

Linux™



Learning Linux Workshop  
Session 3  
12/2/20

# Linux Distros Which one??

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*SEMCO*



# Outline

- ▶ Linux History
- ▶ Distrowatch.com
  - Target
  - Platform
  - Visual/Navigational Appeal
- ▶ Various Distros for Various Tastes
  - Audio Video buffs
  - Security
  - Server types
  - First time users (windows centric)
  - Retro Hardware



## Linux Distro Background (1)

- ▶ The primary difference between Linux and many other popular contemporary operating systems is that the Linux kernel and other components are free and open-source software.
- ▶ Linux is not the only such operating system, although it is by far the most widely used.
- ▶ Linux-based distributions are intended by developers for interoperability with other operating systems and established computing standards.
- ▶ Linux systems adhere to POSIX, ISO, and ANSI standards where possible

## Linux Distro Background (2)

- ▶ Free software projects, although developed through collaboration, are often produced independently of each other.
- ▶ Software licenses explicitly permit redistribution, provides a basis for larger-scale projects that collect the software produced by stand-alone projects and make it available all at once in the form of a Linux **distribution.**
- ▶ Many Linux distributions manage a remote collection of system software and application software packages available for download and installation through a network connection.
- ▶ This allows users to adapt the operating system to their specific needs.
- ▶ Distros are maintained by individuals, loose-knit teams, volunteer organizations, and commercial entities.
- ▶ A distro is responsible for the default configuration of the installed Linux kernel, general system security, and more generally integration of the different software packages into a coherent whole.
- ▶ Distributions typically use a package manager such as ***apt***, ***yum***, ***zypper***, ***pacman*** or ***portage*** to install, remove, and update all of a system's software from one central location

## Linux Distro Background (3)

### ▶ Community

- A distribution is largely driven by its developer and user communities. Some vendors develop and fund their distributions on a volunteer basis, Debian being a well-known example. Others maintain a **community** version of their commercial distributions, as Red Hat does with Fedora, and SUSE does with openSUSE

### ▶ Desktop Environment

### ▶ Hardware Support

### ▶ Package Management

### ▶ Source based

### ▶ Independent

# If you are an Audio Video Buff

- ▶ Ubuntu Studio
- ▶ AV Linux
- ▶ LibreELEC

# If you are an Audio Video Buff

- ▶ Ubuntu Studio (<https://distrowatch.com/table.php?distribution=ubuntustudio>)
- ▶ AV Linux (<http://www.bandshed.net/avlinux/>)



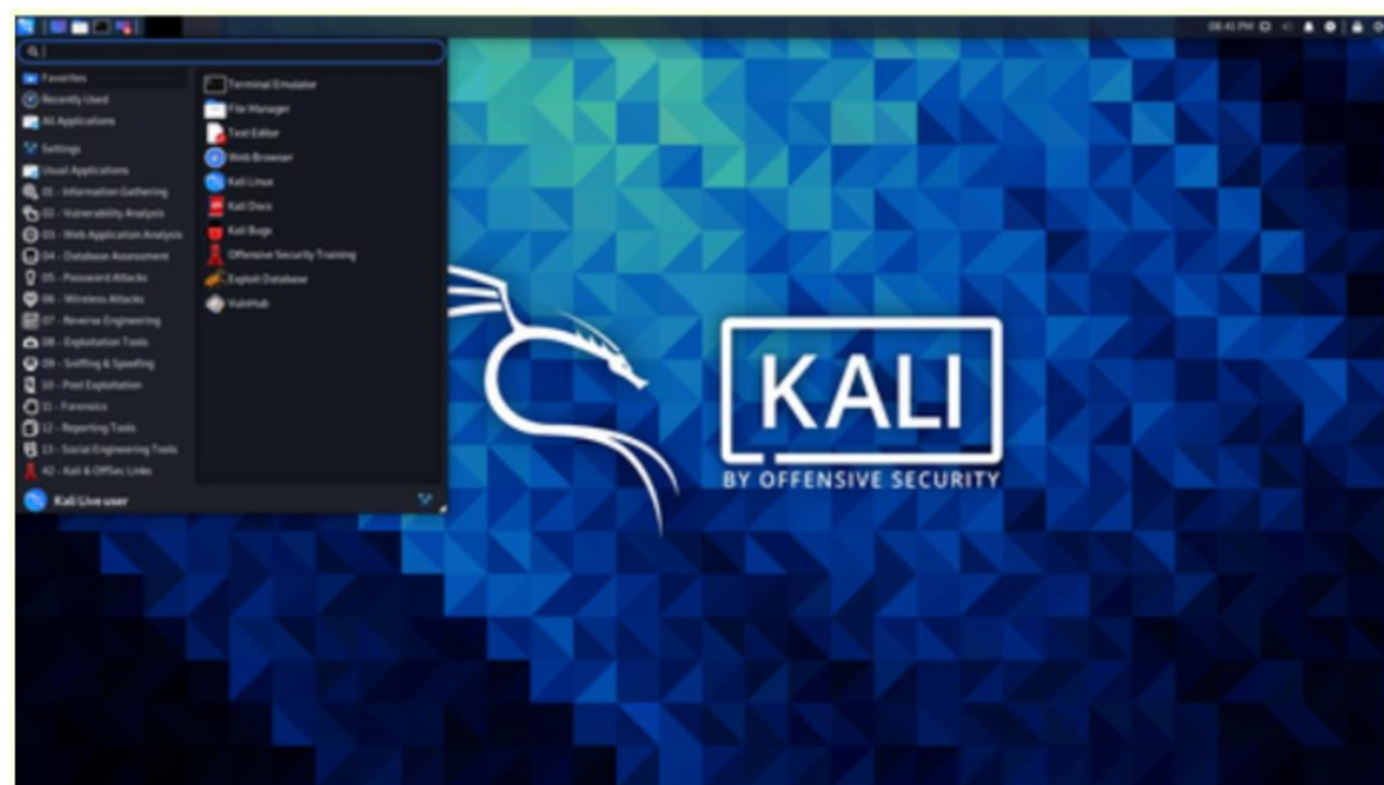


# If you are doing Cybersecurity or Network watcher

- ▶ Kali Linux
- ▶ Tails
- ▶ Parrot
- ▶ Alpine Linux
- ▶ Kodachi
- ▶ ClearOS
- ▶ BlackArch
- ▶ Qubes OS
- ▶ IPFire
- ▶ Whonix
- ▶ BackBox Linux

# If you are doing Cybersecurity or Network watcher

- Kali Linux <https://distrowatch.com/table.php?distribution=kali>



# If you like tinkering with ancient PC hardware

- ▶ AntiX
- ▶ Puppy Linux
- ▶ Lubuntu
- ▶ Peppermint OS
- ▶ LXLE
- ▶ Tiny Core Linux
- ▶ Finnix
- ▶ LinuxConsole

# If you like tinkering with ancient PC hardware

- ▶ Puppy Linux: <http://www.puppylinux.com/>
- ▶ <https://distrowatch.com/table.php?distribution=puppy>

## If you like tasked with Enterprise @work (would like the same at home)

### ► Red Hat Enterprise Linux

- *Fedora* - <https://getfedora.org/>
- CentOS - <http://www.centos.org/>
- ClearOS (small business) - <https://clearos.com/>
- Oracle Linux (zero downtime patch reboot) - <https://www.oracle.com/linux/>

### ► SUSE Linux

- openSUSE - <http://www.opensuse.org/>

### ► Mandrake Linux

- Now Mandriva

# Some choose a distro based on Desktop Environment!

## Desktop environment

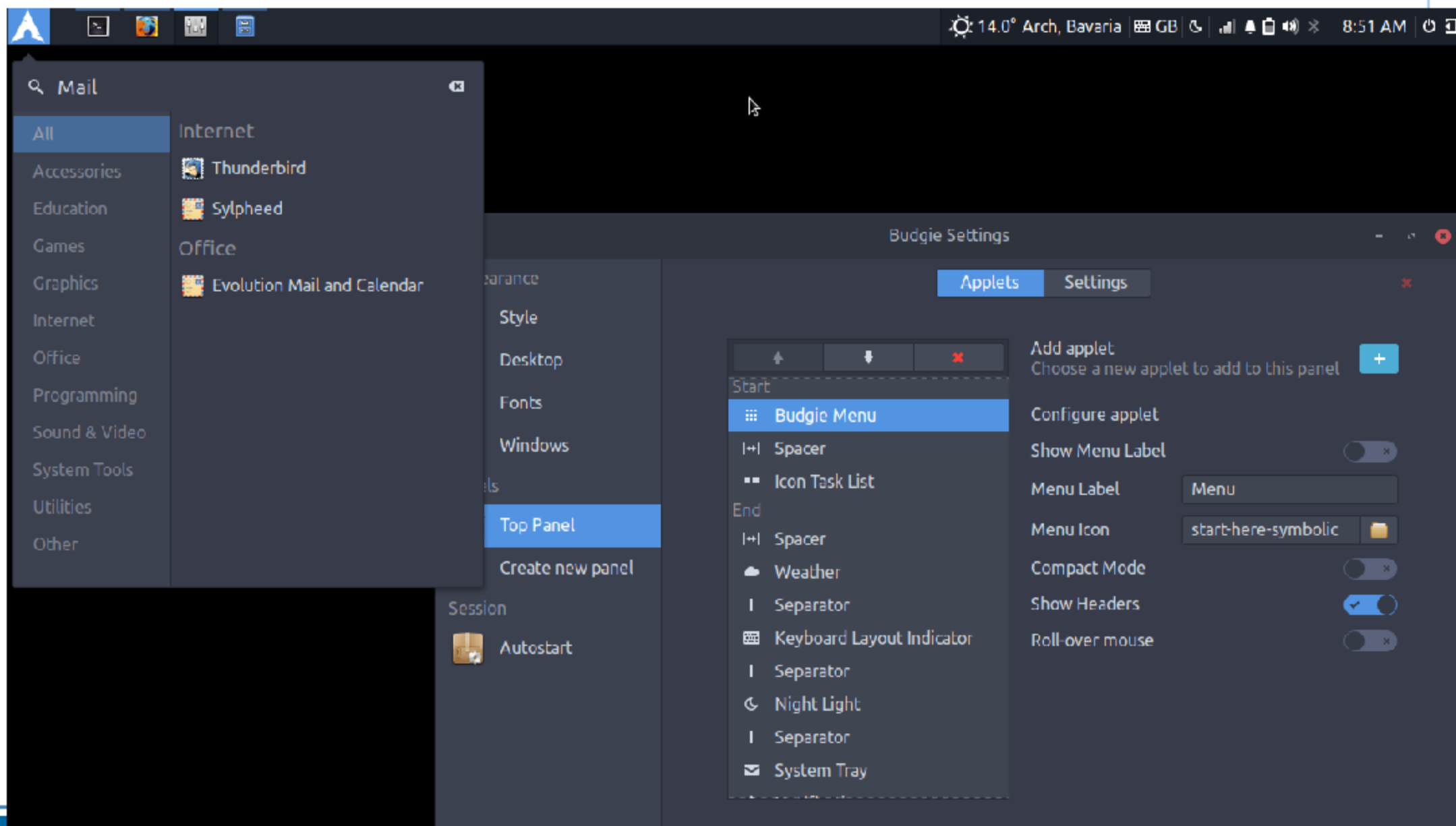
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|--|-------------------------------------|-----------------------------------|------------------------------------|
| <input type="checkbox"/> All           | <input type="checkbox"/> Equinox    | <input type="checkbox"/> Kodi     | <input type="checkbox"/> pekwm     |
| <input type="checkbox"/> No desktop    | <input type="checkbox"/> Firefox    | <input type="checkbox"/> Lesstif  | <input type="checkbox"/> Ratpoison |
| <input type="checkbox"/> AfterStep     | <input type="checkbox"/> Fluxbox    | <input type="checkbox"/> Lumina   | <input type="checkbox"/> Razor-qt  |
| <input type="checkbox"/> Android       | <input type="checkbox"/> flwm       | <input type="checkbox"/> LXDE     | <input type="checkbox"/> SLWM      |
| <input type="checkbox"/> Awesome       | <input type="checkbox"/> FVWM       | <input type="checkbox"/> LXQt     | <input type="checkbox"/> Sugar     |
| <input type="checkbox"/> Blackbox      | <input type="checkbox"/> GNOME      | <input type="checkbox"/> MATE     | <input type="checkbox"/> Trinity   |
| <input type="checkbox"/> bspwm         | <input type="checkbox"/> Hackedbox  | <input type="checkbox"/> Maynard  | <input type="checkbox"/> TWM       |
| <input type="checkbox"/> Budgie        | <input type="checkbox"/> i3         | <input type="checkbox"/> Metacity | <input type="checkbox"/> Unity     |
| <input type="checkbox"/> Cinnamon      | <input type="checkbox"/> IceWM      | <input type="checkbox"/> Mezzo    | <input type="checkbox"/> WebUI     |
| <input type="checkbox"/> Consort       | <input type="checkbox"/> ion        | <input type="checkbox"/> Moblin   | <input type="checkbox"/> WMaker    |
| <input type="checkbox"/> Deepin        | <input type="checkbox"/> JWM        | <input type="checkbox"/> Openbox  | <input type="checkbox"/> WMFS      |
| <input type="checkbox"/> dwm           | <input type="checkbox"/> KDE        | <input type="checkbox"/> Pantheon | <input type="checkbox"/> WMI       |
| <input type="checkbox"/> Enlightenment | <input type="checkbox"/> KDE Plasma | <input type="checkbox"/> Pearl    | <input type="checkbox"/> Xfce      |

## Popular DE's are....

- ▶ Budgie
- ▶ Cinnamon
- ▶ Deepin
- ▶ GNOME
- ▶ KDE
- ▶ KDE Plasma
- ▶ LXDE
- ▶ LXQt
- ▶ MATE
- ▶ Unity
- ▶ Xfce

# Desktop Environment (1)....

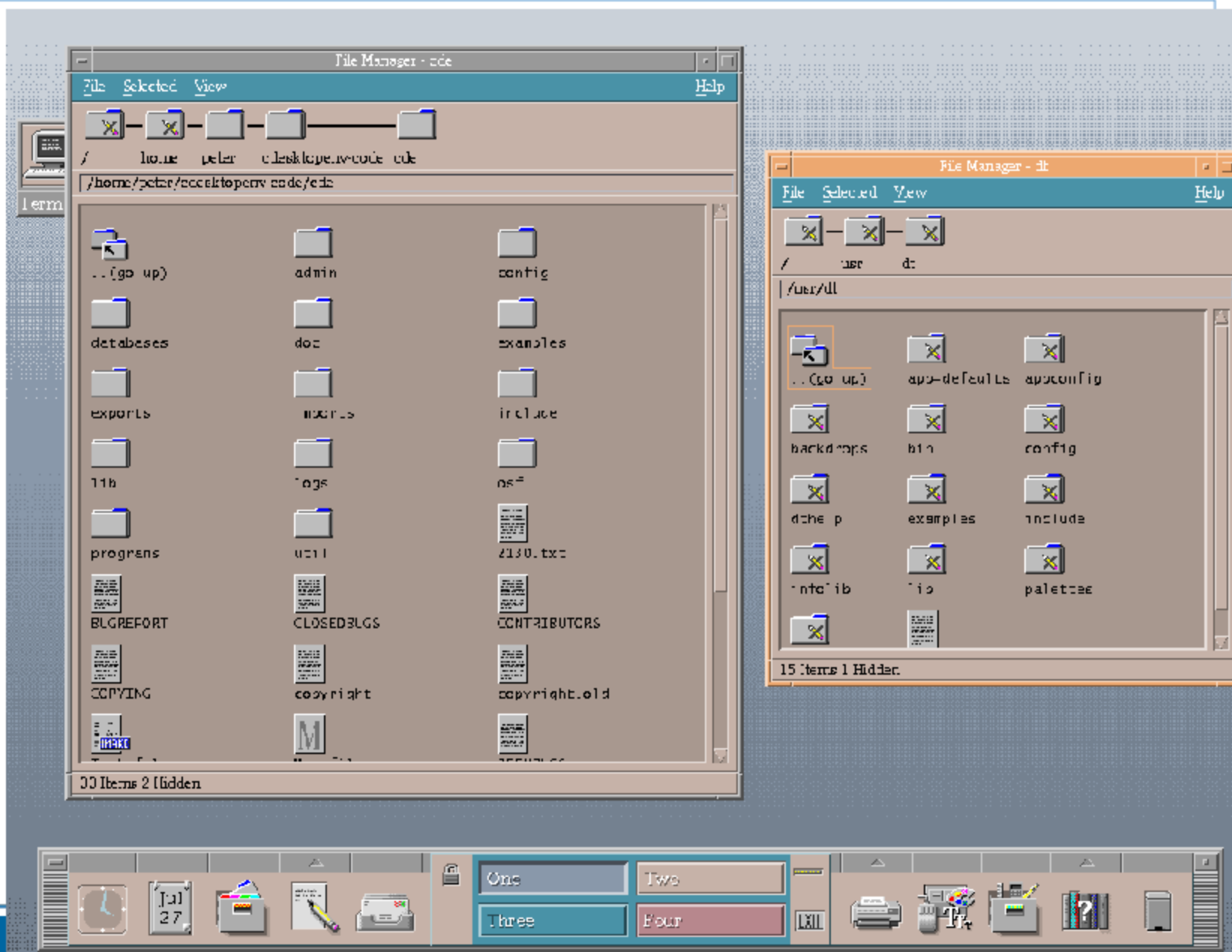
## ► Budgie





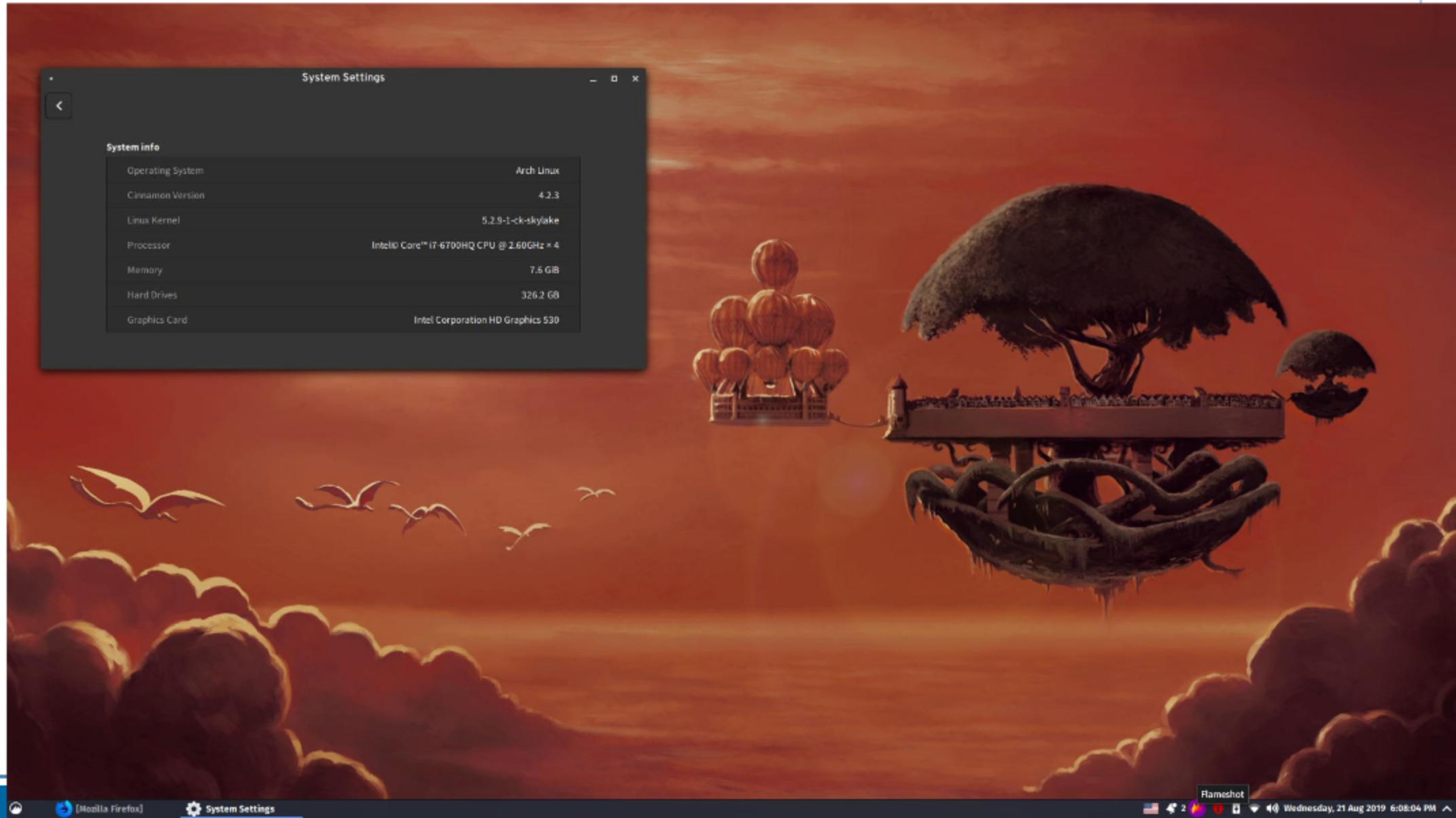
# Desktop Environment (2)....

## ► CDE



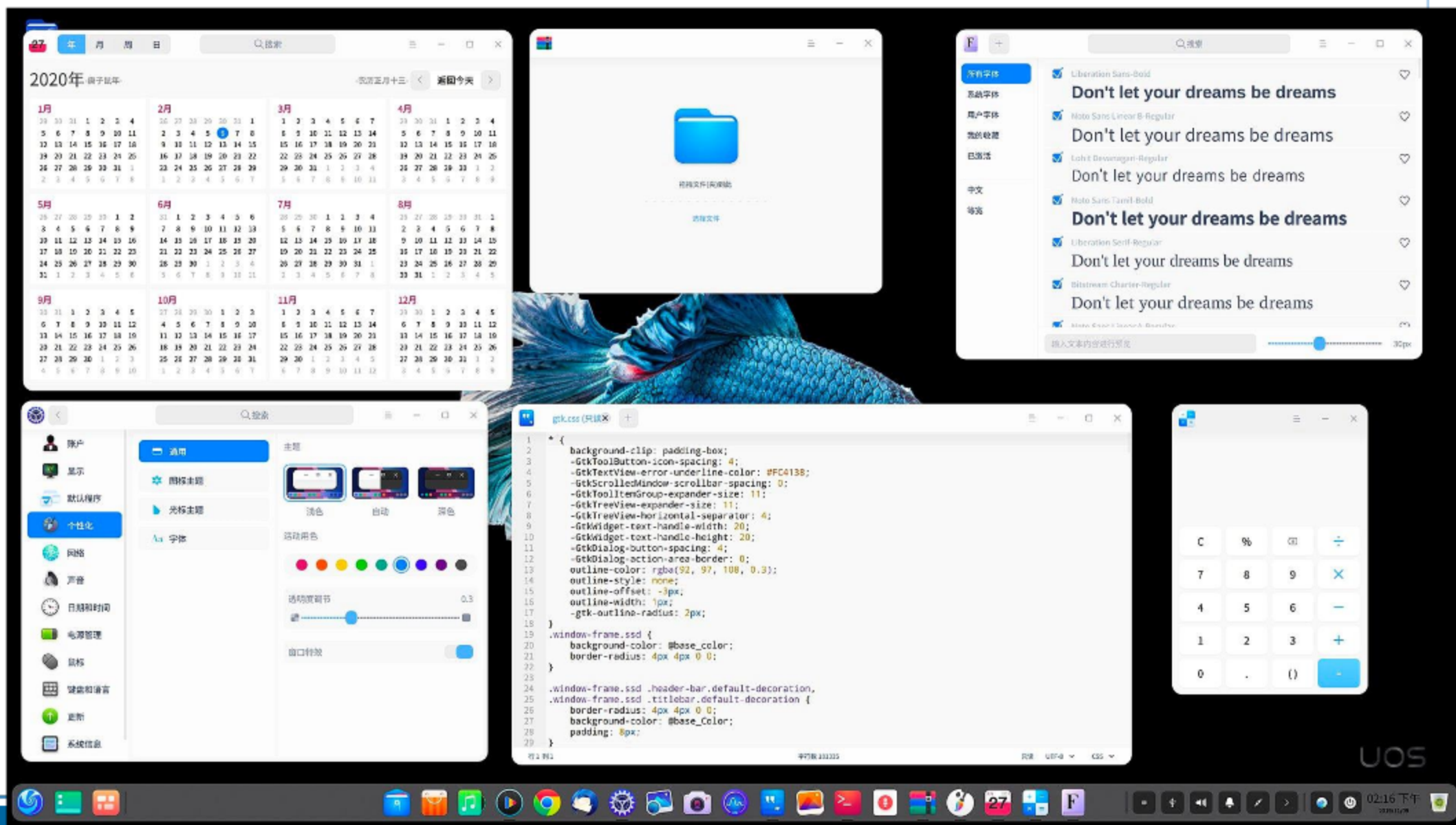
# Desktop Environment (2)....

## ► Cinnamon



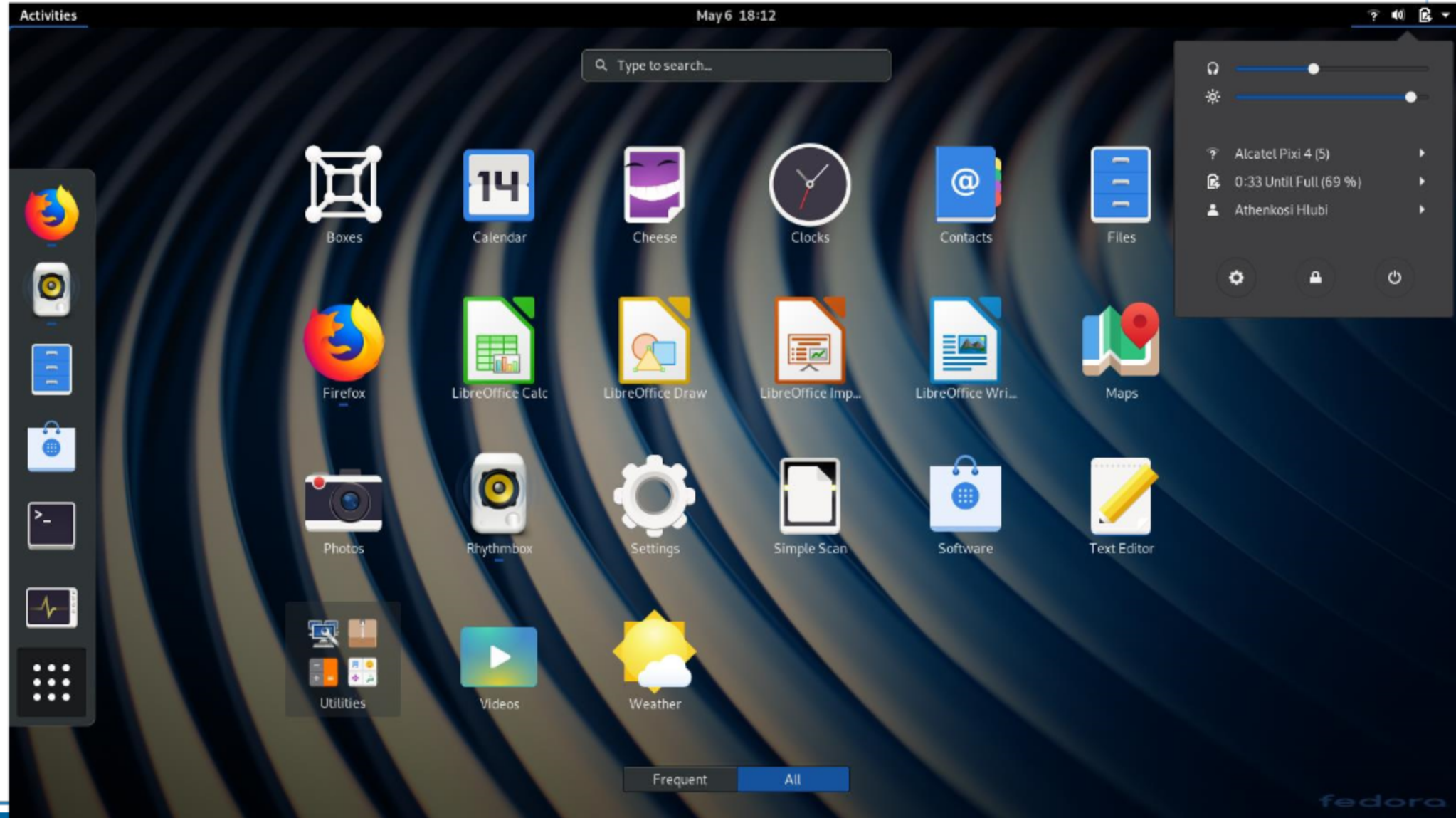
# Desktop Environment (2)....

## ► Deepin



# So if you like....

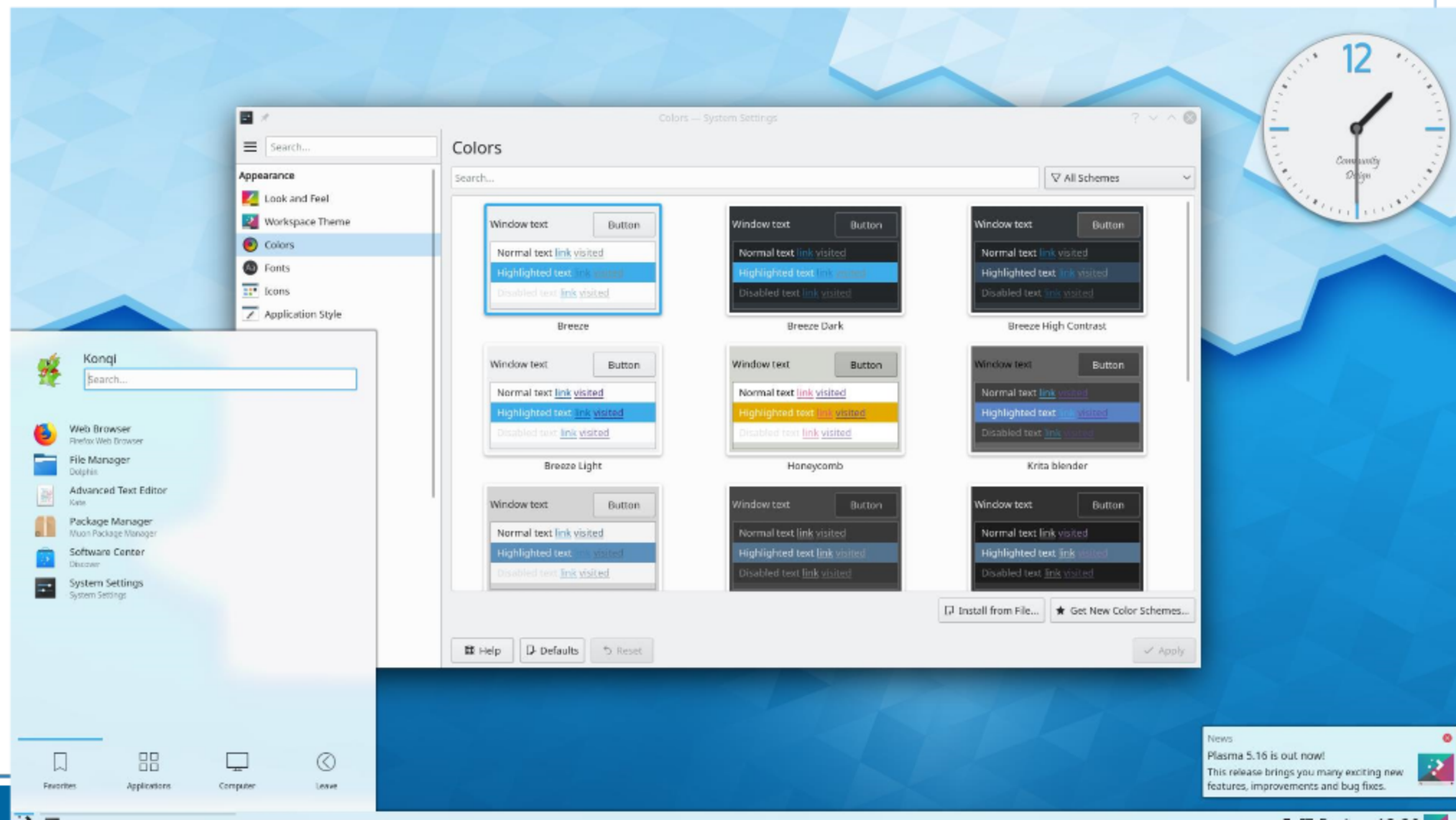
## ► GNOME





# So if you like....

## ► KDE Plasma



# Some folks choose distros based on how they are packaged

- ▶ RPM based
- ▶ Debian based
- ▶ Ubuntu (Debian based)
- ▶ Knoppix (also Debian based)
- ▶ Pacman based
- ▶ Gentoo (Portage based)
- ▶ Slackware based

*\* Only if you are in the business of dealing with a diverse set of users/customers..... ☺*

## First time users...

- ▶ Linux Mint
- ▶ Ubuntu
- ▶ Elementary OS
- ▶ Zorin OS (windows like)
- ▶ PCLinuxOS
- ▶ LinuxLTE
- ▶ Ubuntu MATE
- ▶ Robolinux
- ▶ Pinguy OS

# First time users...

- ▶ Zorin OS (windows like) - <https://www.zorinos.com/>
- ▶ PCLinuxOS - <https://distrowatch.com/table.php?distribution=pclinuxos>





## First time users...

- ▶ Another good site to help you choose a distro is:
- ▶ <http://distrochooser.de/en>
- ▶ It asks you 16 questions and then makes a suggestion on which distro to try out....

Time to context\_switch();



# References

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1. *Distrowatch.com*
2. *Distrochooser.de/en*

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# About Me

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