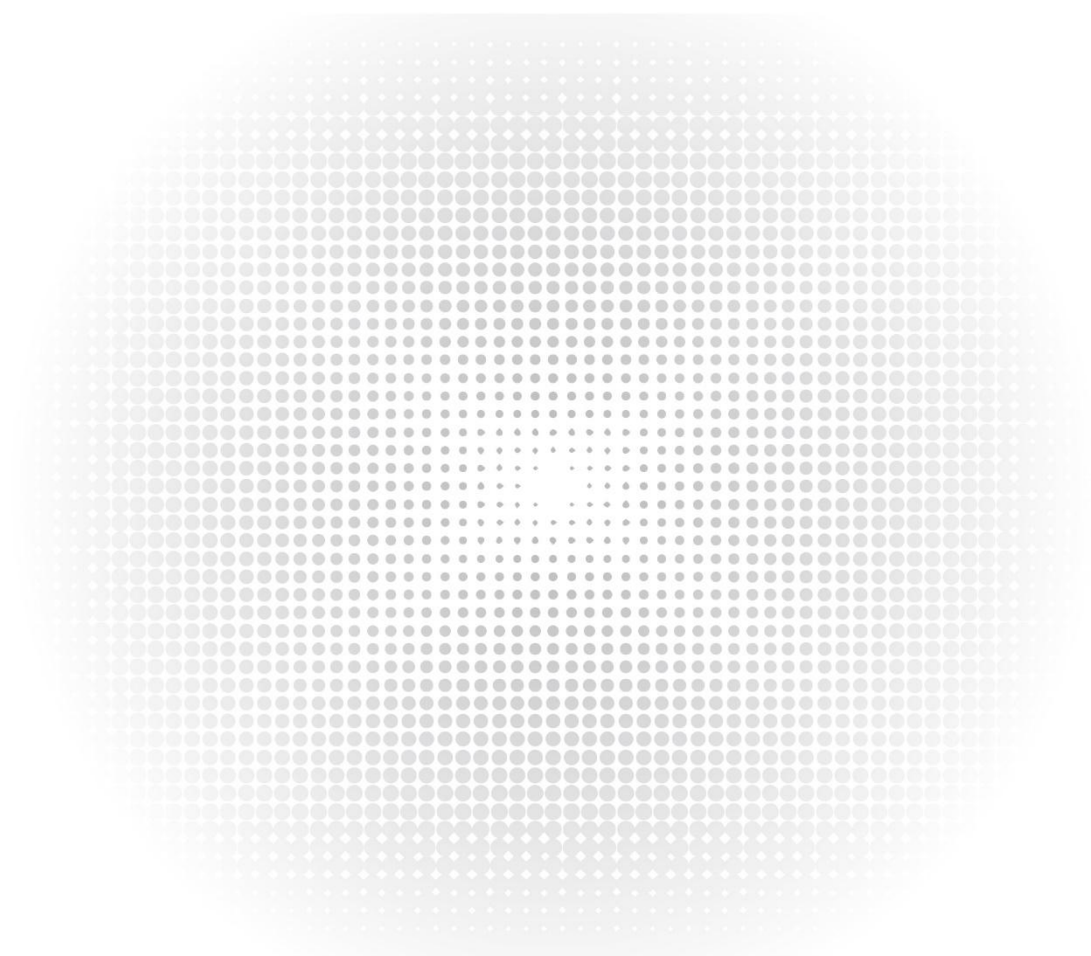


RS8260 Rack Server

Configuration Guide

Model: RS8260



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Chapter 1 Preparation for use

1.1 Abstracts

The main task of this chapter is to describe how to do some basic preparations. They include:

Checking the shipping package;

Choosing a suitable location to place the server;

Checking the power setting switches;

Checking the power cords;

Adding equipment;

Connecting peripheral devices;

Turning on the monitor and server;

Operating system installation preparation.

1.2 Checking the shipping package

NOTE:

The weight of the server may vary depending on the configuration, in order to avoid human damage, please move the server with more than one person.

After unsealing the server, check to see if the packaging has been visibly damaged in transit. If the packaging has been damaged, please take it photographed for reference, and please write a damage statement quickly. After removing the server, please save the packing and encapsulation materials, as you will need them when you ship the server to another location.

Check the packing list to make sure that the items listed are present and in good condition. If any of these items are damaged or missing, please contact our vendor.

1.3 Choosing a suitable location to place the server

Required Conditions	Instructions
Three-core power outlet	A three-core power outlet that complies with local electrical standards. The expected overload current is 13A, or less than 100-120VAC/6.5A or less than 200-240VAC. NOTE: Ensure that the server's power supply is properly grounded.

Meet specialized environmental regulations	The server can reliably operate in a normal office environment. Please choose an environment that meets the following conditions: Clean and low dust Well-ventilated, away from heat sources Away from environments that may encounter vibrations or physical impacts
Isolated from electromagnetic fields and electrical noise environments	The server should be isolated from strong electromagnetic fields and equipment that generate electrical noise, including elevators, copiers, air conditioners, high-power fans, high-power motors, radio and television transmitters, and high-frequency alarm devices, etc.
Maintain good ventilation and cooling conditions	The area around the server should be ensured to have good ventilation and cooling conditions. Keep the area around the server free from obstructions.
Provide space for easy maintenance and power shutdown	Reserve space for easy maintenance of the server. Make sure there is an accessible way to cut off the AC power from the wall outlet or the server's back panel, as this is a safe method to cut off power before maintenance and product upgrades. Turning off the DC switch on the server panel does not truly disconnect the AC power of the server.

1.4 Mount the server on the rack

All Baldor rack-mounted servers are compatible with the 19-inch standard rack, and installation procedures are described in the section "Mounting Guide"

1.5 Checking Power Cables

If the AC power cable provided does not match the model where the server is used, do not continue to use it

Replace it with a matching power cord. Power cables that meet the requirements are described below. When you are ready to join the internal setup

In standby mode, do not connect power to the server.

Power cord needed	Description
Speed	The AC current that the wires can carry should be rated at

125% of the current required by the server.

Connect the power socket end connector	The wire must be a positive plug with a grounded end.
Connect to the server connector	The power plug connected to the server must be a positive IEC320, Sheet C13 plug.
Power cord length and flexibility	The power cord must be shorter than 4.5m and it must be a flexible <HAR> wire or a VDE certified wire that complies with server security regulations.

1.6 Add equipment

Before adding extensions to your server, make sure the server is not connected to power.

When you add drives, expansion cards, and storage to your servers or make any kind of internal change

Restore the server chassis.

NOTE:

The warnings and precautions listed here should be followed whenever the enclosure cover is removed and components inside the server are touched.

Only qualified professional and technical personnel can perform the preceding operations.

1.7 Connect peripherals

Make sure the server is not connected to power. When connecting peripheral devices, make sure the device is not live, otherwise the device may be damaged.

Once all internal expansion devices and recovery cases are installed, connect your keyboard, mouse, monitor, and other peripherals.

You must first install a monitor and keyboard to configure the server. Even if your server works as a web server

You usually do not use a monitor or keyboard, which you still need to install to configure the server.

If necessary, connect other extension devices such as printers, modems, etc.

1.8 Turn on the monitor and server

Warning: The power switch on the front panel cannot cut off the AC voltage. To cut off the AC voltage in the server, disconnect the AC power cable.

Make sure all peripherals such as monitor, keyboard, mouse are connected.

Remove the drive protection card from the disk drive (if present);

Turn on the monitor;

Connect one end of the AC power cable to the power port on the server backplane.

Connect the other end of the AC power cord to a three-pin socket on the wall (or ground);

If the server does not start when the AC power is connected, press the on/off switch on the panel.

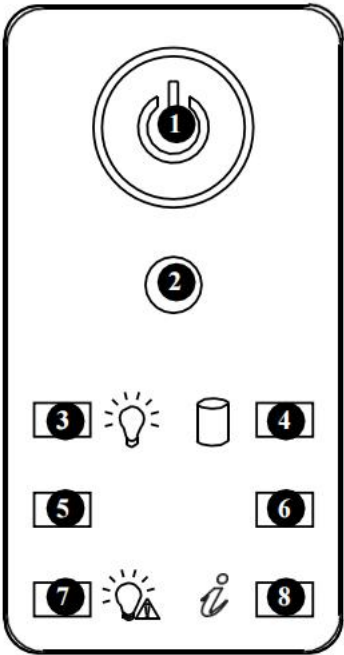
Make sure the power light on the panel is shining. After a few seconds, the server starts to run the POST program (boot self-test). When the hard disk receives the access signal, the hard disk indicator on the front panel blinks. If a fault occurs, record the error displayed on the screen. For error messages and audible codes, see the chapter **on System**

Troubleshooting.

Chapter 2 System structure description

2.1 Structural characteristics of RS8260

1. Control Switch Panel Diagram:



2. Control Panel Features:

Item	Feature	Description
1	Power Button	The main power button is used to apply or remove power to the server from the power supply. Use this button to turn off the system power, remove the main power, but maintain standby power. To perform many maintenance tasks, the power cable must also be unplugged before service.
2	Restart Button	Used to restart the server.
3	Power Indicator Light	Indicates that system power is being supplied. The LED is usually on continuously when the system is running.
4	Hard Drive Activity Light	Blinks when the hard drive is transmitting data.
5	NIC2 LED	Flashes when there is network activity on port 2.

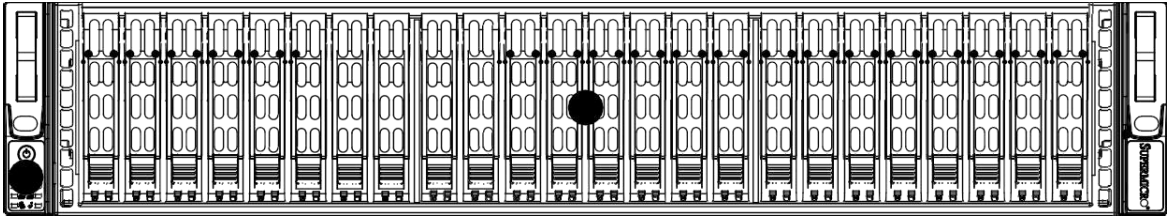
6	NIC1 LED	Flashes when there is network activity on port 1.
7	Power Fault Indicator Light	Indicates a power supply module fault.
8	Universal Information LED	Refer to the table below.

3. Information LED:

Status	Description
Solid Red	May be caused by the server system overheating.
Flashing Red	Abnormal fan, check for non-working fans.
Solid Blue	UID to locate the server.
Flashing Blu	Indicates remote UID locating the server.

4. Front Panel Diagram:

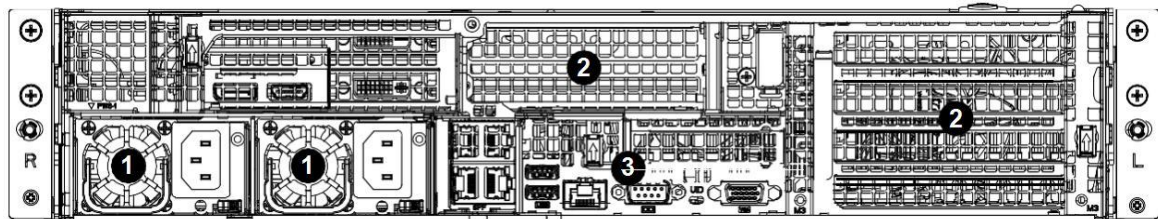
The RS8260 is a 2U rack-mounted server, and the front panel diagram is as follows:



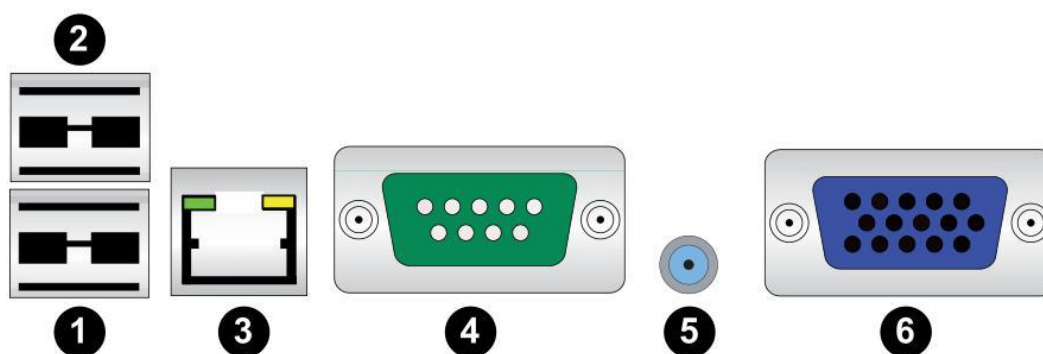
5. Rear Chassis Features:

Item	Feature	Description
1	Control Switch	Refer to the previous section on the control panel for details.
2	Hard Drive Bays	Hot-swappable hard drive bays support HDD and NVMe.

6. Rear Window Diagram:



Item	Feature	Description
1	Power Supply	Supports up to two redundant power supplies.
2	PCIe Expansion Slots	Supports up to 11 PCIe slots.
3	I/O Ports	Motherboard I/O ports.



7. Back Panel I/O Ports:

No.	Description	No.	Description
1	USB 2(USB 3.0)	4	COM1
2	USB 2(USB 3.0)	5	UID Switch
3	IPMI_LAN	6	VGA

8. Power Supply:

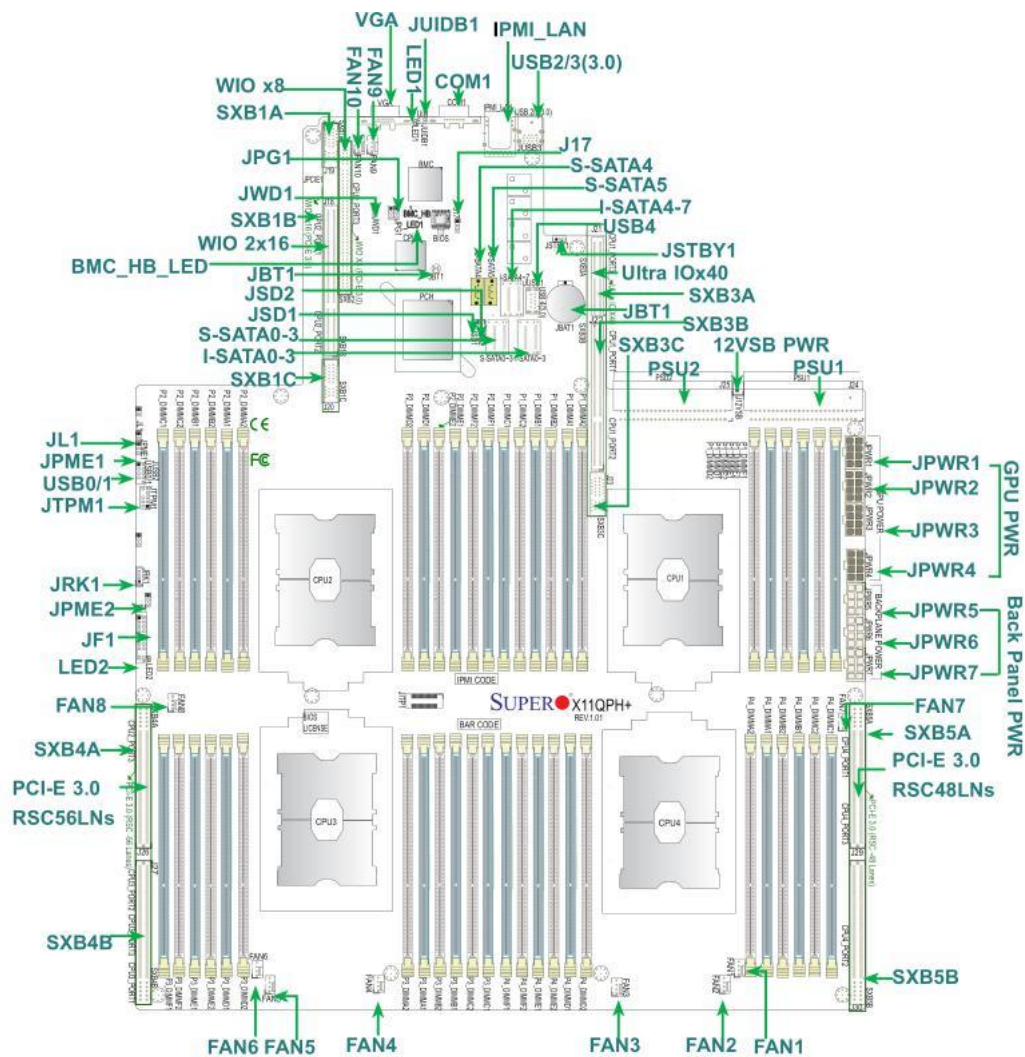
Name	Description
Power supply	Redundant power supply for the server
Input AC Voltage/Frequency Range	100V-240V, 10A-5A, 50Hz Adaptive, Standard Single Power Supply, Optional 1+1 Redundancy

9. Chassis form:

Name	Description
------	-------------

Contour system	Rack mounted 2U
Height	89mm
Width	437mm
Depth	780mm
Weight (minimum configuration)	About 25KG

2.2 Jumper setup and connector instructions



Jumper	Description	Default setting
J17	Power-Failure Throttling Enable	Pins 1-2 (Normal)

JBT1	CMOS Clear	Open (Normal)
JPG1	VGA Enable/Disable	Pins 1-2 (Enabled)
JPME1	Manufacturing Mode Select	Pins 1-2 (Normal)
JWD1	Watch Dog Enable	Pins 1-2 (Reset)

LED	Description	Status
BMC_HB_LED 1	BMC Heartbeat LED	Blinking Green: BMC Normal
LED1	UID LED	Solid Blue: Unit Identified
LED2	Onboard Power LED	Solid Green: Power On

LED	Description
JBAT1	Onboard COMOS battery
COM1	Backplane COM port
FAN1-FAN10	System/CPU fan headers (FAN 1- FAN 10)
IPMI_LAN	Dedicated IPMI LAN port
J12VSB	12V standby power connector
JF1	Front control panel header
JL1	Chassis Intrusion header
JPWR1-JPWR4	12V 8-pin power connectors 1-4 for use of onboard GPU devices
JPWR5-JPWR7	12V 8-pin power connectors 5-7 for use of back panel devices
I-SATA0-3, I-SATA4-7	SATA 3.0 ports 0-3 & 4-7 supported by Intel® PCH
S-SATA0-3	S-SATA 3.0 ports 0-3 supported by Intel® SCU
S-SATA4/5	S-SATA 3.0 ports 4/5 with power-pins built in with support of Super

	DOM (Device-On-Module)
USB0/ 1 (JUSB2)	Universal Serial Bus (USB) header for two USB 2.0 connections for front access
USB2/3 (JUSB3)	Back panel USB 3.0 ports 2/3
USB4 (JUSB1)	Type A USB 3.0 header
PSU1/PSU2 (J24/J25)	Power Supply connectors PSU1 for Power Supply Unit, PSU2 for system use
VGA	VGA port

Chapter 3 System description and Settings

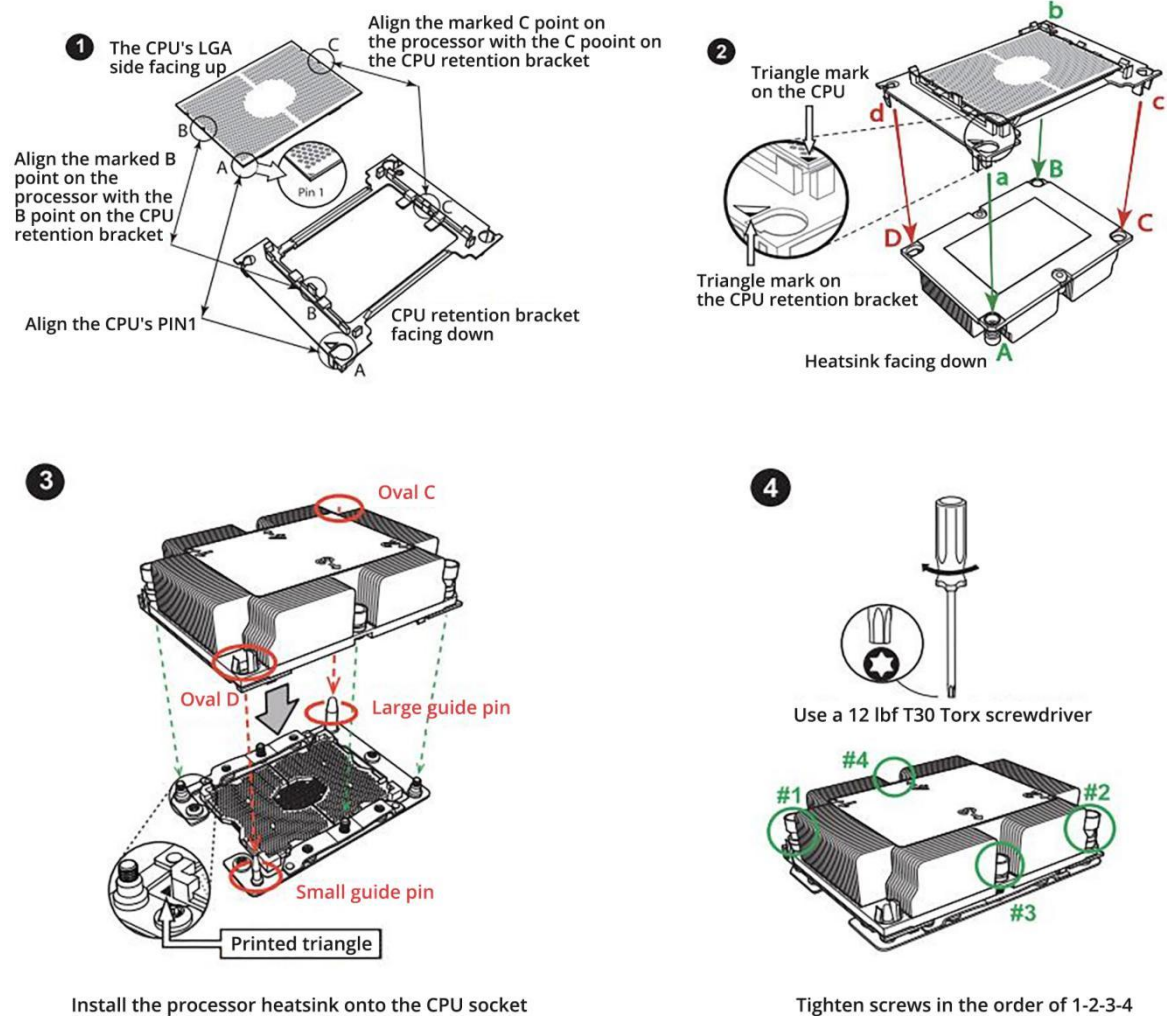
3.1 CPU

3.1.1 CPU Overview

This series supports two Intel 81xx/61xx/51xx/41xx/31xx (Socket P0) series processors, with UPI support of up to 10.4 GT/s.

3.1.2 CPU Installation Procedure

Installation procedure description:



3.2 Internal memory

3.2.1 Memory overview

The server has 48 memory slots, supporting up to 48 DDR4 3DS LRDIMM/LRDIMM/RDIMM ECC 2666 MHz memory modules (mixing different types of memory is not supported), with a maximum memory support of 6TB. Please refer to the table below:

DDR4 Memory Support (for 2-Slot Per-Channel Configuration)					
Type	Ranks Per DIMM and Data Width	DIMM Capacity (GB)		Speed (MT/s); Voltage (V); Slots per Channel (SPC) and DIMMs per Channel (DPC)	
				2 Slots per Channel	
		4 Gb	8 Gb	1DPC (1-DIMM per Channel)	2DPC (2-DIMM per Channel)
RDIMM	SRx4	8 GB	16 GB	1.2 V	1.2 V
RDIMM	SRx8	4 GB	8 GB	2666	2666
RDIMM	DRx8	8 GB	16 GB	2666	2666
RDIMM	DRx4	16 GB	32 GB	2666	2666
RDIMM 3Ds	QRX4	N/A	2H-64GB	2666	2666
RDIMM 3Ds	8RX4	N/A	4H-128GB	2666	2666
LRDIMM	QRx4	32 GB	64 GB	2666	2666
LRDIMM 3Ds	QRX4	N/A	2H-64GB	2666	2666
	8Rx4	N/A	4H-128 GB	2666	2666

DDR4 Memory Support (for 1-Slot Per-Channel Configuration)				
Type	Ranks Per DIMM and Data Width	DIMM Capacity (GB)		Speed (MT/s); Voltage (V); Slots per Channel (SPC) and DIMMs per Channel (DPC)
		4 Gb	8 Gb	1 Slot per Channel 1DPC (1-DIMM per Channel)
RDIMM	SRx4	8 GB	16 GB	1.2 V
RDIMM	SRx8	4 GB	8 GB	2666
RDIMM	DRx8	8 GB	16 GB	2666
RDIMM	DRx4	16 GB	32 GB	2666
RDIMM 3Ds	QRX4	N/A	2H-64GB	2666
RDIMM 3Ds	8RX4	N/A	4H-128GB	2666
LRDIMM	QRx4	32 GB	64 GB	2666
LRDIMM 3Ds	QRX4	N/A	2H-64GB	2666
	8Rx4	N/A	4H-128 GB	2666

To ensure the smooth functioning of the memory, it is necessary to use completely identical memory products in the same server, mainly including memory capacity and chip model.

3.3 Video Controller

The onboard integrated ASPEED2500 video controller is provided by the AST 2500BMC.

3.4 Hard Disk Controller

Supports 24 SATA3 hard drives.

3.5 Network Controller

Integrated with 4 I350 Gigabit network controllers for high-speed network connectivity.

3.6 Keyboard and Mouse

Supports USB keyboard/mouse.

3.7 Optical Drive and Floppy Drive

Servers are optionally equipped with a USB optical drive.

3.8 PCI Expansion (if all PCI-E are needed, two CPUs must be equipped)

3.9 Additional Configuration

3 USB 3.0 ports (2 rear, 1 internal), 1 BMC management network port.

3.10 Certified Compatible Operating Systems

Serial number	Operating System
1	Xenserver7.1 & 7.2
2	Microsoft Windows 2016
3	Red Hat Enterprise Linux* 7.3

Chapter 4 BIOS Settings

BIOS stands for Basic Input/Output System. Basic hardware management before entering an operating system such as Windows. You can solve many hardware compatibility problems by upgrading and setting the BIOS. This chapter focuses on the BIOS configuration menu.

BIOS Settings

This section describes the options commonly used by BIOS users and their meanings.

Each Settings page menu contains a number of features, except for those that give information only, and each feature has a value range with optional parameters that can be changed depending on the security Settings. If a parameter is due to security permissions

If the reason (or other reasons) cannot be modified, then the value range of this feature is not optional.

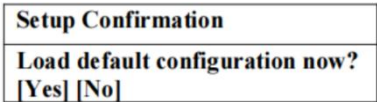
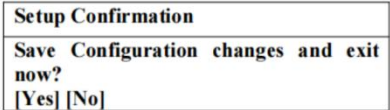
At the bottom of the screen is a description of the commands to be used in the setup program.

After the system starts, press DEL as prompted to enter BIOS Settings.

Press to enter SETUP

Keyboard command description table:

Serial number	Operating System
<Enter>	Execute the command: Enter the submenu when the selected feature is a submenu, enter the option list when the selected feature is a value field, or enter another subfield from one of the multiple value fields (such as time and date), when the suspension list is displayed, press Enter to exit the list and enter the parent menu.
<ESC>	Exit: The <ESC> key provides an exit mechanism in any window that cancels the return key. Whether you are selecting a value or selecting a menu, pressing <ESC> reenters the parent menu. Pressing the <ESC> key on any of the main menu pages will display the exit/Confirm window, confirming whether to exit without saving your changes.
< ↑ ,> ,< ↓ >	Select List items: Used to move items in the menu item option list or range selection list, press Enter to complete the selection

<←>,<→>	Toggle: Left and right buttons are used to switch between main menu pages. Left and right buttons do not work in submenus or selection lists.
Tab	Select: Used to select between different files. For example, the Tab key can change from the hour to the minute.
<←>,<+>	Change the size of the value: Used to change the size of the current value, and scroll to display optional values without displaying the entire list of values.
<F3>	Default setting: Press <F3> to appear the following pop-up window:  If you select Yes and press enter, all BIOS Settings will be set to default values, the BIOS will exit, and the system will restart. If you select "No" and press enter, the BIOS Settings window before pressing <F9> is displayed, and the current Settings are not affected
<F4>	Save and exit: Press <F4> to bring up the following pop-up window :  If you select Yes and press enter, the BIOS configuration changes are saved and the system exits. If you select "No" and press Enter, the window before pressing <F4> will be returned without any effect on the current Settings.

Chapter 5 Integrated RAID configuration

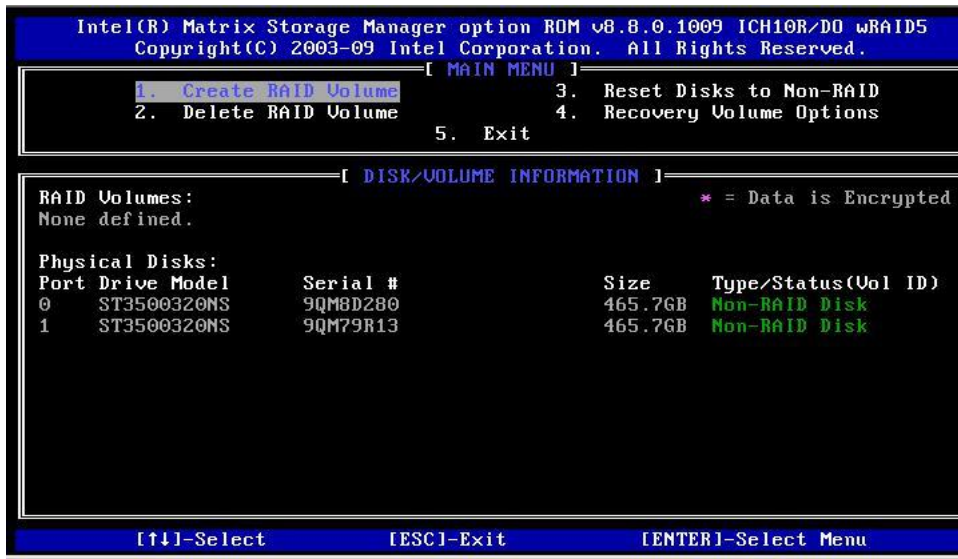
This chapter describes how to create RAID1, RAID0, and RAID10 using the motherboard's integrated SATA RAID controller. After RAID1 is created, the capacity of the hard drives is only half of the total capacity because the drives are mirrored, greatly increasing reliability. After RAID0 is created, the read and write speed of the hard disks is improved, but reliability is reduced; the available capacity equals the total capacity. By creating RAID10, the high read and write efficiency of RAID0 and the substantial data protection and recovery ability of RAID1 are utilized, making it a cost-effective level. The controller motherboard with integrated RAID supports Raid 1, 0, 10, and 5 (support for WINDOWS system only).

5.1 Setting RAID Status in the BIOS

By default, the RAID function is not enabled when the system ships from the factory. If you need to create a RAID, please follow these steps: Press during boot to enter the BIOS. Go to the Advanced menu, select the SATA Configuration submenu, and set SATA Mode to [RAID] to enable the SATA RAID controller.

5.2 Guide to Operating Integrated RAID on the Motherboard

Before configuring the array, set the RAID controller mode in the BIOS. During the Power-On Self-Test (POST), press the <Ctrl>+<I> keys to enter the RAID setup, as shown in the figure after entering.



5.2.1.1.1 To create an array, select the "Create RAID Volume" option, and the following menu will appear:



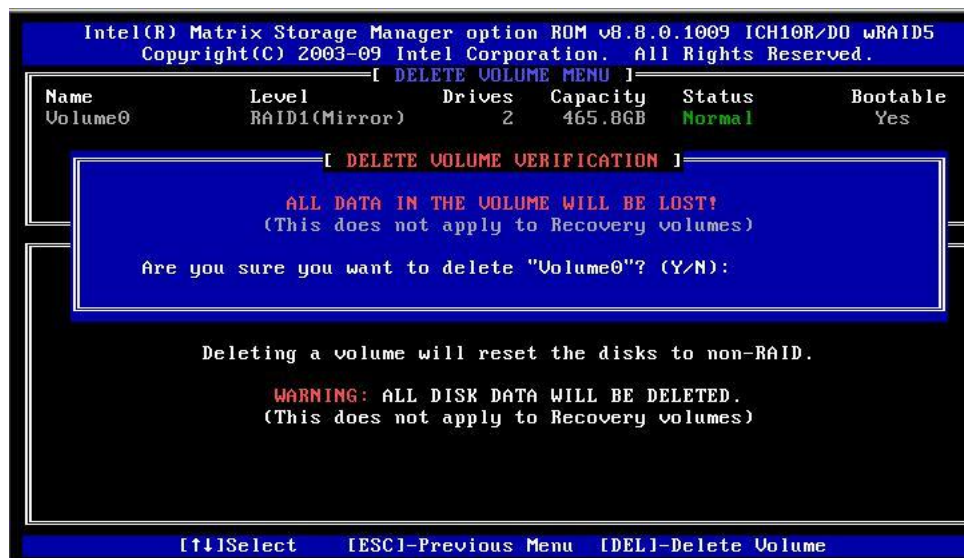
Use the <↑> and <↓> keys to move the cursor up and down. At "RAID Level," choose the level of the array you wish to establish. The options available are RAID0, RAID1, and RAID5. After selecting the array level and the hard drives for the array, hit the "Create Volume" option and follow the prompts to select 'Y' to create the array, as shown in the figure below:



5.2.1.1.2 To delete an array, select the "Delete RAID Volume" option, and the following menu will appear:



After entering, select the array you wish to delete, then press 'DEL' and choose 'Y' to delete the array, as shown in the figure below:



Chapter 6 Installation Instructions for the Operating System

This chapter describes the manual installation of the Red Hat Enterprise Linux 7.3.

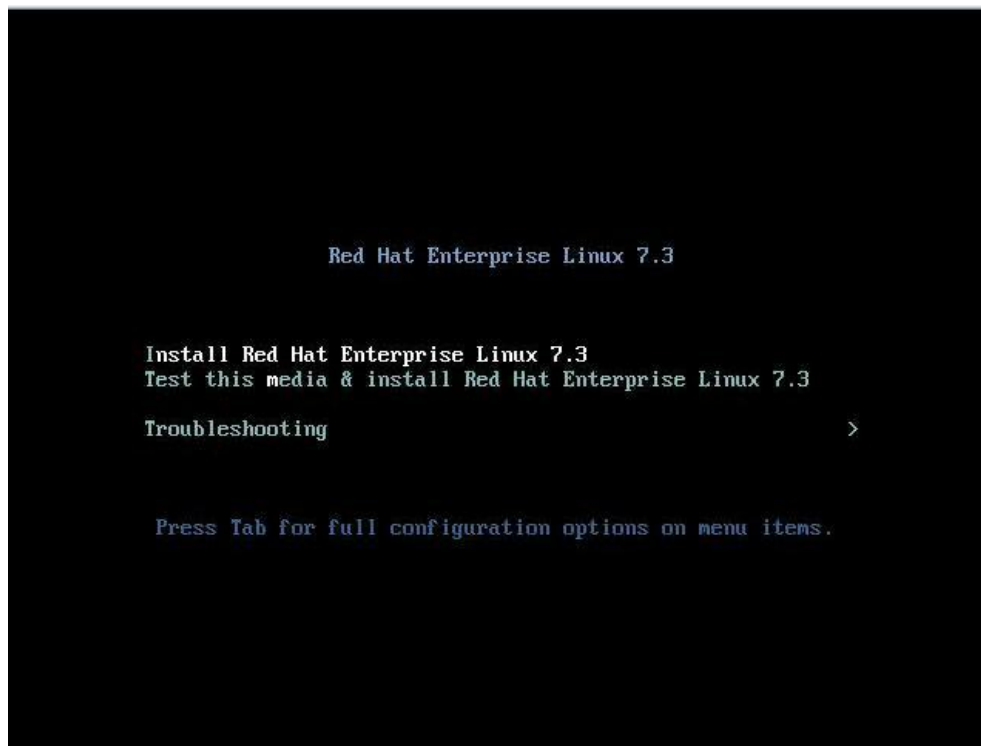
6.1 Red Hat Enterprise Linux 7.3 Installation Instructions

6.1.1 Preparation:

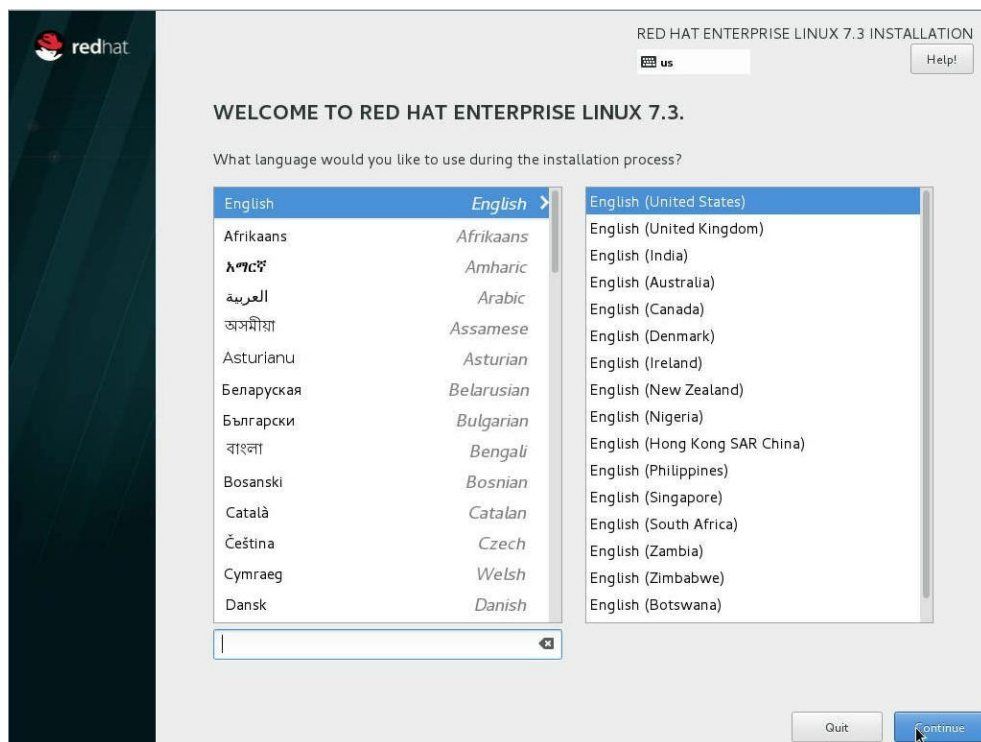
If your server requires loading RAID drivers during the operating system installation, please prepare a USB drive and the random driver CD. If your server is configured with an external RAID card, you will also need to prepare the driver CD for the external card.

6.1.2 Installation Steps:

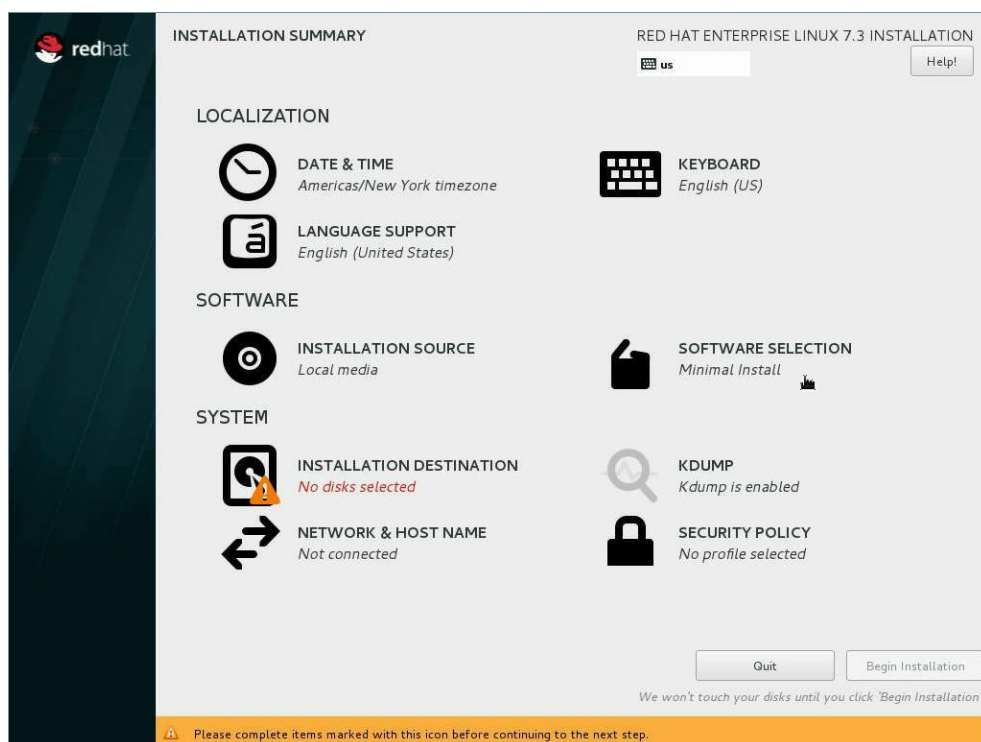
1. Set the CD/DVD drive as the first boot device in BIOS, insert the installation disc, save BIOS settings, and restart the computer.
2. Boot from the disc. When the following interface loads, select: Install Red Hat Enterprise Linux 7.3 and press Enter as shown in the image.



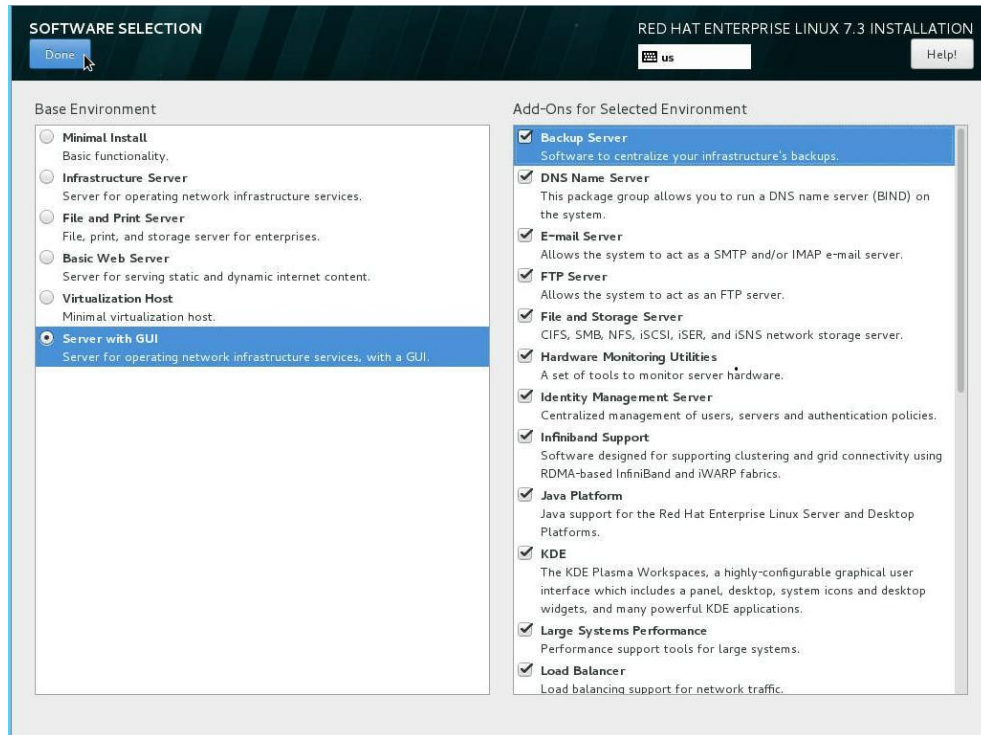
3. Select the system language, default to English, and click Next.



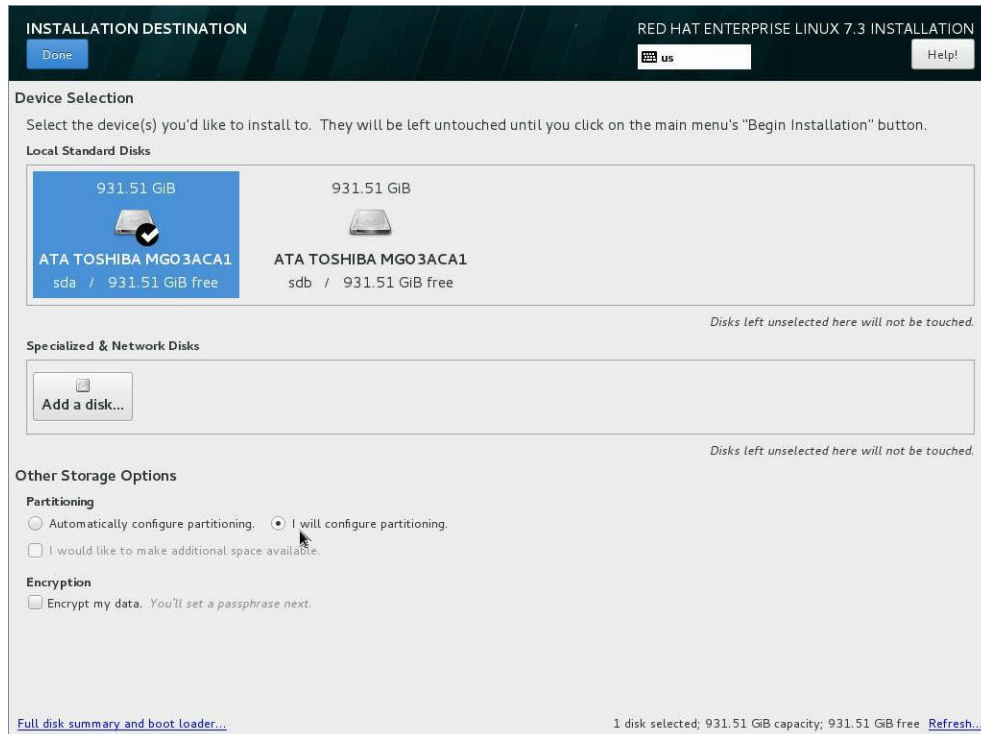
4. The system enters the following interface. (Configure the time, system packages, and hard disk partitioning)



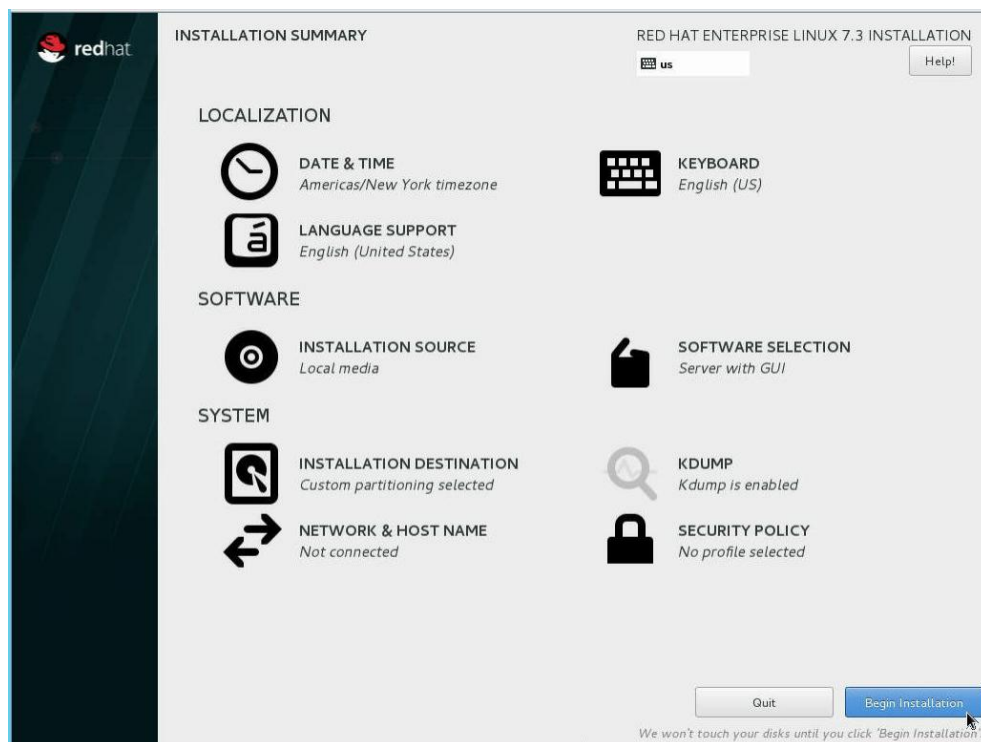
5. Click on SOFTWARE SELECTION to choose system software; click Done to return to step four.



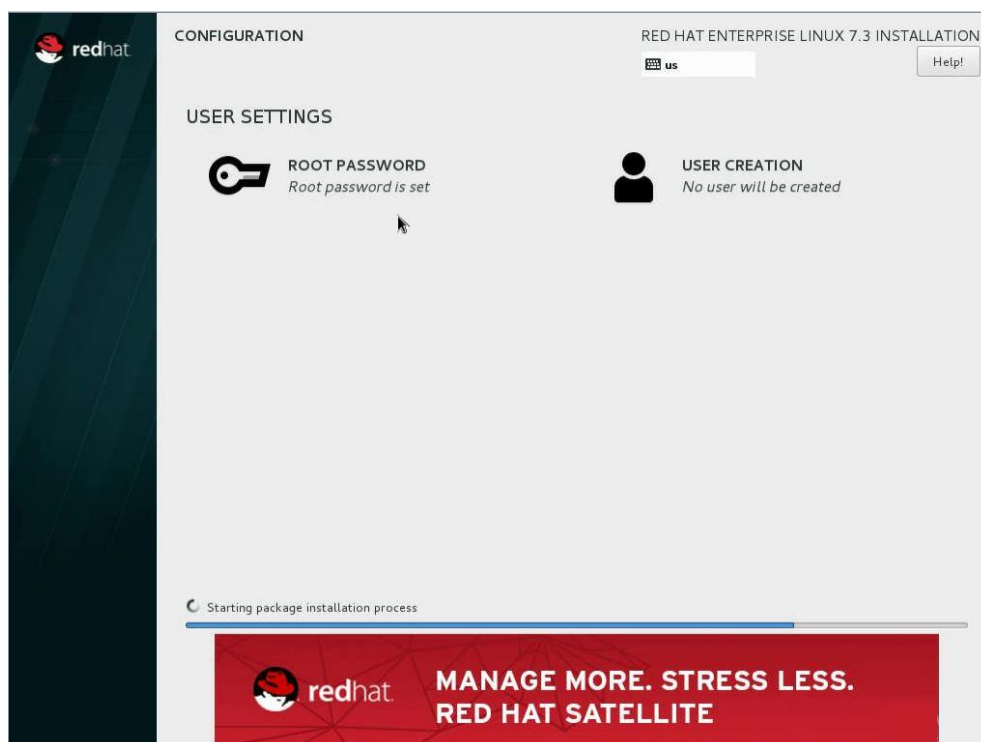
6. Choose INSTALLATION DESTINATION for hard disk partitioning; (You can choose either automatic or manual partitioning)



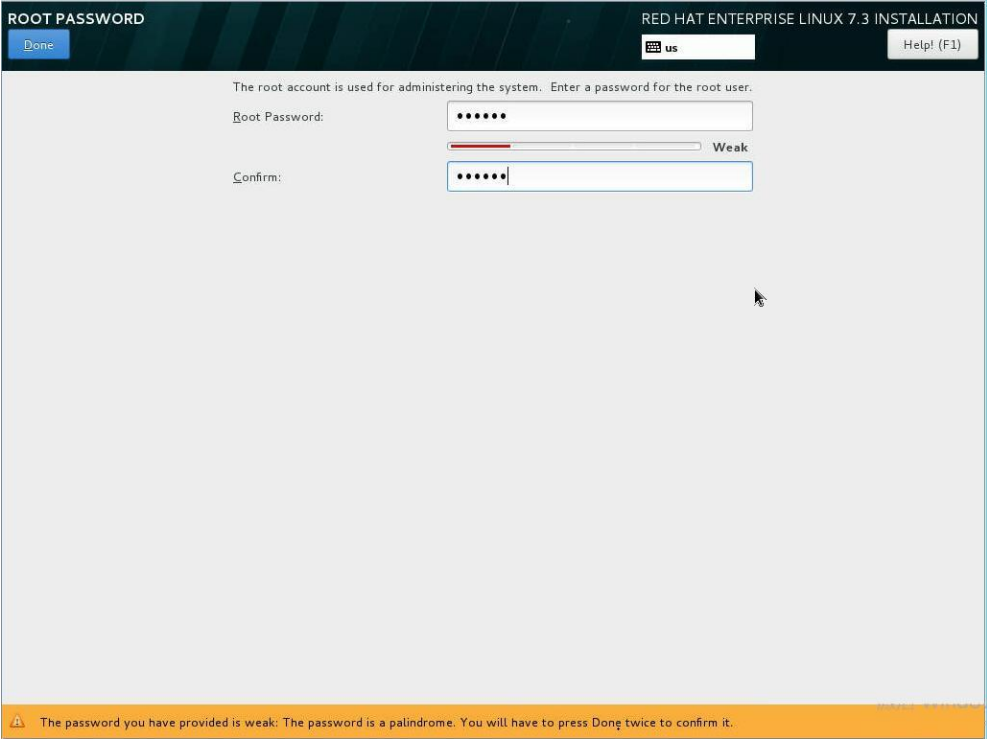
7. Click Next.



8. Begin the installation of the system, as shown below.



9. Set the root user password and after setting it, click Done, as seen below.



ROOT PASSWORD

RED HAT ENTERPRISE LINUX 7.3 INSTALLATION

Done us Help! (F1)

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

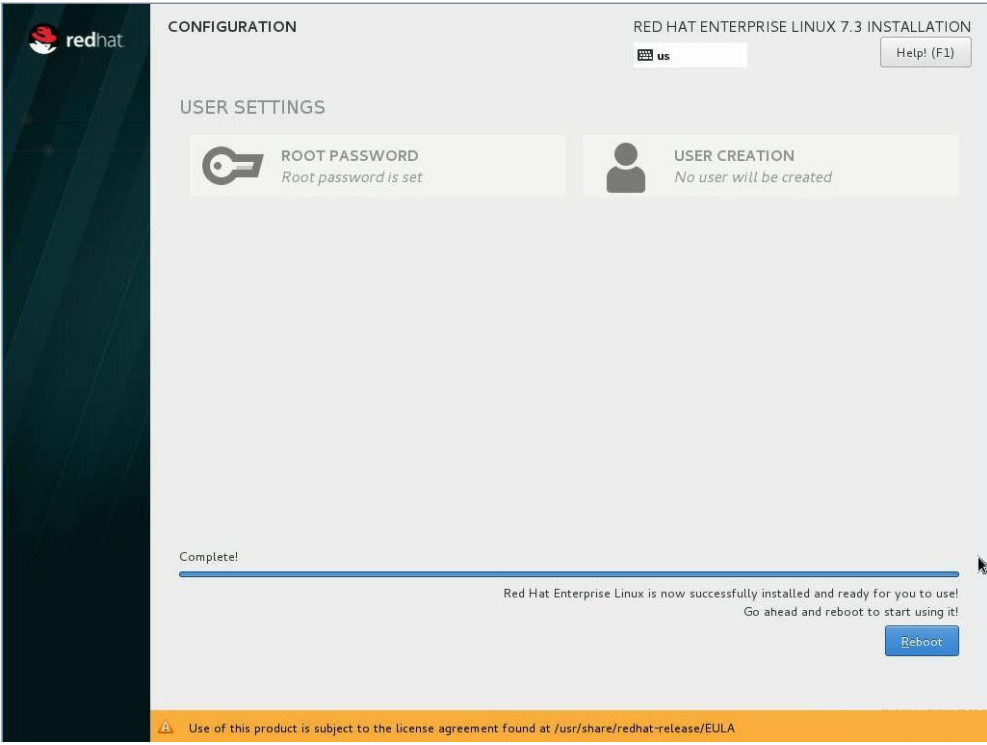
Root Password: [password field]

Confirm: [password field]

Weak

The password you have provided is weak: The password is a palindrome. You will have to press Done twice to confirm it.

10. Once the installation is complete, click REBOOT, as seen below.



redhat

CONFIGURATION

RED HAT ENTERPRISE LINUX 7.3 INSTALLATION

us Help! (F1)

USER SETTINGS

ROOT PASSWORD
Root password is set

USER CREATION
No user will be created

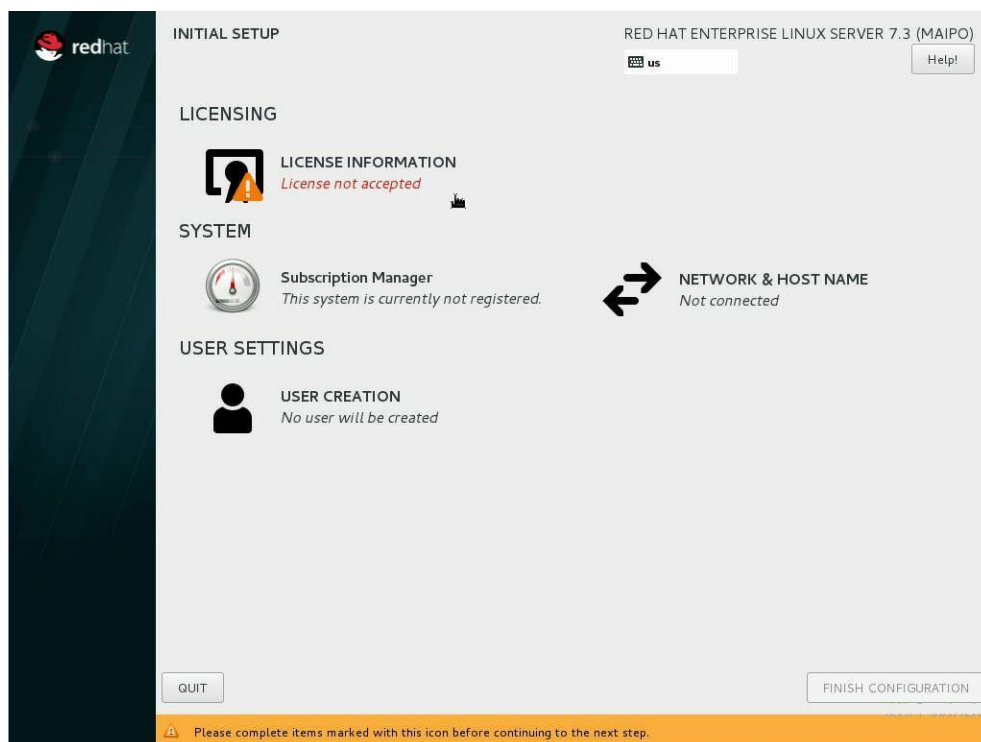
Complete!

Red Hat Enterprise Linux is now successfully installed and ready for you to use!
Go ahead and reboot to start using it!

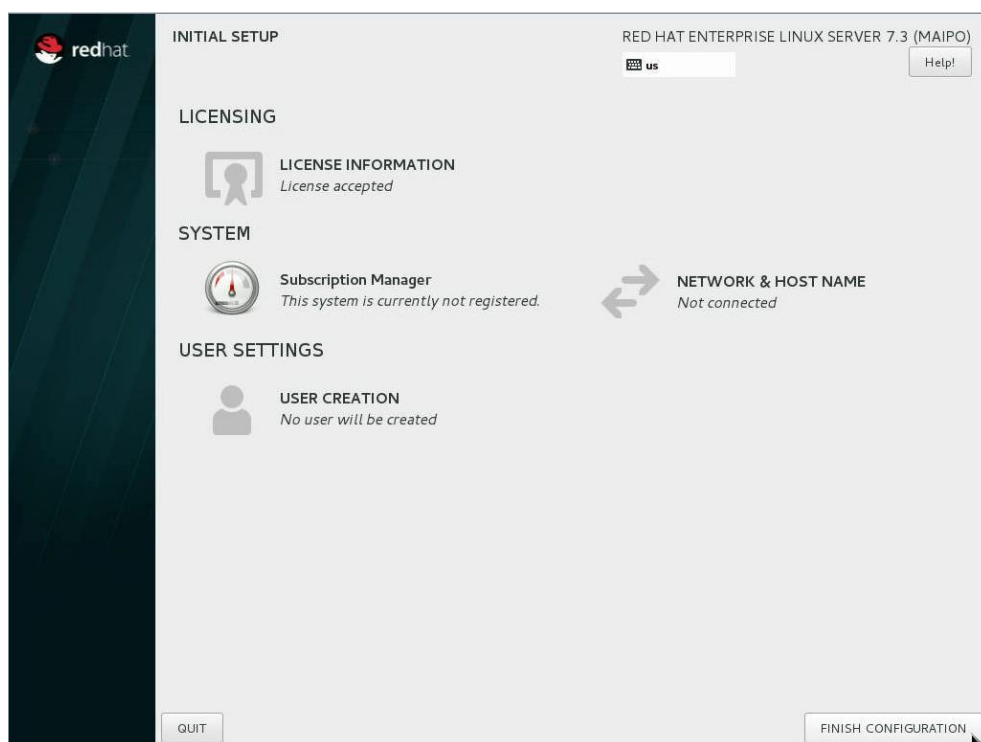
Reboot

Use of this product is subject to the license agreement found at /usr/share/redhat-release/EULA

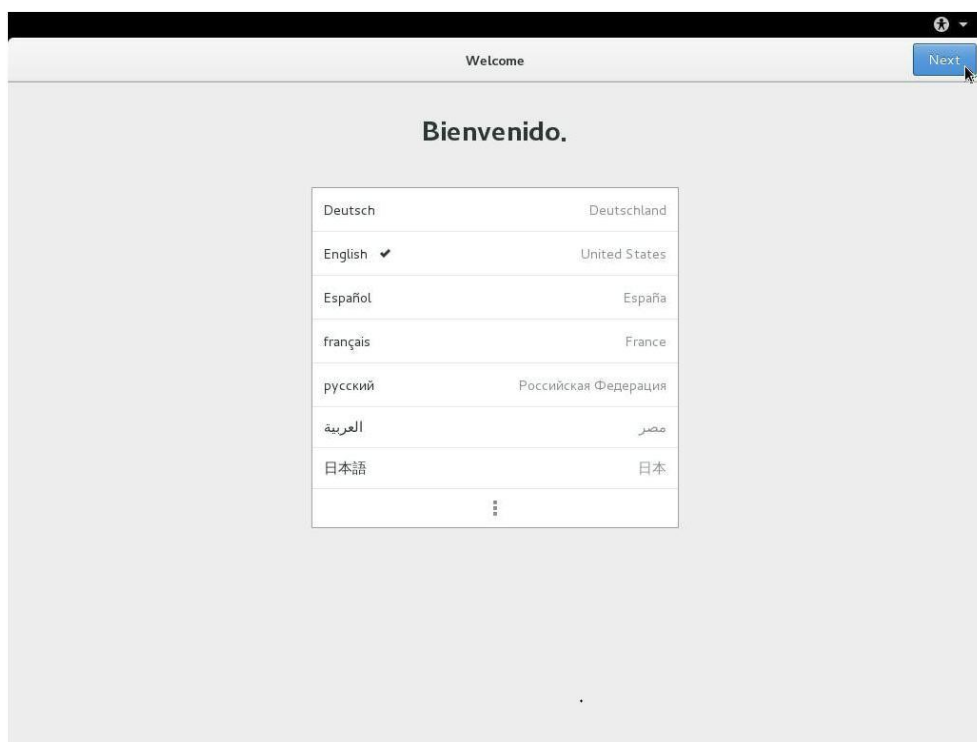
11. Licensing Information



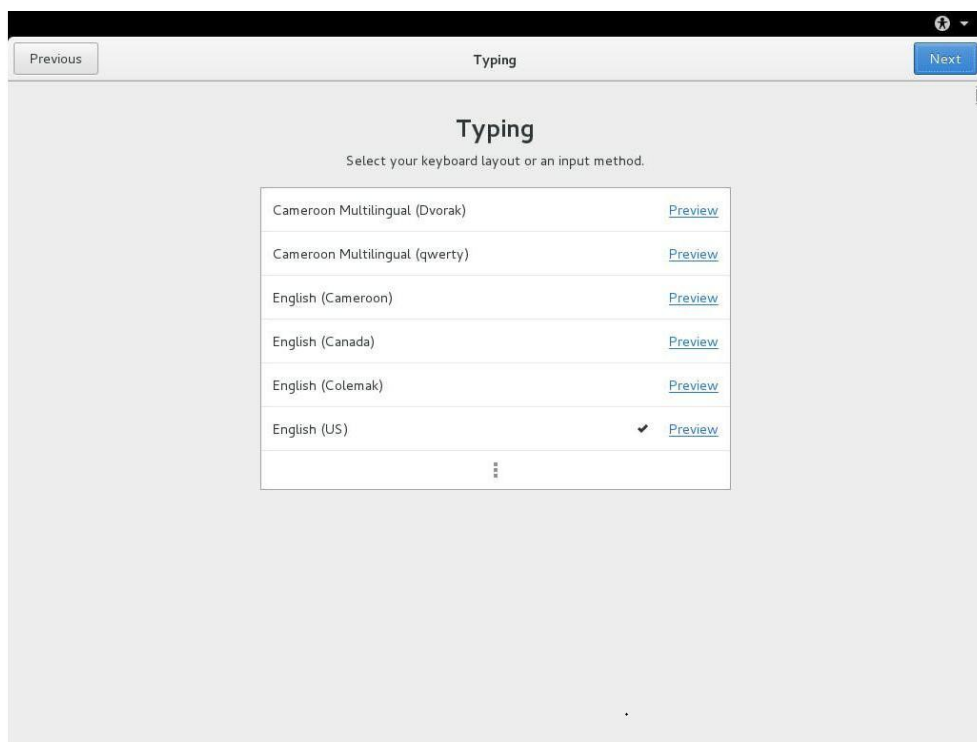
12. By default, click FINISH CONFIGURATION, as shown below.



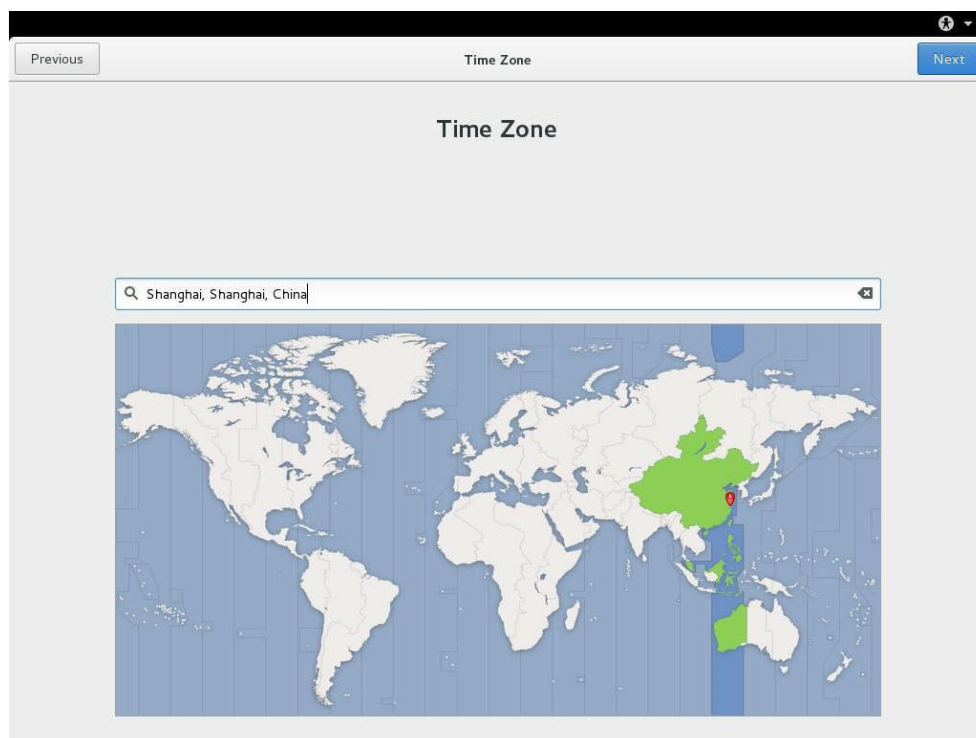
13. By default, click Next, as seen below.



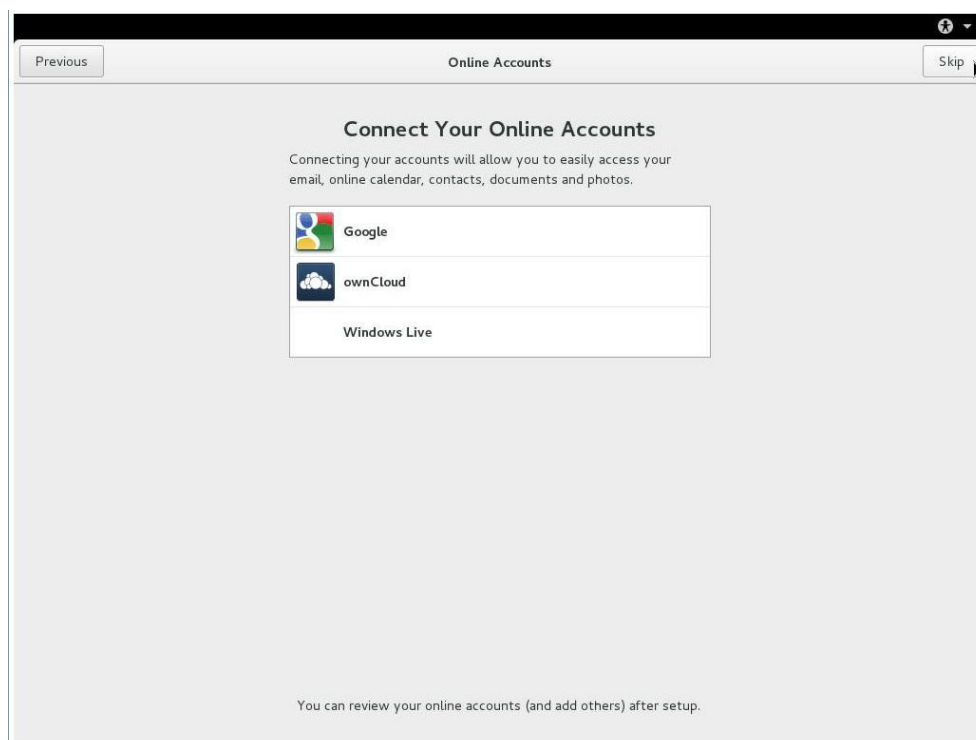
14. By default, click Next, as seen below.



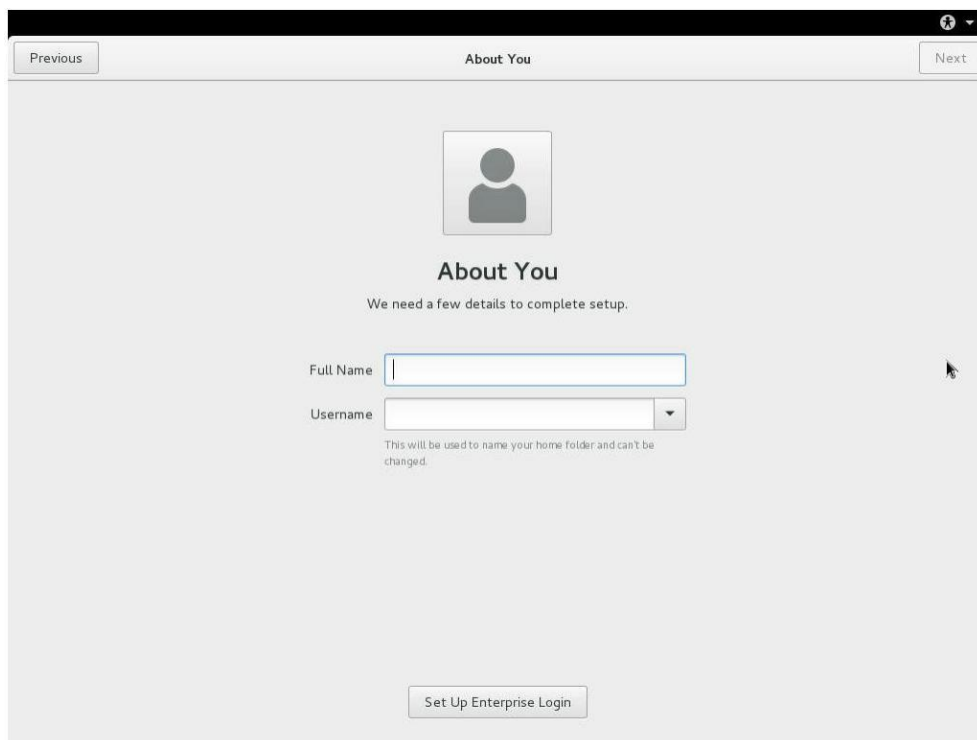
15. Select the time zone (e.g., Shanghai) and click Next, as seen below.



16. Click Skip, as seen below.

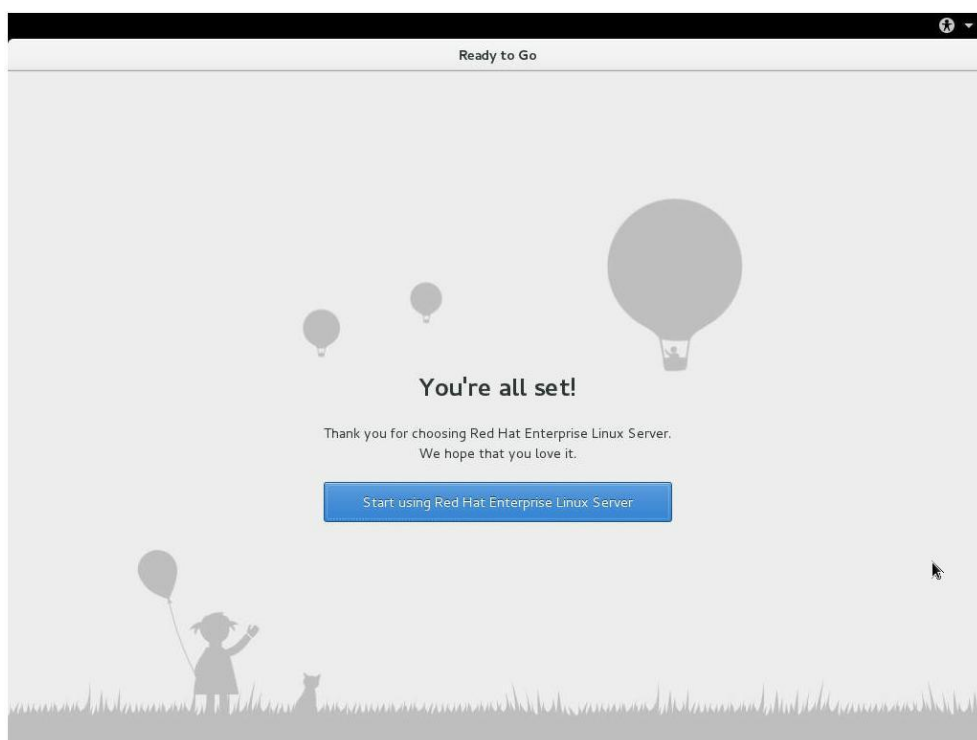


17. Create a user, as seen below.



The screenshot shows a web-based configuration window titled "About You". At the top, there are "Previous" and "Next" buttons. Below the title is a placeholder for a profile picture. The text "About You" is followed by "We need a few details to complete setup." There are two input fields: "Full Name" and "Username". Below the "Username" field, a note states: "This will be used to name your home folder and can't be changed." At the bottom, there is a button labeled "Set Up Enterprise Login".

18. Click Start using Red Hat Enterprise Linux Server to enter the system, as seen below.



Chapter 7 System Troubleshooting

7.1 Introduction to System Reset

This chapter will assist you in checking and solving potential issues that may arise while using the Positivo server systems.

Task	Key(s) Combination
Warm Boot: Clears the system memory and reloads the operating system.	<Ctrl>+<Alt>+ (depends on the operating system)
System Reset: Clears the system memory, performs a power-on self-test (POST) again, and reloads the operating system.	System Reset Button
Cold Boot: Clears the system memory, performs a power-on self-test (POST) again, reloads the operating system, and turns off power to all external devices.	Power Button

7.2 Initial System Start-up

Problems arising from the first startup of the system are generally caused by incorrect installation or configuration. Failures directly caused by hardware are relatively less common.

Checklist:

- Ensure all cables are properly and firmly connected.
- Verify that all expansion cards are fully inserted into the slots on the motherboard.
- Check that all jumper settings on the motherboard are correct.
- Confirm that all jumpers and switch settings on expansion cards and external devices are correct. To verify these settings, refer to the documentation provided by their manufacturers. To ensure that the expansion cards are usable, check for the absence of resource conflicts.
- Make sure all DIMMs are installed correctly.
- Verify that all external devices are installed properly.
- If the system has a hard drive, make sure it has been formatted or configured.
- Confirm that all device drivers are properly installed.

- Check if the configuration set by the SSU is correct.
- Ensure that the operating system is loaded correctly (see related operating system documentation).
- Check if the server has been powered on using the system power button on the front panel (the power light indicator should be on).
- Make sure the system power cord is properly connected to the system and plugged into the outlet.
- Confirm that the wall outlet has AC power.
- If all these items are correct but the problem persists, see the descriptions that follow.

7.3 Other Issues and Solutions

7.3.1 Preparing the System for Diagnostic Procedures

Shut down devices before unplugging cables: Before disconnecting external cables from the system, turn off the external devices connected to the system. Otherwise, this may cause damage to the system or external devices.

1. Turn off all external devices connected to the system.

Disconnect everything from the system except for the keyboard, mouse, and monitor.

2. Ensure that the system power cord is connected to a reliable AC outlet.
3. Make sure your monitor and keyboard are correctly connected to the system. Turn on the monitor and adjust the brightness and contrast to at least two-thirds of the maximum value (refer to the documentation that came with the monitor).
4. Turn on the system. If the power indicator light is not on, see the following section for troubleshooting when the power indicator light is off.

7.3.2 Verifying System Indicator Lights

After POST checks the system configuration, it tests each large capacity storage device for presence. After each device passes the test, the corresponding indicator light will briefly flash.

Please check the following:

- If a hard drive is installed in the system, check if the hard drive activity indicator light on the control panel briefly flashes. If it does not, please contact technical support or authorized dealers for assistance.

7.4 Specific Problems

7.4.1 Power Light is Off

Please check the following:

- Ensure all power cords are firmly connected. Check if the power cord is attached to a junction box or an electrical outlet. Also, check if your fuses or circuit breakers have been tripped or damaged.

- Check if the system is operating normally. If it is, then there may be an issue with the power indicator light, or the cable running from the front panel to the motherboard may have come loose.

- Determine if there are other issues with the system. If there are, please refer to the "Abnormal System Cooling Fan Operation" section listed for possible issues.

If all the items have been correctly checked and the problem still persists, please contact technical support or an authorized dealer for help.

7.4.2 Screen Does Not Display Characters

Check the following:

- Verify the keyboard is functioning correctly. Check to see if the "Num Lock" light is on.

- Make sure the monitor's cable is securely connected and that the power is on. Many monitors now automatically power down when inactive and may require some warm-up time upon being activated.

- Adjust the monitor's brightness and contrast settings appropriately.

- Confirm if the monitor settings are correct.

- Check if the monitor's signal cable is installed correctly.

- Determine if the onboard video controller is working properly.

7.4.3 The display on the screen is incorrect or the characters are distorted

Please check the following items:

- Whether the brightness and contrast settings of the monitor are appropriate. Refer to the documentation provided by the monitor manufacturer.

- Whether the monitor's signal cable and power cord are installed correctly.

- Whether the graphics card installed in the operating system is correct.

If the problem persists, the monitor may be faulty or the model may be incorrect. Please contact technical support personnel or authorized dealers for assistance.

7.4.4 The system fan is not spinning properly

If the system cooling fan is not working properly, system components may be damaged. At this time, please check the following items:

- Whether there is alternating current in the wall outlet.
- Whether the system power cord is correctly connected to the system and the wall outlet.
- Whether the power button has been pressed.
- Whether the power indicator light is on.
- Whether the fan motor has stopped (use the server management subsystem to check the fan status).
- Whether the fan power connector is correctly connected to the board. Whether the cables from the front panel are correctly connected to the motherboard.
- Whether the power cables are correctly connected to the motherboard.
- Whether there is a short circuit caused by the cables being squeezed or the power connectors being inserted incorrectly into the power connector interface.

If the connections are correct and there is alternating current in the wall outlet, please contact technical support personnel or authorized dealers for assistance.

7.4.5 The hard drive activity indicator light does not turn on

If one or more hard drives have been installed in the system, please check the following items:

- Whether the power and signal cables of the hard drive are installed correctly.
- Whether all related switches and jumper settings on the hard drive and adapter are correct.
- Whether the hard drive configuration is correct.

7.4.6 The activity indicator light on the CD-ROM drive is not on

Please check the following items:

- Whether the power and signal cables on the CD-ROM are installed correctly.
- Whether all related switches and jumper settings on the CD-ROM are correct.
- Whether the CD-ROM configuration is correct.
- Whether the motherboard-integrated IDE controller has been enabled.

NOTE:

The front panel indicator lights reflect IDE and SATA devices: When an IDE hard drive or a SATA device controlled by the motherboard-integrated SATA controller is in use, the hard drive activity indicator light on the front panel will light up. This indicator does not show CD-ROM activity status.

7.4.7 The bootable disc cannot boot by itself

If the disc being used is a bootable disc for the system, please check the following setting:

- Whether the CD-ROM has been set as the first boot device in the BIOS settings.

Chapter 8 Environmental Protection Declaration

8.1 RoHS Declaration

The RoHS Directive, also known as 2011/65/EU (RoHS 2.0), was published in the Official Journal of the European Union on July 1, 2011, and took effect on July 21, 2011.

In accordance with the requirements of RoHS 2.0, we have collected material information from our suppliers and have controlled the production process internally within our company. Therefore, our company (including subsidiaries) hereby guarantees that the products/parts supplied as listed in the following inventory, or listed in the attachments, comply with the items and control values outlined in the RoHS Directive 2011/65/EU. Upon signing this declaration, we agree to assume responsibility for any liability arising from any part of the materials and all raw materials provided by our company that violate this RoHS declaration.

NO	Restricted Substances	Eucontrol Value(PPM)	Powerleader control Value(PPM)	Remark
1	Pb	<1000	<1000	
2	Hg	<1000	<1000	
3	Cd	<100	<100	
4	CrVI	<1000	<1000	
5	PBB	<1000	<1000	
6	PBDE	<1000	<1000	
7	HBCDD	<1000	<1000	
8	DEHP	<1000	<1000	
9	DB	<1000	<1000	
10	BBP	<1000	<1000	

8.2 Instructions for Recycling of Discarded Electronic Products

To protect the environment and safeguard human health, in accordance with the "Solid Waste Pollution Environmental Protection Law of the People's Republic of China" and the "Regulations on the Management of Recycling and Disposal of Waste Electrical and Electronic Products," users should uniformly collect, sort, label, transfer, and manage discarded electronic products. These items should be handed over to a "professional environmental protection technology company" for recycling, treatment, dismantling, and landfilling to reduce or eliminate their hazardous components, in compliance with environmental protection requirements.

The primary controlled items of discarded products include: waste cardboard boxes and other packaging materials, waste PE bags, plastic products such as glue bottles, waste glass containers, waste batteries containing zinc and cadmium, waste organic solvents, and discarded whole computers and monitors.