# Elastix 2.5

## Installation

#### Prerequisites:

• Minimum Storage Capacity: 80 GB

• RAM: 2 GB

• CPU: Core i3 or better

#### Step 1:

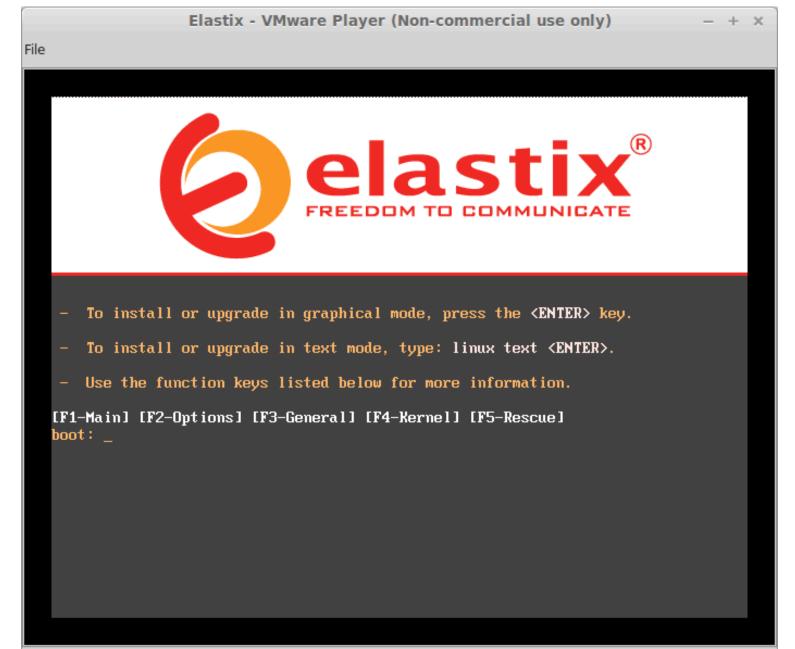
Download ISO Image of Elastix Unified Communication Server from Following Link:

• <a href="http://www.elastix.com/en/downloads/">http://www.elastix.com/en/downloads/</a>

Make a bootable usb or burn iso image to DVD, Boot from device and Install.

#### Step 2:

At the boot prompt, press Enter.

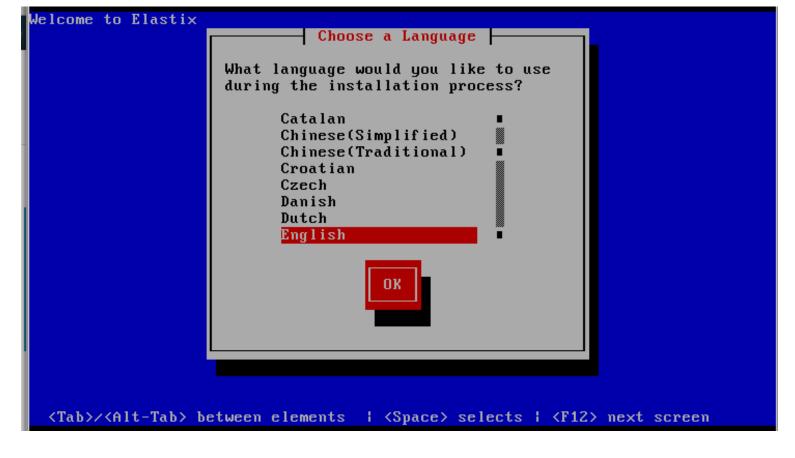


To grab input, press Ctrl+G



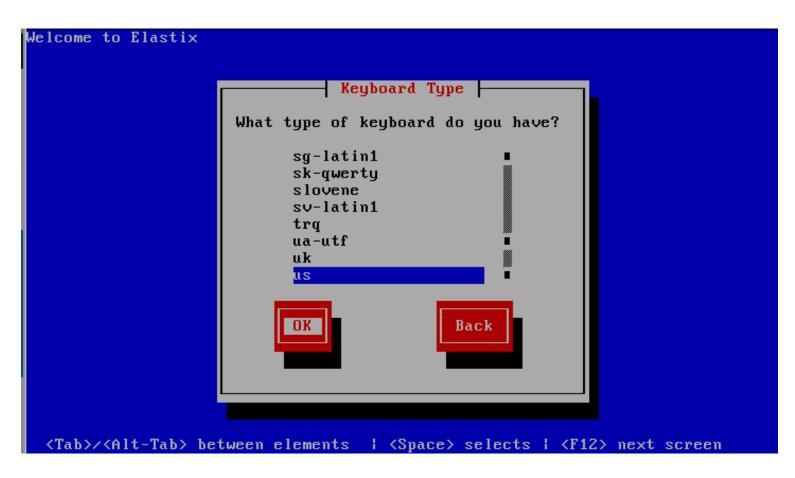
#### Step 3:

Change the default language, press enter.



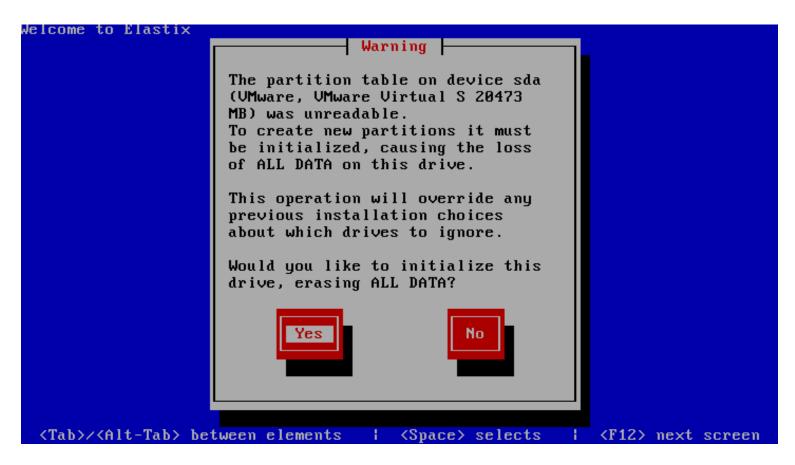
#### Step 4:

We have selected us pattern, press enter.



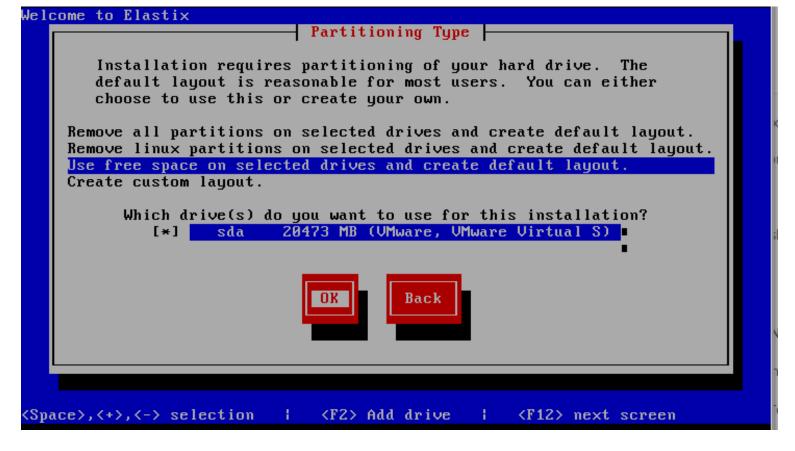
#### Step 5:

Recreate partitions, press yes and then press enter.



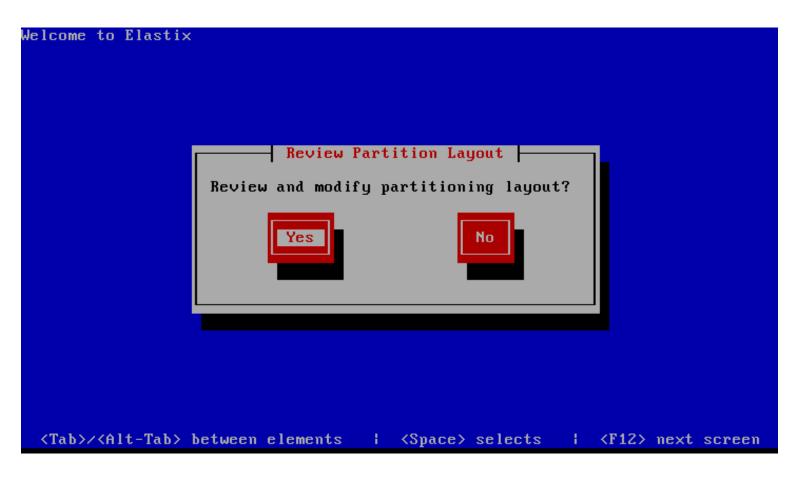
#### Step 6:

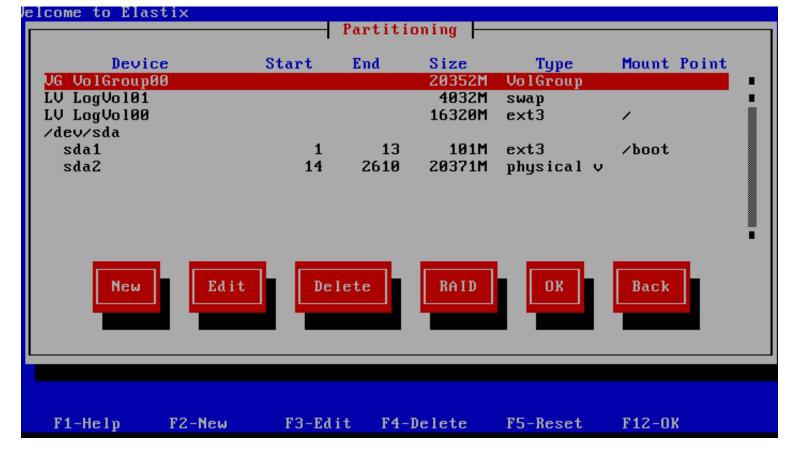
Select Installed Hard Disk, press enter.



#### Step 7:

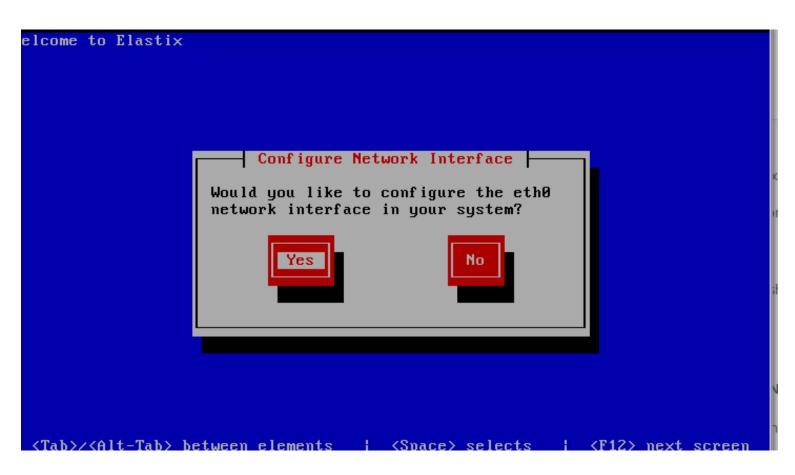
Apply Changes and review your partition table.





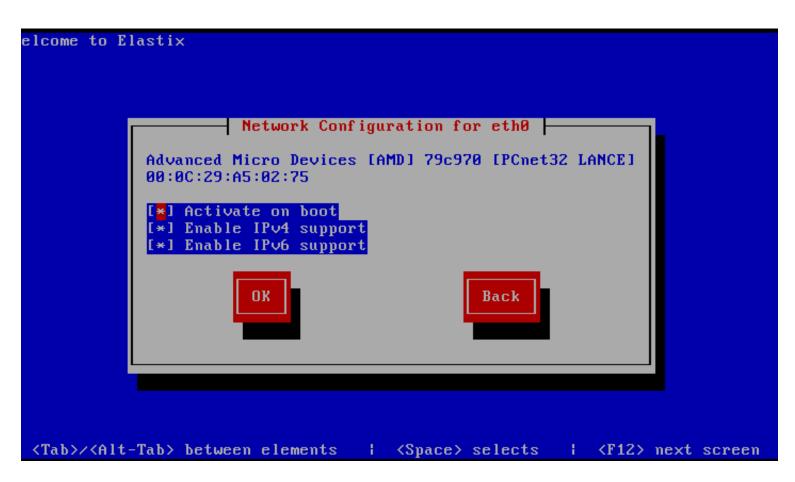
Step 8:

Configure Network Interface, press Yes.



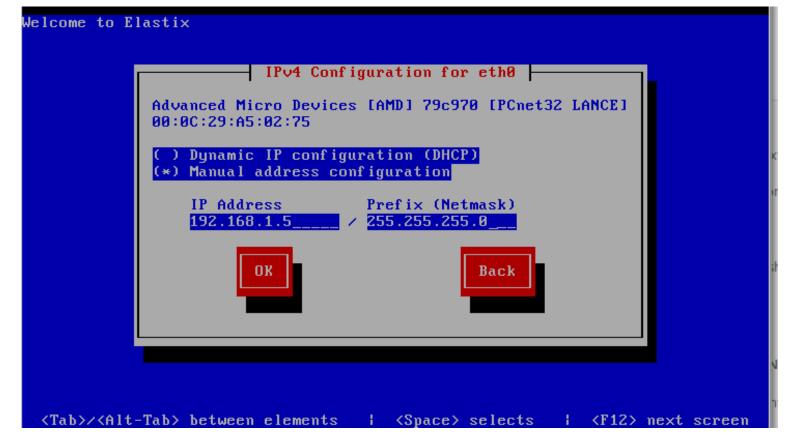
#### Step 9:

Select protocols you wants to have with your VoIP Server.



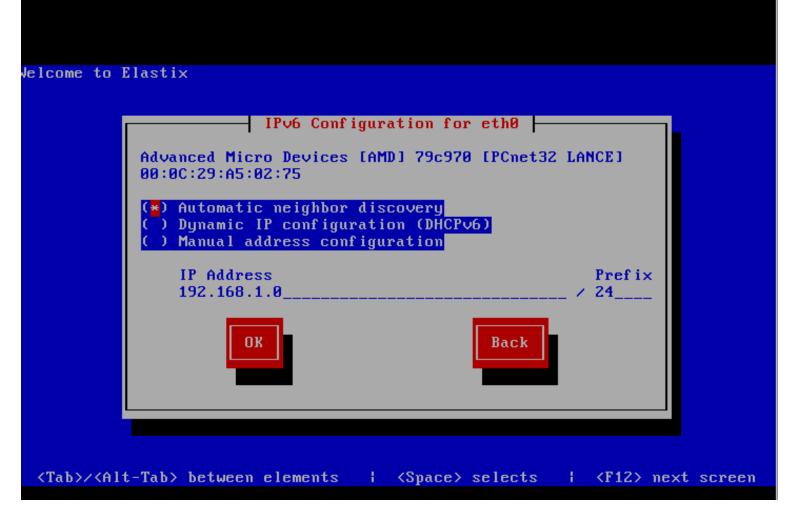
#### Step 10:

Assign IP address, in our scenario it will be 192.168.1.5.



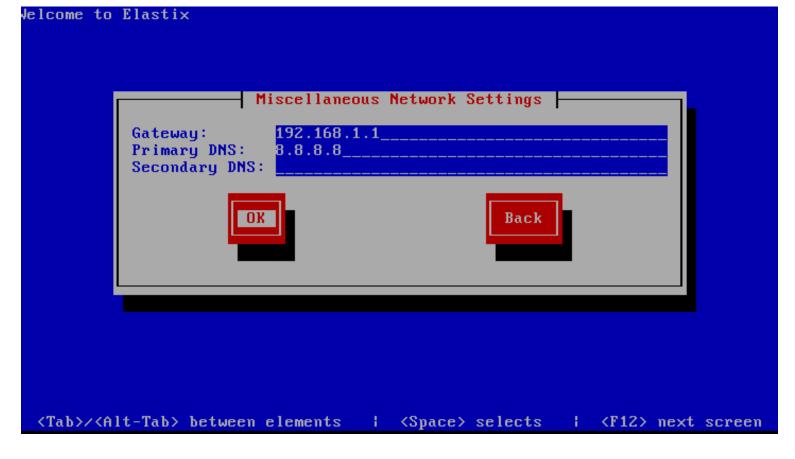
#### Step 11:

Latest Elastix Distro also support IPv6, leave it as default.



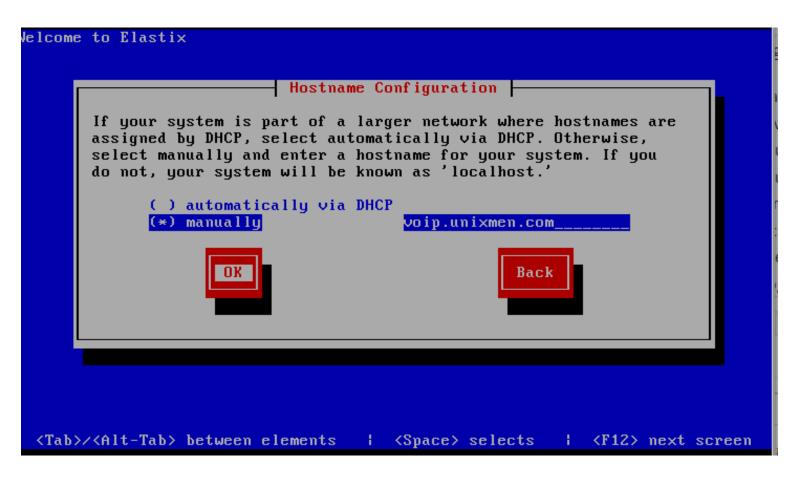
#### Step 12:

Provide Gateway IP Address and DNS Address, press OK.



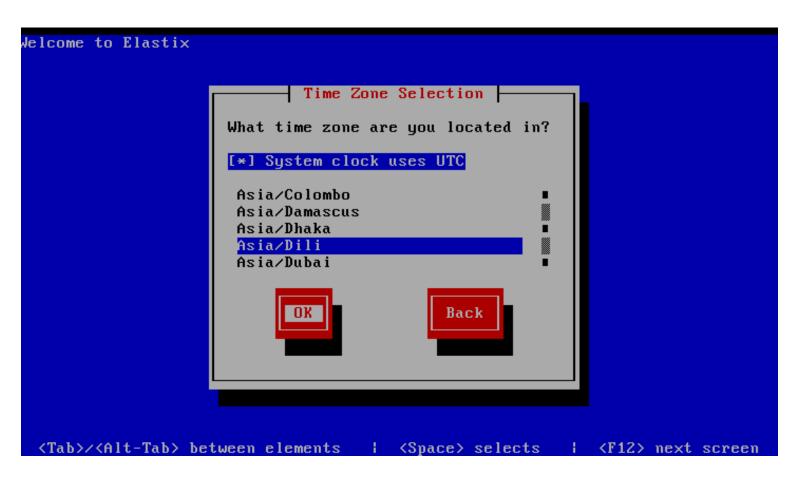
#### Step 13:

Provide hostname, in out case it will be 'voip.unixmen.com', press ok.



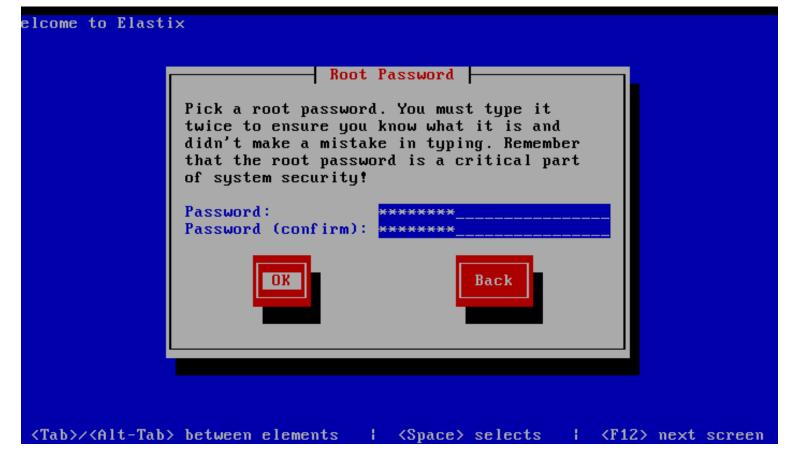
#### Step 14:

Select your time zone, press ok.



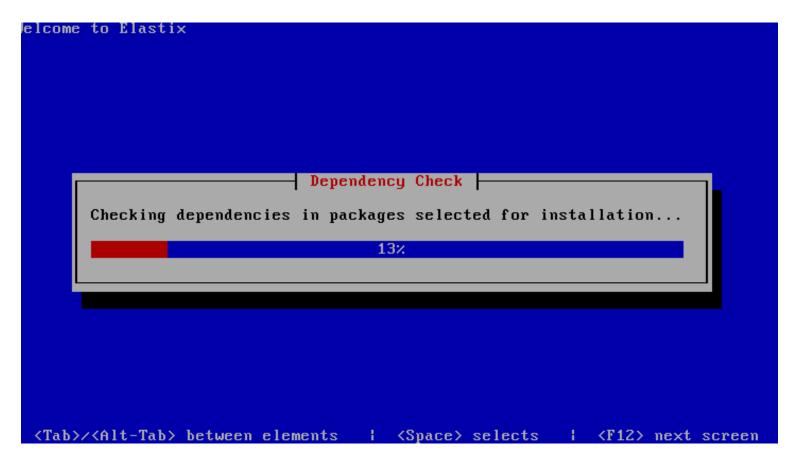
#### **Step 15:**

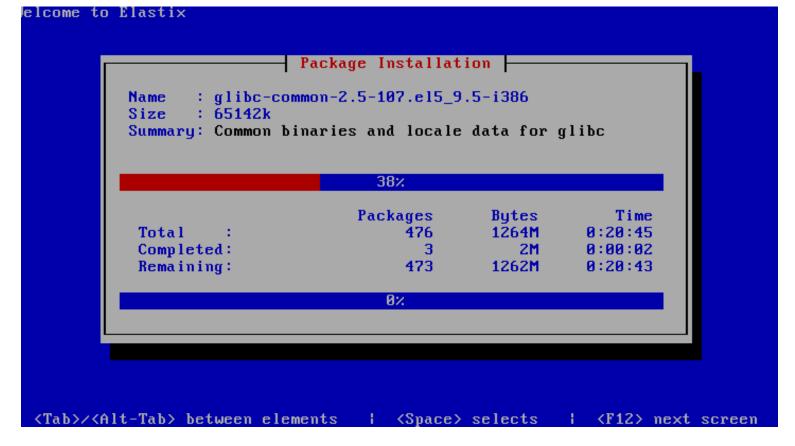
Provide password to the root user, our will be 'P@ssw0rd'.



#### **Step 16:**

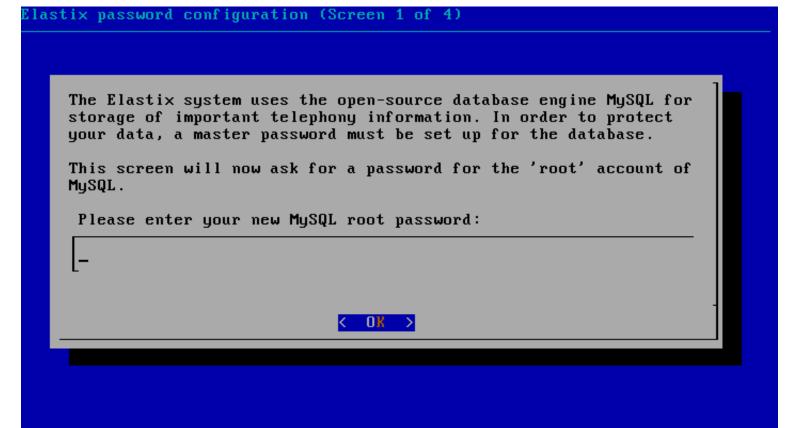
The System will check dependencies, Then it will start installation packages automatically.





#### **Step 17:**

This step may take some time during installation process, System will automatically reboot after completion of this step, do not interrupt this boot process, Server will automatically ask for Mysql password, assign that password (our password is 'P@ssw0rd').



#### **Step 18:**

In next step it will ask for admin password, this password will be required when you have to log in server via web browser (our is 'P@ssw0rd').

#### Step 19:

After completion of installation process, server will be prompted with a terminal, login with username 'root' and provide password for root user.

```
CentOS release 5.9 (Final)
Kernel 2.6.18-348.6.1.el5 on an i686

voip login: root
Password:

Welcome to Elastix

Elastix is a product meant to be configured through a web browser.
Any changes made from within the command line may corrupt the system configuration and produce unexpected behavior; in addition, changes made to system files through here may be lost when doing an update.

To access your Elastix System, using a separate workstation (PC/MAC/Linux)
Open the Internet Browser using the following URL:

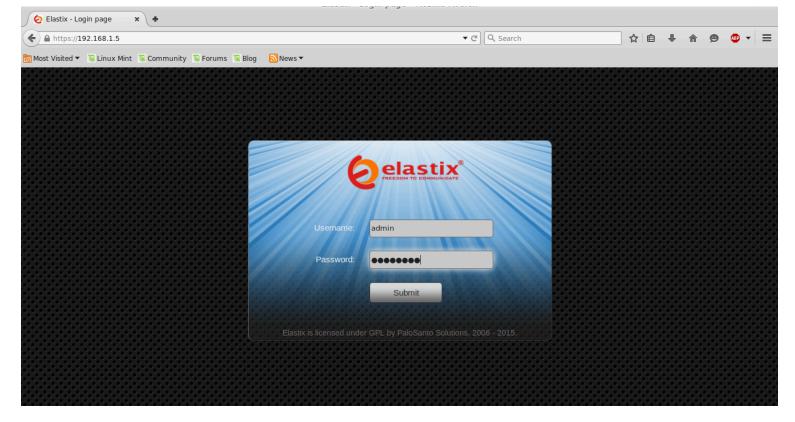
http://192.168.1.5

[root@voip ~1# _
```

#### Step 19:

Congratulation! installation is done.

Now open browser from remote system and type ip\_address of elastix to open management console of server. (our scenario ip will be 192.168.1.5).

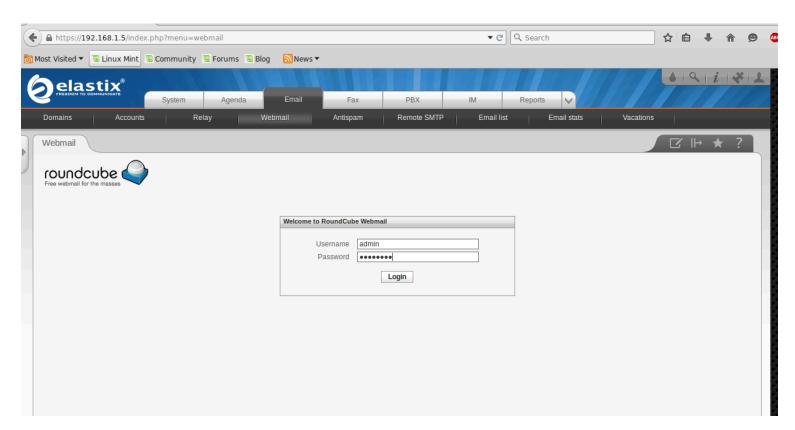


#### Step 20:

Login with 'admin' user and provide password then login, a dash board will appear, now you can manage all of your messaging, VoIP, Mail Services.



Congratulations!! you have installed Elastix unified Communication Service, Explore all of the available service, with Mail Services you can add domains, can configure mail accounts, and provide mail addresses as per your need, similarly you can handle your PBX or FAX etc. services.



That's it. Have Fun!!

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# Elastix 5

### **Install Elastix 5 PBX**

Let's start your Elastix5 virtual machine, you will see the Elastix 5 Debian Installation Boot Menu, choose the Install from the main boot screen and hit Enter key as shown below to continue.



Debian GNU/Linux installer boot menu

Install

Graphical install Help

Press ENTER to boot or TAB to edit a menu entry

The installation process will start from scanning CD-ROM to setting up additional components required for the smooth installation setup. After running the initial setup, you will get into the Network Configurations, Select Configure Network Manually to set a static IP address on the system.

[!!] Configure the network

From here you can choose to retry DHCP network autoconfiguration (which may succeed if your DHCP server takes a long time to respond) or to configure the network manually. Some DHCP servers require a DHCP hostname to be sent by the client, so you can also choose to retry DHCP network autoconfiguration with a hostname that you provide.

Network configuration method:

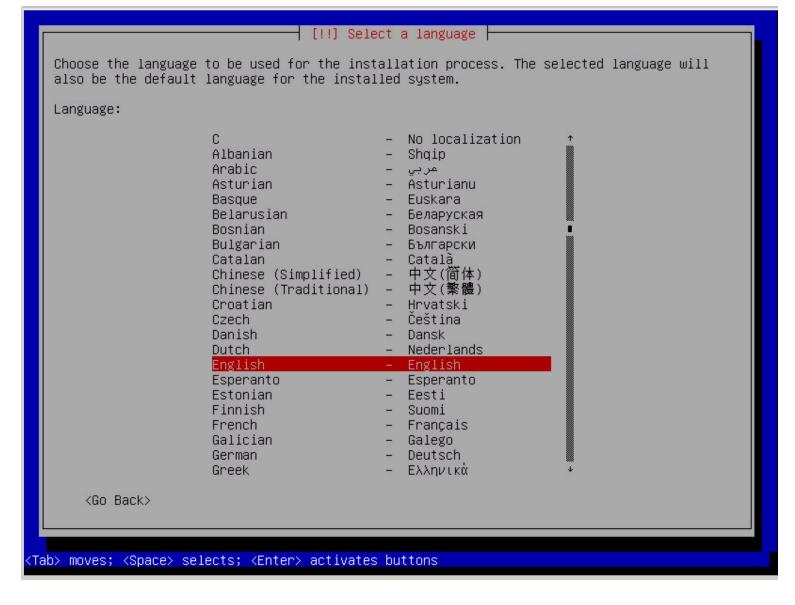
Retry network autoconfiguration
Retry network autoconfiguration with a DHCP hostname
Configure network manually

Do not configure the network at this time

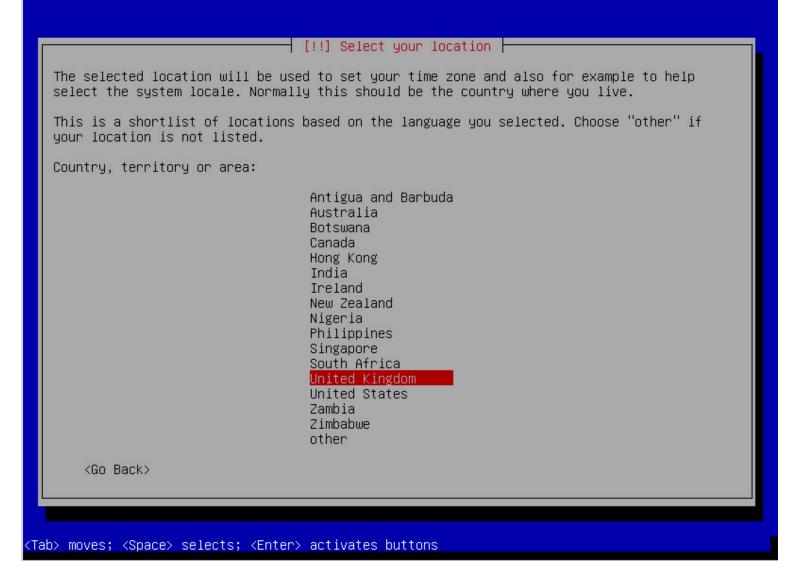
<Go Back>

<Tab> moves; <Space> selects; <Enter> activates buttons

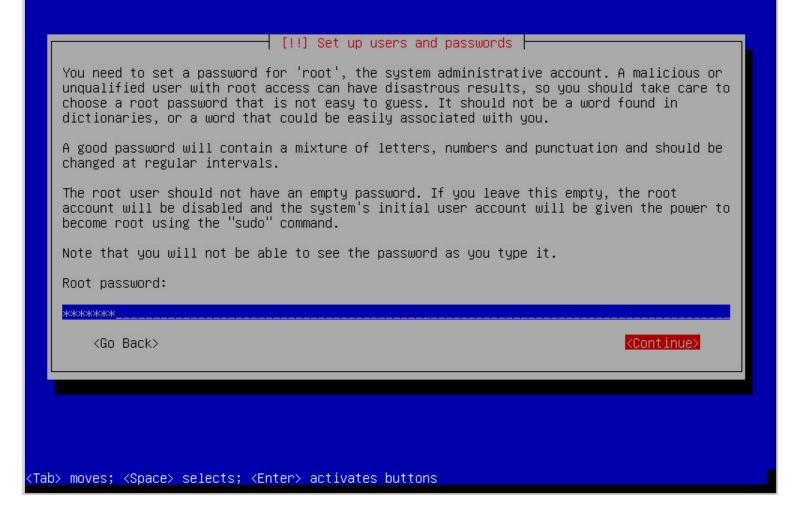
Configure the static IP address for your server and click to continue to the next option to configure the netmask and gateway. After that, you need to set the DNS IP and hostname for your server. Then choose your domain name and click on the 'Continue' button to move to the next option. Select your preferred language to be used for during the installation process.



Next, choose your location considering your country where you are residing, that will be used for the time zone and other locale settings.



After that, you will be asked to setup the root password for your server, which is necessary to be used for the system administrative tasks.



That's it for the initial server's setup. In the next session, you will be asked to partition your disk, let's Select "Guided – use entire disk".

#### [!!] Partition disks

The installer can guide you through partitioning a disk (using different standard schemes) or, if you prefer, you can do it manually. With guided partitioning you will still have a chance later to review and customise the results.

If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.

Partitioning method:

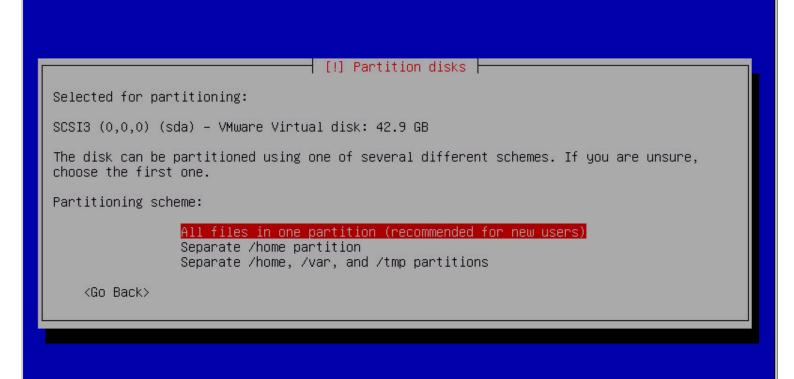
#### Guided – use entire disk

Guided – use entire disk and set up LVM Guided – use entire disk and set up encrypted LVM Manual

<Go Back>

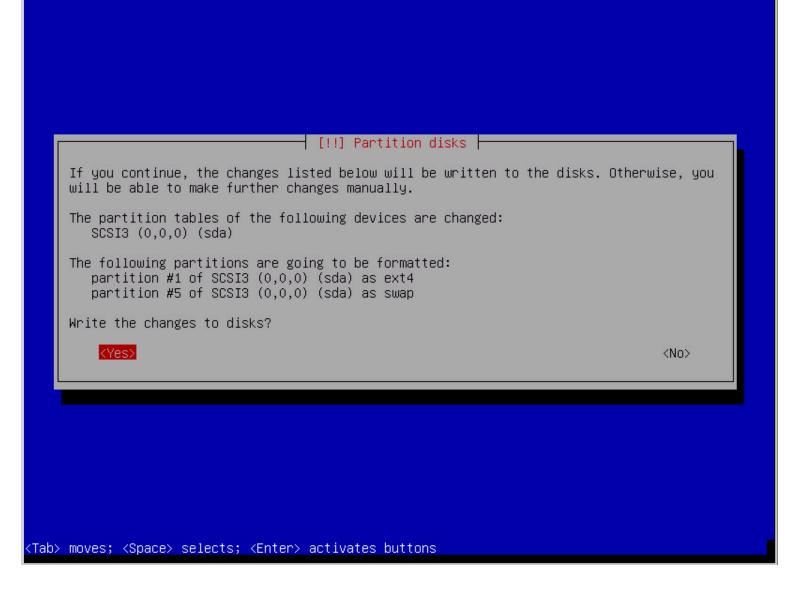
⟨Tab⟩ moves; ⟨Space⟩ selects; ⟨Enter⟩ activates buttons

Then select your attached disks to be used for partitioning, make sure that all the data will be removed from the drives. Next, choose the partitioning scheme to be used for your disks, like we are going to select "All files in one partition".

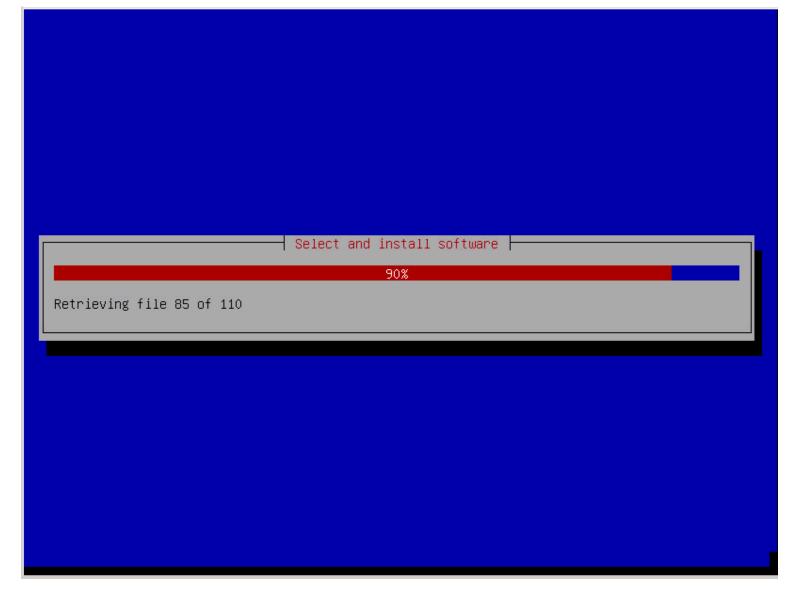


Confirm the disk partitioning, after reviewing your selected settings and then click on "Finish Partitioning and Write changes to Disk" and then to 'Yes' for writing changes to disk as shown.

Tab> moves; <Space> selects; <Enter> activates buttons



The system will format your partitions and start installing the base Operating System. This will take some time to configure 'apt' and to install the software packages.



At the end of the installation, it will install the grub boot loader and reboot your system to complete the installation process.

Once your system is back after reboot, Elastix 5 will be installed automatically – you don't need to log in. After the installation is complete you will be asked if you want to run the PBX configurator tool from a web browser or from the command line. Let's select option "1" to use a web browser.

```
ServiceO1.service.
reated symlink from /etc/systemd/system/multi–user.target.wants/3CXSystemServiceO1.service to /lib/
systemd/system/3CXSystemService01.service.
reated symlink from /etc/systemd/system/3CXTunnelO1.service to /lib/systemd/system/3CXTunnelO1.serv
reated symlink from /etc/systemd/system/multi–user.target.wants/3CXTunnel01.service to /lib/systemd:
system/3CXTunnel01.service.
Welcome to the 3CX Configuration Tool
Help https://www.3cx.com
ress ESC to go back.
Select how to run the tool:
(1) Using a Web Browser
(2) From Command Line
Enter option: 1
Starting PbxWebConfigTool...
AUNCH HTTP://1 2. 5.1 .1 3:5015 FROM A BROWSER ON ANOTHER MACHINE.
TIP: If this is a cloud machine and the link shows a local IP address then you need to replace the l
ocal ip with your public IP Address.
ON WINDOWS THE BROWSER WILL BE LAUNCHED AUTOMATICALLY.
To run this tool again use command line:
sudo /usr/sbin/3CXWizard ——cleanup
Processing triggers for libc–bin (2.19–18+deb8u7) ...
rocessing triggers for systemd (215–17+deb8u6) ...
```

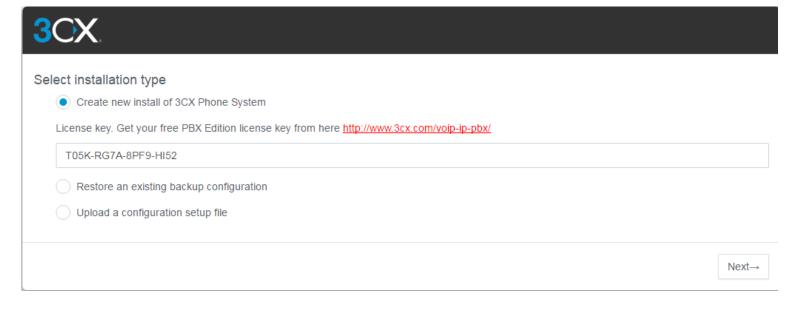
Now point your browser to the following URL and go through the 3 CX, web configuration wizard.

http://your\_server\_ip:5015.

# How to Run and Configure 3CX PBX Tool

After 3CX has been installed, it will need to be configured for your network. The PBX configuration tool obtains some important network and security settings and configures 3CX accordingly. To run it, enter the IP followed by port 5015 (eg. http://10.172.1.88:5015) in a browser on another machine. Alternatively, you can run the configuration tool from the command line.

After opening the mentioned URL in your web browser, you will be asked whether you are creating a new installation of 3CX or whether you wish to restore an existing configuration. If it's a new install, select 1, if you have a backup of a previous version or other installation to restore, select 2. Option.

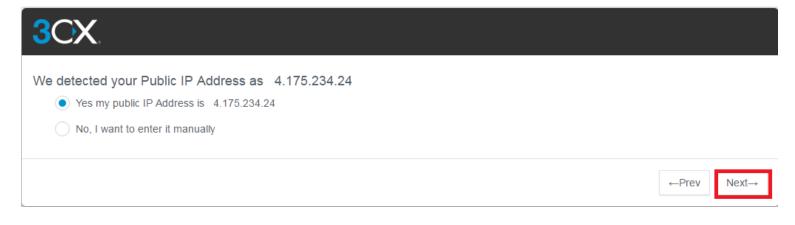


If you already own a 3CX license, copy and paste the key here, unless you are restoring a backup, in which case the key will be restored automatically. If you don't own a license, copy and paste the free PBX edition license key that was sent to you by e-mail. Enter your license key and click on the 'Next' button to continue.

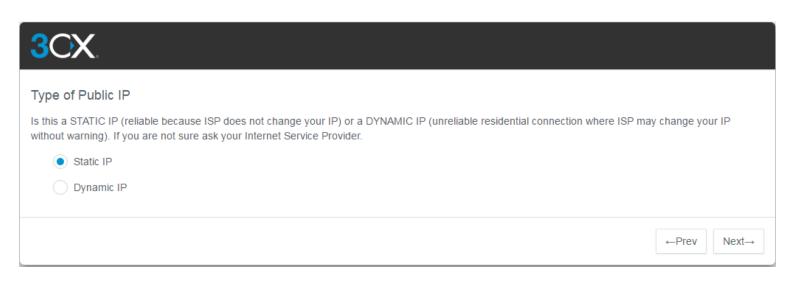
Next, specify the username and password to access the 3CX Management Console. Make sure to use a strong password to prevent unauthorized access to your PBX.



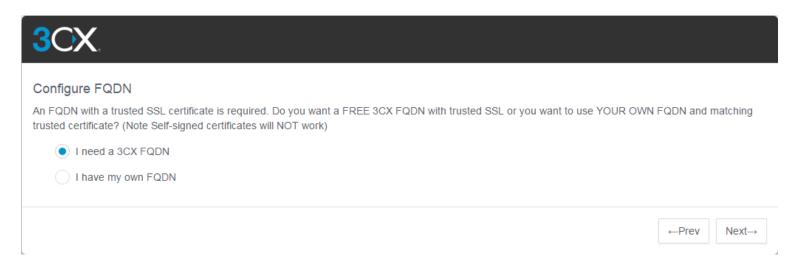
Confirm your Public IP Address by entering "1" to confirm, or 2 to specify another one.



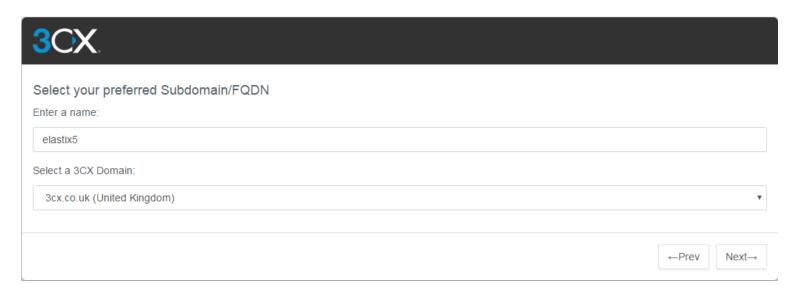
Specify whether your public IP is static or dynamic. For professional use, a static IP is required. For residential use or evaluation purposes, you can use a dynamic IP. A dynamic IP will change at certain intervals. Although 3CX will detect the IP change and update the FQDN accordingly, your calls will not route until it does so.



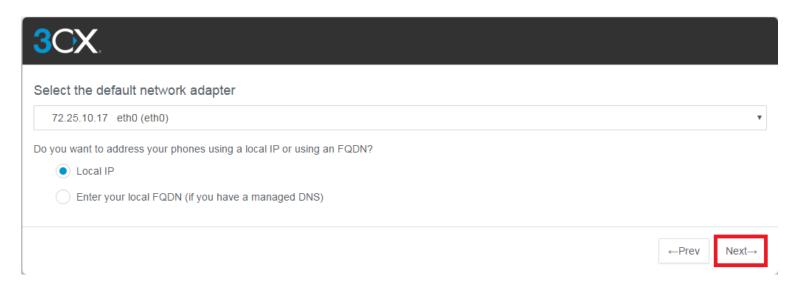
3CX requires a fully resolvable FQDN and a matching SSL certificate for security. This allows 3CX to work seamlessly in and out of the office. To ease setup, you can choose a 3CX supplied FQDN and Let's encrypt certificate.



If you wish, you can configure your own FQDN and upload your own SSL certificate. IMPORTANT: the FQDN/Subdomain you choose will be linked to your license key. If using a trial key be sure to leave your eventual subdomain of choice free.



Select the network interface which is connected to the internet / public IP you specified. If you have multiple interfaces ensure this interface is the one with the default gateway configured.

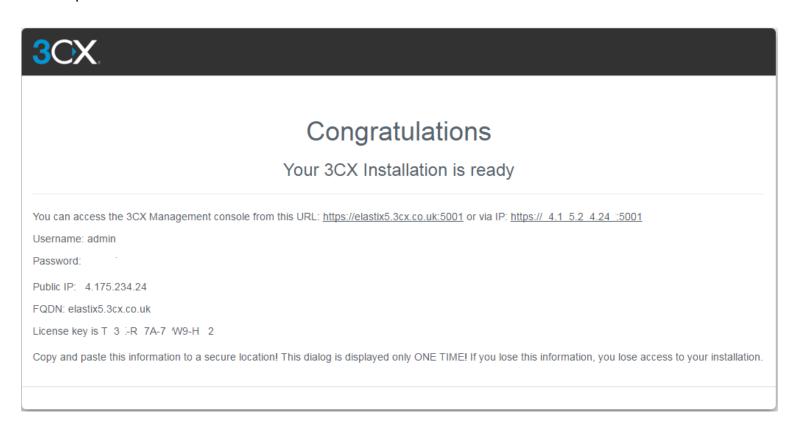


The PBX configuration tool will now detect whether you are using NAT or not based on your IP. If it's Local IP, and thus you are behind a NAT, you will have to configure your firewall/router accordingly.

Select which web ports you wish to use for the management console. Use alternative ports only if 80 or 443 are already in use.

| <b>3</b> C | X.                         |
|------------|----------------------------|
| Enter H    | HTTPS and HTTP ports port: |
| 50         | 001                        |
| HTTP po    | ort:                       |
| 50         | 000                        |
|            | ←Prev Finish               |

The configuration tool will now configure 3CX and start the services. This may take some time. Once done, a confirmation page will be shown with important information. Make a screenshot and/or print this information - it can not be retrieved afterward!



Once you have installed 3CX, or else obtained a hosted instance of 3CX, you will need to go through a number of steps to prepare 3CX for your company to Run the 3CX Setup Wizard, Create Extensions, Configure a SIP Trunk or VoIP Gateway and Deploy IP Phones.

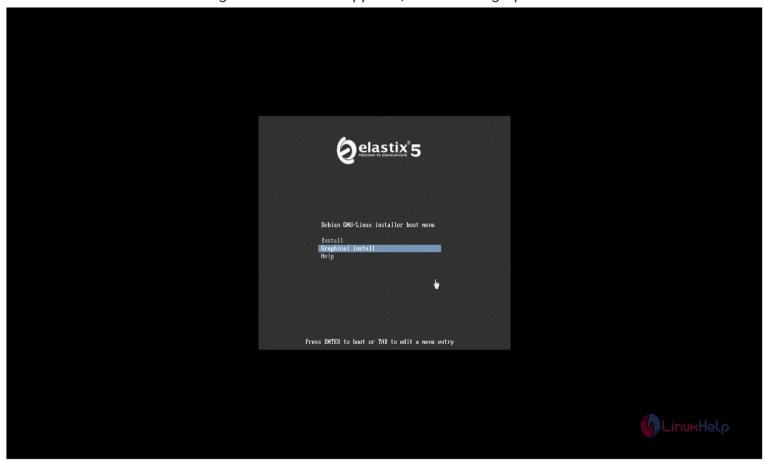
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Youtube LINK

https://www.youtube.com/watch?time\_continue=385&v=NVgLoHcXCCM

Elastix 5 is a recent version of the most sought after unified communication server. It features a secure 3CX telephony engine . Also, it combines IP PBX, email, IM, faxing and collaboration functionality in it. In this article, you will learn the method to install and configure Elastix 5.

Download the ISO image file from the Elastix official site and use a bootable DVD or a Pendrive to run the installation. Once the following installer screen appears, choose the graphical install mode.

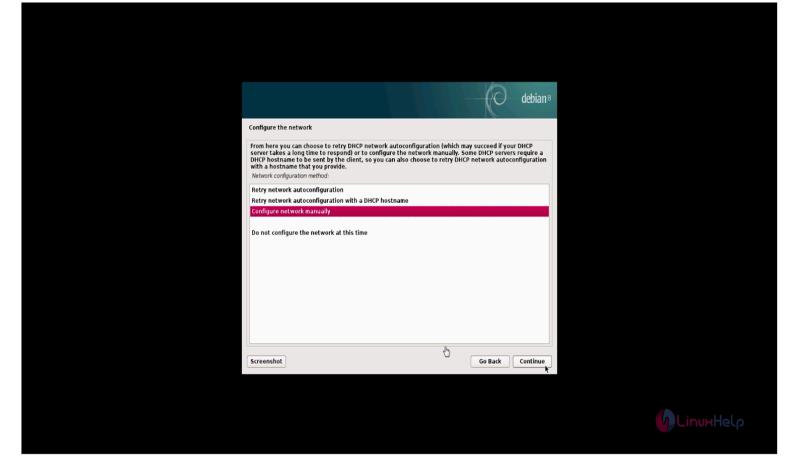


The additional components are getting loaded now.





Once it is loaded, configure the network as follows and click on Continue.

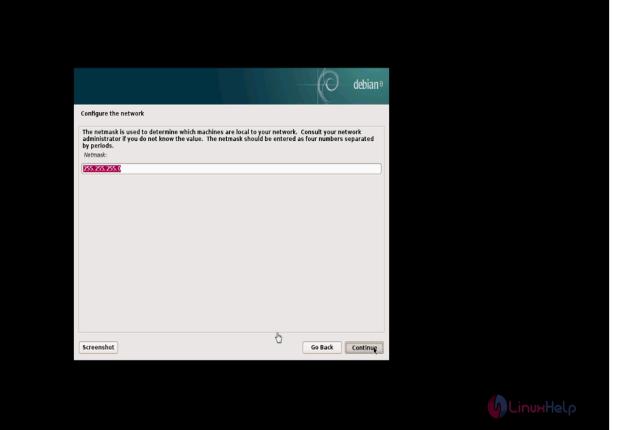


Now, enter your IP address and click on Continue.

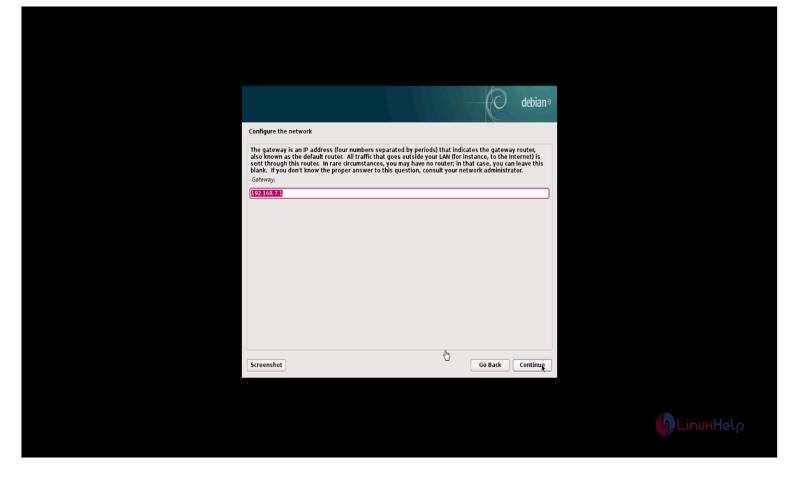




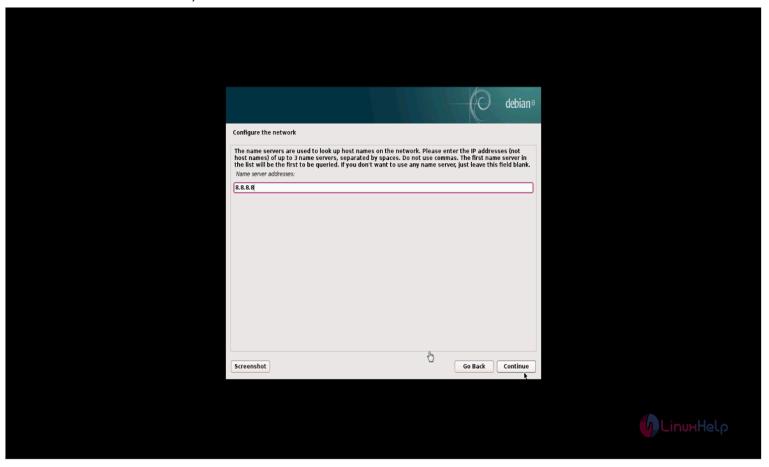
Enter the Netmask and click on Continue.



After that enter the Gateway and click on Continue.



Now enter the Nameserver, and click on Continue.

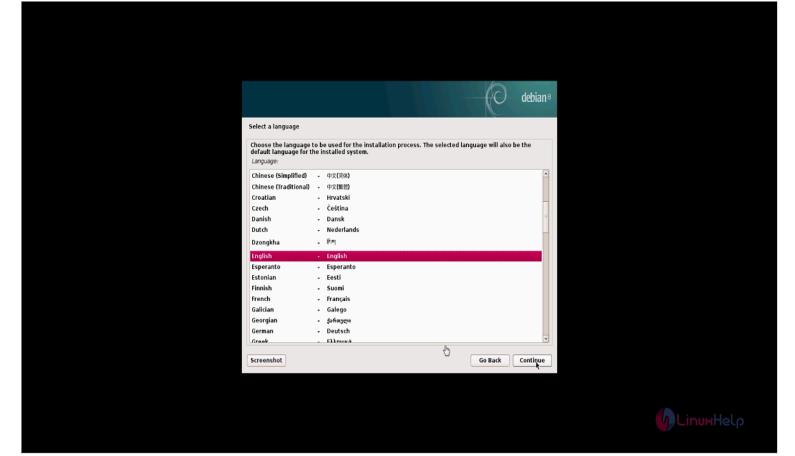


Enter your Hostname and click on *Continue*. Here the hostname is linuxhelp.





Now, Select a language of your choice and click on Continue.

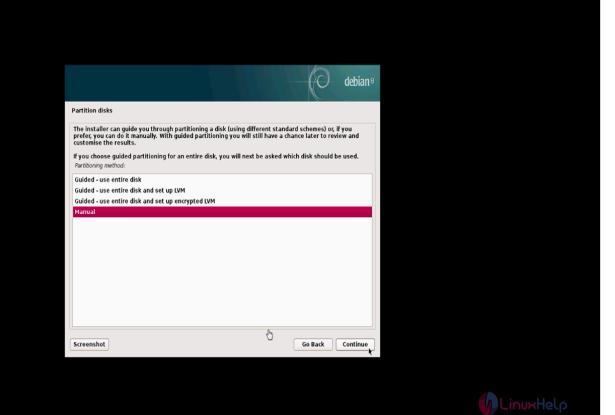


Select your location and setup users and passwords. Click on Continue.





Choose the Partition Disks and click on Continue.

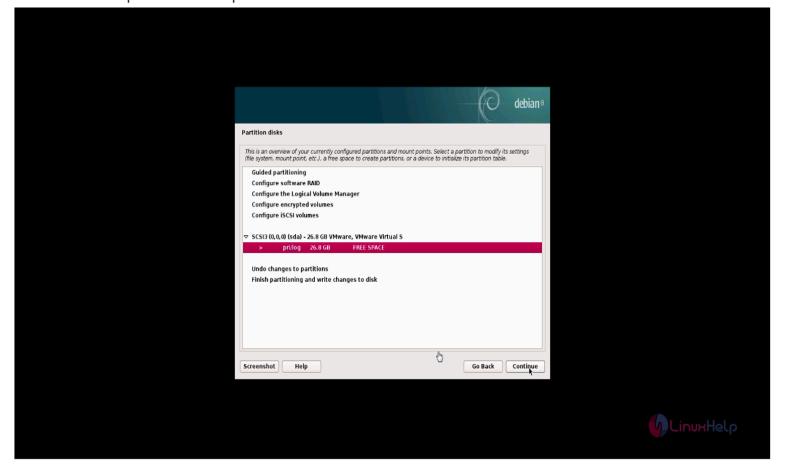


Choose your harddisk now. And then click on Continue.

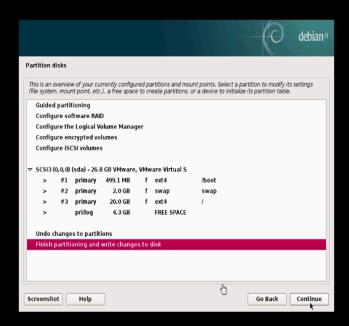




Select the free space to create partitions.

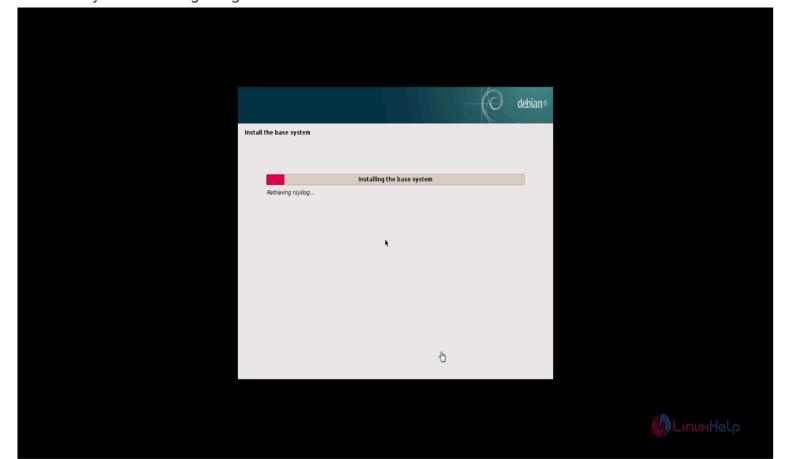


Finish partitioning and write changes to disk as follows. Click on continue after that.





The base system is now getting installed.



3CX has been installed. but it is not over yet as you need to configure 3CX. You can do that using a web browser.



Note the port number you need to enter on the browser.

Press ESC to go back.

Select how to run the tool:
(1) Using a Meb Browser
(2) From Command Line
Enter option:

Select how to run the tool:
(1) Using a Meb Browser
(2) From Command Line
Enter option:
4 Invalid option selected

Select how to run the tool:
(1) Using a Meb Browser
(2) From Command Line
Enter option:
Invalid option selected

Select how to run the tool:
(1) Using a Meb Browser
(2) From Command Line
Enter option:
Invalid option selected

Select how to run the tool:
(1) Using a Meb Browser
(2) From Command Line
Enter option:
Invalid option selected

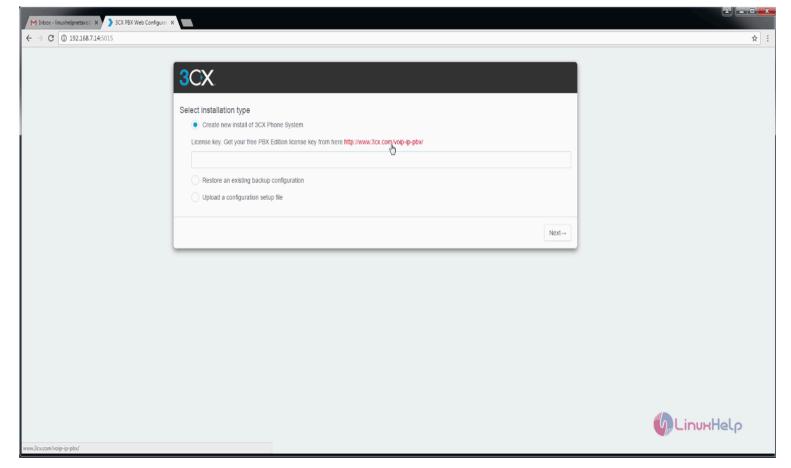
Select how to run the tool:
(1) Using a Meb Browser
(2) From Command Line
Enter option:
Invalid option selected

Select how to run the tool:
(1) Using a Neb Browser
(2) From Command Line
Enter option:
Invalid option selected

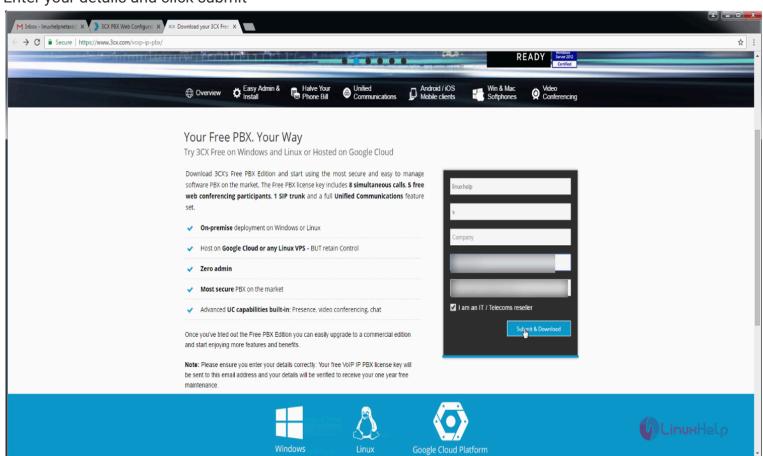
Select how to run the tool:
(1) Using a Neb Browser Run and The Link Shows a local IP address then you need to replace the local ip uith your public IP address.
No KINDOWS THE BROWSER WILL BE LAUNCHED AUTOMATICALLY.
To run this tool again use command line:
sudo /usr/sbin/3CXMizard --cleanup
Processing triggers for libc-bin (2.19-18+deb8u7) ...



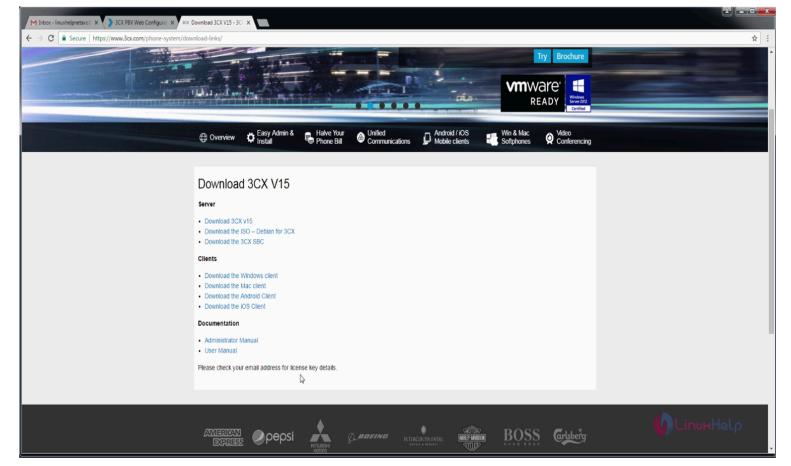
Get the PBX license key from the browser.



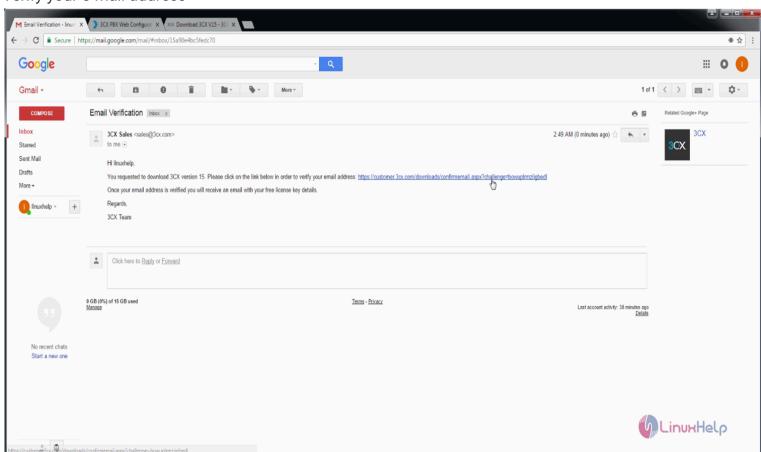
## Enter your details and click submit



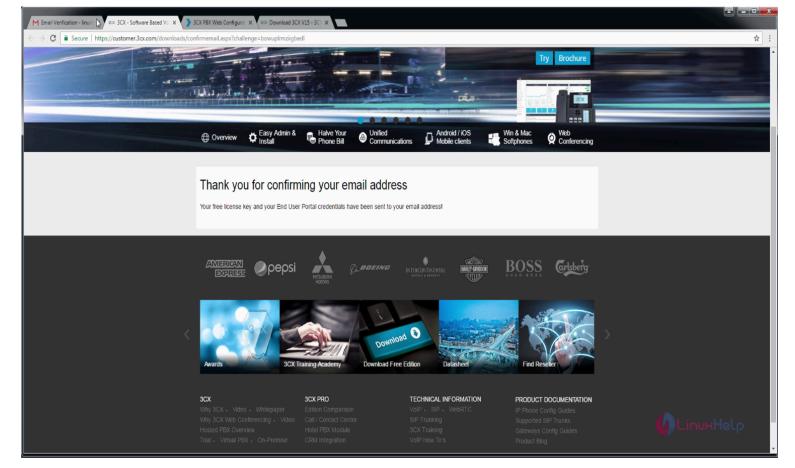
Check your e-mail address for license key details.



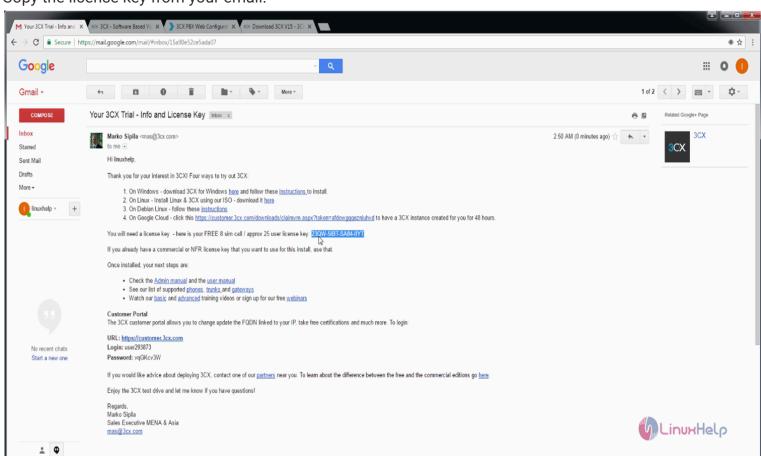
## Verify your e-mail address



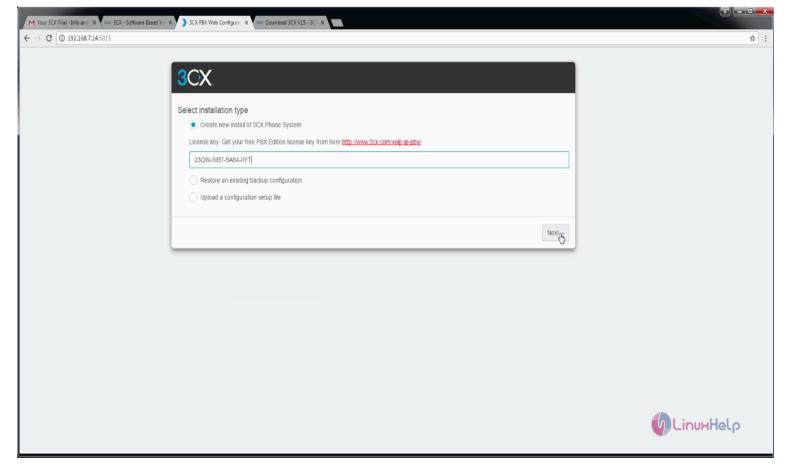
e-mail address has been verified.



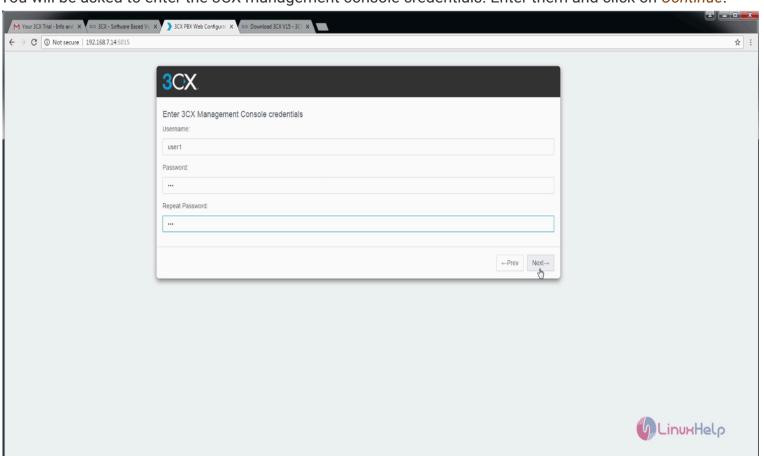
Copy the license key from your email.



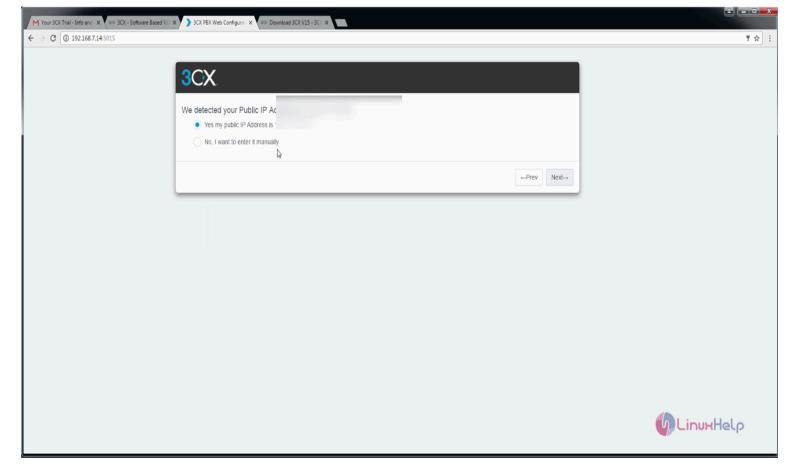
Paste it on the required field and click on Next.



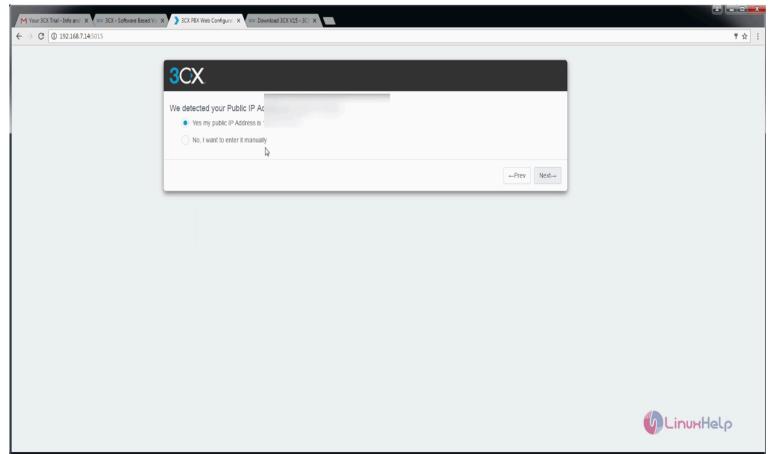
You will be asked to enter the 3CX management console credentials. Enter them and click on Continue.



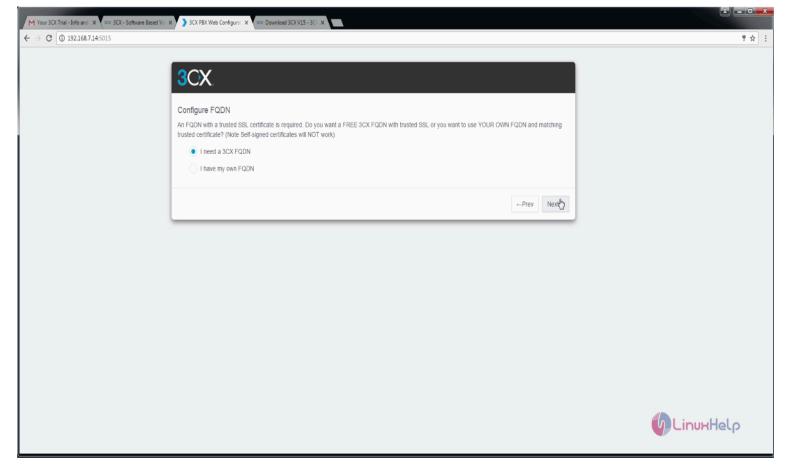
Enter your public IP.



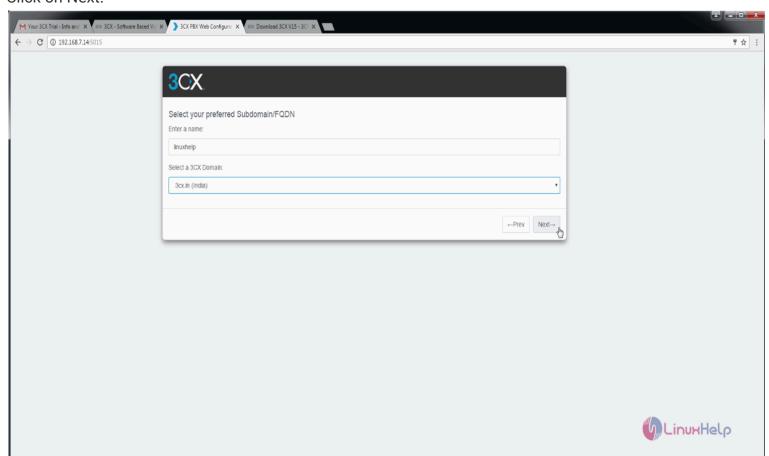
Select the type of your public IP



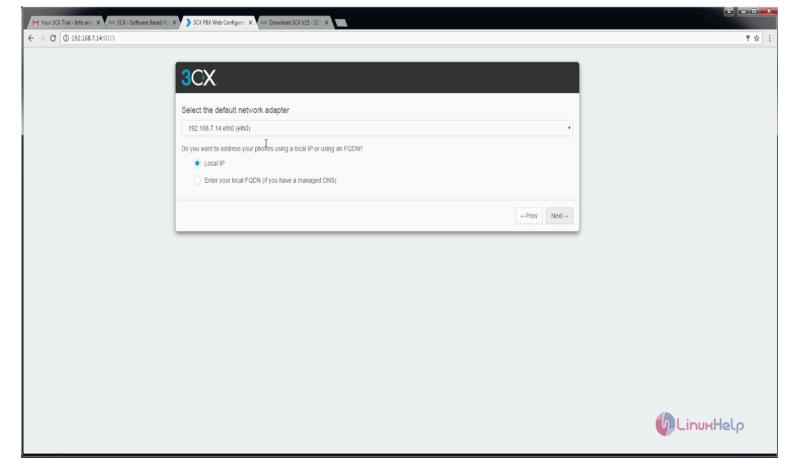
Once it is done Configure FQDN as follows.



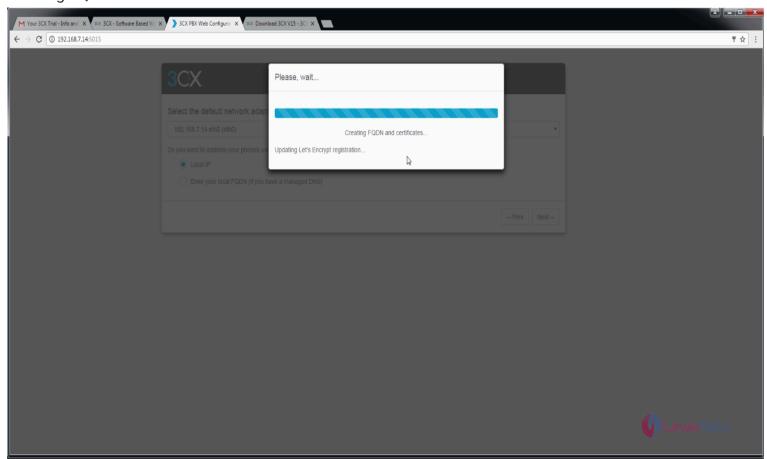
Click on Next.



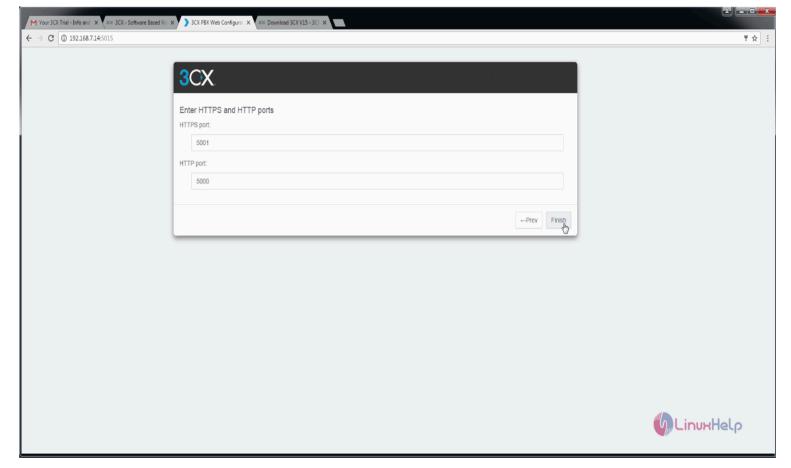
Select the network adapter and click on next.



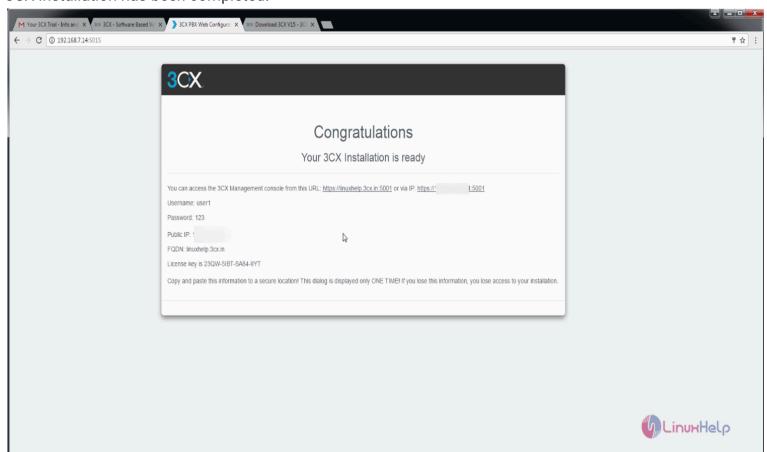
Creating FQDN and certificates.



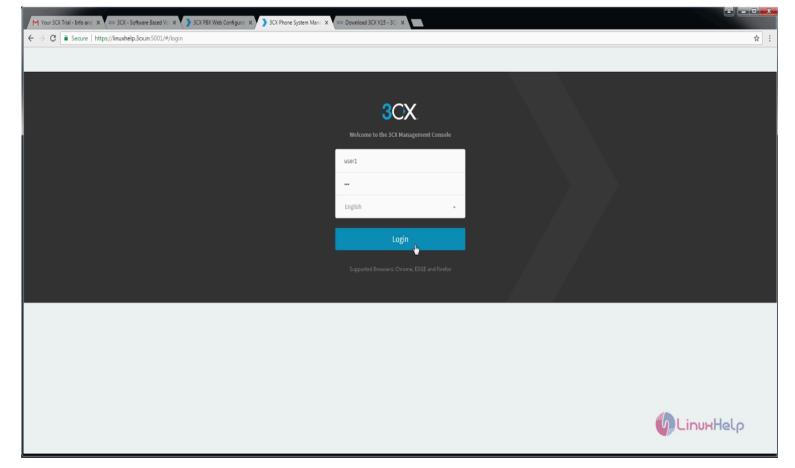
Once it is done, enter HTTP and HTTPS ports and finally click on Finish.



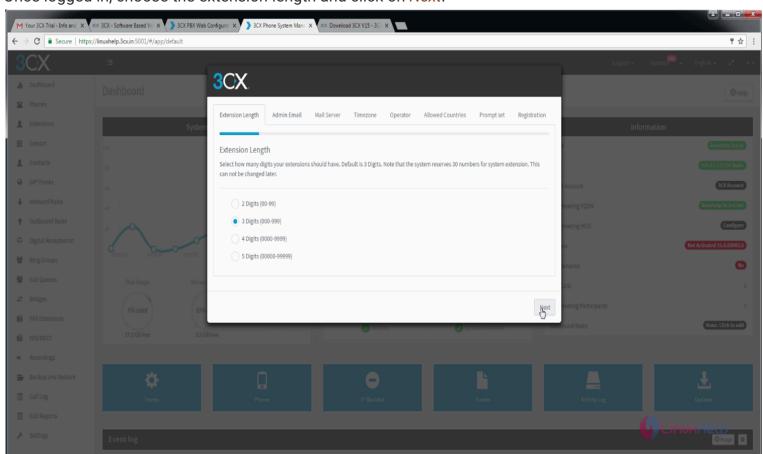
3CX installation has been completed.



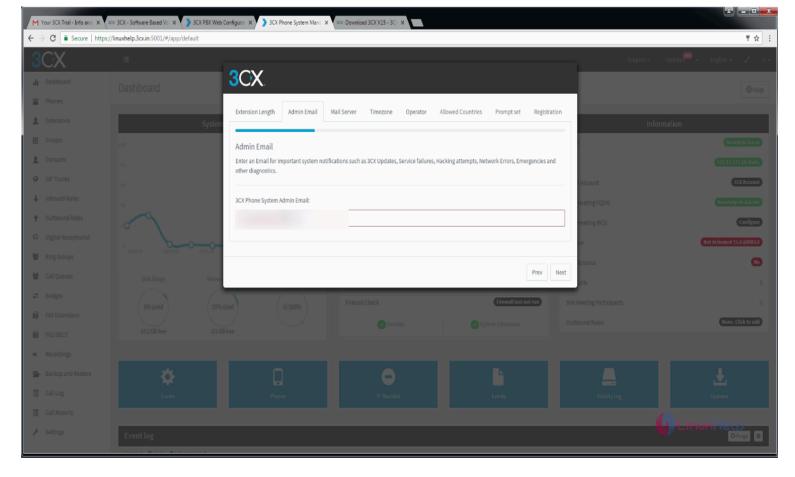
3CX management console login page appears on your screen.



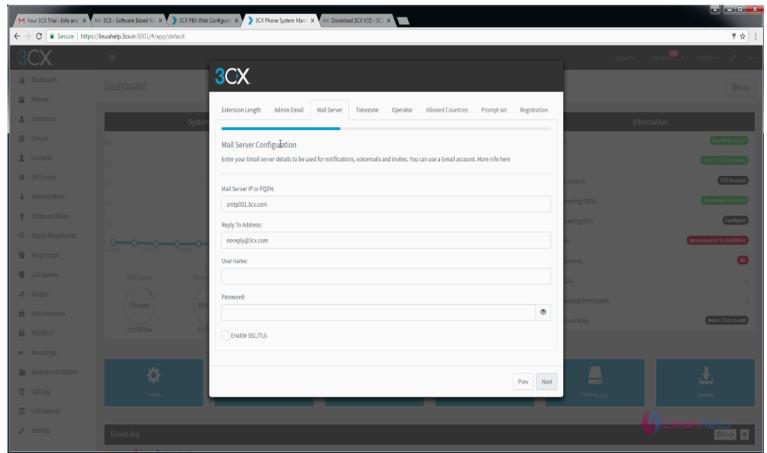
Once logged in, choose the extension length and click on Next.



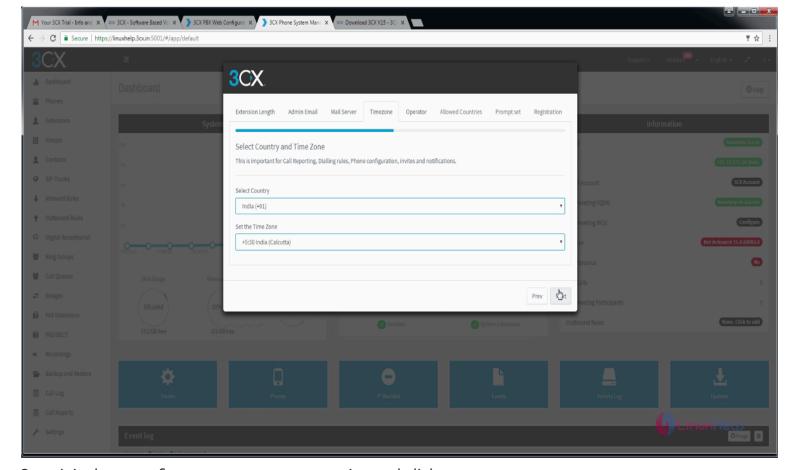
Then add Admin E-mail and click on Next.



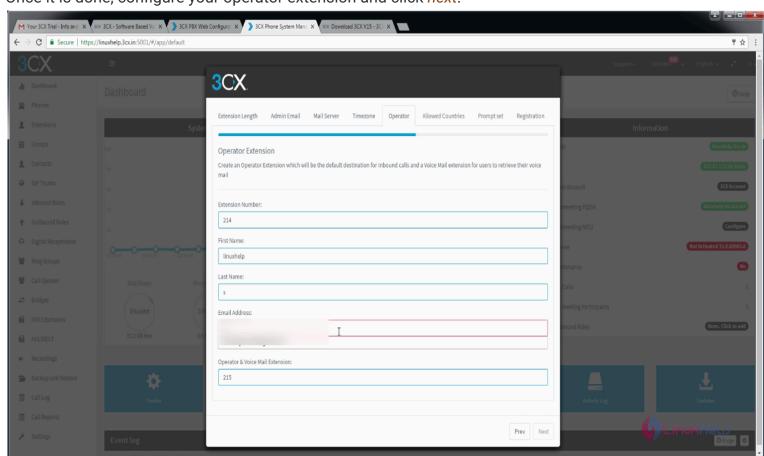
Once it is done, configure the Mail Server, and click on Next.



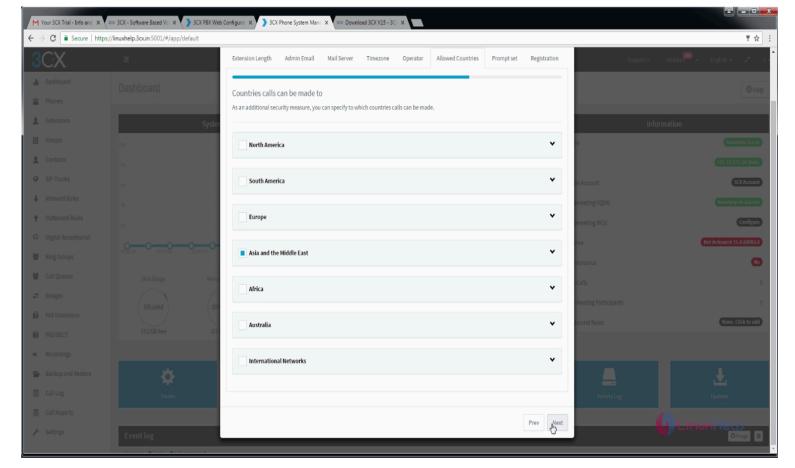
Select your country and time zone.



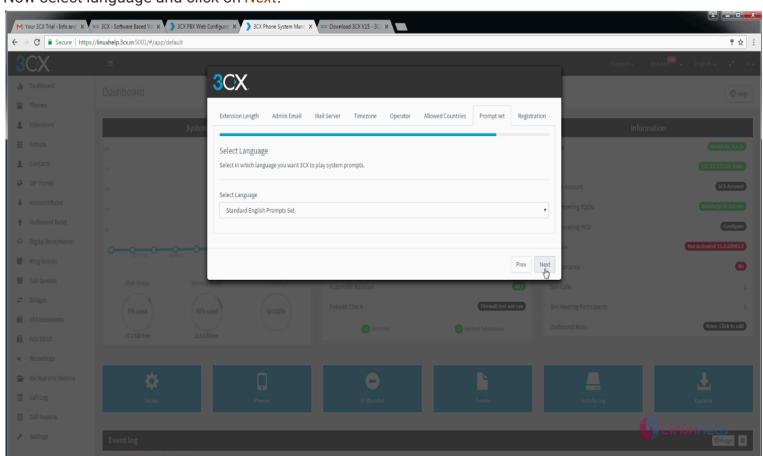
Once it is done, configure your operator extension and click next.



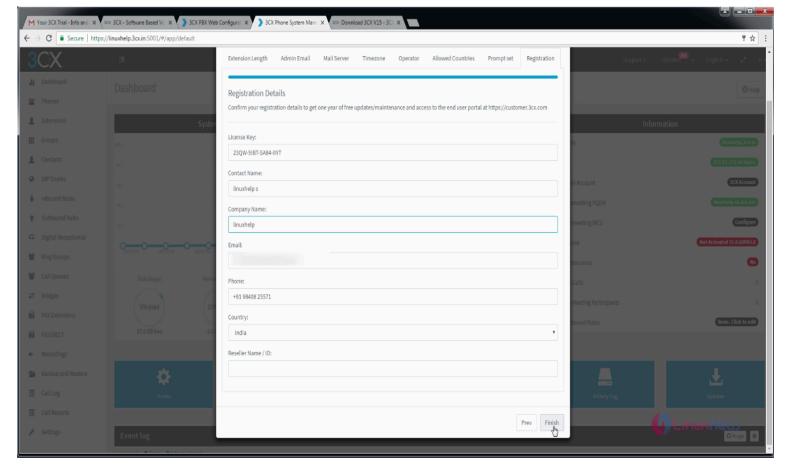
Configure allowed countries and click on Next.



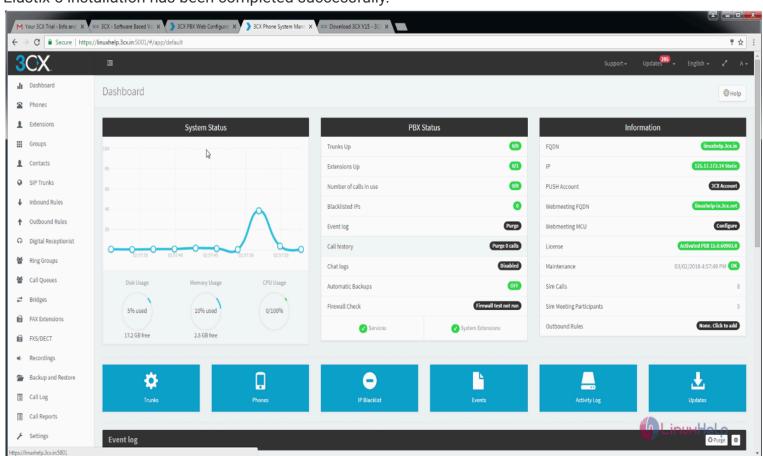
Now select language and click on Next.



Enter registration details and finally click on finish.



Elastix 5 installation has been completed successfully.



### Thank you!

## reset the root password of CentOS, Redhat or Elastix box

In nutshell, we need to boot the OS into single user and execute a reset password command at the bash shell.

1. Boot the system and press any key after you see the "Press any key to enter the menu" message. This will take you to the GRUD menu.

```
Press any key to enter the menu

Booting CentOS (2.6.18-371.8.1.el5) in 1 seconds...
```

2. Press "e" to edit the boot commands before booting.

GNU GRUB version 0.97 (636K lower / 522112K upper memory)

CentOS (2.6.18-371.8.1.el5) Elastix (2.6.18-348.1.1.el5)

Use the  $\uparrow$  and  $\downarrow$  keys to select which entry is highlighted. Press enter to boot the selected OS, 'e' to edit the commands before booting, 'a' to modify the kernel arguments before booting, or 'c' for a command-line.



3. Select and highlight the item with vmlinuz using the arrow keys and **Press<sup>"e"</sup>** to edit the line.

root (hd0,0) kernel /vmlinuz-2.6.18-348.1.1.el5 ro root=/dev/VolGroup00/LogVol00 initrd /initrd-2.6.18-348.1.1.el5.img

Use the ↑ and ↓ keys to select which entry is highlighted. Press 'b' to boot, 'e' to edit the selected command in the boot sequence, 'c' for a command-line, 'o' to open a new line after ('O' for before) the selected line, 'd' to remove the

selected whe, or escape to go back to the main menu.



4. At the end of the line press space bar and type "single".

[ Minimal BASH-like line editing is supported. For the first word, TAB lists possible command completions. Anywhere else TAB lists the possible completions of a device/filename. ESC at any time cancels. ENTER at any time accepts your changes.]

<0/LogVol00 single



5. Press enter. This will bring you back to **GRUD** menu.

root (hd0,0) kernel /vmlinuz-2.6.18-348.1.1.el5 ro root=/dev/VolGroup00/LogVol00 s+ initrd /initrd-2.6.18-348.1.1.el5.img

Use the ↑ and ↓ keys to select which entry is highlighted. Press 'b' to boot, 'e' to edit the selected command in the boot sequence, 'c' for a command-line, 'o' to open a new line after ('O' for before) the selected line, 'd' to remove the

selected whee, or escape to go back to the main menu.



- 6. If vmlinuz is not selected or highlighted, select it using the arrow key. Now **press** to boot the system and wait for the bash shell.
- 7. Execute the password reset command by **typing** "passwd" and press Enter. Now type your new password at the command prompt.

```
Press 'I' to enter interactive startup.
                (localtime): Fri May 16 01:06:19 PHT 2014
Setting clock
                                                                    OK
                                                                    OK
Starting udev:
                                                                         ]
Loading default keymap (us):
Setting hostname localhost.localdomain:
                                                                 E
                                                                    OK
                                                                         ]
                                                                    0K
                                                                         1
                                           2 logical volume(s) in volume group "Vo
Setting up Logical Volume Management:
Group00" now active
                                                                    0 K
Checking filesystems
/dev/VolGroup00/LogVol00: clean, 103706/4956416 files, 756687/4956160 blocks
/boot: clean, 42/26104 files, 23444/104388 blocks
                                                                 E
                                                                    OK
                                                                        ]
Remounting root filesystem in read-write mode:
                                                                 [
                                                                    OK
                                                                        ]
Mounting local filesystems:
                                                                 C
                                                                    OK
                                                                        ]
                                                                         1
Enabling local filesystem quotas:
                                                                    OK
                                                                    ΠK
Enabling /etc/fstab swaps:
sh-3.2# passwd
Changing password for user root.
New UNIX password:
BAD PASSWORD: it is based on a dictionary word
Retype new UNIX password:
passwd: all authentication tokens updated successfully.
sh-3.2# _
```

8. Type "reboot" to reboot the system.

# Elastix 4

 $\hbox{"} \hbox{\bf CentOS 7" template and is meant to work on our self-managed virtual private servers.}$ 

0. Preliminary requirements:

"CentOS 7 64-bit" template installed on server.

1. Downloading install scripts:

wget -O Elastix4onCentos7vz.tar.gz --no-check-certificate https://github.com/thpryrchn/Elastix4onCentos7vz/tarball/master

tar zxvf Elastix4onCentos7vz.tar.gz --strip-components=1

2. Installation process

The first script you have to launch is:

./elastix-install-p1.sh

After installation process you have to reboot your server. Now you can launch the second installation script:

#### ./elastix-install-p2.sh

In this step you will be asked to setup MySQL password and your Elastic admin user password. And after this setup you have to reboot your server once again.

And that's it. Now you can login to your Elastic web interface with password you have entered and manage your Elastix instance:

http://yourhostname