Install CentOS 7

https://www.tecmint.com/centos-7-installation/

This tutorial will guide you on how to perform a minimal installation of latest version of CentOS 7.0, using the binary DVD ISO image, an installation that is best suitable for developing a future customizable server platform, with no Graphical User Interface, where you can install only the software that you need.

Installation of CentOS 7
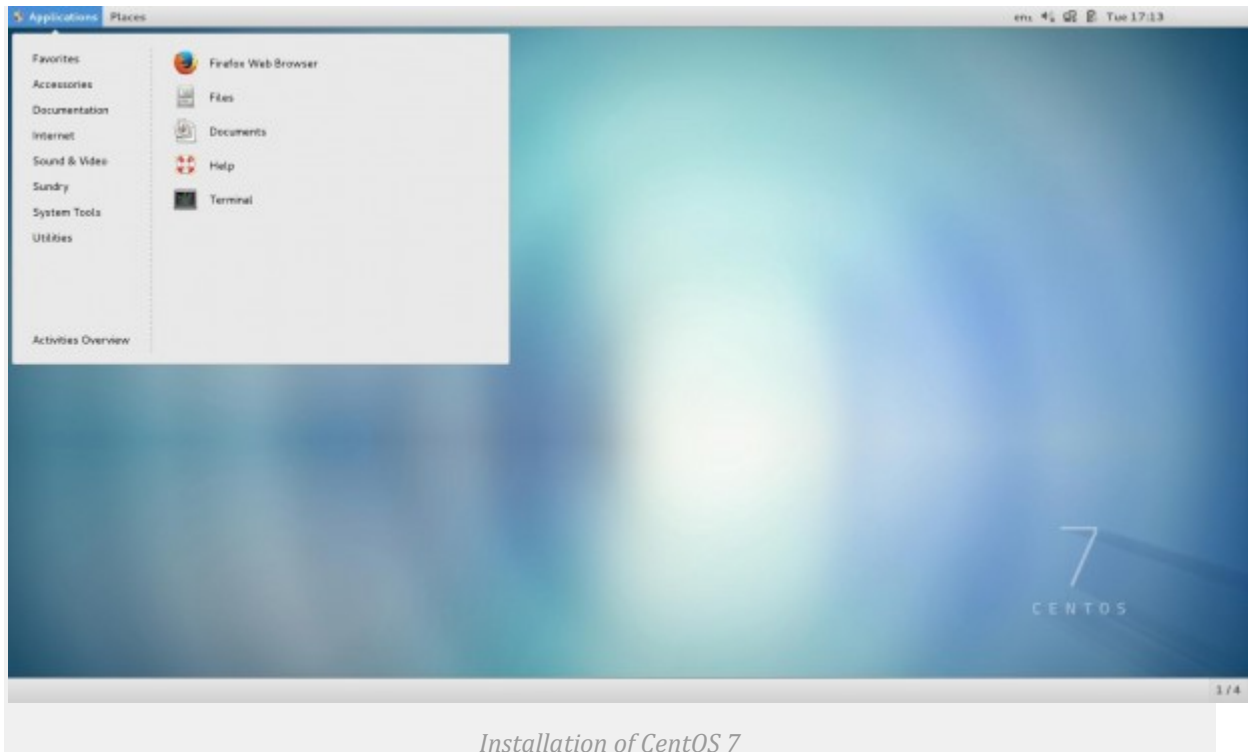
If you want to find out more about what's new in this release of CentOS 7.0 holds and download links, I suggest reading the previous article on release announcements:

- CentOS 7.0 Features and Download ISO Images

Requirements

- CentOS 7.0 DVD ISO

CentOS 7.0 Installation Process

1. After downloading the last version of CentOS using above links or using official CentOS download page. Burn it to a DVD or create a bootable USB stick using LiveUSB Creator called Unetbootin.

2. After you have created the installer bootable media, place your DVD/USB into your system appropriate drive, start the computer, select your bootable unit and the first CentOS 7 prompt should appear. At the prompt choose Install CentOS 7 and press [Enter] key.

CentOS 7 Boot Menu

3. The system will start loading media installer and a Welcome screen should appear. Select your Installation Process Language, that will assist you through the entire installation procedure and click on Continue.

```
[  OK  ] Started Configure read-only root support.
[  OK  ] Started udev Coldplug all Devices.
         Starting udev Wait for Complete Device Initialization...
[  OK  ] Started Import network configuration from initramfs.
[  OK  ] Started Create static device nodes in /dev.
         Starting udev Kernel Device Manager...
[  OK  ] Reached target Local File Systems (Pre).
[  OK  ] Started udev Kernel Device Manager.
[  OK  ] Started Device-Mapper Multipath Device Controller.
[  OK  ] Started udev Wait for Complete Device Initialization.
         Starting Activation of DM RAID sets...
[  OK  ] Started Activation of DM RAID sets.
[  OK  ] Reached target Local File Systems.
         Starting Trigger Flushing of Journal to Persistent Storage...
         Starting Tell Plymouth To Write Out Runtime Data...
         Starting Create Volatile Files and Directories...
[  OK  ] Reached target Encrypted Volumes.
[  OK  ] Started Trigger Flushing of Journal to Persistent Storage.
[  OK  ] Started Tell Plymouth To Write Out Runtime Data.
[  OK  ] Started Create Volatile Files and Directories.
         Starting Update UTMP about System Reboot/Shutdown...
[  OK  ] Started Update UTMP about System Reboot/Shutdown.
[  OK  ] Reached target System Initialization.
[  OK  ] Reached target Timers.
[  OK  ] Listening on Open-iSCSI iscsid Socket.
[  OK  ] Listening on Open-iSCSI iscsiuio Socket.
[  OK  ] Listening on Avahi mDNS/DNS-SD Stack Activation Socket.
[  OK  ] Listening on D-Bus System Message Bus Socket.
[  OK  ] Reached target Sockets.
[  OK  ] Reached target Basic System.
         Starting firewalld - dynamic firewall daemon...
         Starting Dump dmesg to /var/log/dmesg...
         Starting Terminate Plymouth Boot Screen...
         Starting System Logging Service...
         Starting Wait for Plymouth Boot Screen to Quit...
[  OK  ] Started Dump dmesg to /var/log/dmesg.
```

CentOS Installer Loading

WELCOME TO CENTOS 7.

What language would you like to use during the installation process?

English	*English* >	English (United States)
Afrikaans	*Afrikaans*	English (United Kingdom)
አማርኛ	*Amharic*	English (India)
العربية	*Arabic*	English (Australia)
অসমীয়া	*Assamese*	English (Canada)
Asturianu	*Asturian*	English (Denmark)
Беларуская	*Belarusian*	English (Ireland)
Български	*Bulgarian*	English (New Zealand)
বাংলা	*Bengali*	English (Nigeria)
		English (Hong Kong SAR China)

Type here to search.
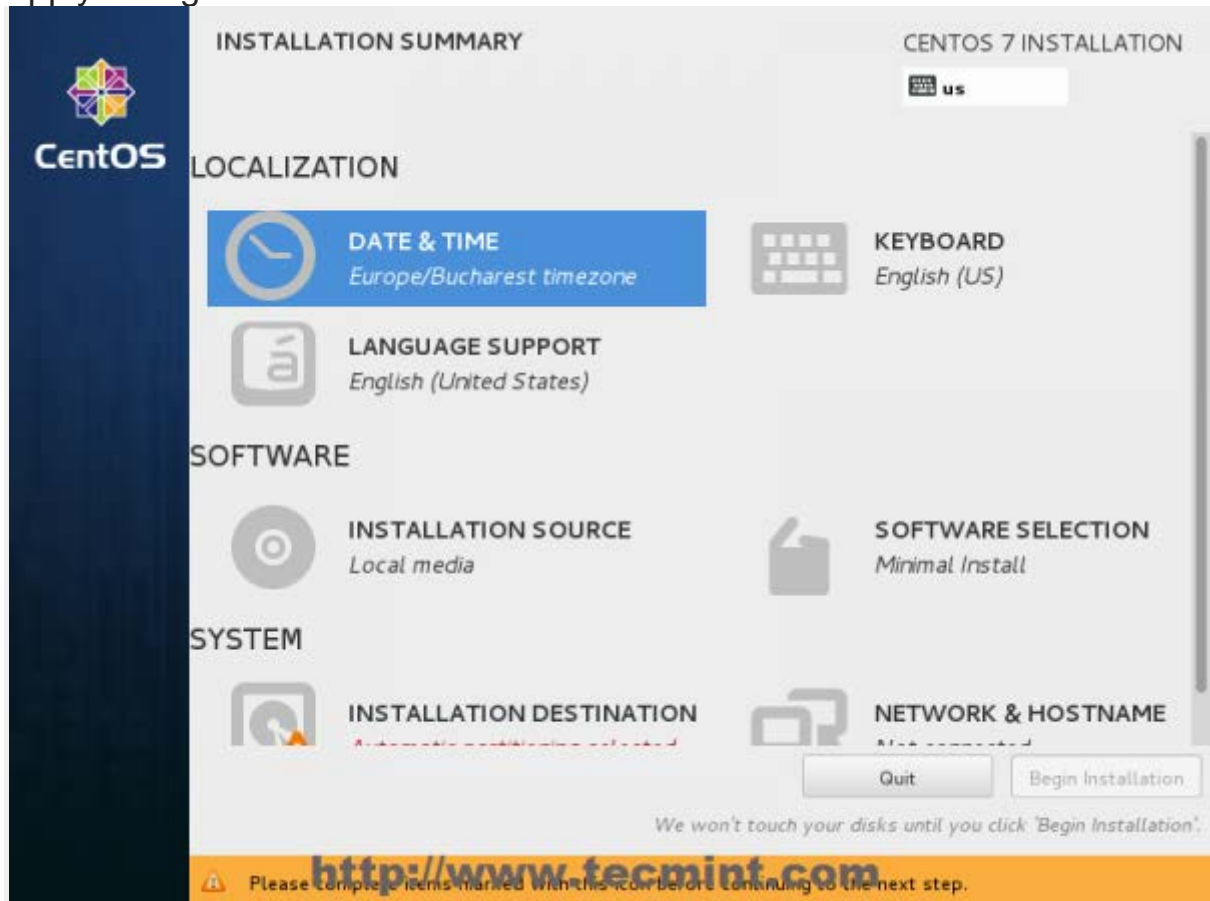
Quit   Continue

4. The next step, present screen prompt is Installation Summary. It contains a lot of options to fully customize your system. First thing you may want to setup is your time settings. Click on Date & Time and select your server physical location from the provided map and hit on upper Done button to apply configuration.
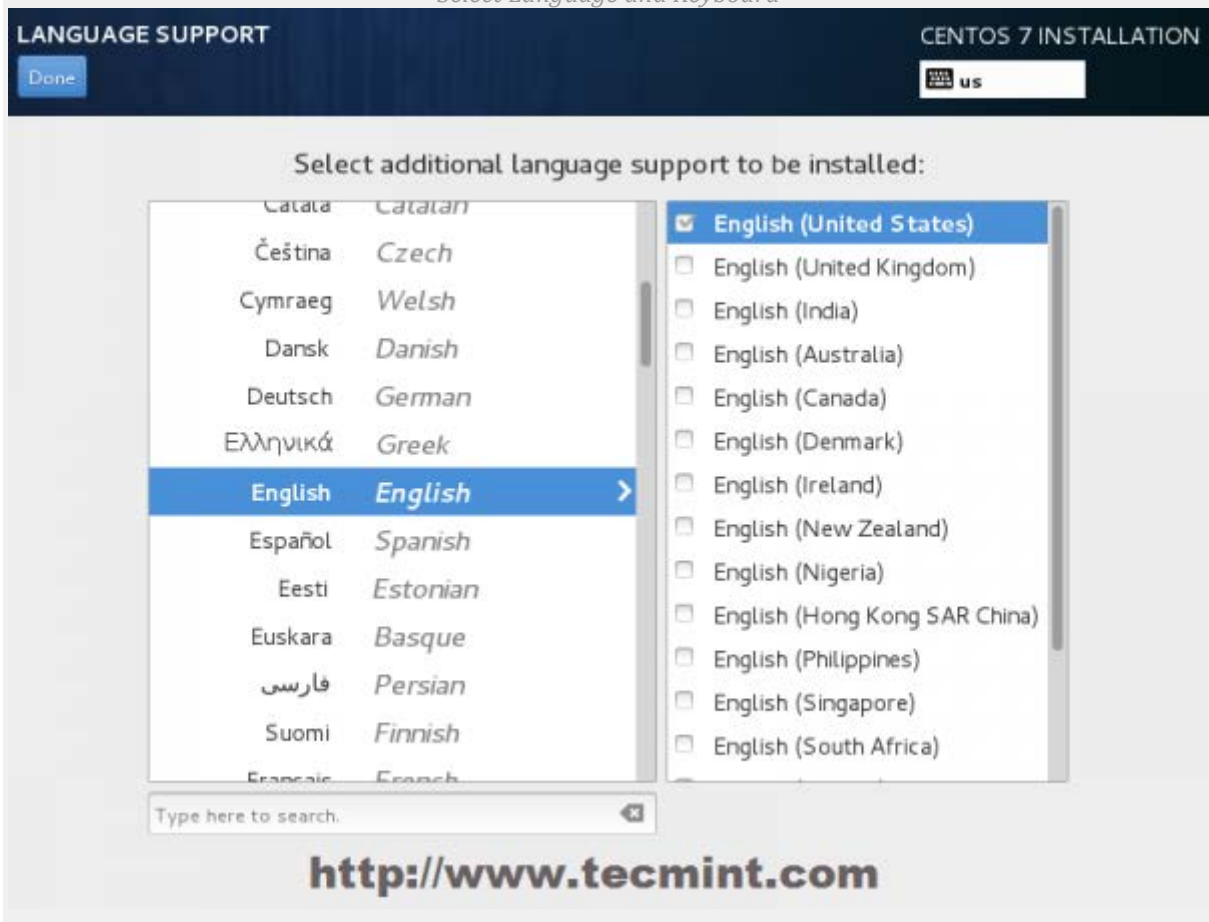

Select Date & Time and Location

5. The next step is to choose your Language Support and Keyboardsettings. Choose your main and extra language for your system and when you're finished hit on Done button.
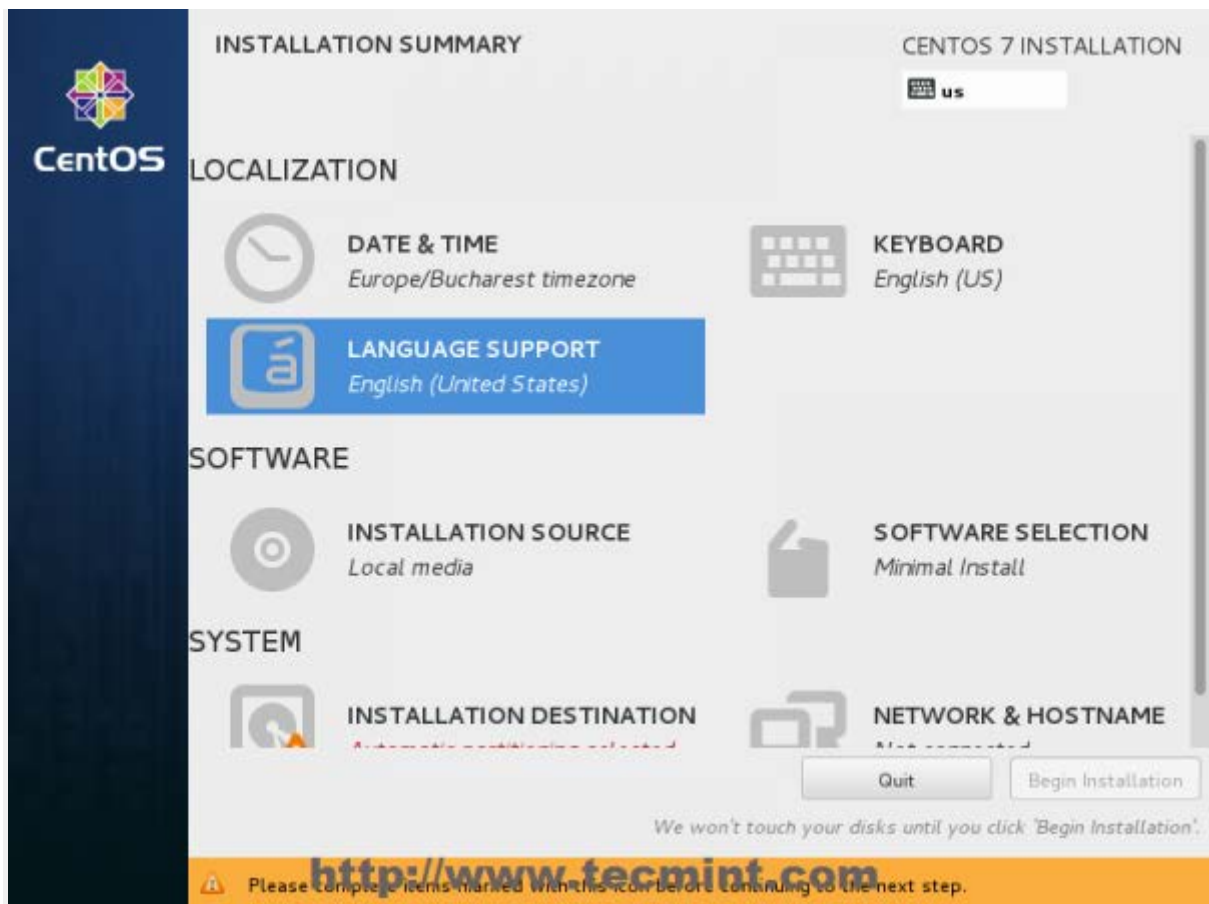
Select Language and Keyboard

6. The same way choose your Keyboard Layout by hitting the plusbutton and test your keyboard configuration using the right input filed. After you finish setting up your keyboard, again hit on upper Donebutton to apply changes and go back to main screen on Installation Summary.

Choose Keyboard Layout

Which keyboard layouts would you like to use on this system? You may move any layout to the top of the list to select it as the default.

English (US)

Test the layout configuration below:

Layout switching not configured.

Options

+ − ∧ ∨ ⌨

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Choose English Keyboard
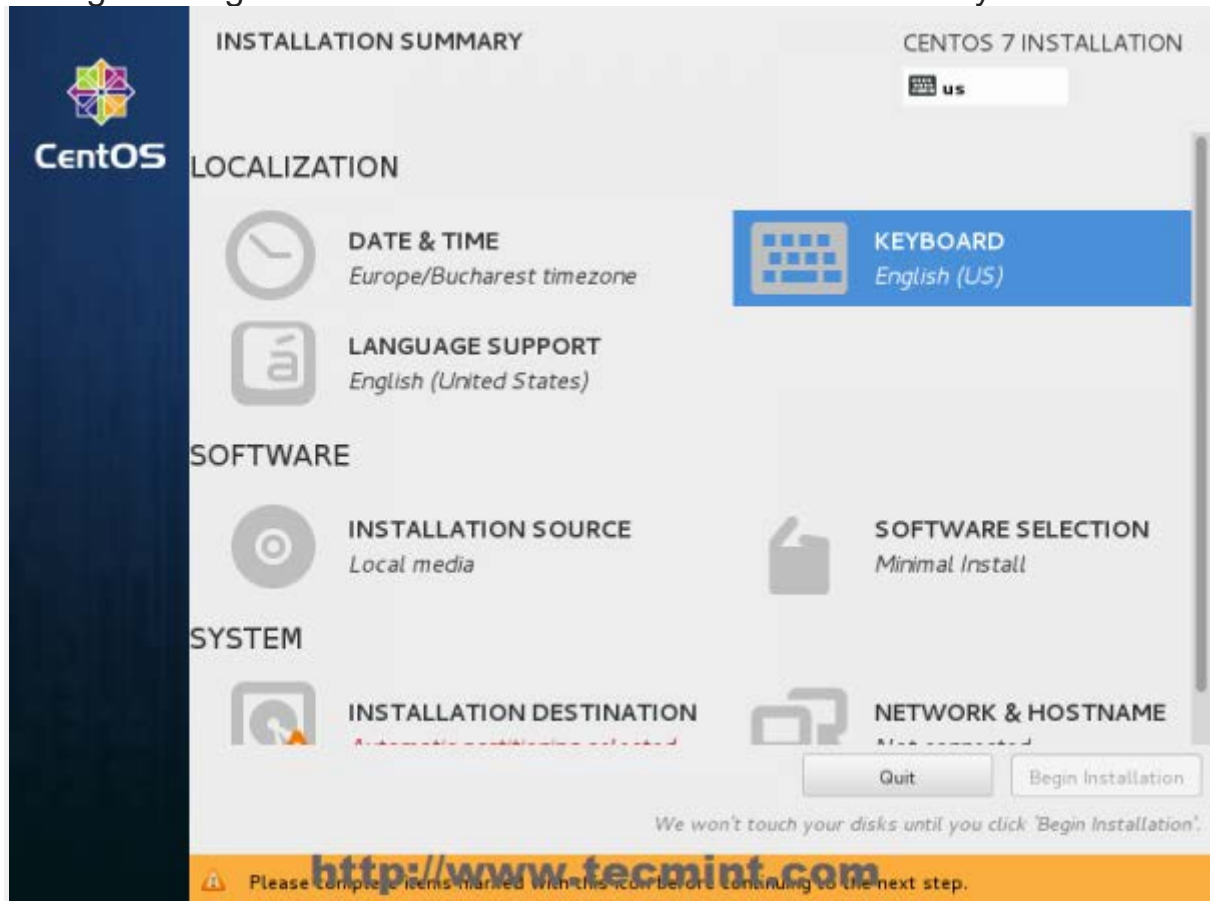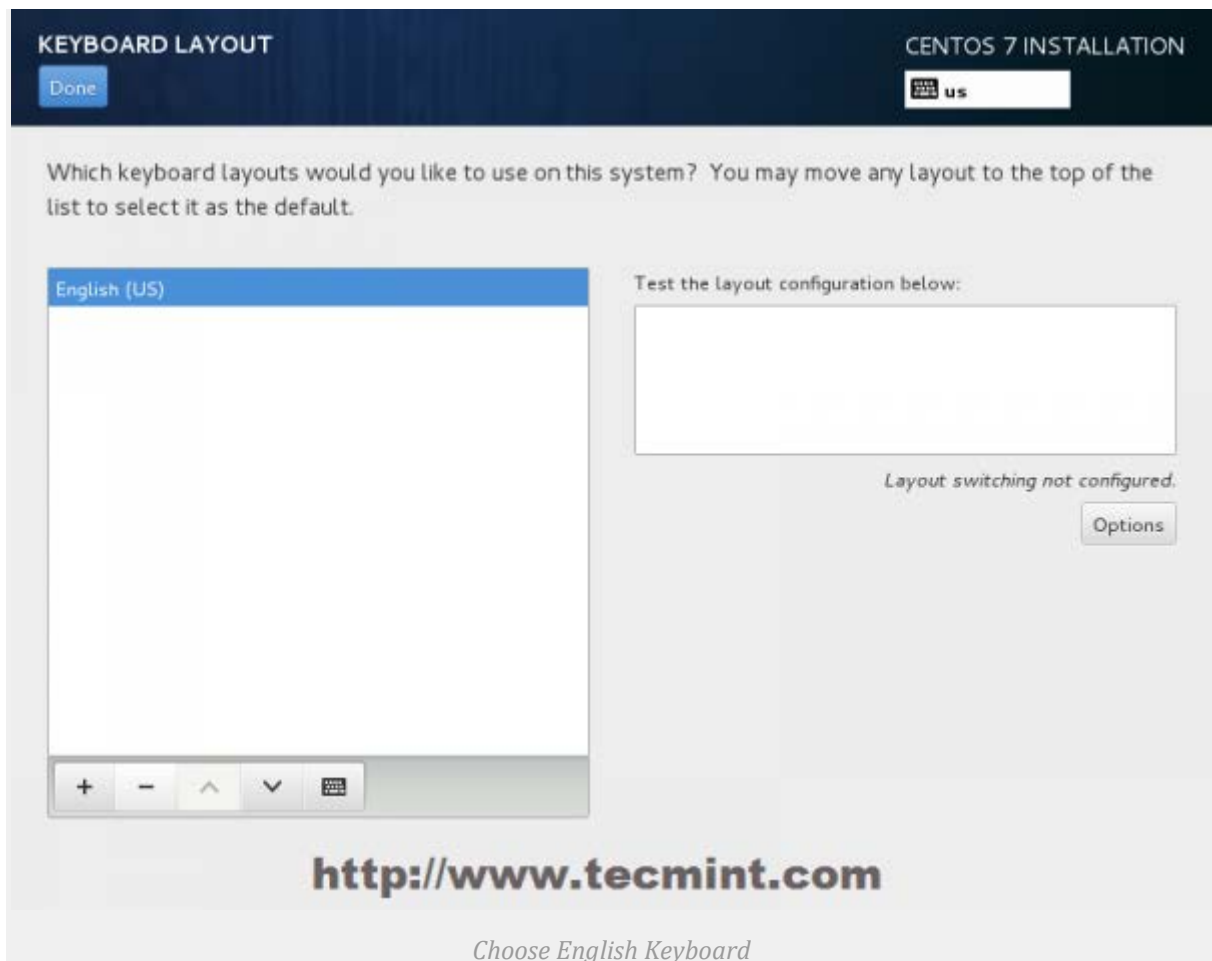
7. On the next step you can customize your installation by using other Installation Sources than your local DVD/USB media, such as a network locations using HTTP, HTTPS, FTP or NFS protocols and even add some additional repositories, but use this methods only if you know what you're doing. So leave the default Auto-detected installation media and hit on Done to continue.

Choose Installation Sources

8. On the next step you can choose your system installation software. On this step CentOS offers a lot of Server and Desktop platform environments that you choose from, but, if you want a high degree of customization, especially if you are going to use CentOS 7 to run as a server platform, then I suggest you select Minimal Install with Compatibility Libraries as Add-ons, which will install a minimal basic system software and later you can add other packages as your needs require using yum groupinstall command.

Software Selection
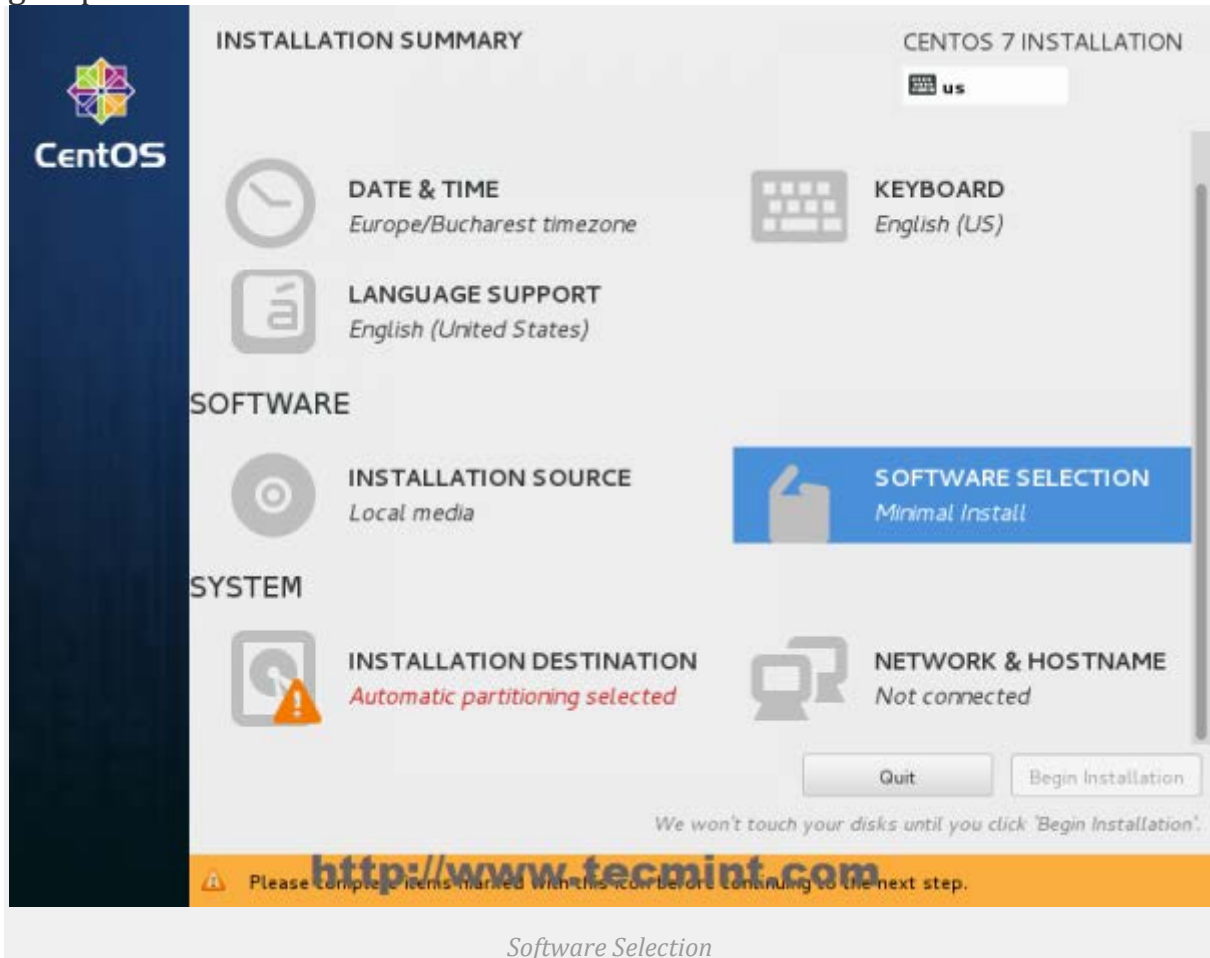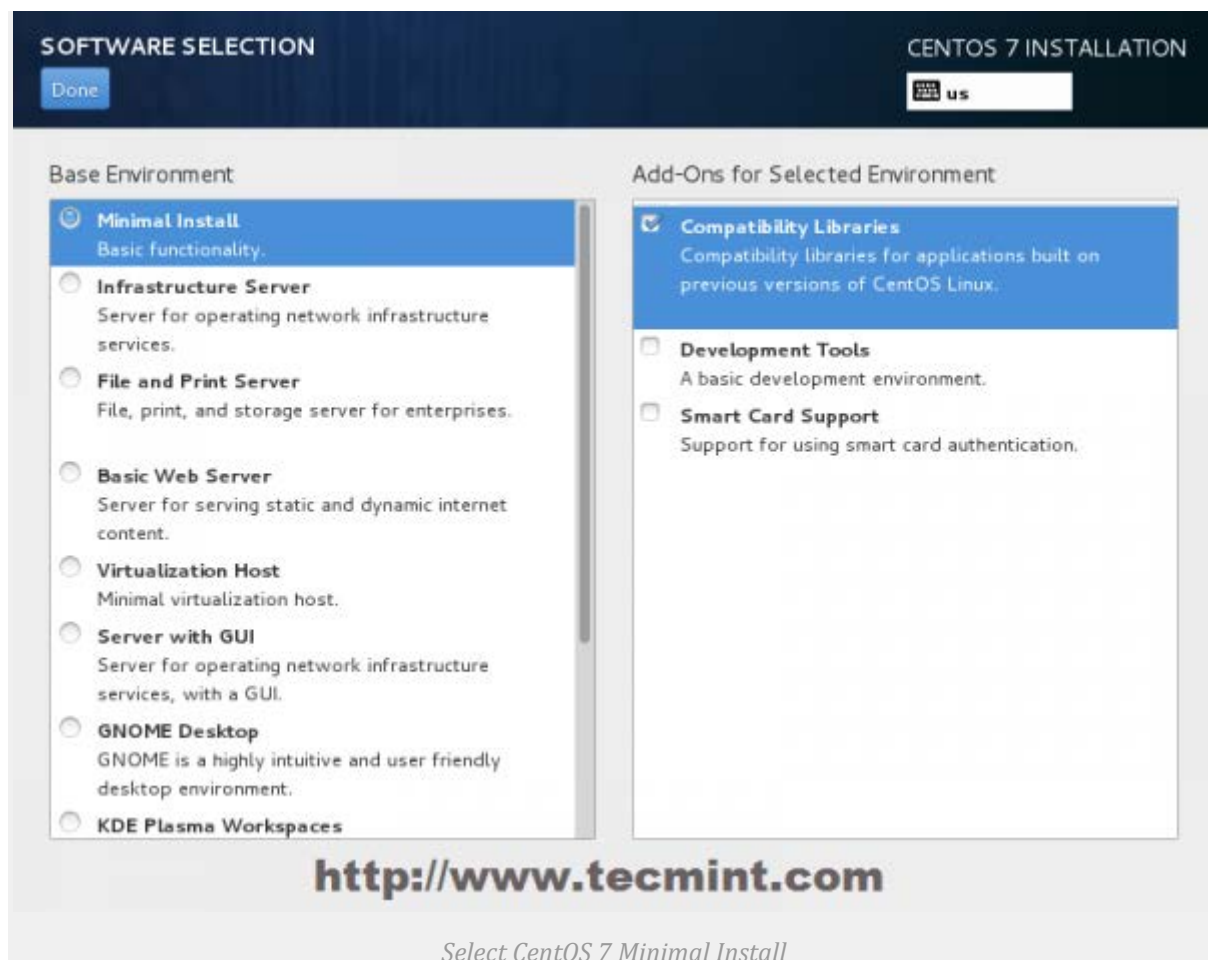
Select CentOS 7 Minimal Install

9. Now it's time to partition your hard-drive. Click on Installation Destination menu, select your disk and choose I will configure partitioning.

Choose Installation Destination

10. On the next screen, choose LVM (Logical Volume Manager) as partition layout and, then, click on Click here to create them automatically, option which will create three system partition using XFS filesystem, automatically redistributing your hard-disk space and gathering all LVS into one big Volume Group named centos.

- /boot – Non LVM
- /(root) – LVM
- Swap – LVM

Select LVM Partition Type

Done

⌨ us

New CentOS 7 Installation

DATA

SYSTEM

/boot   500 MB
sda1

/   10 GB >
centos-root

swap   2.04 GB
centos-swap

+ − ✳ ⟳ ▣

AVAILABLE SPACE   TOTAL SPACE
7.92 GB   20.48 GB

1 storage device selected

centos-root

Name: root

Mount Point: /

Label:

Desired Capacity: 10 GB

Device Type: LVM   ∨   ☐ Enc

File System: xfs   ∨   ☑ Ref

Volume Group   centos   (0 B free) ∨   Modi

Update Set

Note: The settings you make on this screen will not be a
until you click on the main menu's 'Begin Installation'

http://www.tecmint.com   Res

Create Partitions

11. If you are not pleased with the default partition layout done automatically by the installer you can completely add, modify or resize your partition scheme and when you finish hit on Done button and Accept Changes on the Summary of Changes prompt.
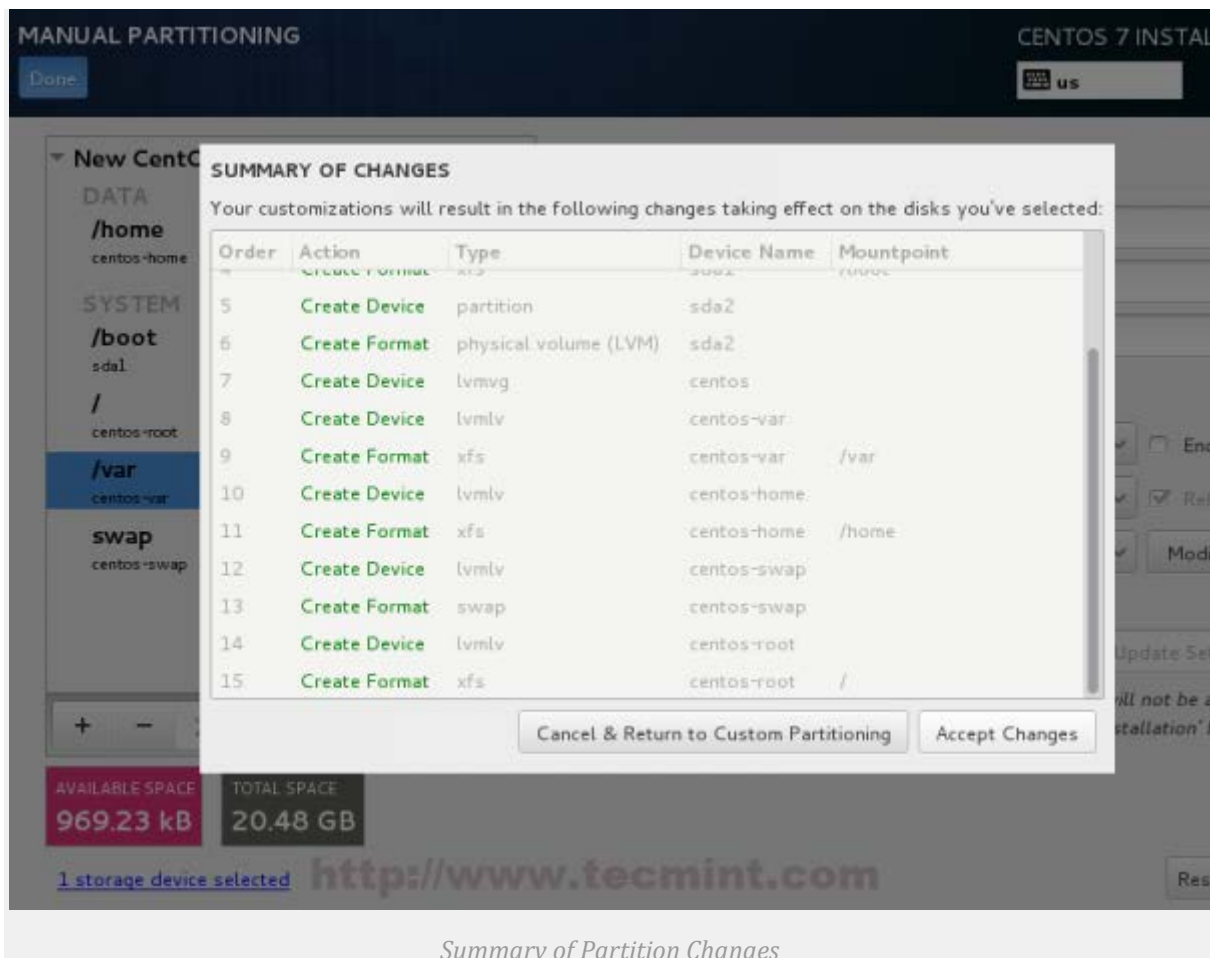
Summary of Partition Changes

NOTE: For those users, who have hard-disks more than 2TB in size, the installer automatically will convert partition table to GPT, but if you wish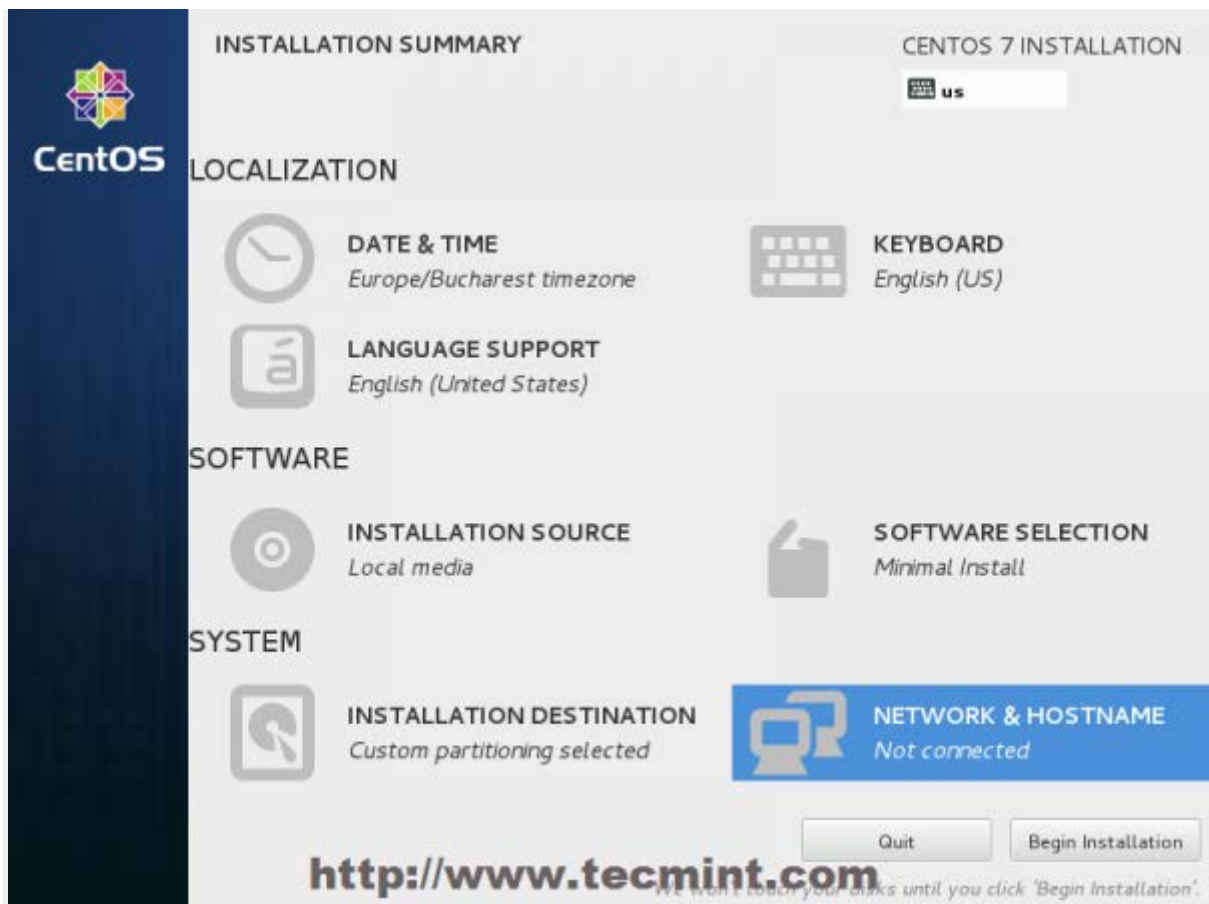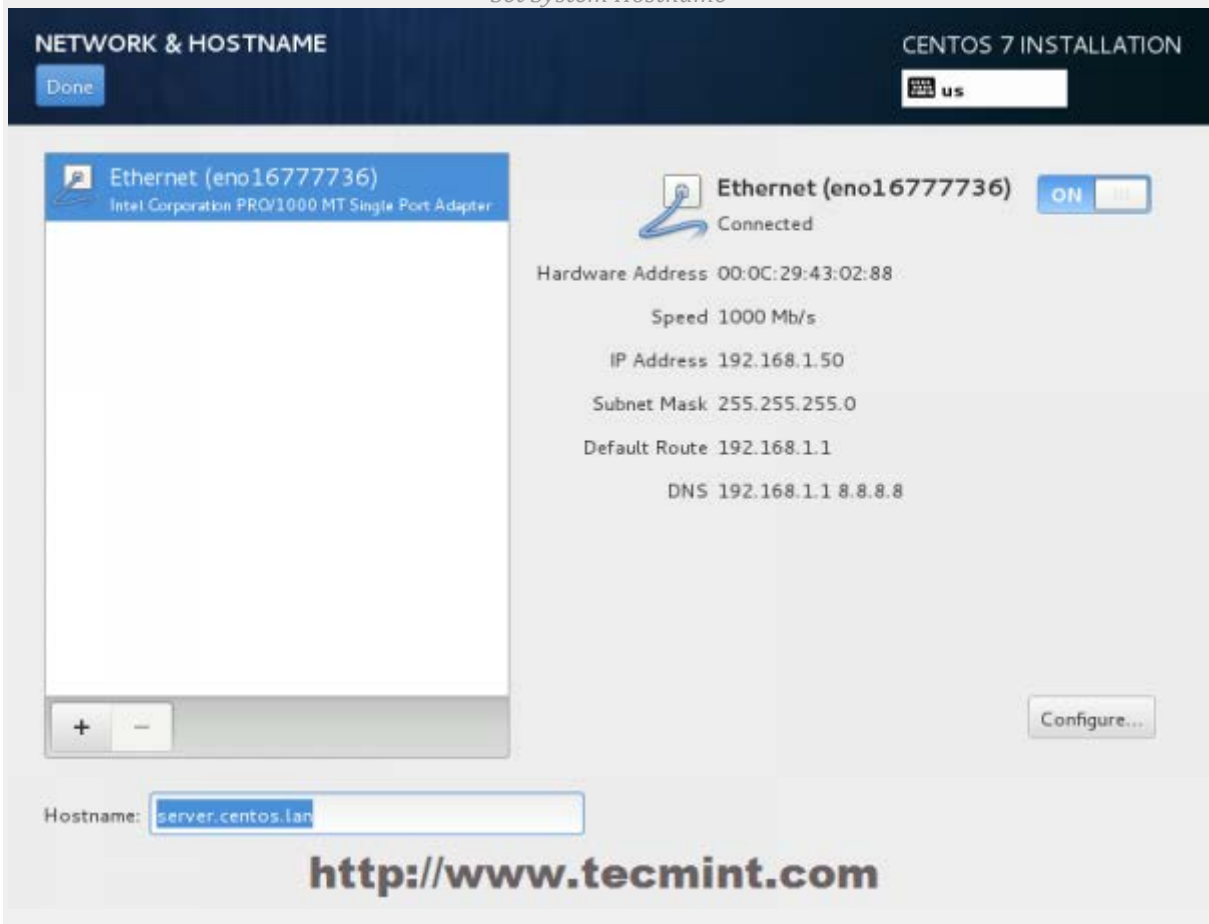 to use GPT table on smaller disks than 2TB, then you should use the argument inst.gpt to the installer boot command line in order to change the default behaviour.

12. The next step is to set your system hostname and enable networking. Click on Network & Hostname label and type your system FQDN (Fully Qualified Domain Name) on Hostname filed, then enable your Network interface, switching the top Ethernet button to ON.

If you have a functional DHCP server on you network then it will automatically configure all your network setting for enabled NIC, which should appear under your active interface.
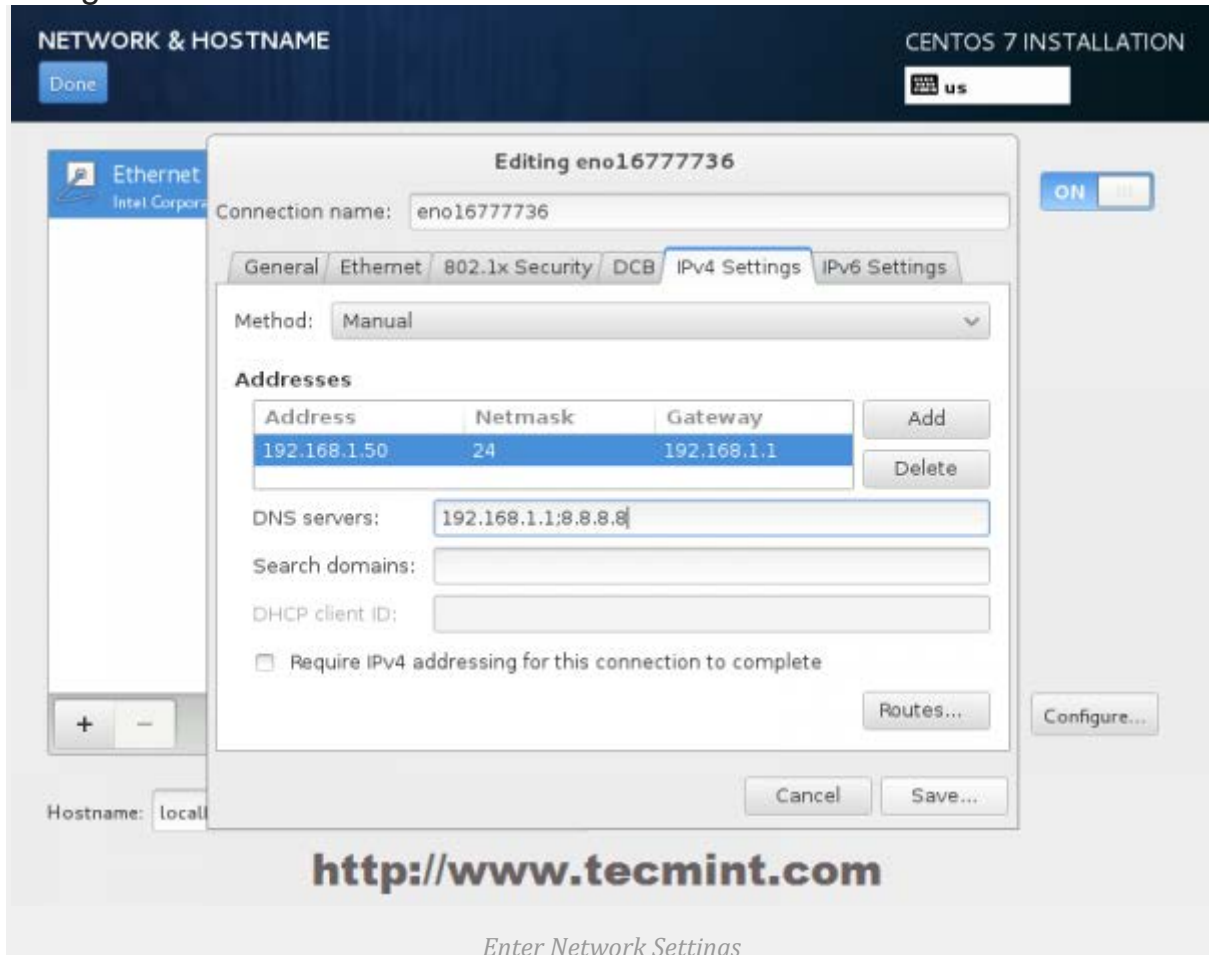
INSTALLATION SUMMARY

CENTOS 7 INSTALLATION

us

LOCALIZATION

DATE & TIME
Europe/Bucharest timezone

KEYBOARD
English (US)

LANGUAGE SUPPORT
English (United States)

SOFTWARE

INSTALLATION SOURCE
Local media

SOFTWARE SELECTION
Minimal Install

SYSTEM

INSTALLATION DESTINATION
Custom partitioning selected

NETWORK & HOSTNAME
Not connected

Quit   Begin Installation

http://www.tecmint.com

We won't touch your disks until you click 'Begin Installation'.

Set System Hostname

NETWORK & HOSTNAME

CENTOS 7 INSTALLATION

Done

us

Ethernet (eno16777736)
Intel Corporation PRO/1000 MT Single Port Adapter

Ethernet (eno16777736)   ON
Connected

Hardware Address 00:0C:29:43:02:88
Speed 1000 Mb/s
IP Address 192.168.1.50
Subnet Mask 255.255.255.0
Default Route 192.168.1.1
DNS 192.168.1.1 8.8.8.8

+   −

Configure...

Hostname: server.centos.lan

http://www.tecmint.com

13. If your system will be destined as a server it's better to set static network configuration on Ethernet NIC by clicking on Configure button and add all your static interface settings like in the screenshot below, and when you're finished hit on Save button, disable and enable Ethernet card by switching the button to OFF and ON, and, then hit on Done to apply setting and go back to main menu.

Enter Network Settings

14. Now it's time to start installation process by pressing on Begin Installation button and set up a strong password for root account.

INSTALLATION SUMMARY

LOCALIZATION

DATE & TIME
Europe/Bucharest timezone

KEYBOARD
English (US)

LANGUAGE SUPPORT
English (United States)

SOFTWARE

INSTALLATION SOURCE
Local media

SOFTWARE SELECTION
Minimal Install

SYSTEM

INSTALLATION DESTINATION
Custom partitioning selected

NETWORK & HOSTNAME
Wired (eno167...736) connecte

Quit   Begin Installation

http://www.tecmint.com

Click on Begin Installation

CONFIGURATION

USER SETTINGS

ROOT PASSWORD
Root password is set

USER CREATION
No user will be created

Installing linux-firmware (9/310)

entOS Core SIG
oduces the CentOS Linux Distribution.
.centos.org/Sp

http://www.tecmint.com

ROOT PASSWORD

Done

CENTOS 7 INSTALLATION

us

The root account is used for administering the system. Enter a password for the root user.

Root Password: ●●●●●●●●●●●●●

Fair

Confirm: ●●●●●●●●●●●●●

15. After you finish setting up a strong password for root account move to User Creation and create your first system user. You can designate this user to become a System Admin with root privileges using sudo command by checking the box Make this user administrator, then click on Done to go back on main menu and wait for the installation process to finish.

CentOS

USER SETTINGS

ROOT PASSWORD
Root password is set

USER CREATION
Administrator c...will be created

○ Installing openssh-server (269/310)

entOS Cloud-Instance SIG
ntOS instances in public and private cloud environments.
.centos.org/Sp

http://www.tecmint.com

CentOS 7 Installation Process

Done

Full name	caezsar
Username	caezsar

Tip: Keep your username shorter than 32 characters and do not use spaces.

☑ Make this user administrator

☑ Require a password to use this account

Password	••••••••••••

Fair

Confirm password	••••••••••••

Advanced...

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16. After the installation process finishes, the installer will show a successfully message on screen, demanding to reboot your system in order to use it.

CentOS 7 Installation Complete
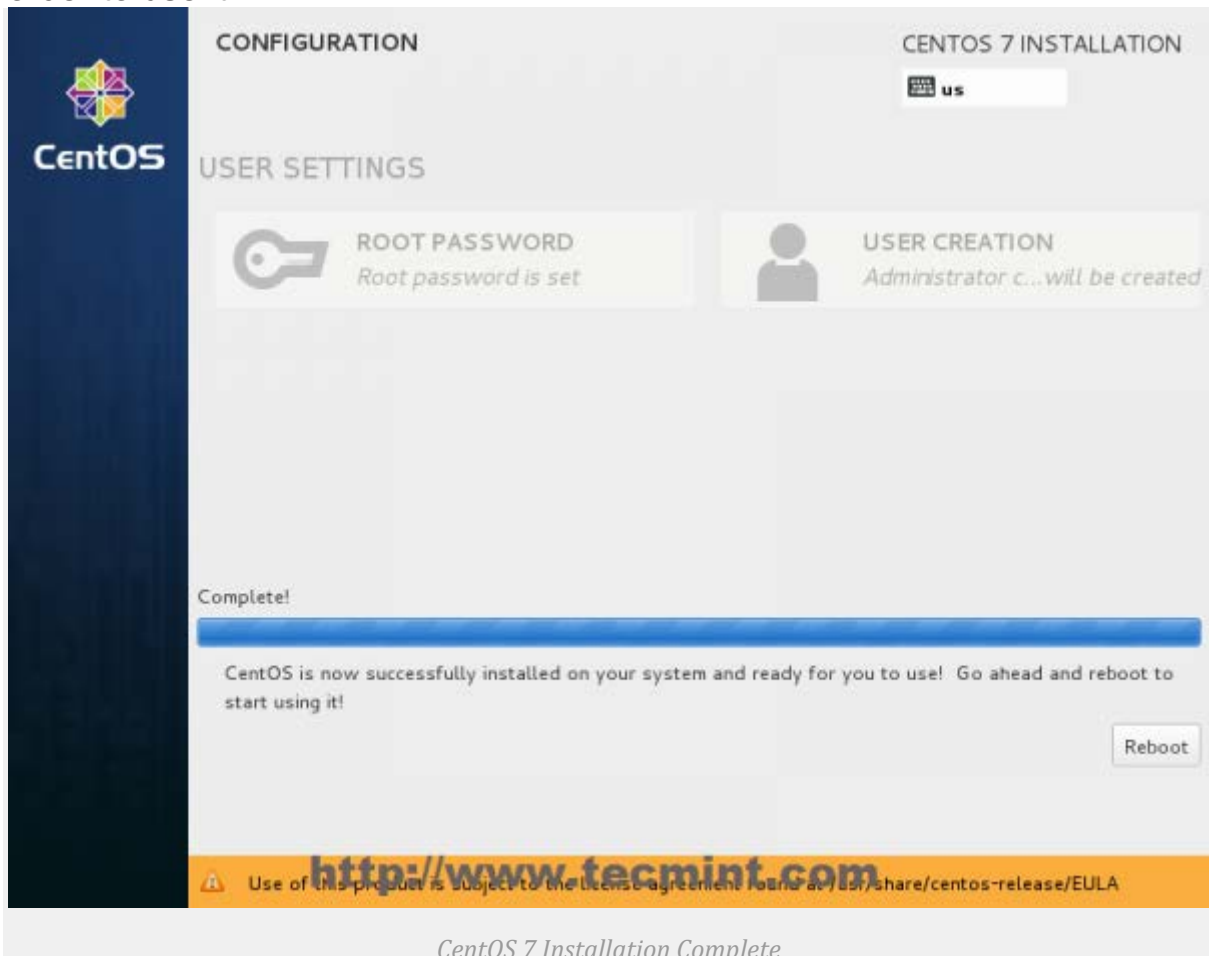
Congratulation! You have now installed last version of CentOS on your bare new machine. Remove any installation media and rebootyour computer so you can login to your new minimal CentOS 7environment and perform other system tasks, such as update you system and install other useful software needed to run day to day tasks.

Note :

If there is any problem in network configuration then you can check following files

ip addr -------- to check ip addresses (same as ifconfig in ubantu

It will show you all available ethernate adaptor on your machine

e.g

enp0s3 -

check whether it is assigned to some i/p if not then assigned to some static ip

use following steps

1. Go to folder /etc/sysconfig/network-scripts -------this folder contains all network related configuration files
2. Find file in which name contains name of ethernate adaptor e.g enp0s3
3. Open the file in vi editor
   # vi ifcf-enp0s3
4. Do the following changes
   1. IPV6INIT=no
   2. BOOTPROTO=none
   3. ONBOOT=yes
5. Add following lines
   IPADDR=192.168.1.1
   PREFIX=24   ---------- this is number of byte for subnet mask instead f this you may
                             add NETMASK=255.255.255.0 in some OS it may be
                             MASK=255.255.255.0
6. Add following line if neccessary

   GATEWAY=192.168.1.254 --------- this is required if you are accessing it

                                       through router 192.168.1.254 --------i/p of router

7. Then we need to restart the service
   #ifdown enpos3
   #ifup enps03