

Munster Technological University

Computer Science Dept.

COMP6042 Operating Systems in Practice

Lab 3

- In today's Lab you will:
 1. Use **Ubuntu 22.04.3 LTS** (default desktop → **GNOME**).
 2. Continue to explore Ubuntu.
 3. Start **ASSESSMENT 1**.

Note your *submission-deadline* and *requirements* including *demonstration* to your lecturer *in lab class*.

Explore Ubuntu Desktop Keyboard Shortcuts

1. Find the **Windows key/Command key/SUPER key** for your machine.
2. Open '**Settings**' application, go to '**Keyboard**', then select '**Keyboard Shortcuts**' to see the keyboard shortcuts for the desktop.
3. Test these shortcuts - for **example** "**Control_ALT_t**" should launch a terminal; "**Control_Alt_Delete**" should log user out. (**MacBook** users: "**Control_Option_t**", "**Control_Option_Delete**").

Explore WorkSpaces & Keyboard Shortcuts

1. Select '**Activities**' on the top left hand side of the desktop.
Note: Your workspaces appear on the screen.
To exit 'Activities' mode, select '**Activities**' again, or hit the **ESCAPE** key.
2. Open some application on your desktop. **Example:** open a **terminal**.
3. Select '**Activities**'; look on the right hand side of your screen; select the *second workspace image*. You enter the second workspace, select **ESCAPE**. Now, open some other application.
4. Create **4 workspaces**; select a different application for each workspace, such as the calculator/editor/game/ . . .
5. Switch between your workspaces.....
6. Setup you own **custom keyboard shortcuts** to switch from one workspace to another.
Suggestion: setup CONTROL_SUPER_1 for workspace1, CONTROL_SUPER_2 for workspace2, and so on. Ensure no "conflict use".

Install Different Desktops on Ubuntu

1. **sudo apt update**
2. **sudo apt install cinnamon**
3. **Restart** your Ubuntu virtual machine.
4. **Select** the **User** to login.

Note: A '**desktops**' icon should appear on the *bottom right-hand-corner of the logon-screen*, (the icon is probably a symbol of a **wheel with cogs**).

5. Select the **desktops** icon, choose the **cinnamon desktop**, and complete your login.
Note: The desktop is now changed from a **GNOME** display, the **Ubuntu Default** desktop, to your chosen, **cinnamon**, display.

For the **cinnamon** display, if you are using **VMWare**, you should be in **full screen mode** so that you can see the **control panel** line at the **bottom** of the screen.

6. When finished exploring, logout. When logging in next-time, choose the **Ubuntu** desktop.

Note:

There is a number of open source desktops available for Linux; these include: **kde, mate, cinnamon, unity, lxde, xfce4, plasma-desktop, enlightenment, flashback, openbox.**

Some are not stable!

To install alternate desktops, you may have to search on the internet for the installation procedures. Two examples that you can try are:

```
sudo apt install plasma-desktop
```

```
sudo apt install xfce4
```

Search for others, yourself.

Enjoy!

Exercise

- Make a **2 minute video** of you exploring an **alternate desktop**.

Prepare for and start Assessment 1

1. Open Assessment 1.
2. Read all guidelines. If you have questions, or need clarification on one/more aspect(s), please ask your Lab lecturer.
3. Start preparing and planning for Assessment 1.
4. Note your **submission-deadline** and what is required for **submission**.
5. In-Lab **attendance** and **demonstration** required.

End Lab 3!