# LPIC-1 102-500 – Lesson 4

## 106.2 Graphical Desktops

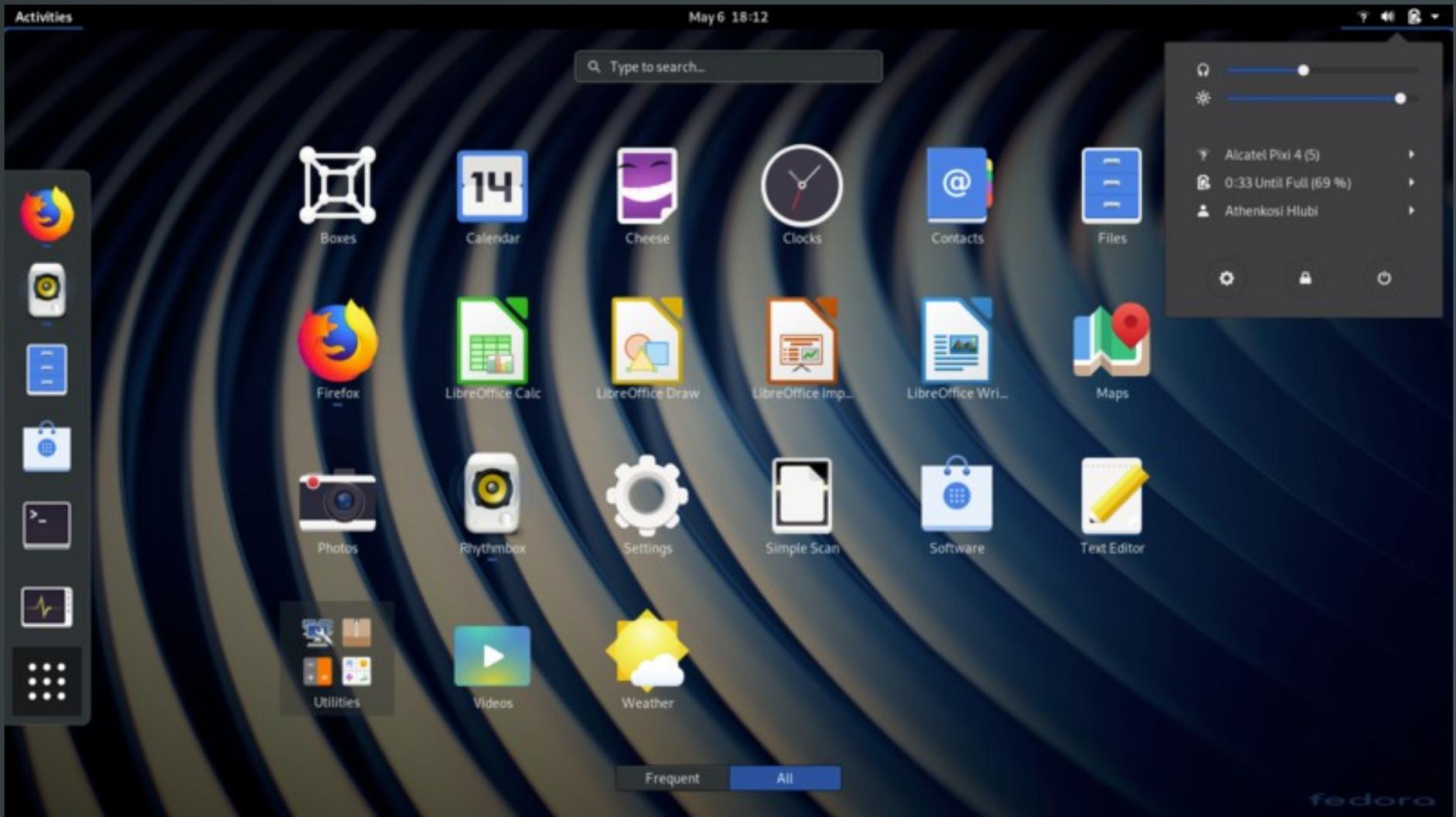# Graphical Desktop Environments

- A *Graphical Desktop Environment* is a collections of applications, themes, icons, windows, wallpapers with a distinct user interface.

- Another terminology used is *Graphical Shell*.

- There are numerous Graphical Environments for Linux some full-featured and customizable, some light and basic.

- All these Desktop Environments need a graphical server to work, such as X11, or Wayland.

# List of Graphical Desktops

- **GNOME**: A very popular Desktop. The latest version is 3.

- **KDE**: Another popular Desktop that resembles newer versions of Microsoft Windows.

- **Mate**: Gnome 2 fork.

- **Cinnamon**: Used and developed by Mint. MS Windows lookalike.

- **Unity**: Used in earlier Ubuntu versions.

- **XFCE**: A lightweight environment.

- **Pantheon**: Developed by ElementaryOS. A MacOS lookalike.

- **Budgie**: a ChromeOS lookalike.

# Gnome Shell
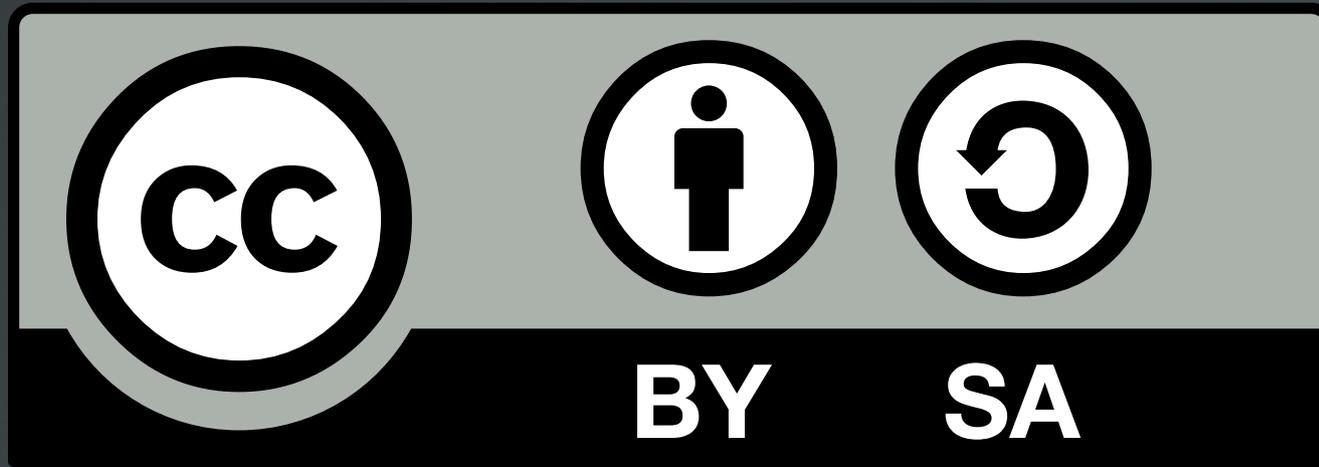


Author Athenkosi Hlubi

# KDE Plasma 5
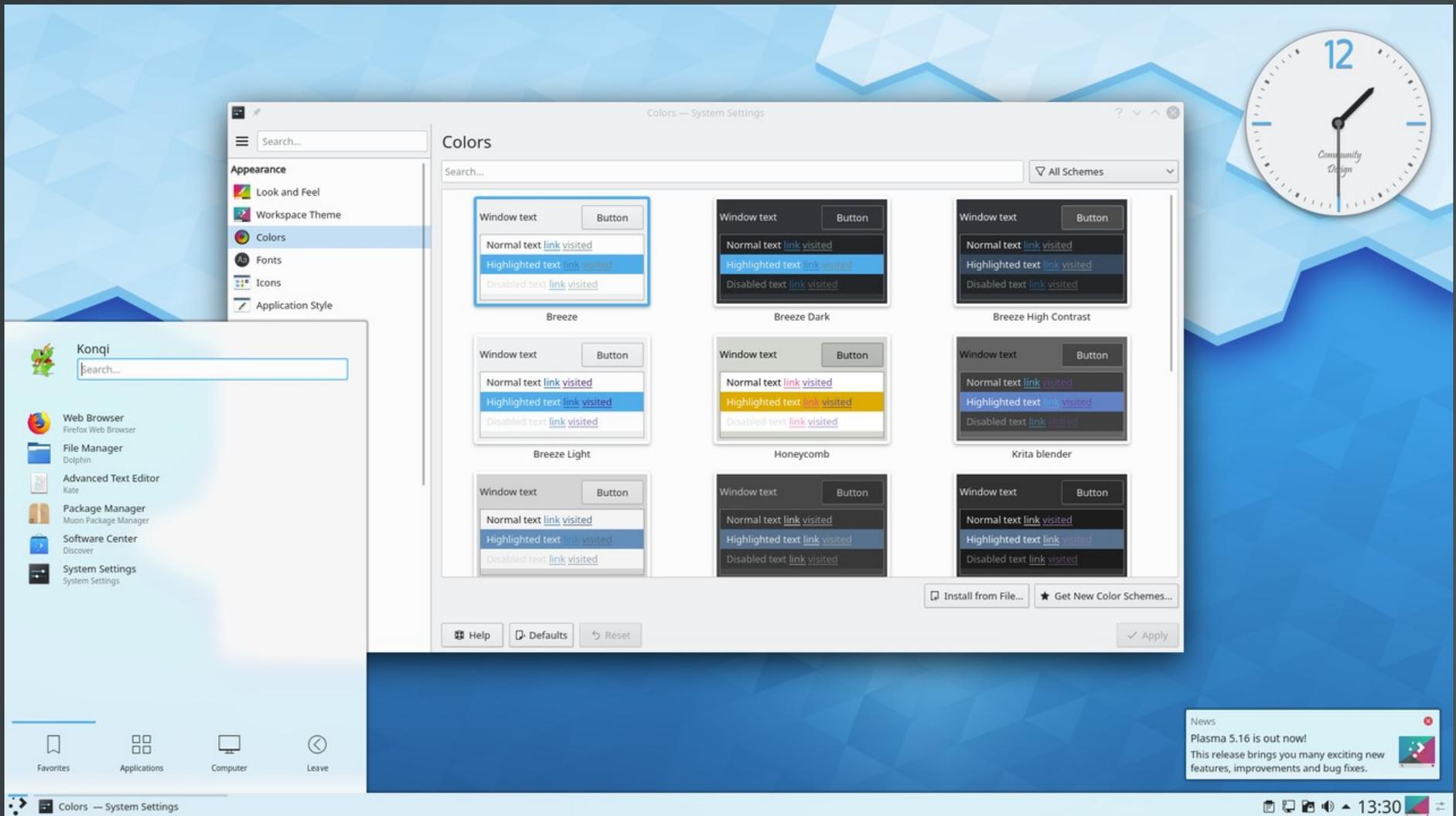
# Remote Display Protocols for Linux Desktop Environments

- **XDMCP**: This is the main protocol of communication between the Window Manager and the X Server. It uses port 177/UDP over network connections.

- **VNC**: Very popular on Linux, port  5900/TCP .

- **SPICE**: Used mainly in virtual environments, port 5900/TCP. Supports TLS.

- **RDP**: Supported via the xrdp package. Not all Desktop Environments are supported.

- All these protocols (expect SPICE with TLS) are inherently insecure and need additional effort, like an SSH tunnel, for encrypted connections.

# License