How to Install a Desktop (GUI) on a Linux Ubuntu Server

Ubuntu Server 20.04 LTS (or previous versions) does not include a Graphical User Interface (GUI) upon installation. However, a desktop environment (a GUI) can be added after Ubuntu Server is installed. Installation is done from the command line interface (CLI) either with or without the necessity of installing or employing the task select manager utility (tasksel), which necessity will depend on the Display Manager and/or the GUI that you choose.

Update the Repositories and Packages

Since we want to have access to the latest packages that are available to install, it is good practice to begin with updating the repositories and package lists by entering the following at the CLI.

```
sudo apt-get update && sudo apt-get upgrade
```

Press y and the enter key at the prompt - 'Do you want to continue?“

If asked, enter your root/sudo password at the prompt.

This ensures that we have the most recent software updates.

Install the Tasksel Manager Utility

Tasksel is a utility for simultaneously installing related software packages.

To install tasksel manager utility, enter the following at the CLI:

```
sudo apt-get install tasksel
```

If asked, enter your root/sudo password at the prompt.

Display Manager and GUI

The display manager chosen supports certain or various choices of the GUI / Desktop Environment that you select based on your choices of the look, feel, functionality of the display manager and GUI, as well as the resources that are consumed or preserved (with a heavier or more light weight display manager and/or GUI).

Selecting a Display Manager

The “default” display manager is **GDM3** which is relatively resource-intensive. The GDM3 display manager is used with and supports the **KDE-Plasma** Desktop GUI. In order to conserve resources, there are lighter display managers in the genus to choose from, such as **SDDM**, **SLiM**, and **LightDM**.

Here is how to install a specific display manager other than the **GDM3** default display manager. It may involve the command line **apt-get** package manager to install, or by using the **tasksel** menu (addressed below).

The **SDDM** display manager can be installed from the **tasksel** menu during installation of **KDE** Desktop.

To install either **SLiM** or **LightDM** managers, use the **apt-get** Package manager as follows:

To install **SLiM** enter the following at the CLI:

```
sudo apt-get install slim
```

To install **LightDM**, instead enter:

```
sudo apt-get install lightdm
```

Choose a Graphical User Interface (GUI) for your Ubuntu Server

GNOME is the mostly the default desktop GUI.

KDE is a different popular GUI.

Install GNOME

First, launch the tasksel manager from the CLI:

```
tasksel
```

A graphical installation interface will appear and you are prompted to choose which software to install from a long list. Use the down arrows to move the cursor down the list to Ubuntu desktop and press the space-bar to put a [*] next to “Ubuntu desktop.” Press **Tab** to select **OK** at the bottom of the interface list, and press Enter. The software will install and the operating system will reboot, resulting in a graphical login screen that will be generated from the display manager (default or chosen). For example, is we installed SLiM, then SLiM would generate the gnome ubuntu desktop login screen.

Enter you login credentials (password), to proceed to the graphical interface, in this case the GNOME UI environment.

Install KDE Plasma

To install KDE Plasma, use the following command:

```
sudo apt-get install kde-plasma-desktop
```

During installation, you may be asked to select a default display manager by using the arrow keys to make a selection and pressing the Enter key.

Next, launch **KDE Plasma** with one of the following commands, depending on the particular *display_manager* previously installed (namely, either SLiM, lightDM, SDDM):

```
sudo service Slim start

sudo service lightdm start

sudo service sddm start
```

If you are concerned about the substantial resource usage of these above Ubuntu Server GUI applications, then you may want to consider one of the lighter GUI applications, less resource-intensive GUI apps, listed below. This can conserve server resources.