



Alt Uses for Alt Images

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Alternative Images SIG Chair

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OVERALL GOALS

The Alternate Images SIG's goal is to build and provide alternate images for CentOS Stream.

Whenever possible, these images will be created on the CentOS SIG infrastructure.



CentOS

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Progress

- We have had 4 quarterly updates
- We have 6 CentOS Stream 9 Live Images you can boot up and install from.
 - Cinnamon, GNOME, KDE, Mate, XFCE, MAX, MIN
- We have a CentOS Stream 9 WSL Image for Windows users
- We have CentOS Stream 10 Images in our testing repository
 - GNOME, MIN, WSL
 - The Live Image Installer currently does not work



Computer



Home



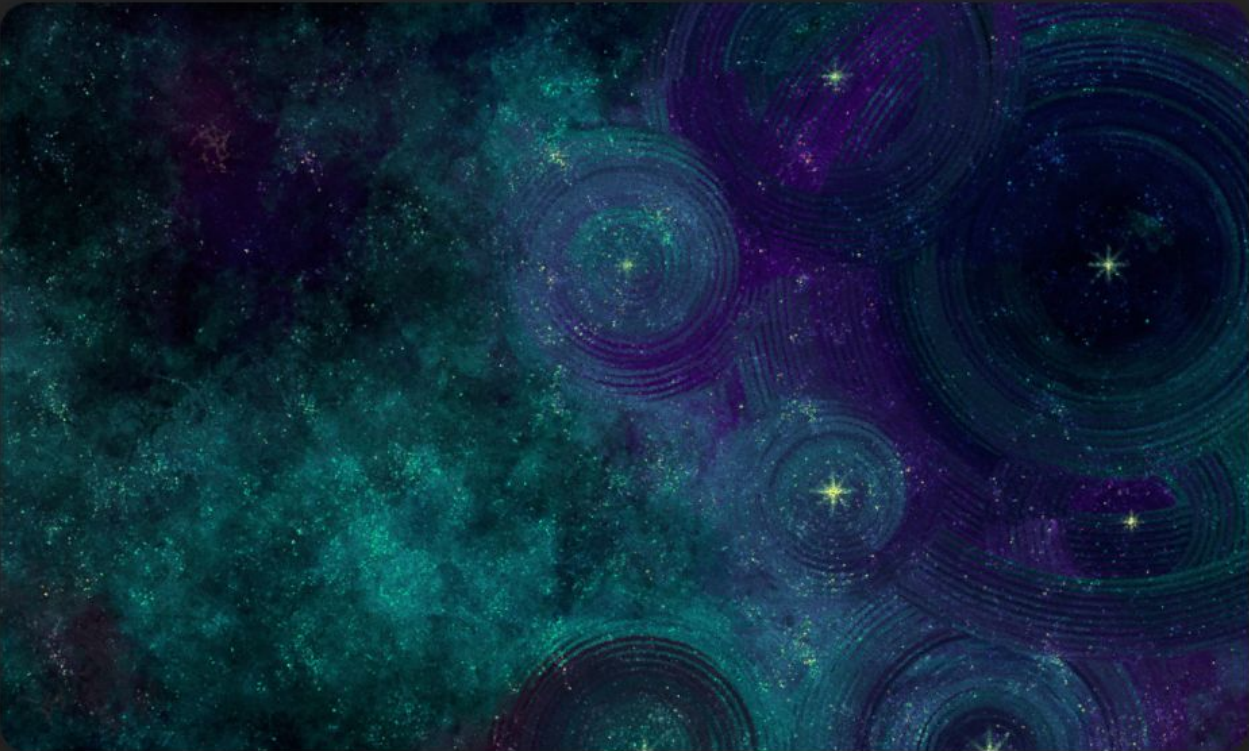
Trash



Install to Hard
Drive

Cinnamon
Live

🔍 Type to search



GNOME
Live





Install to Hard
Drive

KDE
Live



10:05 PM
7/5/24



Computer



liveuser's Home



Install to Hard Drive



Trash

MATE
Live



1.1 GB
Volume



Home



3.8 GB
Volume



Install to
Hard Drive



1.2 GB
Volume



8.6 GB
Volume



3.8 GB
Volume



Trash



File System



XFCE
Live

10:10 PM

Friday, July 5, 2024



Live System User



Sleep



Restart



Shut
Down



Other...

- GNOME Classic on Wayland
- GNOME Classic (Wayland)
- Standard (Wayland display server) (Wayland)
- Standard (Wayland display server) (Wayland)
- Plasma (Wayland)
- Cinnamon
- Cinnamon (Software Rendering)
- GNOME Classic on Xorg
- GNOME Classic
- Custom
- Standard (X11 display server)
- Standard (X11 display server)
- IceWM Session
- Lumina
- MATE
- Plasma (X11)
- Xfce Session
- User script

MAX
Live

```
CentOS Stream 9
Kernel 5.14.0-472.el9.x86_64 on an x86_64

localhost-live login: liveuser (automatic login)

[liveuser@localhost-live ~]$ ls
install_to_hard_drive
[liveuser@localhost-live ~]$
```

MIN
Live

```
root@PurplePower:~  
root@PurplePower:~# cat /etc/redhat-release  
CentOS Stream release 9  
root@PurplePower:~# df -h  
Filesystem      Size  Used Avail Use% Mounted on  
none            3.9G  0  3.9G   0% /usr/lib/modules/5.15.153.1-microsoft-standard-WSL2  
none            3.9G  4.0K  3.9G   1% /mnt/wsl  
drivers         447G  145G  302G  33% /usr/lib/wsl/drivers  
/dev/sdc        1007G  1.2G  955G   1% /  
none            3.9G   72K  3.9G   1% /mnt/wslg  
none            3.9G   0  3.9G   0% /usr/lib/wsl/lib  
rootfs          3.9G  2.2M  3.9G   1% /init  
none            3.9G   0  3.9G   0% /dev  
none            3.9G  8.5M  3.9G   1% /run  
none            3.9G   0  3.9G   0% /run/lock  
none            3.9G   0  3.9G   0% /run/shm  
tmpfs           4.0M   0  4.0M   0% /sys/fs/cgroup  
none            3.9G   76K  3.9G   1% /mnt/wslg/versions.txt  
none            3.9G   76K  3.9G   1% /mnt/wslg/doc  
C:\             447G  145G  302G  33% /mnt/c  
D:\             932G  574G  358G  62% /mnt/d  
E:\             1.9T  259G  1.6T  14% /mnt/e  
tmpfs           791M   0  791M   0% /run/user/0  
root@PurplePower:~# uname -a  
Linux PurplePower 5.15.153.1-microsoft-standard-WSL2 #1 SMP Fri Mar 29 23:14:13 UTC 2024 x86_64 x86_64 x86_64 GNU/Linux  
root@PurplePower:~#
```

WSL



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Future

- Persistent Media
 - This will allow users to customize their Live media
- Raw Images for Aarch64
 - First get raw images working
 - Ultimate goal is get them working on RPi if possible



DEMO: Full Disk Backup

- What and Why?
 - What: This takes a full disk snapshot. Not of the data, but the full disk.
 - Why: Sometimes you don't want to restore data, you want the drive back to its original state.
 - Example: This is the first thing I do to any Windows based machine, before I put Linux on it. If I ever need to give that machine to a Windows user, I can put Windows back on the machine.



DEMO: Full Disk Backup

- Prerequisites:
 - A server to store the image on.
 - You must be able to ssh from the target machine to the server.
 - A Linux Live USB.
 - We will be using CentOS Stream 9 KDE Live image.
 - (Optional) A second machine to ssh into the target machine.
 - Often the target machine is in an inconvenient place.
 - Can "cut and paste" commands.
 - Makes the demo easier to watch.



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DEMO: Full Disk Backup

- Setup:
 - Boot target machine on Live Image
 - (Optional) Startup sshd on target machine, log in remotely
 - Make sure fuse-sshfs is installed on the Live image, if it isn't, install it
 - Mount the servers data disk path on the target machine using fuse-sshfs
 - `mkdir {$local}`
 - `sshfs -o allow_other,default_permissions root@{$server-ip}:{$server-data} {$local}`
 - `mkdir /mnt/srv`
 - `sshfs -o allow_other,default_permissions root@192.168.11.11:/srv/backup/ /mnt/srv`
 - `mkdir {$local}/{machine}`
 - `mkdir /mnt/srv/buba`



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DEMO: Full Disk Backup

- Backup from target machine to server machine
 - `dd if=/dev/{$disk} | gzip -9 > {$local}/{machine}/{machine}.img.gz`
 - `dd if=/dev/sda | gzip -9 > /mnt/srv/buba/buba.2024.img.gz`
- Restore from server machine to target machine
 - `zcat {$local}/{machine}/{machine}.img.gz | dd of=/dev/{$disk}`
 - `zcat /mnt/srv/buba/buba.2024.img.gz | dd of=/dev/sda`



DEMO: CentOS on Window

CentOS on Windows needs it's own presentation.

See it late on CentOS Showcase

or see the web page at

<https://sigs.centos.org/altimages/wsl-images/>



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Questions

Answers

Discussion



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Meetings

The SIG holds regular [meetings](#) on the 2nd Thursday of each month at 19:00 UTC at

<https://chat.fedoraproject.org/#/room/#meeting1:fedoraproject.org>

Meetings are logged and the minutes for past meetings are [available](#).



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Mailing List and Communication

The SIG uses the [centos-devel](#) mailing list for coordination and the [#centos-alt-images Matrix channel](#) for interactive communication.