System Installation Guide

Yeastar K2 IP-PBX

Version: 2.0
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Contents

System Installation Guide

About this guide

This guide describes how to install Yeastar K2 IPPBX system in your own physical machine or virtual machine. In this guide, we also provide procedures of K2 system activation and expansion.

Audience

This guide is for the person who only buys Yeastar K2 IPPBX software, and wants to install the K2 IPPBX system in his/her own machine.

Hardware and System Requirements

This topic provides the hardware system requirements, the tested and supported Virtual Machine (VM) Platforms for installing Yeastar K2 IPPBX system.

Hardware Requirements

System performance depends on the following key factors:

- How many concurrent calls will the system handle
- Which codecs are used to make calls
- If call recording is used.

Based on the factors, your system hardware should meets the minimal requirements:

Table 1:

Hardware	200 Concurrent Calls	300 Concurrent Calls	500 Concurrent Calls
Recommended Server	Dell EMC PowerEdge R240		
CPU	Intel(R) Xeon(R) CPU E-2124 • Cores: 4 • Threads: 4 • CPU Frequency: 3.4GHz	Intel(R) Xeon(R) CPU E-2124 • Cores: 4 • Threads: 4 • CPU Frequency: 3.4GHz	Intel(R) Xeon(R) CPU E-2144G • Cores: 4 • Threads: 8 • CPU Frequency: 3.6GHz
RAM	8 GB	8 GB	8 GB
Hard Disk (Call Recording Disabled)	50 GB	50 GB	50 GB
Hard Disk (Call Recording Enabled)	1 TB	1 TB	1 TB

Supported Virtual machine (VM) Platforms

The tested and supported VM platforms:

- VMware 12.0 or later
- Hyper-v-6.3.9600.16384 or later
- KVM 2.5.0 or later

Install K2 System on a Virtual Machine

Install Yeastar K2 System on VMware Workstation

This topic describes how to install Yeastar K2 IPPBX system on VMware workstation 12.0.

Before You Begin

To install the K2 system on a virtual machine, make sure that both the Virtual machine and the hardware meets the requirements.

- Hardware requirements
- Supported virtual machine platforms

Step 1. Configure language and location

The installer will begin with a prompt to select a language for the installation wizard.

1. Select a language for the installation wizard.

2. Select **Install Ubuntu Server**.

3. Select a language to be used for the installation process and installed system.

4. Select your location based on the language you selected.

```
┤ [!!] Select your location ├

The selected location will be used to set your time zone and also for example to help
select the system locale. Normally this should be the country where you live.

This is a shortlist of locations based on the language you selected. Choose "other" if
your location is not listed.

Country, territory or area:

                              Antigua and Barbuda
                              Australia
                              Botswana
                              Canada
                              Hong Kong
                              India
                              Ireland
                              New Zealand
                              Nigeria
                              Philippines
                              Singapore
                              South Africa
                              United Kingdom
                              United States
                              Zambia
                              Zimbabwe
                              other

        <Go Back>
```

Step 2. Configure the keyboard

1. Select **NO**, not to do keyboard layout detection.

```
┤ [!] Configure the keyboard ├

You can try to have your keyboard layout detected by pressing a series of keys. If you do
not want to do this, you will be able to select your keyboard layout from a list.

Detect keyboard layout?

   <Go Back>                                                      <Yes>      <No>
```

2. Select a country of origin for the keyboard of this computer.

```
┤ [!] Configure the keyboard ├

The layout of keyboards varies per country, with some countries having multiple common
layouts. Please select the country of origin for the keyboard of this computer.

Country of origin for the keyboard:

                        Armenian                                    ↑
                        Azerbaijani
                        Bambara
                        Bangla
                        Belarusian
                        Belgian
                        Bosnian
                        Braille                              ▪
                        Bulgarian
                        Burmese
                        Chinese
                        Croatian
                        Czech
                        Danish
                        Dhivehi
                        Dutch
                        Dzongkha
                        English (Cameroon)
                        English (Ghana)
                        English (Nigeria)
                        English (South Africa)
                        English (UK)
                        English (US)                        ↓

        <Go Back>
```

3. Select the layout matching the keyboard for your machine.

```
┤ [!] Configure the keyboard ├

Please select the layout matching the keyboard for this machine.

Keyboard layout:

English (US)
English (US) - Cherokee
English (US) - English (Colemak)
English (US) - English (Dvorak alternative international no dead keys)
English (US) - English (Dvorak)
English (US) - English (Dvorak, international with dead keys)
English (US) - English (Macintosh)
English (US) - English (US, alternative international)
English (US) - English (US, international with dead keys)
English (US) - English (US, with euro on 5)
English (US) - English (Workman)
English (US) - English (Workman, international with dead keys)
English (US) - English (classic Dvorak)
English (US) - English (international AltGr dead keys)
English (US) - English (left handed Dvorak)
English (US) - English (programmer Dvorak)
English (US) - English (right handed Dvorak)
English (US) - English (the divide/multiply keys toggle the layout)
English (US) - Russian (US, phonetic)
English (US) - Serbo-Croatian (US)

    <Go Back>
```

Step 3. Plan and create partition disk

1. Select **Manual** partitioning method.

```
┤ [!!] 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>
```

2. Delete all the existed partition disk.
3. Select the partition of the virtual machine.

```
┤ [!!] Partition disks ├

This is an overview of your currently configured partitions and mount points. Select a
partition to modify its settings (file system, mount point, etc.), a free space to create
partitions, or a device to initialize its partition table.

                    Guided partitioning
                    Configure iSCSI volumes

                    SCSI33 (0,0,0) (sda) - 1.1 TB VMware, VMware Virtual S

                    Undo changes to partitions
                    Finish partitioning and write changes to disk

    <Go Back>
```

4. Select **Yes** to create new empty partition table on this device.

```
┤ [!!] Partition disks ├

You have selected an entire device to partition. If you proceed with creating a new
partition table on the device, then all current partitions will be removed.

Note that you will be able to undo this operation later if you wish.

Create new empty partition table on this device?

    <Go Back>                                         <Yes>      <No>
```
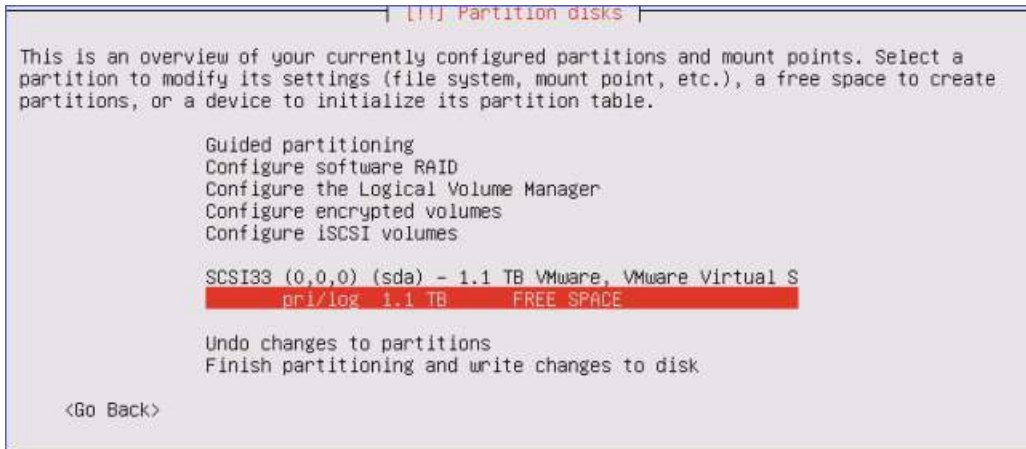
5. Create partition 1: root directory for system files

   a. Select the **FREE SPACE** to create partition 1.

```
┤ [!!] Partition disks ├

This is an overview of your currently configured partitions and mount points. Select a
partition to modify its settings (file system, mount point, etc.), a free space to create
partitions, or a device to initialize its partition table.

                Guided partitioning
                Configure software RAID
                Configure the Logical Volume Manager
                Configure encrypted volumes
                Configure iSCSI volumes

                SCSI33 (0,0,0) (sda) - 1.1 TB VMware, VMware Virtual S
                     pri/log  1.1 TB        FREE SPACE

                Undo changes to partitions
                Finish partitioning and write changes to disk

        <Go Back>
```

b. Select **Create a new partition**.

```
┤ [!!] Partition disks ├

How to use this free space:

Create a new partition
Automatically partition the free space
Show Cylinder/Head/Sector information

      <Go Back>
```

c. Set the partition size.

Partition size recommend: 50GB.

```
┤ [!!] Partition disks ├

The maximum size for this partition is 1.1 TB.

Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage
(e.g. "20%") to use that percentage of the maximum size.

New partition size:

50GB

    <Go Back>                                              <Continue>
```

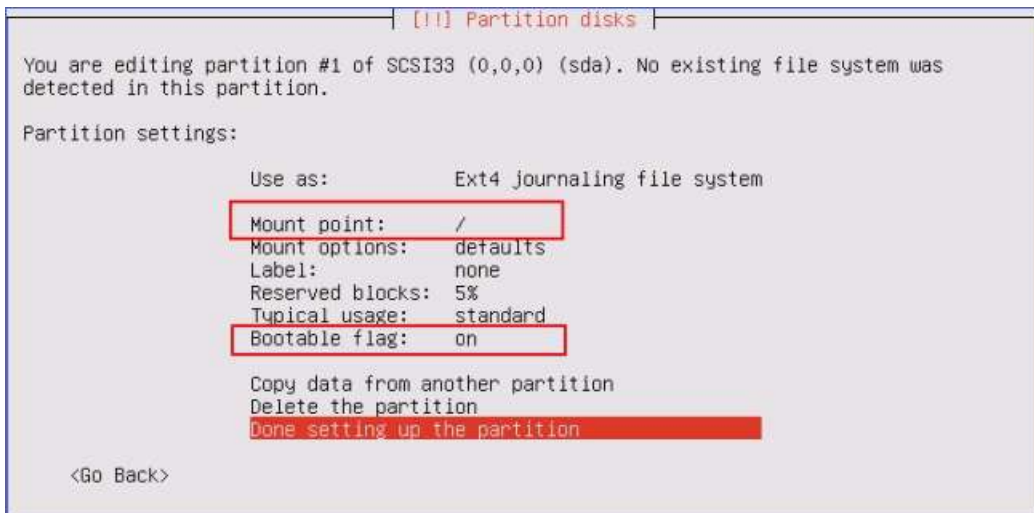**d.** Choose the partition type as **Primary**.

e. Select location for the partition as **Beginning**.
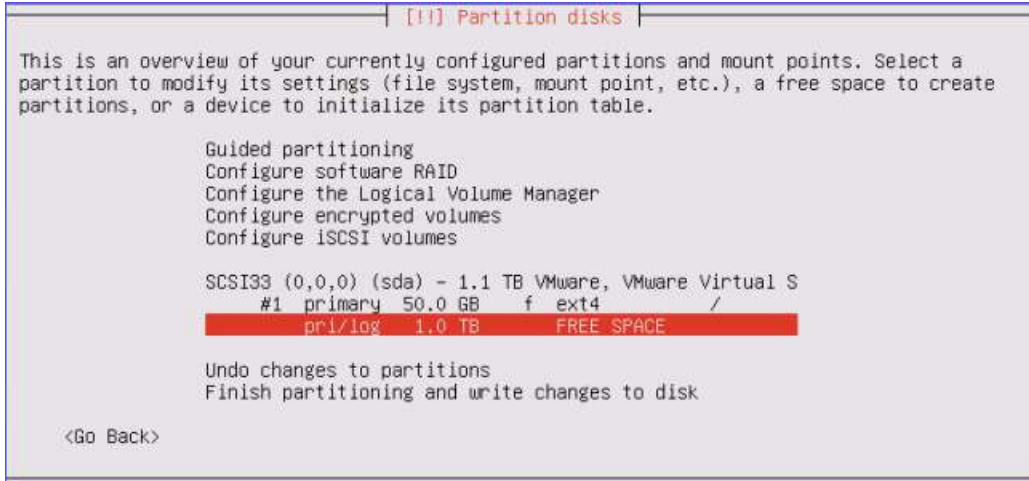

f. Set **Use as** and **Mount point** for the partition 1, then select **Done settings up the partition**.

- **Use as**: Ext4 journaling file system
- **Mount point**: /
- **Bootable flag**: on

6. Create partition 2: home directory for data and recordings.

a. Select the **FREE SPACE** to create partition 2.

```
┤ [!!] Partition disks ├
This is an overview of your currently configured partitions and mount points. Select a
partition to modify its settings (file system, mount point, etc.), a free space to create
partitions, or a device to initialize its partition table.

                    Guided partitioning
                    Configure software RAID
                    Configure the Logical Volume Manager
                    Configure encrypted volumes
                    Configure iSCSI volumes

                    SCSI33 (0,0,0) (sda) - 1.1 TB VMware, VMware Virtual S
                        #1  primary  50.0 GB    f  ext4          /
                             pri/log   1.0 TB         FREE SPACE

                    Undo changes to partitions
                    Finish partitioning and write changes to disk

        <Go Back>
```

b. Select **Create a new partition**.

```
┤ [!!] Partition disks ├

  How to use this free space:

   Create a new partition
   Automatically partition the free space
   Show Cylinder/Head/Sector information

        <Go Back>
```
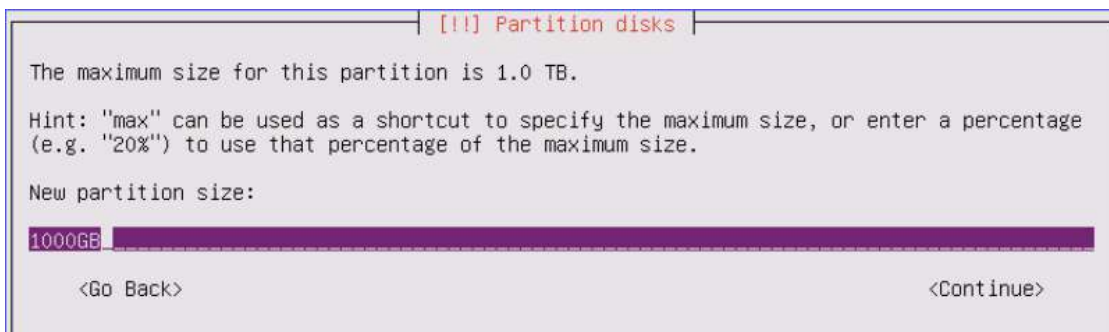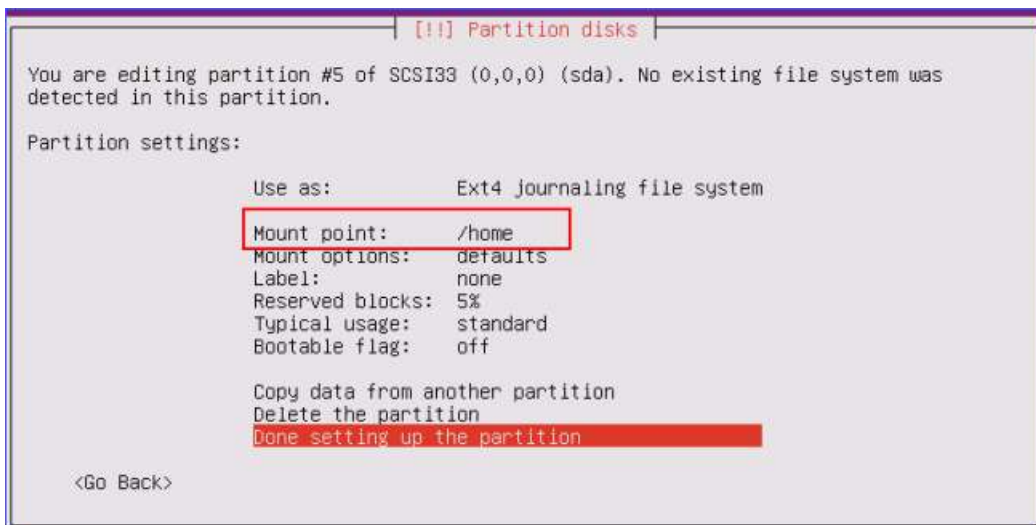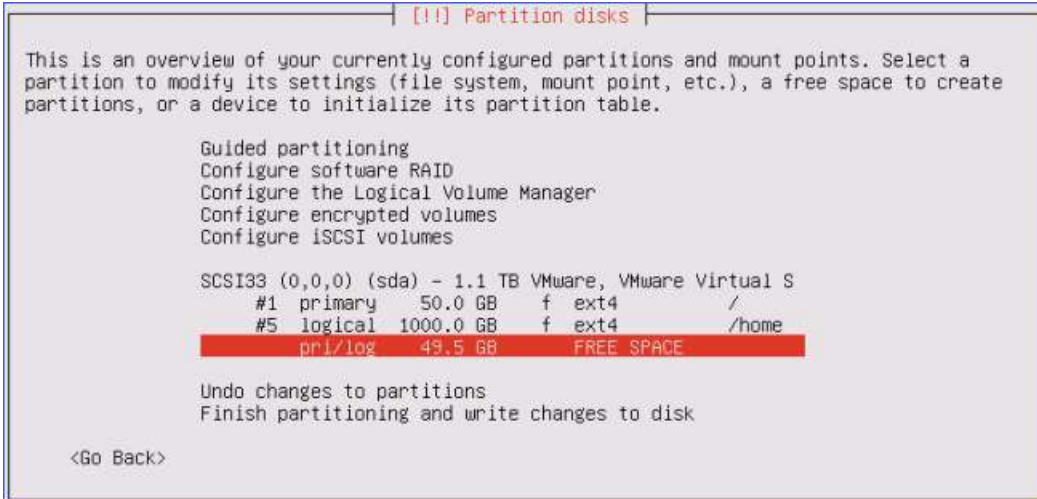
c. Set the partition size.

> 📝 **Note:**
> - 1000-minute recordings require about 1GB space.
> - We recommend that you set a larger space for the partition to have more space to store your recordings and other data.

```
┤ [!!] Partition disks ├

  The maximum size for this partition is 1.0 TB.

  Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage
  (e.g. "20%") to use that percentage of the maximum size.

  New partition size:

  1000GB_

      <Go Back>                                                      <Continue>
```

d. Choose the partition type as **Logical**.

```
                ┤ [!!] Partition disks ├

   Type for the new partition:

                  Primary
                  Logical

           <Go Back>
```

e. Select location for the partition as **Beginning**.

```
                        ┤ [!!] Partition disks ├

   Please choose whether you want the new partition to be created at the beginning or at the
   end of the available space.

   Location for the new partition:

                              Beginning
                              End

        <Go Back>
```

f. Set **Use as** and **Mount point** for the partition 2, then select **Done settings up the partition**.

- Use as: Ext4 journaling file system
- Mount point: /home

```
                        ┤ [!!] Partition disks ├

   You are editing partition #5 of SCSI33 (0,0,0) (sda). No existing file system was
   detected in this partition.

   Partition settings:

                   Use as:           Ext4 journaling file system

                   Mount point:      /home
                   Mount options:    defaults
                   Label:            none
                   Reserved blocks:  5%
                   Typical usage:    standard
                   Bootable flag:    off

                   Copy data from another partition
                   Delete the partition
                   Done setting up the partition

        <Go Back>
```

7. Create partition 3: swap area for storing data when system hibernates.

a. Select the **FREE SPACE** to create a new partition.

```
┤ [!!] Partition disks ├

This is an overview of your currently configured partitions and mount points. Select a
partition to modify its settings (file system, mount point, etc.), a free space to create
partitions, or a device to initialize its partition table.

              Guided partitioning
              Configure software RAID
              Configure the Logical Volume Manager
              Configure encrypted volumes
              Configure iSCSI volumes

              SCSI33 (0,0,0) (sda) - 1.1 TB VMware, VMware Virtual S
                  #1  primary    50.0 GB    f  ext4              /
                  #5  logical  1000.0 GB    f  ext4              /home
                         pri/log    49.5 GB         FREE SPACE

              Undo changes to partitions
              Finish partitioning and write changes to disk

      <Go Back>
```
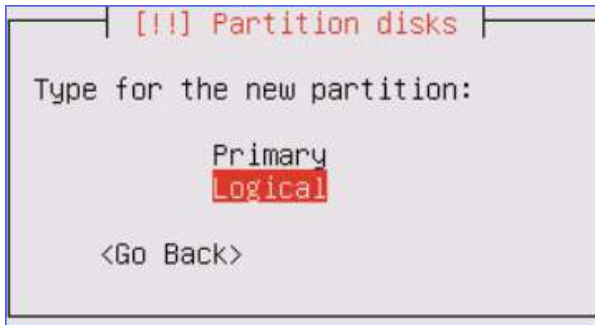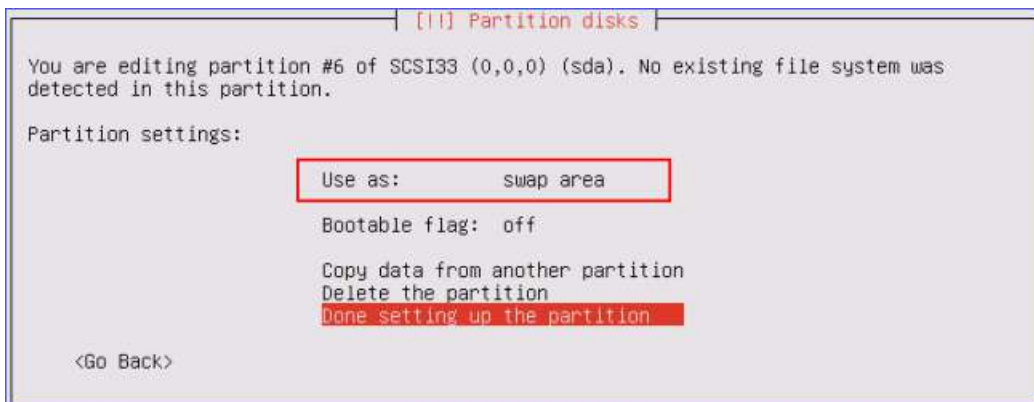
b. Select **Create a new partition**.

```
┤ [!!] Partition disks ├

  How to use this free space:

    Create a new partition
    Automatically partition the free space
    Show Cylinder/Head/Sector information

        <Go Back>
```

c. Set the partition size.

Partition size recommend: 10G.

```
┤ [!!] Partition disks ├

  The maximum size for this partition is 49.5 GB.

  Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage
  (e.g. "20%") to use that percentage of the maximum size.

  New partition size:

  49.5 GB_____

      <Go Back>                                                    <Continue>
```

d. Choose the partition type as **Logical**.

```
                 ┤ [!!] Partition disks ├

     Type for the new partition:

                      Primary
                      Logical

              <Go Back>
```

e. Select location for the partition as **Beginning**.

```
                              ┤ [!!] Partition disks ├

     Please choose whether you want the new partition to be created at the beginning or at the
     end of the available space.

     Location for the new partition:

                                      Beginning
                                      End

         <Go Back>
```

f. Set **Use as** for the partition 3, then select **Done settings up the partition**.

- Use as: swap area

```
                              ┤ [!!] Partition disks ├

     You are editing partition #6 of SCSI33 (0,0,0) (sda). No existing file system was
     detected in this partition.

     Partition settings:

                          Use as:          swap area

                          Bootable flag:  off

                          Copy data from another partition
                          Delete the partition
                          Done setting up the partition

         <Go Back>
```

8. Select **Finish partitioning and write changes to disk**.

```
┤ [!!] Partition disks ├

This is an overview of your currently configured partitions and mount points. Select a
partition to modify its settings (file system, mount point, etc.), a free space to create
partitions, or a device to initialize its partition table.

                 Guided partitioning
                 Configure software RAID
                 Configure the Logical Volume Manager
                 Configure encrypted volumes
                 Configure iSCSI volumes

                 SCSI33 (0,0,0) (sda) - 1.1 TB VMware, VMware Virtual S
                     #1  primary    50.0 GB    f  ext4    /
                     #5  logical  1000.0 GB    f  ext4    /home
                     #6  logical    49.5 GB    f  swap    swap

                 Undo changes to partitions
                 Finish partitioning and write changes to disk

       <Go Back>
```

9. Select **Yes**, write the changes to disks.

```
┤ [!!] Partition disks ├

If you continue, the changes listed below will be written to the disks. Otherwise, you
will be able to make further changes manually.

The partition tables of the following devices are changed:
   SCSI33 (0,0,0) (sda)

The following partitions are going to be formatted:
   partition #1 of SCSI33 (0,0,0) (sda) as ext4
   partition #5 of SCSI33 (0,0,0) (sda) as ext4
   partition #6 of SCSI33 (0,0,0) (sda) as swap

Write the changes to disks?

   <Yes>                                                              <No>
```

Step 4. Install the IPPBX System

After finishing partitioning and write changes to disk, the virtual machine starts to install the system. Wait for a few minutes for the installation.

1. Select **No automatic updates**.

    ⚠ **Important:** Do not select other options.

```
┤ [!] Configuring tasksel ├

Applying updates on a frequent basis is an important part of keeping your system secure.

By default, updates need to be applied manually using package management tools.
Alternatively, you can choose to have this system automatically download and install
security updates, or you can choose to manage this system over the web as part of a group
of systems using Canonical's Landscape service.

How do you want to manage upgrades on this system?

                       No automatic updates
                       Install security updates automatically
                       Manage system with Landscape
```
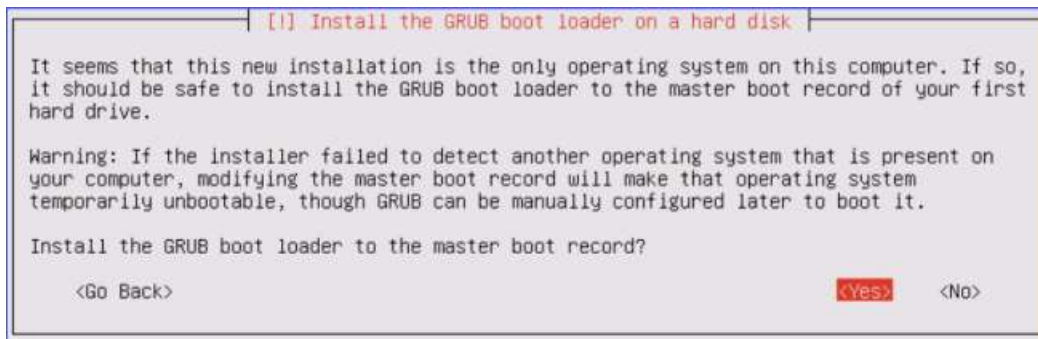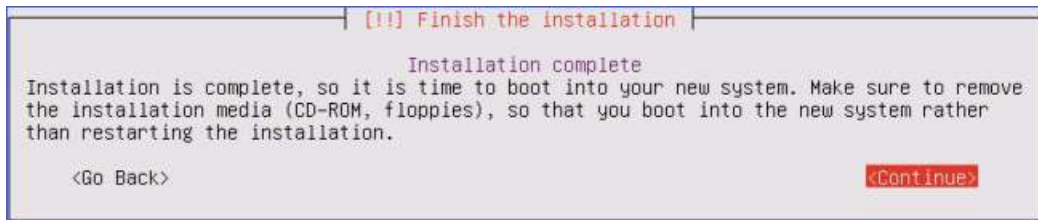
2. Press **Tab** to select **Continue** to skip this step.

```
┤ [!] Software selection ├

At the moment, only the core of the system is installed. To tune the system to your
needs, you can choose to install one or more of the following predefined collections of
software.

Choose software to install:

                        [ ] OpenSSH server
                        [ ] DNS server
                        [ ] LAMP server
                        [ ] Mail server
                        [ ] PostgreSQL database
                        [ ] Print server
                        [ ] Samba file server
                        [ ] Tomcat Java server
                        [ ] Virtual Machine host
                        [ ] Manual package selection

                            <Continue>
```

3. Select **Yes** to install the GPUB boot loader.

```
┤ [!] Install the GRUB boot loader on a hard disk ├

It seems that this new installation is the only operating system on this computer. If so,
it should be safe to install the GRUB boot loader to the master boot record of your first
hard drive.

Warning: If the installer failed to detect another operating system that is present on
your computer, modifying the master boot record will make that operating system
temporarily unbootable, though GRUB can be manually configured later to boot it.

Install the GRUB boot loader to the master boot record?

    <Go Back>                                          <Yes>    <No>
```

4. Select **Continue** to boot into your system.

```
┤ [!!] Finish the installation ├

                        Installation complete
Installation is complete, so it is time to boot into your new system. Make sure to remove
the installation media (CD-ROM, floppies), so that you boot into the new system rather
than restarting the installation.

    <Go Back>                                                  <Continue>
```

When the following screen displays, the IPPBX system is successfully installed.
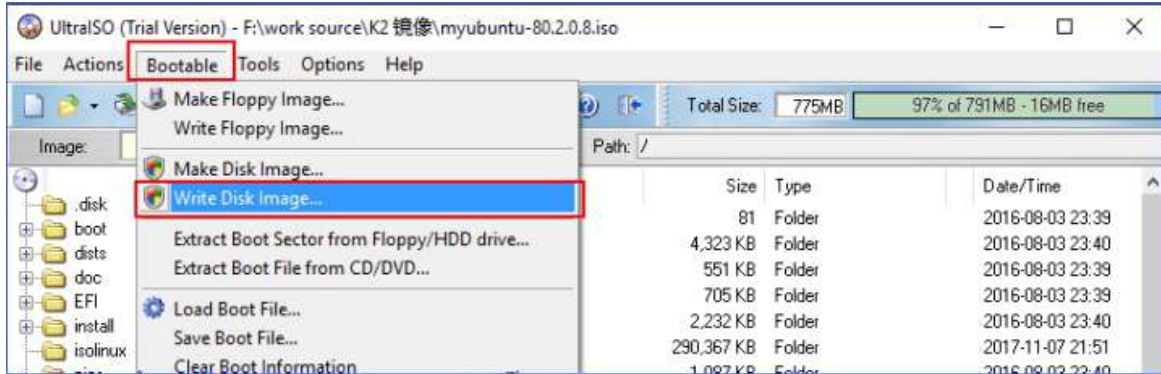
Install K2 System on a Physical Machine

Write Yeastar K2 Image in a USB

If you choose to install Yeastar K2 IPPBX system on a physical machine, you need to write K2 image in the USB in advance. The instructions below introduces how to write K2 image in a USB via UltraISO.
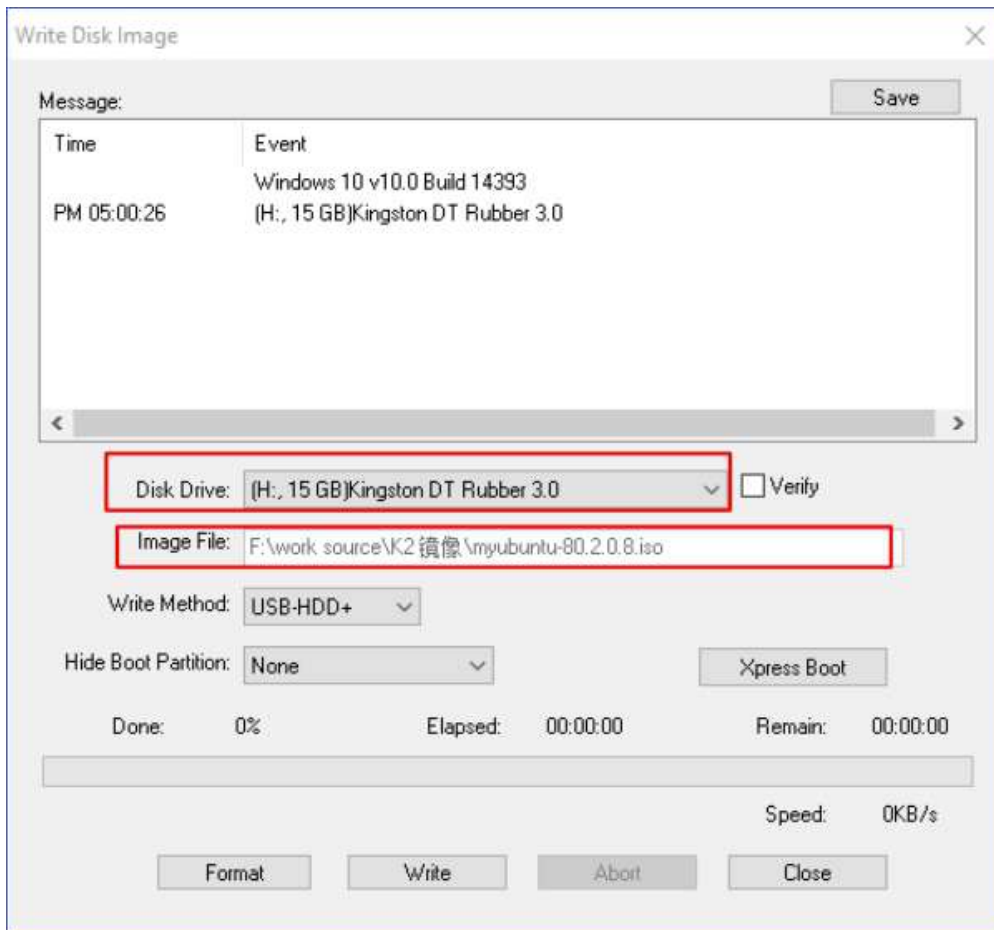
1. Format your USB with FAT32.
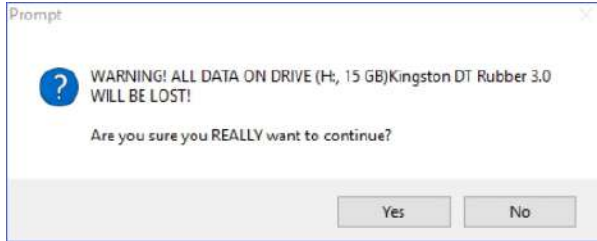2. Open the K2 image file via UltraISO.
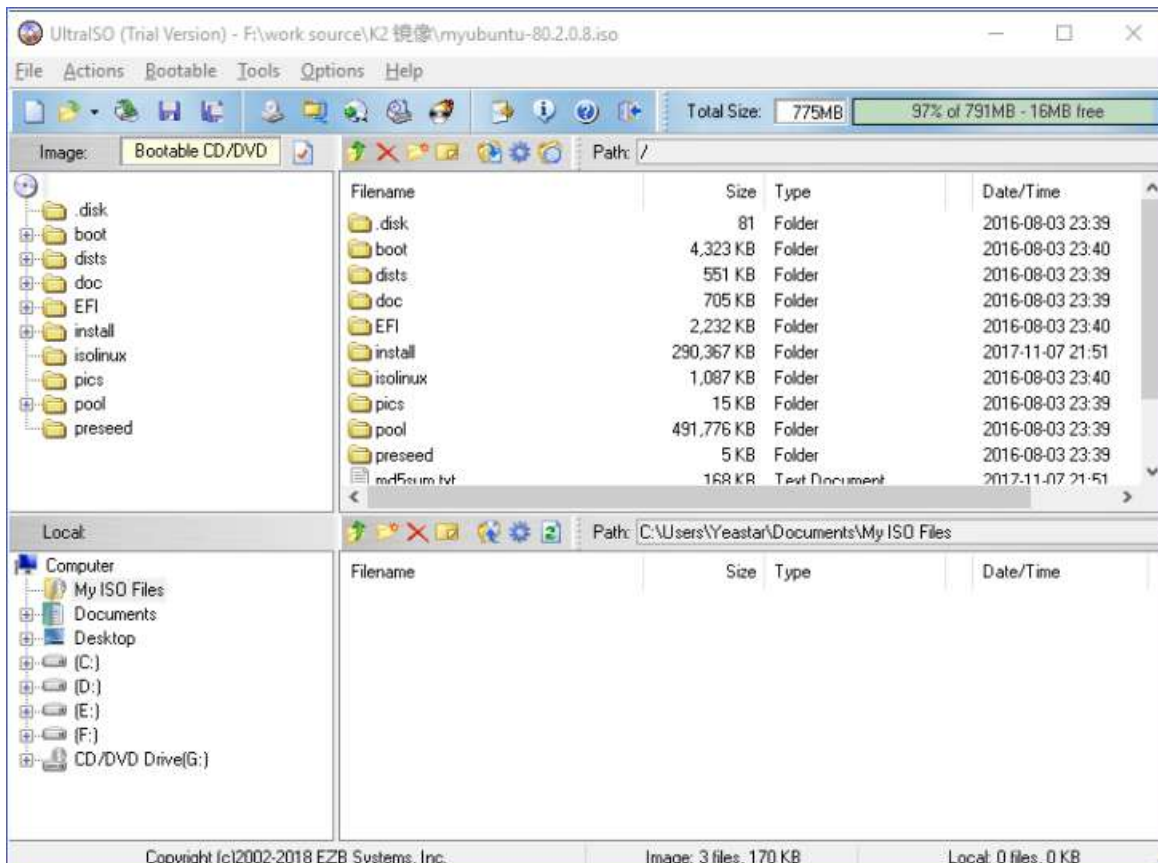

3. Click **Bootable→Write Disk Image**.

4. Choose your USB drive as **Disk Drive**, and choose the K2 image file, then click **Write**.

5. Click **Yes** to start writing image.

Prompt

WARNING! ALL DATA ON DRIVE (H:, 15 GB)Kingston DT Rubber 3.0 WILL BE LOST!

Are you sure you REALLY want to continue?

Yes   No

6. After the process of writing image is completed, you can check your USB drive.

   The USB should contain the files as the following figure shows.
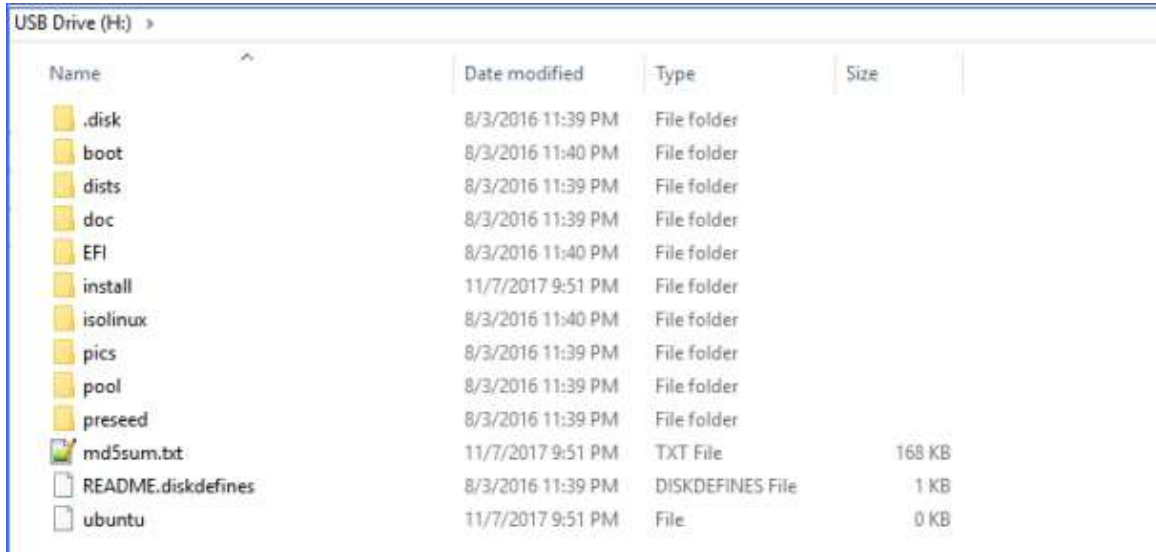
What's Next:

Install Yeastar K2 System on VMware Workstation

Install Yeastar K2 IPPBX System on Dell EMC PowerEdge R240 Server

This topic describes how to install Yeastar K2 system on Dell EMC PowerEdge R240 server.

Before You Begin

You need to write Yeastar K2 image in a USB, then connect the USB driver to the physical machine to start installing the K2 system.

Step1. Prepare before Installation Process

 Note: Do not connect Dell EMC PowerEdge R240 Server to network, or problems may occur during the installation process.

1. Connect the USB driver to the USB 2.0 port on Dell EMC PowerEdge R240 Server.

    Note:
    - The USB 2.0 port is at the right side of the front panel.
    - The installation process cannot work with USB 3.0.

2. Press the power button to power on the device.

3. When you see the following figure, press F2 immediately to enter system setup.

> 📝 **Note:** If you don't press F2 in time to enter the system setup, reboot the device to try again.
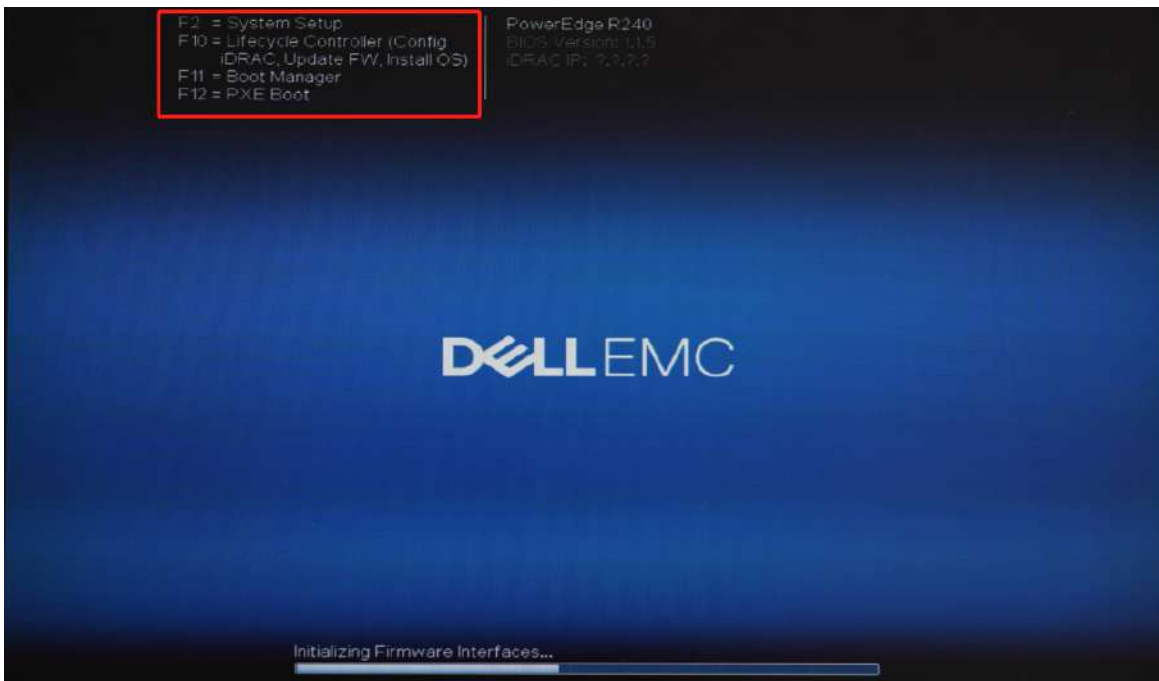
4. Go to **System BIOS→ Boot Settings**, set the **Boot Mode** to **UEFI**.

5. Press **Esc** key twice to exist **System BIOS Settings**, then select **Yes** to save the setting.
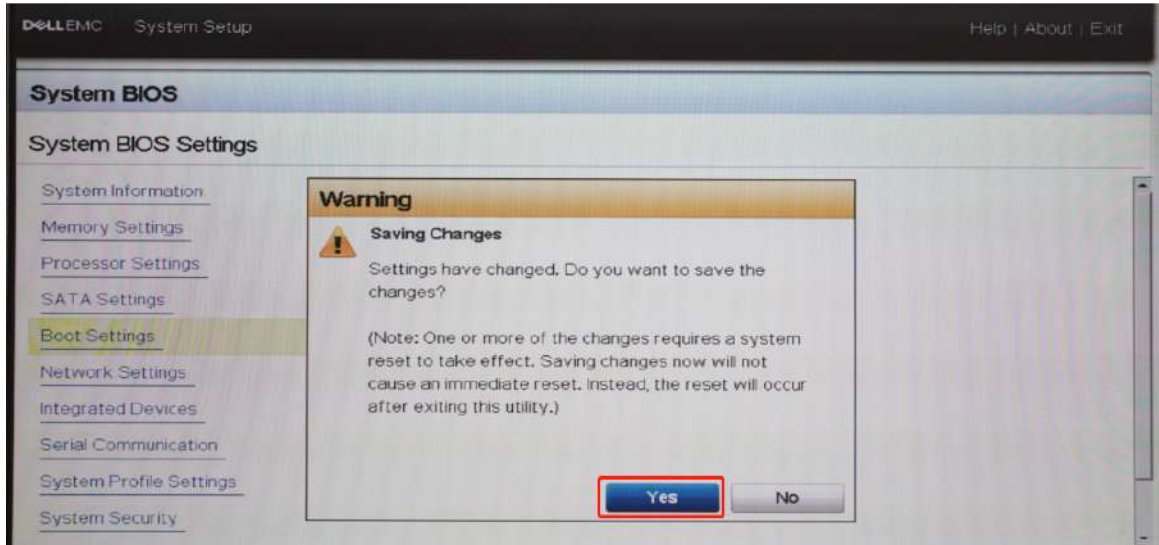
6. Press **Ctrl** + **Alt** + **Delete** key to reboot the sever.
7. During boot, press **F11** to enter the **Boot Manager**.
8. Select **One-shot UEFI Boot Menu**, then select **Disk connected to front USB 1: DT Rubber 3.0**.
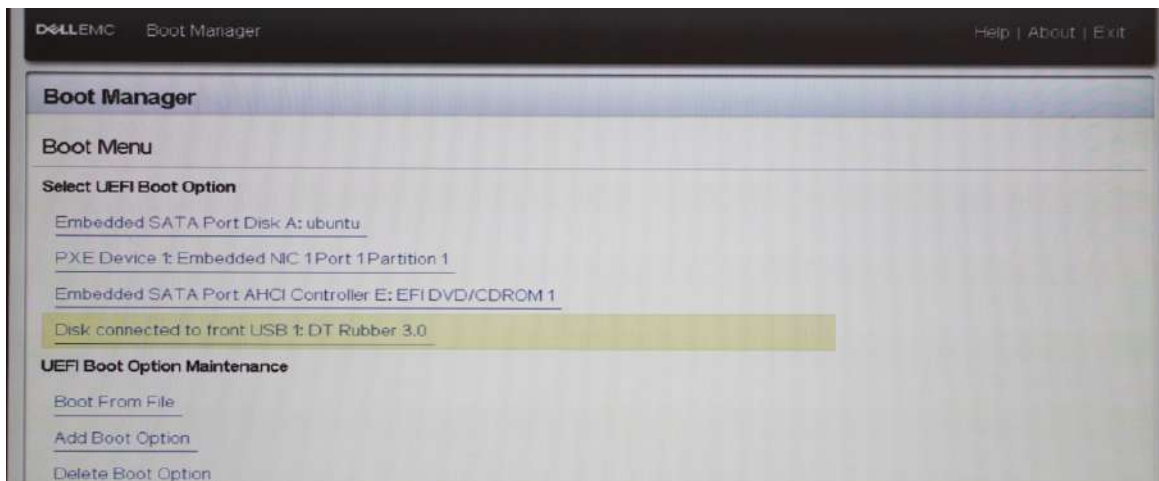
9. Select **Install Ubuntu Server** to install K2 system.

Step 2. Configure language and location

The installer will begin with a prompt to select a language for the installation process.

1. Select a language to be used for the installation process and installed system.

```
┤ [!!] Select a language ├

Choose the language to be used for the installation process. The selected language will
also be the default language for the installed system.

Language:

                    C                       -  No localization          ↑
                    Albanian                -  Shqip
                    Arabic                  -  عربي
                    Asturian                -  Asturianu
                    Basque                  -  Euskara
                    Belarusian              -  Беларуская
                    Bosnian                 -  Bosanski                  ▪
                    Bulgarian               -  Български
                    Catalan                 -  Català
                    Chinese (Simplified)    -  中文(简体)
                    Chinese (Traditional)   -  中文(繁體)
                    Croatian                -  Hrvatski
                    Czech                   -  Čeština
                    Danish                  -  Dansk
                    Dutch                   -  Nederlands
                    English                 -  English
                    Esperanto               -  Esperanto
                    Estonian                -  Eesti
                    Finnish                 -  Suomi
                    French                  -  Français
                    Galician                -  Galego
                    German                  -  Deutsch
                    Greek                   -  Ελληνικά                  ↓

        <Go Back>
```
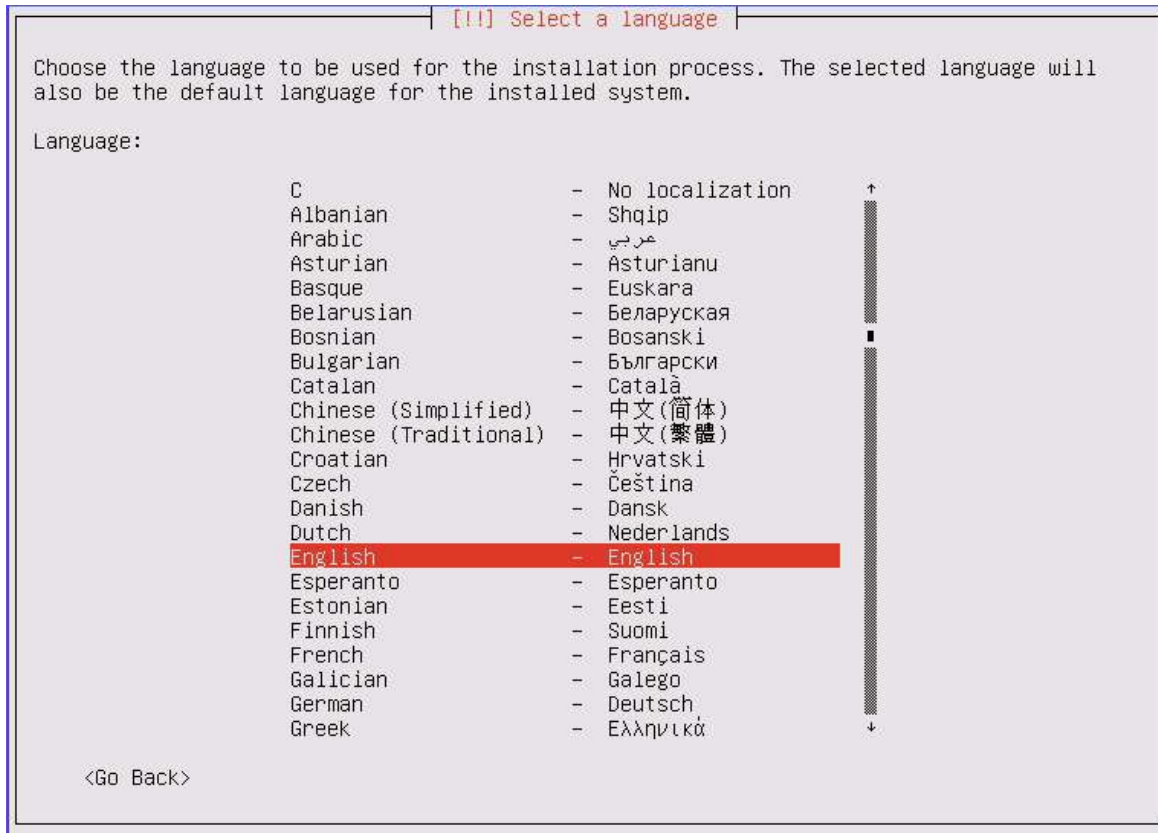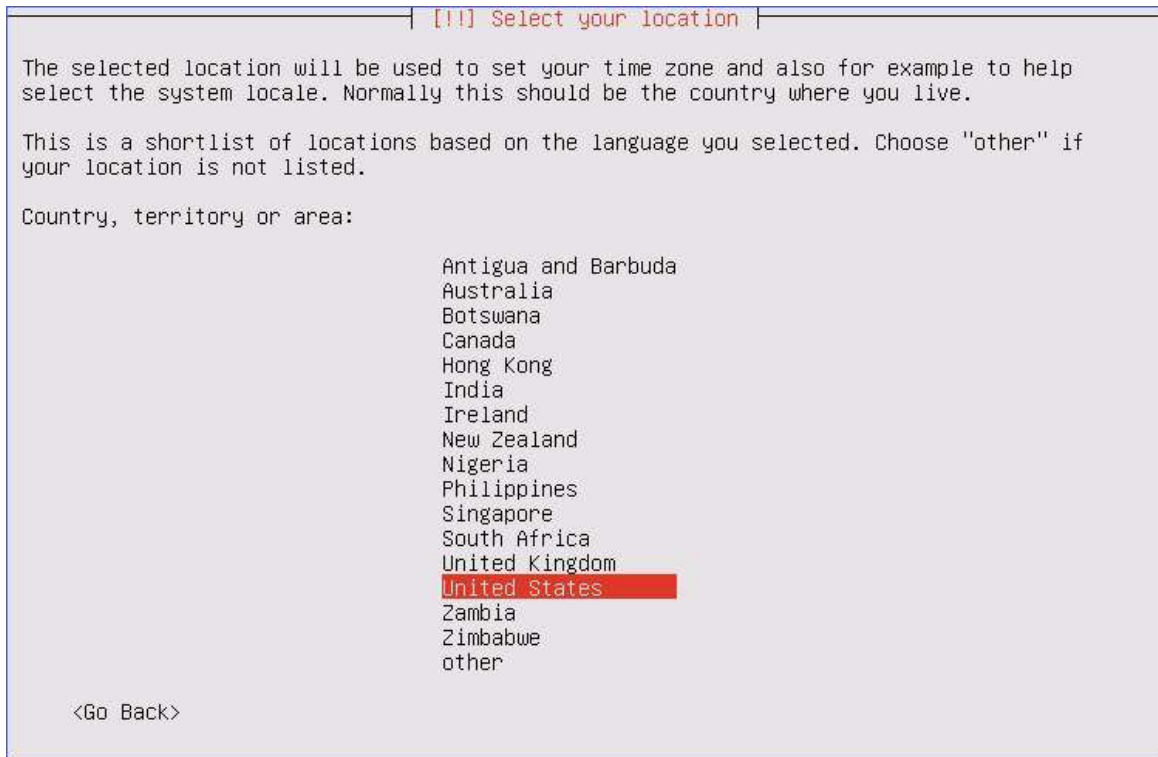
2. Select your location based on the language you selected.

```
┤ [!!] Select your location ├

The selected location will be used to set your time zone and also for example to help
select the system locale. Normally this should be the country where you live.

This is a shortlist of locations based on the language you selected. Choose "other" if
your location is not listed.

Country, territory or area:

                        Antigua and Barbuda
                        Australia
                        Botswana
                        Canada
                        Hong Kong
                        India
                        Ireland
                        New Zealand
                        Nigeria
                        Philippines
                        Singapore
                        South Africa
                        United Kingdom
                        United States
                        Zambia
                        Zimbabwe
                        other

        <Go Back>
```

Step 2. Configure the keyboard

1. Select **NO**, not to do keyboard layout detection.

```
┤ [!] Configure the keyboard ├

You can try to have your keyboard layout detected by pressing a series of keys. If you do
not want to do this, you will be able to select your keyboard layout from a list.

Detect keyboard layout?

    <Go Back>                                                      <Yes>      <No>
```
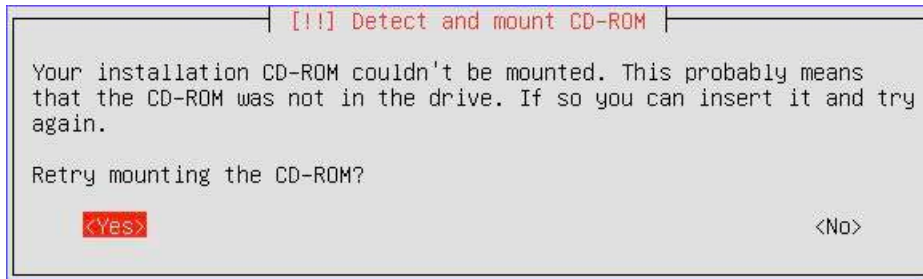
2. Select a country of origin for the keyboard of this computer.

```
┤ [!] Configure the keyboard ├

The layout of keyboards varies per country, with some countries having multiple common
layouts. Please select the country of origin for the keyboard of this computer.

Country of origin for the keyboard:

                        Armenian                              ↑
                        Azerbaijani
                        Bambara
                        Bangla
                        Belarusian
                        Belgian
                        Bosnian
                        Braille
                        Bulgarian
                        Burmese
                        Chinese
                        Croatian
                        Czech
                        Danish
                        Dhivehi
                        Dutch
                        Dzongkha
                        English (Cameroon)
                        English (Ghana)
                        English (Nigeria)
                        English (South Africa)
                        English (UK)
                        English (US)                          ↓

    <Go Back>
```

3. Select the layout matching the keyboard for your machine.

```
┤ [!] Configure the keyboard ├

Please select the layout matching the keyboard for this machine.

Keyboard layout:

English (US)
English (US) - Cherokee
English (US) - English (Colemak)
English (US) - English (Dvorak alternative international no dead keys)
English (US) - English (Dvorak)
English (US) - English (Dvorak, international with dead keys)
English (US) - English (Macintosh)
English (US) - English (US, alternative international)
English (US) - English (US, international with dead keys)
English (US) - English (US, with euro on 5)
English (US) - English (Workman)
English (US) - English (Workman, international with dead keys)
English (US) - English (classic Dvorak)
English (US) - English (international AltGr dead keys)
English (US) - English (left handed Dvorak)
English (US) - English (programmer Dvorak)
English (US) - English (right handed Dvorak)
English (US) - English (the divide/multiply keys toggle the layout)
English (US) - Russian (US, phonetic)
English (US) - Serbo-Croatian (US)

    <Go Back>
```
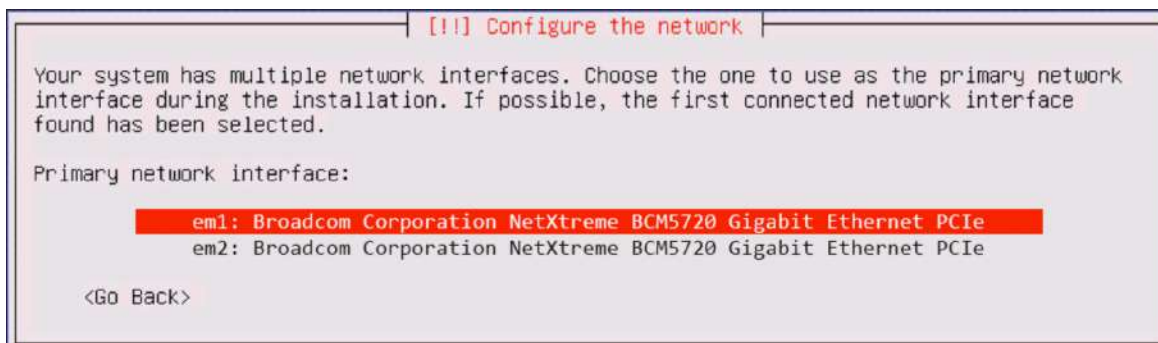
4. If it is the first time to install K2 on R240 server, you may be prompted that the installation CD-ROM couldn't be mounted. To solve this issue, disconnect your USB driver and reconnect it again.
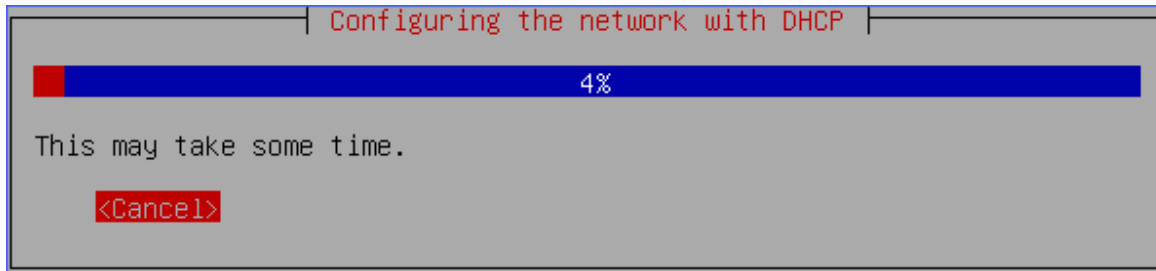
```
┤ [!!] Detect and mount CD-ROM ├

Your installation CD-ROM couldn't be mounted. This probably means
that the CD-ROM was not in the drive. If so you can insert it and try
again.

Retry mounting the CD-ROM?

    <Yes>                                              <No>
```

Step 3. Skip network configuration

1. Select the primary network interface.

```
┤ [!!] Configure the network ├

Your system has multiple network interfaces. Choose the one to use as the primary network
interface during the installation. If possible, the first connected network interface
found has been selected.

Primary network interface:

        em1: Broadcom Corporation NetXtreme BCM5720 Gigabit Ethernet PCIe
        em2: Broadcom Corporation NetXtreme BCM5720 Gigabit Ethernet PCIe

    <Go Back>
```

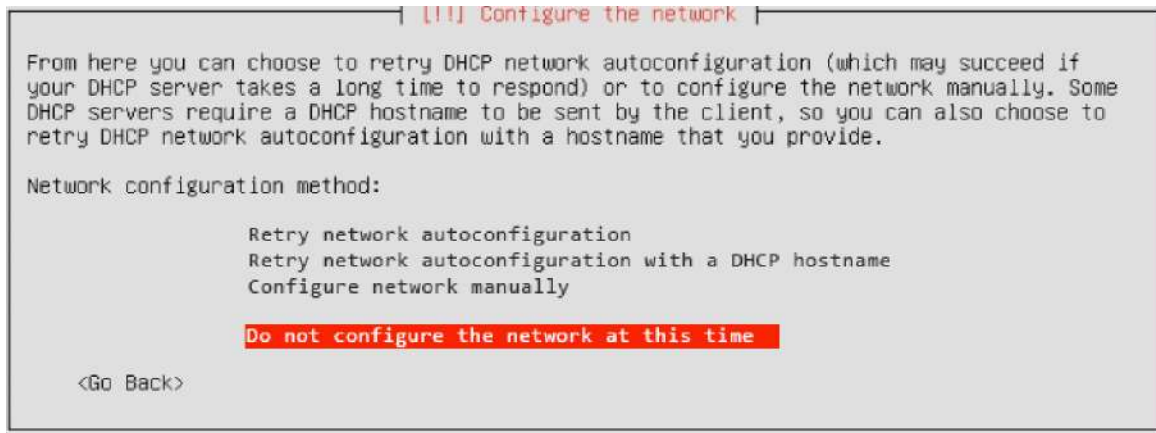2. When you see the DHCP configuration process, press **Enter** key to cancel.

You will be prompted that the network auto configuration failed, press **Enter** key to continue.

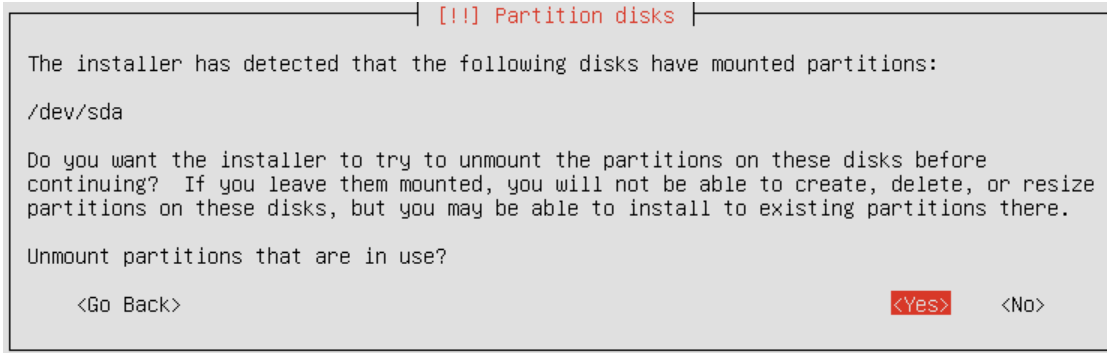

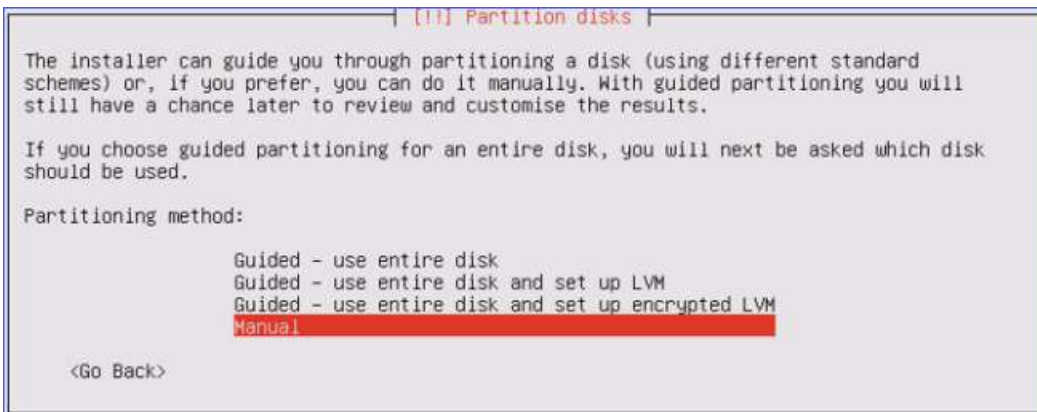3. Select **Do not configure the network at this time**.

4. Select the time zone.

Step 4. Plan and create partition disk
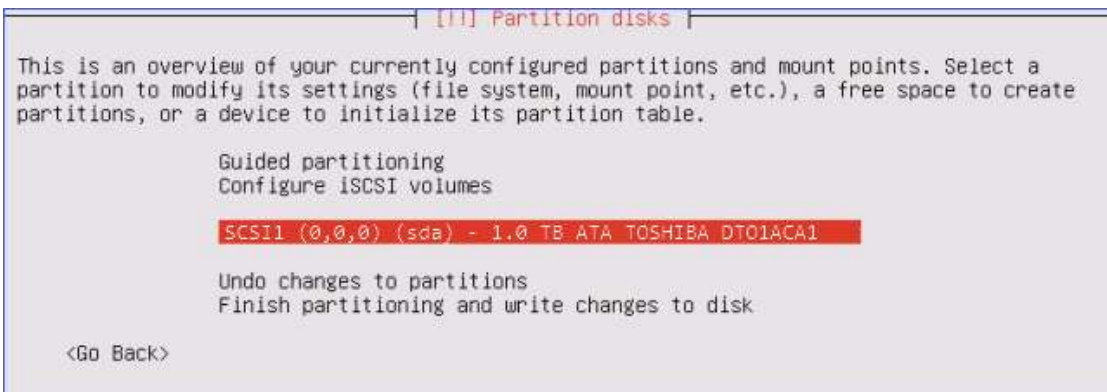
1. Unmount partitions that are in use.

    a. Select **Yes** to unmount the partitions.
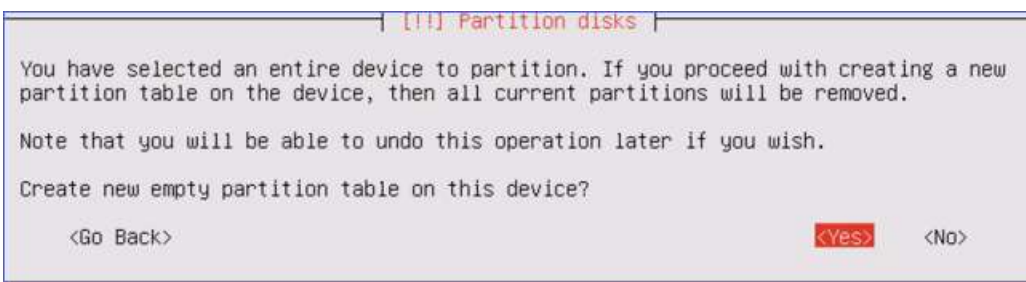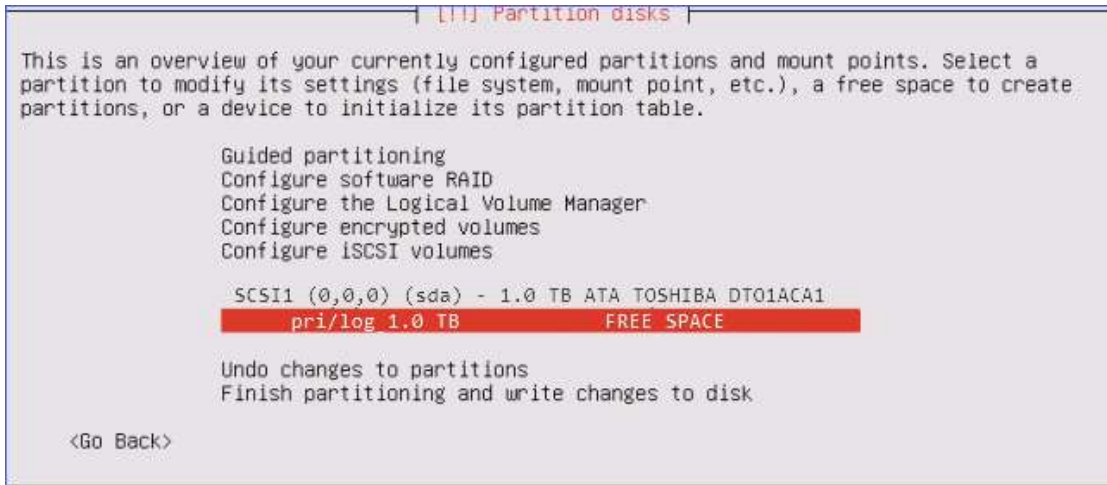
```
┤ [!!] Partition disks ├

The installer has detected that the following disks have mounted partitions:

/dev/sda

Do you want the installer to try to unmount the partitions on these disks before
continuing?  If you leave them mounted, you will not be able to create, delete, or resize
partitions on these disks, but you may be able to install to existing partitions there.

Unmount partitions that are in use?

     <Go Back>                                              <Yes>      <No>
```

b. Select **Manual** partitioning method.

```
┤ [!!] 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>
```

c. Select the partition of the system.

```
┤ [!!] Partition disks ├

This is an overview of your currently configured partitions and mount points. Select a
partition to modify its settings (file system, mount point, etc.), a free space to create
partitions, or a device to initialize its partition table.

                    Guided partitioning
                    Configure iSCSI volumes

          SCSI1 (0,0,0) (sda) - 1.0 TB ATA TOSHIBA DT01ACA1

                    Undo changes to partitions
                    Finish partitioning and write changes to disk

     <Go Back>
```

d. Select **Yes** to create new empty partition table on this device.

```
┤ [!!] Partition disks ├

You have selected an entire device to partition. If you proceed with creating a new
partition table on the device, then all current partitions will be removed.

Note that you will be able to undo this operation later if you wish.

Create new empty partition table on this device?

     <Go Back>                                              <Yes>      <No>
```

2. Create partition 1: root directory for system files.

    a. Select the **FREE SPACE** to create partition 1.

```
┤ [!!] Partition disks ├

This is an overview of your currently configured partitions and mount points. Select a
partition to modify its settings (file system, mount point, etc.), a free space to create
partitions, or a device to initialize its partition table.

                Guided partitioning
                Configure software RAID
                Configure the Logical Volume Manager
                Configure encrypted volumes
                Configure iSCSI volumes

                SCSI1 (0,0,0) (sda) - 1.0 TB ATA TOSHIBA DTO1ACA1
                     pri/log 1.0 TB              FREE SPACE

                Undo changes to partitions
                Finish partitioning and write changes to disk

        <Go Back>
```

    b. Select **Create a new partition**.

```
┤ [!!] Partition disks ├

   How to use this free space:

     Create a new partition
     Automatically partition the free space
     Show Cylinder/Head/Sector information

          <Go Back>
```

    c. Set the partition size.

       Recommended size: 50 GB.

```
┤ [!!] Partition disks ├

   The maximum size for this partition is 1.1 TB.

   Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage
   (e.g. "20%") to use that percentage of the maximum size.

   New partition size:

   50GB

        <Go Back>                                                    <Continue>
```

    d. Select location for the partition as **Beginning**.

```
                        ┤ [!!] Partition disks ├
 Please choose whether you want the new partition to be created at the beginning or at the
 end of the available space.

 Location for the new partition:

                                    Beginning
                                    End

        <Go Back>
```
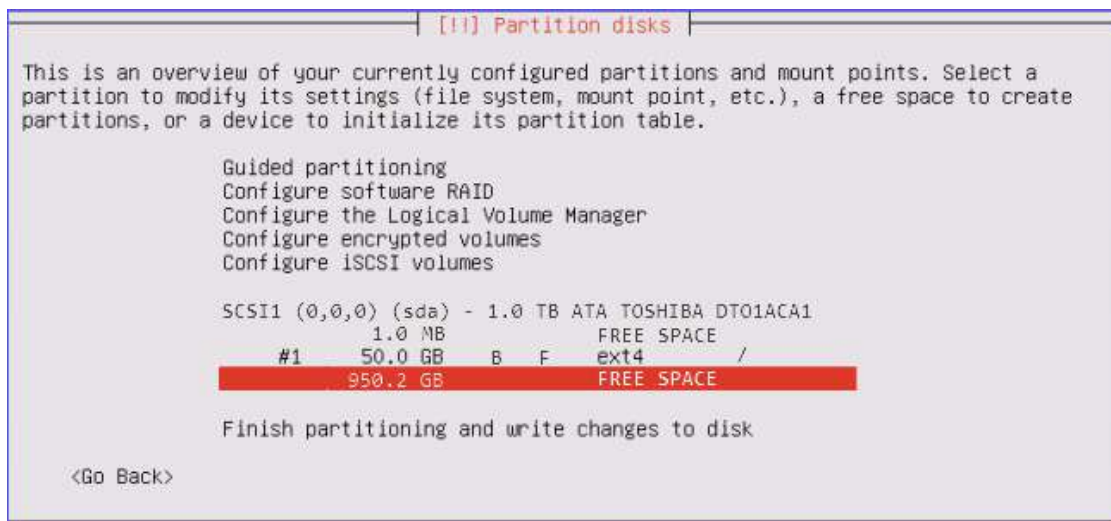
e. Set **Use as** and **Mount point** for the partition 1, then select **Done settings up the partition**.
- **Use as**: Ext4 journaling file system
- **Mount point**: /
- **Bootable flag**: on

```
                        ┤ [!!] Partition disks ├
 You are editing partition #1 of SCSI33 (0,0,0) (sda). No existing file system was
 detected in this partition.

 Partition settings:

                 Use as:             Ext4 journaling file system

                 Mount point:        /
                 Mount options:      defaults
                 Label:              none
                 Reserved blocks:    5%
                 Typical usage:      standard
                 Bootable flag:      on

                 Copy data from another partition
                 Delete the partition
                 Done setting up the partition

        <Go Back>
```

3. Create partition 2: home directory for data and recordings.
   a. Select the **FREE SPACE** to create partition 2.

```
                        ┤ [!!] Partition disks ├
 This is an overview of your currently configured partitions and mount points. Select a
 partition to modify its settings (file system, mount point, etc.), a free space to create
 partitions, or a device to initialize its partition table.

                 Guided partitioning
                 Configure software RAID
                 Configure the Logical Volume Manager
                 Configure encrypted volumes
                 Configure iSCSI volumes

                 SCSI1 (0,0,0) (sda)  -  1.0 TB ATA TOSHIBA DTO1ACA1
                         1.0 MB                    FREE SPACE
                 #1      50.0 GB      B   F        ext4          /
                         950.2 GB                  FREE SPACE

                 Finish partitioning and write changes to disk

        <Go Back>
```

   b. Select **Create a new partition**.

c. Set the partition size.

> 📝 **Note:**
> - 1000-minute recordings require about 1GB space.
> - We recommend that you set a larger space for the partition to have more space to store your recordings and other data.
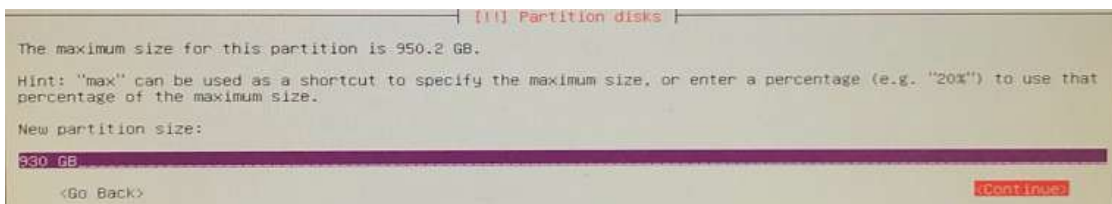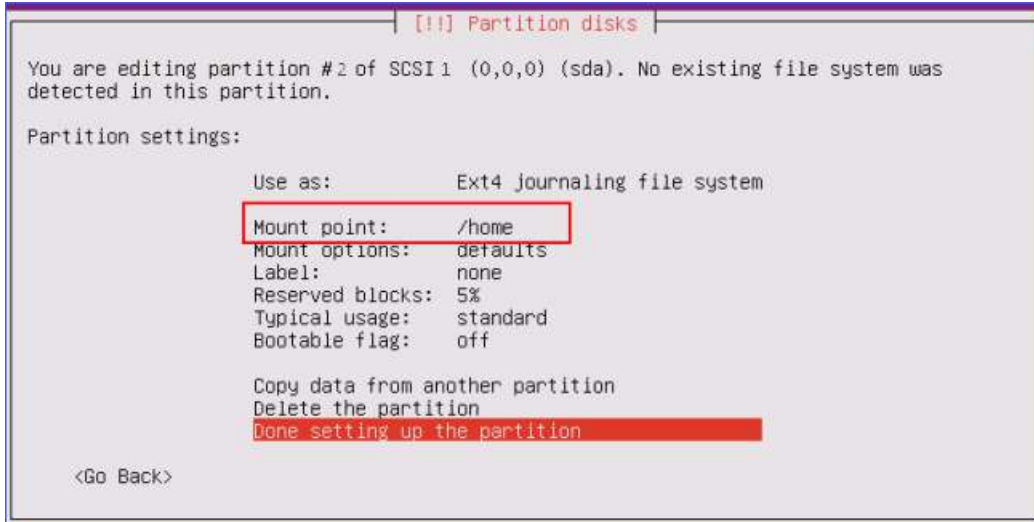

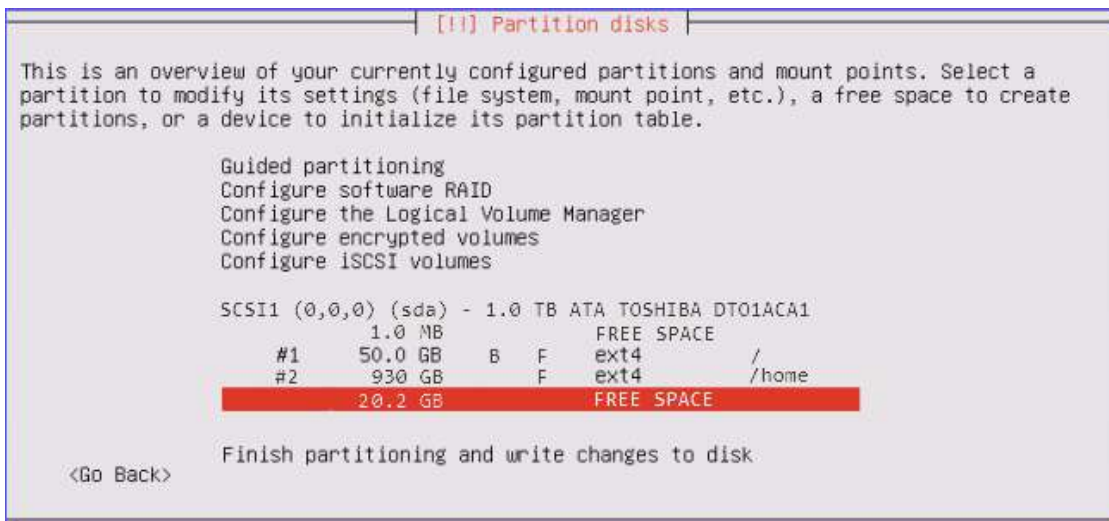d. Select location for the partition as **Beginning**.

e. Set **Use as** and **Mount point** for the partition 2, then select **Done settings up the partition**.
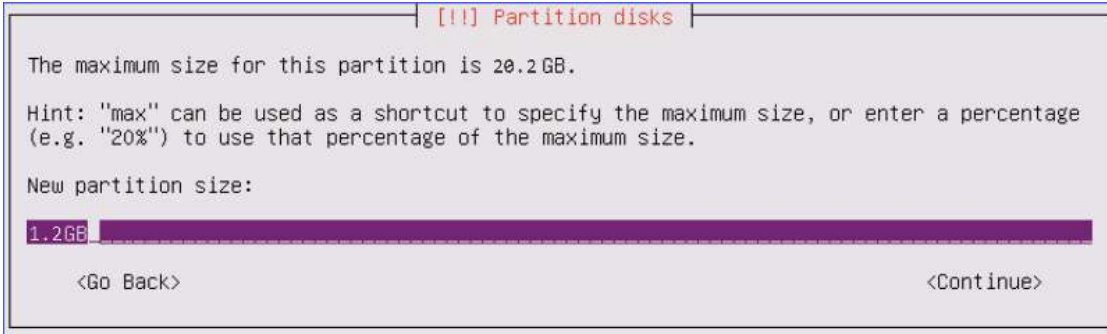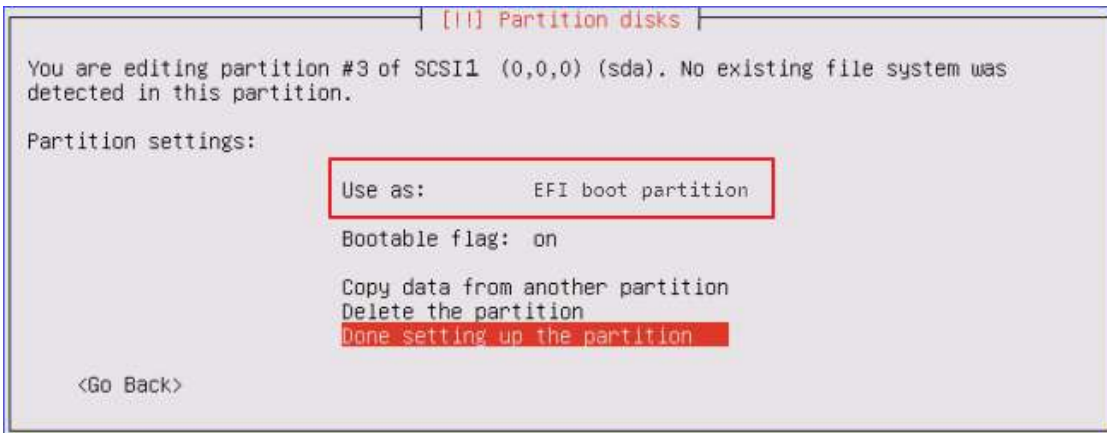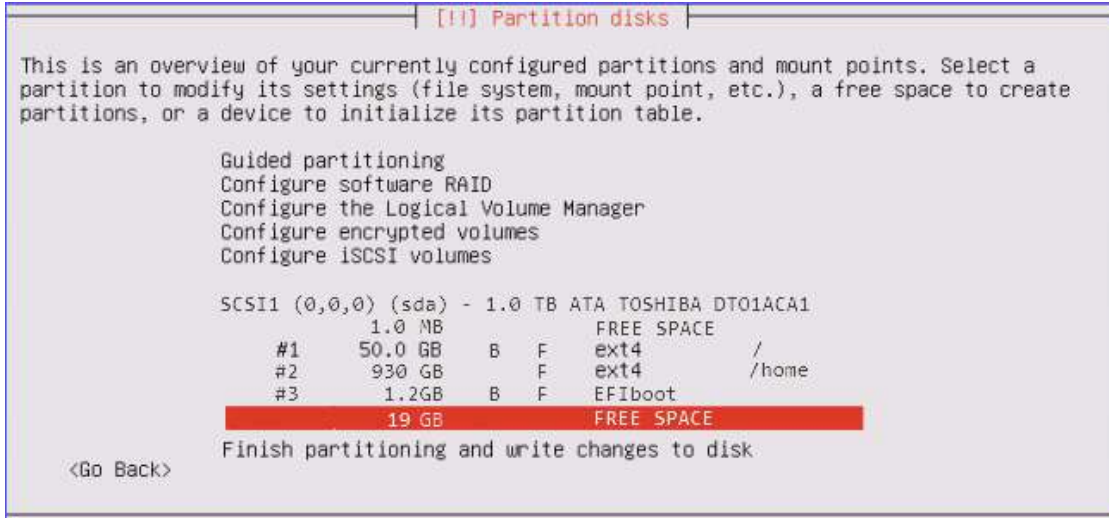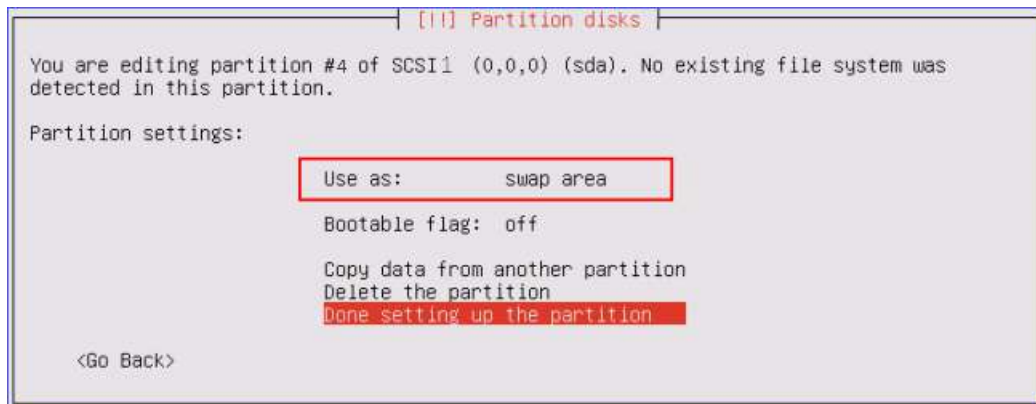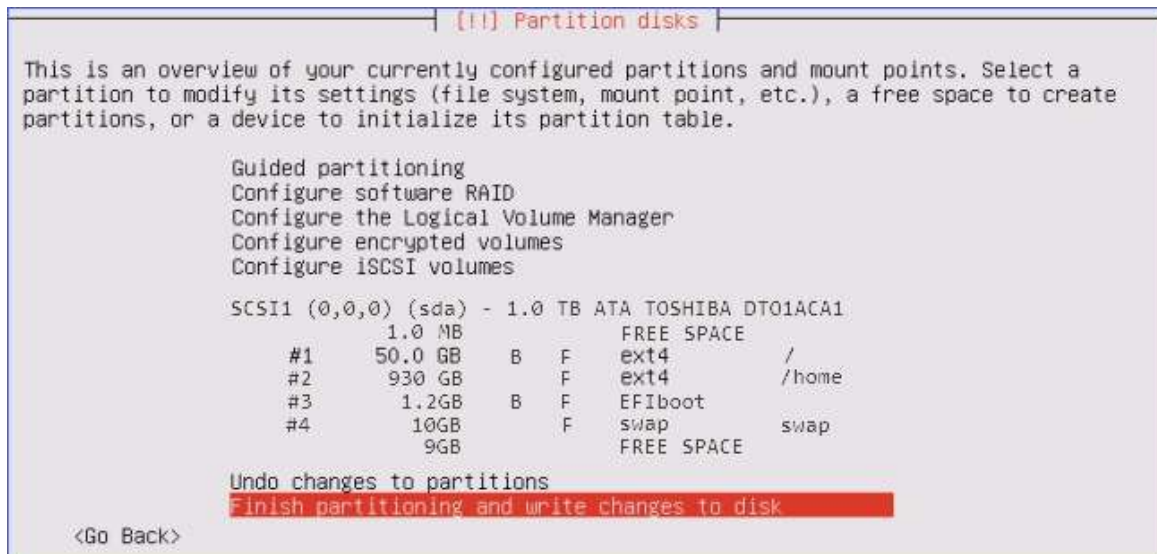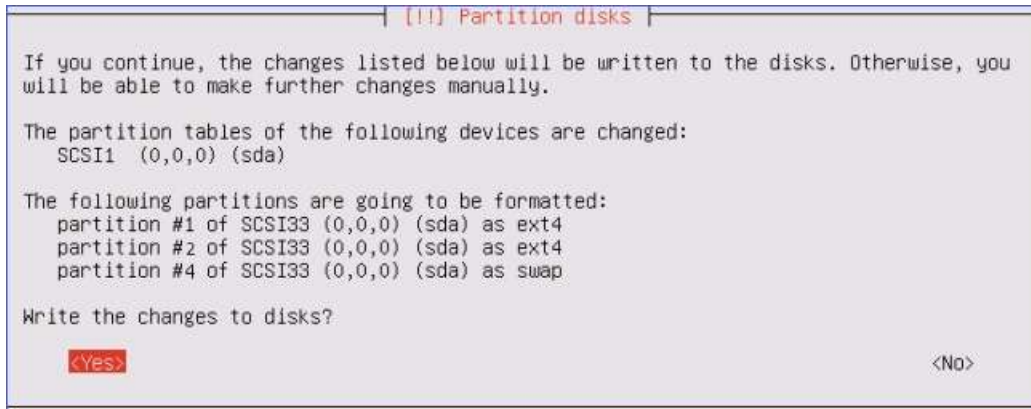   - Use as: Ext4 journaling file system
   - Mount point: /home

```
                    ┤ [!!] Partition disks ├

 You are editing partition #2 of SCSI 1 (0,0,0) (sda). No existing file system was
 detected in this partition.

 Partition settings:

                  Use as:           Ext4 journaling file system

                  Mount point:      /home
                  Mount options:    defaults
                  Label:            none
                  Reserved blocks:  5%
                  Typical usage:    standard
                  Bootable flag:    off

                  Copy data from another partition
                  Delete the partition
                  Done setting up the partition

        <Go Back>
```

4. Create partition 3: EFI boot for UEFI boot mode.

   a. Select the **FREE SPACE** to create a new partition.

```
                    ┤ [!!] Partition disks ├

 This is an overview of your currently configured partitions and mount points. Select a
 partition to modify its settings (file system, mount point, etc.), a free space to create
 partitions, or a device to initialize its partition table.

                  Guided partitioning
                  Configure software RAID
                  Configure the Logical Volume Manager
                  Configure encrypted volumes
                  Configure iSCSI volumes

                  SCSI1 (0,0,0) (sda) - 1.0 TB ATA TOSHIBA DTO1ACA1
                        1.0 MB              FREE SPACE
                  #1    50.0 GB   B   F    ext4         /
                  #2     930 GB       F    ext4         /home
                        20.2 GB             FREE SPACE

                  Finish partitioning and write changes to disk
        <Go Back>
```

   b. Select **Create a new partition**.

```
                ┤ [!!] Partition disks ├

    How to use this free space:

    Create a new partition
    Automatically partition the free space
    Show Cylinder/Head/Sector information

        <Go Back>
```

   c. Set the partition size.

      Recommended size : 1.2 GB.

```
┤ [!!] Partition disks ├

The maximum size for this partition is 20.2 GB.

Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage
(e.g. "20%") to use that percentage of the maximum size.

New partition size:

1.2GB_____

      <Go Back>                                                  <Continue>
```

d. Select location for the partition as **Beginning**.

```
┤ [!!] Partition disks ├

Please choose whether you want the new partition to be created at the beginning or at the
end of the available space.

Location for the new partition:

                              Beginning
                              End

      <Go Back>
```

e. Set **Use as** and **Mount point** for the partition 3, then select **Done settings up the partition**.

   • Use as: EFI boot partition

```
┤ [!!] Partition disks ├

You are editing partition #3 of SCSI1 (0,0,0) (sda). No existing file system was
detected in this partition.

Partition settings:

                    Use as:          EFI boot partition

                    Bootable flag:  on

                    Copy data from another partition
                    Delete the partition
                    Done setting up the partition

      <Go Back>
```

5. Create partition 4: swap area for storing data when system hibernates.

   a. Select the **FREE SPACE** to create a new partition.

```
                      ┤ [!!] Partition disks ├
  This is an overview of your currently configured partitions and mount points. Select a
  partition to modify its settings (file system, mount point, etc.), a free space to create
  partitions, or a device to initialize its partition table.

              Guided partitioning
              Configure software RAID
              Configure the Logical Volume Manager
              Configure encrypted volumes
              Configure iSCSI volumes

              SCSI1 (0,0,0) (sda) - 1.0 TB ATA TOSHIBA DTO1ACA1
                      1.0 MB              FREE SPACE
              #1    50.0 GB    B   F      ext4           /
              #2    930 GB         F      ext4           /home
              #3     1.2GB    B   F      EFIboot
                      19 GB              FREE SPACE
              Finish partitioning and write changes to disk

      <Go Back>
```

b. Select **Create a new partition**.

```
                   ┤ [!!] Partition disks ├

   How to use this free space:

    Create a new partition
    Automatically partition the free space
    Show Cylinder/Head/Sector information

        <Go Back>
```

c. Set the partition size.

Recommended size : 10 GB.

```
                      ┤ [!!] Partition disks ├
  The maximum size for this partition is 19 GB.

  Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage
  (e.g. "20%") to use that percentage of the maximum size.

  New partition size:

  10 GB_____

     <Go Back>                                              <Continue>
```

d. Select location for the partition as **Beginning**.

```
                    ┤ [!!] Partition disks ├
 Please choose whether you want the new partition to be created at the beginning or at the
 end of the available space.

 Location for the new partition:

                               Beginning
                               End

      <Go Back>
```

e. Set **Use as** and **Mount point** for the partition 4, then select **Done settings up the partition**.

- Use as: swap area

```
                       ┤ [!!] Partition disks ├
 You are editing partition #4 of SCSI1 (0,0,0) (sda). No existing file system was
 detected in this partition.

 Partition settings:

                   Use as:          swap area

                   Bootable flag:  off

                   Copy data from another partition
                   Delete the partition
                   Done setting up the partition

      <Go Back>
```

6. Select **Finish partitioning and write changes to disk**.

```
                       ┤ [!!] Partition disks ├
 This is an overview of your currently configured partitions and mount points. Select a
 partition to modify its settings (file system, mount point, etc.), a free space to create
 partitions, or a device to initialize its partition table.

           Guided partitioning
           Configure software RAID
           Configure the Logical Volume Manager
           Configure encrypted volumes
           Configure iSCSI volumes

           SCSI1 (0,0,0) (sda) - 1.0 TB ATA TOSHIBA DTO1ACA1
                      1.0 MB                FREE SPACE
              #1      50.0 GB    B   F      ext4           /
              #2      930 GB         F      ext4           /home
              #3      1.2GB      B   F      EFIboot
              #4      10GB           F      swap           swap
                      9GB                   FREE SPACE
           Undo changes to partitions
           Finish partitioning and write changes to disk

      <Go Back>
```

7. Select **Yes**, write the changes to disks.

```
                    ┤ [!!] Partition disks ├

 If you continue, the changes listed below will be written to the disks. Otherwise, you
 will be able to make further changes manually.

 The partition tables of the following devices are changed:
    SCSI1  (0,0,0) (sda)

 The following partitions are going to be formatted:
    partition #1 of SCSI33 (0,0,0) (sda) as ext4
    partition #2 of SCSI33 (0,0,0) (sda) as ext4
    partition #4 of SCSI33 (0,0,0) (sda) as swap

 Write the changes to disks?

    <Yes>                                                          <No>
```

Step 5. Install the IPPBX System

After finishing partitioning and write changes to disk, the K2 system starts to be installed on the server. Wait for a few minutes for the installation.

1. Select **No automatic updates**.

    ⚠️ **Important:** Do not select other options.

```
                    ┤ [!] Configuring tasksel ├

 Applying updates on a frequent basis is an important part of keeping your system secure.

 By default, updates need to be applied manually using package management tools.
 Alternatively, you can choose to have this system automatically download and install
 security updates, or you can choose to manage this system over the web as part of a group
 of systems using Canonical's Landscape service.

 How do you want to manage upgrades on this system?

                    No automatic updates
                    Install security updates automatically
                    Manage system with Landscape
```

2. Press **Tab** to select **Continue** to skip this step.

    The system installation starts.

```
                    ┤ [!] Software selection ├

 At the moment, only the core of the system is installed. To tune the system to your
 needs, you can choose to install one or more of the following predefined collections of
 software.

 Choose software to install:

                    [ ] OpenSSH server
                    [ ] DNS server
                    [ ] LAMP server
                    [ ] Mail server
                    [ ] PostgreSQL database
                    [ ] Print server
                    [ ] Samba file server
                    [ ] Tomcat Java server
                    [ ] Virtual Machine host
                    [ ] Manual package selection

                       <Continue>
```

3. When you are prompted that the installation is complete, disconnect your USB driver, then select **Continue** to boot into your system.
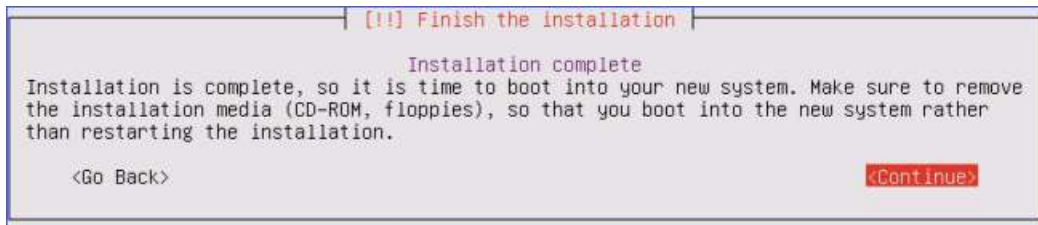
```
┤ [!!] Finish the installation ├

                    Installation complete
Installation is complete, so it is time to boot into your new system. Make sure to remove
the installation media (CD-ROM, floppies), so that you boot into the new system rather
than restarting the installation.

    <Go Back>                                                      <Continue>
```

When the following screen displays, the IPPBX system is successfully installed.

```
                    Ubuntu 14.04.5 LTS IPPBX tty1

                    IPPBX login: _
```

Log in the Yeastar K2 IPPBX

After installing Yeastar K2 IPPBX system successfully, you can log in your PBX using a local browser.

The default IP address of the PBX is 192.168.5.150. To log in the PBX, you need to make sure that your server is in the same network segment of 192.168.5.X.

1. Launch your Web browser, enter the default IP address, and press **Enter**.

A connection warning appears. Ignore the warning and proceed to the Yeastar IPPBX web page.
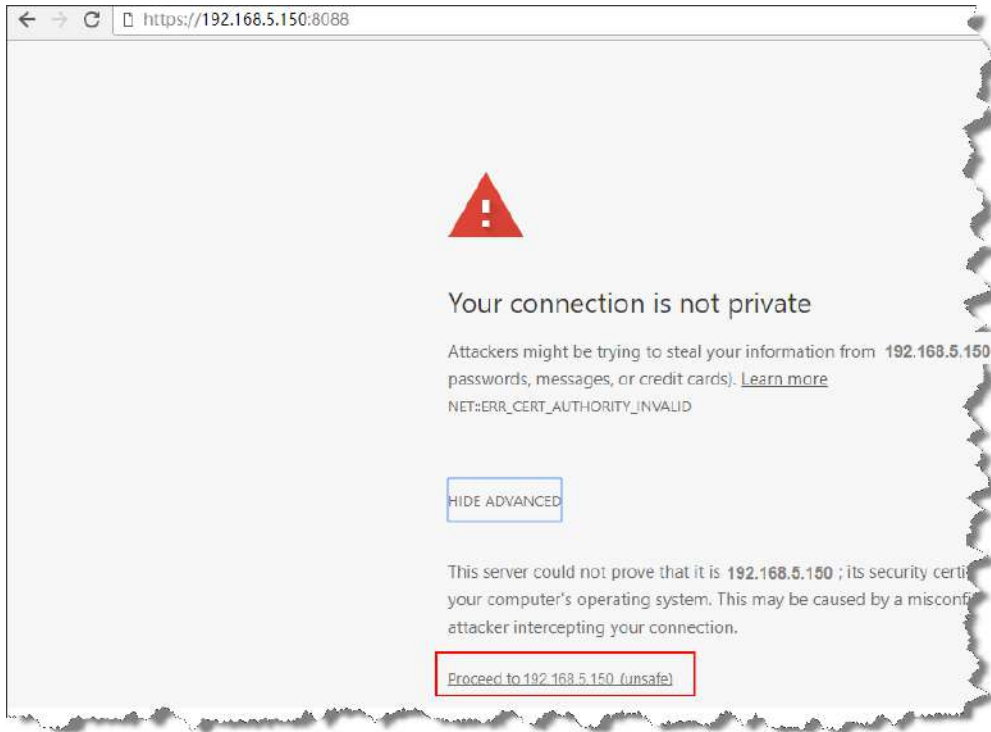
2. Enter the default user name and password, click **Login**.

   - Username: admin
   - Password: password

Activate Yeastar K2 IPPBX

After installing the Yeastar K2 Software, you can try out all the PBX features free without time limit. However, the inactivated PBX has a limit on the number of extensions, concurrent calls, VoIP trunks, ring groups, etc. Contact Yeastar to buy the license according to how many extensions, concurrent calls, and other features you need on the PBX.

Limitation of an inactivated Yeastar K2 IPPBX

Table 2:

Feature	Max number
Extension	10
Concurrent call	5
Trunk	1
Ring Group	1
RingGroup Member	1
Queue	1
Queue Member	1
Conference	1

Feature	Max number
Conference Member	1
Pickup Group	1
Paging/Intercom	1
Paging/Intercom Member	1
Speed Dial	1
Callback	1
DISA	1
Inbound Routes	1
Outbound Routes	1
SLA	1
Time Condition	1
Holiday	1
IVR	1
Blackllist/Whitelist	1
PIN List	1
PIN List Number	1

Activation methods

Method	Environment	Description
Online activation	PBX can access to the internet	Keep your PBX connected to the internet to access the Yeastar activation server.
Offline activation	PBX cannot access to the internet	To secure your phone system, you may install a Yeastar K2 IPPBX that has no ability to access the Internet. In this scenario, Yeastar will provide a USB license key to help you activate your PBX. 📝 **Note:** The USB key is programmed with your required PBX capacity, and can be used for one device only.

⚠️ **Important:** If you reinstall your PBX, you need to contact Yeastar to get a new license, and reactivate your PBX.

Activate Yeastar K2 IPPBX online

1. Log in the PBX web interface, go to **Maintenance→Activation**, Click **Activate**.
2. Enter your license in the **License** field, click **Activate**.

3. Click **OK** and reboot the PBX to take effect.

📝 **Note:** After activating the PBX, keep your PBX connected to the Internet, or the PBX will be detected as an abnormal device.

Activate Yeastar K2 IPPBX offline (USB Key)

1. Connect the USB Key to your computer where the Yeastar K2 IPPBX is installed.
2. Log in the PBX web interface, go to **Maintenance→ Activation**, click **Activate**.
3. Enter your license in the **License** field, click **Activate**.

4. Click **OK** and reboot the PBX to take effect.

📝 **Note:** After activating the PBX, keep the USB Key connected to the PBX, or the PBX will be detected as activation abnormality.

Expand System Capacity of Yeastar K2 IPPBX

If you need to expand the number of extensions, concurrent calls or other features, contact Yeastar to upgrade your license, and then update your license on your PBX.

Update methods

Choose the same update method as the one you choose to update the license according to the environment of your PBX.

- Update license online
- Update license offline (USB Key)

Update license online

Contact Yeastar to update your license, and confirm the license update on your PBX.

1. Log in the PBX web interface, go to **Maintenance→Activation**, click **Update**.

2. Click **OK** after update.

📝 **Note:** Keep your PBX connected to the internet, or the PBX will be detected as an abnormal device.

Update license offline (USB Key)

Contact Yeastar to update your license, you will get a new license, enter the new license on your PBX.

1. Log in the PBX web interface, go to **Maintenance→Activation** , click **Update**.
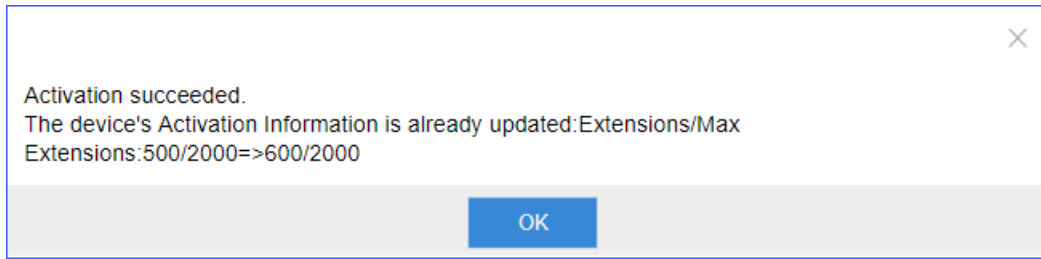2. Enter your new license, click **Activate**.

3. Click **OK** after update.

Activation succeeded.
The device's Activation Information is already updated:Extensions/Max
Extensions:500/2000=>600/2000

OK

Note: Keep the USB Key connected to the PBX, or the PBX will be detected as an abnormal device.