

Install

Language			
Amharic	Français	Македонски	Tamil
Arabic	Gaeilge	Malayalam	தமிழ்
Asturianu	Galego	Marathi	Thai
Беларуская	Gujarati	Burmese	Tagalog
Български	ᱚᱱᱟᱜᱚᱸᱰ	Nepali	Türkçe
Bengali	Hindi	Nederlands	Uyghur
Tibetan	Hrvatski	Norsk bokmål	Українська
Bosanski	Magyar	Norsk nynorsk	Tiếng Việt
Català	Bahasa Indonesia	Punjabi (Gurmukhi)	中文(简体)
Čeština	Íslenska	Polski	中文(繁體)
Dansk	Italiano	Português do Brasil	
Deutsch	日本語	Português	
Dzongkha	தமிழ்	Română	
Ελληνικά	Қазақ	Русский	
English	Khmer	Sámegillii	
Esperanto	ಕನ್ನಡ	සිංහල	
Español	한국어	Slovenčina	
Eesti	Kurdî	Slovenščina	
Euskara	Lao	Shqip	
فارسی	Lietuviškai	Српски	
Suomi	Latviski	Svenska	

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Install Ubuntu Server
Multiple server install with MAAS
Check disc for defects
Test memory
Boot from first hard disk
Rescue a broken system

F1 Help F2 Language F3 Keymap F4 Modes F5 Accessibility F6 Other Options

[!!] 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	↓

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[!] 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

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[!] 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?

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<Yes>

<No>

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

[!] 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)



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[!] 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)

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[!] Configure the network

Please enter the hostname for this system.

The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.

Hostname:

ubuntu

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<Continue>

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

[!] Set up users and passwords

A user account will be created for you to use instead of the root account for non-administrative activities.

Please enter the real name of this user. This information will be used for instance as default origin for emails sent by this user as well as any program which displays or uses the user's real name. Your full name is a reasonable choice.

Full name for the new user:

testuser

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[!!] Set up users and passwords

Select a username for the new account. Your first name is a reasonable choice. The username should start with a lower-case letter, which can be followed by any combination of numbers and more lower-case letters.

Username for your account:

testuser

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[!!] Set up users and passwords

A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.

Choose a password for the new user:

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<Continue>

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

[!] Set up users and passwords

Please enter the same user password again to verify you have typed it correctly.

Re-enter password to verify:

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<Continue>

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

[!] Set up users and passwords

You may configure your home directory for encryption, such that any files stored there remain private even if your computer is stolen.

The system will seamlessly mount your encrypted home directory each time you login and automatically unmount when you log out of all active sessions.

Encrypt your home directory?

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<Yes>

<No>

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

[!] Configure the clock

Based on your present physical location, your time zone is Asia/Tokyo.

If this is not correct, you may select from a full list of time zones instead.

Is this time zone correct?

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<Yes>

<No>

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

[!!] 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

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!!! Partition disks

Note that all data on the disk you select will be erased, but not before you have confirmed that you really want to make the changes.

Select disk to partition:

SCSI3 (0,0,0) (sda) - 8.6 GB ATA VBOX HARDDISK

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!!! Partition disks

Before the Logical Volume Manager can be configured, the current partitioning scheme has to be written to disk. These changes cannot be undone.

After the Logical Volume Manager is configured, no additional changes to the partitioning scheme of disks containing physical volumes are allowed during the installation. Please decide if you are satisfied with the current partitioning scheme before continuing.

The partition tables of the following devices are changed:

SCSI3 (0,0,0) (sda)

Write the changes to disks and configure LVM?

<Yes>

<No>

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

[!] Partition disks

You may use the whole volume group for guided partitioning, or part of it. If you use only part of it, or if you add more disks later, then you will be able to grow logical volumes later using the LVM tools, so using a smaller part of the volume group at installation time may offer more flexibility.

The minimum size of the selected partitioning recipe is 3.0 GB (or 36%); please note that the packages you choose to install may require more space than this. The maximum available size is 8.3 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.

Amount of volume group to use for guided partitioning:

8.3 GB

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<Continue>

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[!!] 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:

- LVM VG ubuntu-vg, LV root
- LVM VG ubuntu-vg, LV swap_1
- SCSI3 (0,0,0) (sda)

The following partitions are going to be formatted:

- LVM VG ubuntu-vg, LV root as ext4
- LVM VG ubuntu-vg, LV swap_1 as swap
- partition #1 of SCSI3 (0,0,0) (sda) as ext2

Write the changes to disks?

<Yes>

<No>

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

[!] Configure the package manager

If you need to use a HTTP proxy to access the outside world, enter the proxy information here. Otherwise, leave this blank.

The proxy information should be given in the standard form of "http://[[user][:pass]@]host[:port]/".

HTTP proxy information (blank for none):

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<Continue>

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[!] Configuring taskel

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

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

[!] 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>

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

[!] 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.

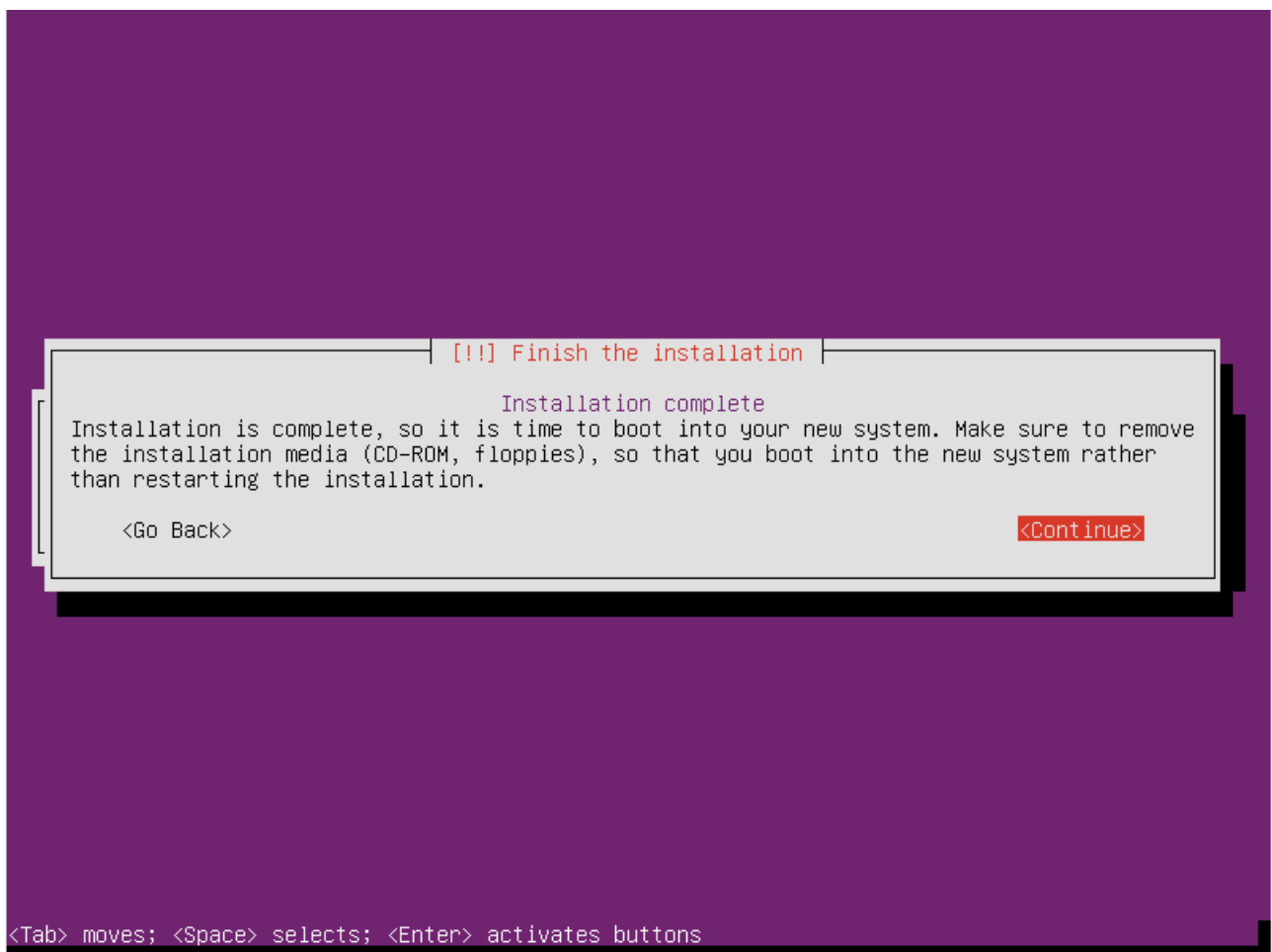
Install the GRUB boot loader to the master boot record?

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<Yes>

<No>

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



enable root login (All Nodes)

権限の有効化

1. # setting password for root (All Nodes)
2. sudo passwd root
- 3.
4. # login as root
5. su - root

enable root ssh login (All Nodes)

1. sudo vim /etc/ssh/sshd_config

1. # PermitRootLogin without-password
2. PermitRootLogin yes

```
# Package generated configuration file
# See the sshd_config(5) manpage for details

# What ports, IPs and protocols we listen for
Port 22
# Use these options to restrict which interfaces/protocols sshd will bind to
#ListenAddress ::
#ListenAddress 0.0.0.0
Protocol 2
# HostKeys for protocol version 2
HostKey /etc/ssh/ssh_host_rsa_key
HostKey /etc/ssh/ssh_host_dsa_key
HostKey /etc/ssh/ssh_host_ecdsa_key
HostKey /etc/ssh/ssh_host_ed25519_key
#Privilege Separation is turned on for security
UsePrivilegeSeparation yes

# Lifetime and size of ephemeral version 1 server key
KeyRegenerationInterval 3600
ServerKeyBits 1024

# Logging
SyslogFacility AUTH
LogLevel INFO

# Authentication:
LoginGraceTime 120
# PermitRootLogin without-password
PermitRootLogin yes
```

1,1

Top

ssh passwordless login (All Nodes)

パスワードなしでのsshログインが必要となります

1. # ssh localhost
2. # ll ~/.ssh
3. # rm ./id_rsa*
4. ssh-keygen -t rsa

```

root@hadoop-master:~# ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /root/.ssh/id_rsa.
Your public key has been saved in /root/.ssh/id_rsa.pub.
The key fingerprint is:
9d:d5:93:32:16:fd:4b:90:44:f1:0b:ed:ce:1b:00:06 root@hadoop-master
The key's randomart image is:
+--[ RSA 2048 ]-----+
|      E   +=o   |
|      .   =+.   |
|      o= . =+   |
|      ..+.0000  |
|      S o  ..o.  |
|      +.   |
|      +   |
|      o   |
|      .   |
+-----+
root@hadoop-master:~#

```

print rsa key to authorized (All Nodes)

1. `cd ~`
2. `cat .ssh/id_rsa.pub >> .ssh/authorized_keys`

test (All Nodes)

1. `# ssh localhost-name`
2. `ssh localhost`

sent to remote node (Master Node)

1. `scp ~/.ssh/authorized_keys root@remote-node:/root/.ssh/authorized_keys`
2. `scp ~/.ssh/authorized_keys hadoop@remote-node:/home/hadoop/.ssh/authorized_keys`

JDK (All Nodes)

append ppa

1. `add-apt-repository ppa:webupd8team/java`
2. `apt-get update`

```

root@hadoop-master:~# sudo add-apt-repository ppa:webupd8team/java
Oracle Java (JDK) Installer (automatically downloads and installs Oracle JDK7 / JDK8 / JDK9). There are no actual Java files in this PPA.

More info (and Ubuntu installation instructions):
- for Oracle Java 7: http://www.webupd8.org/2012/01/install-oracle-java-jdk-7-in-ubuntu-via.html
- for Oracle Java 8: http://www.webupd8.org/2012/09/install-oracle-java-8-in-ubuntu-via-ppa.html

Debian installation instructions:
- Oracle Java 7: http://www.webupd8.org/2012/06/how-to-install-oracle-java-7-in-debian.html
- Oracle Java 8: http://www.webupd8.org/2014/03/how-to-install-oracle-java-8-in-debian.html

Oracle Java 9 (for both Ubuntu and Debian): http://www.webupd8.org/2015/02/install-oracle-java-9-in-ubuntu-linux.html

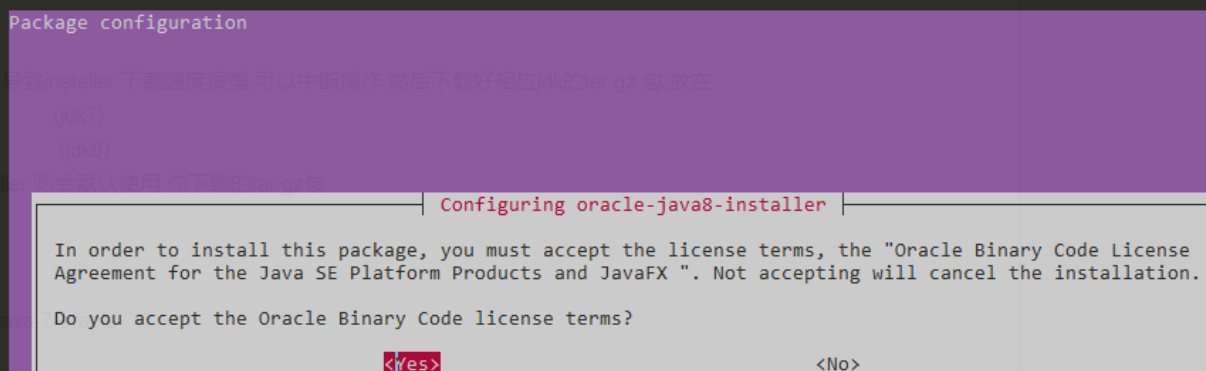
For JDK9, the PPA uses standard builds from: https://jdk9.java.net/download/ (and not the Jigsaw builds!).

Important!!! For now, you should continue to use Java 8 because Oracle Java 9 is available as an early access release! You should only use Oracle Java 9 if you explicitly need it, because it may contain bugs and it might not include the latest security patches! Also, some Java options were removed in JDK9, so you may encounter issues with various Java apps. More information and installation instructions (Ubuntu / Linux Mint / Debian): http://www.webupd8.org/2015/02/install-oracle-java-9-in-ubuntu-linux.html
More info: https://launchpad.net/~webupd8team/+archive/ubuntu/java
Press [ENTER] to continue or ctrl-c to cancel adding it

```

install jdk8 (All Nodes)

1. apt-get install oracle-java8-installer



test (All Nodes)

1. java -version
2. javac -version

```
root@hadoop-master:~# java -version
java version "1.8.0_121"
Java(TM) SE Runtime Environment (build 1.8.0_121-b13)
Java HotSpot(TM) 64-Bit Server VM (build 25.121-b13, mixed mode)
root@hadoop-master:~# javac -version
javac 1.8.0_121
root@hadoop-master:~# |
```