Ubuntu 18.04 LTS Server (Bionic Beaver) Installation Guide
Refer to https://www.linuxtechi.com/ubuntu-18-04-server-installation-guide/

-Now a days Ubuntu is the most widely used Operating system used servers level.
-Canonical had released its latest and stable version of server as Ubuntu 18.04 LTS (Bionic Beaver).
-In this article we will discuss what new features that has been included in this release and also discuss Ubuntu 18.04 Server installation steps.
-Let's look into the new features of Ubuntu 18.04 Server,
    1) Introduction of new Network configuration utility "netplan", It is used to configure Static IP and Bridge.
    2) Python version 3.6
    3) New updated Linux Container manager LXD 3.0
    4) Updated QEMU 2.11.1
    5) Updated libvirt 4.0
    6) Updated Open vSwitch 2.9
    7) Chrony has been replaced NTP for time syncing
    8) PHP has been updated to PHP 7.2
    9) New Version of OpenStack "Queen" has been included.
    10) Cloud-init has been updated to 18.2

-Let's jump into the Installation guide,
-Minimum system requirement for Ubuntu 18.04 Server

    --2 GB RAM
    --20 GB hard disk Space
    --Dual core Processor (2 GHZ)
    --Installer Media (USB / DVD)

Step 1. Download Ubuntu 18.04 Server ISO file
    1)Download the Ubuntu 18.04 Server ISO file from the Ubuntu official web site:

        http://releases.ubuntu.com/18.04/

    2)Once the file is downloaded then burn it either into USB or DVD and make it Bootable.
    3)In Case you have downloaded the iso file in Ubuntu desktop then refer the following:

        How to Create Bootable USB Disk / DVD on Ubuntu / Linux Mint
            https://www.linuxtechi.com/create-bootable-usb-disk-dvd-ubuntu-linux-mint/

Step 2. Boot system (or server) with bootable media
    1)Now reboot your target system or server, go to the bios settings and change the boot sequence, select the bootable media that you have created in step:1

    2)Welcome
        -Select your preferred language and then hit enter : English
    3)Keyboard configuration
        -Select the preferred Keyboard layout that suits to your installation, in my case I am taking as default.
            --Layout : English (US)
            --Variant : English (US)

    4)Ubuntu 18.04
        -Choose "Install Ubuntu" option and then hit enter,

Step 3. Choose your Network and Proxy Configuration
    1)Network connections
        -Choose the network configuration that suits your environment, by default it will try to pick IP address from the DHCP server.
        -In my case I am selecting the default option and later on I will demonstrate how to configure static ip address.
        -Choose "Done" and then press enter
    2)Configure proxy
        -If your system is connected to the internet via some proxy servers then specify the details of proxy else leave it as blank,
    3)Configure Ubuntu archive mirror
        -Mirror address : default setting

Step 4. Choose partitioning scheme either as automatic or manual

1) Filesystem setup
   - Select the partitioning scheme either as automatic or manual.
   - In this tutorial I will demonstrate how to create your own partition table using manual method.
   - So select “Manual” option and then hit enter,
2) As we can see I have 50 GB space for Ubuntu 18.04 Server installation, we will create the following partitions on it,

   - Swap = 4 GB (ext4 file system)
   - /boot = 0.5GB (ext4 file system)
   - / = 44.5GB (ext4 file system)

3) 50.000G local disk -> Add Partition
   - Size (max 50.0G) : 4GB
   - Format : swap
   - Create
   - SWAP 4.000G swap partition of local disk

4) 50.000G local disk -> Add Partition
   - Size (max 45.997G) : 0.5G
   - Format : ext4
   - Mount : /boot
   - Create
   - /boot 512.000M ext4 partition of local disk

5) 50.000G local disk -> Add Partition
   - Size (max 45.497G) : leave blank
   - Format : ext4
   - Mount : /
   - Create
   - / 45.497G ext4 partition of local disk

6) Done

7) Confirm destructive action
   - Select “Continue” to write changes on the disk

Step 5. Specify User details, hostname and start the installation

1) Profile setup
   - Specify the user name, its password and hostname for your system.
     --Your name :
     --Your server's name :
     --Pick a username :
     --Choose a password :
     --Confirm your password :
     --Import SSH identity : No

2) Installing system
   - Choose Done to proceed with installation
   - Done

3) Installation complete!
   - You will be prompted to reboot your system once the installation is completed.

4) Reboot Now

5) Remove the installation media and change the boot sequence and set it as hard disk.
   - Please remove the installation medium, then press ENTER:

Step 6. Login after Ubuntu 18.04 Server Installation

Ubuntu 18.04 LTS webserver tty1
webserver login:

Step 7. To do after installation Ubuntu Server 18.04 LTS

1) Ubuntu Cache Update

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        $ sudo apt-get update

    2)Ubuntu Upgrade

        $ sudo apt-get upgrade

    3)Ubuntu Firewall enable

        $ sudo ufw enable

    4)Timezone setting
        -How to Check the Current Time Zone
            --Open your Terminal application through Ubuntu Dash or through the
            Ctrl+Alt+T shortcut.
            --Enter the following command in order to view information about your
            system's time and time zone:

                $ timedatectl

            --You can also view this information by using the following command:

                $ ls -l /etc/localtime

        -How to Change the Time Zone
            --Open the Terminal and enter the following command in order to list all
            the timezones of the specified zone:

                $ timedatectl list-timezones | grep -i asia

            --First, let us unlink the system time with local time through the
            following command:

                $ sudo unlink /etc/localtime

            --The next step is to use the following command to set a new time zone:

                $ sudo ln -s /usr/share/zoneinfo/Asia/Seoul /etc/localtime

        -Check
            $ timedatectl
            or
            $ ls -l /etc/localtime


Step 8. Configure static IP address in Ubuntu 18.04 Server
    1) $ ip link
    2)  As we discussed in the features section, network configuration in Ubuntu
    18.04 server is controlled by "netplan" utility.
    3)To configure the static ip address, edit the file
    "/etc/netplan/50-cloud-init.yaml"

        $ sudo nano /etc/netplan/50-cloud-init.yaml

    4)Replace the IP address details, gateway and dns server that suits your
    environment.

        network:
             ethernets:
                    enp0s3:
                             addresses: []
                                dhcp4: true
                    enp0s8:
                             addresses: [192.168.56.x/24]
                                gateway4: 192.168.56.1
                                dhcp4: false
                version: 2

    5)Now apply these changes using below netplan command

        $ sudo netplan apply

    6)If you want to run above netplan command in debug command, then execute below
    command,
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198
199             $ sudo netplan apply --debug
200
201         7)Now you can verify the IP address details using ip command
202
203             $ ip add show
204
```