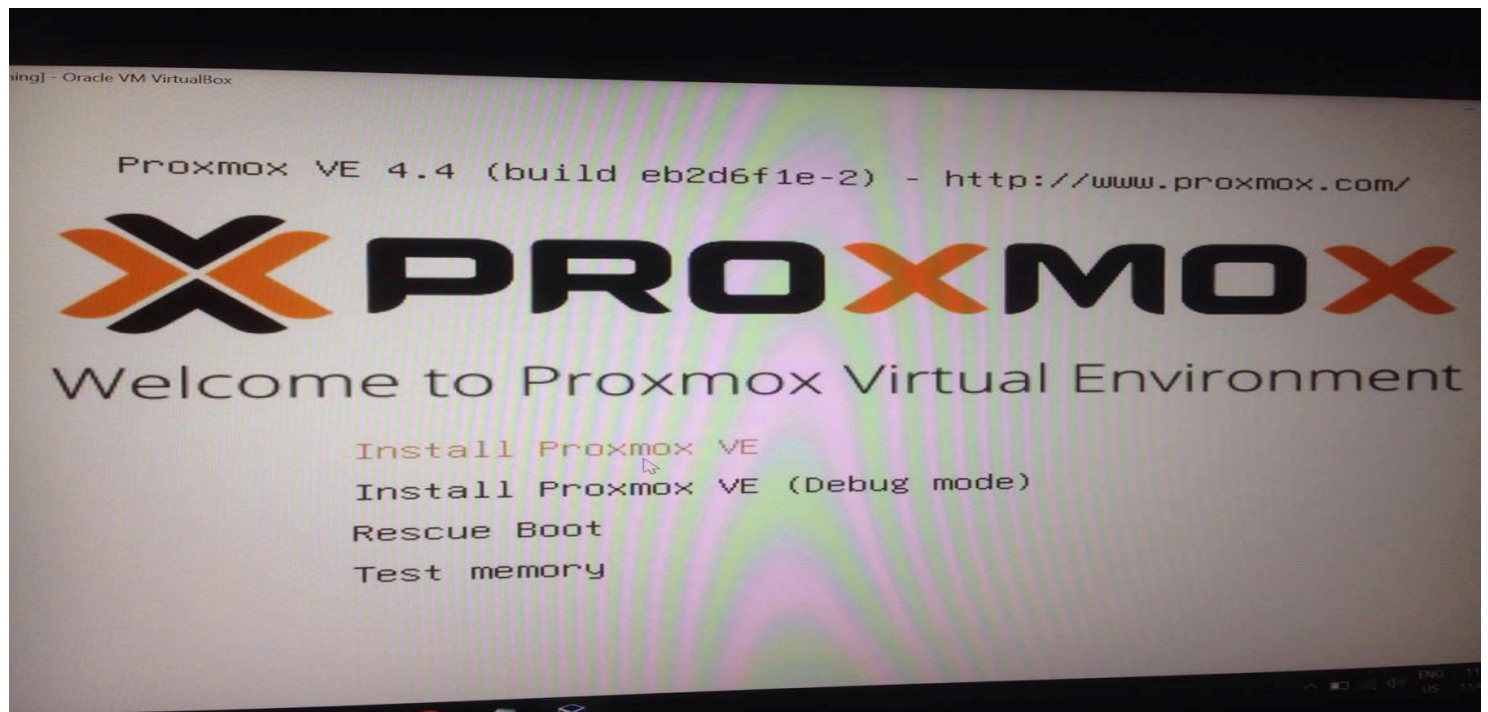
Storage:

IDE - Select Empty - click IDE Secondary - select the disk symbol, pick ISO for Proxmox

Network:

Adapter 1: Host-only Adapter, vboxnet0; recommended leave the advanced settings as they are (Paravirtualized Network (virtio-net)).

Adapter 2: NAT (attention: NOT NAT-network!!)



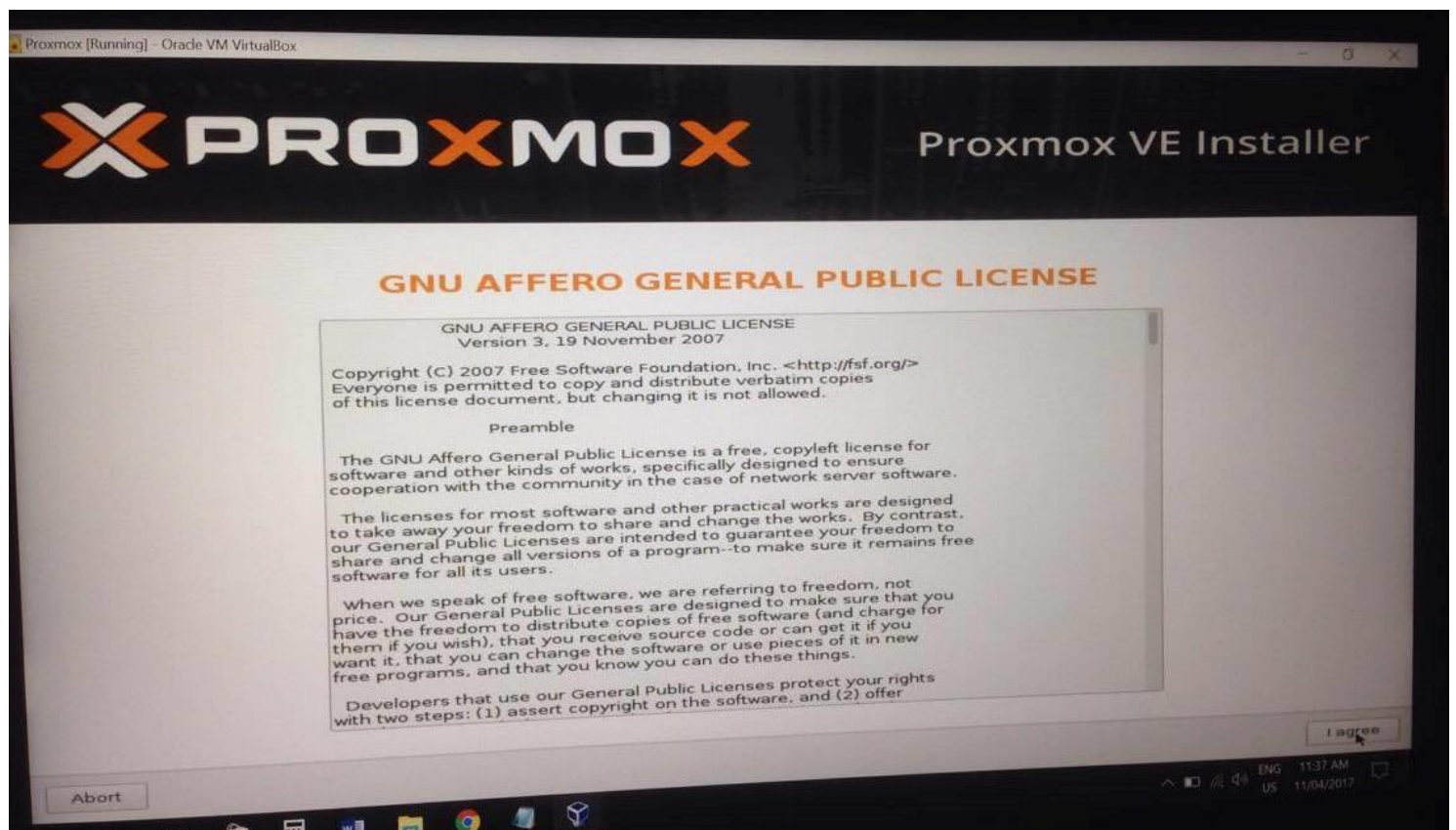
2nd Step

After entering Install Proxmox VE

```
Proxmox startup
mounting proc filesystem
mounting sys filesystem
comandline: BOOT_IMAGE=/boot/linux26 ro ramdisk_size=16777216 rw quiet splash=silent
loading drivers: i2c_pllx4 pata_acpi floppy 8250_fintek video mac_hid input_leds serio_raw psmouse pcspkr aesni_intel ghash_
uhci_intel crc32_pclmul crc10dif_pclmul
modprobe: ERROR: could not insert 'floppy': No such device
searching for cdrom
testing cdrom /dev/sr0
found proxmox cdrom
Starting Proxmox installation
Installing additional hardware drivers
[ ok ] Starting the hotplug events dispatcher: udevd.
[ ok ] Synthesizing the initial hotplug events...done.
[....] Waiting for /dev to be fully populated...[ 5.274453] Error: Driver 'pcspkr' is already registered, aborting...
done.
Detecting network settings...
```

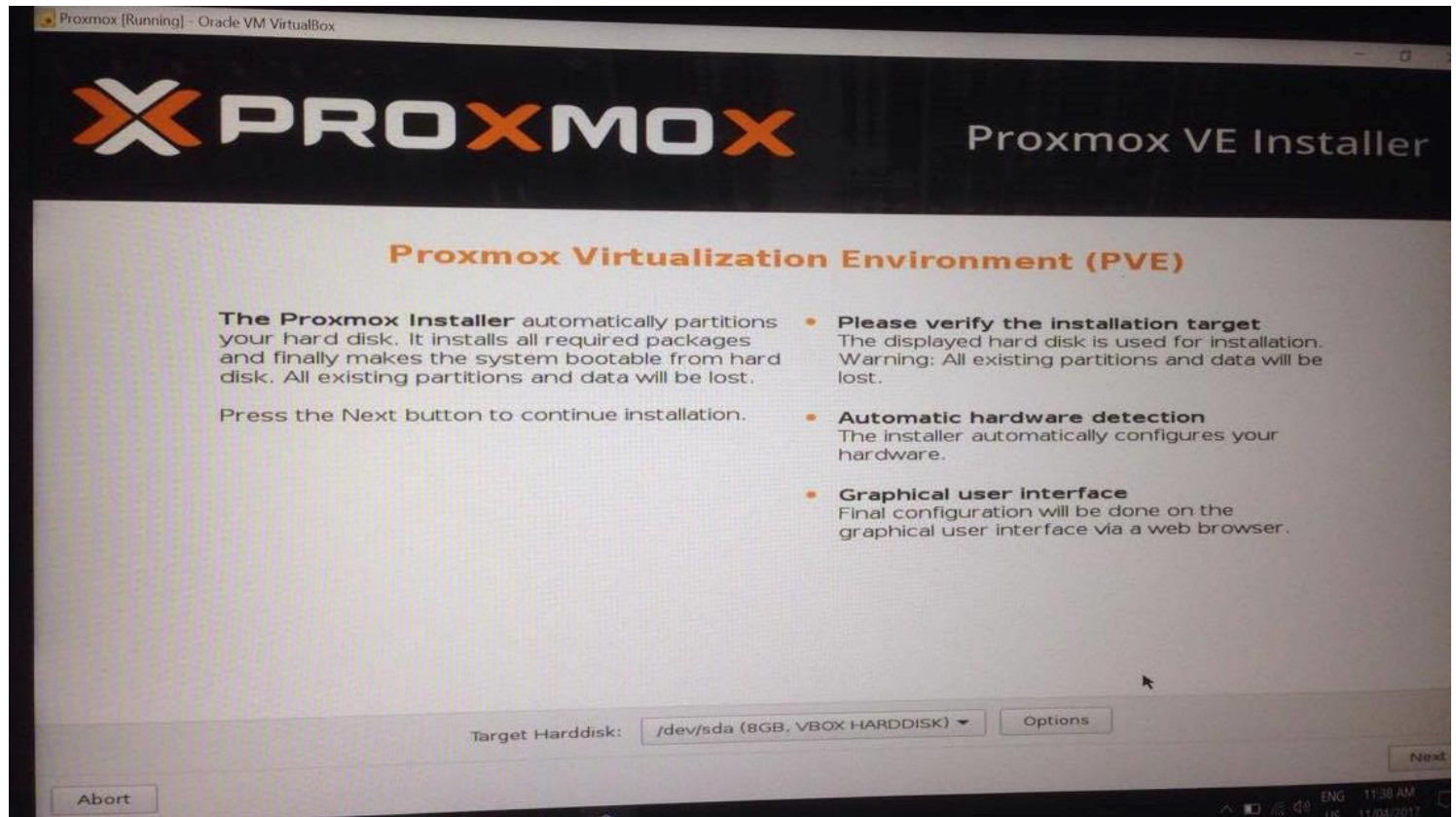
3rd Step

After loading the contents of the Proxmox ISO. Read and continue by clicking “I agree”.



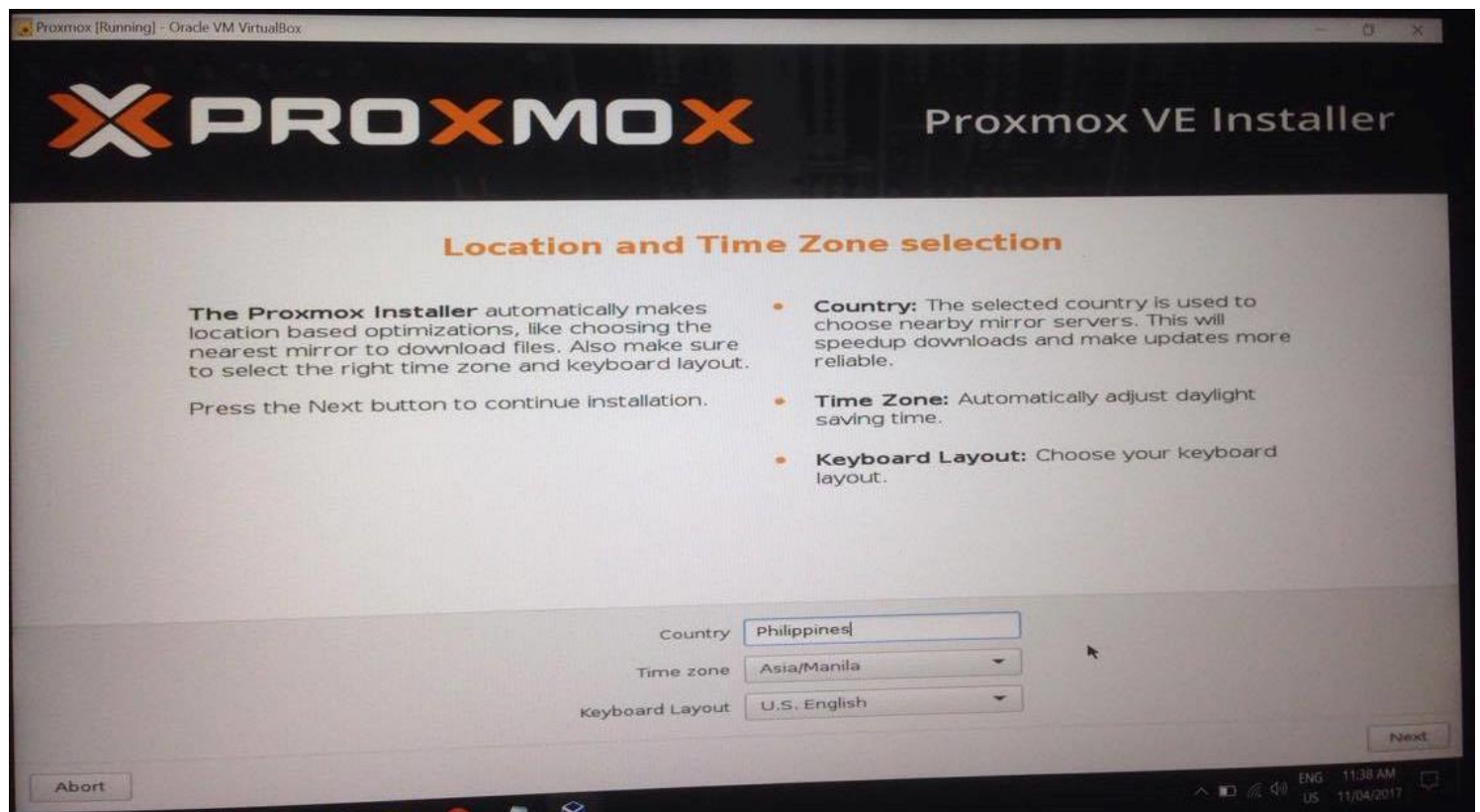
4th Step

Set up the hard disk option by clicking the Options button.



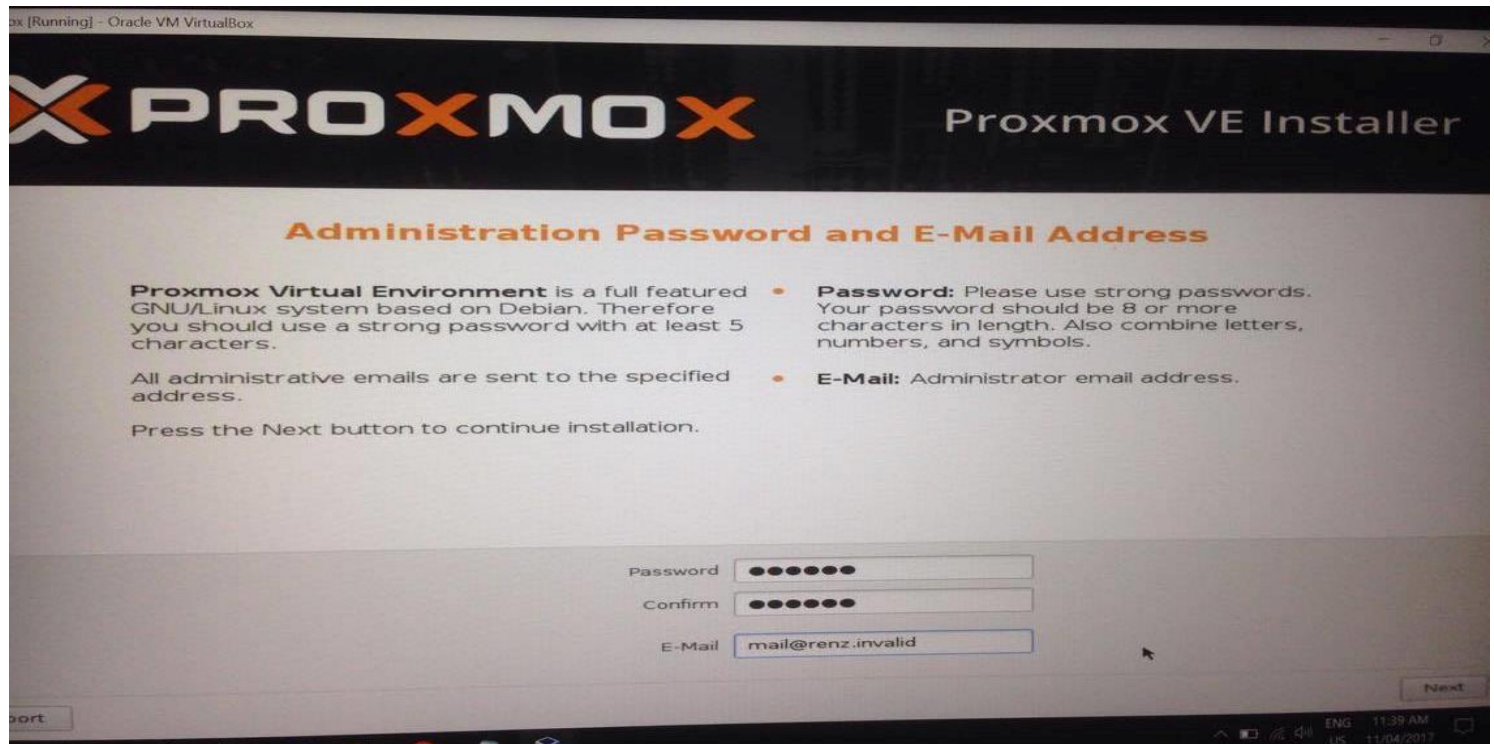
5th Step

Input the country.



6th Step

Enter the Proxmox password and email address.



The screenshot shows the 'Administration Password and E-Mail Address' screen of the Proxmox VE Installer. The Proxmox logo is at the top left, and the title 'Proxmox VE Installer' is at the top right. The main heading is 'Administration Password and E-Mail Address'. Below this, there is explanatory text about the Proxmox Virtual Environment and instructions for password and email entry. At the bottom, there are input fields for 'Password', 'Confirm', and 'E-Mail'. The 'E-Mail' field contains 'mail@renz.invalid'. A 'Next' button is located at the bottom right.

Proxmox Virtual Environment is a full featured GNU/Linux system based on Debian. Therefore you should use a strong password with at least 5 characters.

All administrative emails are sent to the specified address.

Press the Next button to continue installation.

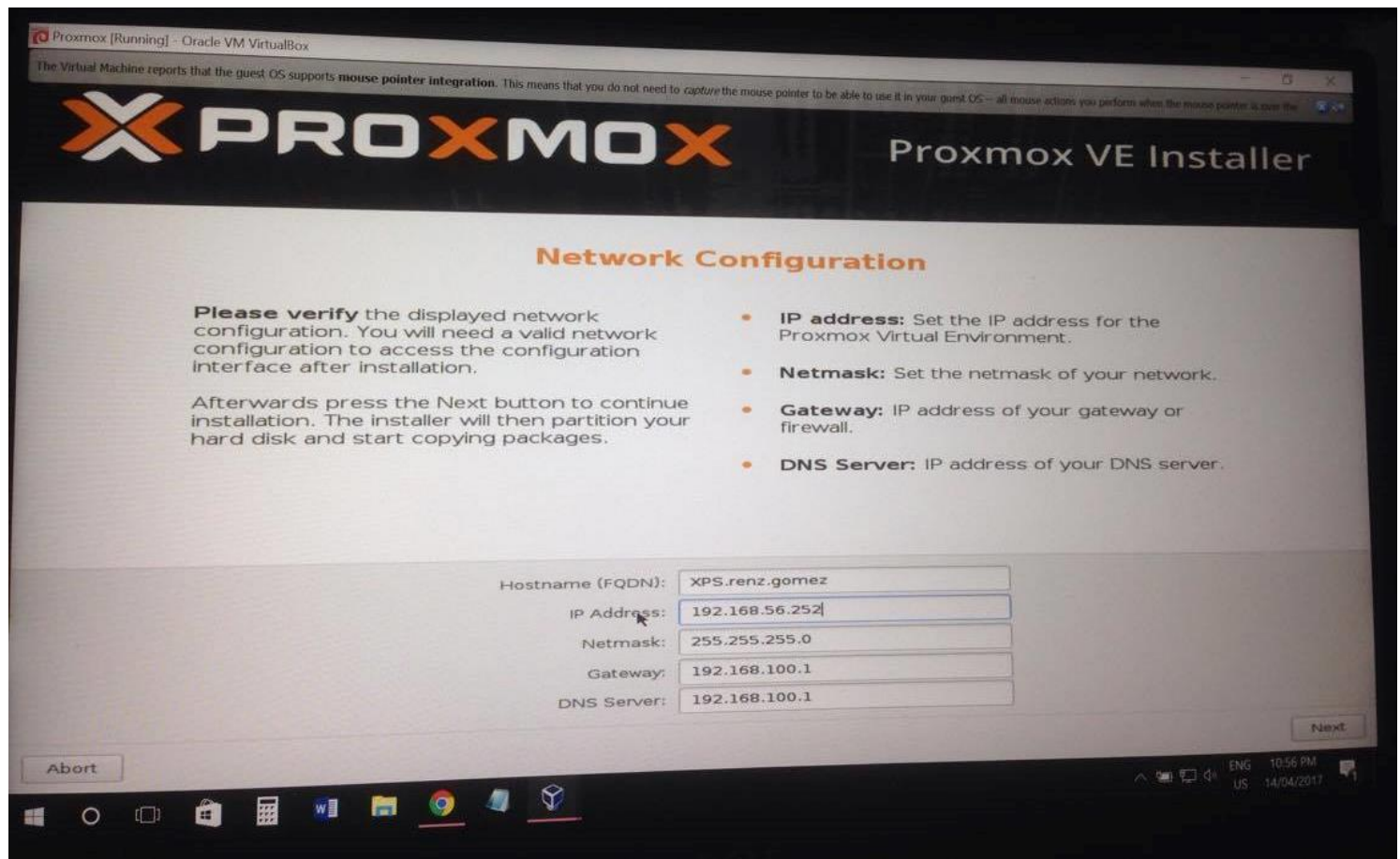
- Password:** Please use strong passwords. Your password should be 8 or more characters in length. Also combine letters, numbers, and symbols.
- E-Mail:** Administrator email address.

Password: [masked]
Confirm: [masked]
E-Mail: mail@renz.invalid

Next

7th Step

Fill out the network configuration. I modified the IP Address to 192.168.56.252



The screenshot shows the 'Network Configuration' screen of the Proxmox VE Installer. The Proxmox logo is at the top left, and the title 'Proxmox VE Installer' is at the top right. The main heading is 'Network Configuration'. Below this, there is explanatory text about verifying the network configuration and instructions for the Next button. At the bottom, there are input fields for 'Hostname (FQDN)', 'IP Address', 'Netmask', 'Gateway', and 'DNS Server'. The 'IP Address' field contains '192.168.56.252'. A 'Next' button is located at the bottom right.

Please **verify** the displayed network configuration. You will need a valid network configuration to access the configuration interface after installation.

Afterwards press the Next button to continue installation. The installer will then partition your hard disk and start copying packages.

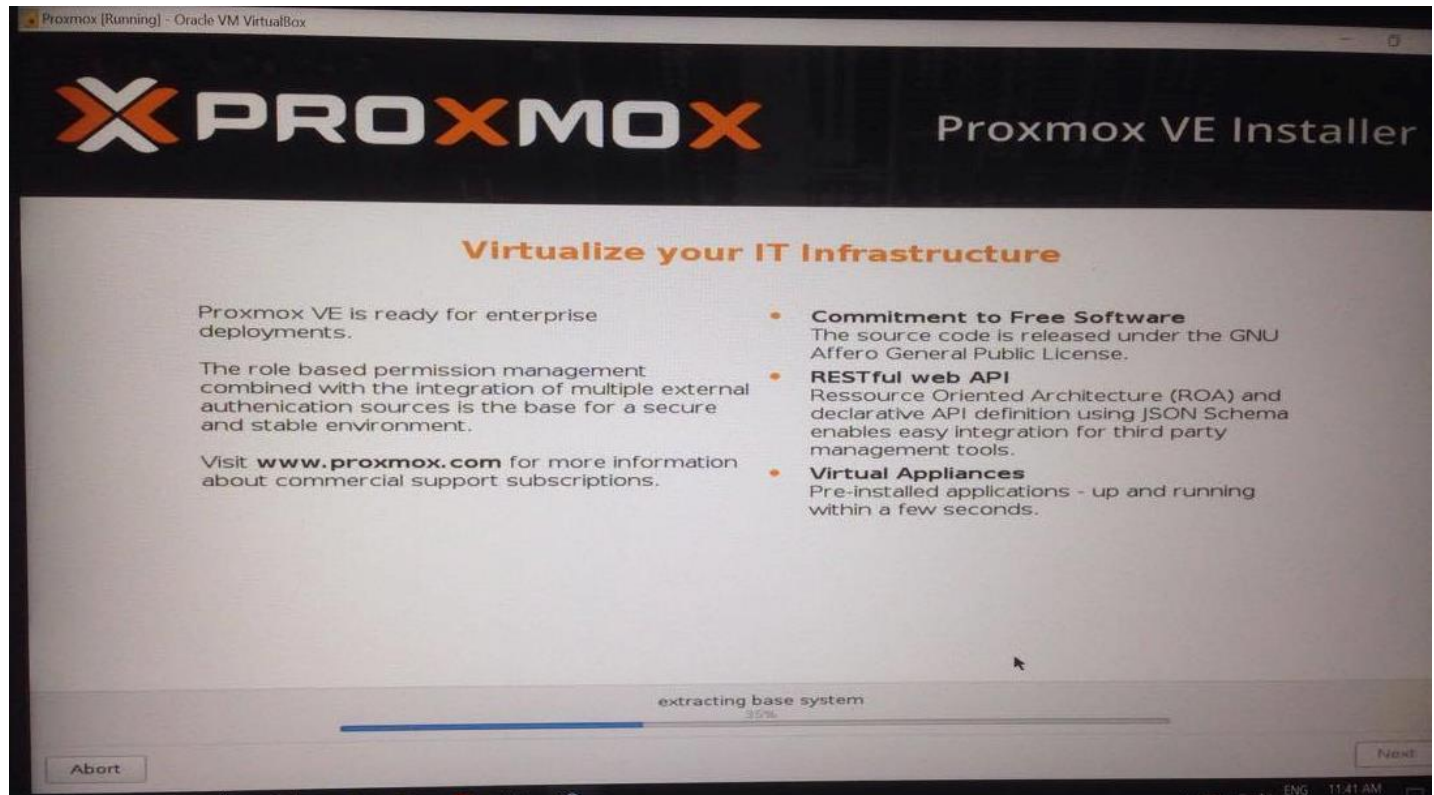
- IP address:** Set the IP address for the Proxmox Virtual Environment.
- Netmask:** Set the netmask of your network.
- Gateway:** IP address of your gateway or firewall.
- DNS Server:** IP address of your DNS server.

Hostname (FQDN): XPS.renz.gomez
IP Address: 192.168.56.252
Netmask: 255.255.255.0
Gateway: 192.168.100.1
DNS Server: 192.168.100.1

Next

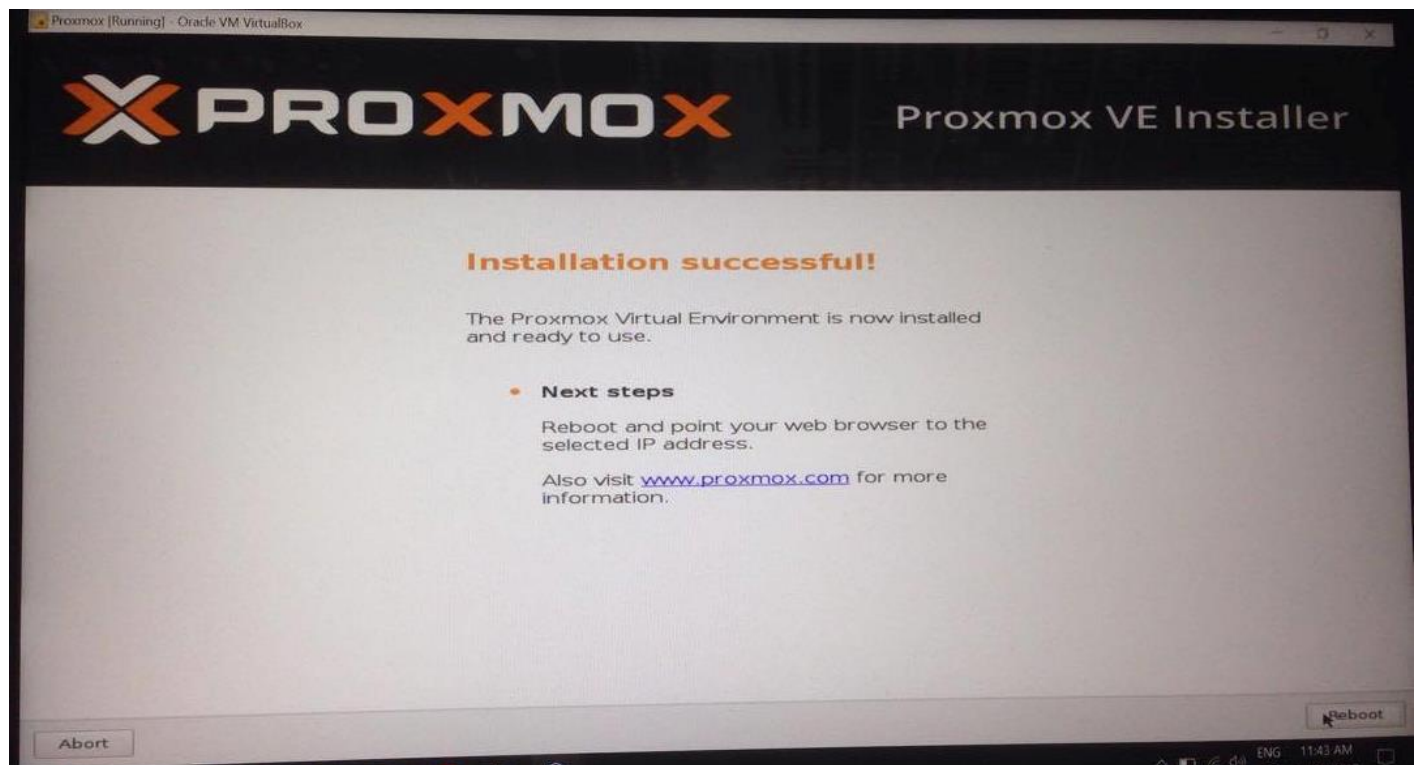
8th Step

Installation starts.



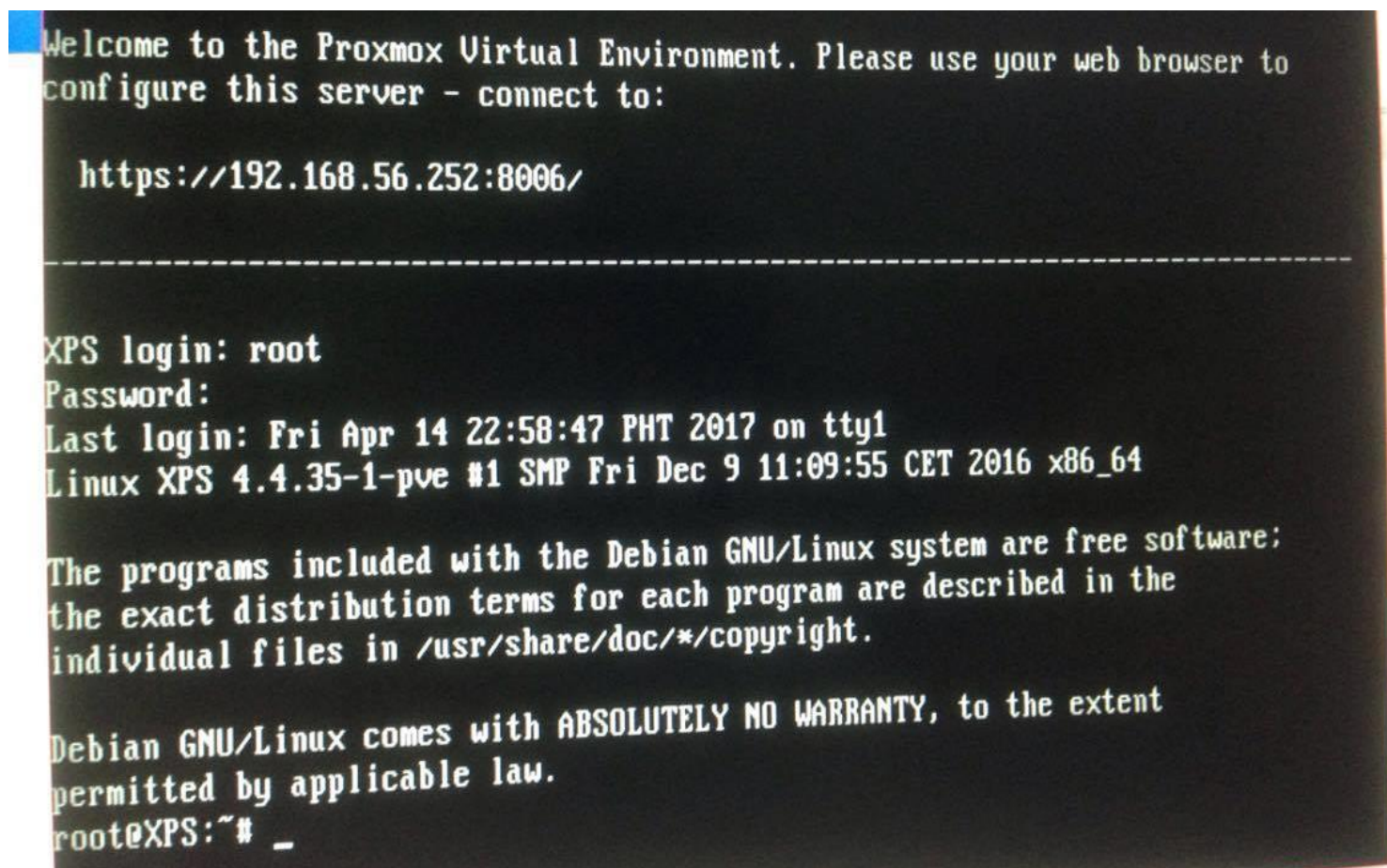
9th Step

After installation reboot Proxmox or close the Proxmox virtual machine then run again.



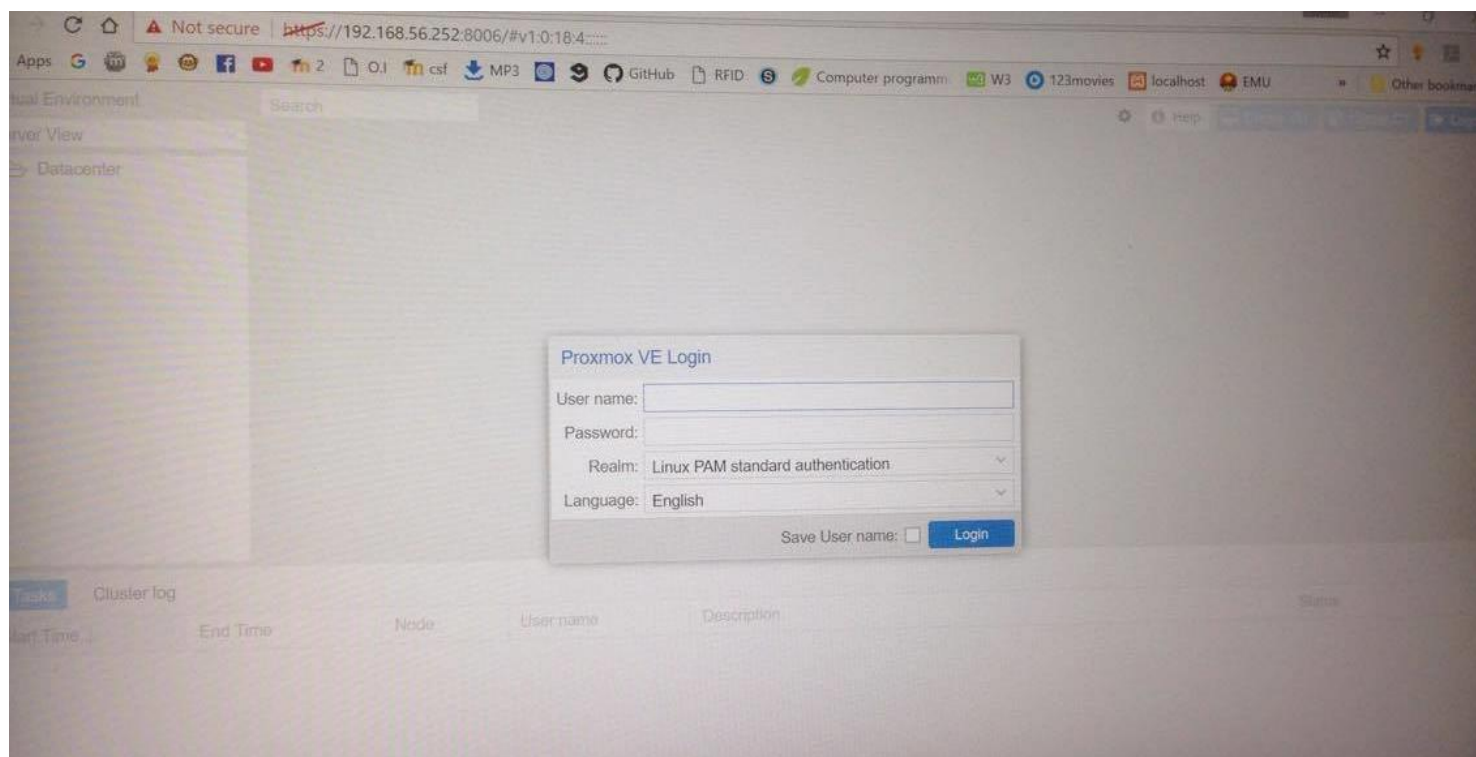
10th Step

Login using root and enter administration password.



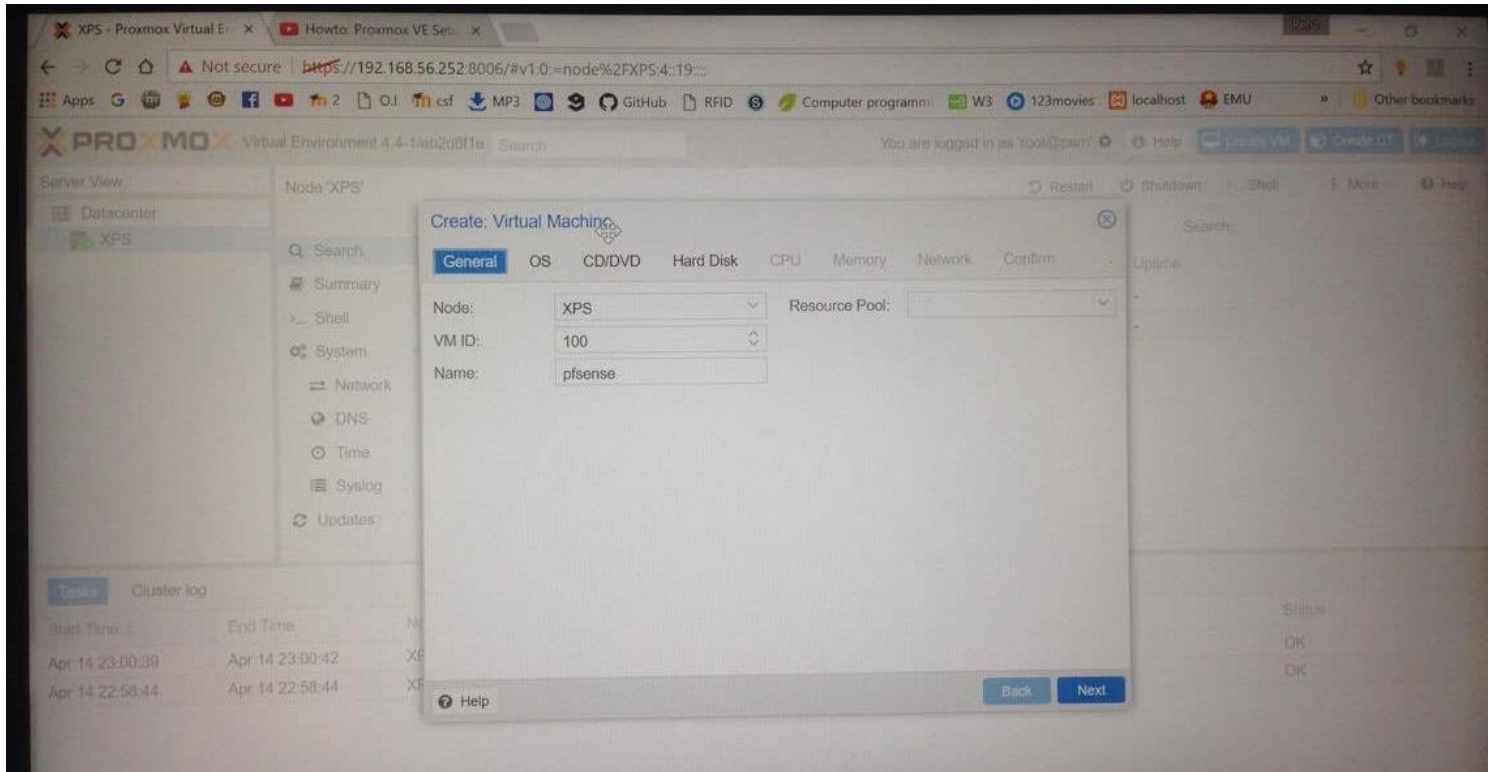
11th Step

After logging into proxmox, access the proxmox interface by using the IP Address used during the installation.



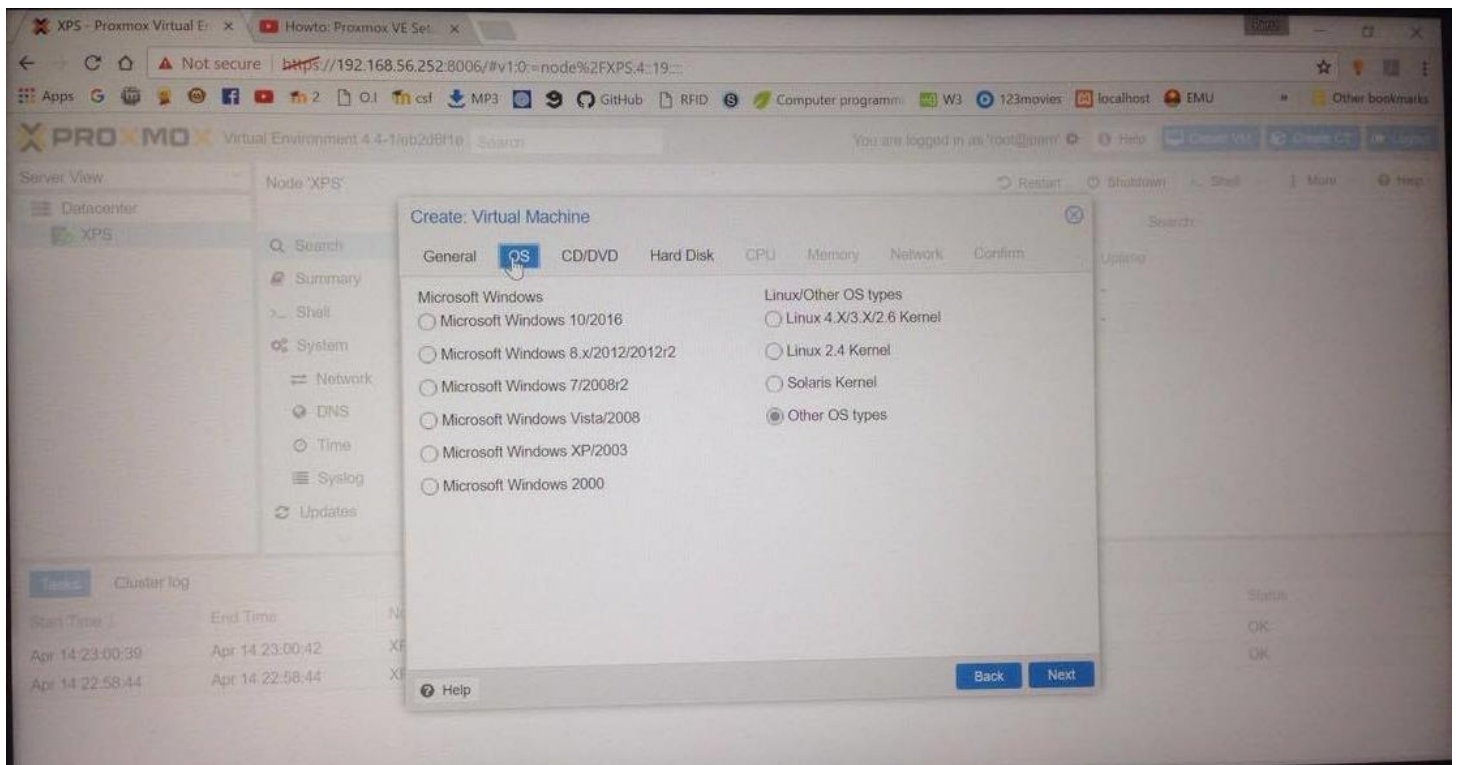
12th Step

Click the create VM option and modify the settings for creating virtual machine. General tab.



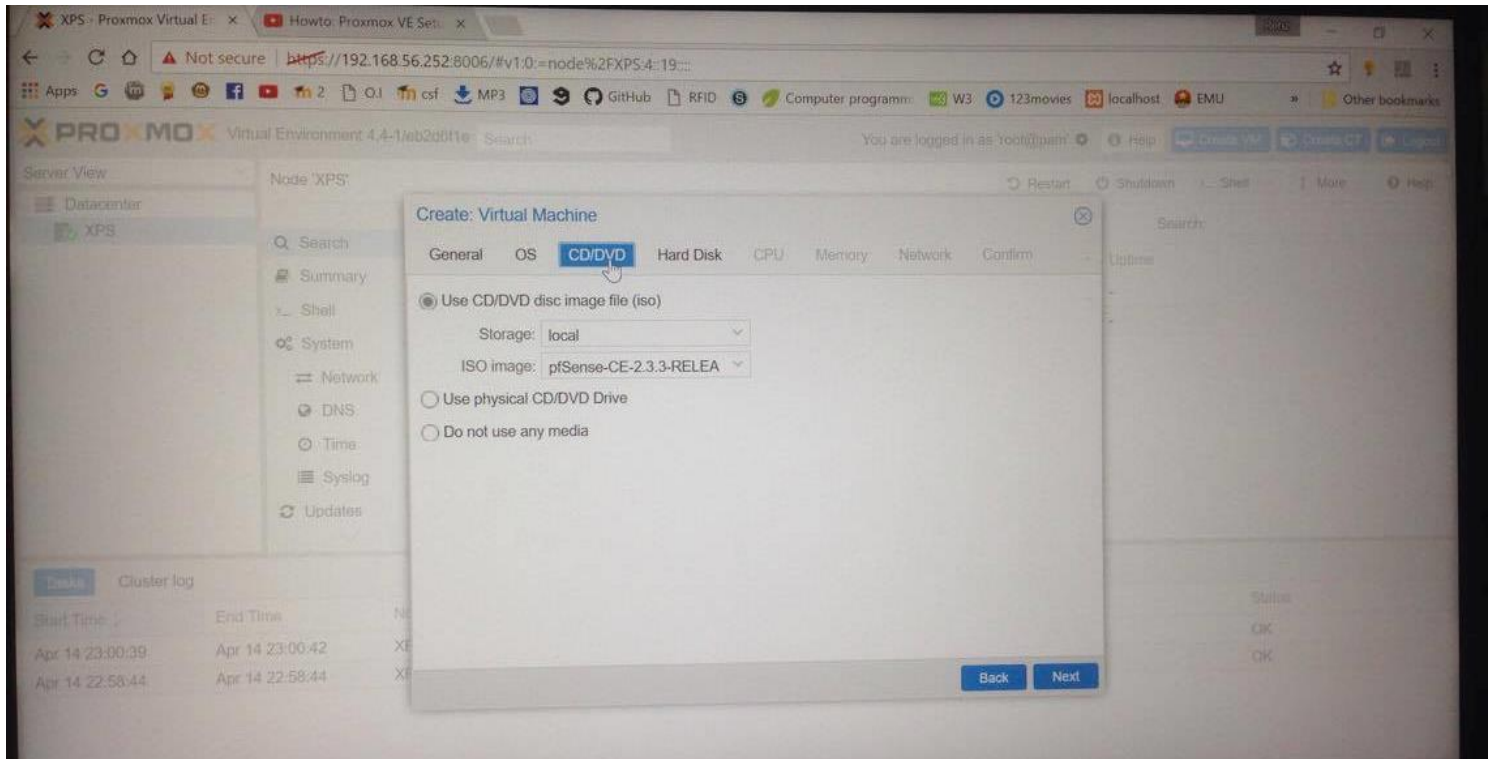
13th Step

Select OS type. I used the Other OS types radiobutton.



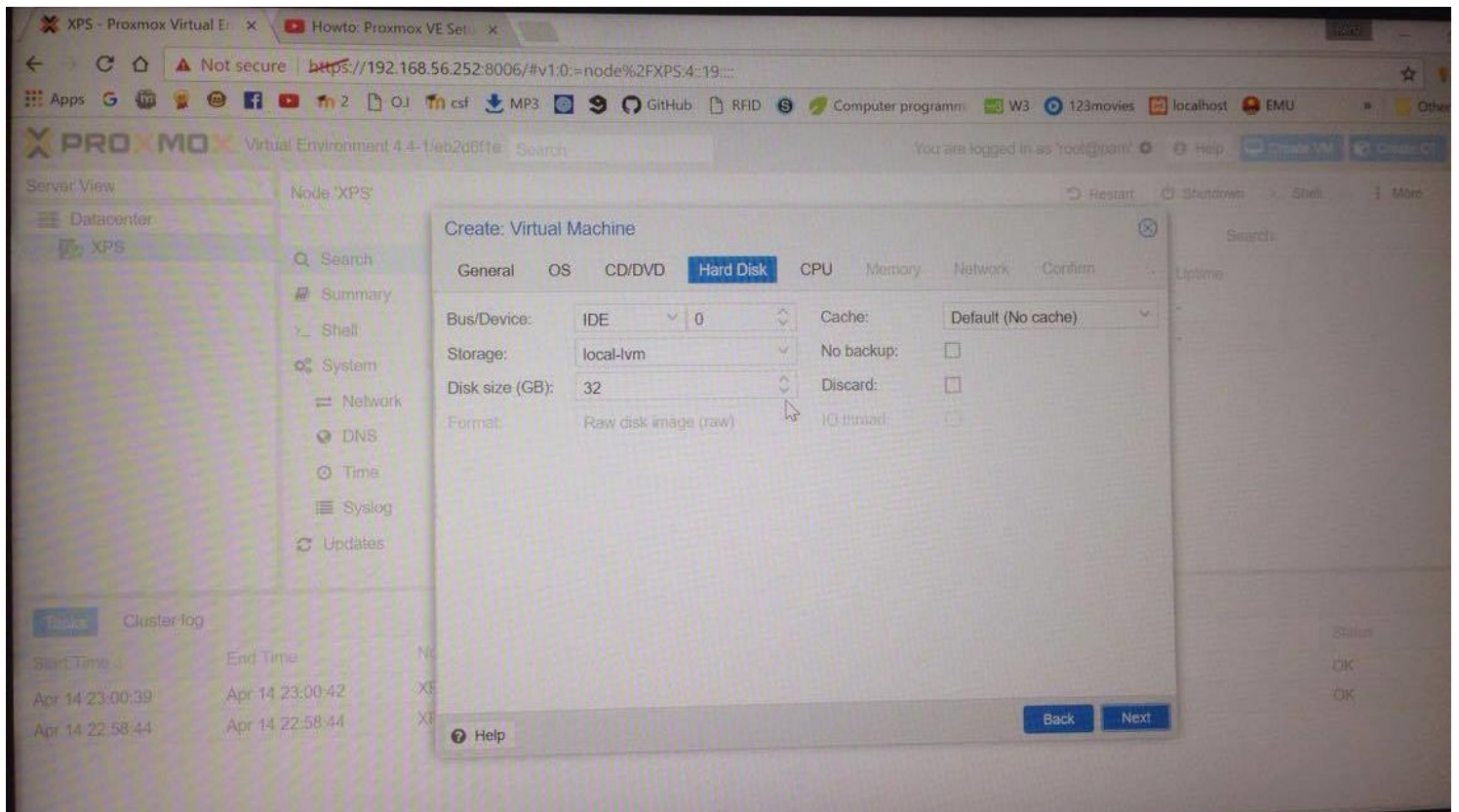
14th Step

Select the ISO you want to create as VM.



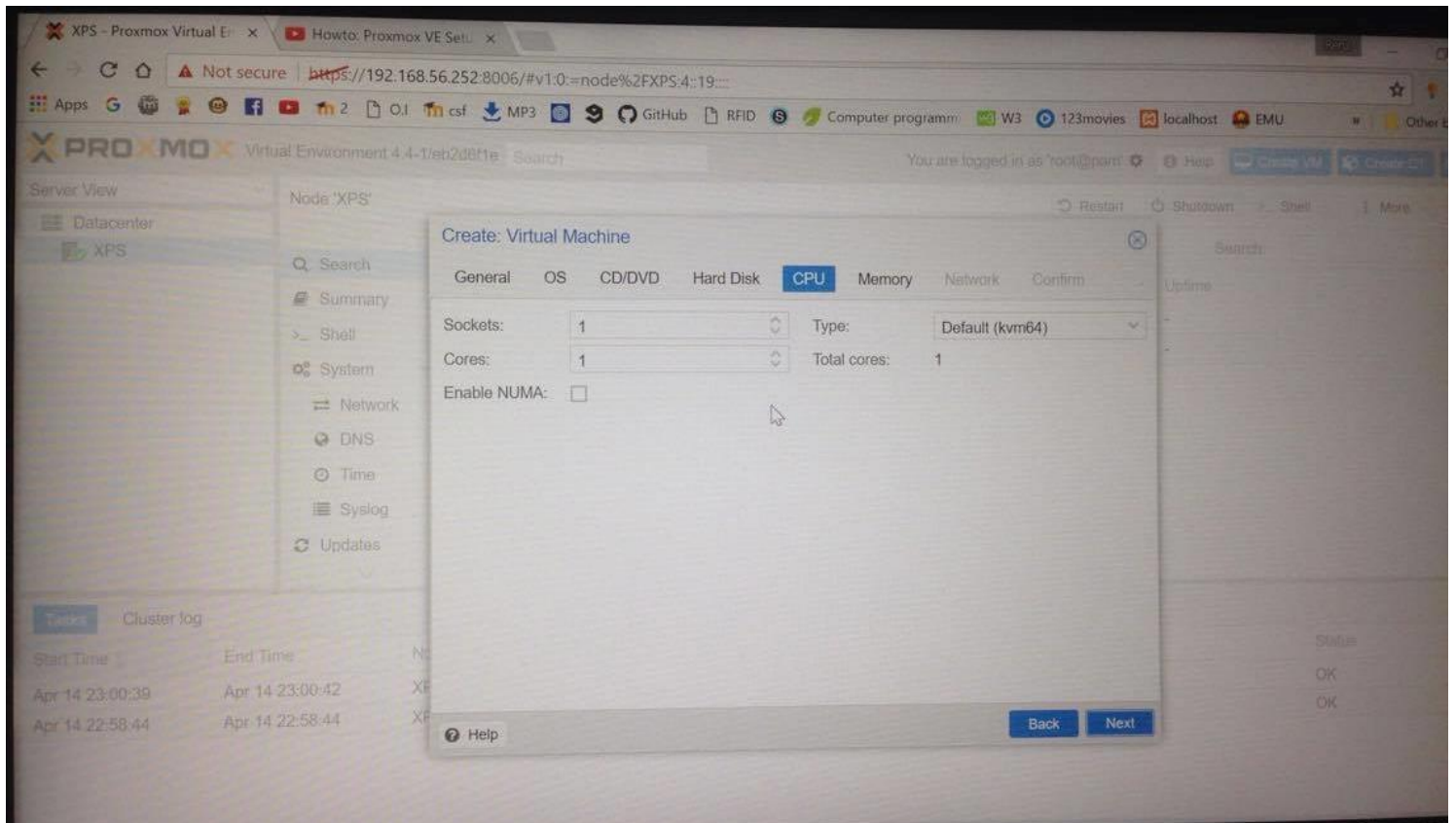
15th Step

Modify the Hard Disk. I used the default settings.



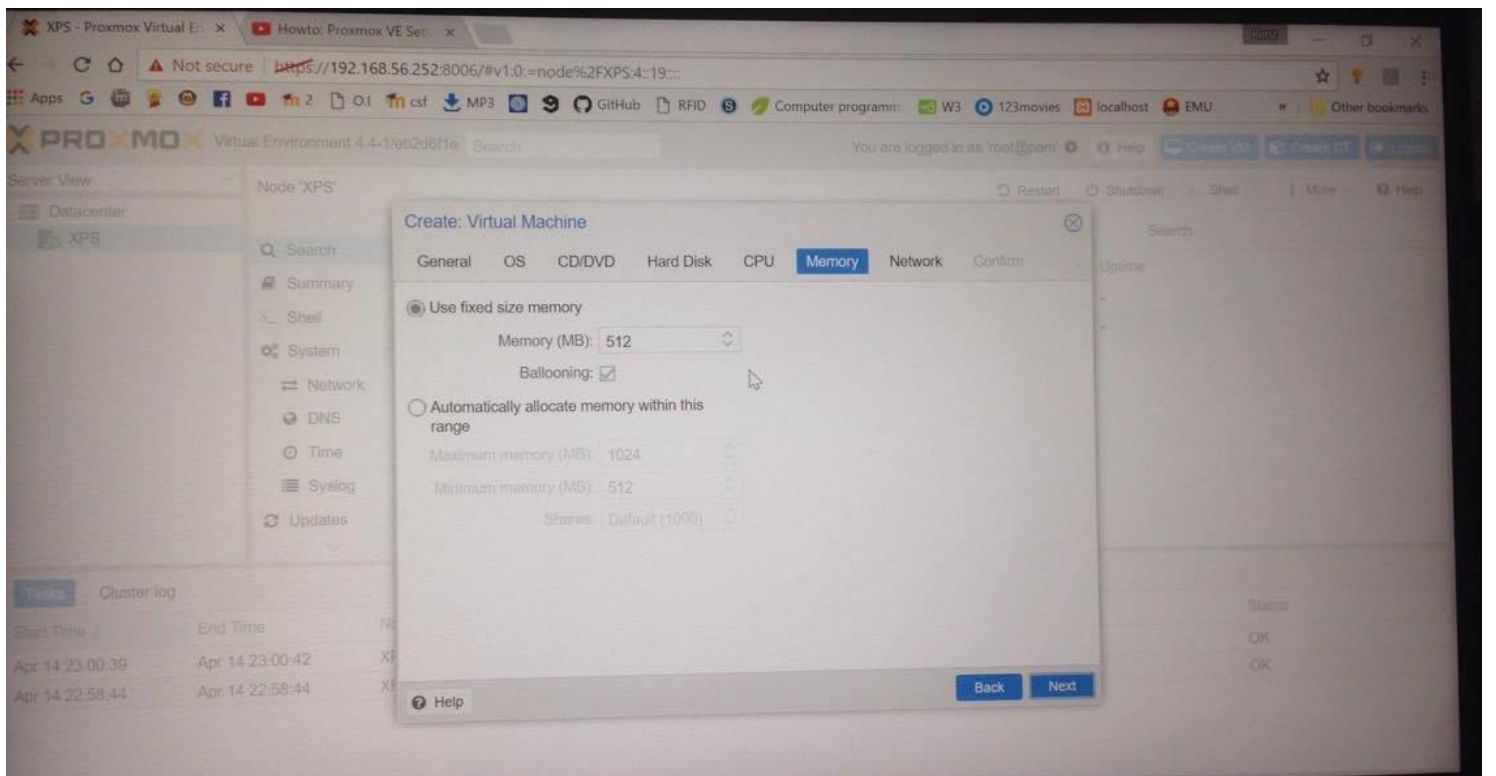
16th Step

Modify the the number of cores, sockets and the CPU type. I used the default settings.



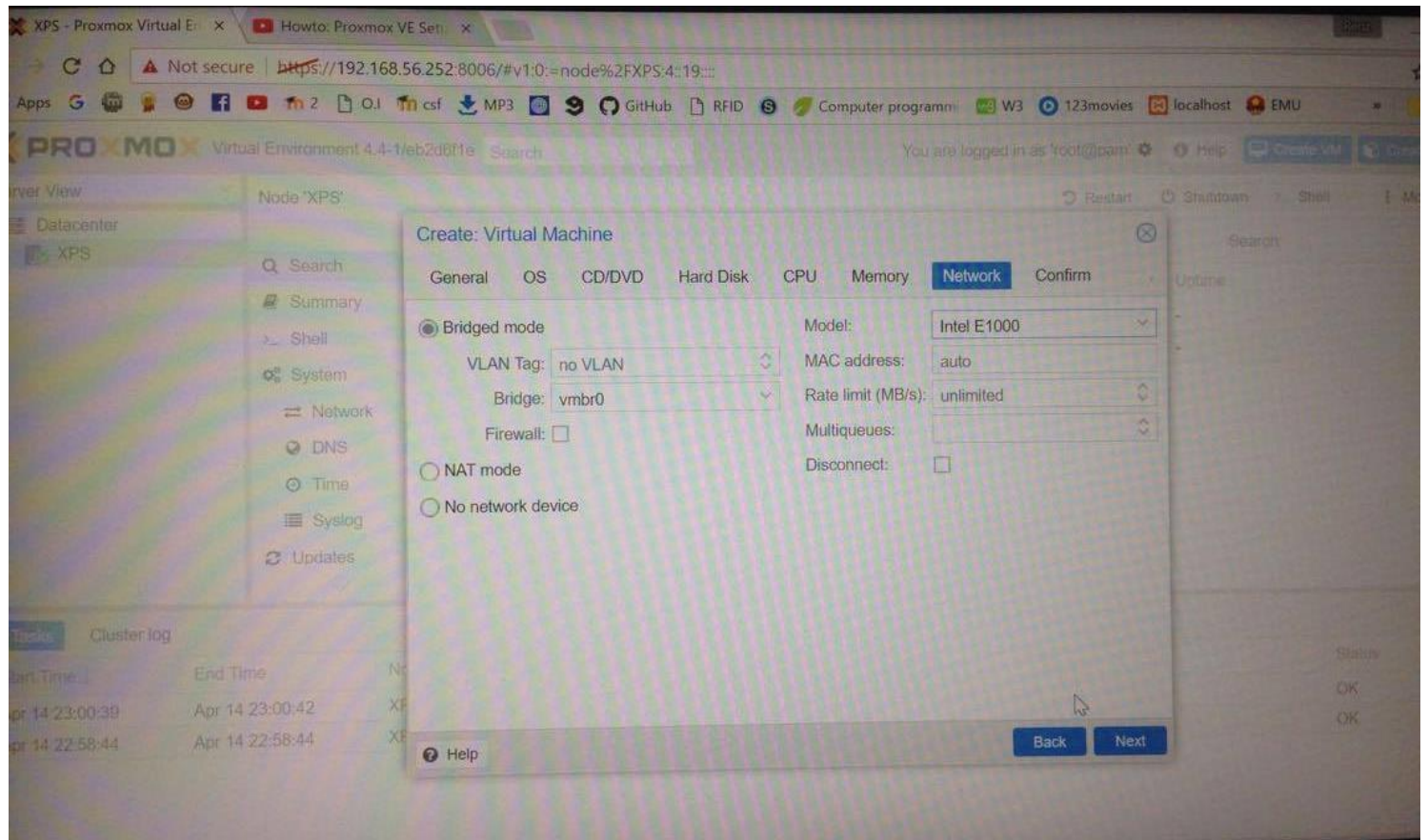
17th Step

Modify the RAM or Memory for the virtual machine. I used the default settings.



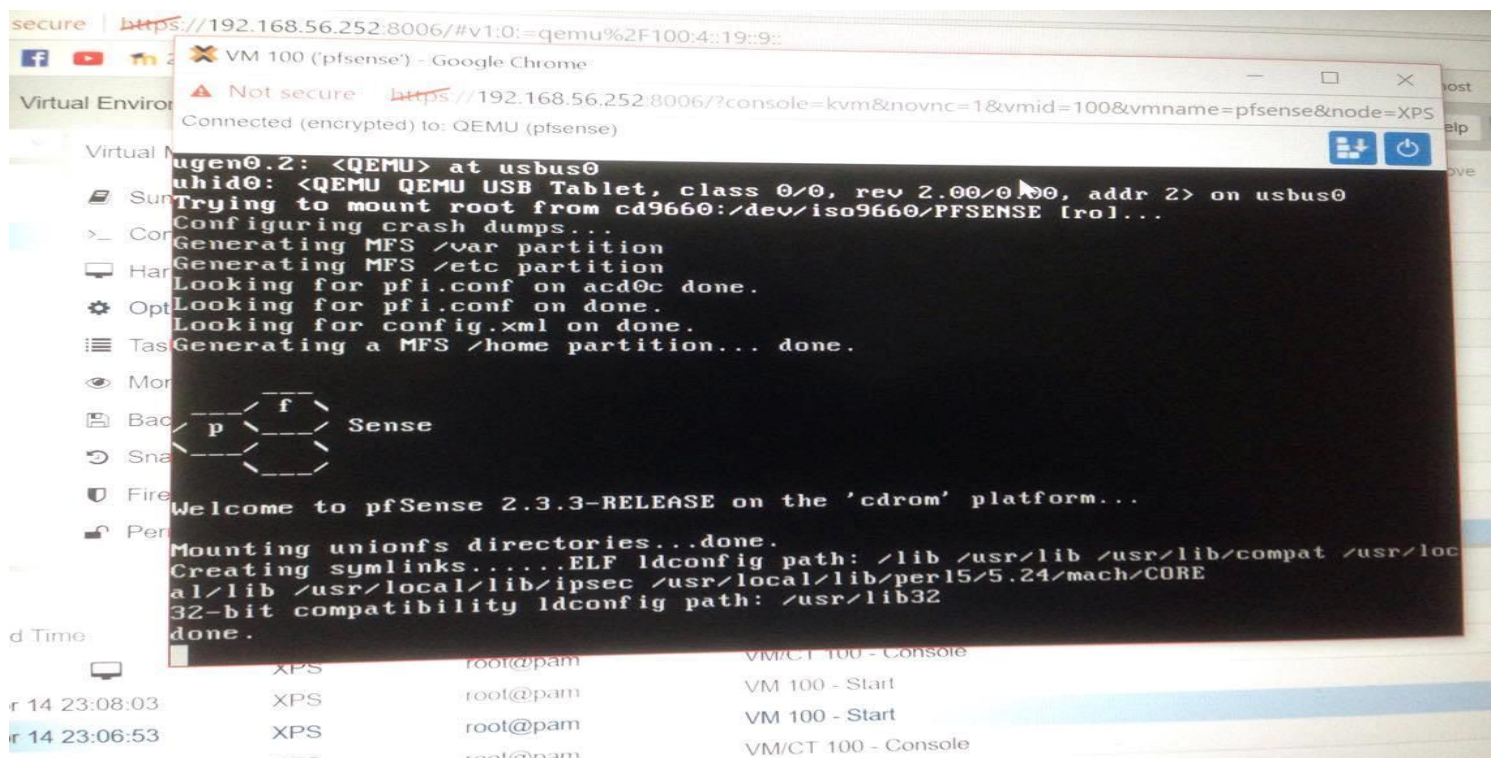
18th Step

Configure the Network settings. I used the default settings.



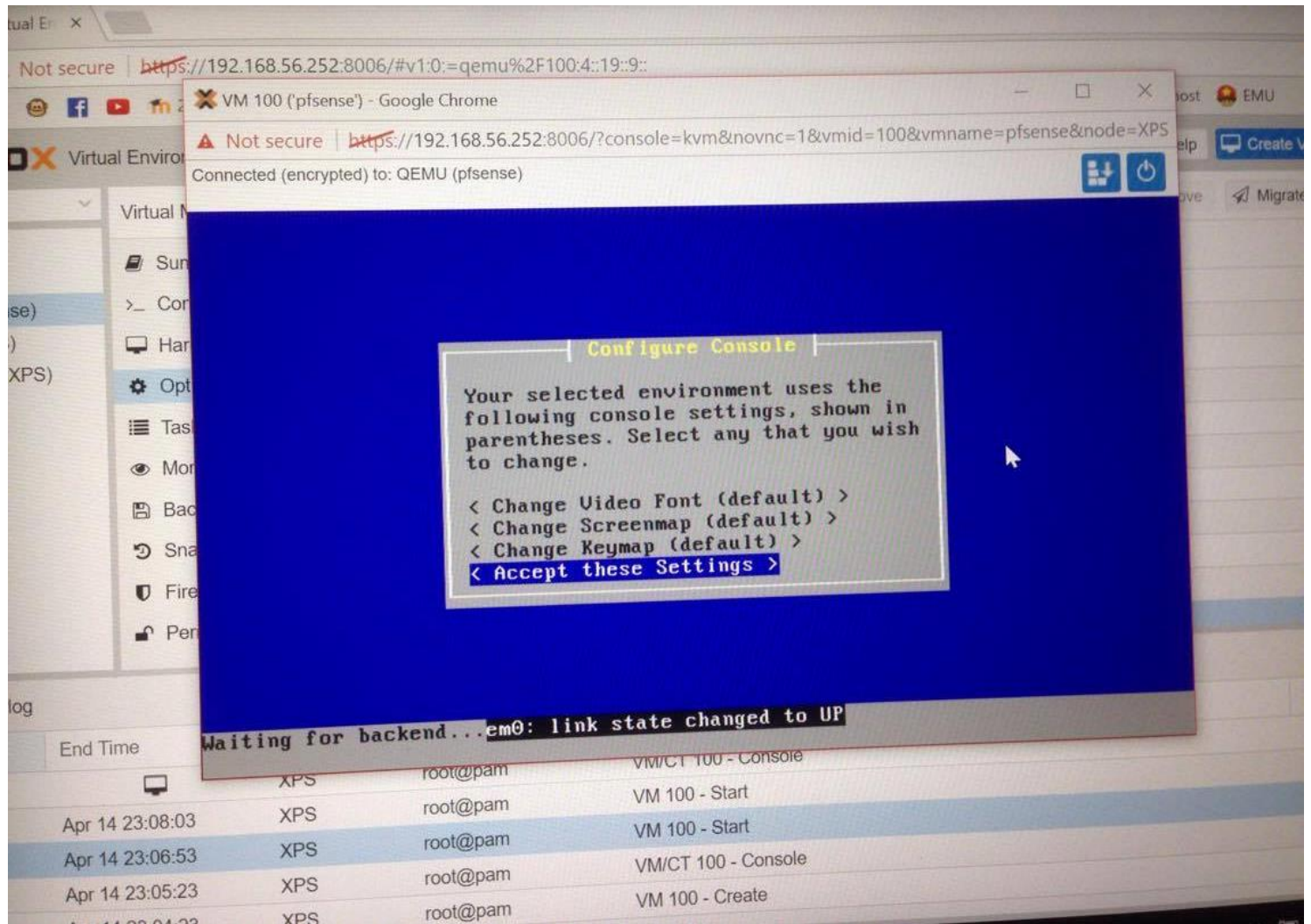
19th Step

After modifying the settings for the virtual machine, click the start then go to the console to see the installation for pfsense.



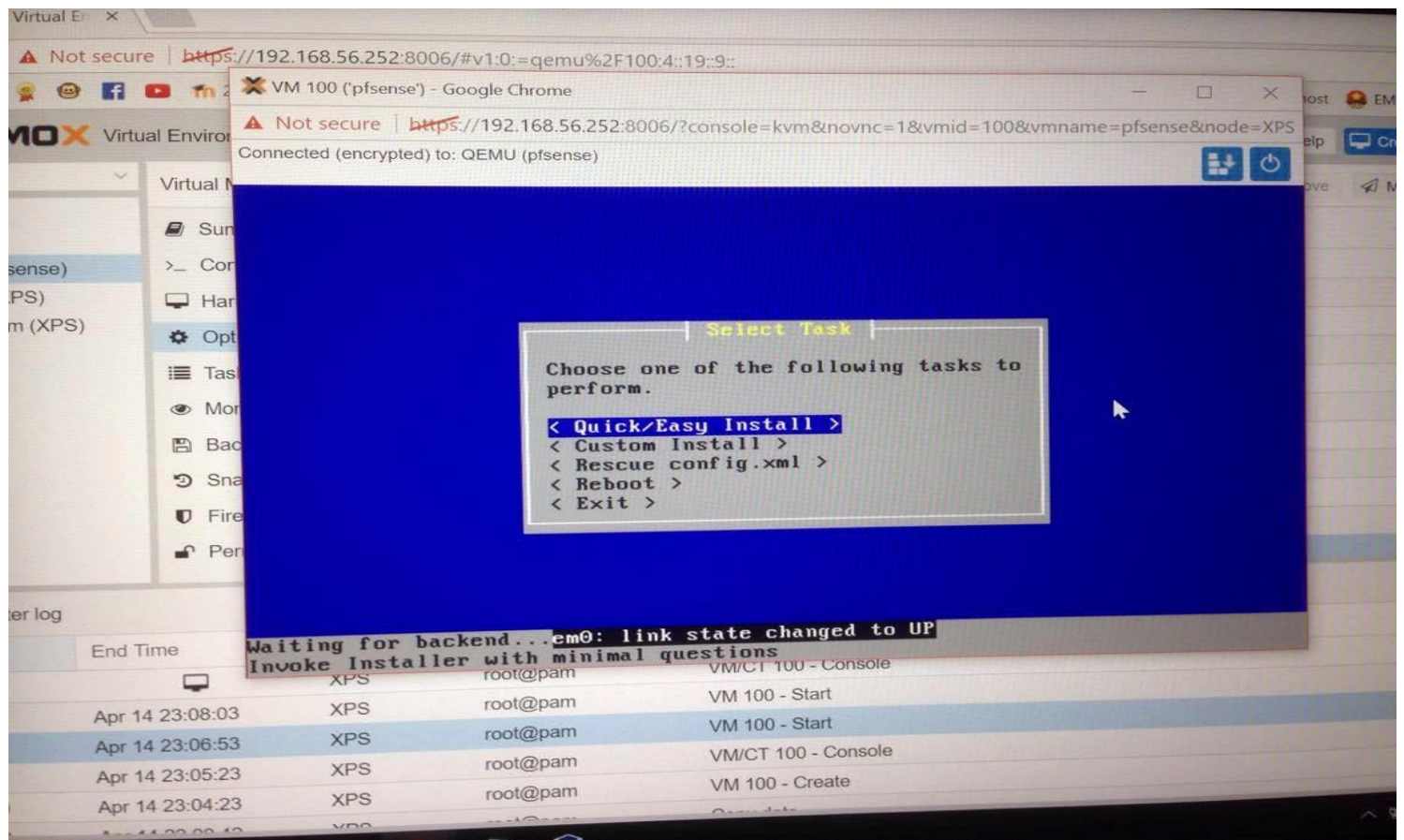
20th Step

Choose the 3rd option and press enter to continue the installation for pfsense.



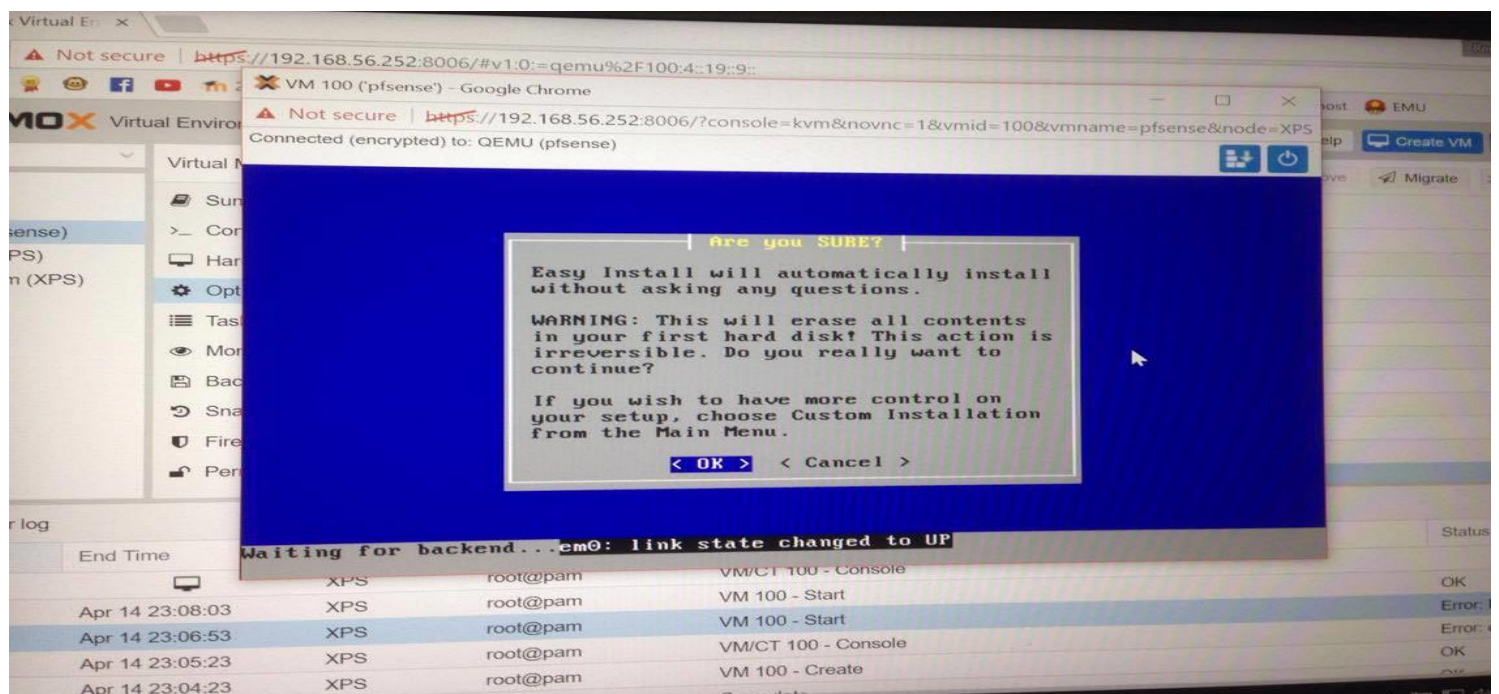
21st Step

Select the first option and press enter.



22nd Step

Select ok and press enter to start the installation.



Wait until finish.

Virtual Environment

Not secure | <https://192.168.56.252:8006/#v1:0:=qemu%2F100:4::19::9::>

VM 100 ('pfsense') - Google Chrome

Not secure | <https://192.168.56.252:8006/?console=kvm&novnc=1&vmid=100&vmname=pfsense&node=XPS>

Connected (encrypted) to: QEMU (pfsense)

Executing Commands

```
/sbin/newfs -U -j /dev/ada0s1a
```

[N 83%]

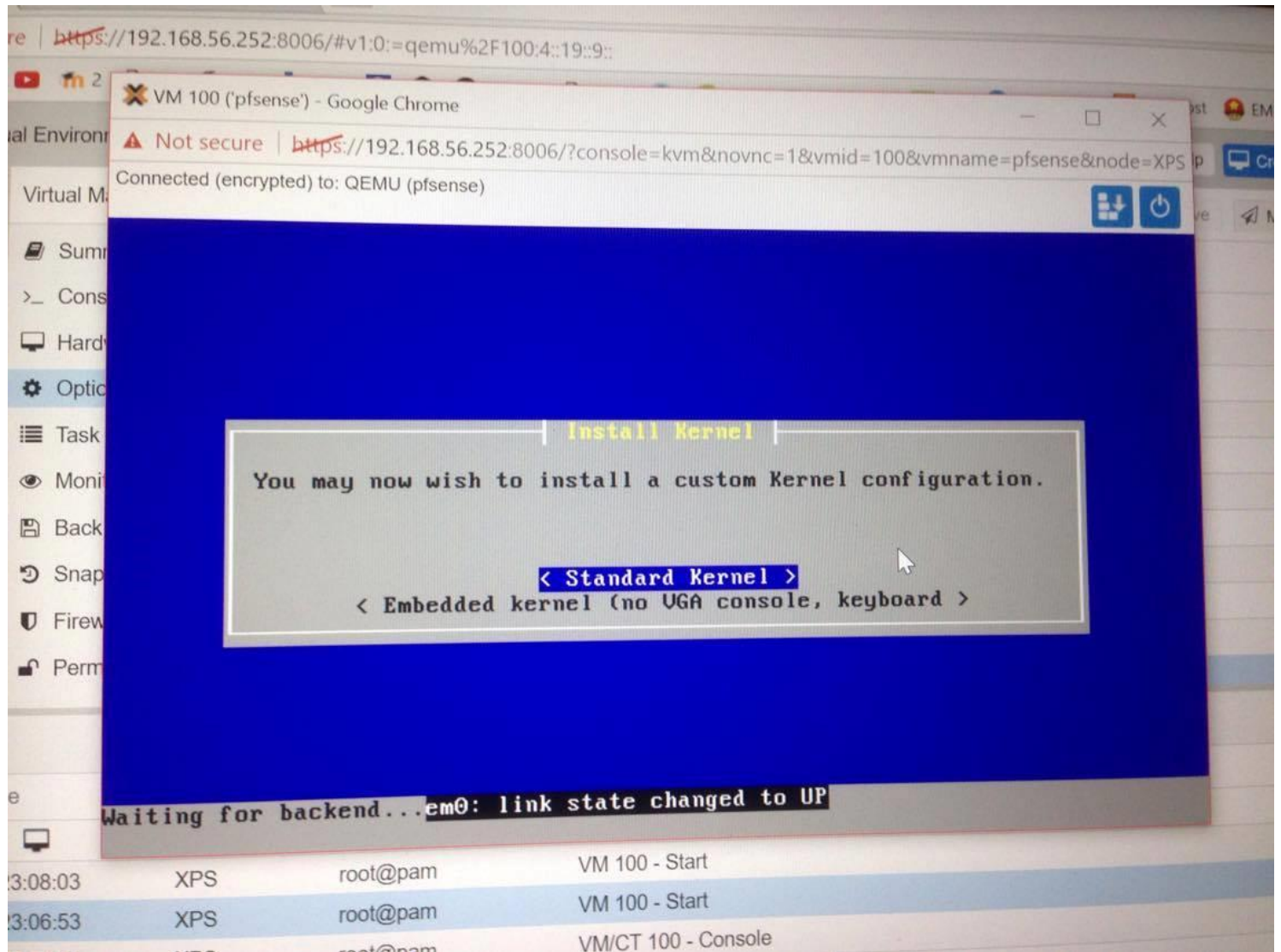
< Cancel >

Waiting for backend...em0: link state changed to UP

End Time	Host	User	Action
	XPS	root@pam	VM/CT 100 - Console
	XPS	root@pam	VM 100 - Start
Apr 14 23:08:03	XPS	root@pam	VM 100 - Start
Apr 14 23:06:53	XPS	root@pam	VM/CT 100 - Console
Apr 14 23:05:23	XPS	root@pam	VM 100 - Create

23rd Step

Select the Standard Kernel option and press enter.



Wait until finish again.

VM 100 ('pfsense') - Google Chrome

Not secure | <https://192.168.56.252:8006/?console=kvm&novnc=1&vmid=100&vmname=pfsense&node=XPS>

Connected (encrypted) to: QEMU (pfsense)

Executing Commands

```
/bin/sh /usr/local/bin/after_installation_routines.sh
```

[50%]

< Cancel >

Waiting for backend... em0: link state changed to UP

Time	Host	User	Action
4 23:08:03	XPS	root@pam	VM 100 - Start
4 23:06:53	XPS	root@pam	VM 100 - Start
4 23:05:23	XPS	root@pam	VM/CT 100 - Console
			VM 100 - Create

24th Step

Enter the WAN interface name. I used em0.

```

bw starting...
Launching the init system..... done.
Initializing..... done.
Starting device manager (devd)...done.
Loading configuration.....done.

Default interfaces not found -- Running interface assignment option.
Valid interfaces are:

em0      8a:7f:48:16:1b:06 (down) Intel(R) PRO/1000 Legacy Network Connection 1.1.

Do VLANs need to be set up first?
If VLANs will not be used, or only for optional interfaces, it is typical to
say no here and use the webConfigurator to configure VLANs later, if required.

Should VLANs be set up now [y;n]? em0: link state changed to UP
n

If the names of the interfaces are not known, auto-detection can
be used instead. To use auto-detection, please disconnect all
interfaces before pressing 'a' to begin the process.

Enter the WAN interface name or 'a' for auto-detection
(em0 or a): a

```

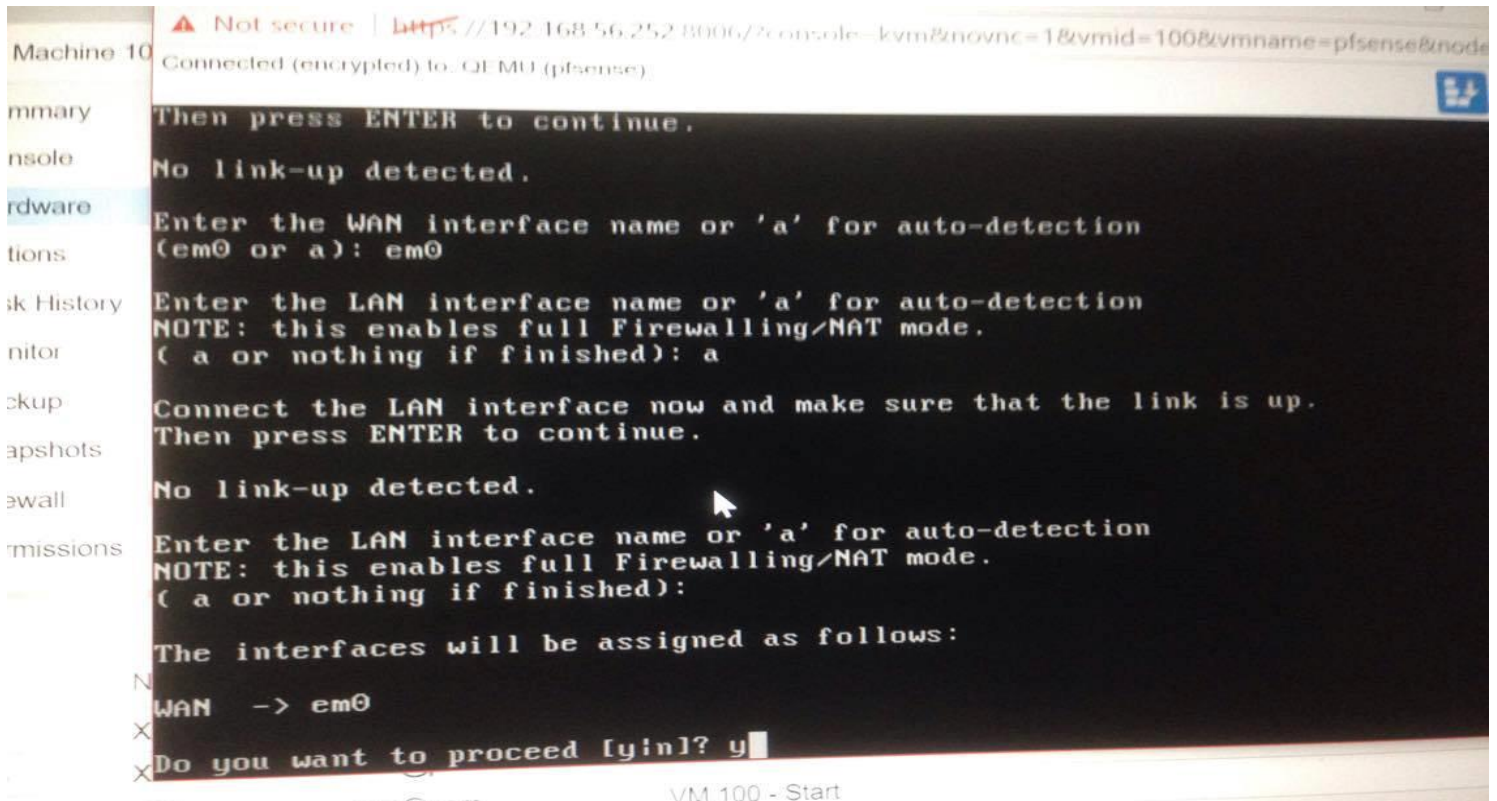
XPS root@pam VM 100 - Start

XPS root@pam VM/CT 100 - Console

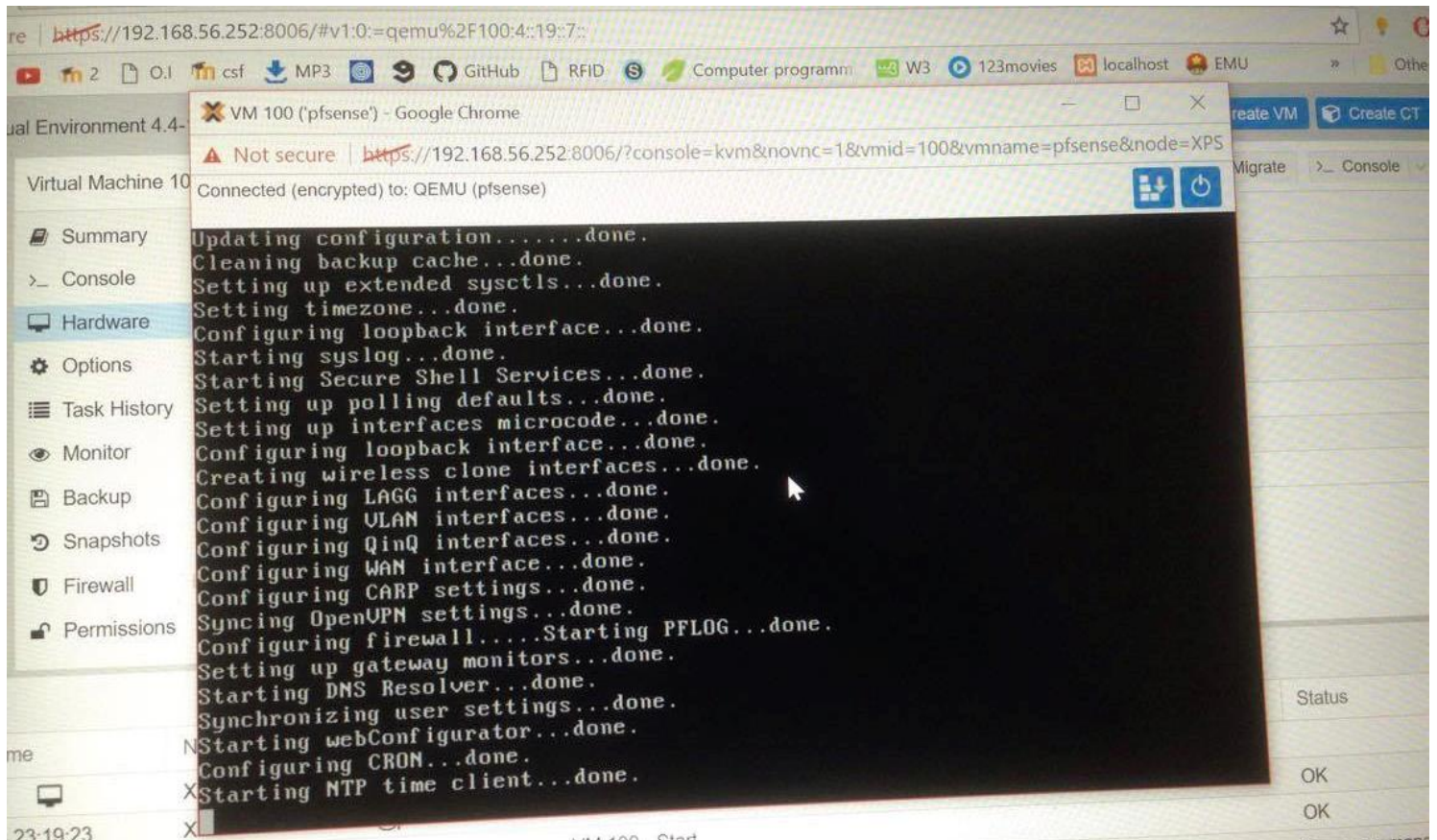
XPS root@pam VM 100 - Shutdown

25th Step

Enter nothing for LAN interface name to proceed.



Wait until everything is done.



After everything is done it will continue to the startup for pfSense installation finished.

```
line 10 192.168.56.252 8006/?console= kvm&novnc=1&vmid=100&vmname=pfSense&node=XP
Connected (encrypted) to Q1 MU (pfSense)

Starting NTP time client...done.
Configuring firewall.....Generating RRD graphs...done.
Starting syslog...done.
Starting CRON... done.
pfSense (pfSense) 2.3.3-RELEASE amd64 Thu Feb 16 06:59:53 CST 2017
Bootup complete

FreeBSD/amd64 (pfSense.localdomain) (ttyv0)

*** Welcome to pfSense 2.3.3-RELEASE (amd64 full-install) on pfSense ***

WAN (wan)      -> em0      -> v4/DHCP4: 192.168.56.104/24

0) Logout (SSH only)          9) pfTop
1) Assign Interfaces          10) Filter Logs
2) Set interface(s) IP address 11) Restart webConfigurator
3) Reset webConfigurator password 12) PHP shell + pfSense tools
4) Reset to factory defaults    13) Update from console
5) Reboot system               14) Enable Secure Shell (sshd)
6) Halt system                 15) Restore recent configuration
7) Ping host                   16) Restart PHP-FPM
8) Shell

Enter an option:

XPS      root@pam      VM 100 - Start
XPS      root@pam      VM/CT 100 - Console
XPS      VM 100 - Shutdown
```