

Installation Ubuntu 20.04 LTS & 5 Things to do After Installation Ubuntu

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<https://github.com/swacademy/Ubuntu>

Minimum System Requirements

- 2 GHz dual core processor
- 2 GiB of system memory (RAM)
- 25 GB of hard-drive space
- Video support capable of 1024 x 768 resolution
- Either a CD/DVD drive or a USB port for the installer media
- Audio support
- An Internet connection

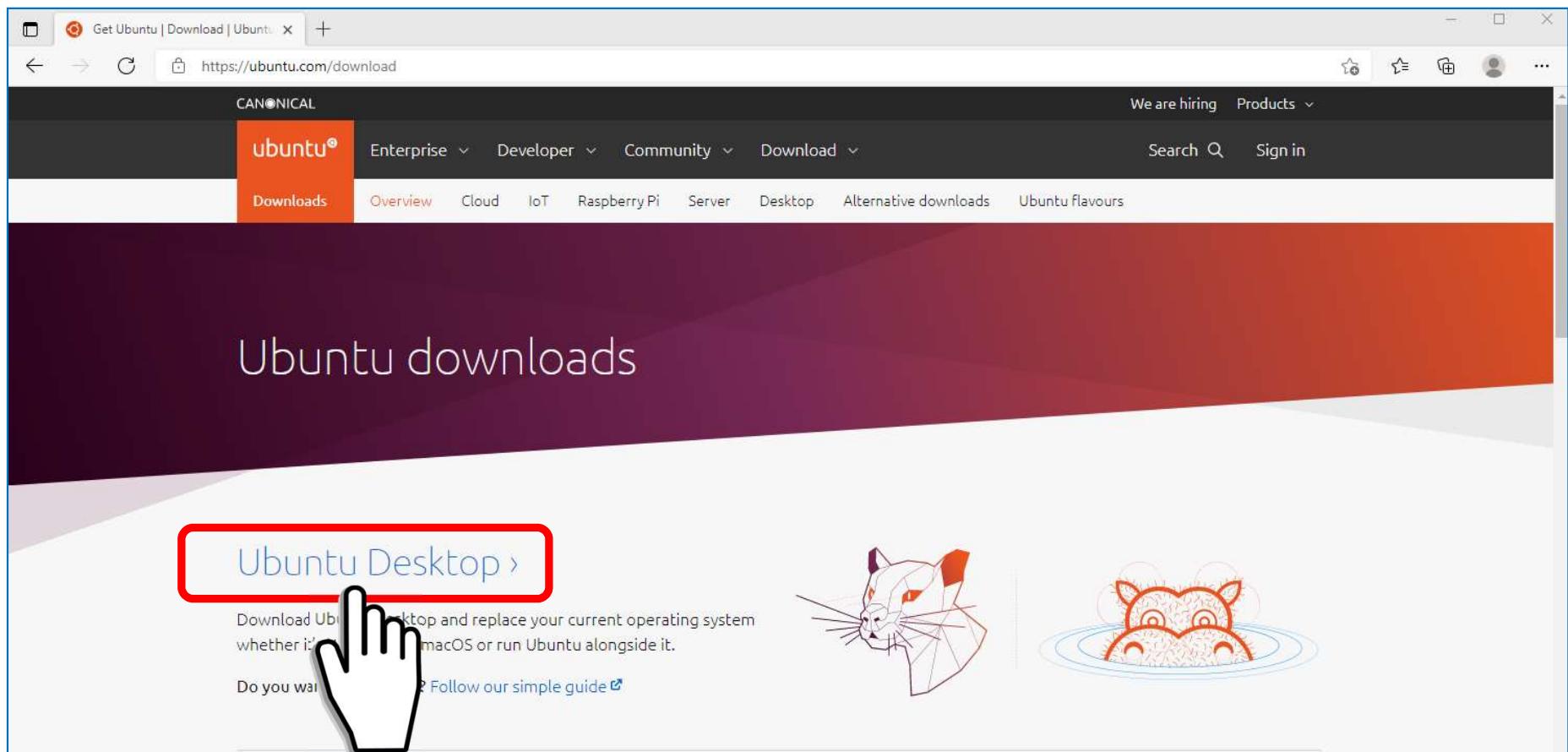
32-bit versus 64-bit

- If your computer 64-bit processor, install the 64-bit version.
- If your computer is older, a netbook, or you do not know the type of processor in the computer, install the 32-bit version.

Lab 1 : Installation Ubuntu 20.04 LTS

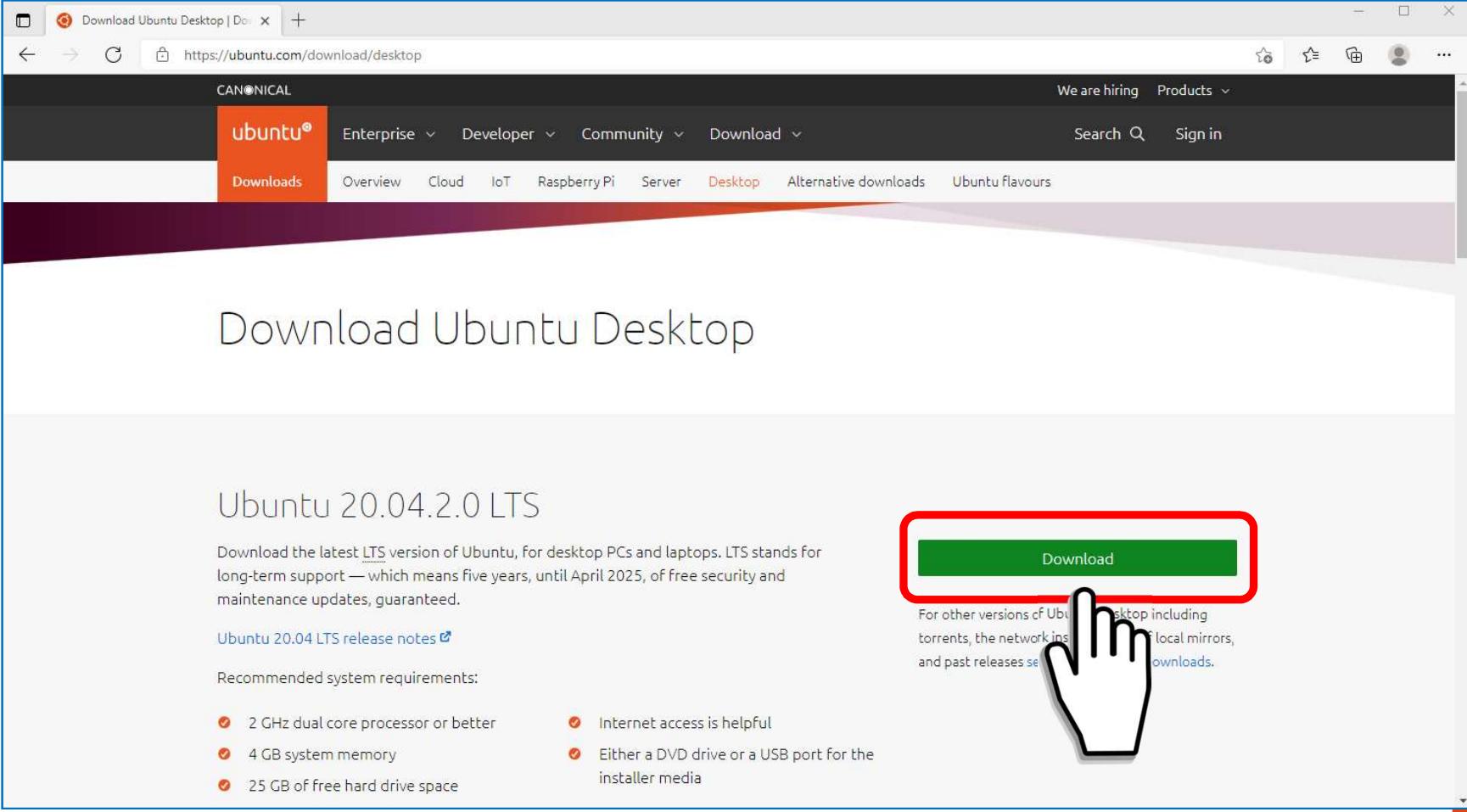
Downloads from Ubuntu Site

Visit www.ubuntu.com/download



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Downloads Ubuntu Desktop Image



The screenshot shows a web browser displaying the Ubuntu download page at <https://ubuntu.com/download/desktop>. The page has a dark header with the Canonical logo and navigation links for Enterprise, Developer, Community, Download, Downloads (which is highlighted), Overview, Cloud, IoT, Raspberry Pi, Server, Desktop (which is also highlighted in red), Alternative downloads, and Ubuntu flavours. A search bar and sign-in link are also present. The main content area features a large heading "Download Ubuntu Desktop" and a section for "Ubuntu 20.04.2.0 LTS". It includes a brief description of what LTS means, a link to "Ubuntu 20.04 LTS release notes", and a list of recommended system requirements. On the right side, there is a large green "Download" button with a red border, which is being pointed to by a black hand cursor. Below the button, there is a note about other download options like torrents and local mirrors.

Download Ubuntu Desktop

Ubuntu 20.04.2.0 LTS

Download the latest LTS version of Ubuntu, for desktop PCs and laptops. LTS stands for long-term support — which means five years, until April 2025, of free security and maintenance updates, guaranteed.

[Ubuntu 20.04 LTS release notes](#)

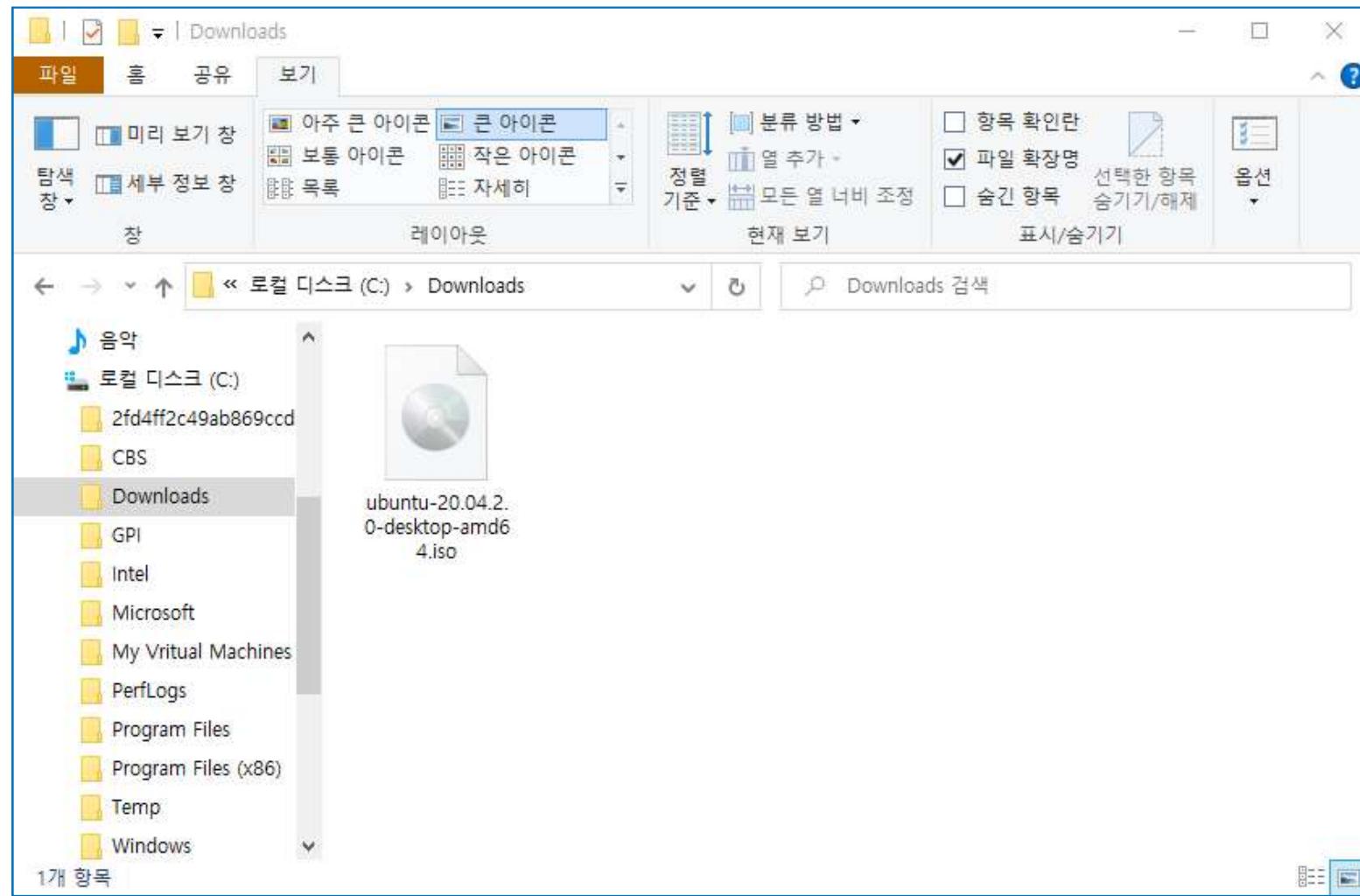
Recommended system requirements:

- 2 GHz dual core processor or better
- 4 GB system memory
- 25 GB of free hard drive space
- Internet access is helpful
- Either a DVD drive or a USB port for the installer media

For other versions of Ubuntu desktop including torrents, the network installer, local mirrors, and past releases see [Downloads](#).

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Save ubuntu-20.04.x-desktop-amd64.iso



Burning the DVD Image

- Once your download is complete, will be left with a file called *ubuntu-20.04.x-desktop-amd64.iso* or similar (*amd64* here in the filename refers to the 64-bit version. If downloaded the 32-bit version, the filename contains *i386* instead).
- This file is a DVD image—a snapshot of the contents of a DVD—which you will need to burn to a DVD.

Installation

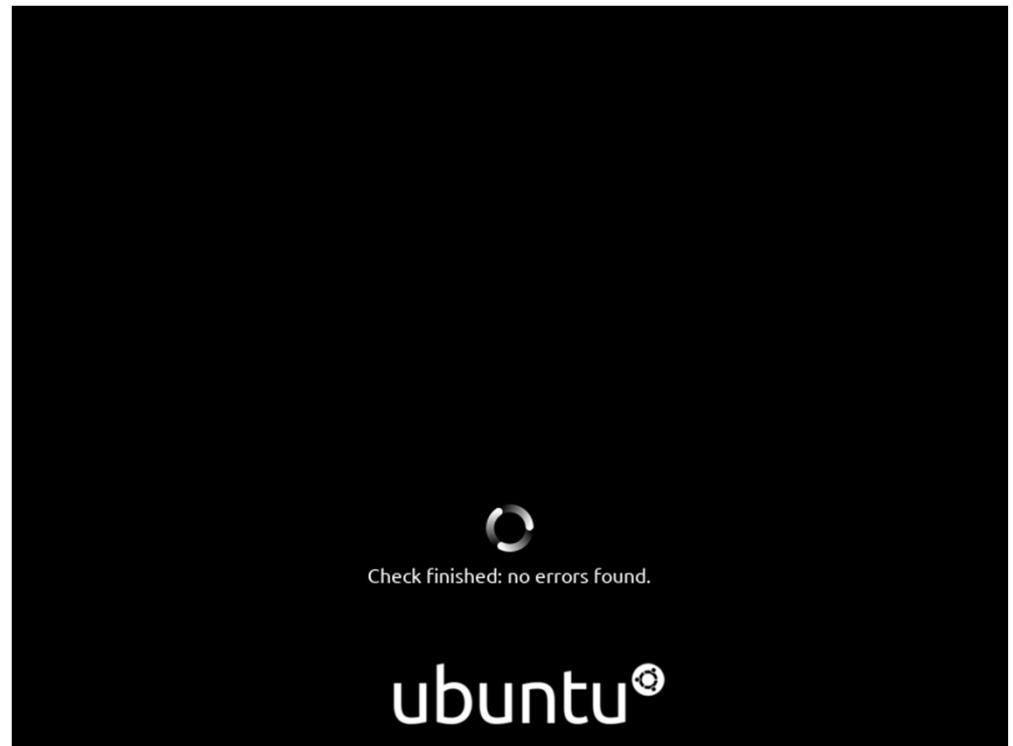
Ubuntu 20.04 LTS

Desktop 64-bit

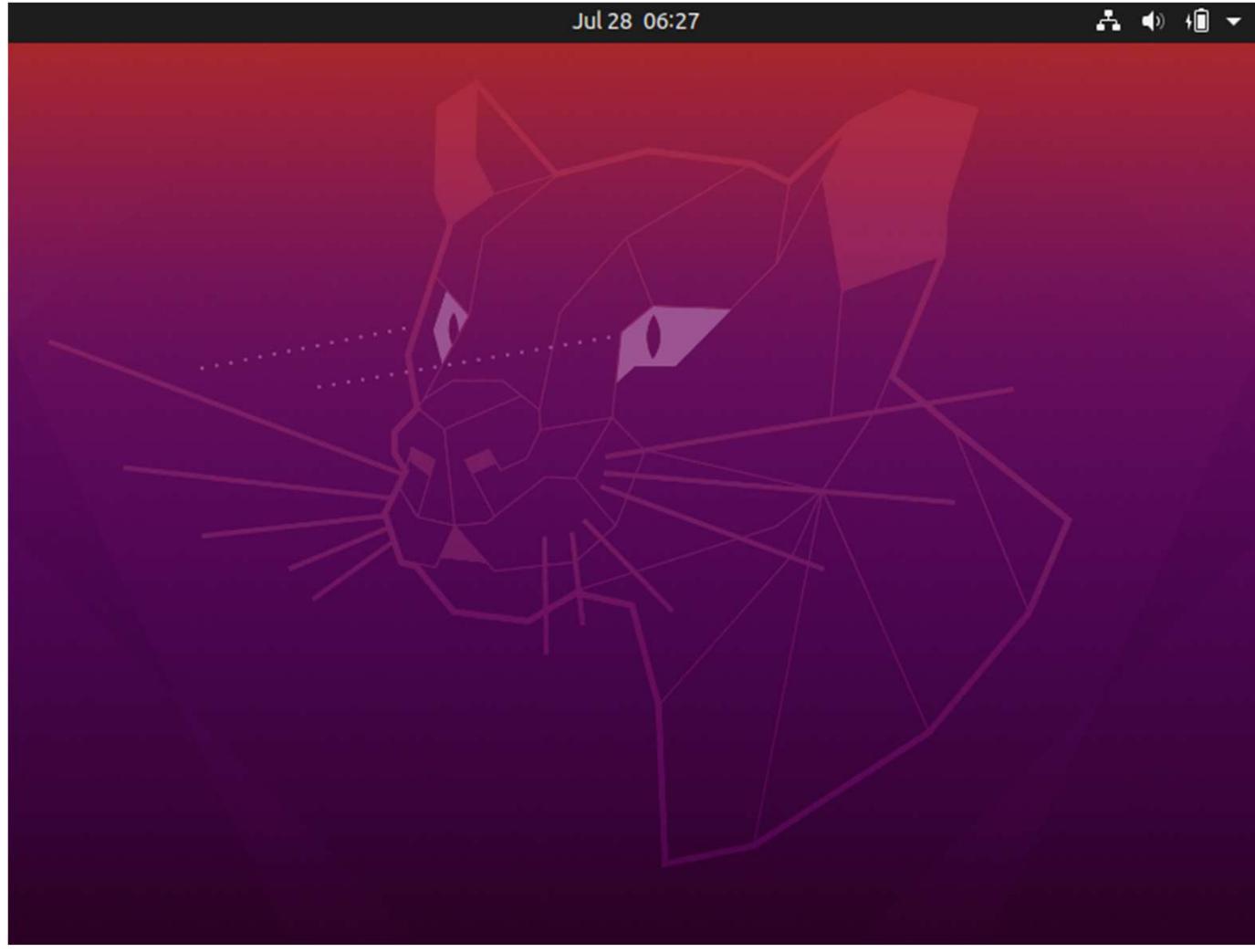
Start & Loading



Start & Loading (Cont.)



Start & Loading (Cont.)



Install Ubuntu

Jul 28 06:28

Install

Welcome

English

Español

Esperanto

Euskara

Français

Gaeilge

Galego

Hrvatski

Íslenska

Italiano

Kurdî

Latviski

Lietuviškai

Magyar

Nederlands

No localization (UTF-8)

Norsk bokmål

Norsk nynorsk

The screenshot shows the initial 'Welcome' screen of the Ubuntu installer. On the left, a vertical list of languages is displayed, with 'English' currently selected. In the center, there are two main options: 'Try Ubuntu' (represented by a CD icon) and 'Install Ubuntu' (represented by a laptop icon). A large hand cursor is shown pointing at the 'Install Ubuntu' button, which is highlighted with a red rectangle. Below the buttons, explanatory text is visible: 'You can try Ubuntu without making any changes to your current system directly from this CD.' and 'Or if you're ready, you can install Ubuntu alongside (or instead of) your current operating system. This shouldn't take too long.' At the bottom, it says 'You may wish to read the [release notes](#)'.

Try Ubuntu

Install Ubuntu

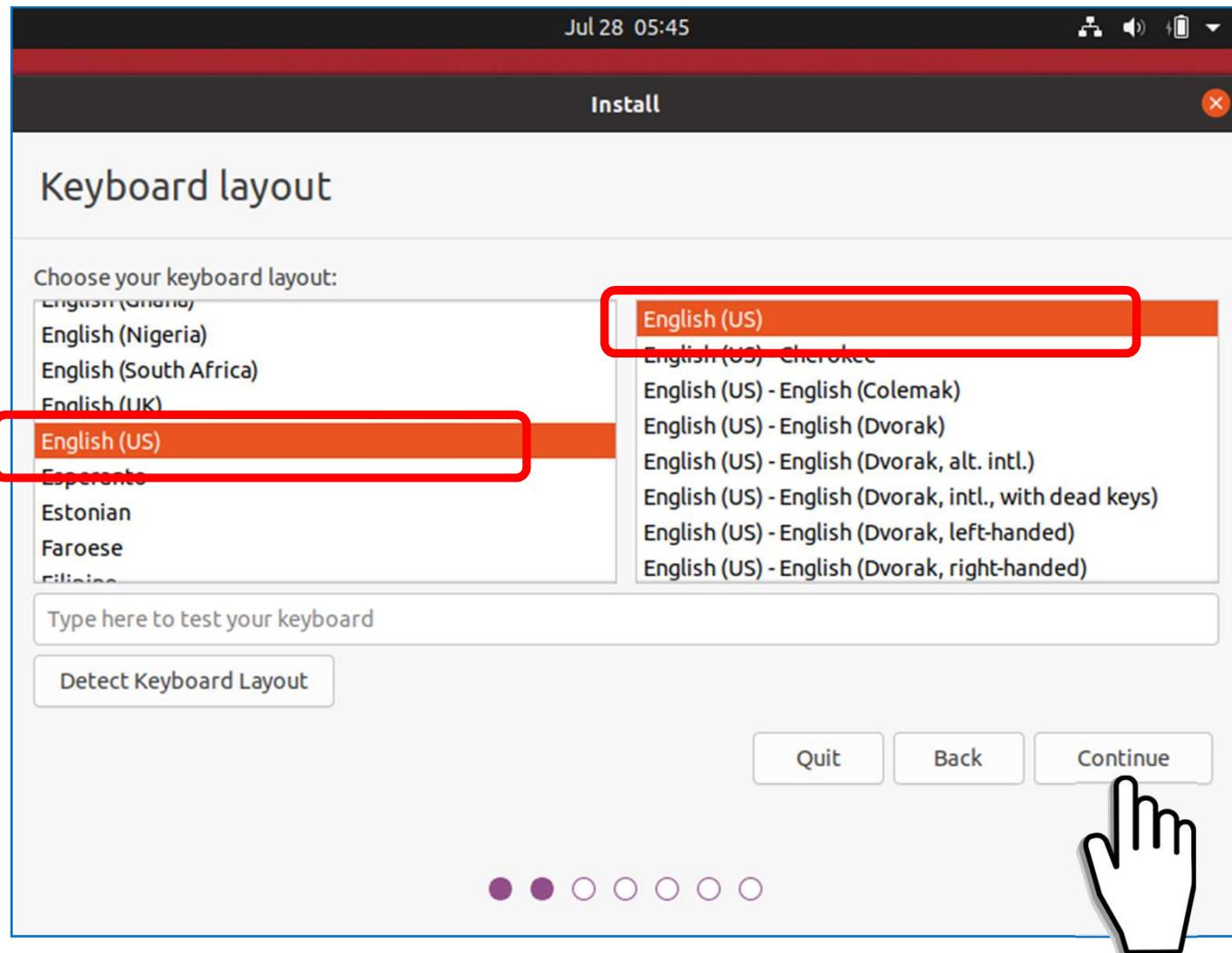
You can try Ubuntu without making any changes to your current system directly from this CD.

Or if you're ready, you can install Ubuntu alongside (or instead of) your current operating system. This shouldn't take too long.

You may wish to read the [release notes](#).

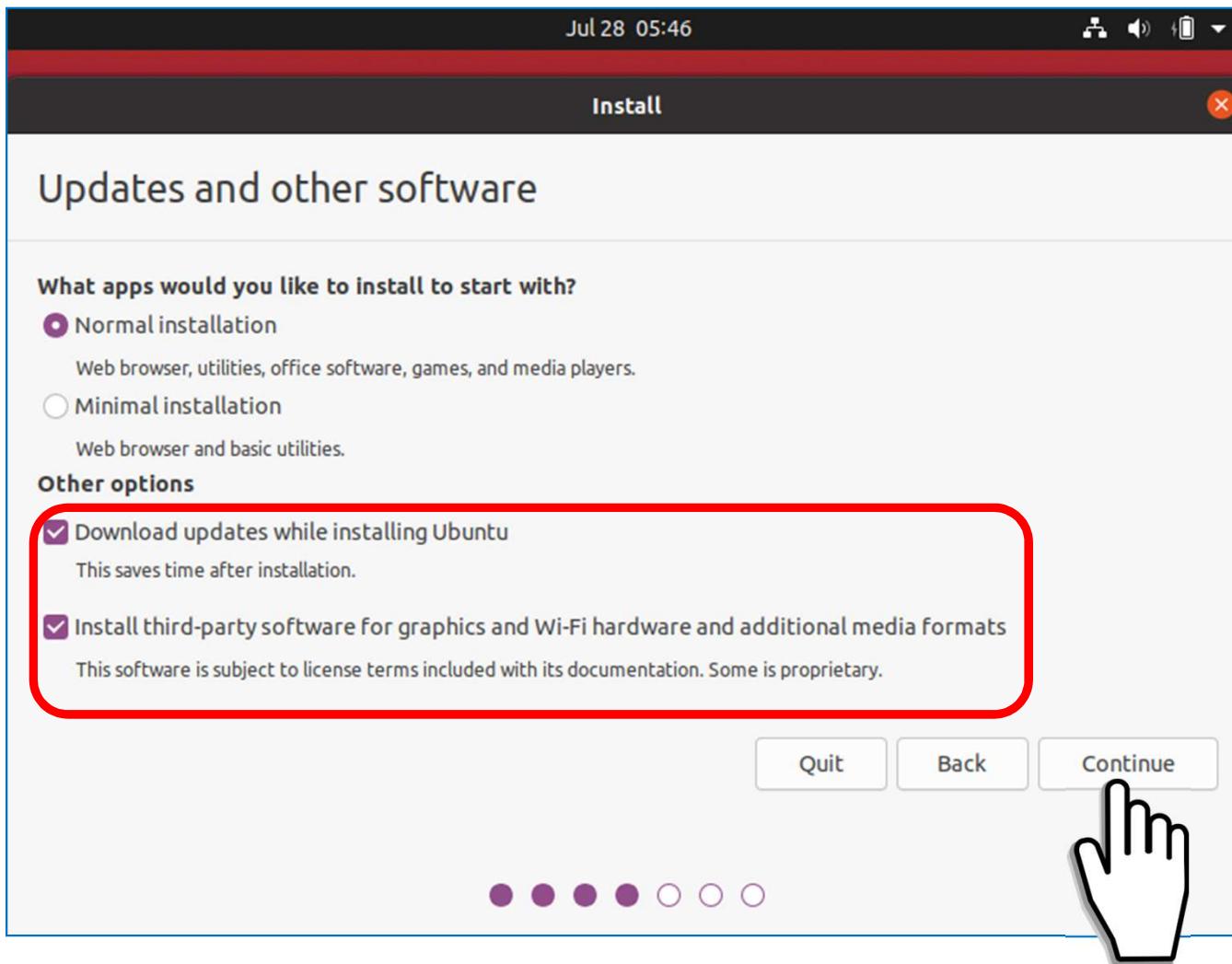
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Keyboard layout



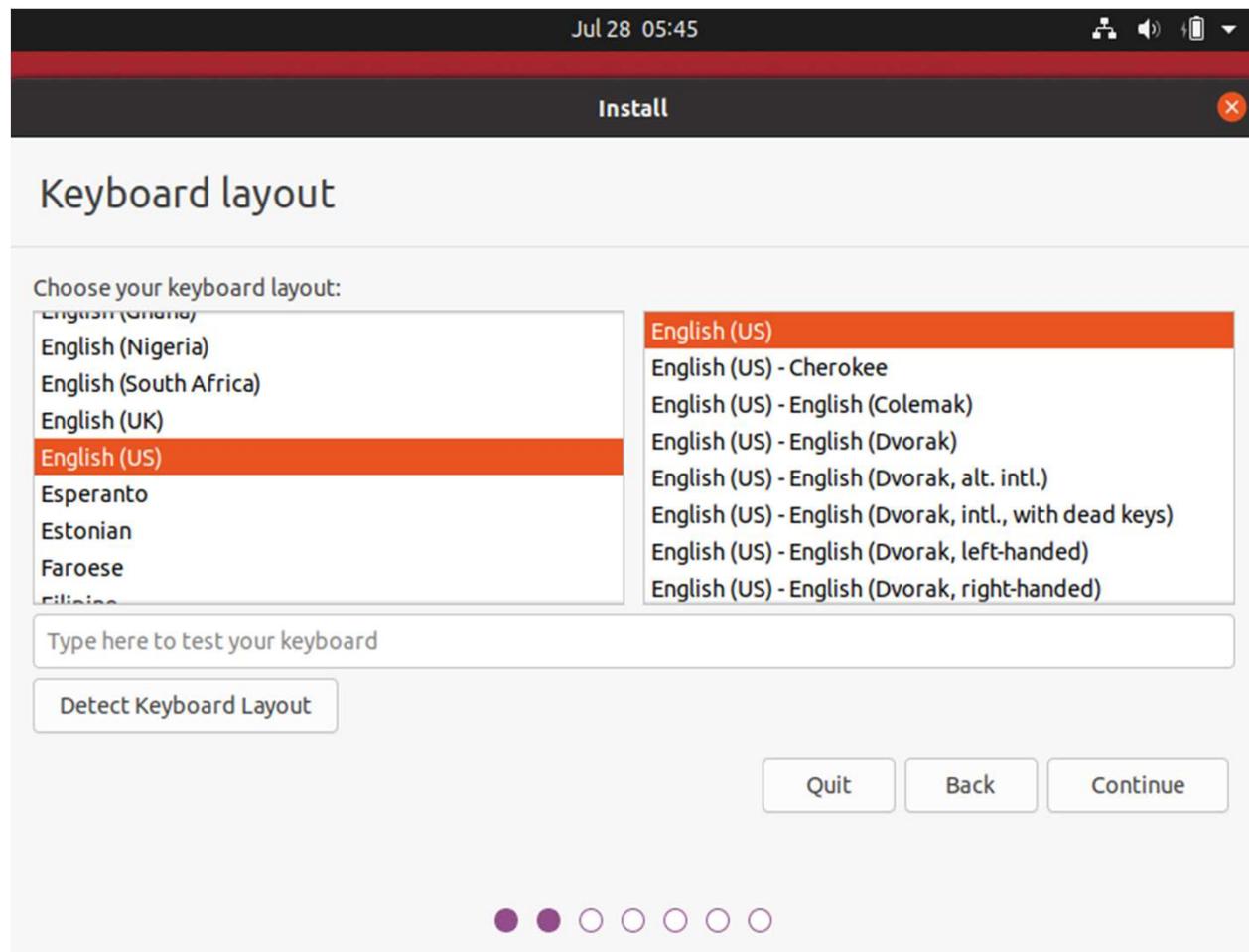
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Preparing to install Ubuntu



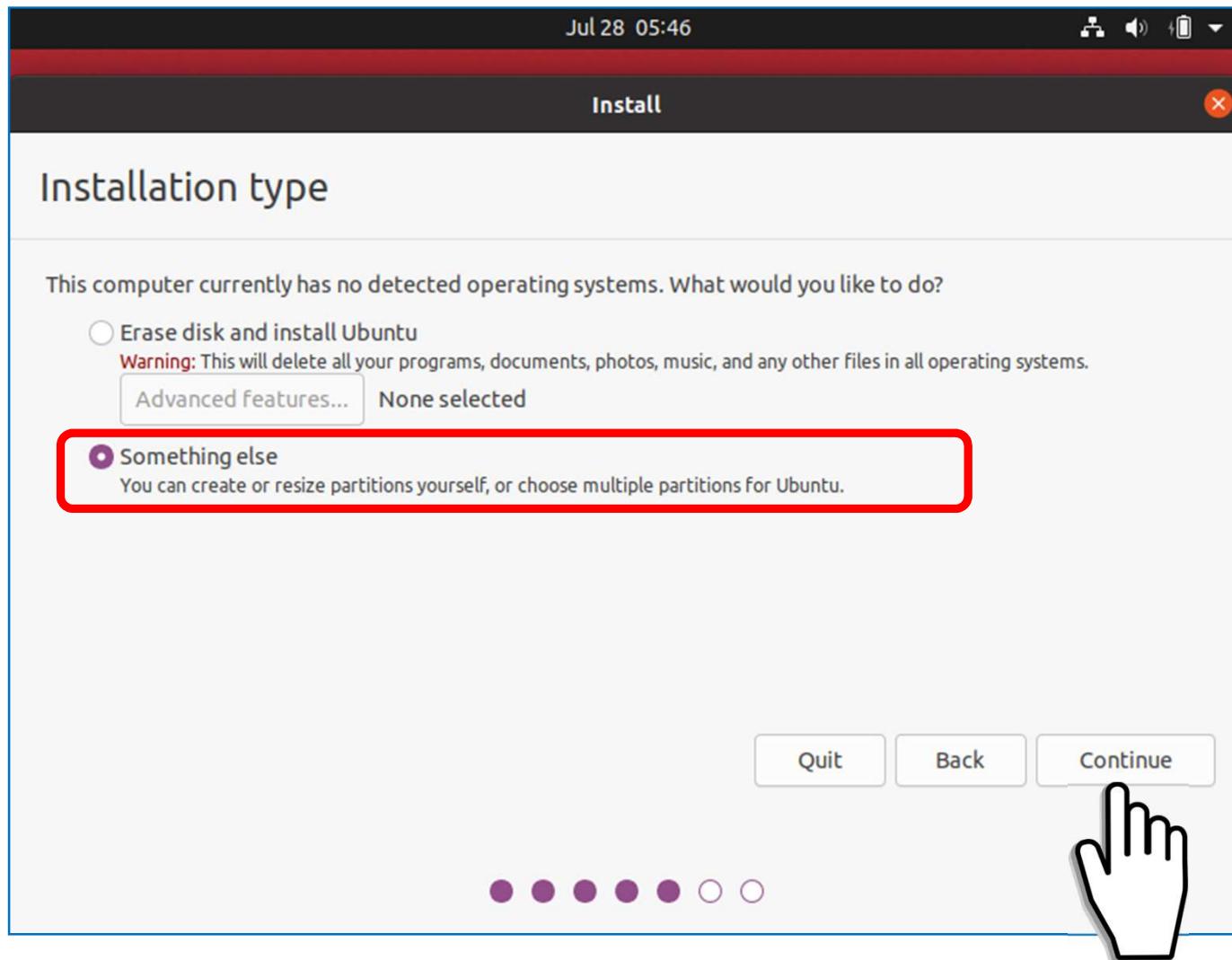
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Internet Connection (if wireless)



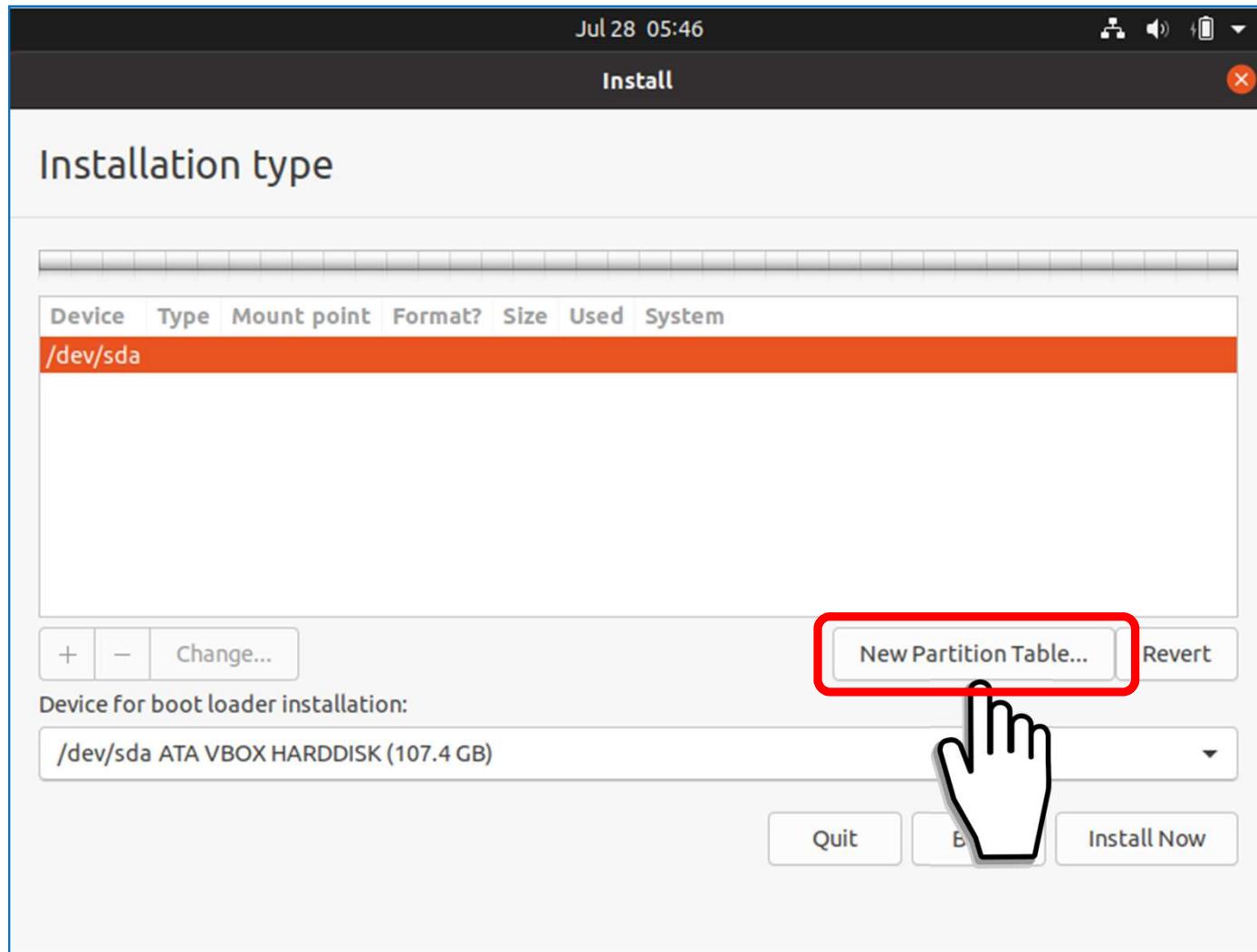
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Something else



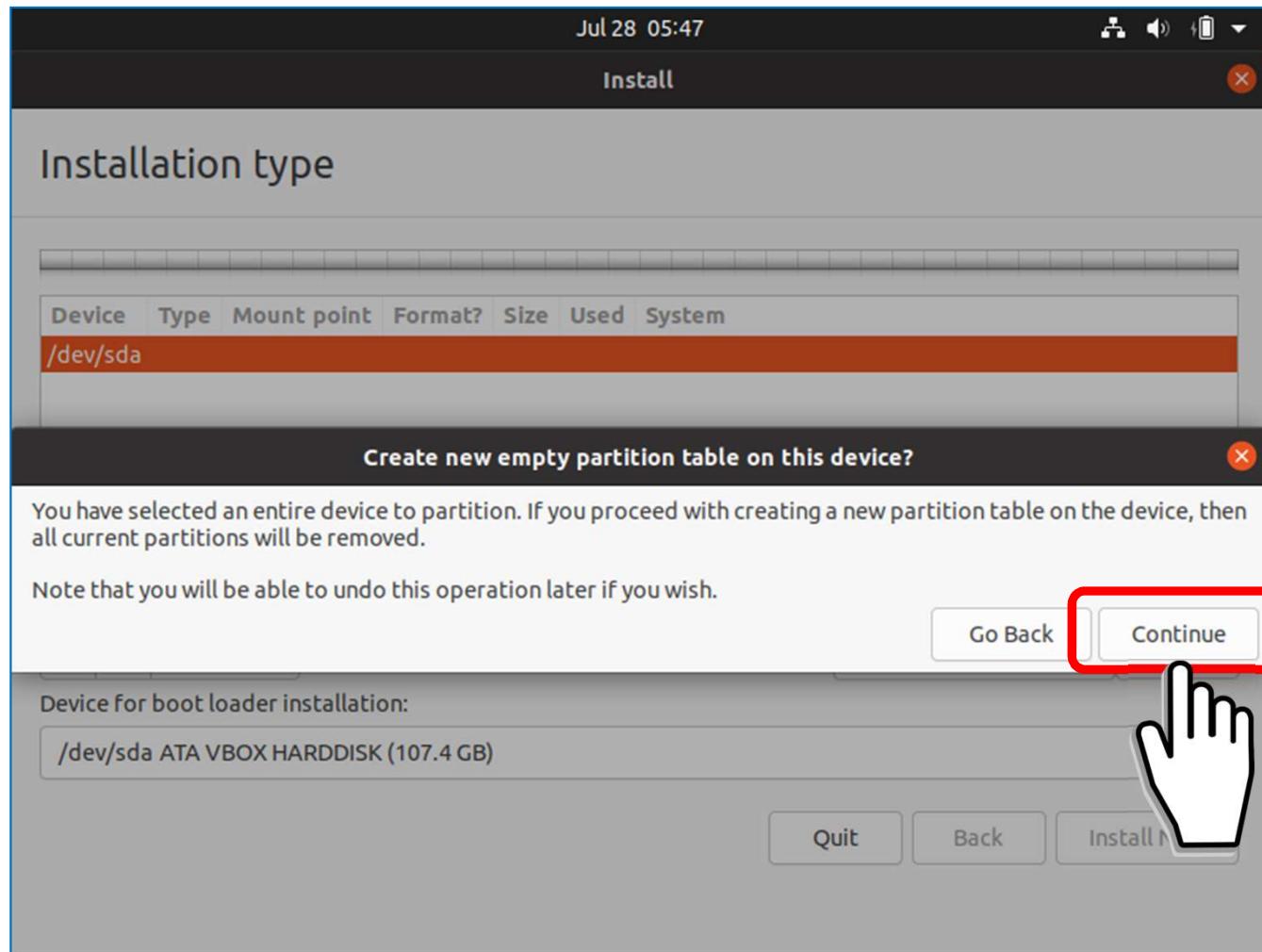
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New Partition Table...

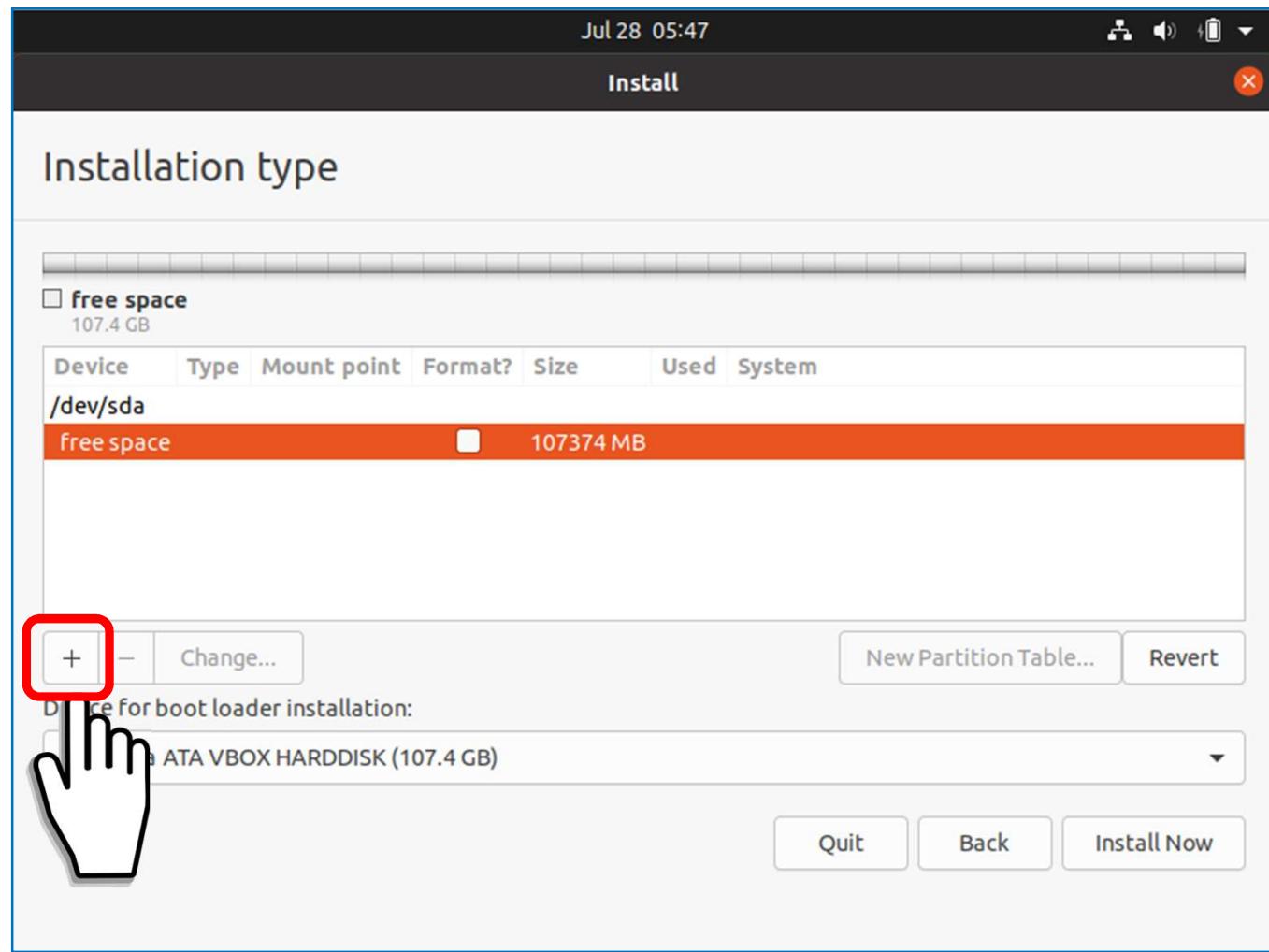


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Create new empty partition table on this device?

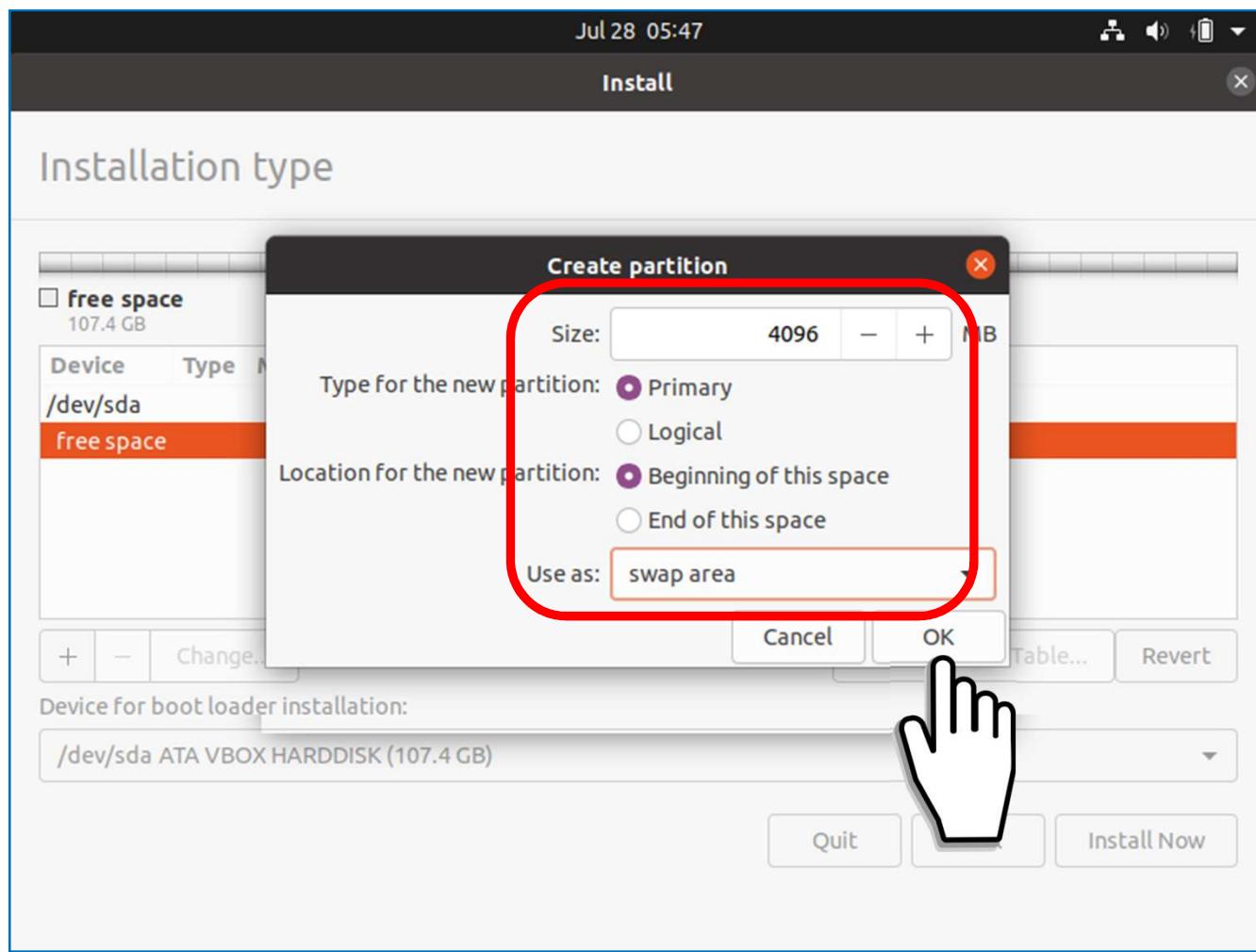


Partitioning



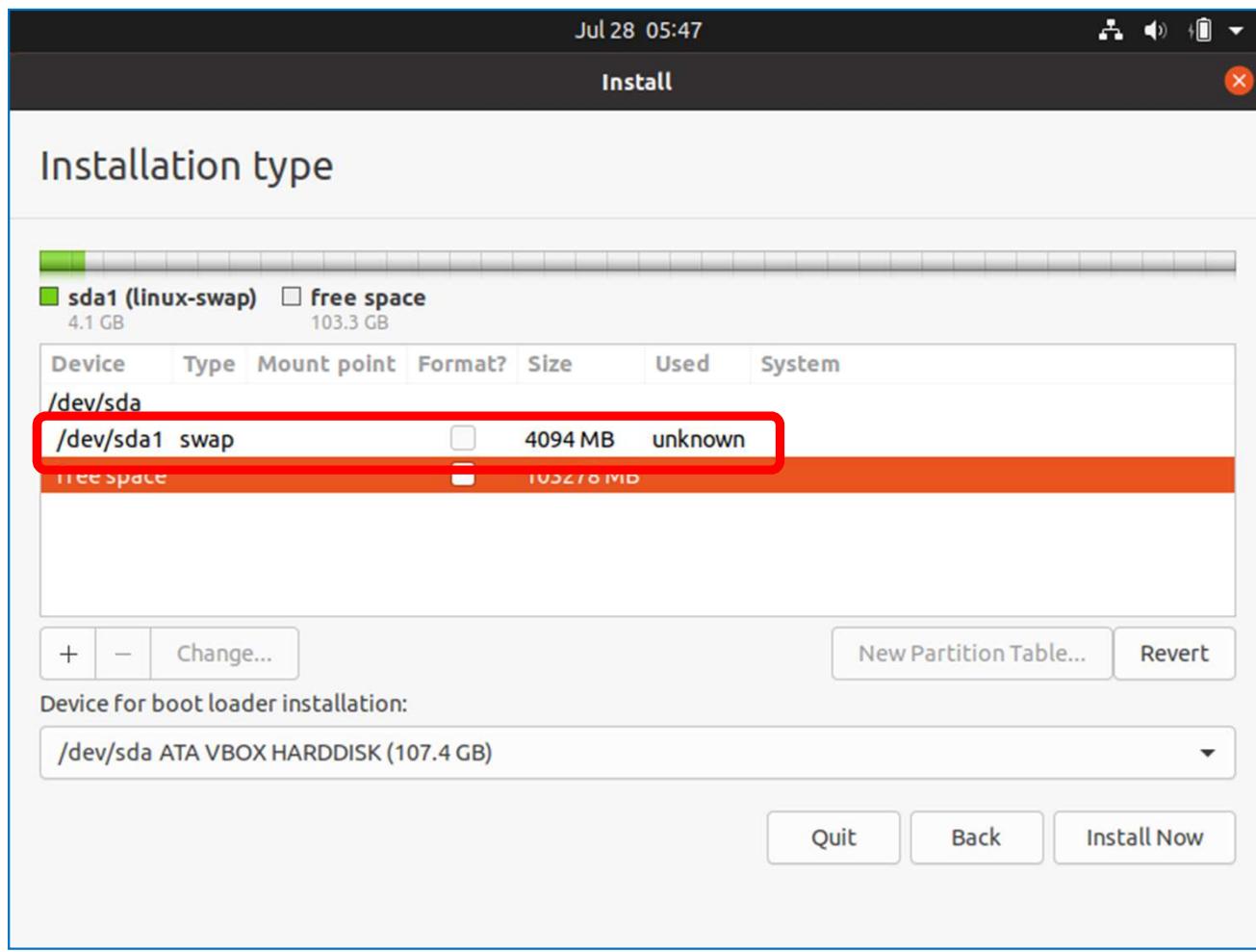
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Partitioning (Cont.)



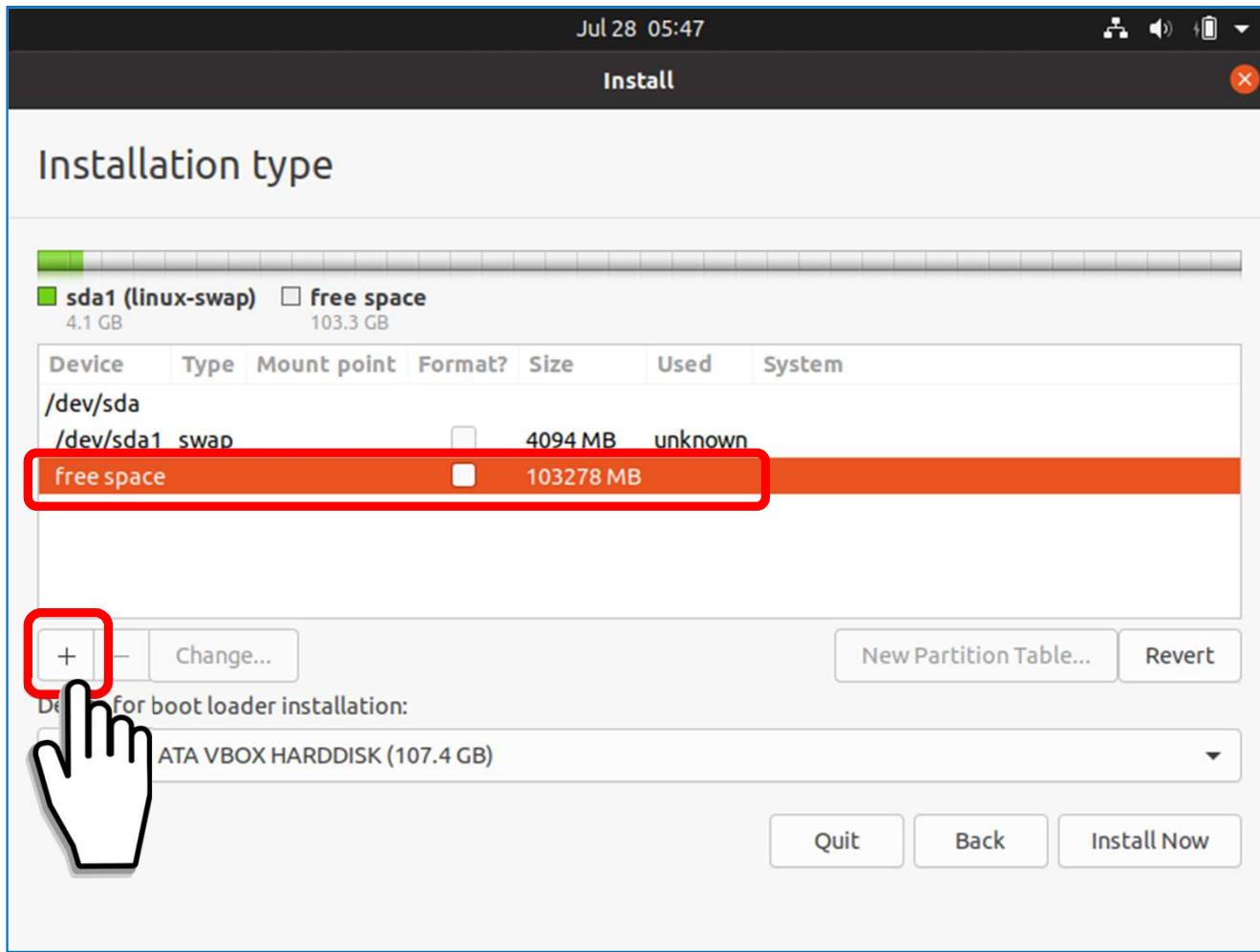
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Partitioning (Cont.)



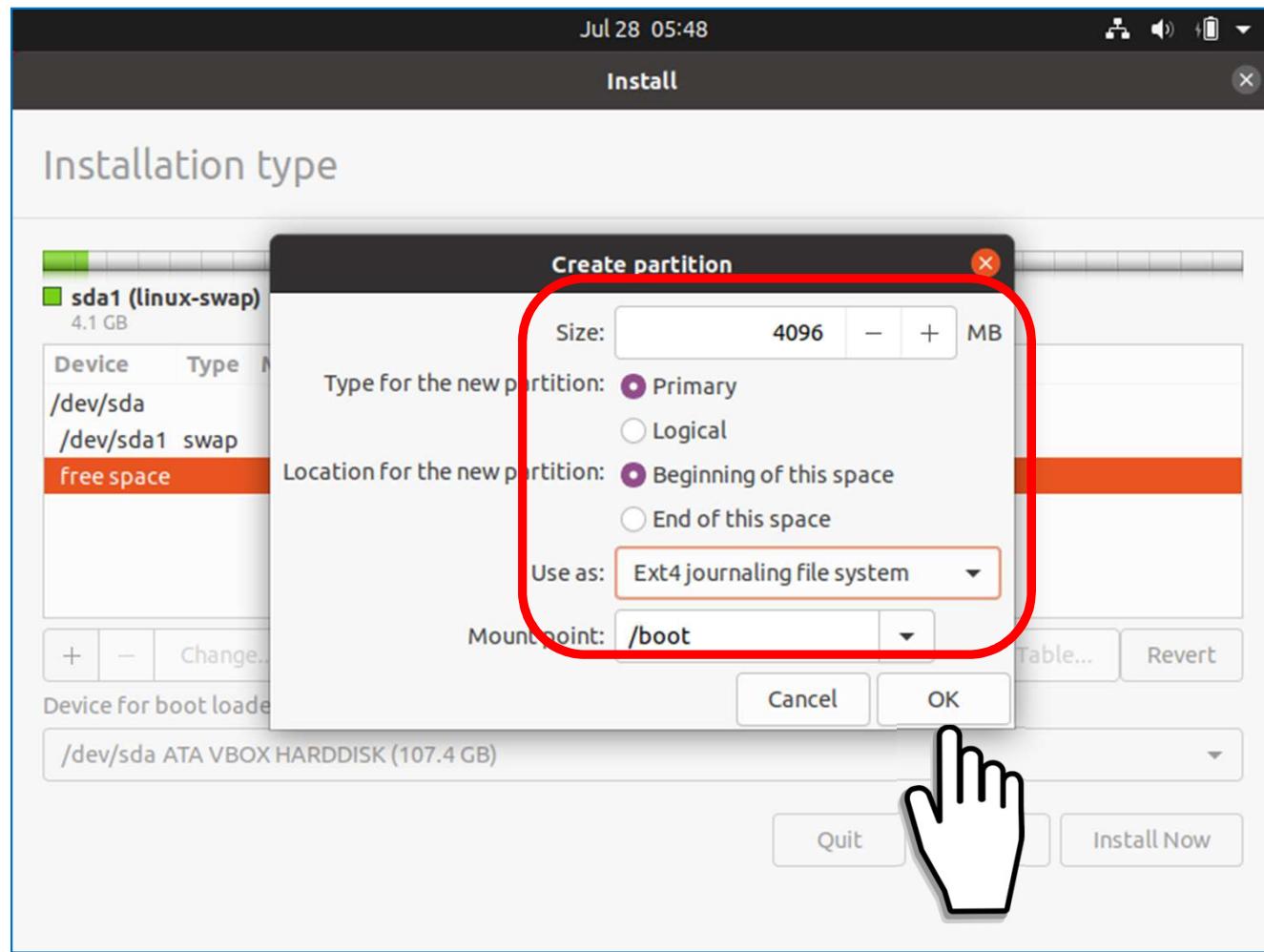
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Partitioning (Cont.)



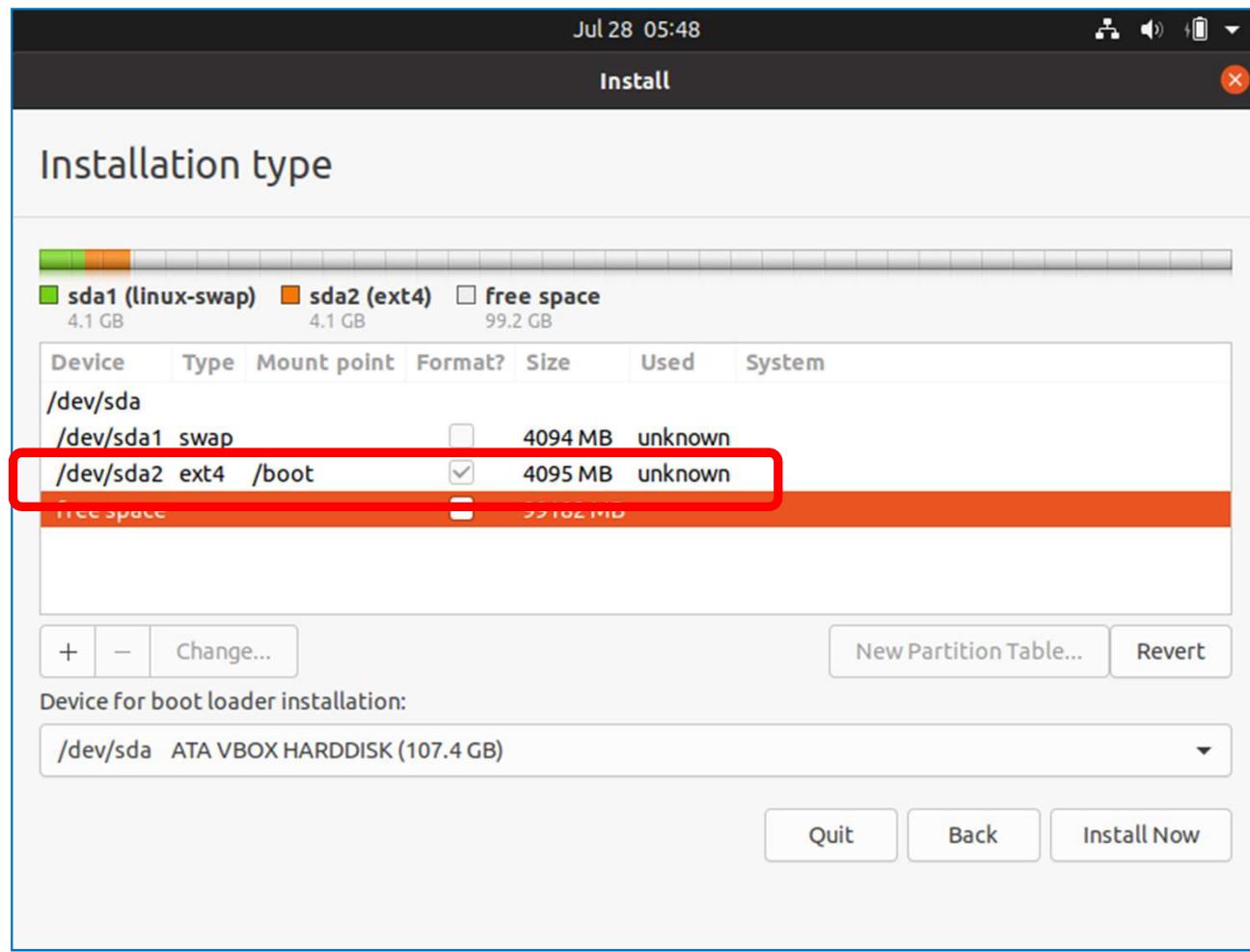
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Partitioning (Cont.)



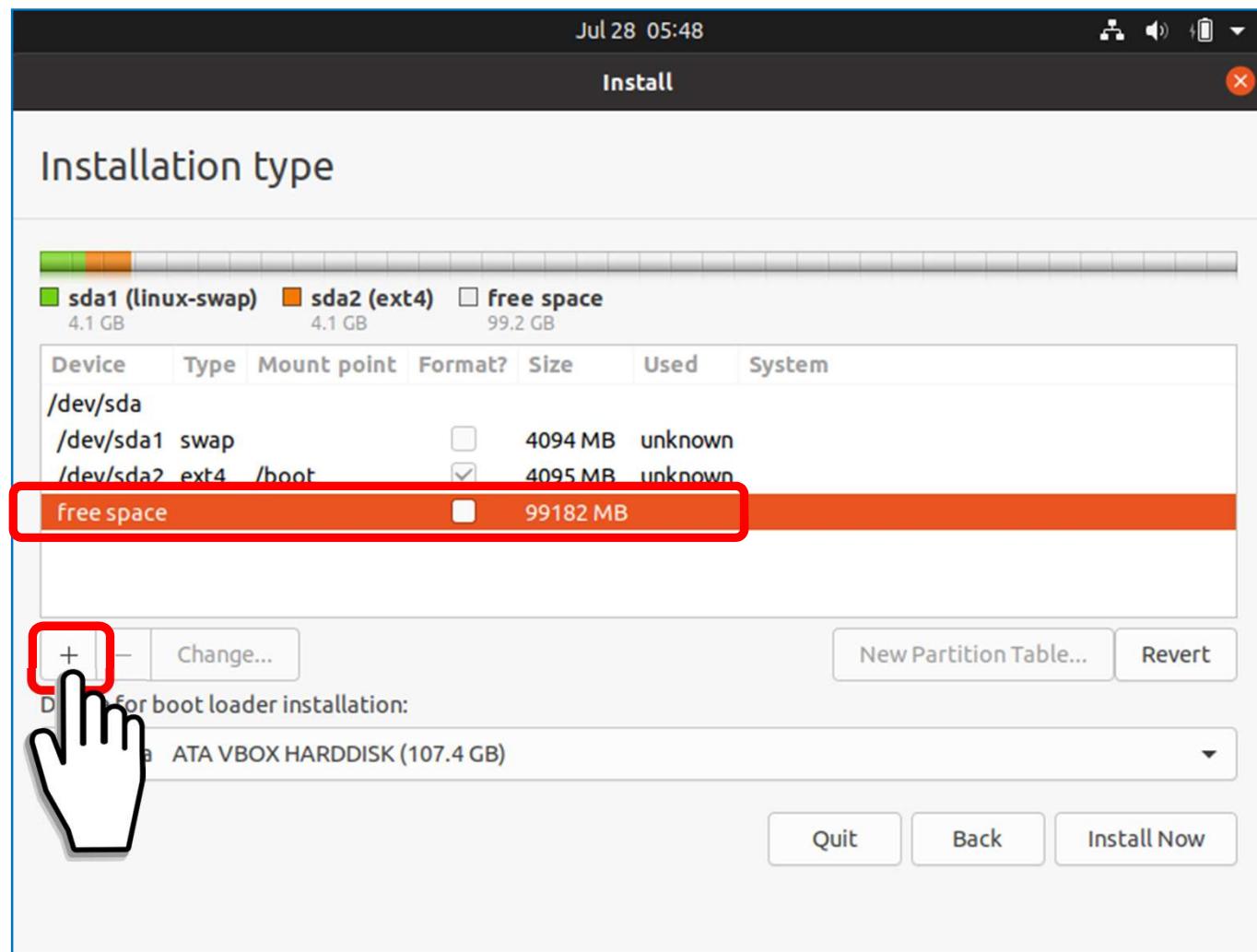
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Partitioning (Cont.)



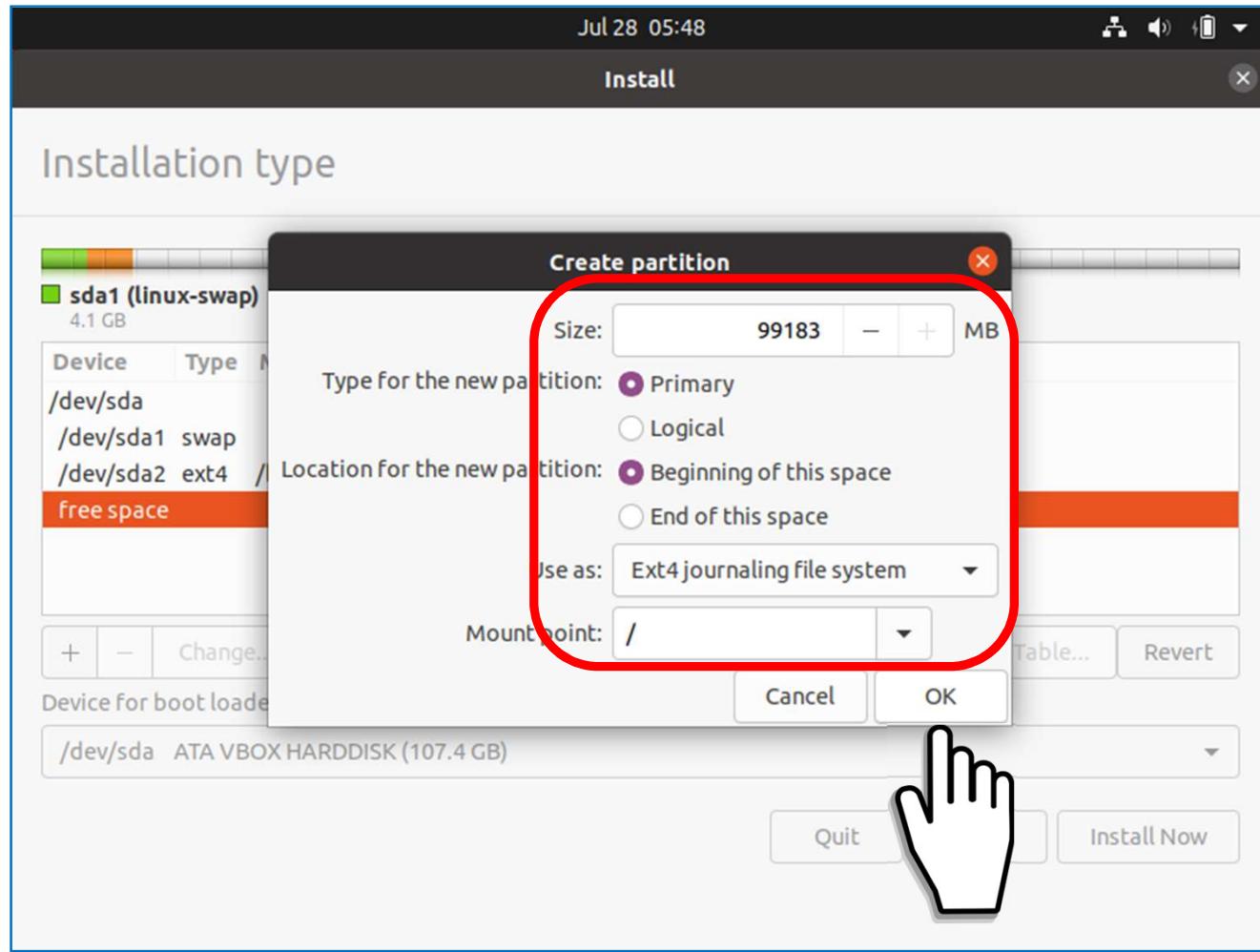
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Partitioning (Cont.)



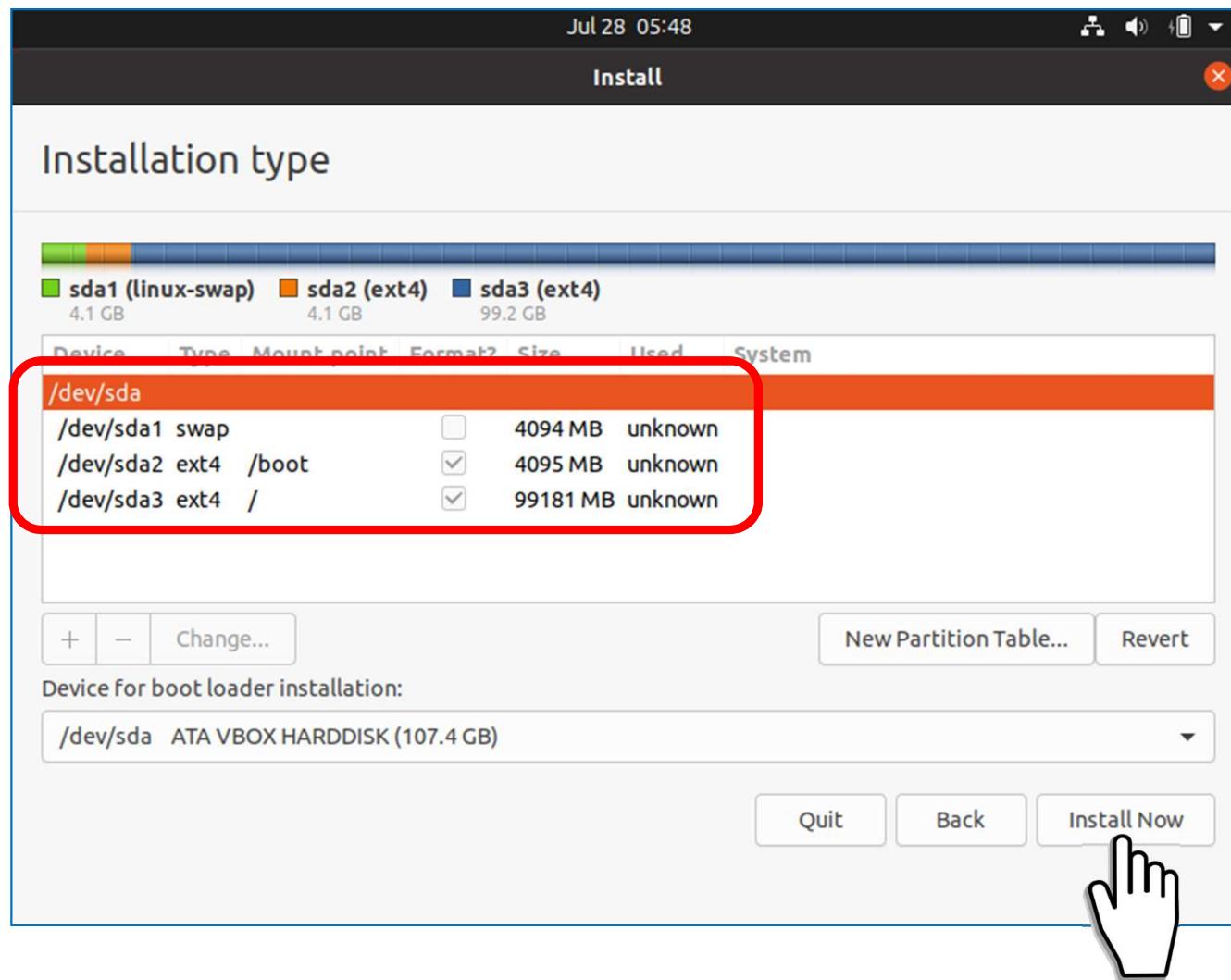
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Partitioning (Cont.)



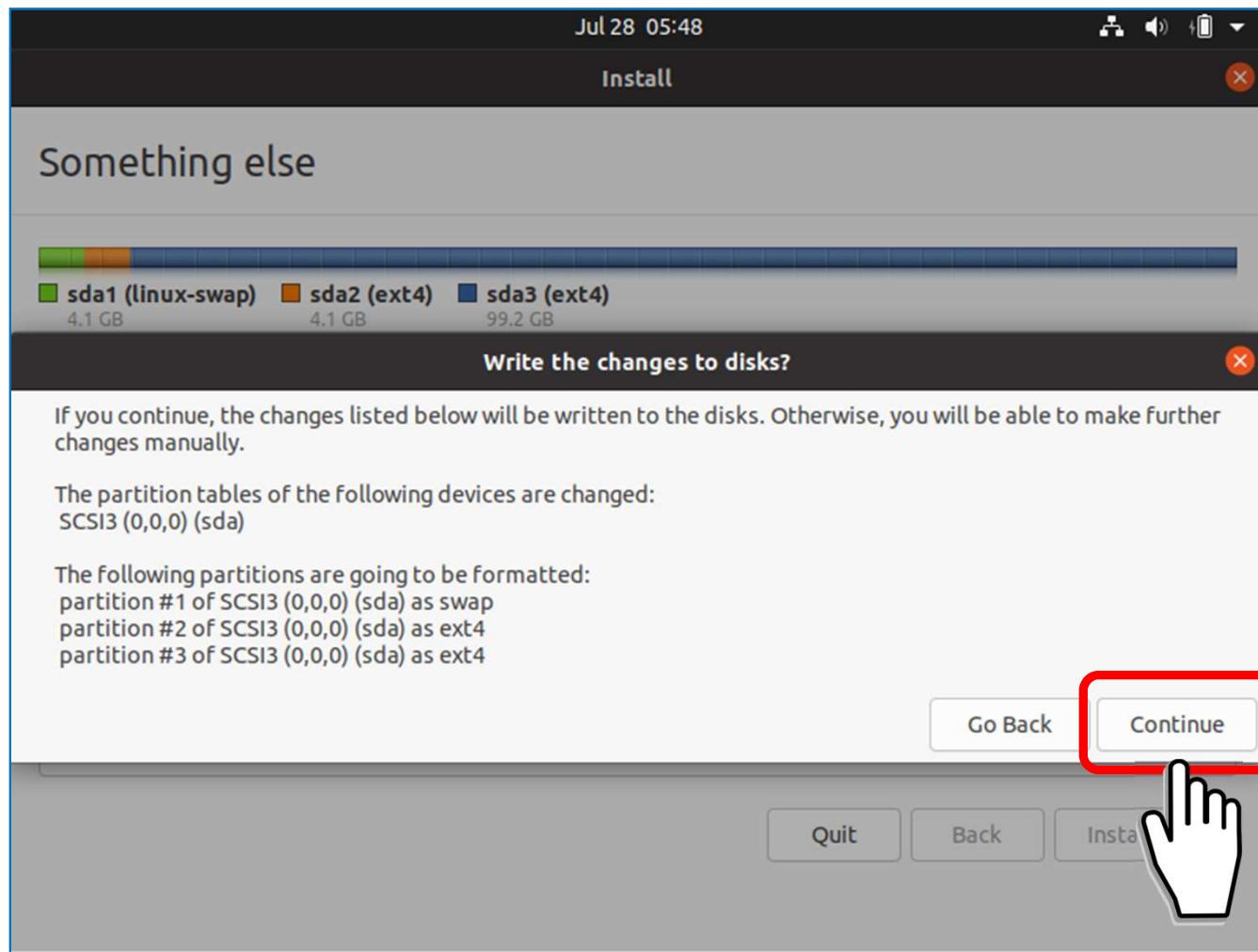
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Partitioning (Cont.)



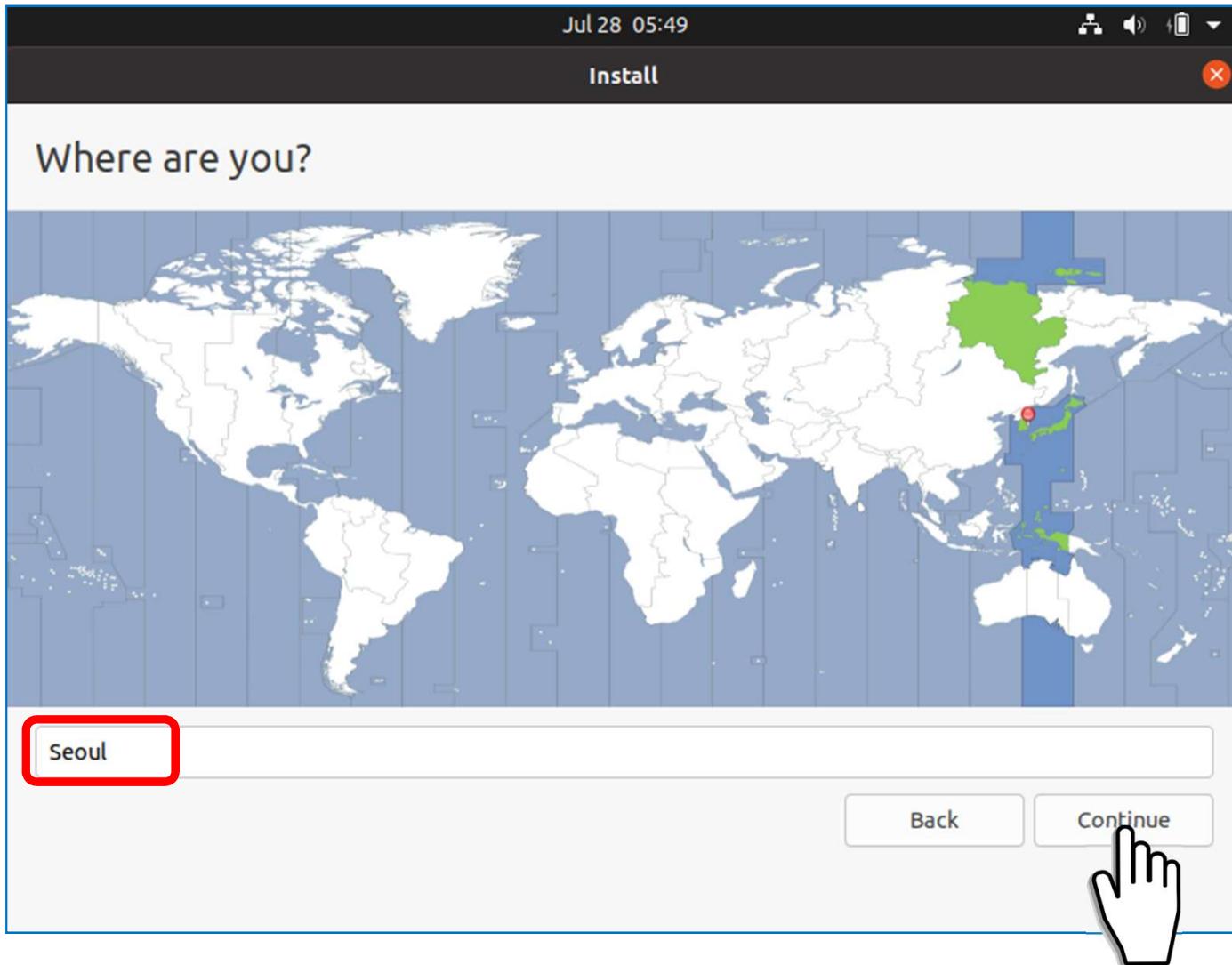
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Partitioning (Cont.)



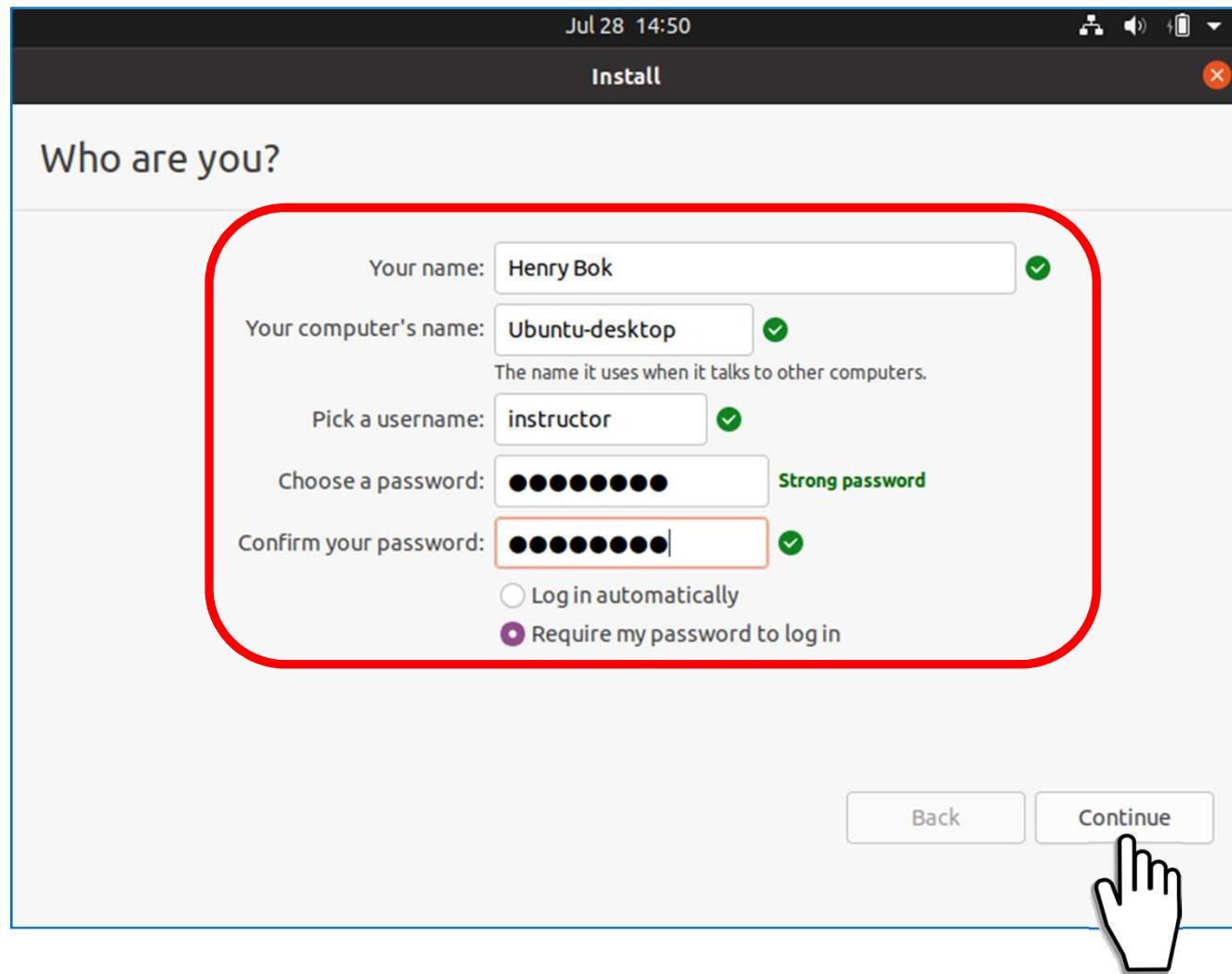
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Setting Location

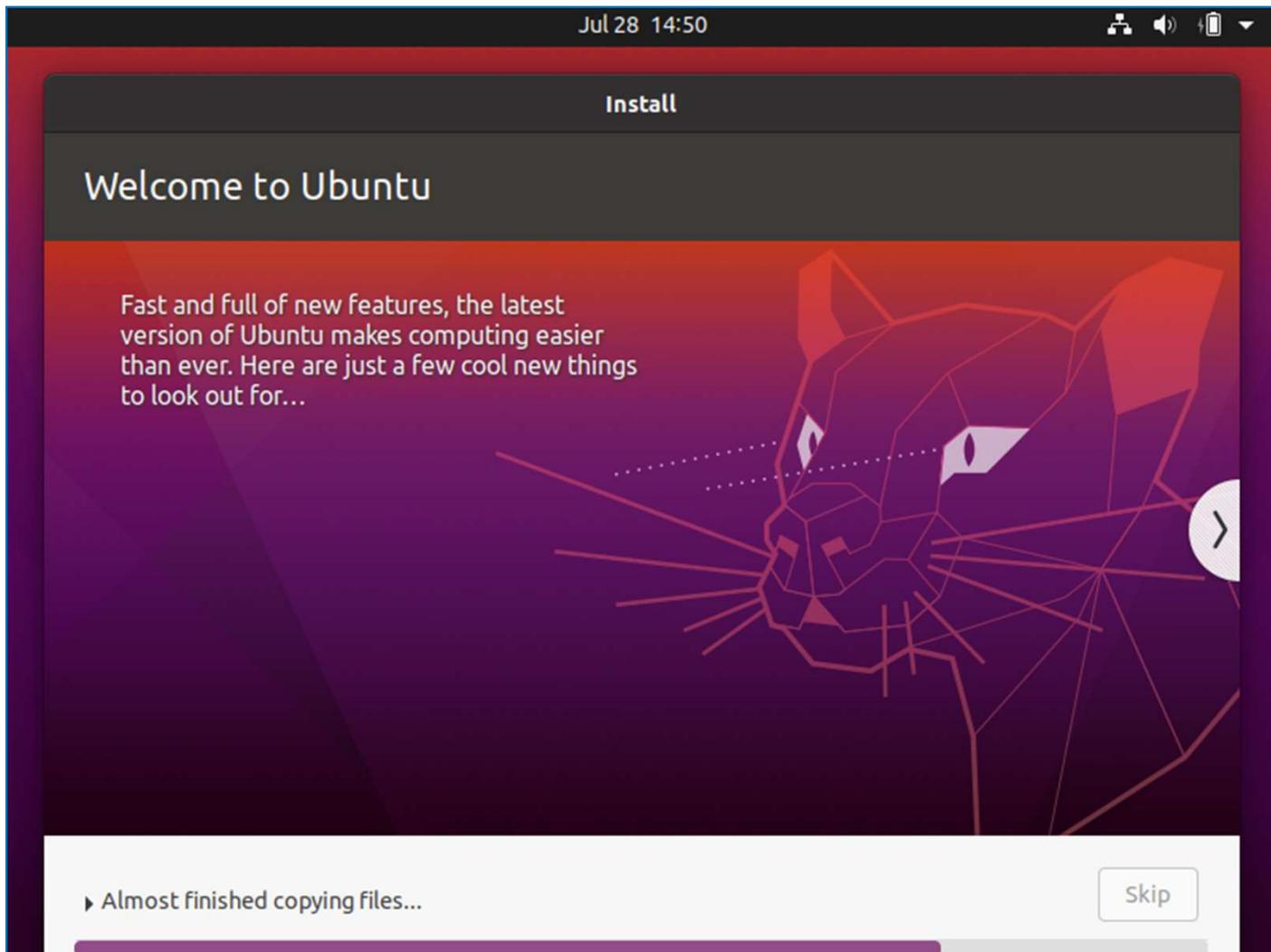


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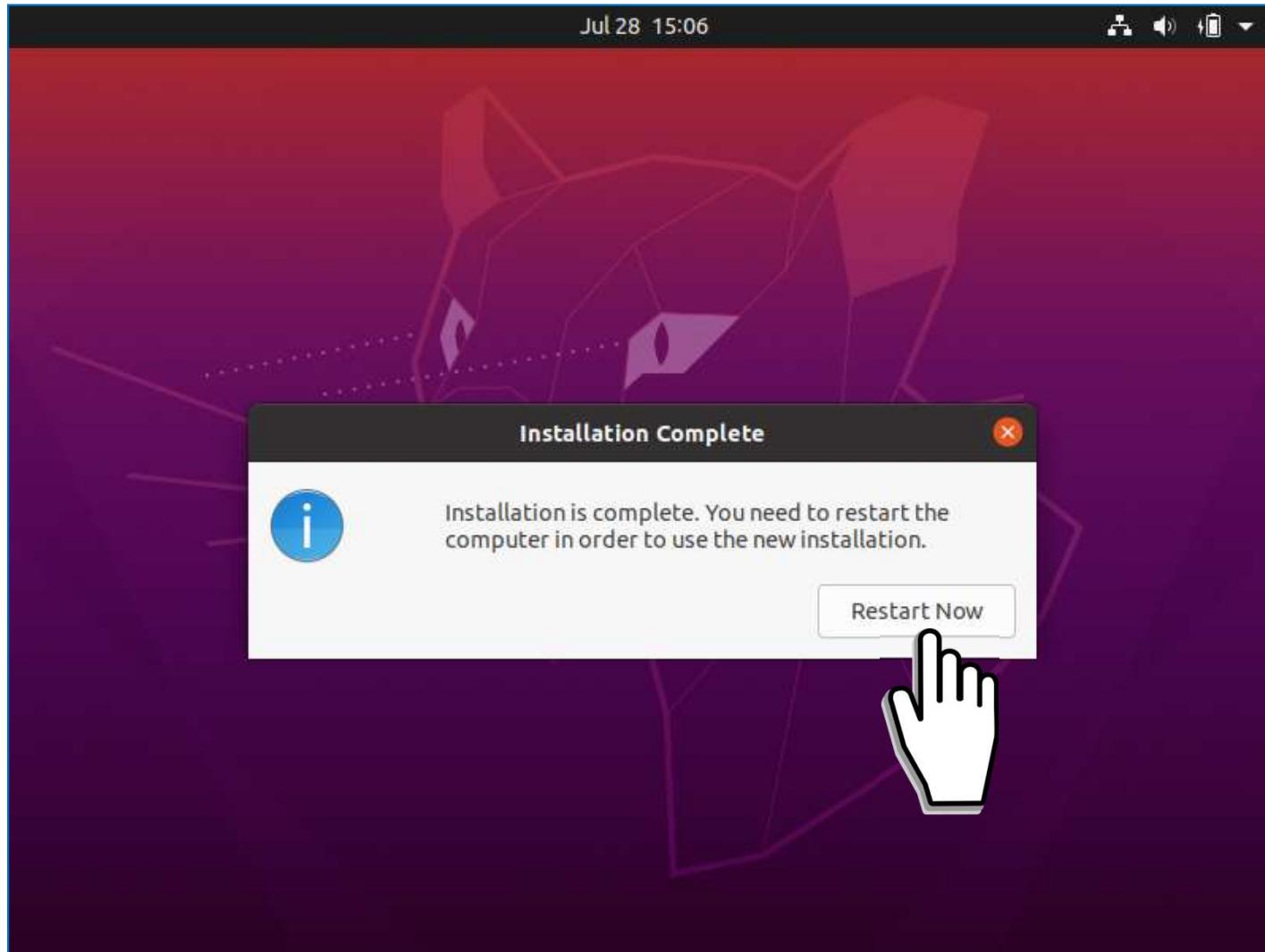
User Account



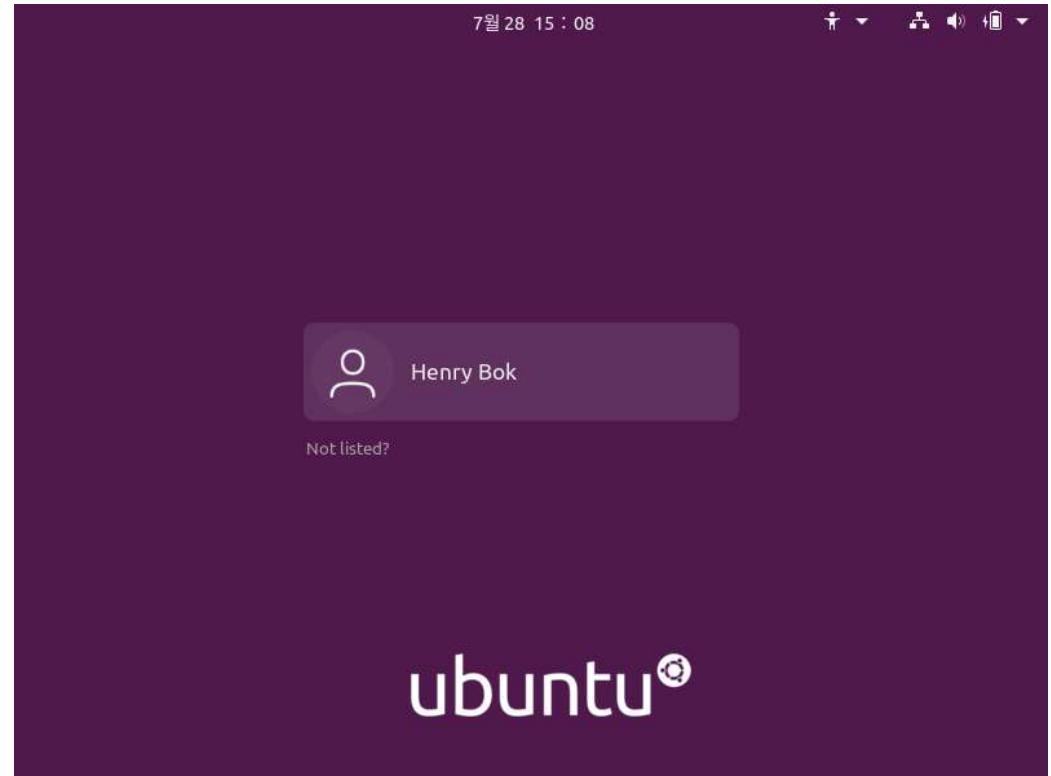
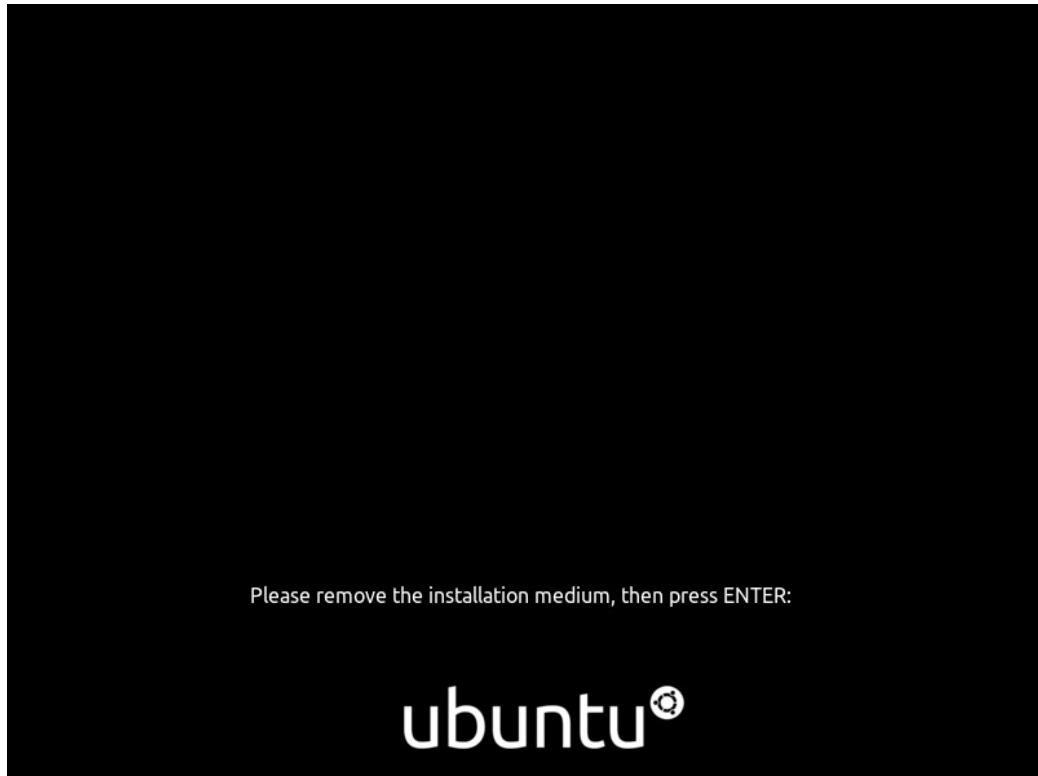
Starting Installation



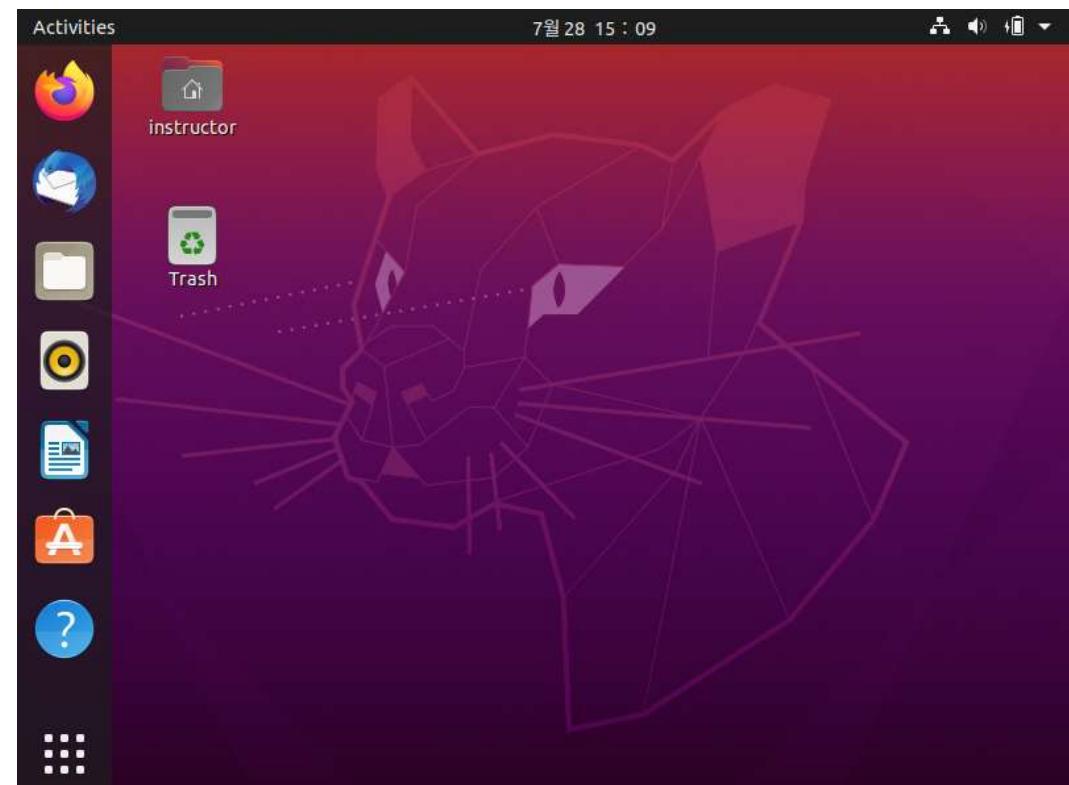
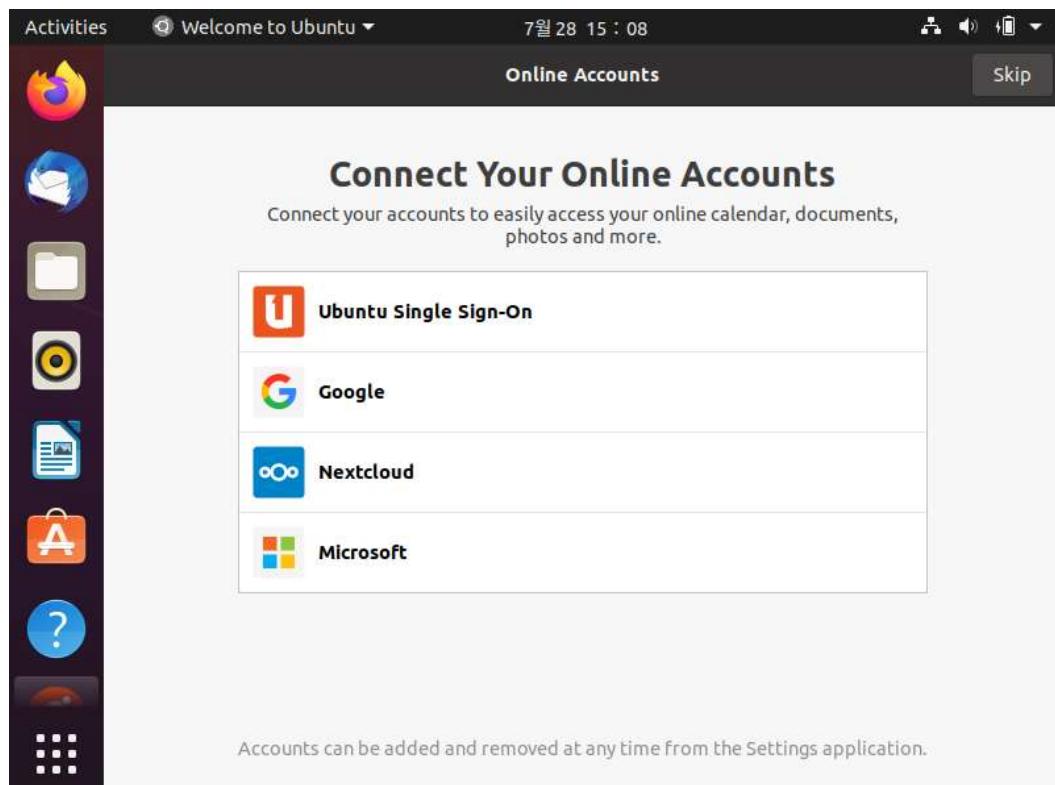
Restart OS



First Login After Installation



First Login After Installation (Cont.)



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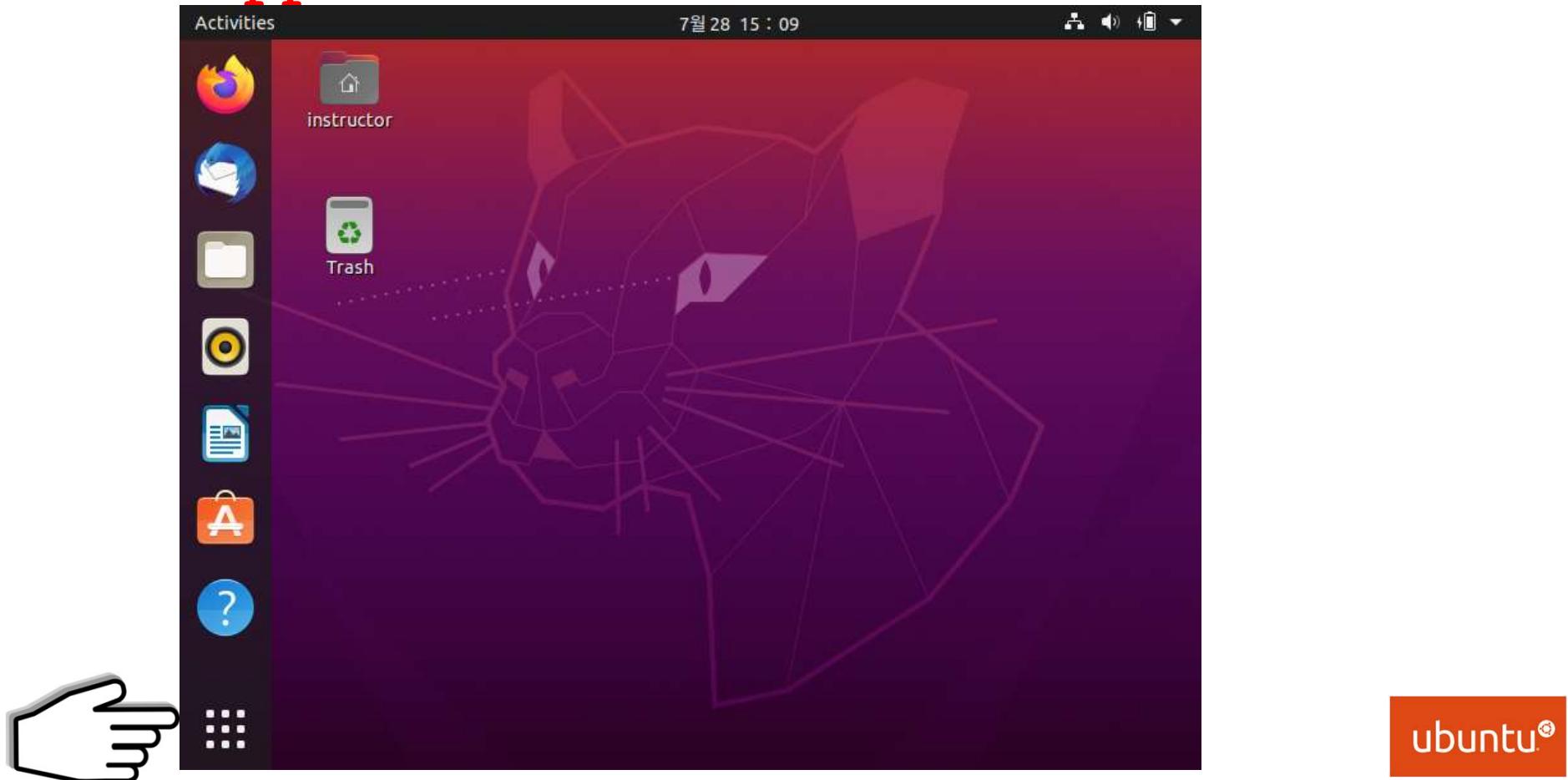
Lab 2 : 5 Things to do After Installation Ubuntu

Contents

1. Software Update
2. Install Ubuntu Restricted Extras
3. Setting Keyboard Shortcut Keys
4. Setup Hangul Language Pack
5. Activate ufw

1. Software Updates (1/15)

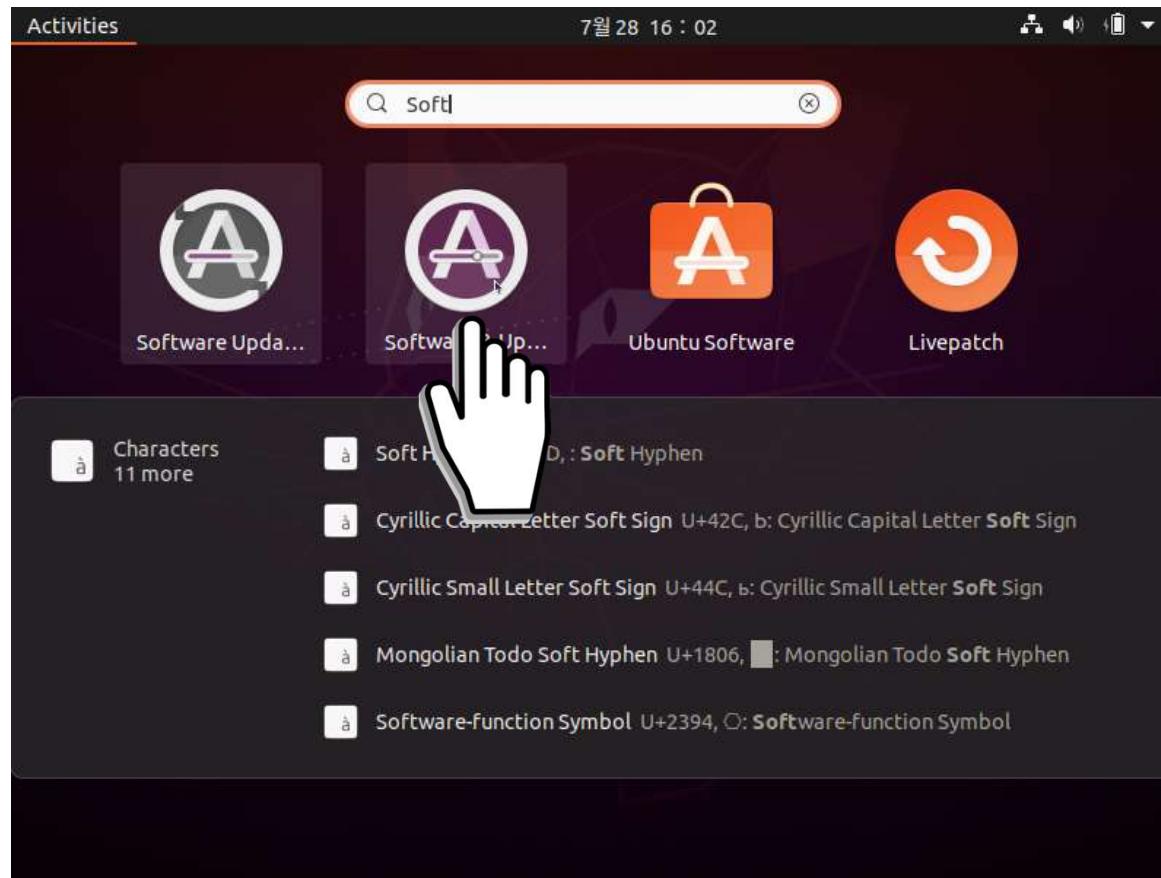
■ Click **Show Applications**



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1. Software Updates (2/15)

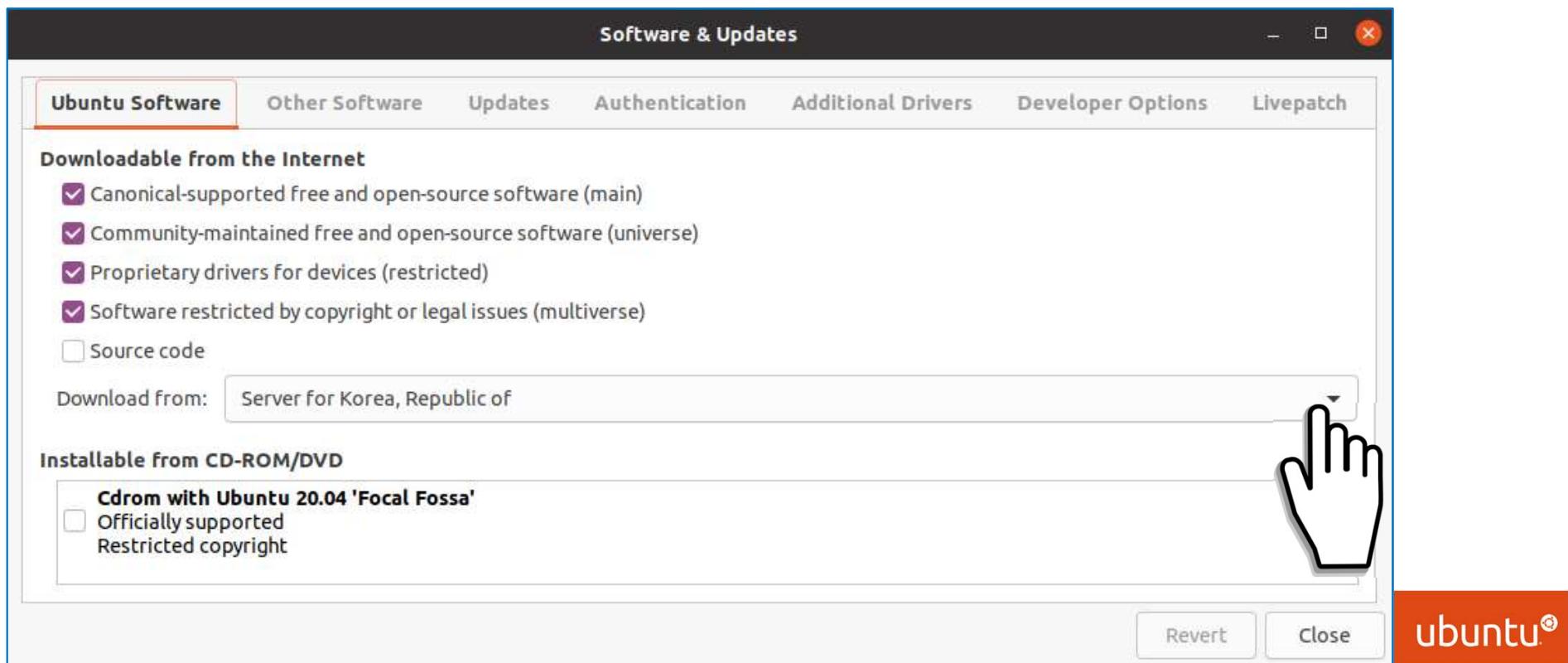
■ Click **Software & Updates**



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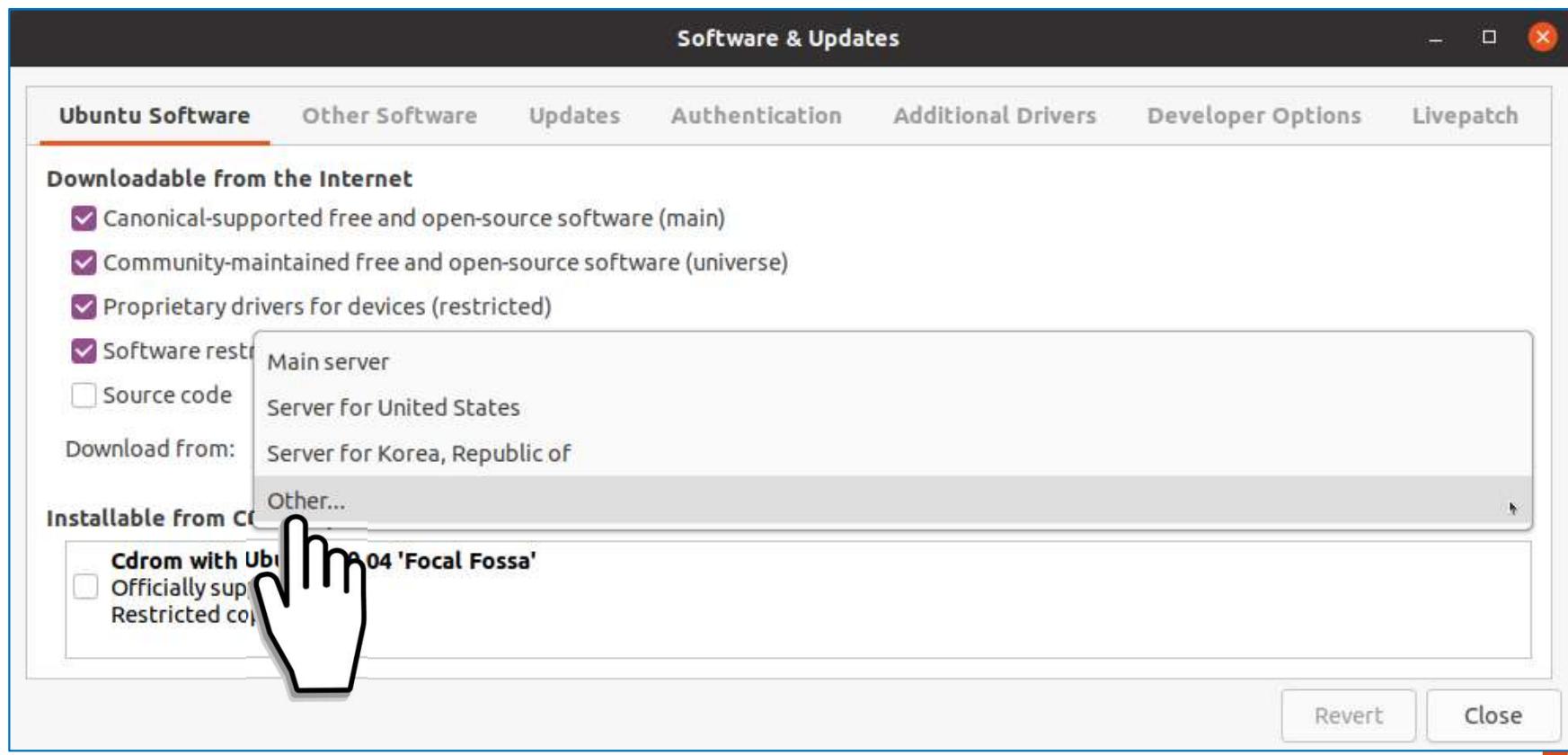
1. Software Updates (3/15)

- At **Ubuntu Software** tab
- Click dropdown button in **Download from :**



1. Software Updates (4/15)

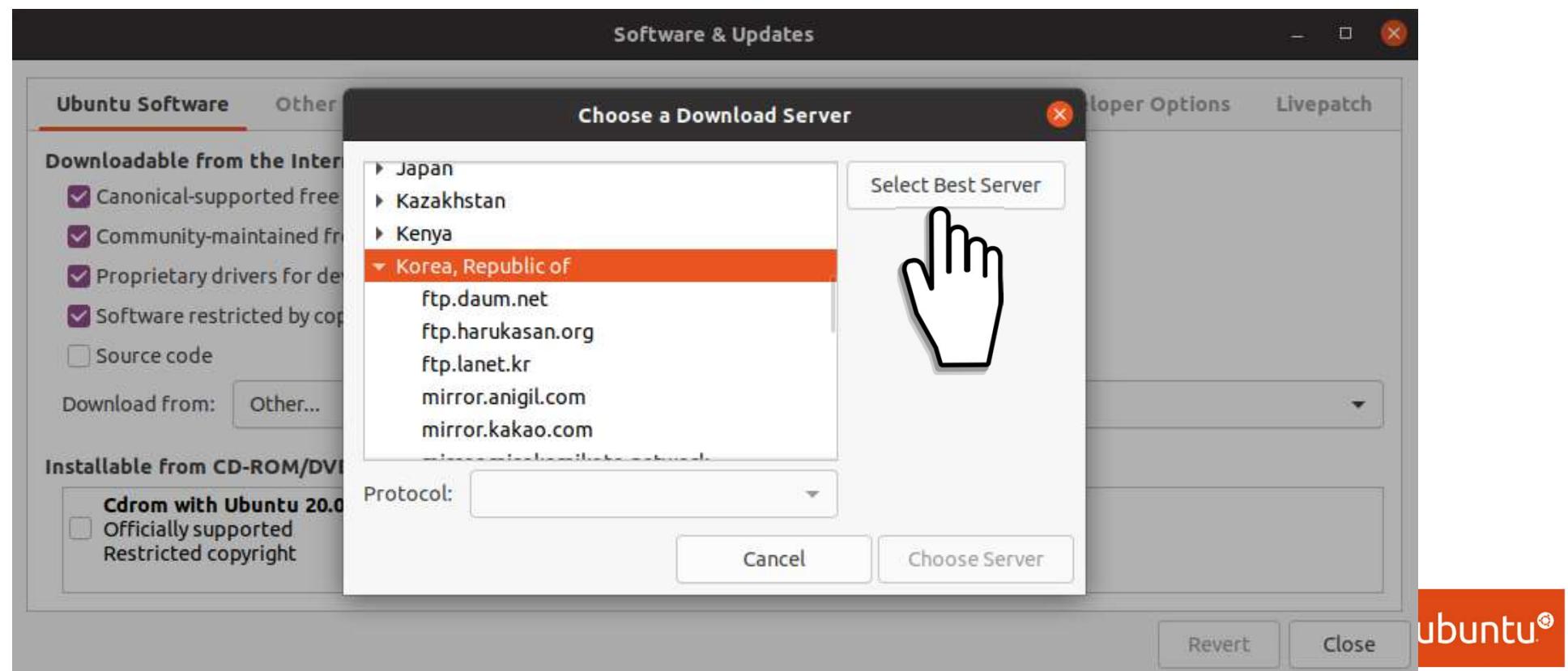
■ Select **Other...**



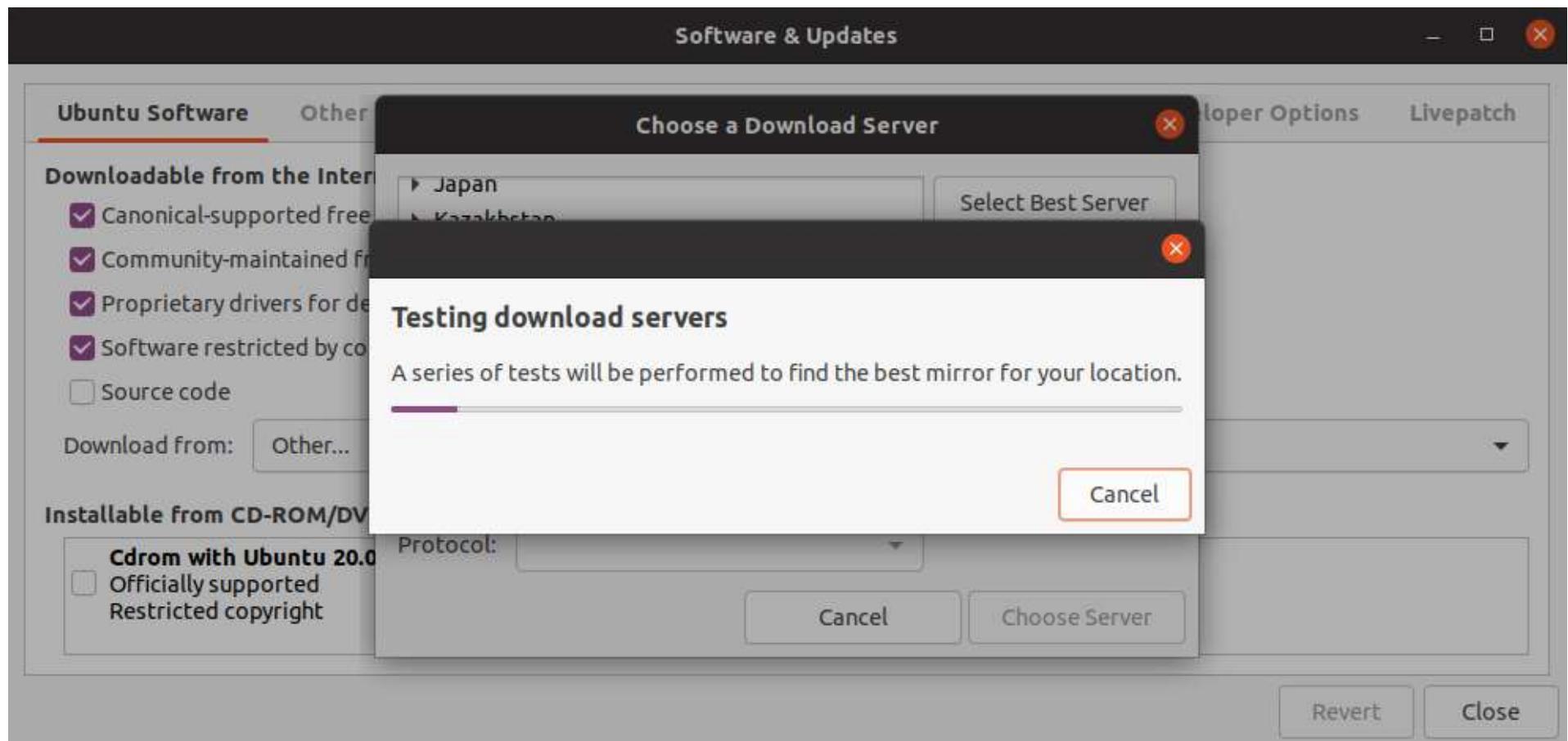
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1. Software Updates (5/15)

- Click **Korea, Republic of**
- Click **Select Best Server** button

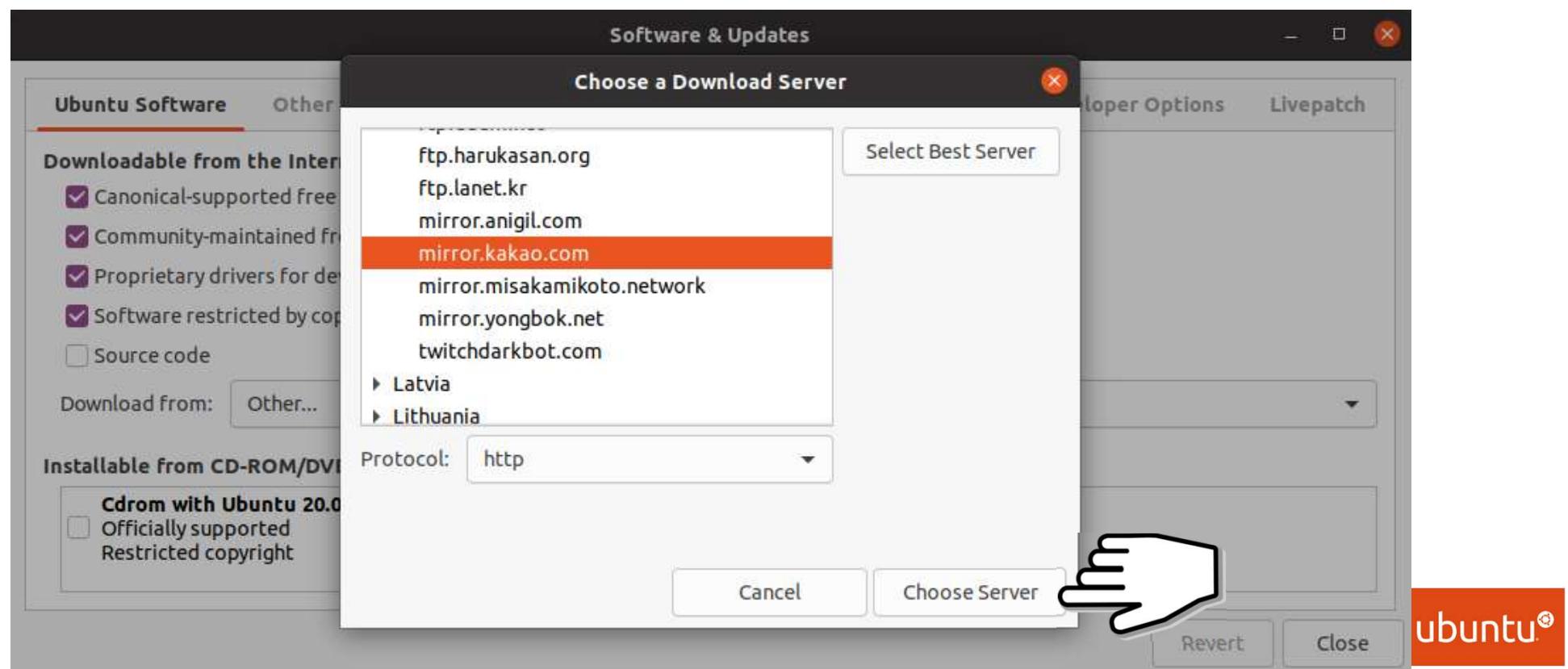


1. Software Updates (6/15)

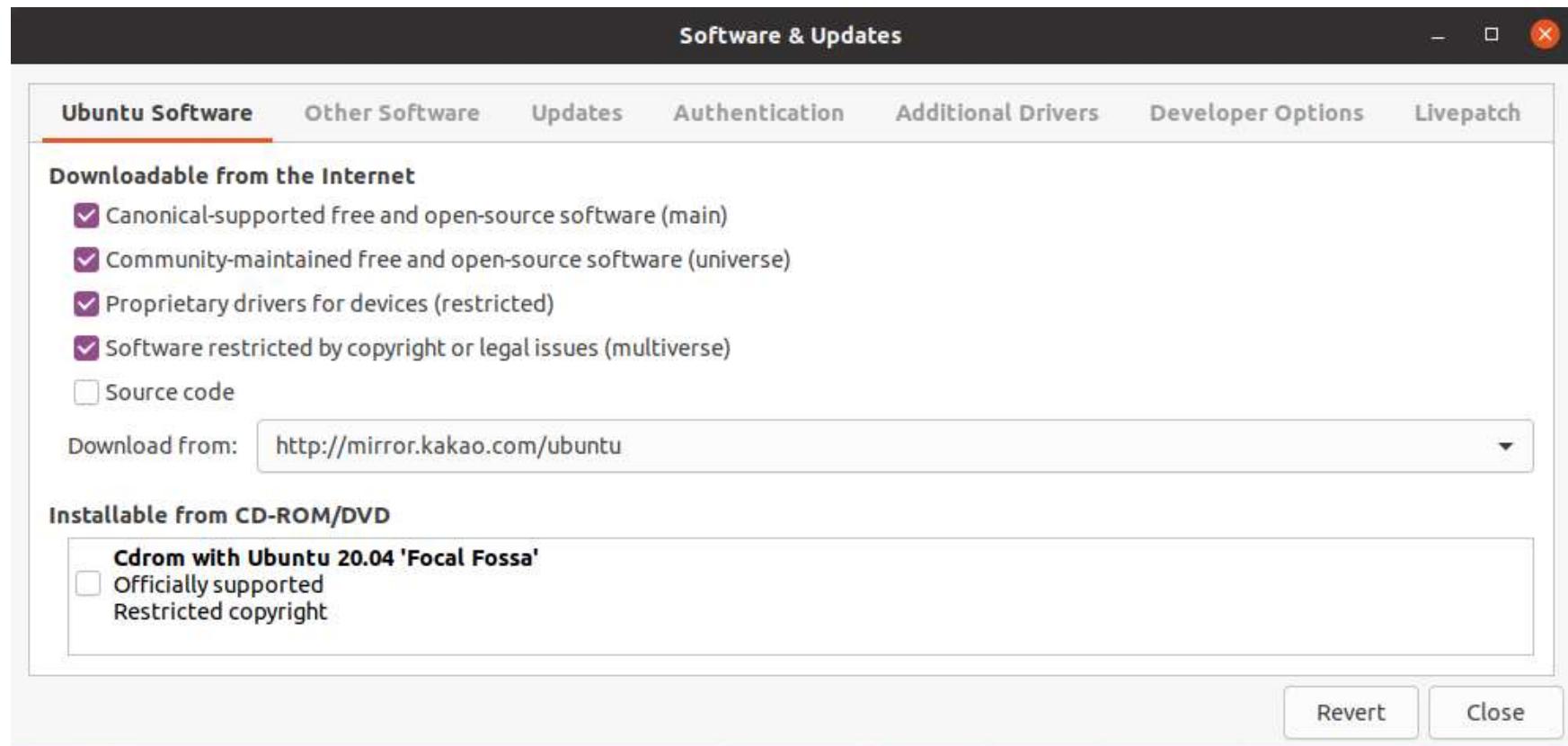


1. Software Updates (7/15)

- Click **mirror.kakao.com**
- Click **choose Server** button



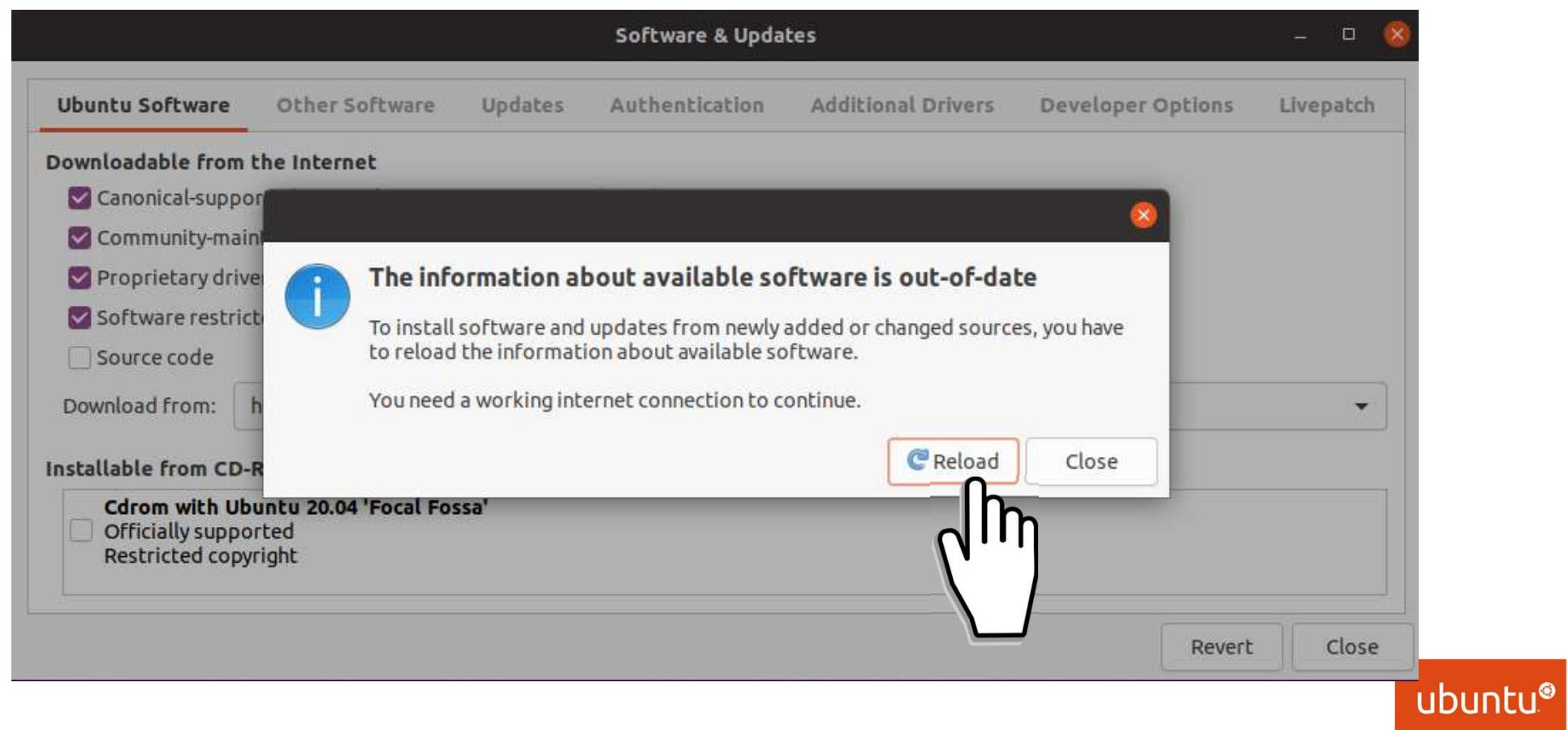
1. Software Updates (8/15)



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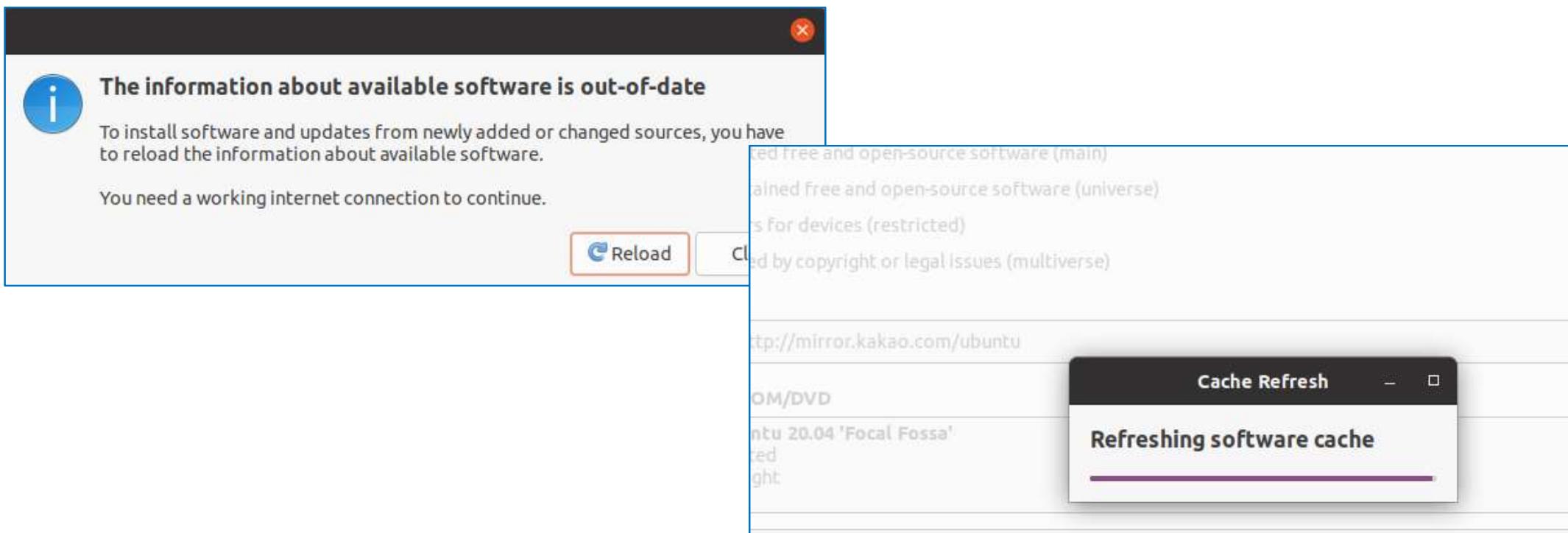
1. Software Updates (9/15)

- Click **Reload** button



1. Software Updates (10/15)

■ Updating cache



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1. Software Updates (11/15)

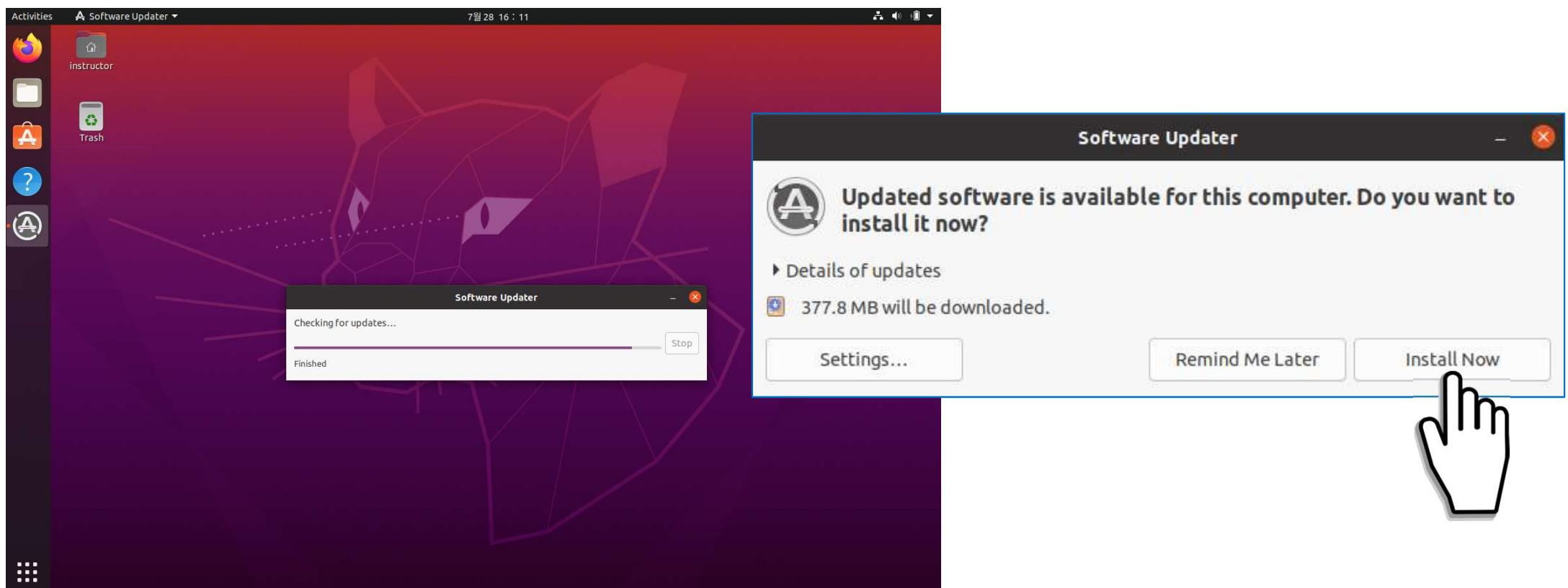
- Search **Software Updater** & click



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1. Software Updates (12/15)

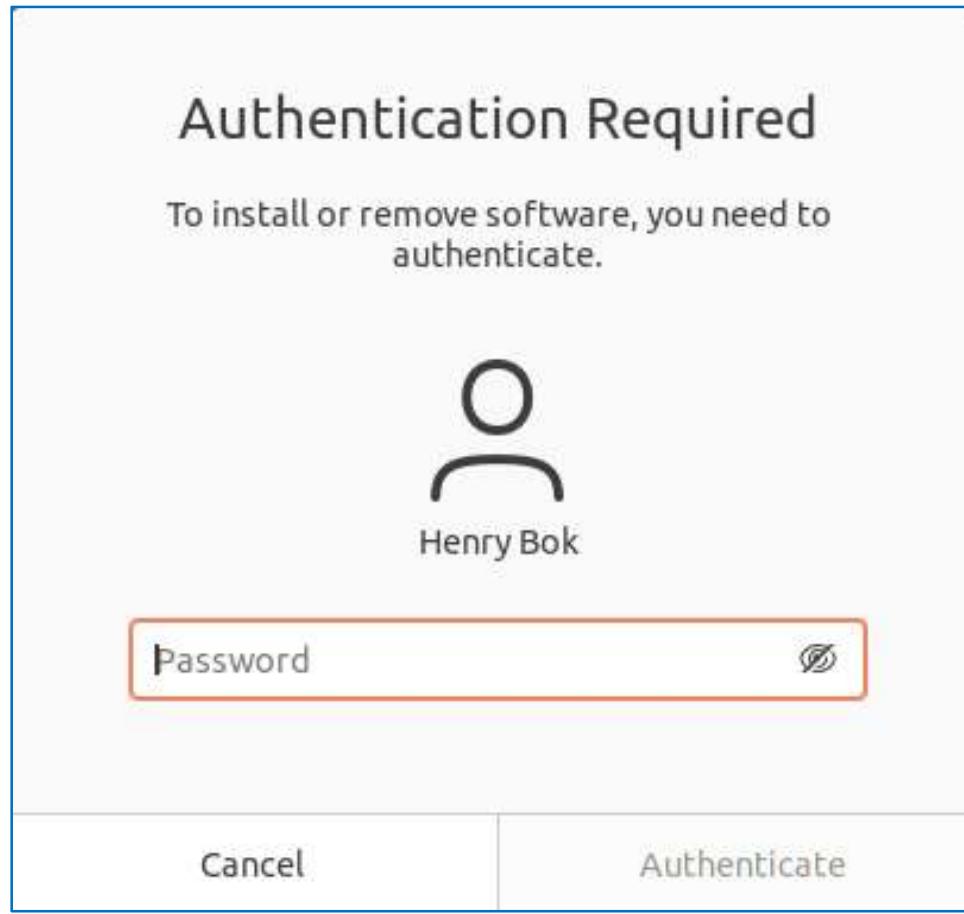
- Click **Install Now** button



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1. Software Updates (13/15)

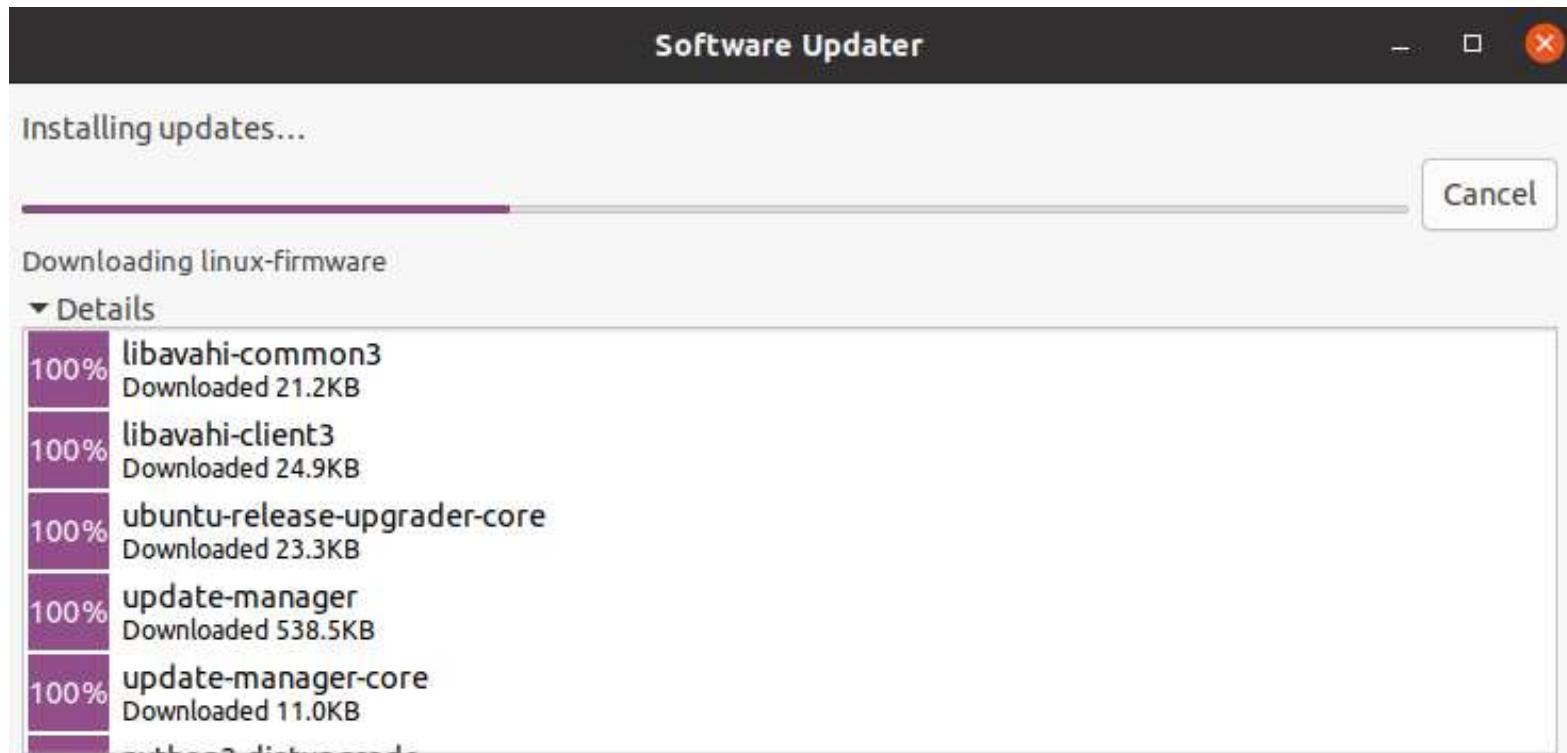
■ Authentication



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1. Software Updates (14/15)

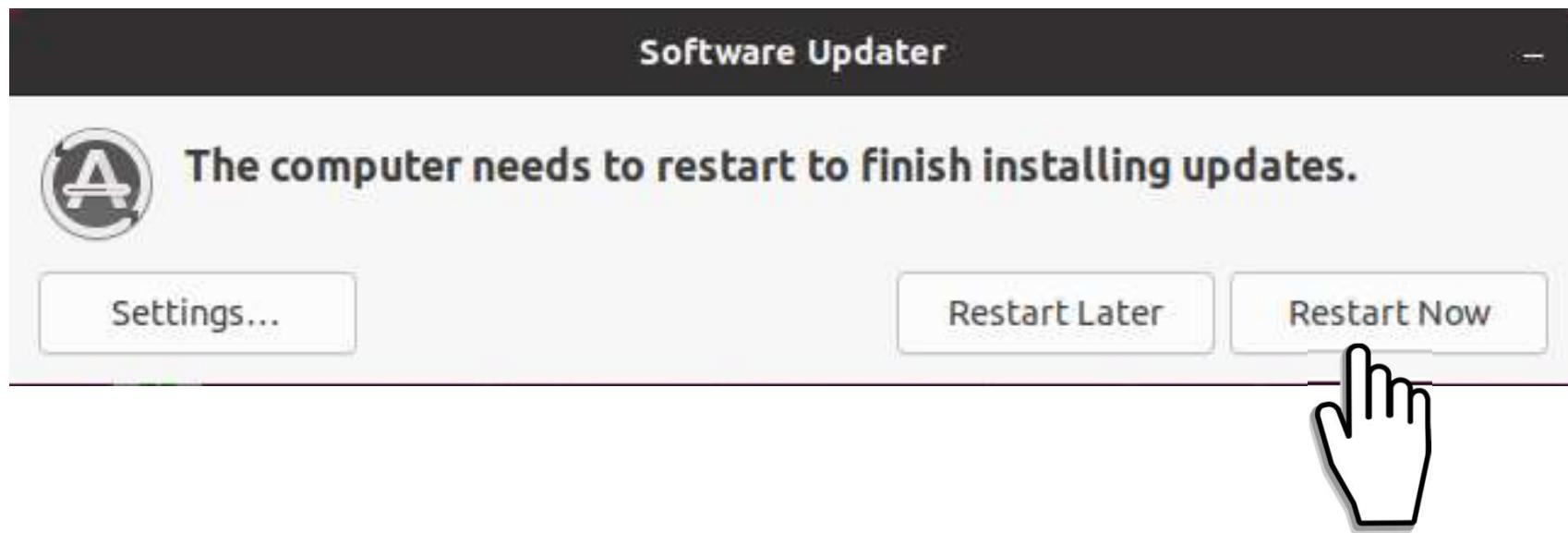
■ Downloading & Installing updates



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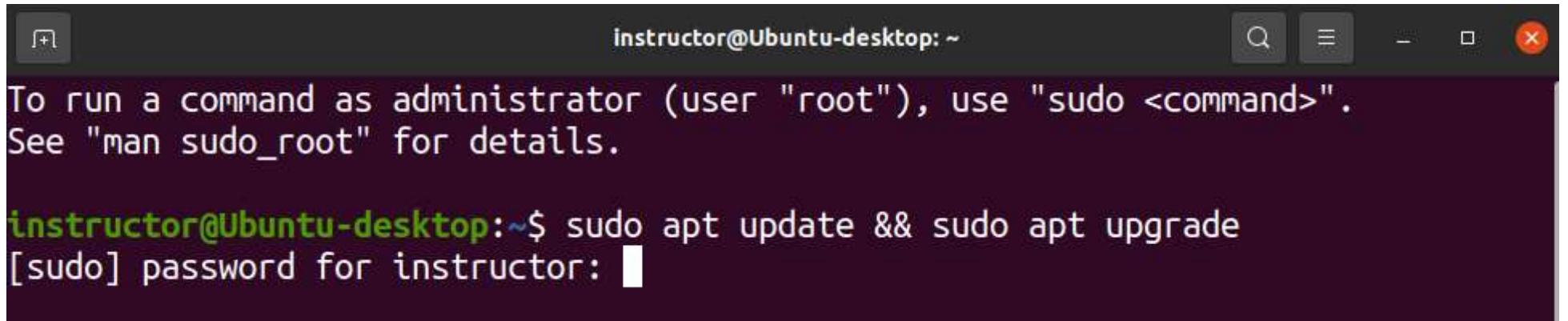
1. Software Updates (15/15)

- Click **Restart Now** button



Or Alternatively

- In terminal, type **sudo apt update && sudo apt upgrade**.



The image shows a screenshot of a terminal window on an Ubuntu desktop. The title bar reads "instructor@Ubuntu-desktop: ~". The terminal output is as follows:

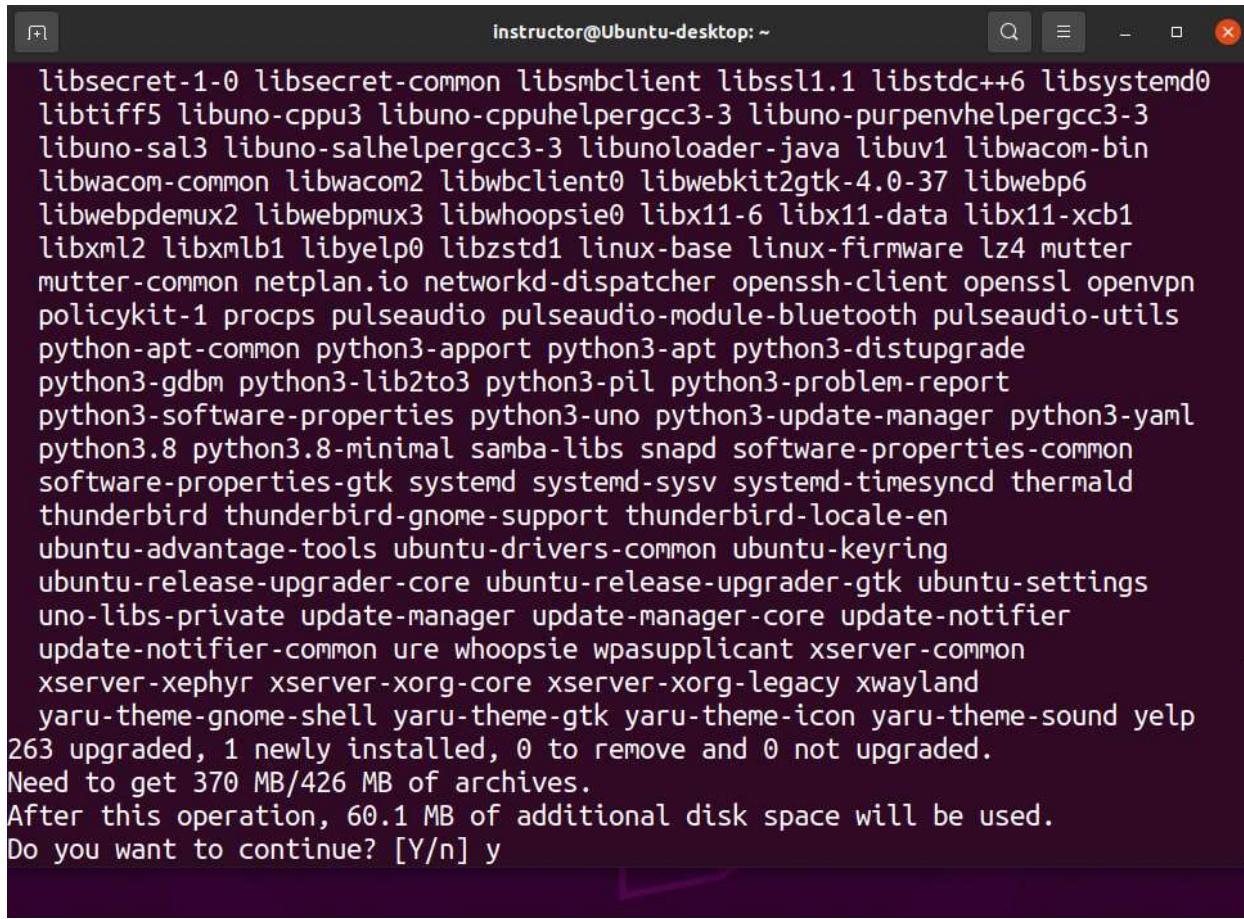
```
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

instructor@Ubuntu-desktop:~$ sudo apt update && sudo apt upgrade
[sudo] password for instructor: █
```

The terminal window has a dark background with light-colored text. It includes standard window controls (minimize, maximize, close) in the top right corner.

Or Alternatively (Cont.)

- Type **y**.



The screenshot shows a terminal window titled "instructor@Ubuntu-desktop: ~". The window contains the following text output from an apt command:

```
libsecret-1-0 libsecret-common libsmbclient libssl1.1 libstdc++6 libsystemd0
libtiff5 libuno-cppu3 libuno-cppuhelpergcc3-3 libuno-purpenvhelpergcc3-3
libuno-sal3 libuno-salhelpergcc3-3 libunoloader-java libuv1 libwacom-bin
libwacom-common libwacom2 libwbclient0 libwebkit2gtk-4.0-37 libwebp6
libwebpdemux2 libwebpmux3 libwhoopsie0 libx11-6 libx11-data libx11-xcb1
libxml2 libxmlb1 libyelp0 libzstd1 linux-base linux-firmware lz4 mutter
mutter-common netplan.io networkd-dispatcher openssh-client openssl openvpn
policykit-1 procps pulseaudio pulseaudio-module-bluetooth pulseaudio-utils
python3-apt-common python3-apport python3-apt python3-distupgrade
python3-gdbm python3-lib2to3 python3-pil python3-problem-report
python3-software-properties python3-uno python3-update-manager python3-yaml
python3.8 python3.8-minimal samba-libs snapd software-properties-common
software-properties-gtk systemd systemd-sysv systemd-timesyncd thermald
thunderbird thunderbird-gnome-support thunderbird-locale-en
ubuntu-advantage-tools ubuntu-drivers-common ubuntu-keyring
ubuntu-release-upgrader-core ubuntu-release-upgrader-gtk ubuntu-settings
uno-libs-private update-manager update-manager-core update-notifier
update-notifier-common ure whoopsie wpa_supplicant xserver-common
xserver-xephyr xserver-xorg-core xserver-xorg-legacy xwayland
yaru-theme-gnome-shell yaru-theme-gtk yaru-theme-icon yaru-theme-sound yelp
263 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.
Need to get 370 MB/426 MB of archives.
After this operation, 60.1 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

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Or Alternatively (Cont.)

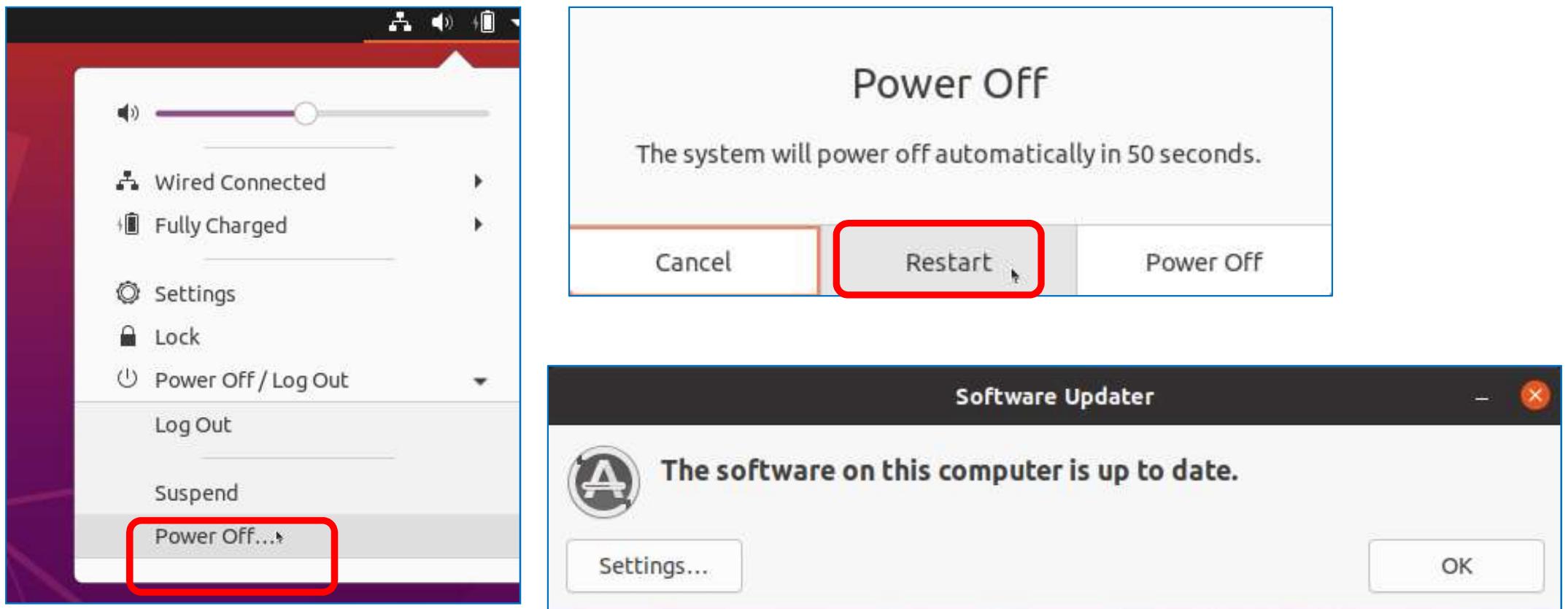
The screenshot shows two terminal windows side-by-side on an Ubuntu desktop environment.

Terminal Window 1: This window displays the command-line output of a package update. It includes multiple lines of text indicating the unpacking of various packages (e.g., libdataserver, libecal, libedata-cal, libebook-contacts, libedata-book, libebbackend, libwebkit2gtk, libjavascriptcoregtk) and the processing of triggers for various system components (e.g., mime-support, hicolor-icon-theme, gnome-menus, libc-bin, man-db, libreoffice-common, dbus, shared-mime-info, install-info, fontconfig, desktop-file-utils, dictionaries-common, initramfs-tools). A progress bar at the bottom indicates the task is at 10% completion.

Terminal Window 2: This window shows the final step of the update process: generating the new initramfs image. The command `update-initramfs` is run, followed by a series of informational messages from the kernel module about the generation of `/boot/initrd.img-5.8.0-63-generic`. These messages include the UUID of the resume partition, the path to the resume file, and a reminder to set the `RESUME` variable if needed.

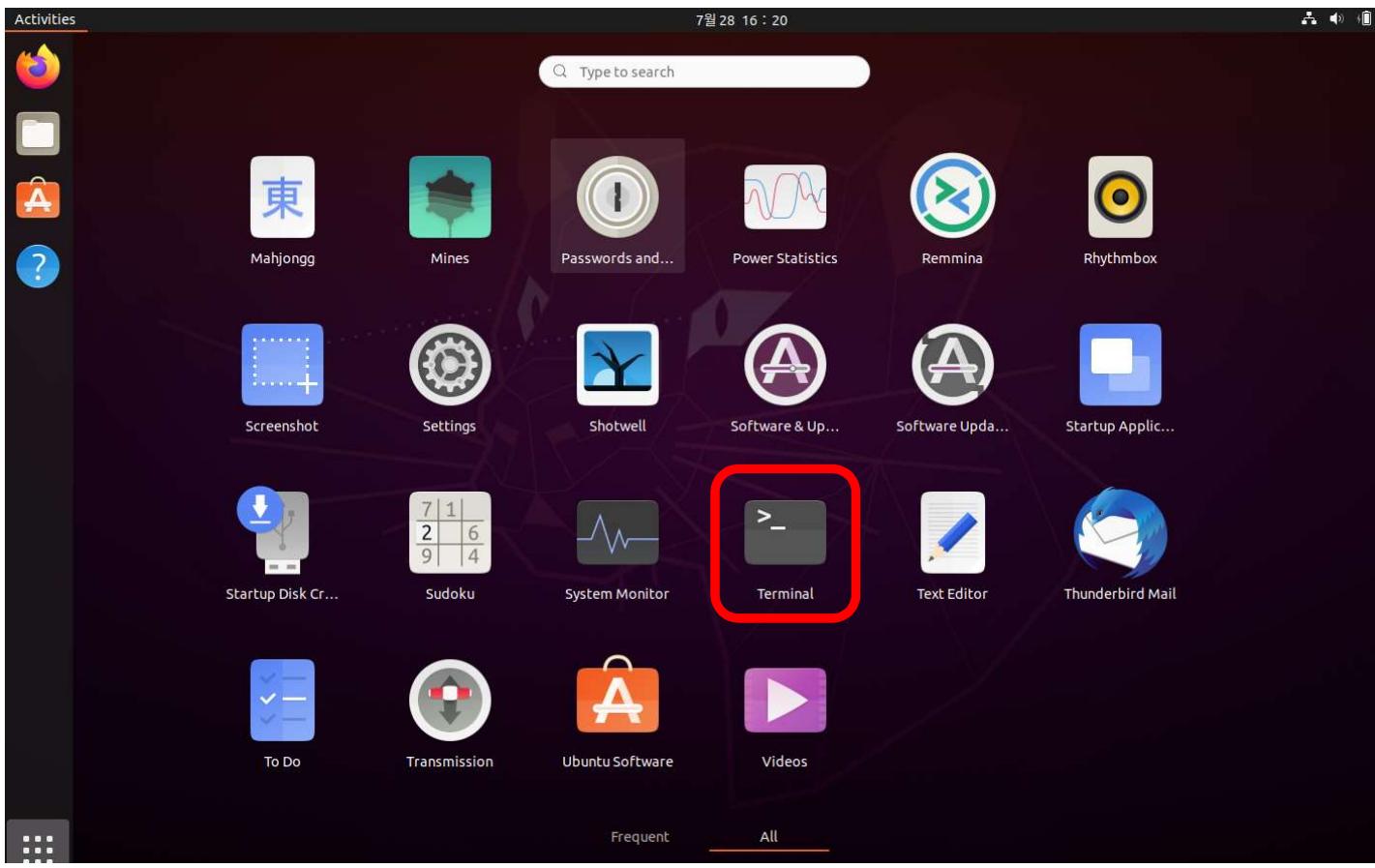
Ubuntu Desktop UI: In the bottom right corner, the classic orange Ubuntu logo is visible.

Or Alternatively (Cont.)



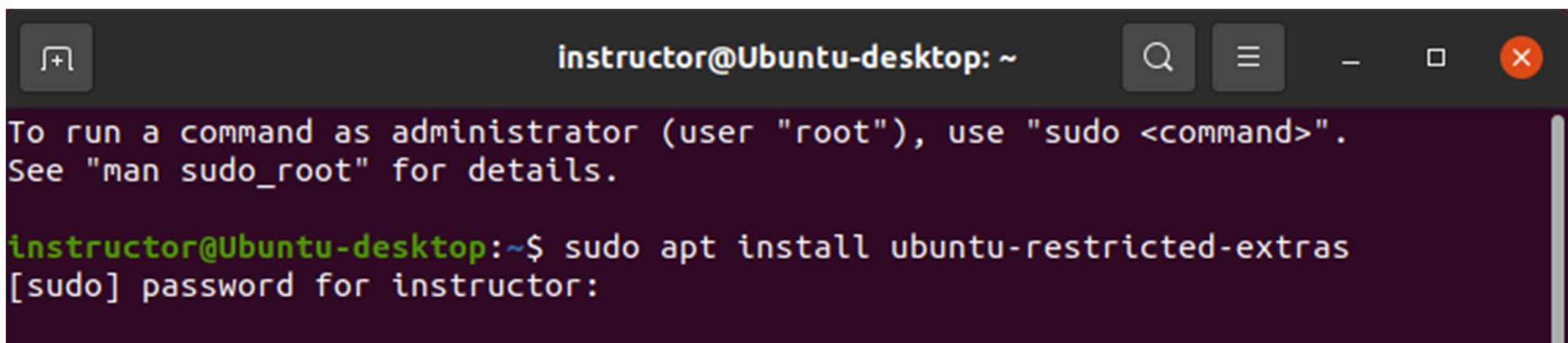
2. Install Ubuntu Restricted Extras (1/6)

■ Select **terminal**.



2. Install Ubuntu Restricted Extras (2/6)

■ \$ sudo apt-get install ubuntu-restricted-extras



The screenshot shows a terminal window with a dark background and light-colored text. The title bar reads "instructor@Ubuntu-desktop: ~". The window contains the following text:

```
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

instructor@Ubuntu-desktop:~$ sudo apt install ubuntu-restricted-extras
[sudo] password for instructor:
```

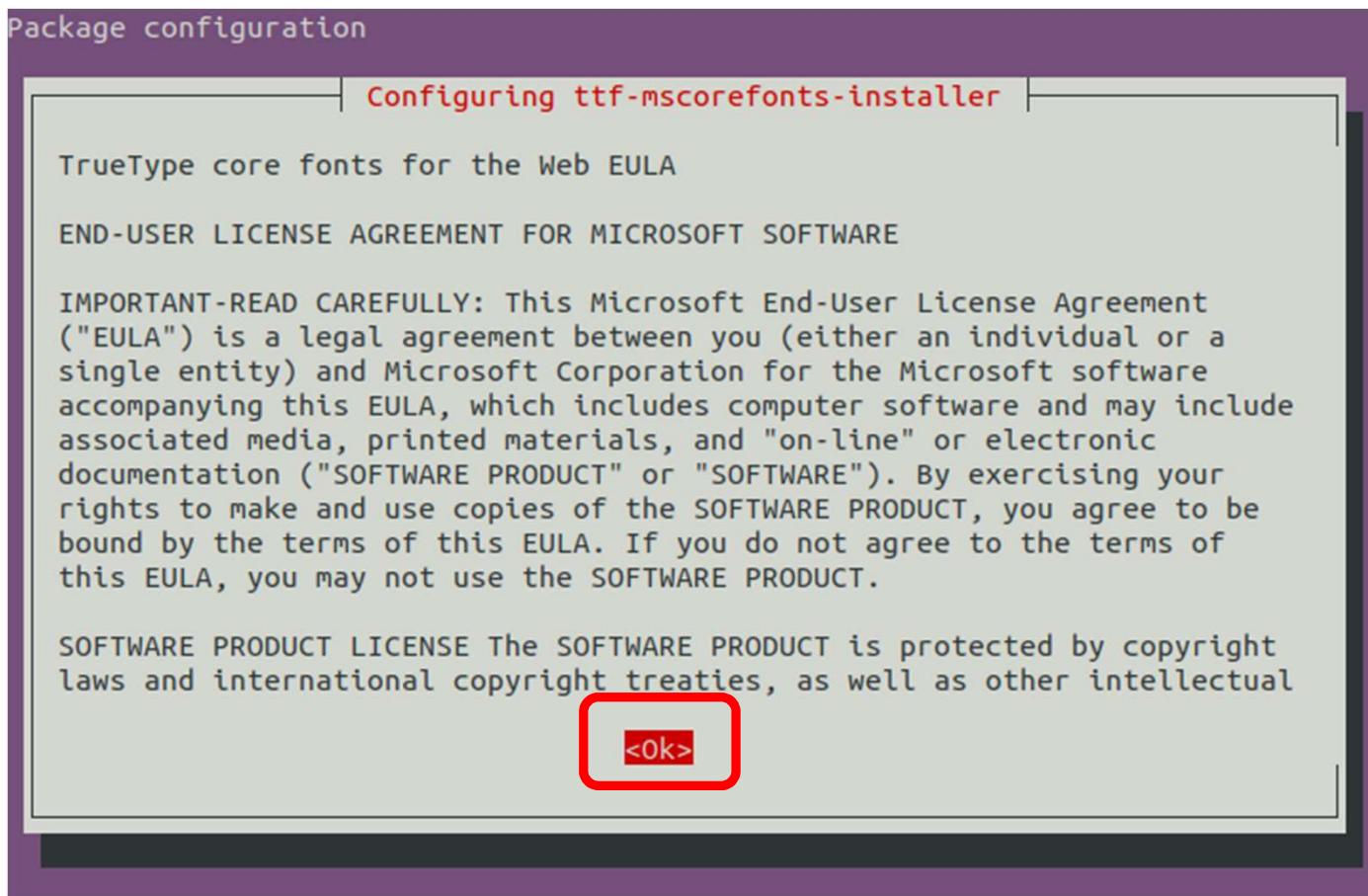
2. Install Ubuntu Restricted Extras (3/6)

- Type **y**.

```
instructor@Ubuntu-desktop:~$ sudo apt install ubuntu-restricted-extras
[sudo] password for instructor:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  cabextract libaribb24-0 libavcodec-extra libavcodec-extra58 libvo-amrwbenc0
    ttf-mscorefonts-installer ubuntu-restricted-addons unrar
Recommended packages:
  gstreamer1.0-fluendo-mp3
The following packages will be REMOVED:
  libavcodec58
The following NEW packages will be installed:
  cabextract libaribb24-0 libavcodec-extra libavcodec-extra58 libvo-amrwbenc0
    ttf-mscorefonts-installer ubuntu-restricted-addons ubuntu-restricted-extras
    unrar
0 upgraded, 9 newly installed, 1 to remove and 0 not upgraded.
Need to get 5,158 kB of archives.
After this operation, 912 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

2. Install Ubuntu Restricted Extras (4/6)

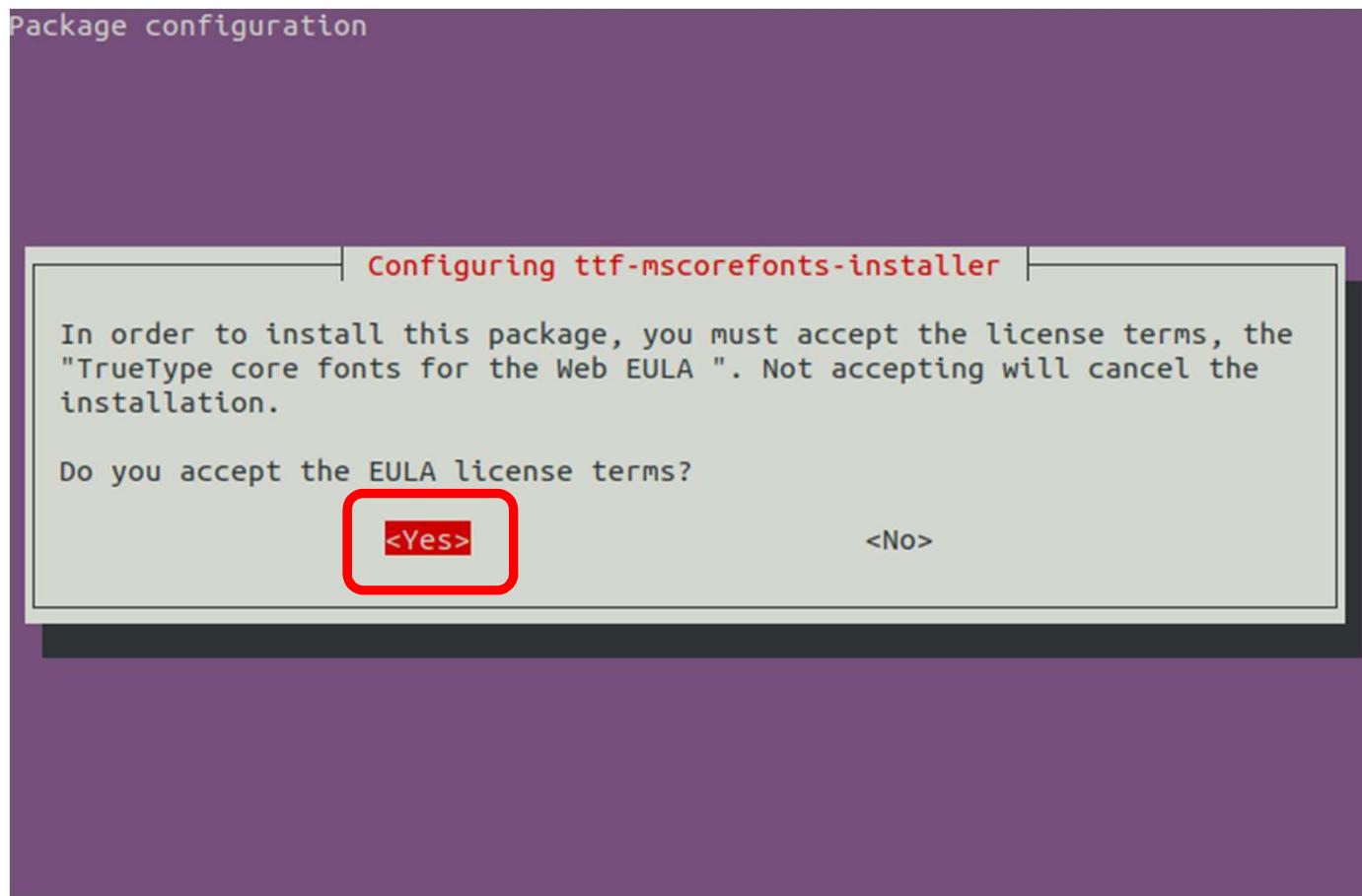
- Click **Ok**.



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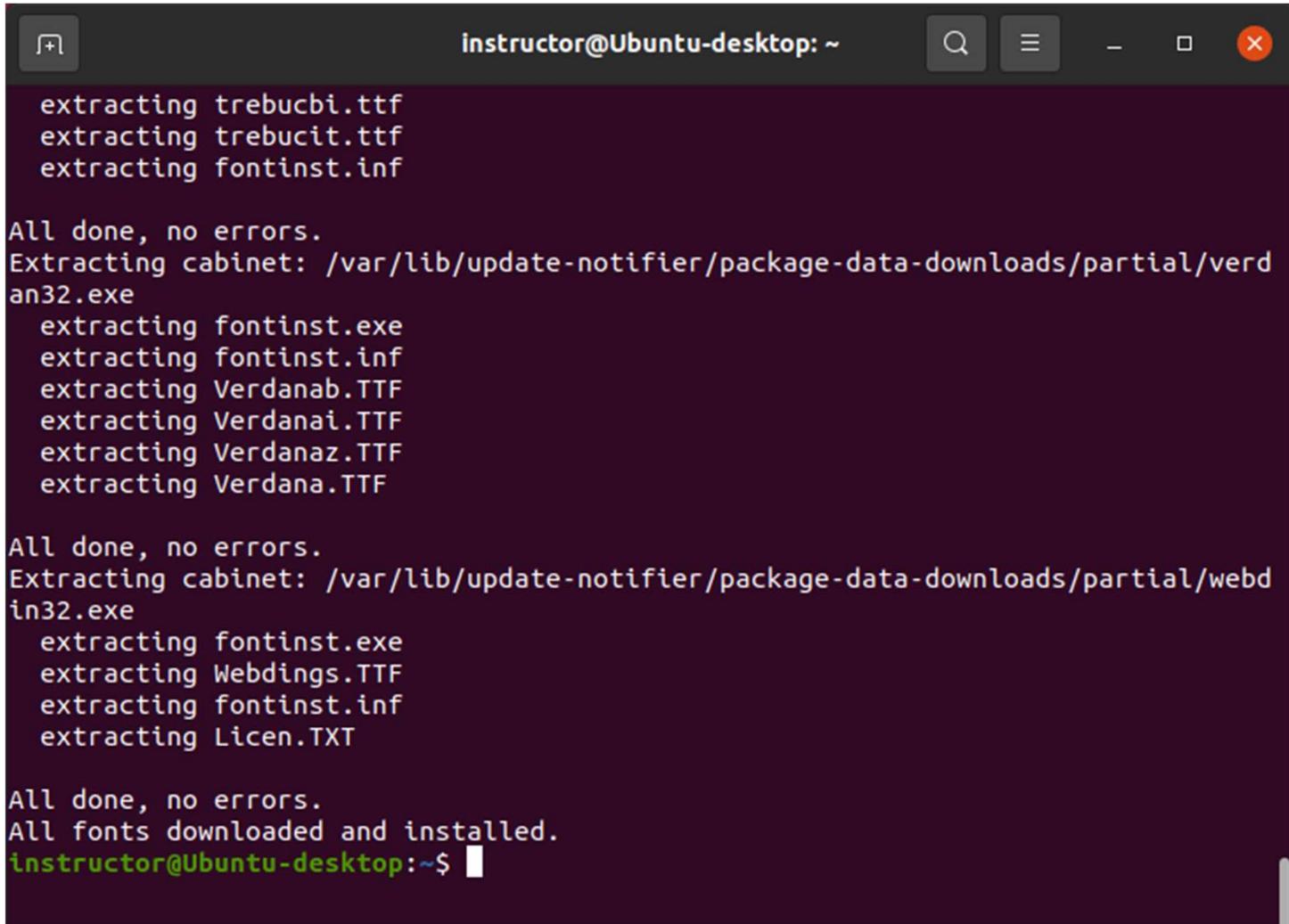
2. Install Ubuntu Restricted Extras (5/6)

- Click **Yes**.



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2. Install Ubuntu Restricted Extras (6/6)



A screenshot of a terminal window titled "instructor@Ubuntu-desktop: ~". The window shows a series of log messages from the "dpkg-deb" command extracting files from several ".deb" packages. The packages include "trebuchet-fonts", "verdanab-fonts", "webdings-fonts", and "libfont-installer". Each package's extraction process is shown with "extracting" commands for various files like ".ttf" and ".inf" files, followed by a message stating "All done, no errors." at the end of each section. The terminal ends with the prompt "instructor@Ubuntu-desktop:~\$".

```
extracting trebucbi.ttf
extracting trebucit.ttf
extracting fontinst.inf

All done, no errors.
Extracting cabinet: /var/lib/update-notifier/package-data-downloads/partial/verdan32.exe
    extracting fontinst.exe
    extracting fontinst.inf
    extracting Verdanab.TTF
    extracting Verdanai.TTF
    extracting Verdanaz.TTF
    extracting Verdana.TTF

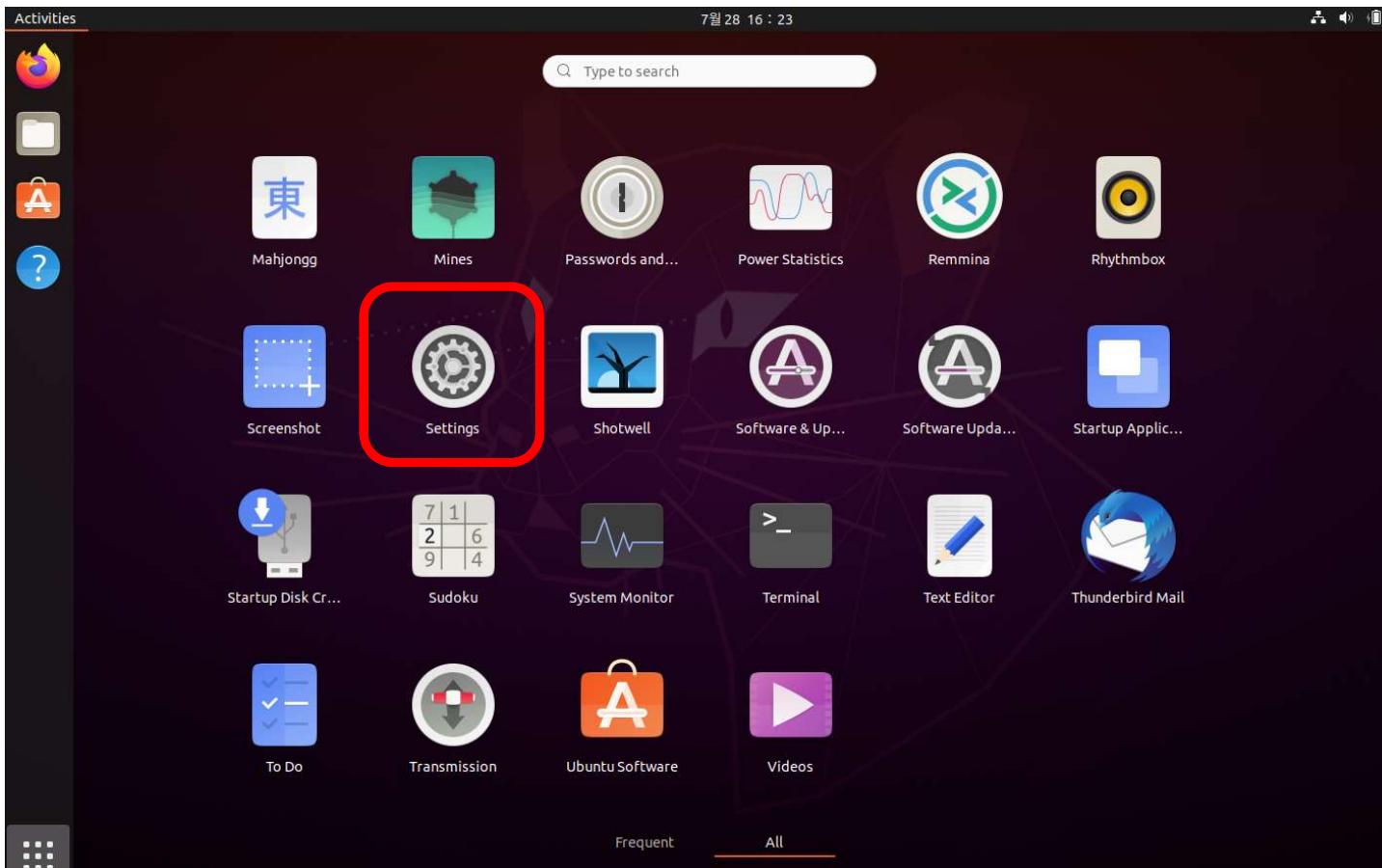
All done, no errors.
Extracting cabinet: /var/lib/update-notifier/package-data-downloads/partial/webd32.exe
    extracting fontinst.exe
    extracting Webdings.TTF
    extracting fontinst.inf
    extracting Licen.TXT

All done, no errors.
All fonts downloaded and installed.
instructor@Ubuntu-desktop:~$
```

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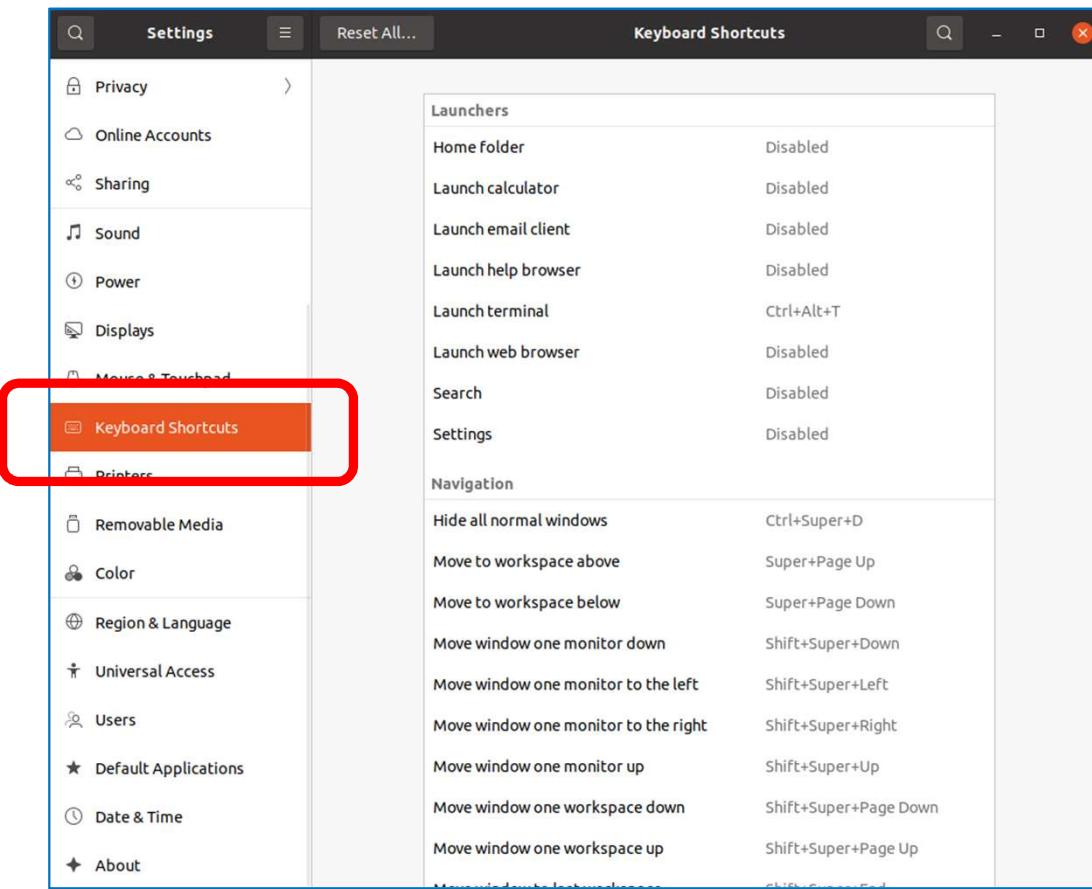
3. Setting Keyboard Shortcut Key (1/13)

■ Click **Settings**



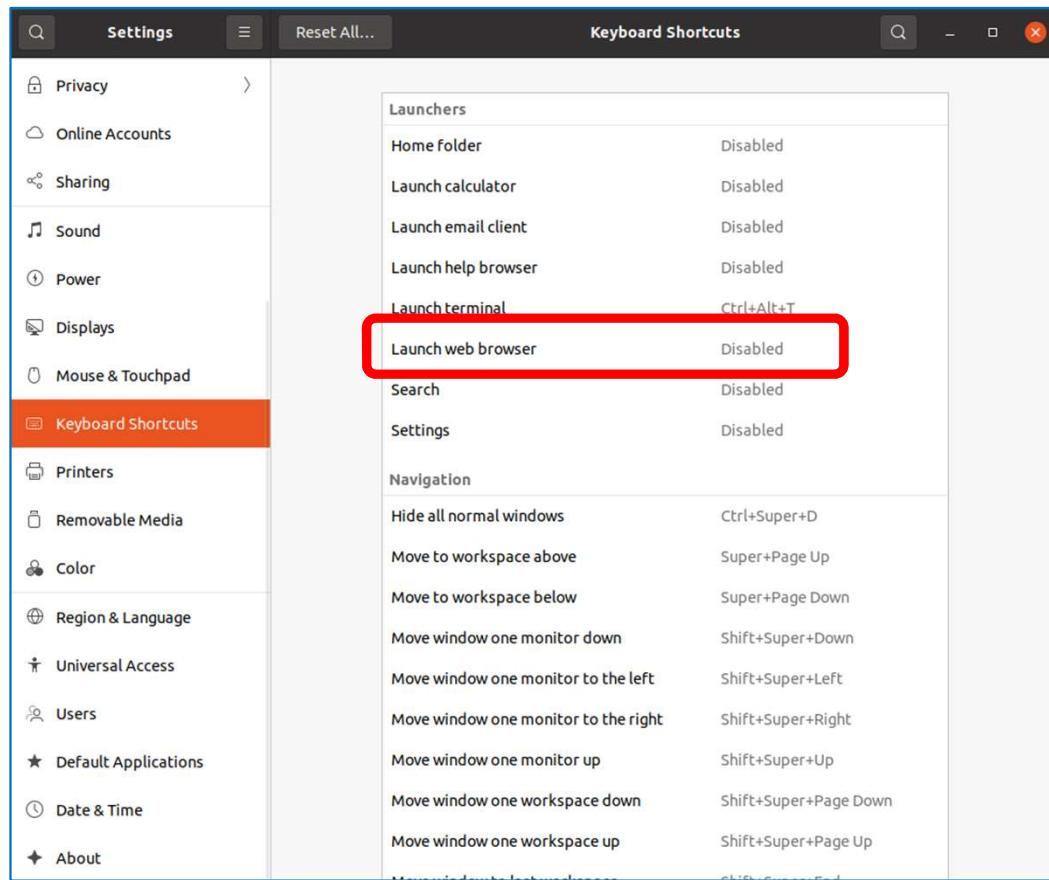
3. Setting Keyboard Shortcut Key (2/13)

■ Click **Keyboard Shortcuts**



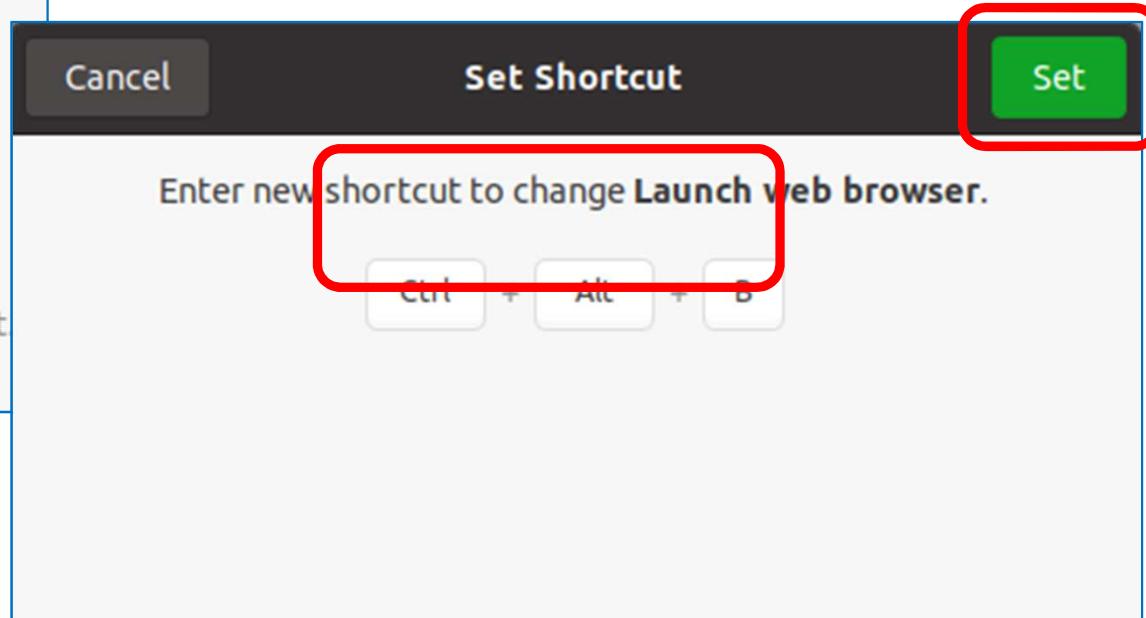
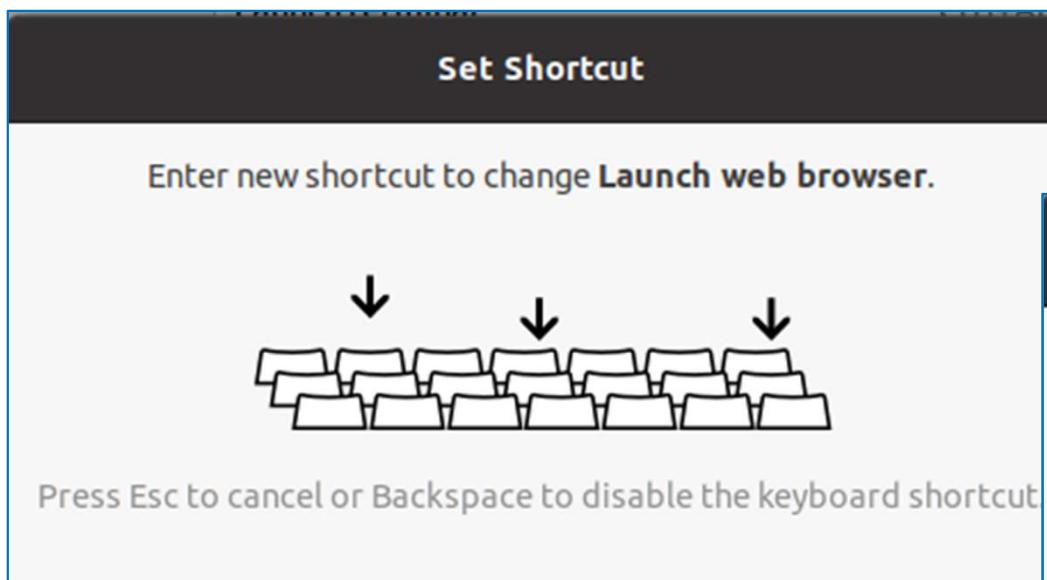
3. Setting Keyboard Shortcut Key (3/13)

- In **Launchers**, select **Launch web browser**.

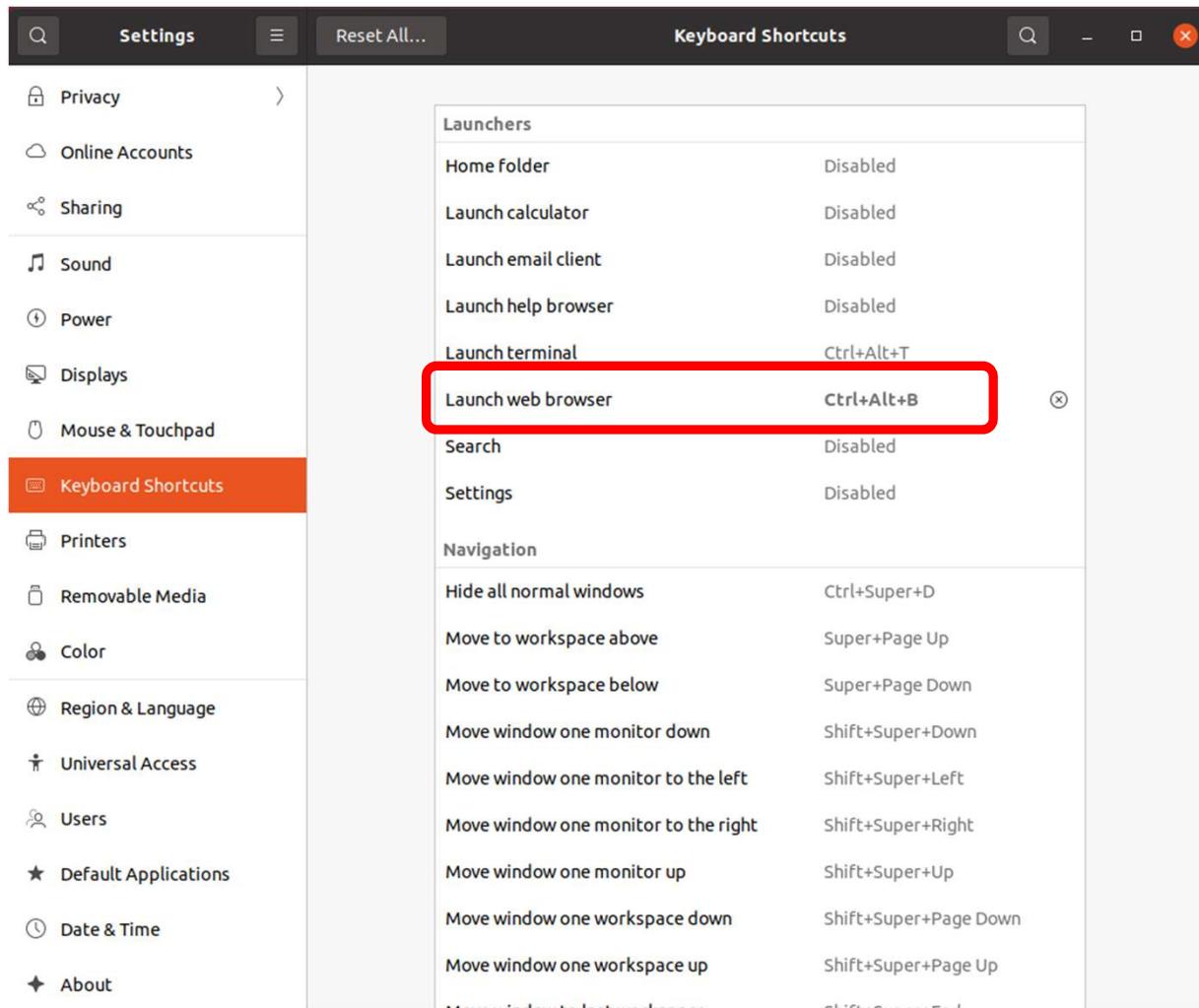


3. Setting Keyboard Shortcut Key (4/13)

- Press key **Ctrl + Alt + B**.

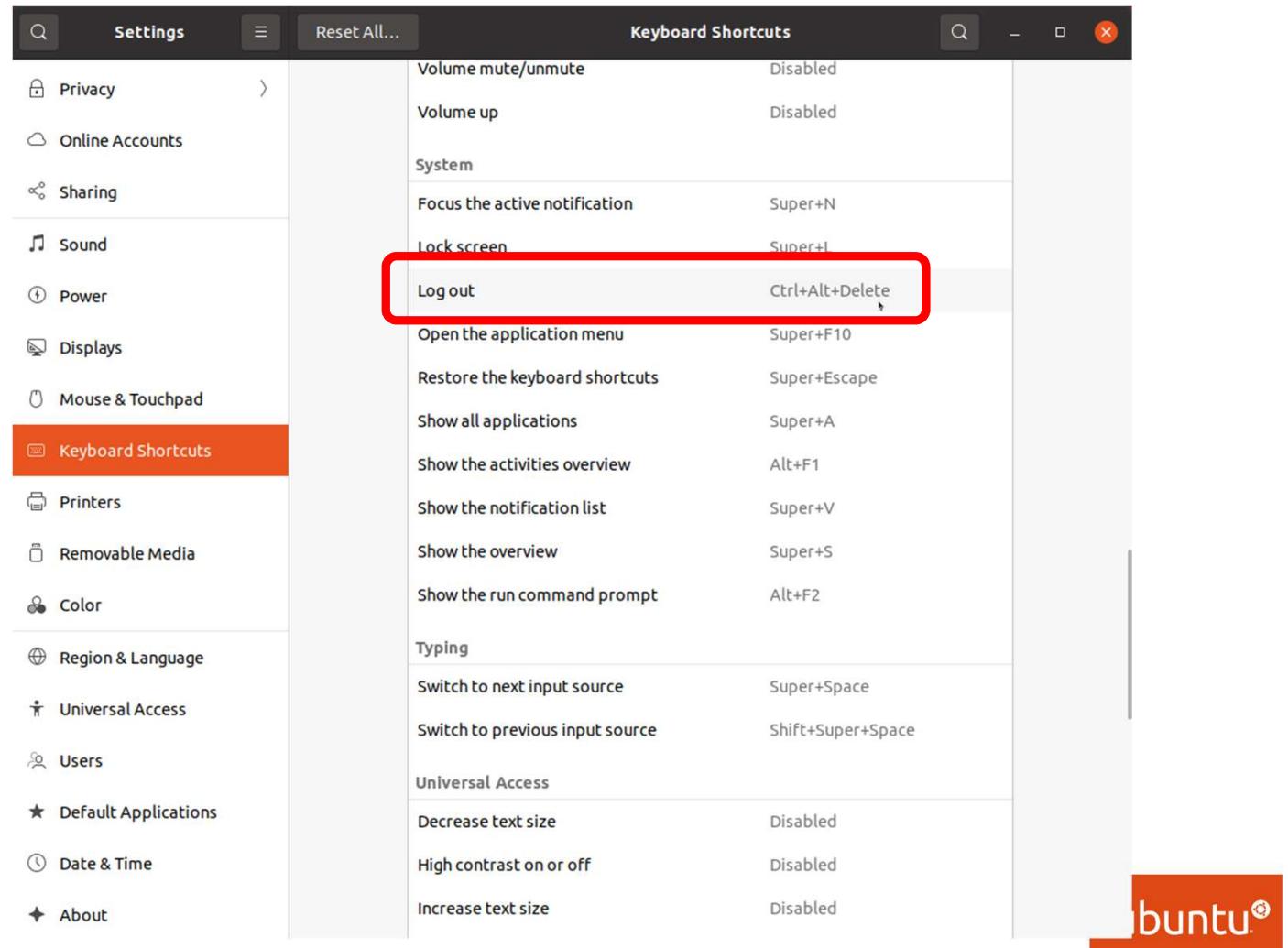


3. Setting Keyboard Shortcut Key (5/13)



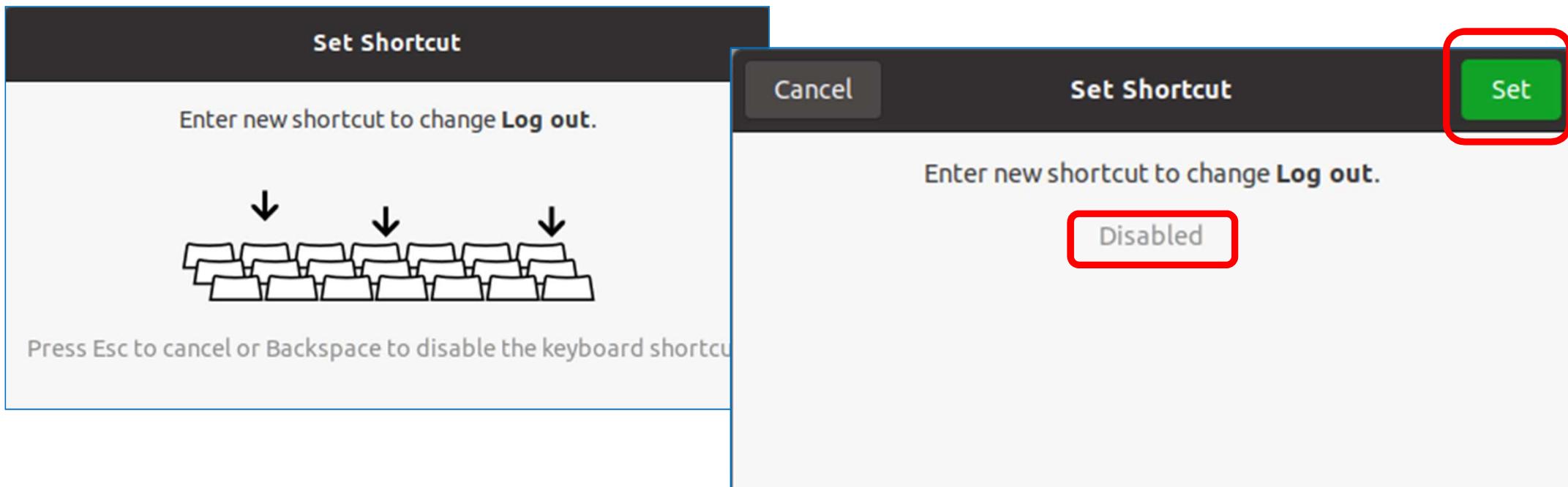
3. Setting Keyboard Shortcut Key (6/13)

■ Select **Log out**.



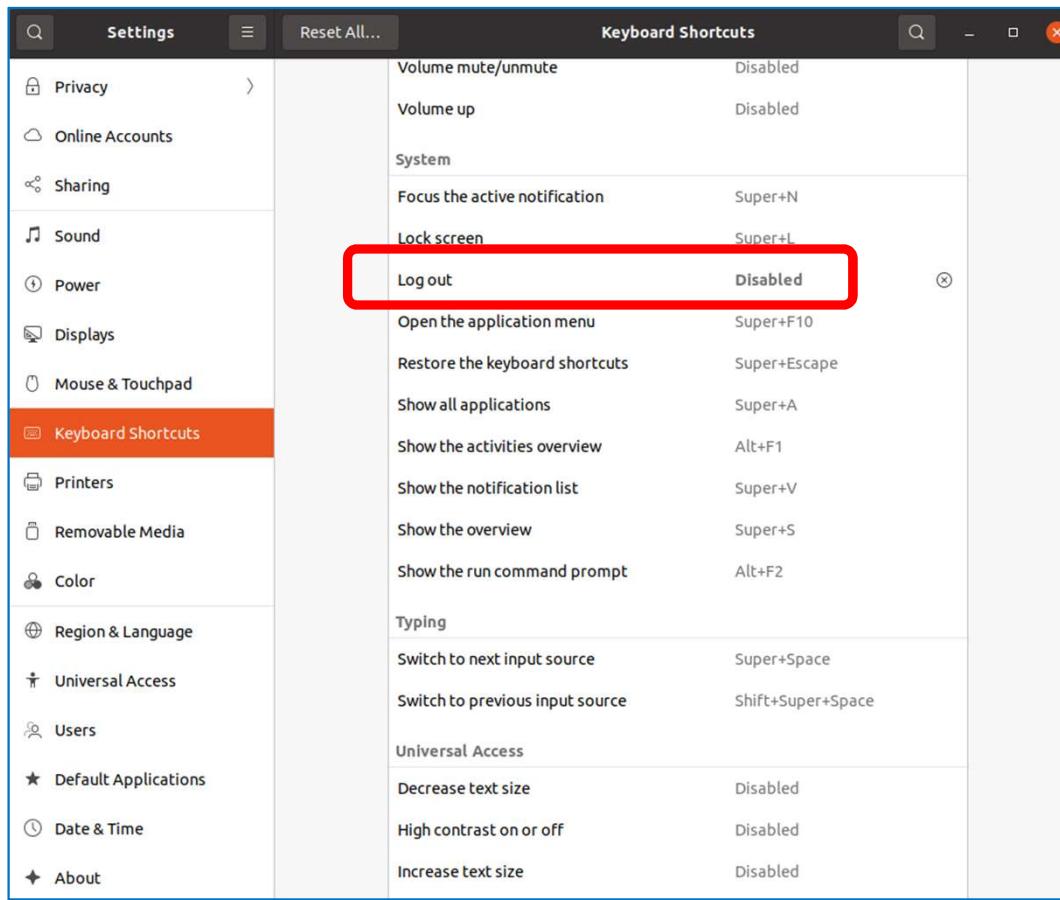
3. Setting Keyboard Shortcut Key (7/13)

- Press key **backspace** to change **Disabled** state.



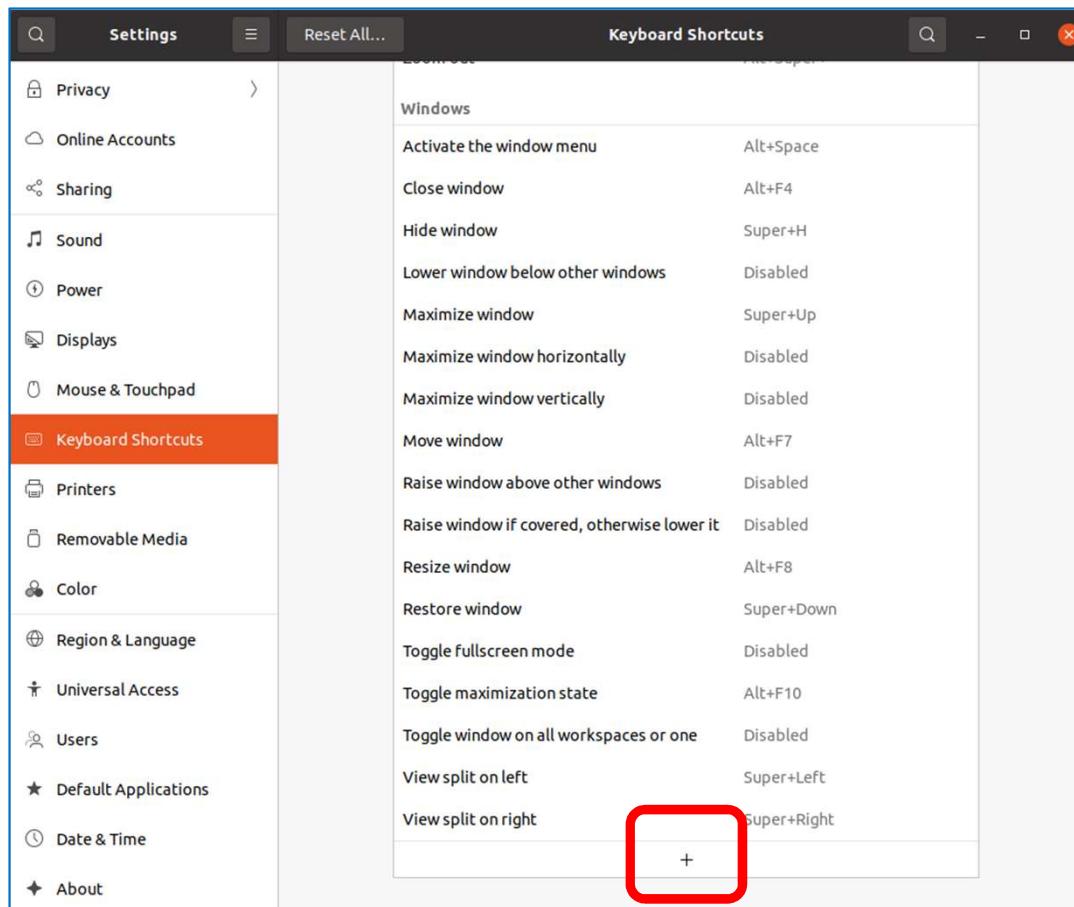
3. Setting Keyboard Shortcut Key (8/13)

- Press key **backspace** to change **Disabled** state.



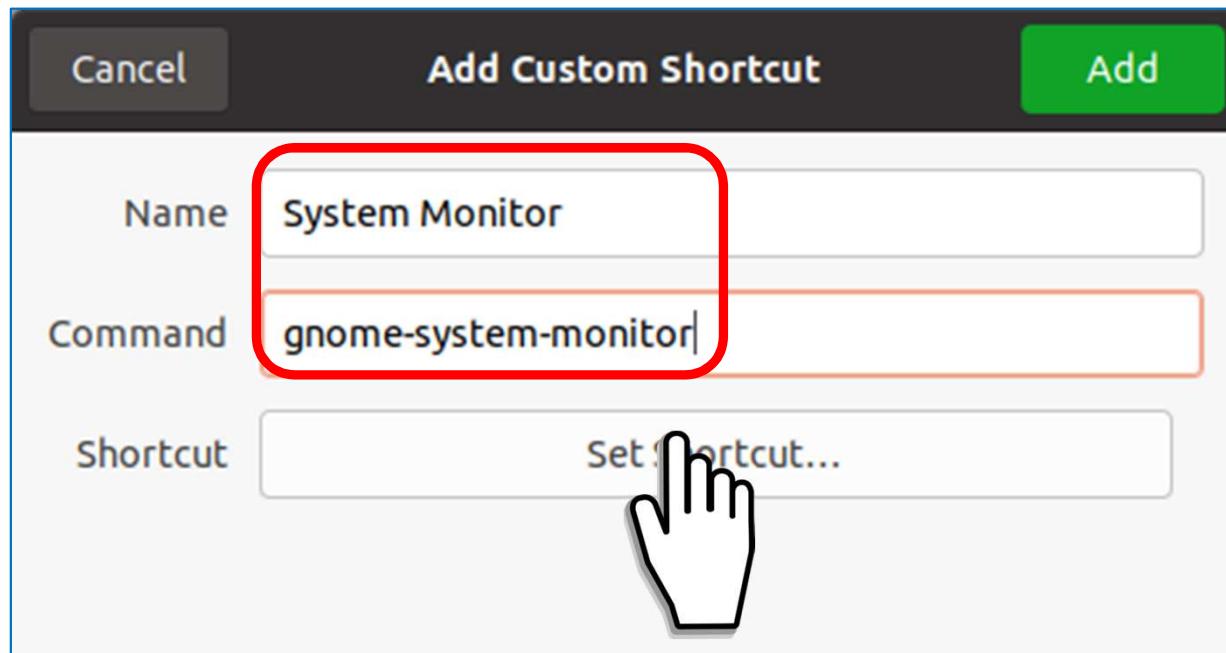
3. Setting Keyboard Shortcut Key (9/13)

■ Select **Custom Shortcuts** > click ‘+’



3. Setting Keyboard Shortcut Key (10/13)

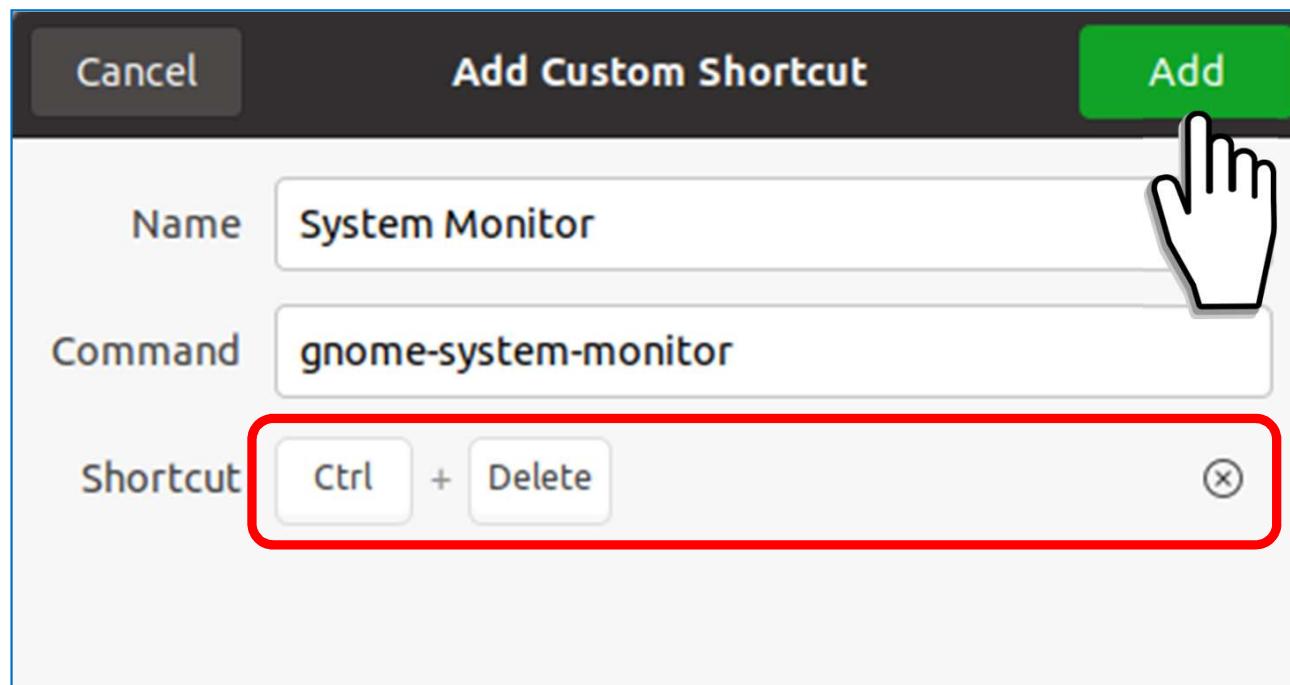
- Name : **System Monitor**
- Command : **gnome-system-monitor**
- Click **Set Shortcut...** button.



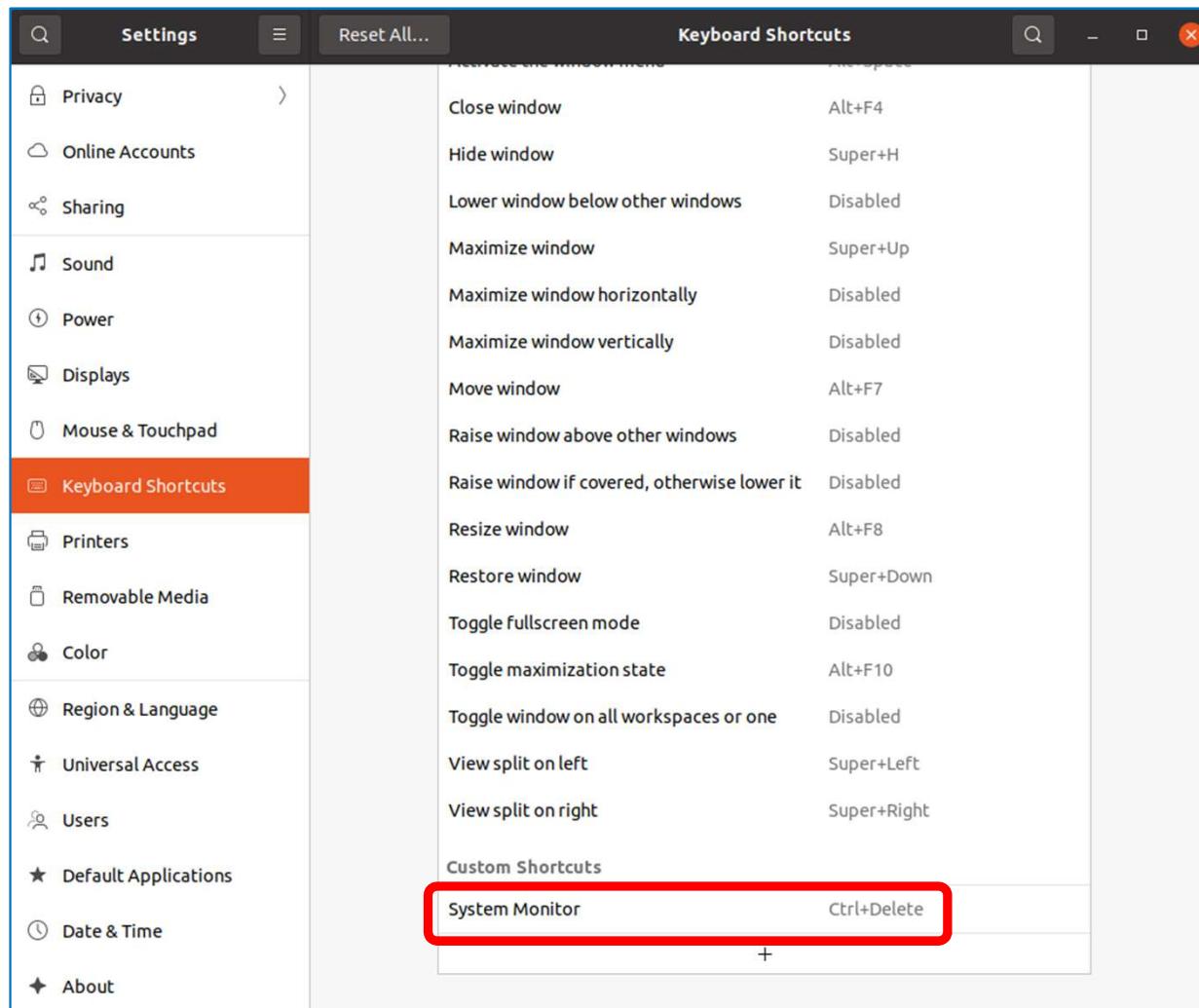
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3. Setting Keyboard Shortcut Key (11/13)

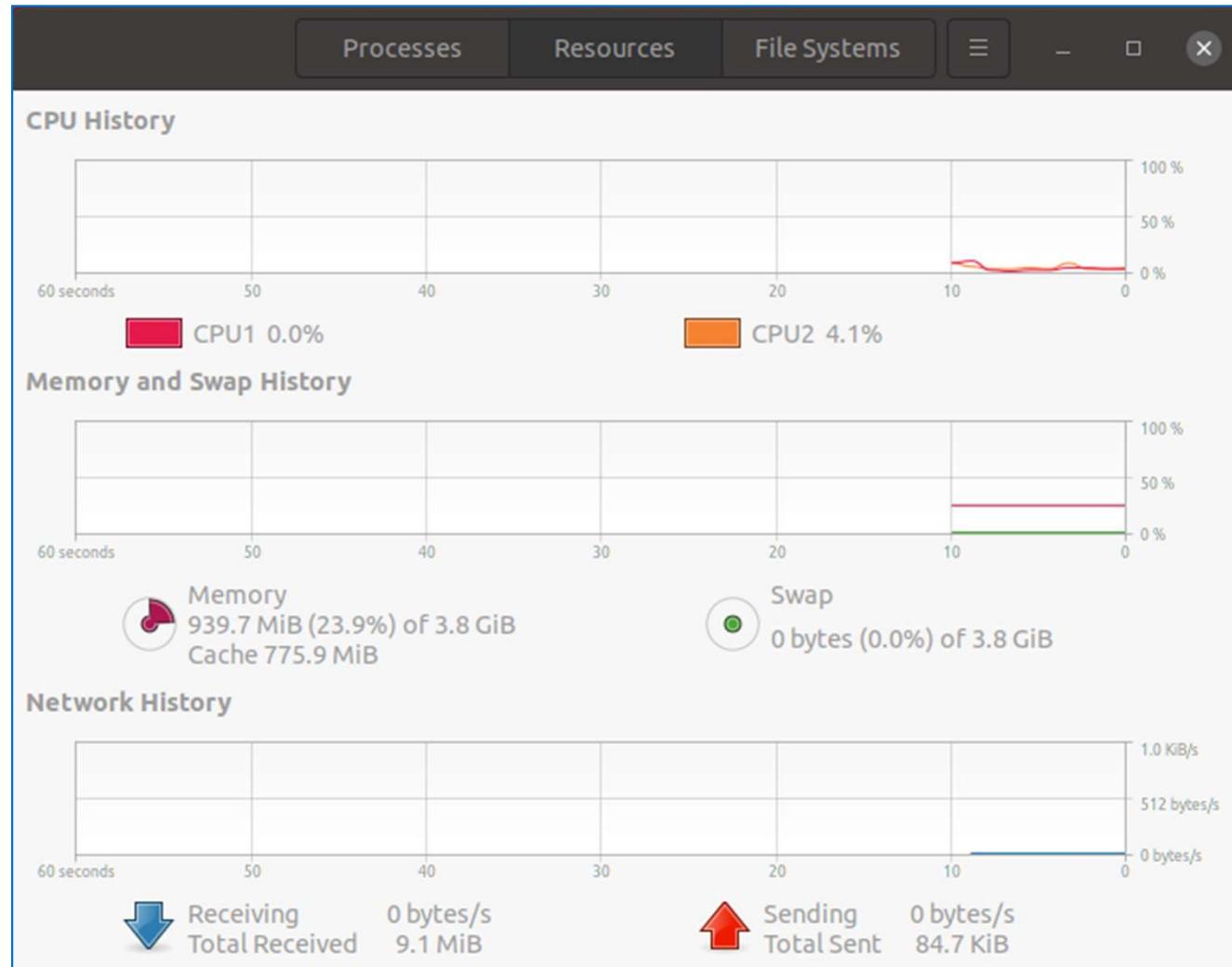
■ Press **Ctrl + Delete**



3. Setting Keyboard Shortcut Key (12/13)



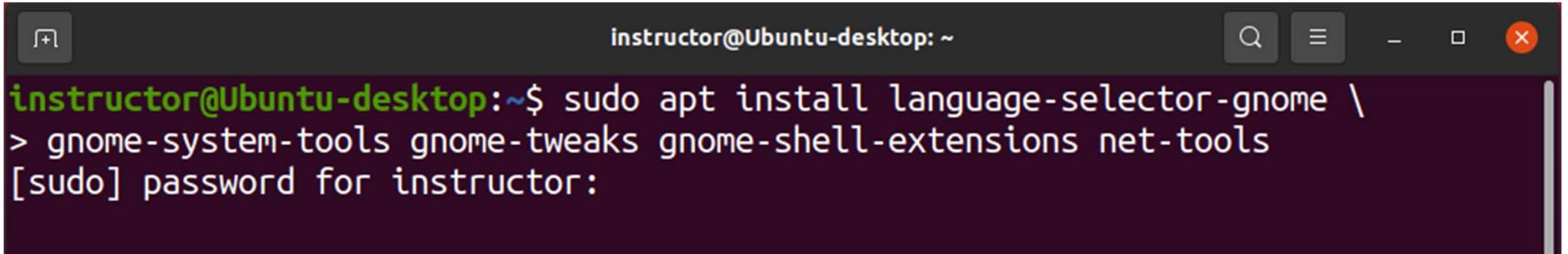
3. Setting Keyboard Shortcut Key (13/13)



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4. Setup Hangul Language Pack (1/14)

- \$ sudo apt-get install language-selector-gnome gnome-system-tools gnome-tweaks gnome-shell-extensions net-tools.

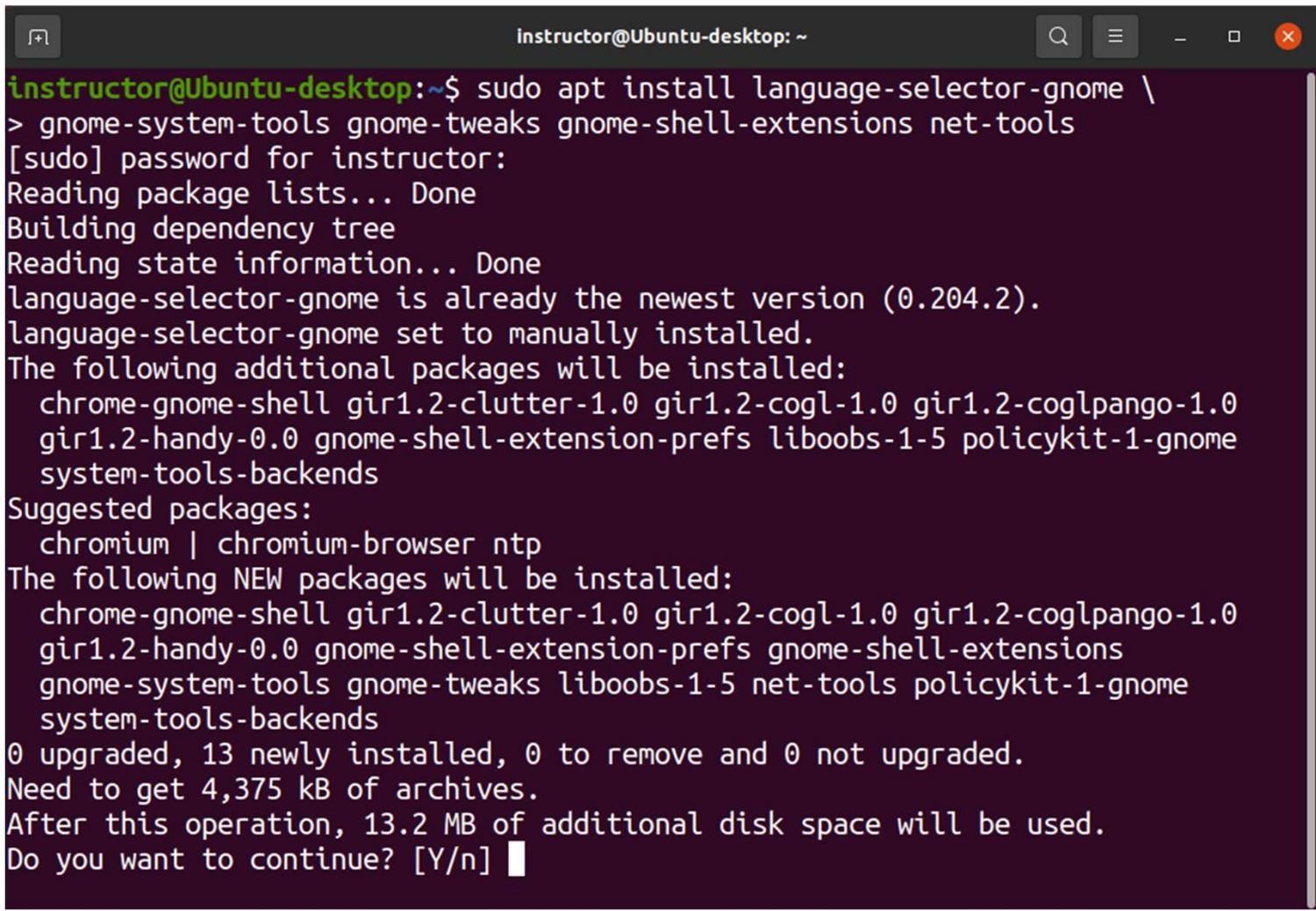


The screenshot shows a terminal window with a dark theme. The title bar reads "instructor@Ubuntu-desktop: ~". The main area of the terminal contains the following text:

```
instructor@Ubuntu-desktop:~$ sudo apt install language-selector-gnome \
> gnome-system-tools gnome-tweaks gnome-shell-extensions net-tools
[sudo] password for instructor:
```

4. Setup Hangul Language Pack (2/14)

■ Type **y**.



The image shows a terminal window titled "instructor@Ubuntu-desktop: ~". The terminal is displaying the output of a command entered by the user. The command is:

```
instructor@Ubuntu-desktop:~$ sudo apt install language-selector-gnome \
> gnome-system-tools gnome-tweaks gnome-shell-extensions net-tools
```

After entering the command, the user is prompted for a password:

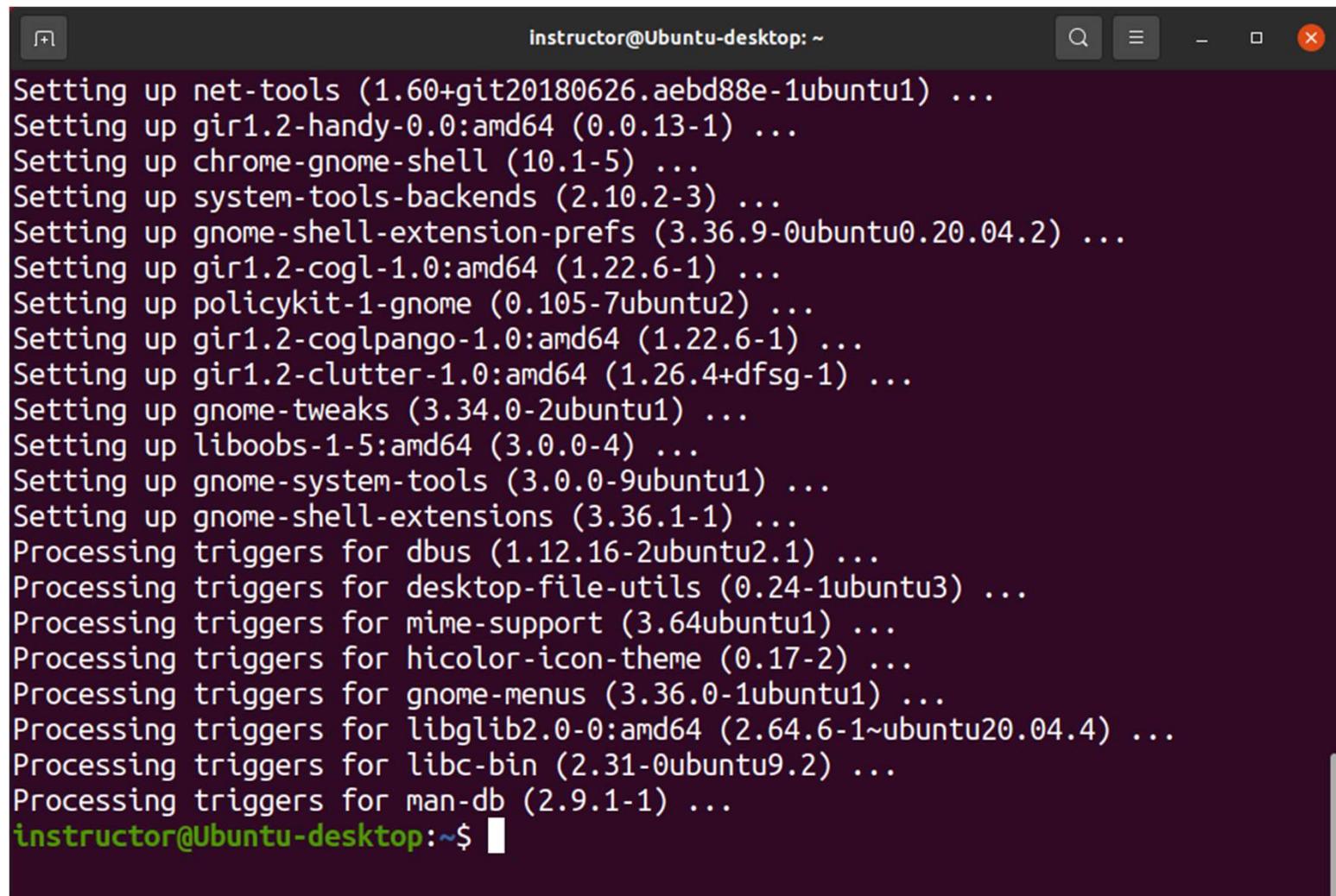
```
[sudo] password for instructor:
```

The terminal then displays the package manager's processing steps:

```
Reading package lists... Done
Building dependency tree
Reading state information... Done
language-selector-gnome is already the newest version (0.204.2).
language-selector-gnome set to manually installed.
The following additional packages will be installed:
  chrome-gnome-shell gir1.2-clutter-1.0 gir1.2-cogl-1.0 gir1.2-cogl-pango-1.0
  gir1.2-handy-0.0 gnome-shell-extension-prefs liboobs-1-5 policykit-1-gnome
  system-tools-backends
Suggested packages:
  chromium | chromium-browser ntp
The following NEW packages will be installed:
  chrome-gnome-shell gir1.2-clutter-1.0 gir1.2-cogl-1.0 gir1.2-cogl-pango-1.0
  gir1.2-handy-0.0 gnome-shell-extension-prefs gnome-shell-extensions
  gnome-system-tools gnome-tweaks liboobs-1-5 net-tools policykit-1-gnome
  system-tools-backends
0 upgraded, 13 newly installed, 0 to remove and 0 not upgraded.
Need to get 4,375 kB of archives.
After this operation, 13.2 MB of additional disk space will be used.
Do you want to continue? [Y/n] █
```

The terminal window has a dark background with white text. The title bar is dark with light-colored icons. The bottom right corner of the window frame contains the word "ubuntu®".

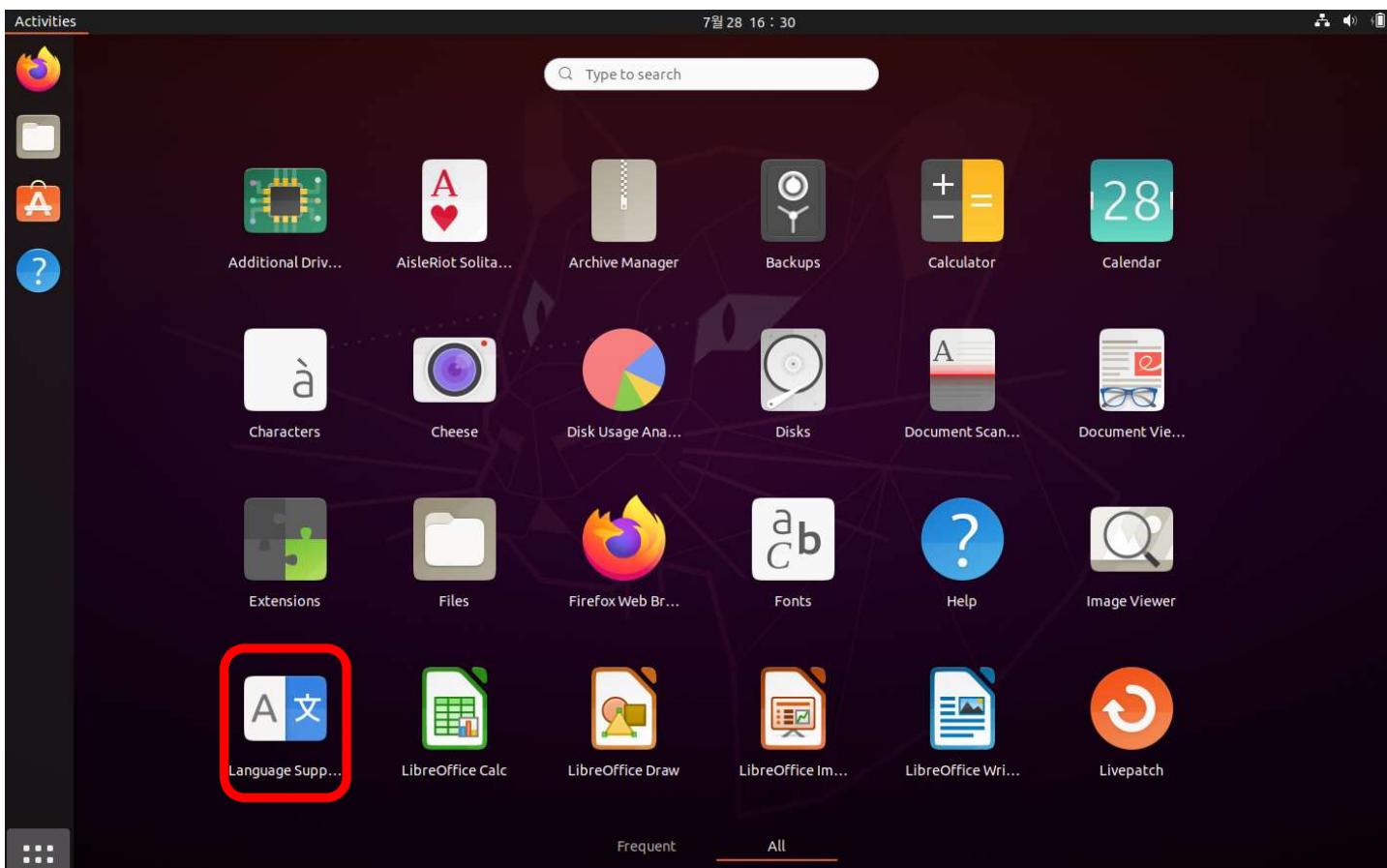
4. Setup Hangul Language Pack (3/14)

A screenshot of a Linux desktop environment, specifically Ubuntu, showing a terminal window. The terminal window has a dark background and light-colored text. At the top, it shows the session name "instructor@Ubuntu-desktop: ~". The window contains a list of package installation logs, starting with "Setting up net-tools" and ending with "Processing triggers for man-db". The terminal prompt "instructor@Ubuntu-desktop:~\$" is visible at the bottom left. The desktop background is a light blue gradient with a subtle pattern. In the bottom right corner, there is an orange "ubuntu®" logo.

```
Setting up net-tools (1.60+git20180626.aebd88e-1ubuntu1) ...
Setting up gir1.2-handy-0.0:amd64 (0.0.13-1) ...
Setting up chrome-gnome-shell (10.1-5) ...
Setting up system-tools-backends (2.10.2-3) ...
Setting up gnome-shell-extension-prefs (3.36.9-0ubuntu0.20.04.2) ...
Setting up gir1.2-cogl-1.0:amd64 (1.22.6-1) ...
Setting up policykit-1-gnome (0.105-7ubuntu2) ...
Setting up gir1.2-cogl-pango-1.0:amd64 (1.22.6-1) ...
Setting up gir1.2-clutter-1.0:amd64 (1.26.4+dfsg-1) ...
Setting up gnome-tweaks (3.34.0-2ubuntu1) ...
Setting up liboobs-1-5:amd64 (3.0.0-4) ...
Setting up gnome-system-tools (3.0.0-9ubuntu1) ...
Setting up gnome-shell-extensions (3.36.1-1) ...
Processing triggers for dbus (1.12.16-2ubuntu2.1) ...
Processing triggers for desktop-file-utils (0.24-1ubuntu3) ...
Processing triggers for mime-support (3.64ubuntu1) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu1) ...
Processing triggers for libglib2.0-0:amd64 (2.64.6-1~ubuntu20.04.4) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
Processing triggers for man-db (2.9.1-1) ...
instructor@Ubuntu-desktop:~$
```

4. Setup Hangul Language Pack (4/14)

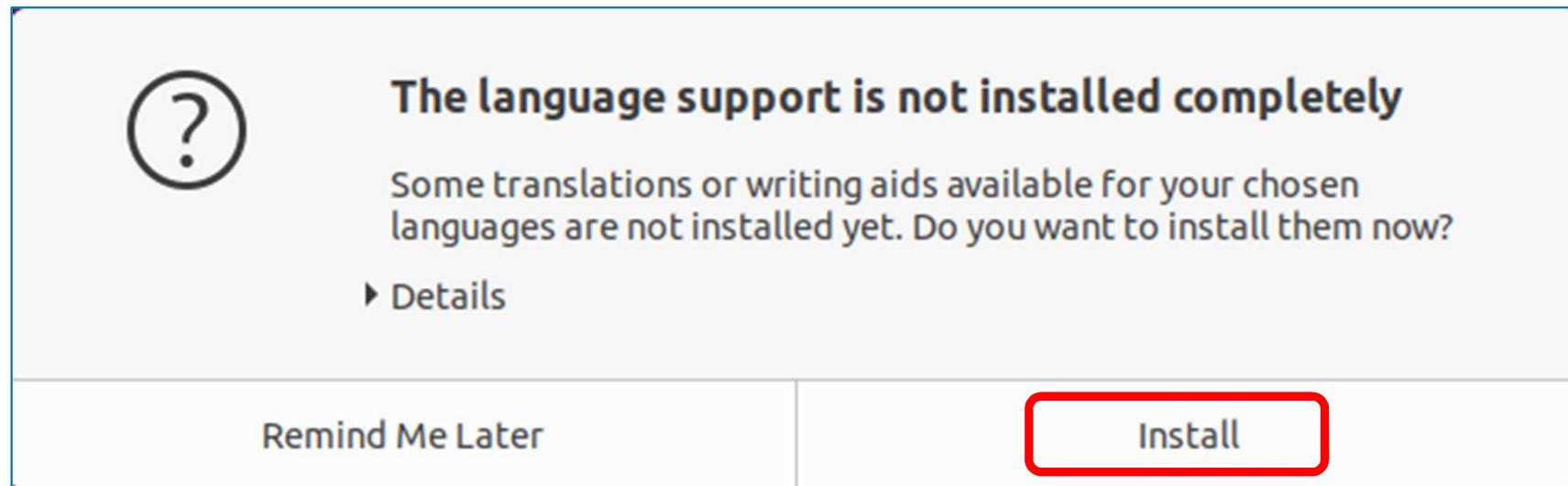
■ Select Language Support.



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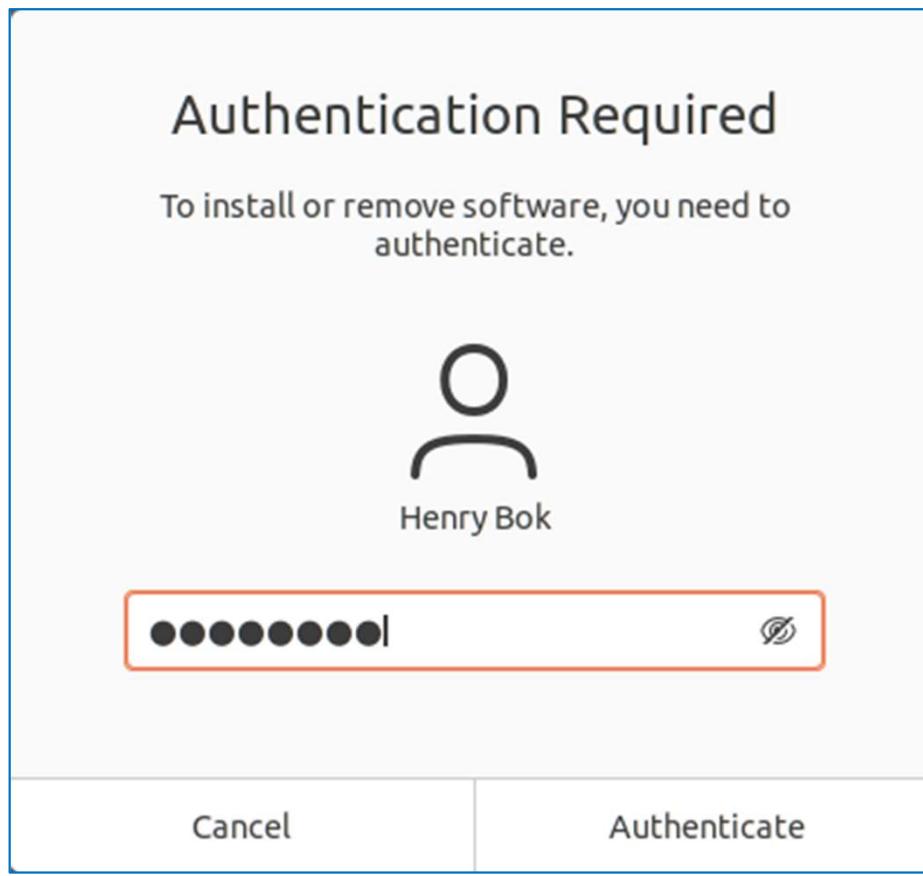
4. Setup Hangul Language Pack (5/14)

- Click **Install** button.



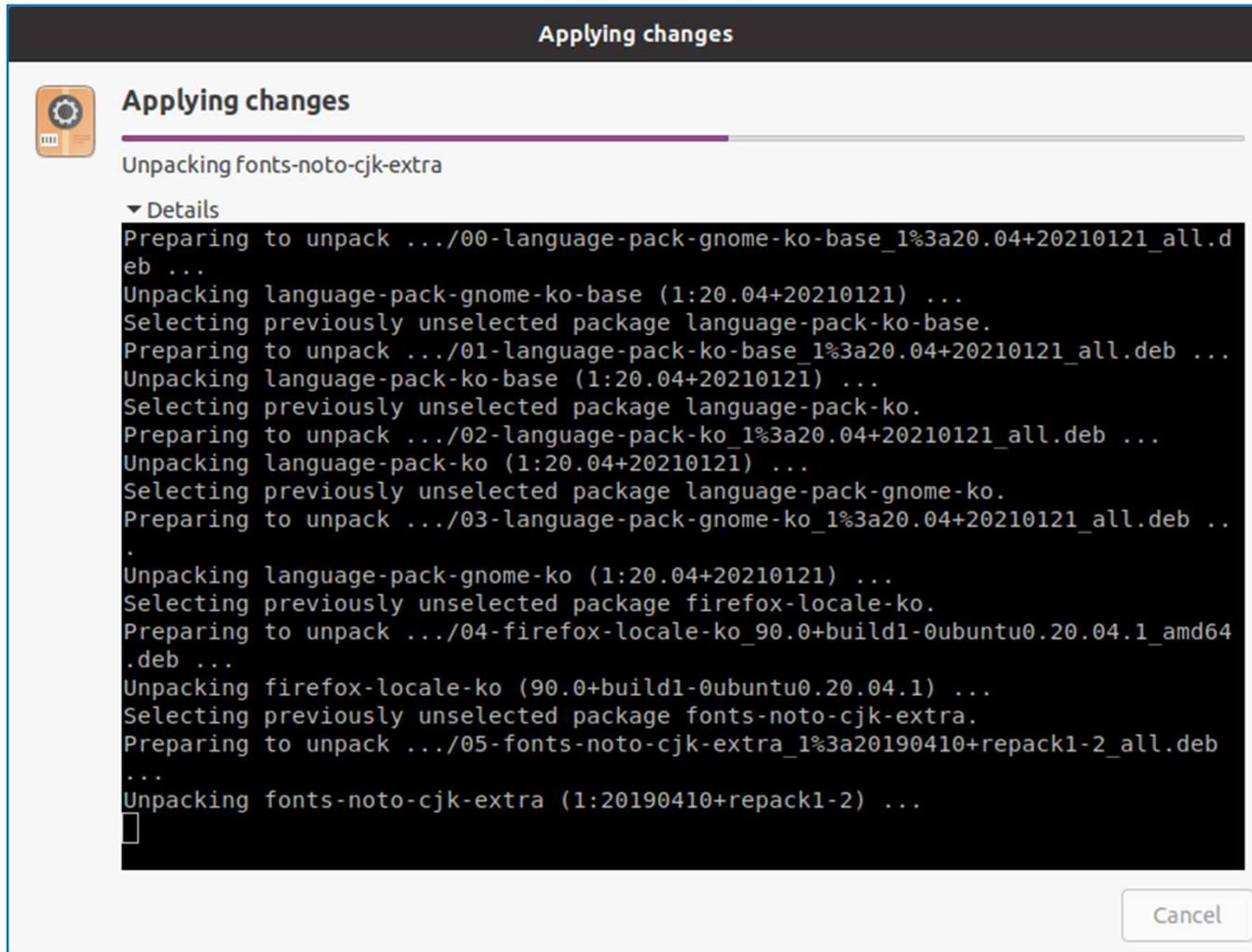
4. Setup Hangul Language Pack (6/14)

■ Authentication



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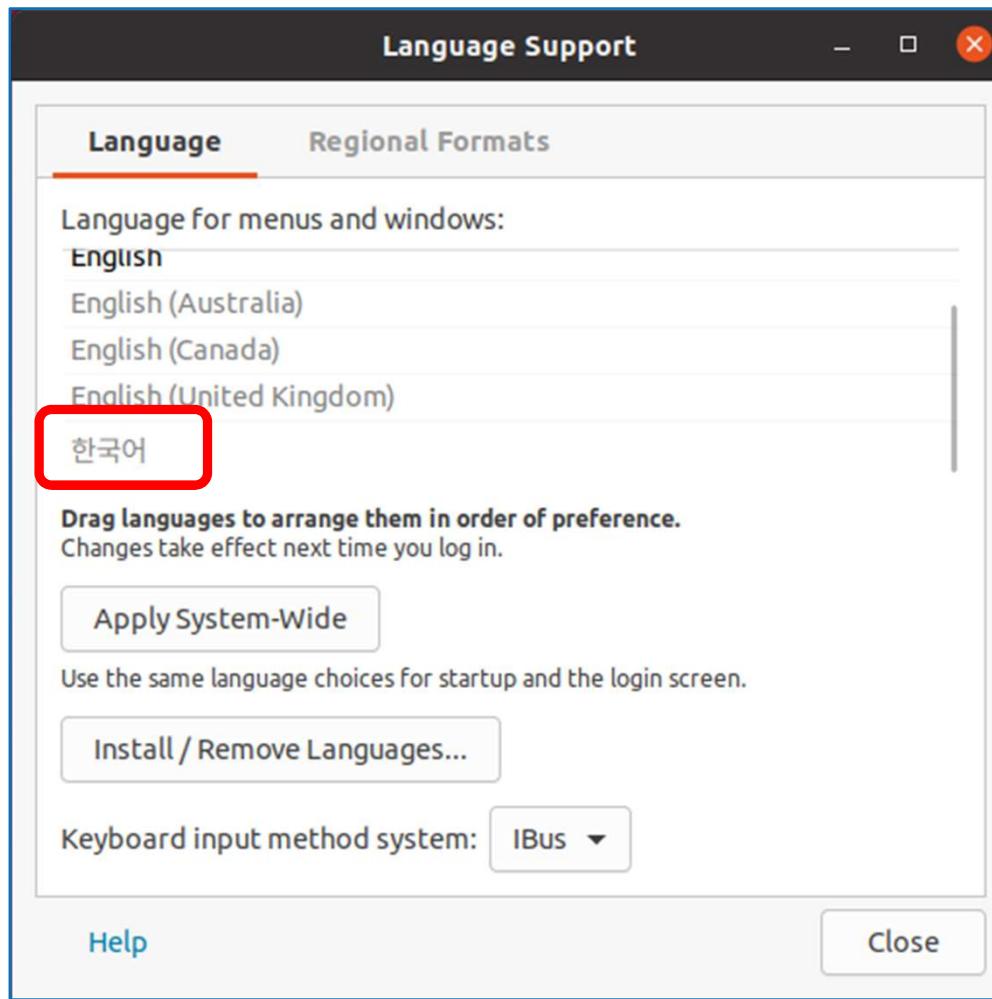
4. Setup Hangul Language Pack (7/14)



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4. Setup Hangul Language Pack (8/14)

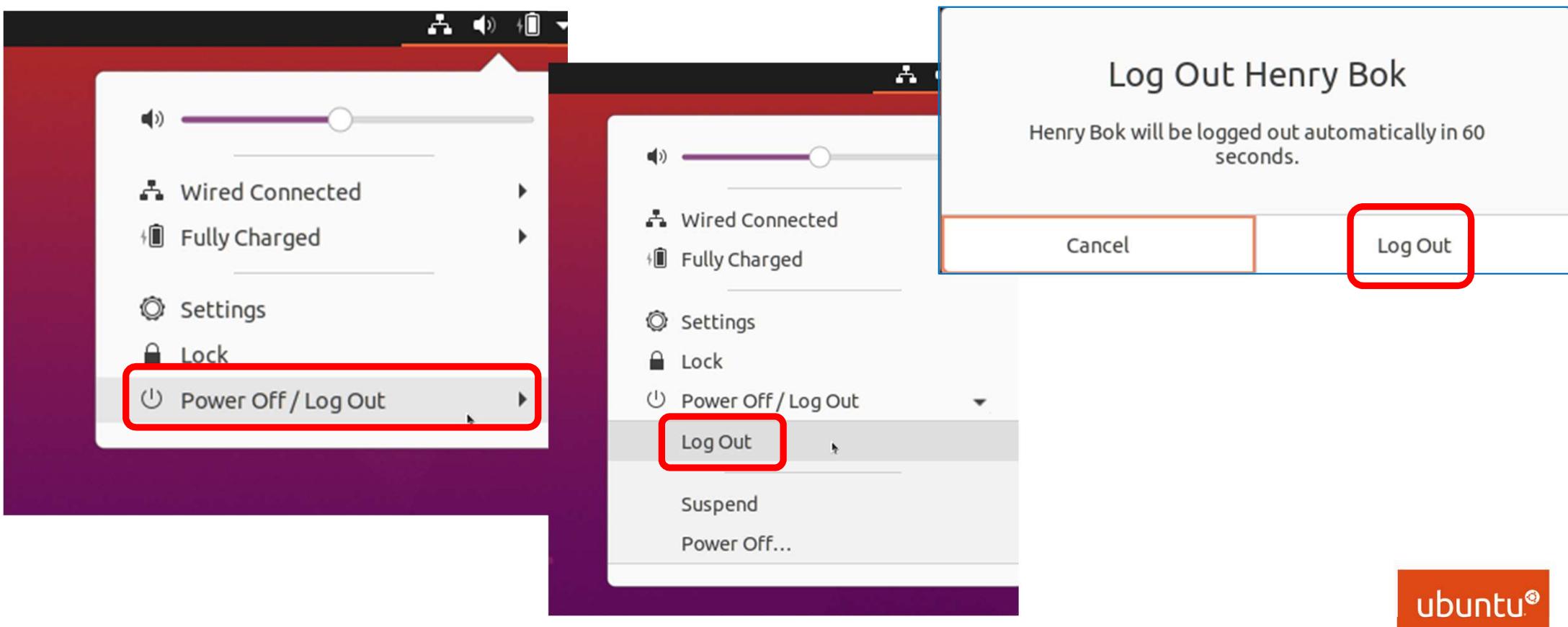
■ Confirm 한국어.



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4. Setup Hangul Language Pack (9/14)

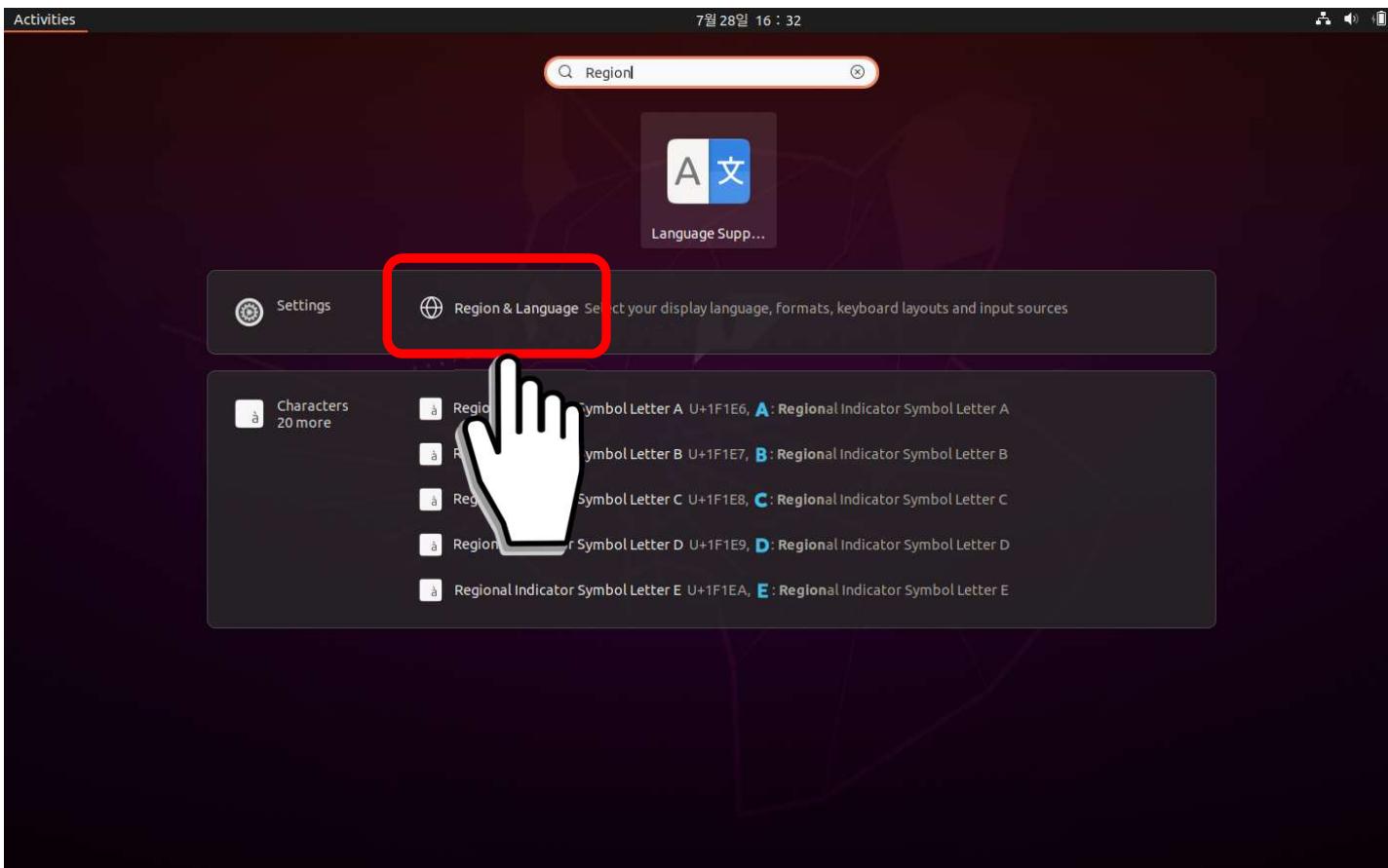
■ Select **Log Out**.



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4. Setup Hangul Language Pack (10/14)

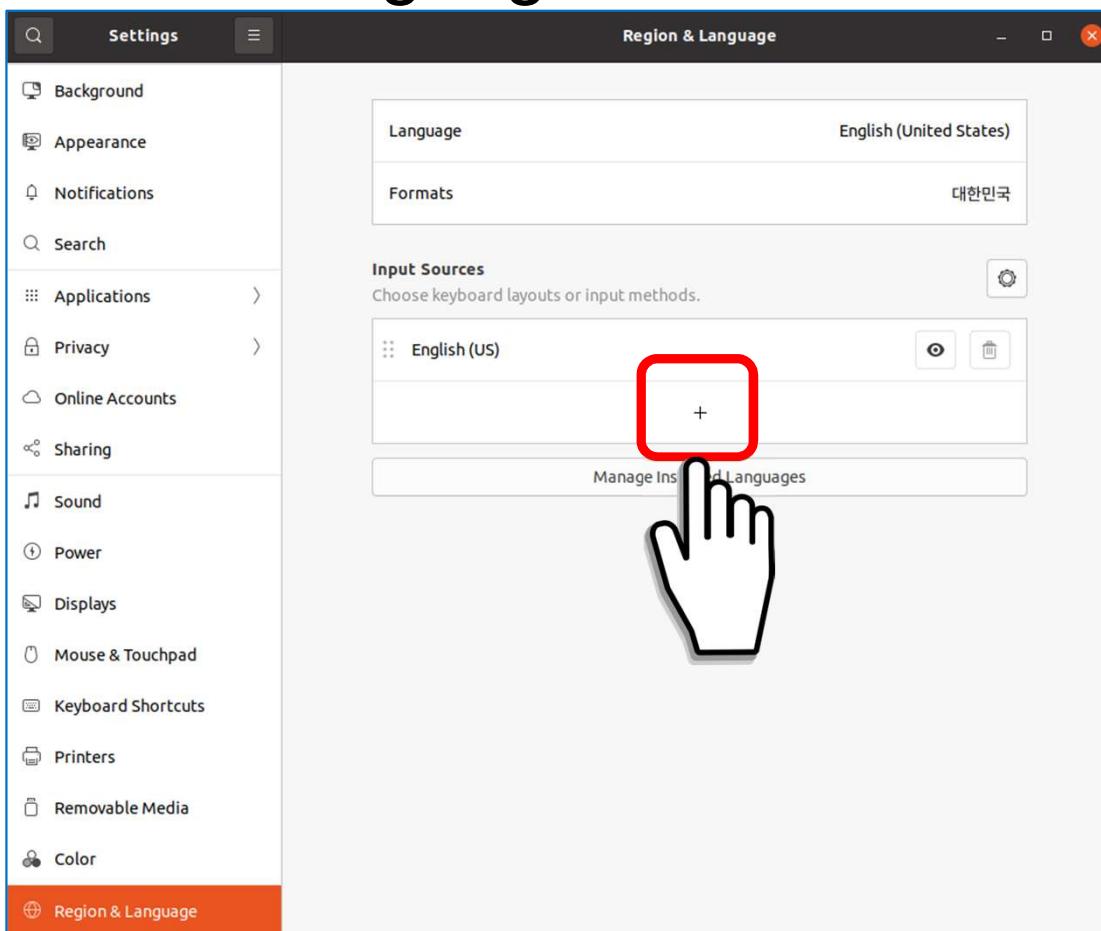
■ Select Region & Language.



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4. Setup Hangul Language Pack (11/14)

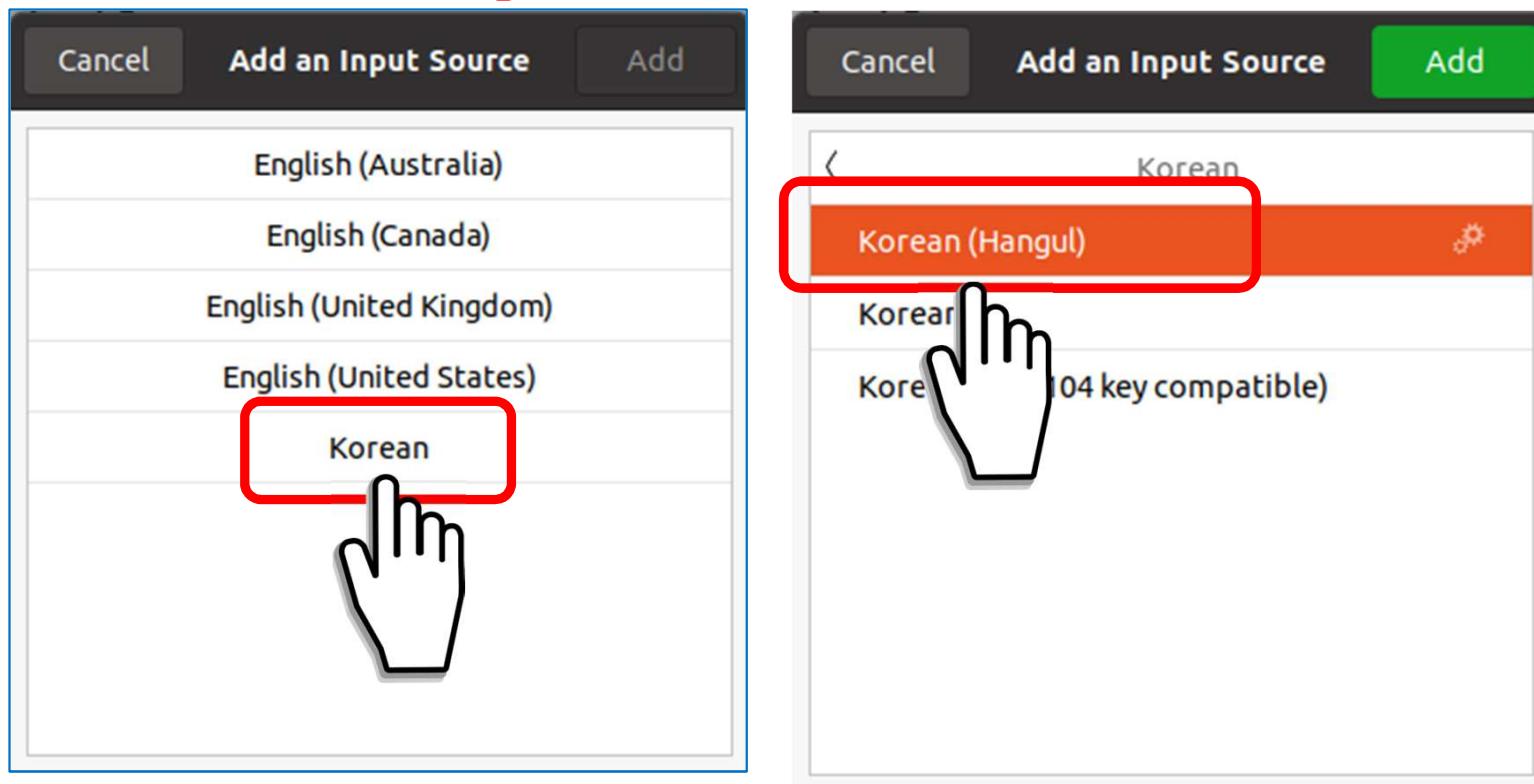
- Click + button to add language.



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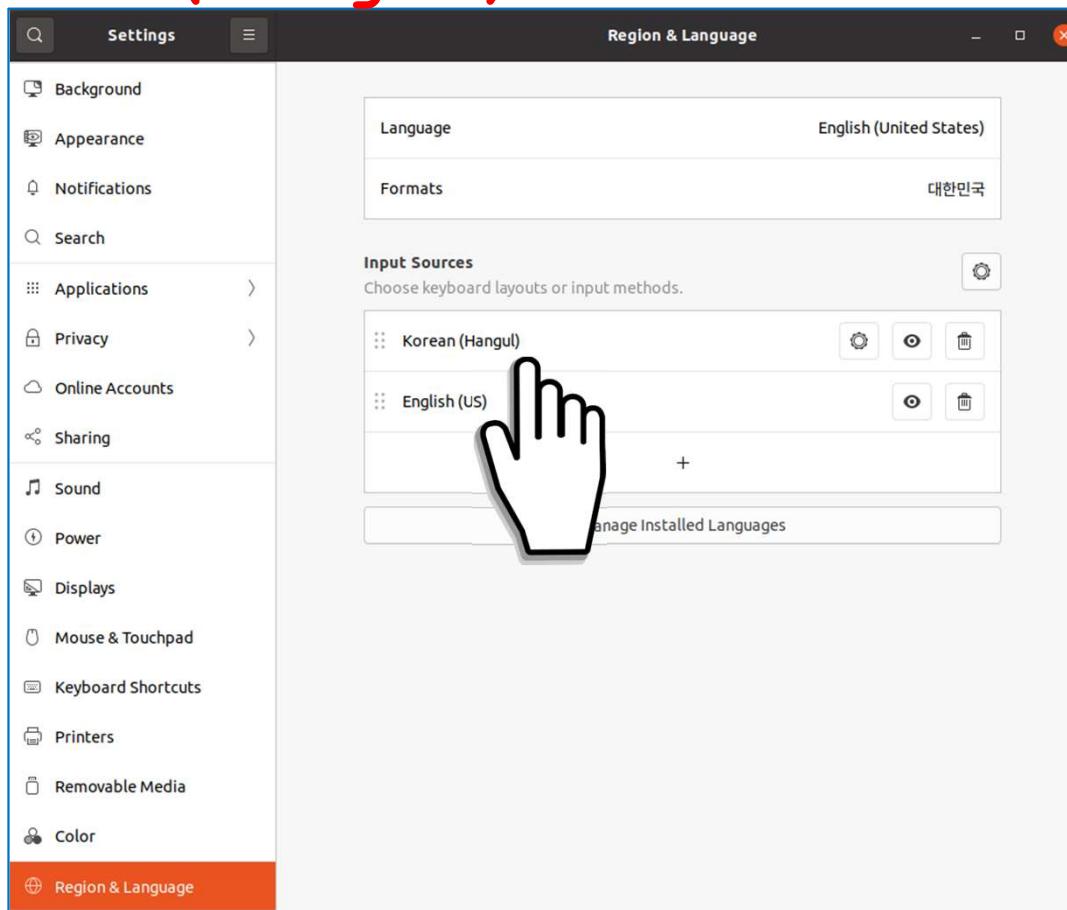
4. Setup Hangul Language Pack (12/14)

- Select **Korean** In **Add an Input Source** window.
- Select **Korean (Hangul)** and Click **Add** button.



4. Setup Hangul Language Pack (13/14)

■ Move up Korean (Hangul)



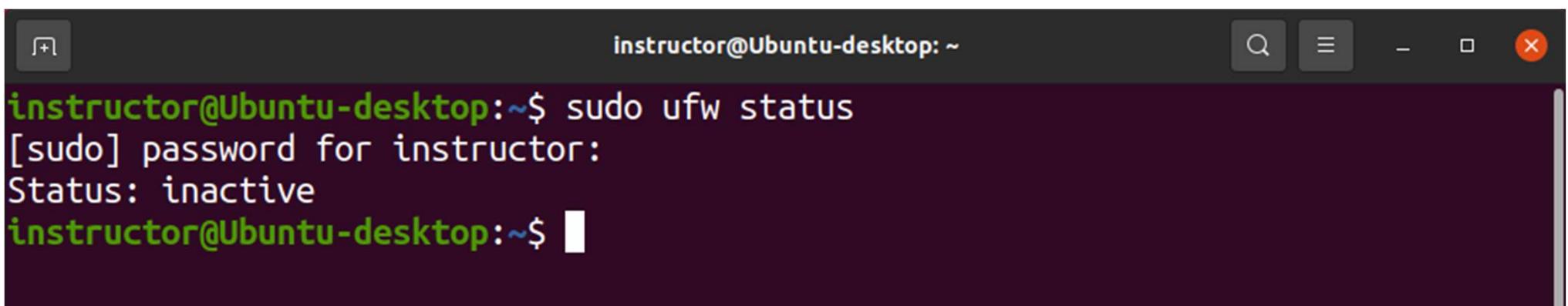
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4. Setup Hangul Language Pack (14/14)



5. Activate ufw (1/2)

■ \$ sudo ufw status.



The screenshot shows a terminal window with a dark background and light-colored text. The title bar reads "instructor@Ubuntu-desktop: ~". The terminal prompt is "instructor@Ubuntu-desktop:~\$". The user types "sudo ufw status" and is prompted for a password. The response shows that the firewall status is "inactive".

```
instructor@Ubuntu-desktop:~$ sudo ufw status
[sudo] password for instructor:
Status: inactive
instructor@Ubuntu-desktop:~$
```

5. Activate ufw (2/2)

- \$ **sudo ufw enable**.

```
instructor@Ubuntu-desktop:~$ sudo ufw enable
Firewall is active and enabled on system startup
instructor@Ubuntu-desktop:~$ sudo ufw status
Status: active
instructor@Ubuntu-desktop:~$
```