



Emperor-OS

V2.5

Founder and developed by

[Hossein seilani](#)

ALL in One OS



Emperor-OS Linux is a non-commercial, special purpose Linux distribution designed for beginner and power users who appreciate working with programming, developing, debugging, big data and data science tools.

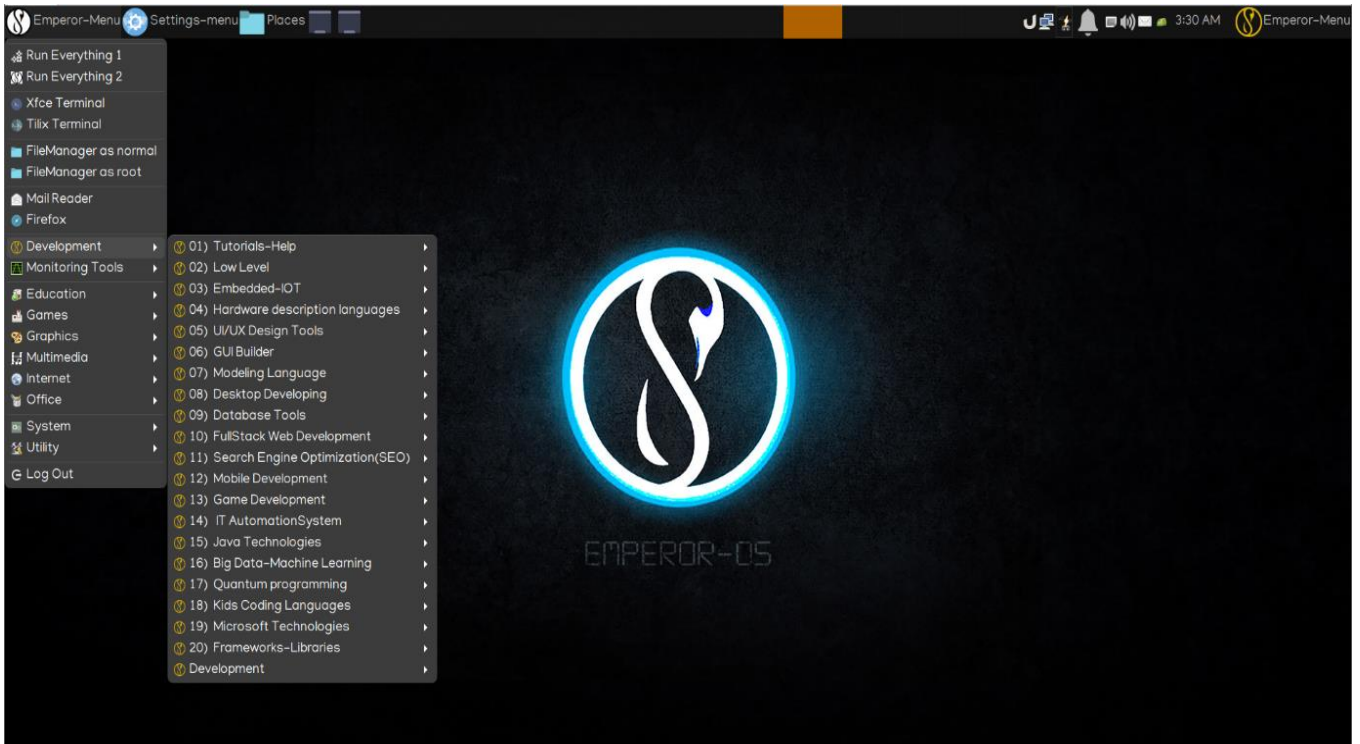
A new Linux OS for programmers, designers and data science users

Also

Teach programming to your kids by using the kids coding Apps menu

Best available programming software and tools.

New look and feel



Is Emperor-OS for me?

Emperor-OS has over 500 apps which are split into 20 categories for programming and data science. It is a complete Linux operating system that is customized to run from CD, USB flash drive, hard drive or other Bootable Storage Medias. It comes in 64 bit ISO and has 7 desktops. Furthermore, it supports several programming languages, frameworks and developing tools. Also It is a Live ISO and can be installed in your computer. Emperor-OS Linux is a non-commercial, special purpose Linux distribution designed for beginner and power users who appreciate working with programming, developing, big data and data analysis tools.

Why is Emperor-OS special?

It comes with many tools for both programming and desktop users. In addition, it has a customized grub boot menu with kernel 5.10 LTS, Plymouth theme, customized login window to login. Also, it has second menu to quick run and search your app, 7 pre-installed and pre-configured desktops (XFCE, LXDE, LXQT, OpenBox, KDE plasma, Mate and deepin). It has 2 browsers for the web, 40 games, many graphic tools and file managers, and you can manage Emails, Rip CDs and watch video, play music, burn CDs and DVDs, manage and organize pictures. It also includes the libre Office which allows you to write letters, do spreadsheets, drawings and slide presentations; it has many settings and accessories. Everything you can do with other operating systems, you can do in emperor-OS.

New features in version 2.5

<http://seilany.ir/emperor-os/XFCE/Emperor-OS-v2.5-LTS.iso>

500 Packages

Installed Special Packages

150 Tools

Installed Utility

360 Modules

Installed Python2 and 3 Modules

140 Fonts

Installed Fonts

7 Desktops

Desktop Environments

20 Tools

Extra Development Tools

40 Themes

Installed Themes

5 Icons

Installed Icons

40 Games

Installed Games

2600 scanners

supported Scanners

2600 Cameras

supported Cameras

5000 Packages

Overall Installed Packages

1) Upgraded from 18.04 LTS to 20.04 LTS

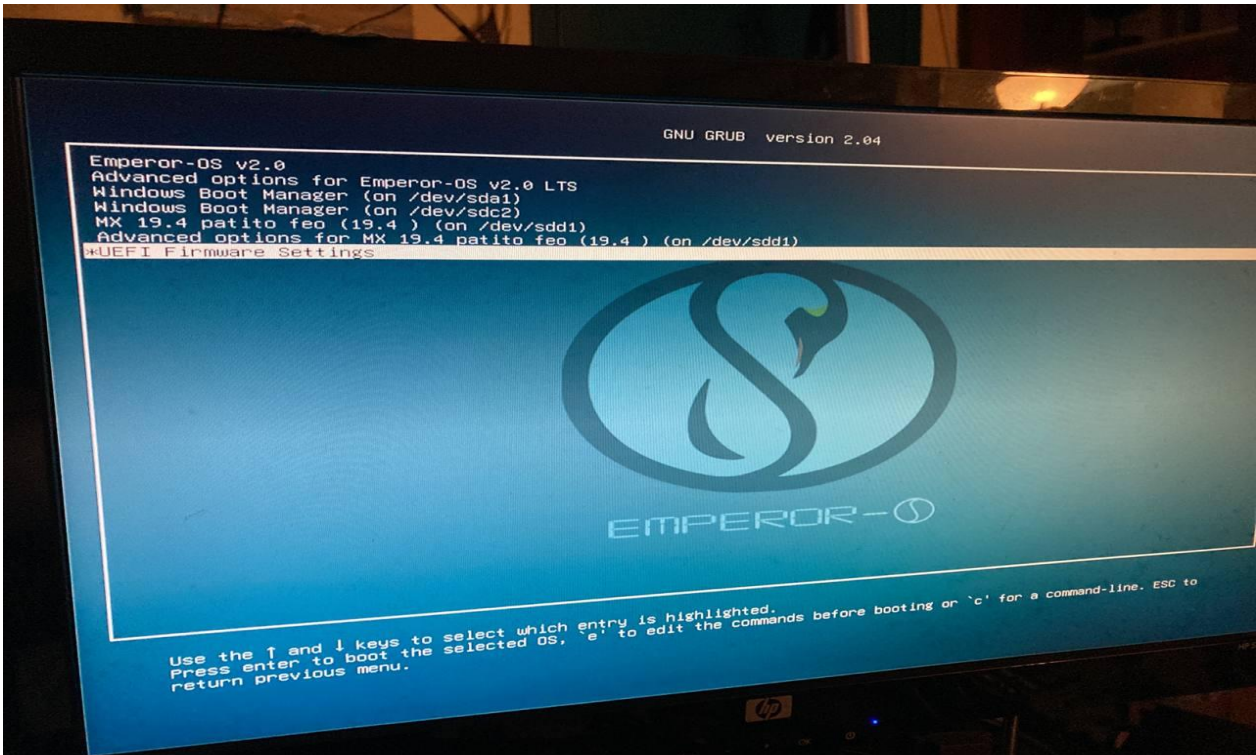
```
>-
File Edit View Terminal Tabs Help
user@user-pc:~$ lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Emperor-OS
Release:        20.04
Codename:       focal
user@user-pc:~$
```

2) New GRUB boot



We added `GRUB_DISABLE_OS_PROBER=false` parameter in `/etc/default/grub` to better detection other OS in dual booting.

Example: After installing



3)New Plymouth theme Linux

We added new Plymouth theme in /usr/share/plymouth/ path.

Both system console message and GUI boot. Press the arrow key to see console messages while booting the system.



4)New Login window

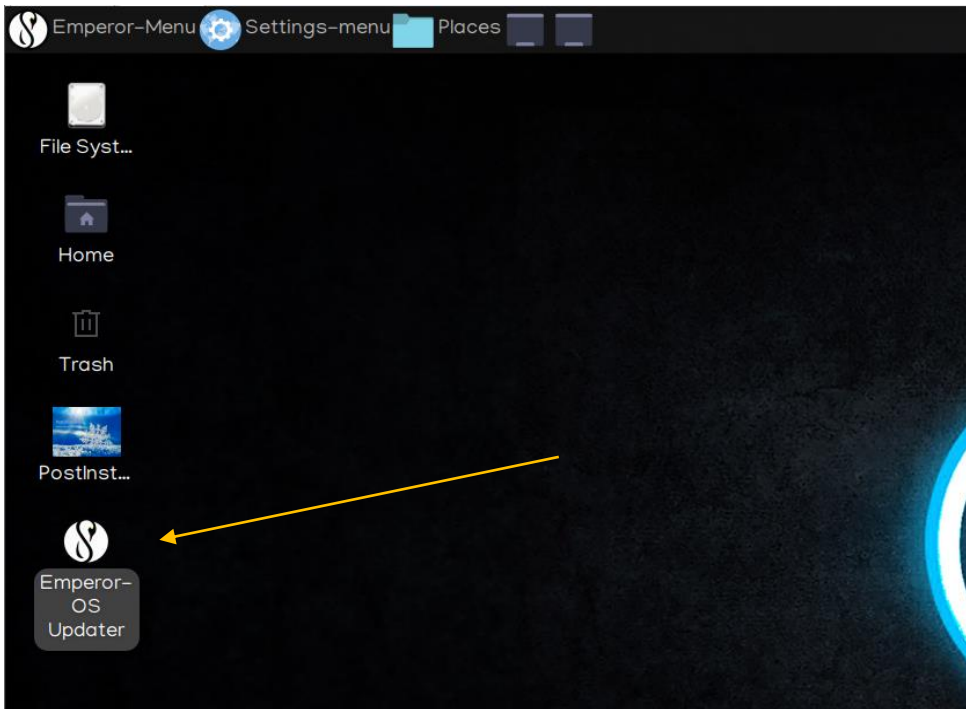


5)New desktop background and icons



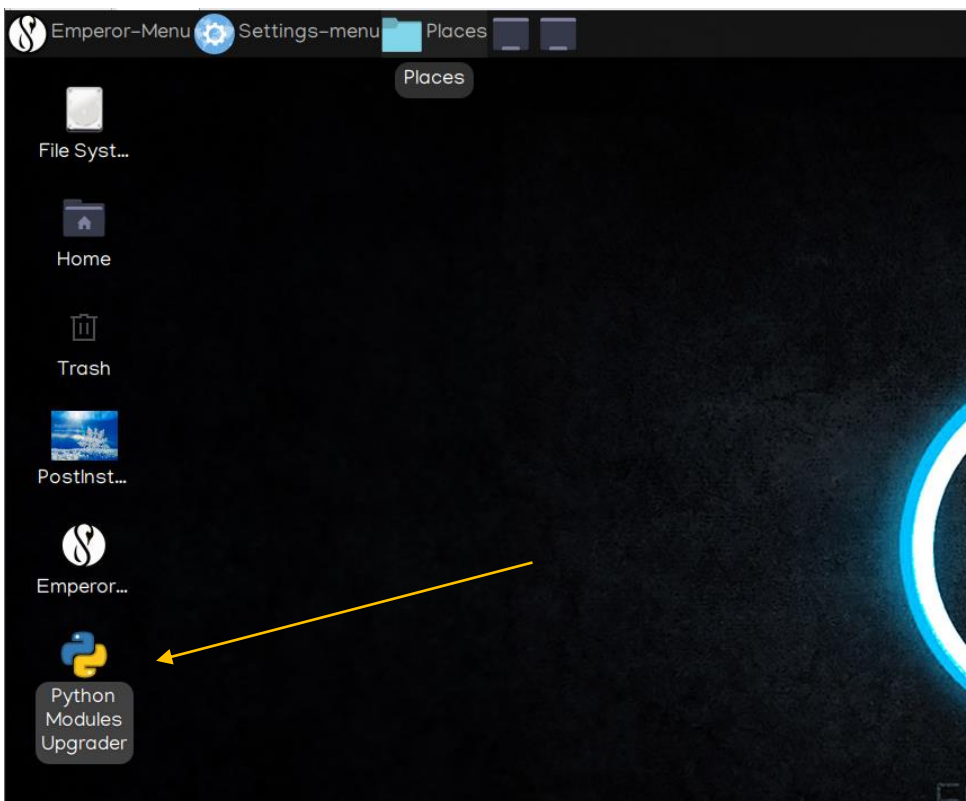
6)Emperor-OS updater icon on desktop

Update emperor-OS Linux by clicking in this icon easily.

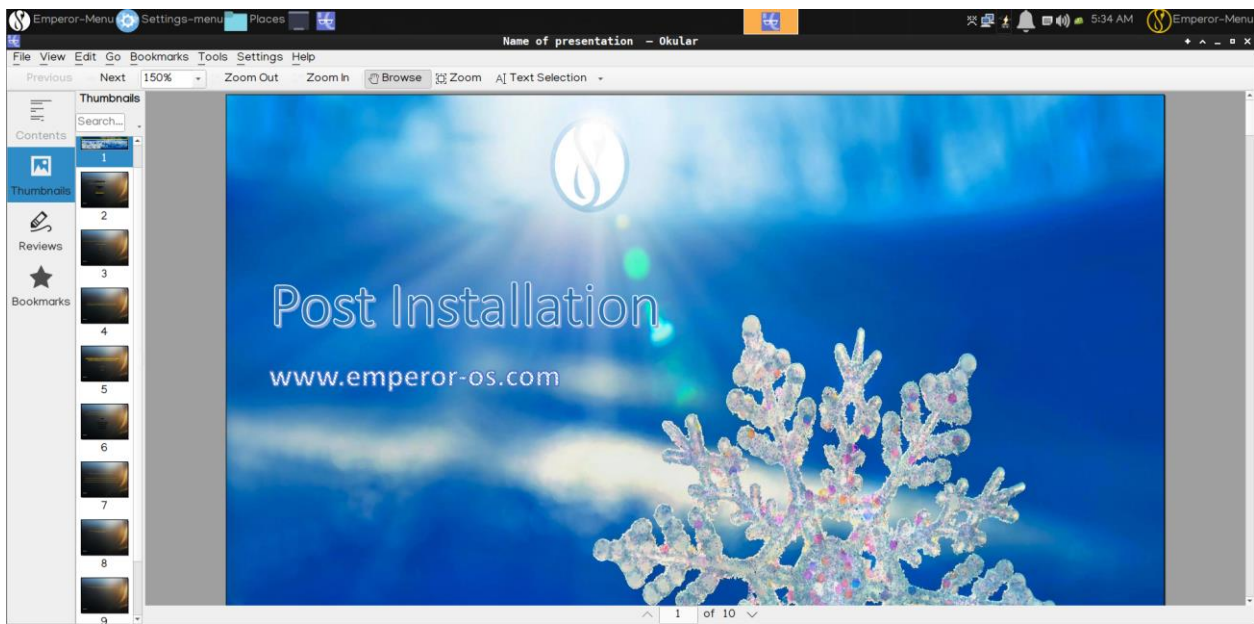


7)New Python Modules Upgrader

upgrading all pre-installed python modules by clicking on this icon.



8) Post installation file on desktop

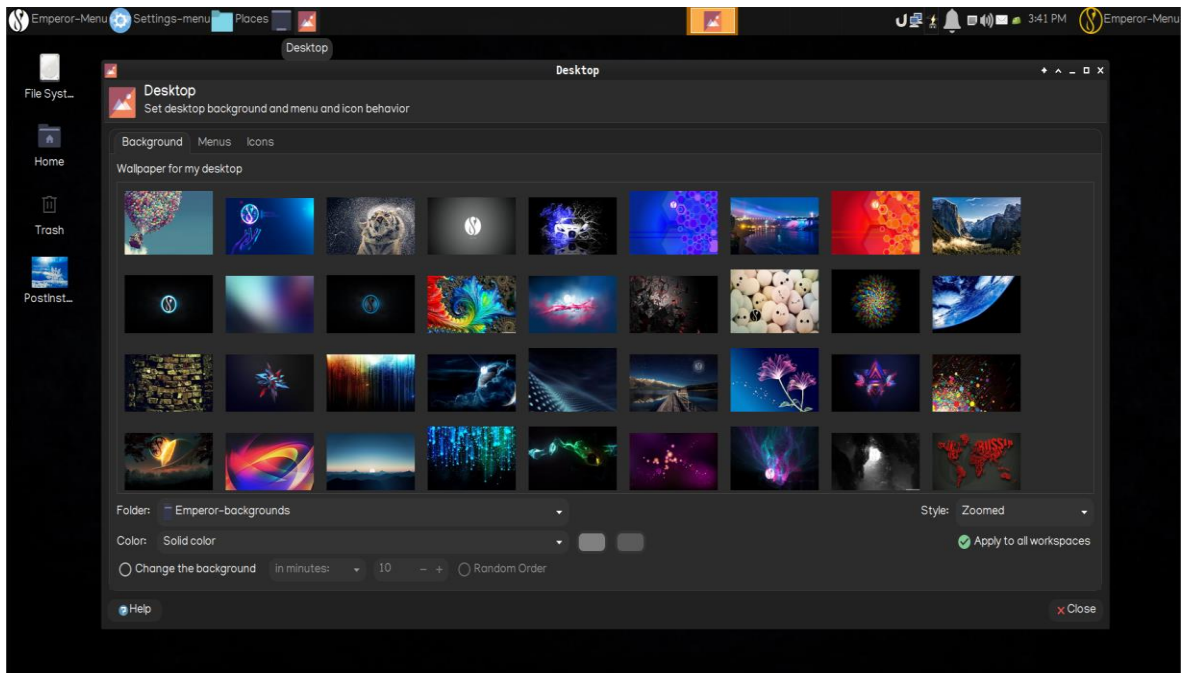


9) Access to 500 Apps in programming, designing and data science.

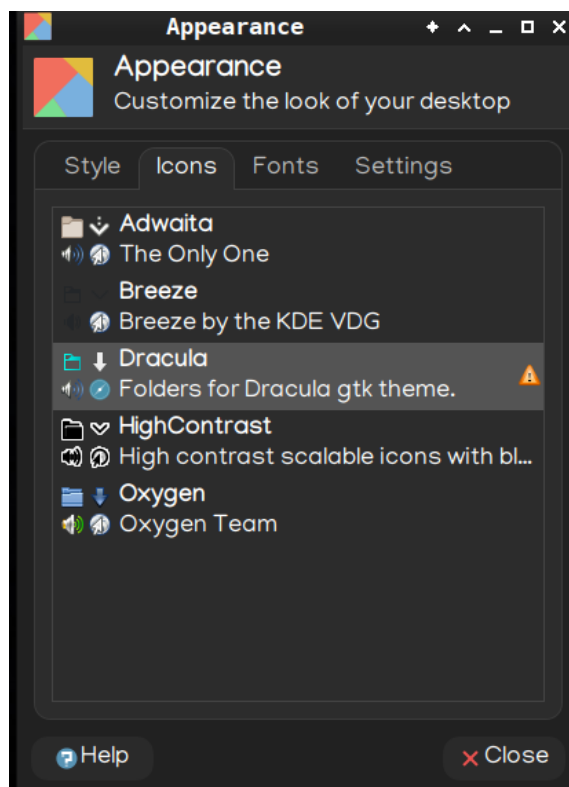
10) Access to 20 categories' Apps.

- Low level
- Embedded-IOT-Robot
- Hardware description languages
- UX/UI Design Tools
- GUI Builder
- Modeling Languages
- Desktop Development
- Database Tools
- FullStack Web Development
- Search Engine Optimization(SEO)
- Mobile Development
- Game Development
- IT automation system
- Java Technologies
- Big Data-Machine Learning
- Quantum programming
- Kids Coding Languages
- Microsoft Technologies
- Frameworks-Libraries

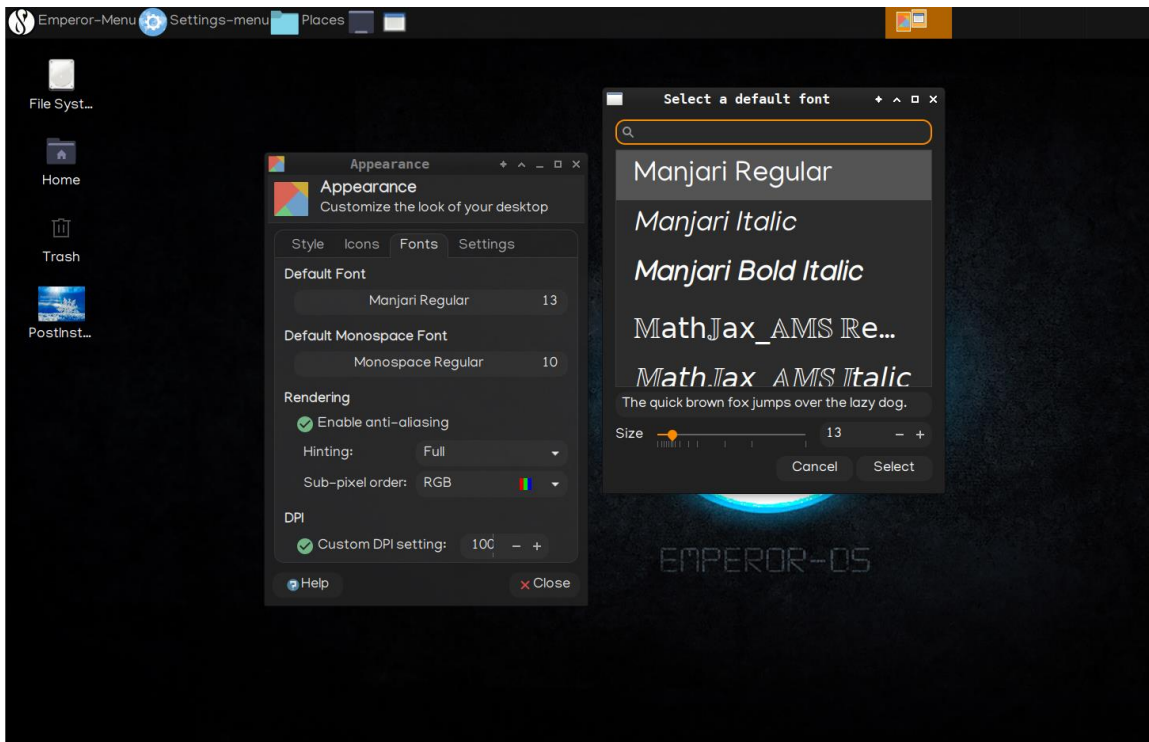
11) Access to 40 background images



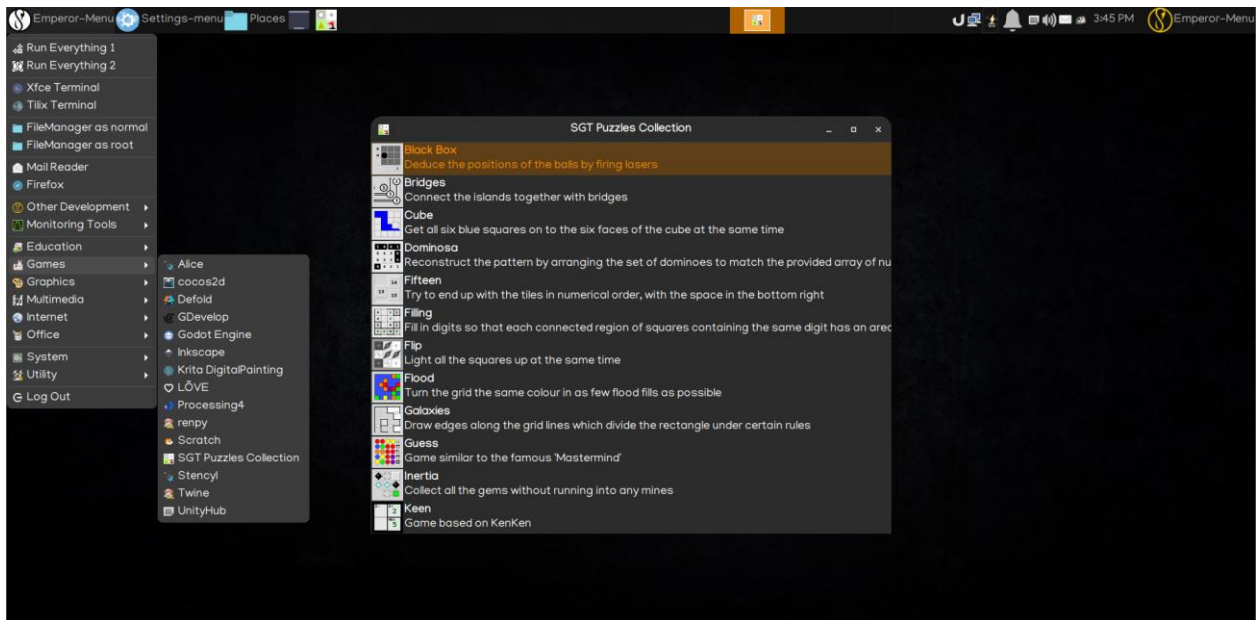
12) Access to 5 special icon groups.



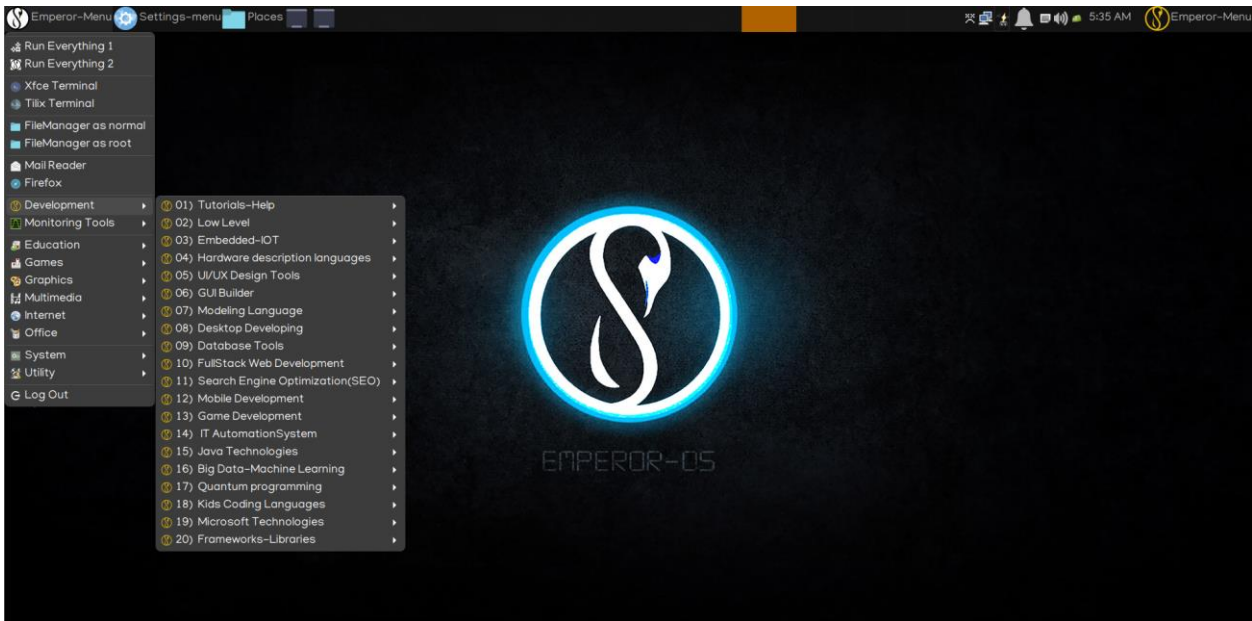
13) Access to 140 fonts



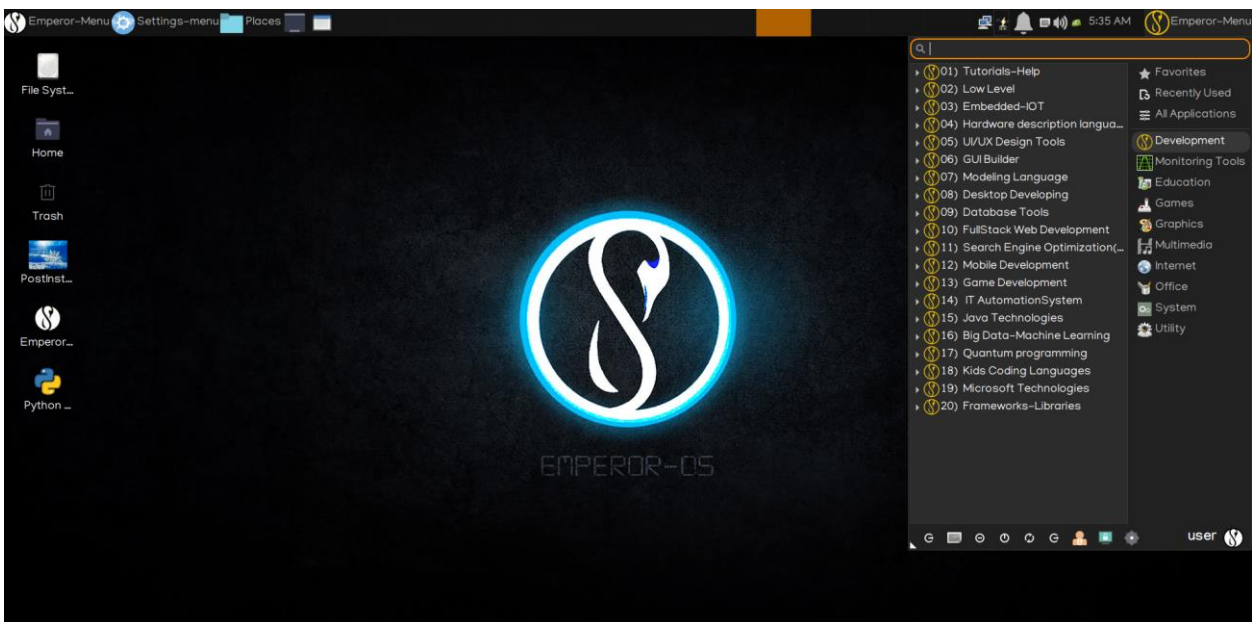
14) Access to 40 games.



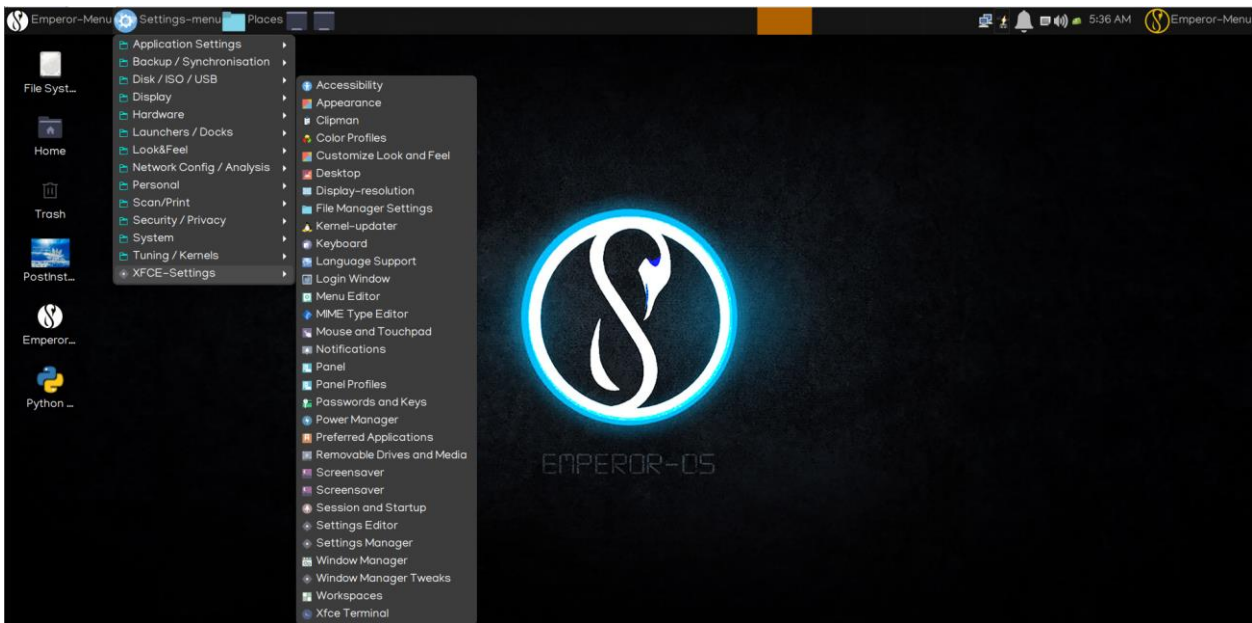
15) added new menu with 20 categories' Apps



16) added second menu. Whisker menu

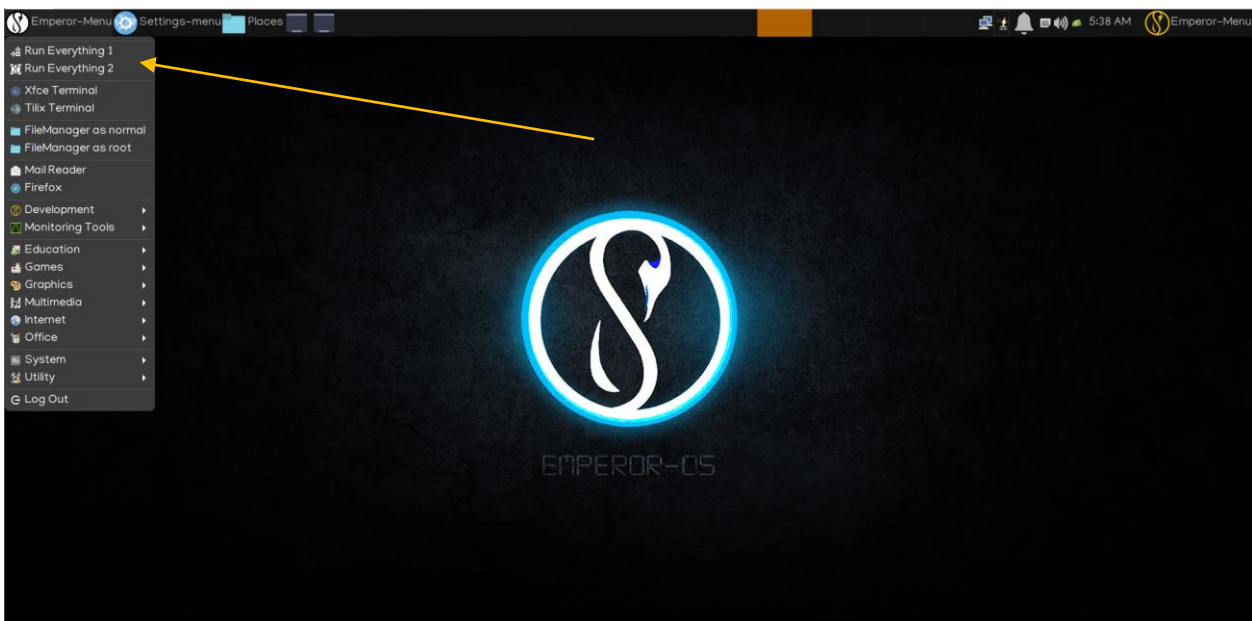


17) Second menu of Apps.

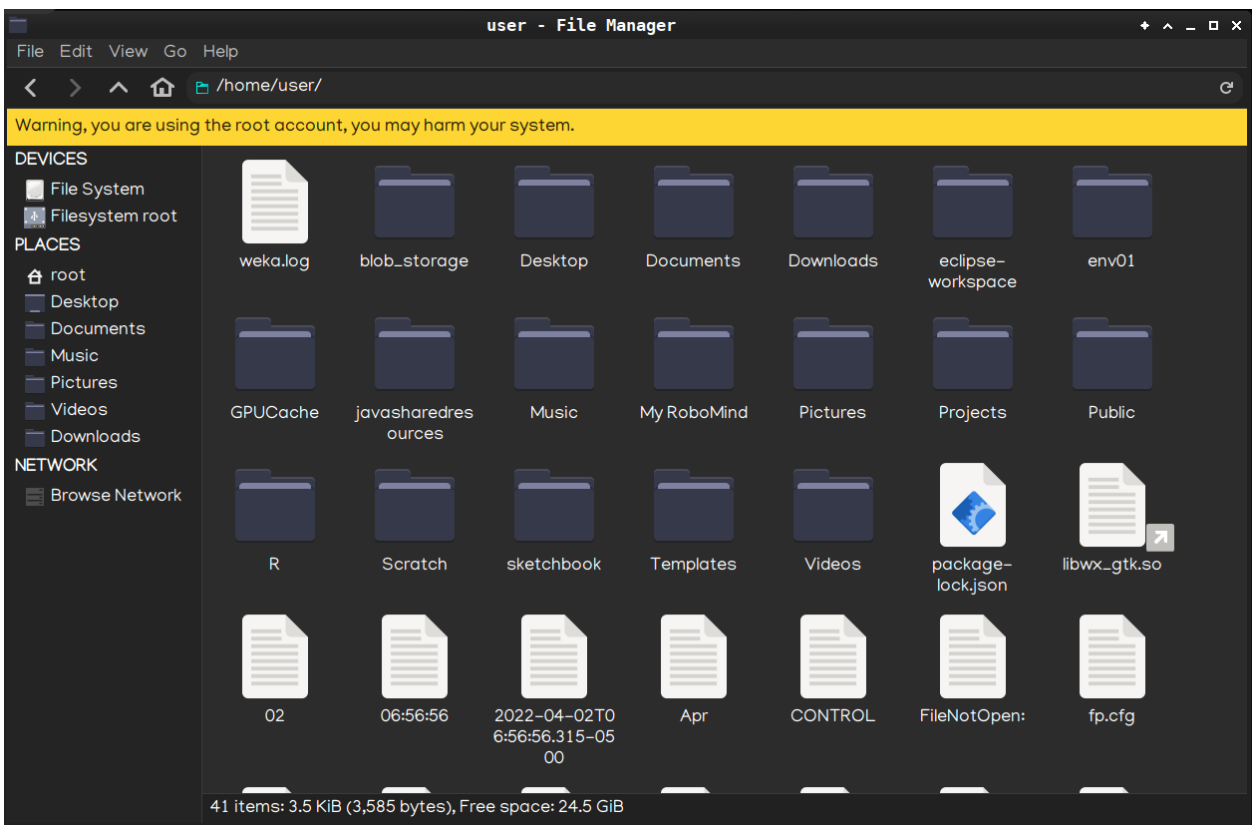
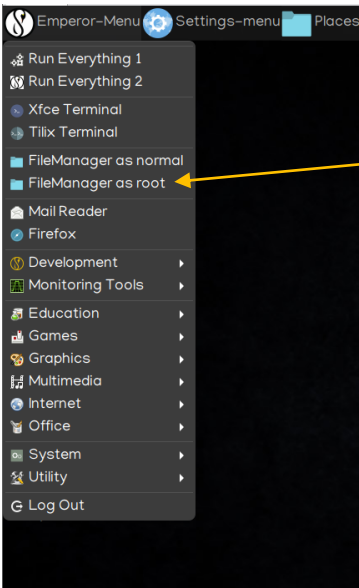


18) Menu items

Search apps by using two search apps

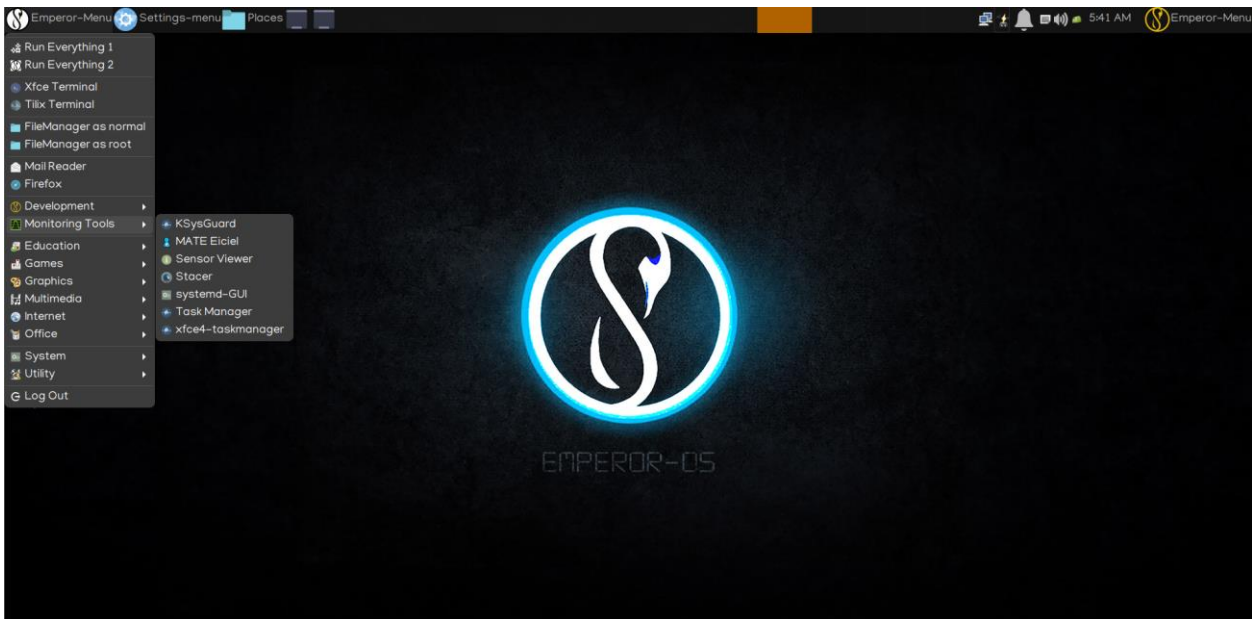


19) Open file manager as root



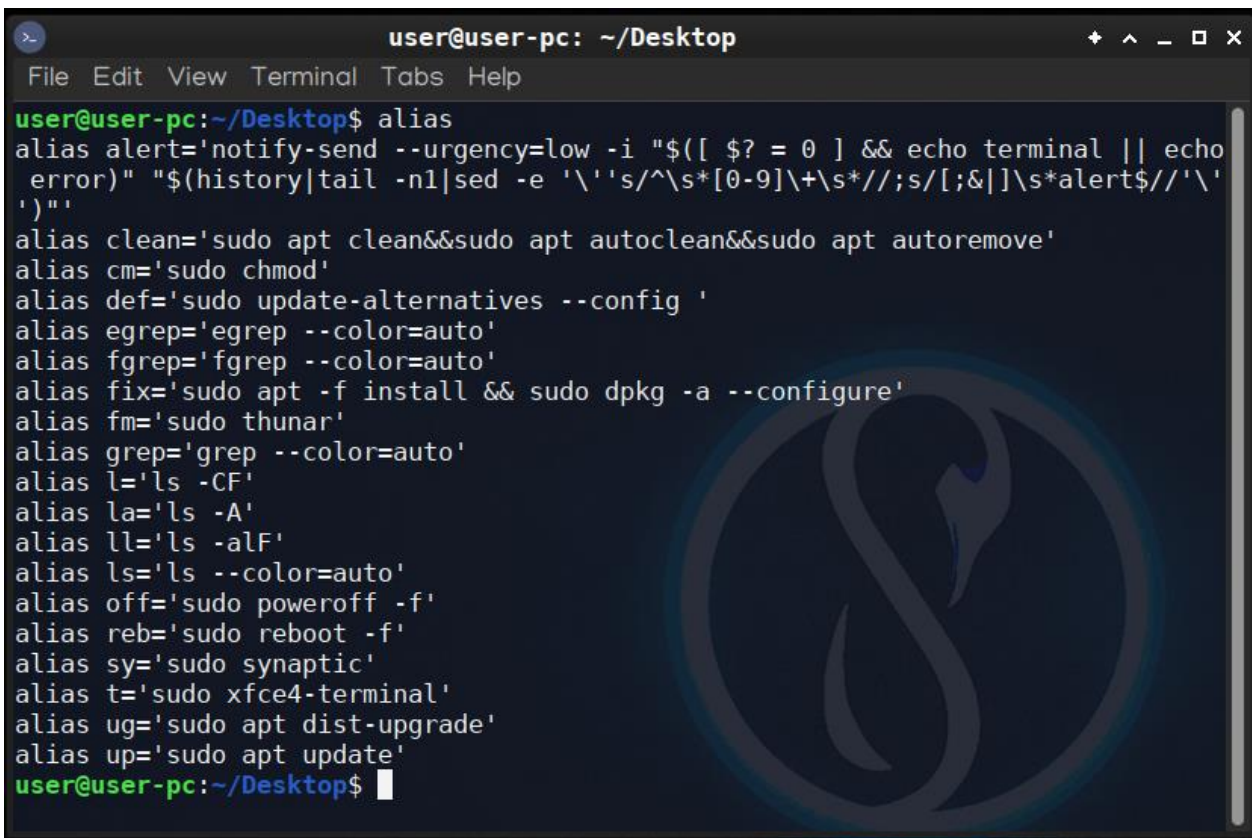
20)Monitoring tools

added new monitoring menu



21)Alias

Added some aliases for fasting command.



22) Added new performance kernel parameters.

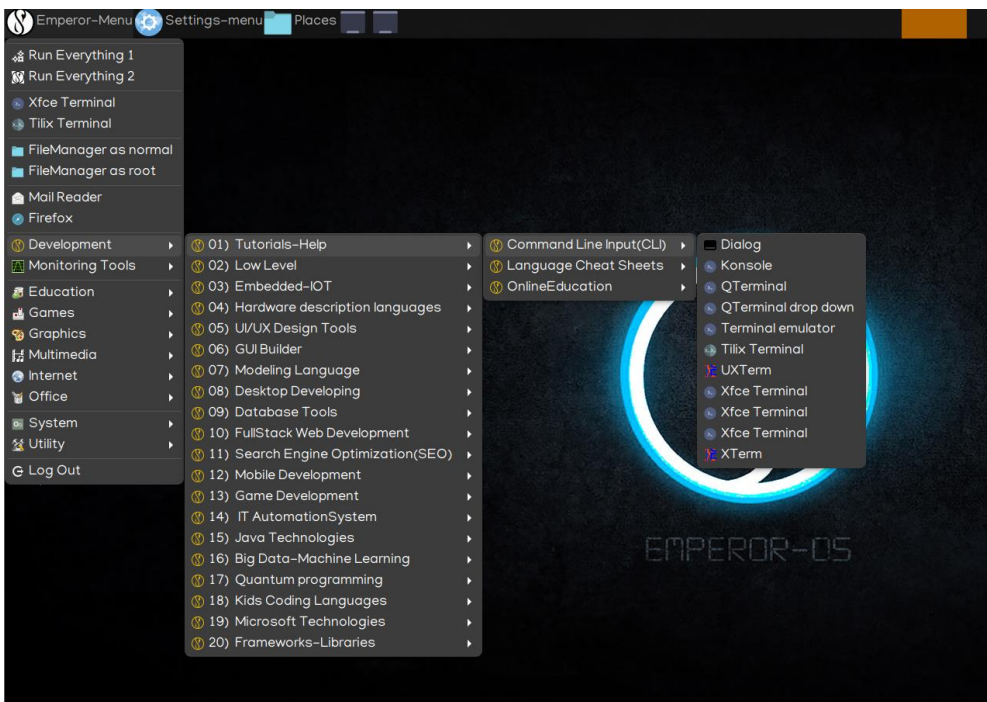
we added kernel and user parameters for tuning for performance optimization. Kernel parameters are tunable values which you can adjust while the system is running:

```
#increase local ports
# Maximum number of packets queued on the input side
# Auto tuning
# Don't cache ssthresh from previous connection
# The Hamilton TCP (High-speed-TCP)
# avoid MTU black holes.
# Increased system file descriptor limit
# Increased ephemeral IP ports
# Increased Linux auto tuning TCP buffer limits
# set tcp_me by kernel itself scale it based on RAM.
# Make room for more TIME_WAIT sockets due to more clients,
# and allow them to be reused if we run out of sockets
# increased the max packet backlog
# Disabled TCP slow start on idle connections
# Disabled source routing and redirects
# Log packets with impossible addresses for security
# Controls the System Request debugging functionality of the kernel
# Controls whether core dumps will append the PID to the core filename.
# Useful for debugging multi-threaded applications.
#Allow for more PIDs
# The contents of /proc/<pid>/maps and smaps files are only visible to readers that are allowed to
ptrace() the process
#Enable ExecShield protection
# Controls the maximum size of a message, in bytes
# Controls the default maximum size of a message queue
# Restrict core dumps
# Hide exposed kernel pointers
# Increased size of file handles and inode cache
# increased swap size by default
# specifies the minimum virtual address that a process is allowed to mmap
# 50% overcommitment of available memory
# Set maximum amount of memory allocated to shm to 256MB
# Keep at least 64MB of free RAM space available
#Prevent SYN attack, enable SYNcookies
# Disabled packet forwarding
# Disabled IP source routing
# Enabled IP spoofing protection, turn on source route verification
# Disabled ICMP Redirect Acceptance
# Enabled Log Spoofed Packets, Source Routed Packets, Redirect Packets
# Decreased the time default value for tcp_fin_timeout connection
# Decreased the time default value for connections to keep alive
# Don't relay bootp
# Don't proxy arp for anyone
```

```
# Turn on the tcp_timestamps, accurate timestamp make TCP congestion control algorithms work better
# Don't ignore directed pings
# Enabled ignoring broadcasts request
# Enabled bad error message Protection
# Allowed local port range
# Enabled a fix for RFC1337 - time-wait assassination hazards in TCP
# Do not auto-configure IPv6
# Use BBR TCP congestion control and set tcp_notsent_lowat to 16384 to ensure HTTP/2
# Do a 'modprobe tcp_bbr' first
# Fall-back to htcp if bbr is unavailable
# Turn on the tcp_window_scaling
# Increased the read-buffer space allocatable
# Increased the write-buffer-space allocatable
# Increased number of incoming connections
# Increased number of incoming connections backlog
# Increased the maximum amount of option memory buffers
# Increased the tcp-time-wait buckets pool size to prevent simple DOS attacks
# try to reuse time-wait connections, but don't recycle them (recycle can break clients behind NAT)
# Limit the maximum memory used to reassemble IP fragments
# don't cache ssthresh from previous connection
# Increased size of RPC datagram queue length
# Don't allow the arp table to become bigger than this
# Tell the gc when to become aggressive with arp table cleaning.
# Increased TCP queue length
# Enabled Explicit Congestion Notification (RFC 3168), disable it if it doesn't work for you
# Avoid falling back to slow start after a connection goes idle
# keeps our cwnd large with the keep alive connections
# Allow the TCP fastopen flag to be used, beware some firewalls do not like TFO
# This will ensure that immediately subsequent connections use the new values
# Disabled magic keys
# This value can be used to query and set the run time limit on the maximum shared memory segment size that can be created.
# set the total amount of shared memory pages that can be used system wide.
# Defined the maximum size in bytes of a single message queue.
# Defined the maximum allowable size in bytes of any single message in a message queue. This value must not exceed the size of the queue (msgmnb).
# That defines the minimum and maximum port a networking connection can use as its source (local) port.
# The maximum number of IPv4 routes allowed
# Ignore all incoming ICMP echo requests
# Ignore ICMP echo requests to broadcast
# Don't log invalid responses to broadcast
# Set the congestion control algorithm to be used for new connections.
# Possible values: reno (default), cubic, bic, htcp, vegas, westwood.
# Minimal size of receive buffer used by UDP sockets in moderation.
# Minimal size of send buffer used by UDP sockets in moderation.
# Maximal number of timewait sockets held by system simultaneously. If this number is exceeded time-wait socket is immediately destroyed
```

```
# Enable or disable fast recycling of TIME_WAIT sockets. Known to cause some issues with
hoststated (Load balancing and fail over)
# Maximal number of TCP sockets not attached to any user file handle, held by system.
# Enable or disable window scaling as defined in RFC1323.
# Send out syncookies when the syn backlog queue of a socket overflows. This is to prevent against
the common 'SYN flood attack'
# Number of times SYNACKs for a passive TCP connection attempt will be retransmitted.
# Number of times initial SYNs for an active TCP connection attempt will be retransmitted.
# Maximal number of remembered connection requests (SYN_RECV), which have not received an
acknowledgment from connecting client.
# Enable or disable timestamps as defined in RFC1323 and use random offset for each connection
rather than only using the current time.
# Accept ICMP redirect messages.
# Accept packets with SRR option.
# Do multicast routing
```

23) Access to many CLI terminal

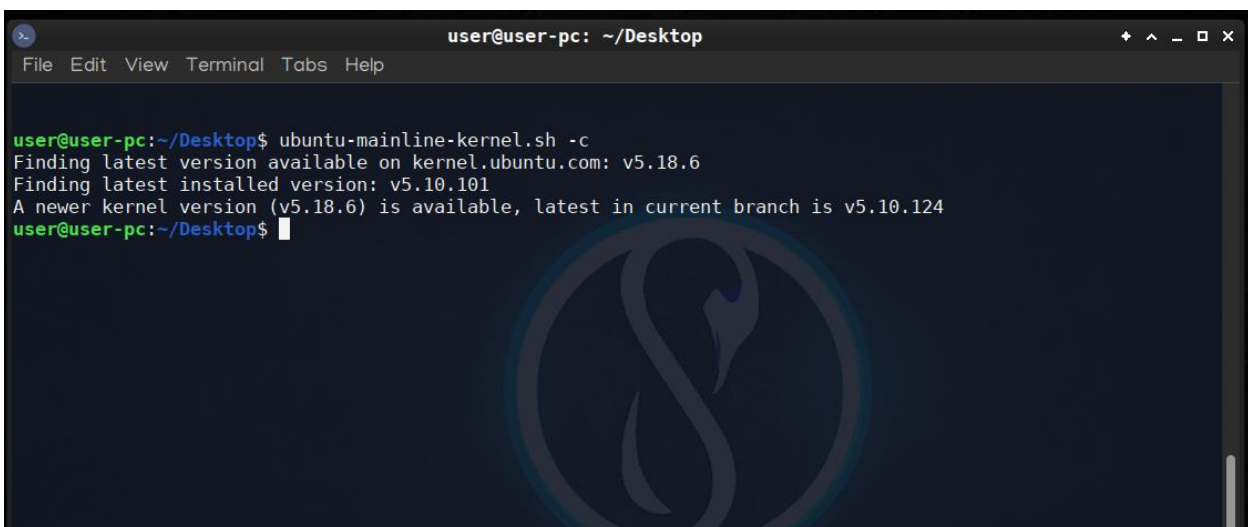


24) sudo dpkg --add-architecture i386

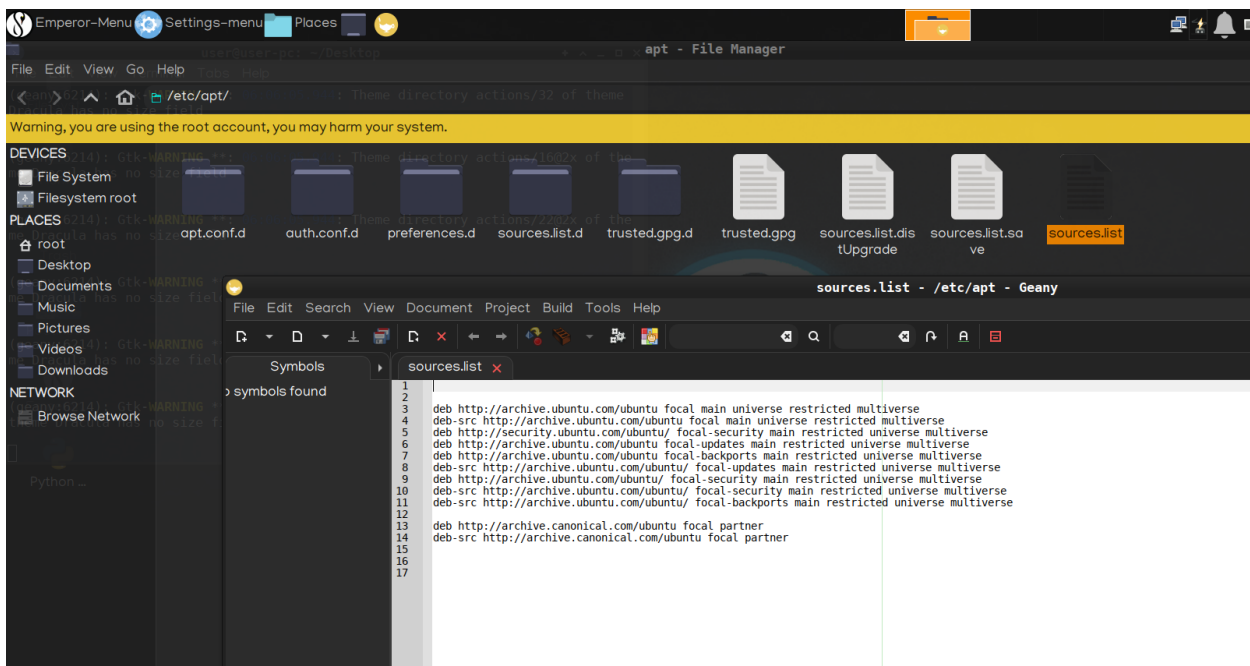
Using multiarch to enable the installation of multiarch binaries, apt and dpkg need configuration changes.

25) new kernel version notification and cli command

New cli script to install, remove and updating new kernel.



26) Added complete source list



27) Activated the Pipenv shell that contains the packages to be upgraded.

28) Disabled unnecessary services for best performance.

29) Added XFCE4-goodies package

The "Goodies for XFCE" project includes additional software and artwork that are related to the XFCE desktop, but not part of the official release.

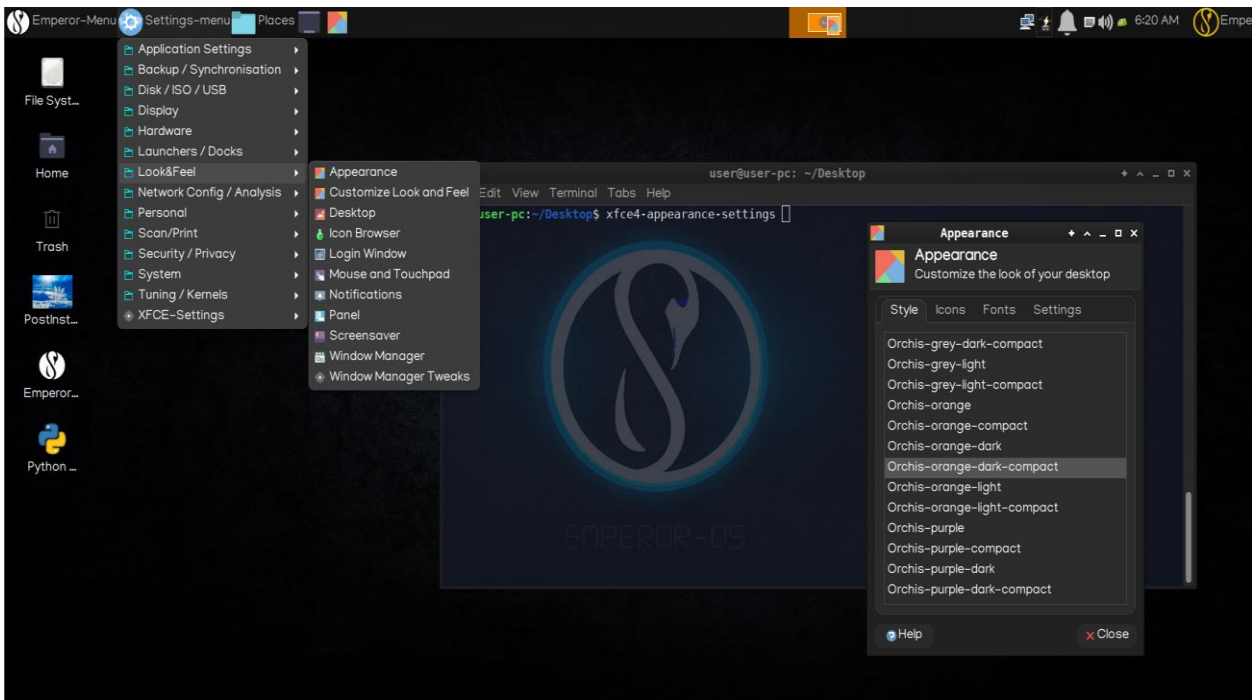
Name	Description
mousepad	Simple text editor for Xfce
parole	Modern media player based on the GStreamer framework
ristretto	A fast and lightweight picture viewer for Xfce
thunar-archive-plugin	Adds archive operations to the Thunar file context menus
thunar-media-tags-plugin	Adds special features for media files to the Thunar File Manager
xfburn	A simple CD/DVD burning tool based on libburnia libraries
xfce4-artwork	Backdrops for the Xfce4 desktop
xfce4-battery-plugin	A battery monitor plugin for the Xfce panel
xfce4-clipman-plugin	A clipboard plugin for the Xfce4 panel
xfce4-cpufreq-plugin	CPU frequency plugin for the Xfce4 panel
xfce4-cpugraph-plugin	Graphical representation of the CPU load
xfce4-datetime-plugin	A date and time display plugin for the Xfce panel
xfce4-dict	A dictionary plugin for the Xfce panel
xfce4-diskperf-plugin	Displays instant disk/partition performance in the Xfce4 panel

Name	Description
xfce4-eyes-plugin	A rolling eyes (following mouse pointer) plugin for the Xfce panel
xfce4-fsguard-plugin	File system usage monitor plugin for the Xfce4 panel
xfce4-genmon-plugin	plugin that monitors customizable programs stdout for the Xfce4 panel
xfce4-mailwatch-plugin	Multi-protocol, multi-mailbox mail watcher for the Xfce4 panel
xfce4-mount-plugin	Mount/umount utility for the Xfce4 panel
xfce4-mpc-plugin	Control the Music Player Daemon from the Xfce4 panel
xfce4-netload-plugin	A netload plugin for the Xfce panel
xfce4-notes-plugin	Notes plugin for the Xfce panel
xfce4-notifyd	Notification daemon for the Xfce desktop
xfce4-pulseaudio-plugin	Pulseaudio plugin for the Xfce4 panel
xfce4-screensaver	Xfce Screensaver
xfce4-screenshooter	An application to take screenshots
xfce4-sensors-plugin	Sensors plugin for the Xfce panel
xfce4-smartbookmark-plugin	Allows you to send requests directly to your browser and perform a custom search
xfce4-systemload-plugin	A system load plugin for the Xfce4 panel
xfce4-taskmanager	Easy to use task manager
xfce4-time-out-plugin	Take a break from your computer with this plugin for Xfce4
xfce4-timer-plugin	Plugin to track time for the Xfce4 panel
xfce4-verve-plugin	Command line plugin for the Xfce panel
xfce4-wavelan-plugin	Plugin to monitor wifi connectivity for the Xfce4 panel
xfce4-weather-plugin	A weather plugin for the Xfce4 panel
xfce4-whiskermenu-plugin	Menu for Xfce4
xfce4-xkb-plugin	Plugin to switch keyboard layouts for the Xfce4 panel

30) The ISO file was reduced from 5Gb to 4 Gb

31) Installation disk size was reduced to 21Gb

32) Added new theme and icon



33) Pre-installed more python modules

Added 365 python modules.

34) Appended all python path of modules to one path to the following path:

All python modules's system path appends the following path:

`/usr/lib/python3/dist-packages`

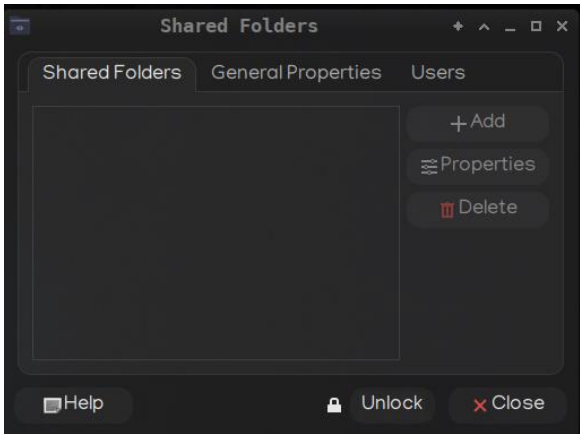
35) prepared to install another desktop by pre-configuration emperor-os Linux desktops: KDE plasma-mate-openbox-lxde

36) live CD

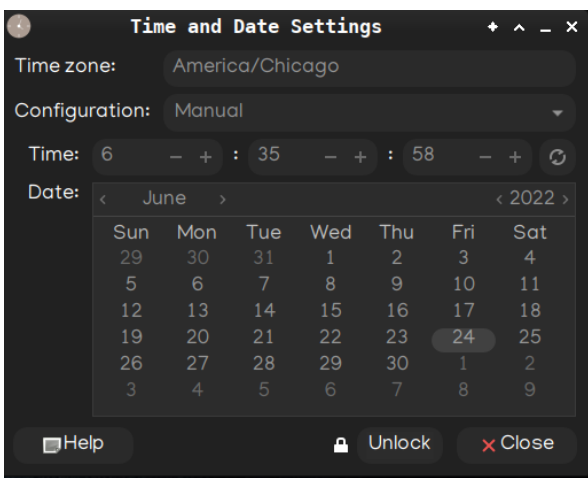
Emperor allow you to have full access to emperor-OS without needing to installed operating system.

37) Added pre-installed VMware and virtual box tools

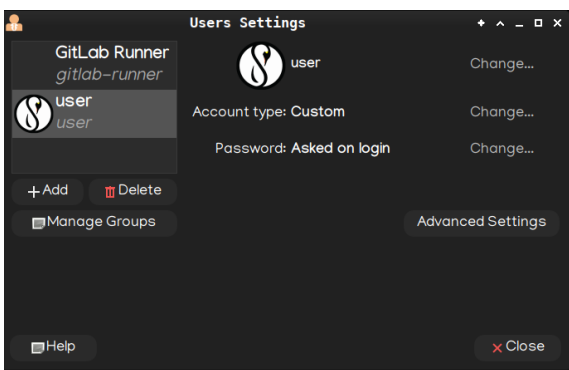
38) Added /usr/bin/shares-admin to share everything.



39) added /usr/bin/time-admin to manage time and date.



40) added /usr/bin/users-admin to manage any users.



41) xhost +SI:localuser:root

by default, emperor-OS allows the root user to access the running X server.

42)disabled and stopped sleep,hibernation and suspend by default:

```
sudo systemctl disable sleep.target suspend.target hibernate.target hybrid-sleep.target
```

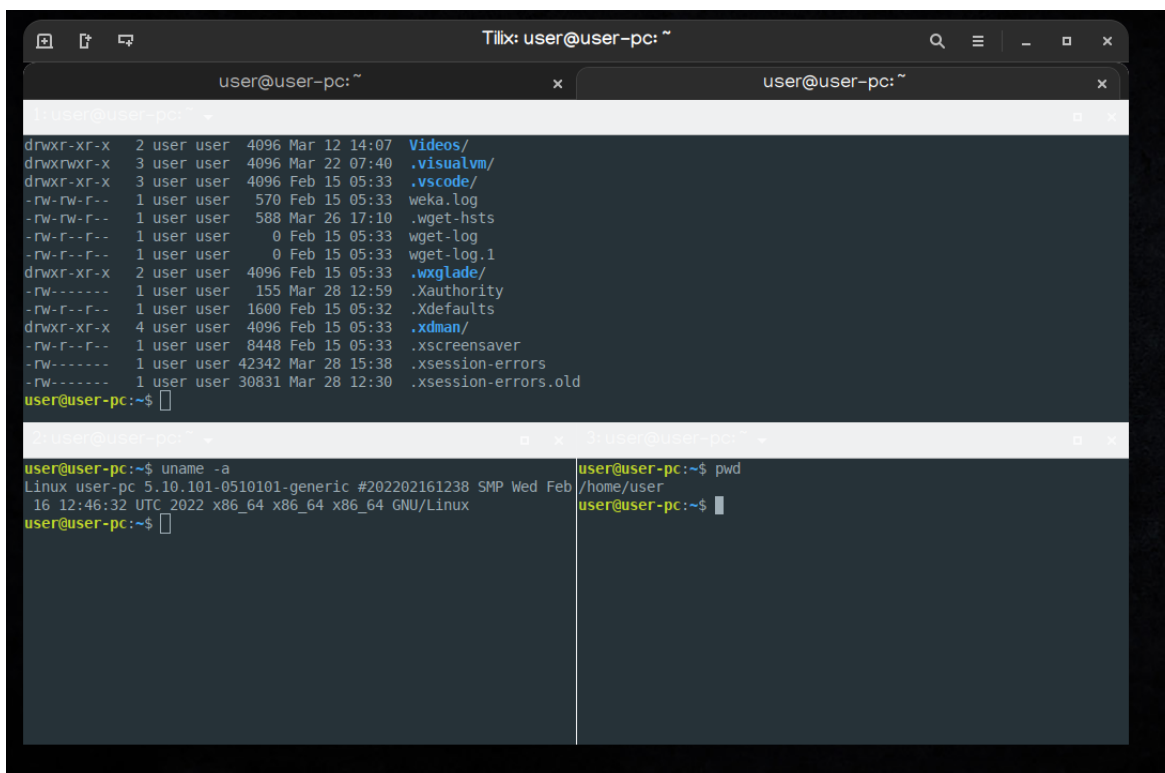
```
sudo systemctl stop sleep.target suspend.target hibernate.target hybrid-sleep.target
```

43)added the last Firmware for Linux kernel drivers

44)just click to install apps.

added installer of essential and popular tools for easy installing.

45)Added Tilix terminal



The image shows a screenshot of a Tilix terminal window. The window title is "Tilix: user@user-pc: ~". There are three terminal panes. The top pane shows the output of the command 'ls -l', listing files and directories with their permissions, owner, group, size, date, and name. The middle pane shows the output of 'uname -a', displaying system information like kernel version and architecture. The bottom pane shows the output of 'pwd', displaying the current directory path as '/home/user'.

```
Tilix: user@user-pc: ~
user@user-pc: ~
ls -l
drwxr-xr-x  2 user user 4096 Mar 12 14:07 Videos/
drwxrwxr-x  3 user user 4096 Mar 22 07:40 .visualvm/
drwxr-xr-x  3 user user 4096 Feb 15 05:33 .vscode/
-rw-rw-r--  1 user user  570 Feb 15 05:33 weka.log
-rw-rw-r--  1 user user  588 Mar 26 17:10 .wget-hsts
-rw-r--r--  1 user user   0 Feb 15 05:33 wget-log
-rw-r--r--  1 user user   0 Feb 15 05:33 wget-log.1
drwxr-xr-x  2 user user 4096 Feb 15 05:33 .wxglade/
-rw-----  1 user user  155 Mar 28 12:59 .Xauthority
-rw-r--r--  1 user user  1600 Feb 15 05:32 .Xdefaults
drwxr-xr-x  4 user user 4096 Feb 15 05:33 .xdman/
-rw-r--r--  1 user user  8448 Feb 15 05:33 .xscreensaver
-rw-----  1 user user 42342 Mar 28 15:38 .xsession-errors
-rw-----  1 user user 30831 Mar 28 12:30 .xsession-errors.old
user@user-pc:~$ █

user@user-pc:~$ uname -a
Linux user-pc 5.10.101-0510101-generic #202202161238 SMP Wed Feb 16 12:46:32 UTC 2022 x86_64 x86_64 x86_64 GNU/Linux
user@user-pc:~$ █

user@user-pc:~$ pwd
/home/user
user@user-pc:~$ █
```

46) network speed was increased

47) the speed of Firefox was increased

48) Lightweight Kernel in new version 2.5

49) the snap package manager was added in version 2.5

50) the value of command and file history in .bashrc was increased.

51) list and PPA of useful and user-friendly applications to the distribution repository was added by default:

`/etc/apt/sources.list.d`

52) Persepolis download manager was added

2) Disabled the check disk while booting in live mode to further increase the boot speed.

3) The VMware and virtual box tools was added

Contact me:

- www.emperor-os.com
- <https://t.me/joinchat/QPMh3Khn9izpmzqf>
- info.emperor.os@gmail.com
- <https://github.com/hosseinseilani>
- <https://www.linkedin.com/in/hossein-seilany-2931891b4/>
- https://www.youtube.com/watch?v=xvJmd_d4yao
- Telegram: @seilany