

# Fedora 25 Highlights



Perry Rivera  
SCaLE 15x

March 2017

# Agenda

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- Welcome to Fedora 25 Highlights
- What is Fedora and what's new in Fedora 25?
- A Brief History of Fedora
- Getting started with Fedora
- How to ask for help
- What is Fedora.Next?

# About the Speaker

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- Perry Rivera
  - Motivates, mobilizes, and connects cross-functional teams with technical solutions and support and provides customer-focused Computer Professional services with System Administrator experience in commercial and non-profit industries.
  - Delivers system, network, and security support in a wide variety of business and home environments.
  - Partners with clients for training and end-developer support efforts, especially in the areas of configuration management, operating system integration...



What is Fedora and what's  
new in Fedora 25?

SCaLE15x

Perry Rivera  
Fedora Ambassador

# What is Fedora?

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- GNU/Linux Distribution
- 100% Free & Open
- Innovative
- Stable
- Secure

# Our Mission

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The Fedora Project's mission is to lead the advancement of free and open source software and content as a collaborative community.

# The Four Foundations



**FREEDOM.**



**FRIENDS.**



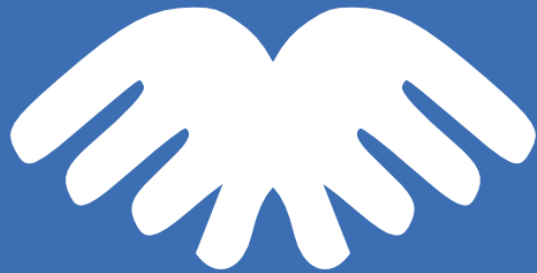
**FEATURES.**



**FIRST.**

# Freedom

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**FREEDOM.**

- 100% free, legal, redistributable
- Software. Artwork. Project code. Everything!
- **Never cutting corners**



# Friends

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**FRIENDS.**

- **Everyone has something to give**
- Thousands of active contributors
- Disagreement, then discussion, then consensus

# Features

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**FEATURES.**

- **Technical excellence**
- Upstream collaboration
- Our features become part of others

# First

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**FIRST.**

- **Innovation!**
- We don't wait for others to do the heavy lifting
- Rapid release cycle
- Community R&D lab



# History

# A Quick History (1 of 2)

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- 1969: Ken Thompson and Dennis Ritchie implement Unix
- 1991: Finnish student Linus Torvalds creates a new free operating system that later became the Linux kernel
- 1994: Red Hat, Inc. creates Red Hat Software Linux Preview (Beta)
- 1995: Red Hat, Inc. releases Red Hat Commercial Linux (RHL 1.0)

# A Quick History (2 of 2)

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- 1995-2003: Red Hat, Inc. releases various RHL versions
- 2003: Red Hat, Inc. releases second beta, Fedora Core (FC) 0.94
- 2003-2006: Red Hat, Inc. releases FC1-FC6
- 2007-2017: Red Hat, Inc. releases Fedora 7-25. Beginning 2013, codenames are dropped.



# Getting Fedora

A stylized blue flower graphic composed of multiple overlapping, semi-transparent petals, positioned in the upper right quadrant of the image. The background is a dark blue gradient with subtle, larger-scale circular patterns.

[getfedora.org](https://getfedora.org)



# Different Flavors (1/4)

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- Categories
  - Workstation, Server, Cloud.
    - Server: For specialized servers
    - Cloud: For cloud computing and facilitates container usage.
    - Workstation: For general users

# Different Flavors (2/4)

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- Spins (Alternative Desktops)
  - <https://spins.fedoraproject.org/>
  - KDE, Xfce, LXDE, MATE, Cinnamon, SOAS

# Different Flavors (3/4)

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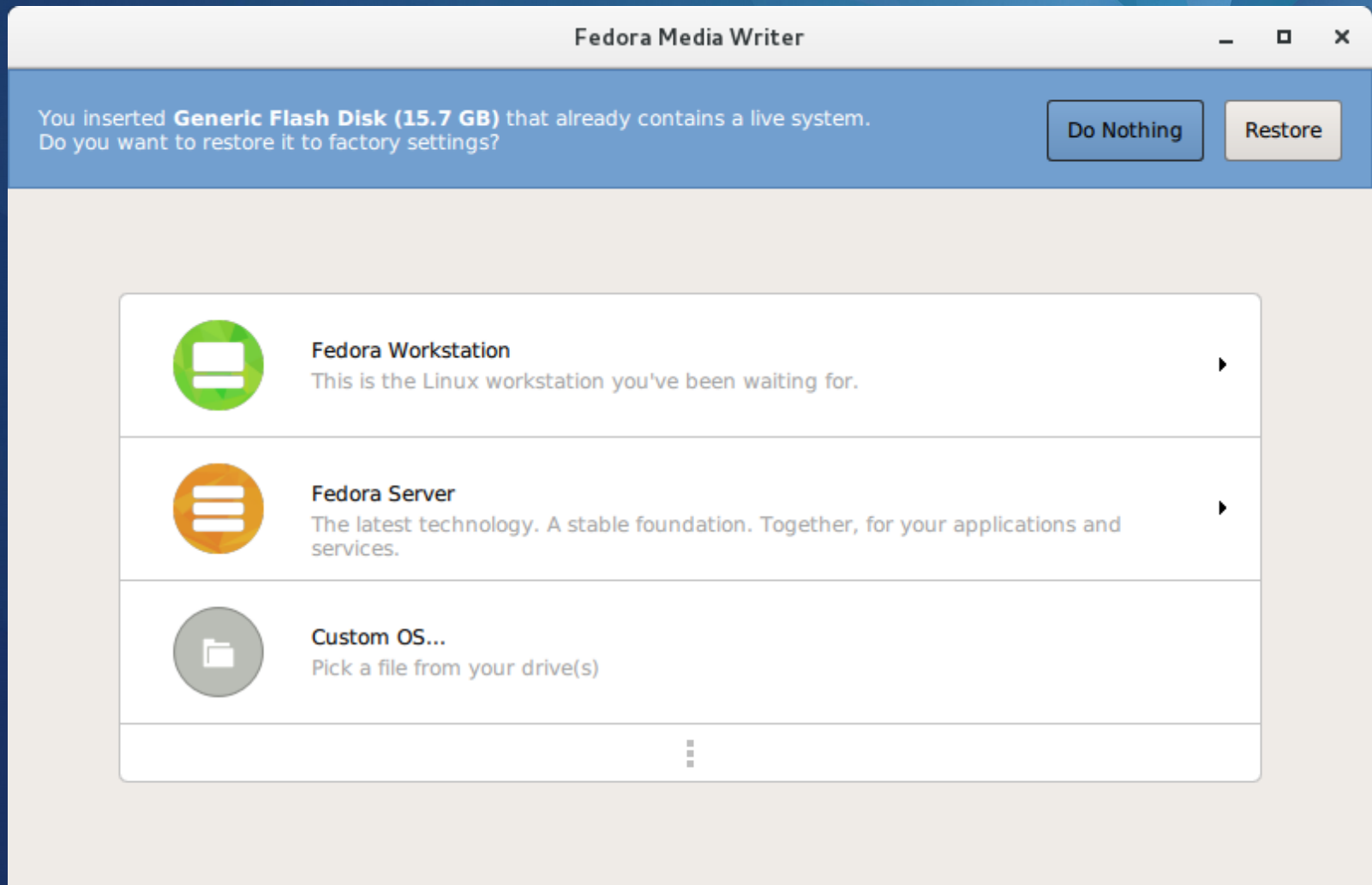
- Labs
  - <https://labs.fedoraproject.org/>
  - Astronomy
  - Design Suite
  - Games
  - Jam
  - Robotics Suite
  - Scientific
  - Security Lab

# Different Flavors (4/4)

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- Fedora ARM  
<https://arm.fedoraproject.org/>
- Secondary Architectures
  - PowerPC, s390x

# Fedora Media Writer



# How to Ask for Help

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- Ask Fedora: [ask.fedoraproject.org](http://ask.fedoraproject.org)
- Forums: [fedoraforum.org](http://fedoraforum.org)
- IRC: #fedora on [irc.freenode.net](http://irc.freenode.net), etc.
- Mailing Lists:  
[users@lists.fedoraproject.org](mailto:users@lists.fedoraproject.org)
- Documentation: [docs.fedoraproject.org](http://docs.fedoraproject.org)
- Wiki: [wiki.fedoraproject.org](http://wiki.fedoraproject.org)
- Reddit: [r/fedora](https://www.reddit.com/r/fedora)

The background features a dark blue gradient with a large, stylized, multi-layered circular logo on the right side, resembling a flower or a sunburst. The logo is composed of numerous overlapping, semi-transparent blue segments that create a sense of depth and movement. The text "Fedora.next" is centered horizontally and positioned in the lower half of the image.

Fedora.next

# Fedora.next

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- An initiative that forms the way Fedora works and operates. An umbrella for changes in the way we do Fedora.
- From F21 onward, we ship three (3) different products:
  - Fedora Workstation
  - Fedora Server
  - Fedora Cloud



# F25 Workstation

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- GNOME 3.22
- Wayland display server is now default
- Fedora Media Writer
- MP3 decoding (playback!) support
- Flatpak support: <http://flatpak.org/>
- GNOME Extensions don't expire
  - Updates won't risk breaking all the extensions you rely on to customize GNOME Shell.

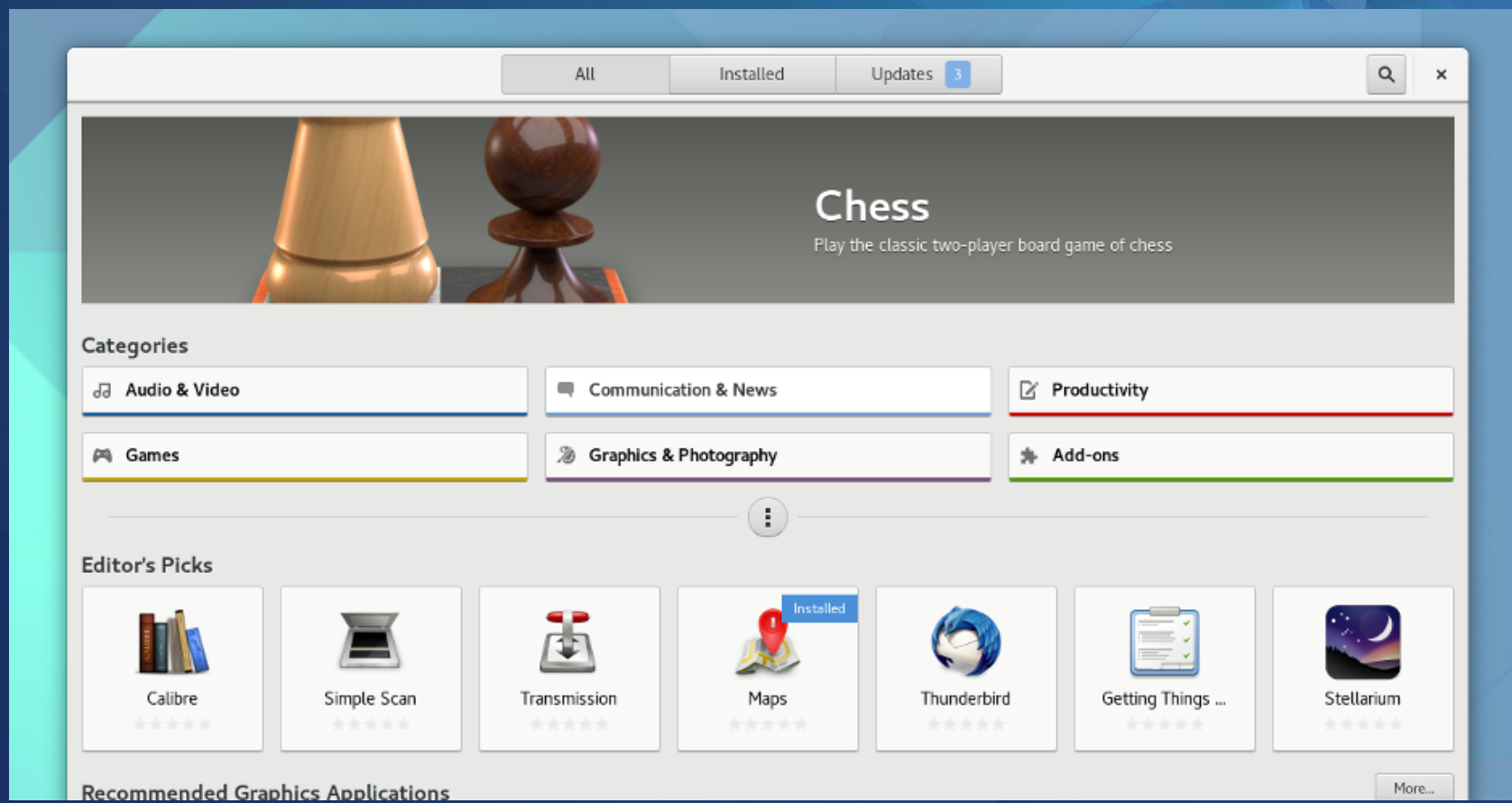
# GNOME 3.22 (1/2)

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- Multiple file renaming in Files
- Integrated compressed file capabilities in Files
- New, redesigned keyboard settings tool
- Revamped landing page in Software
- Easier category browsing in Software
- Variable speed playback in Videos

# GNOME 3.22 (2/2)

- Big updates to Software store



# Wayland

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- Protocol for a compositor to talk through.
- Little moments of tearing that used to happen under X are gone and common tasks like dragging windows are much smoother
- Log into your desktop. Do any activity you would normally do in your daily desktop use: launching applications, configuring displays, etc. Things should work the same way under Wayland that they used to under X.

# Cockpit: Fedora Server (1/3)

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- From [https://fedoraproject.org/wiki/Fedora\\_25\\_talking\\_points#Cockpit:](https://fedoraproject.org/wiki/Fedora_25_talking_points#Cockpit:)
- SELinux Troubleshooter module: similar to Fedora Workstation
  - If system encounters SELinux denial, will display information about the issue and remediation suggestions
  - Without the module, admins have to manually recognize the denial and figure out ways to sidestep the issue.

# Cockpit: Fedora Server (2/3)

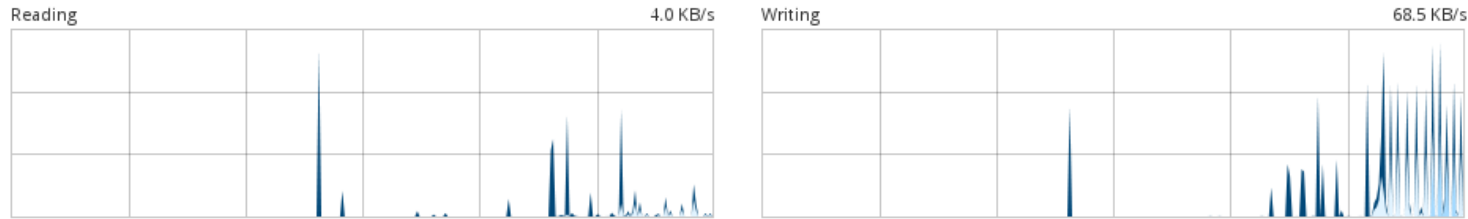
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- Host SSH keys displayed in the dashboard: Clearly view what keys are configured for connections.
- Delivers support for Docker volume and storage management, network teaming, and systemd timer unit setup

# Cockpit: Fedora Server (3/3)

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- Supports multi-step (incl. 2FA) authentication



[Create RAID Device](#) [Create Volume Group](#)

RAID Devices	
RAIDTest (on fedora21.ad.baseos.qe)	2.0 GB
testraider	151.5 MB

Volume Groups	
dockers	7.1 GB
Dockers	6.1 GB
server	14.6 GB

Filesystems		
Name	Mount Point	Size
/dev/server/root	/	5.0 / 13.6 GB
/dev/Dockers	/var/lib/docker	2.7 / 6.3 GB
/Docker	/devicemapper, /var/lib/docker	
/dev/vda1		524.3 MB
/dev/vdi		107.4 MB

Drives	
QEMU QEMU HARDDISK 102 MB Hard DiskR: 0 B/s W: 0 B/s	
VirtIO Disk 15.0 GB Hard DiskR: 0 B/s W: 0 B/s	
VirtIO Disk 2.0 GB Hard Disk R: 0 B/s W: 0 B/s	
VirtIO Disk 2.0 GB Hard Disk R: 0 B/s W: 0 B/s	
LVM PV 1sn5He-h4W3-E30r-07bk-th30-btf5-mYQOH8 on /dev/vdd 4.0 GB Hard Disk	

Storage Journal		
November 25, 2014		
udisksd:	Acquired the name org.freedesktop.UDisks2 on the system message bus	16:53
udisksd:	udisks daemon version 2.1.3 starting	16:53
smartd:	Monitoring 0 ATA and 0 SCSI devices	16:47
smartd:	Try 'smartctl -s on /dev/sda' to turn on SMART features	16:47
smartd:	Device: /dev/sda, IE (SMART) not enabled, skip device	16:47
smartd:	Device: /dev/sda, [QEMU QEMU HARDDISK 2.1.], 107 MB	16:47
smartd:	Device: /dev/sda, opened	16:47
smartd:	Configuration file /etc/smartmontools/smartd.conf was parsed, found DEVICSCAN, scanning devices	16:47



# Other changes (1/2)

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- Full support for Raspberry Pi platform (2 & 3)
- Proprietary drivers in GNOME Software are now easy to install!
- Unicode 9.0
- Rust language support

# Other changes (2/2)

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- Multiple Python version supported (install alongside the latest one)
- Chromium available in the official repos
- Emoji support: Ctrl+Shift+e



# Upgrading to Fedora 25

# Use GNOME Software

-or-

```
$ sudo dnf system-upgrade download --refresh --releasever=25
```

```
$ sudo dnf system-upgrade reboot
```

# Questions?

Visit Booth 305 in the Expo Hall



Contact:

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Additional Thanks To:

Brian Monroe, Scott Williams

Slide Template Courtesy:

Nemanja Milošević

# Survey



<http://bit.ly/2ldxUVH>



Next Up:  
How You Can Help  
With Fedora  
SCaLE15x

Perry Rivera  
Alex Acosta  
Fedora Ambassadors

# Slides



<http://bit.ly/2m1174S>