Life and Death on
fedora
Silverblue

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Highlights

- Silverblue **is** Fedora
- The name is … just a name
- Containers are great, we want to make them easy
Silverblue *is* Fedora

- Continuation of Fedora Atomic Workstation
- Exists since Fedora 25
- Built from Fedora rpms
- Delivered via an OSTree repository
- Applications via Flatpak
What about the name?

Workstation sounds a bit old-fashioned

Sun SPARCstation 10 with CRT monitor, from the early 1990s
What about the name?

Atomic sounds ...dangerous
New name, New logo, New website, New channels

Web:  www.teamsilverblue.org

Twitter:  @teamsilverblue

Discourse:  discussion.fedoraproject.org
What happens to Project Atomic?

- Umbrella project
- Atomic Host, Atomic Workstation, podman, buildah, skopeo, ...
- Atomic Host becomes Fedora CoreOS
- Atomic Workstation becomes Silverblue
- Other projects move to a new place for container tools
First impressions

$ dnf install gtk3-devel
bash: dnf: command not found

$ mount | grep /usr
/dev/mapper/fedora on /usr type ext4 (ro,relatime,seclabel)

$ rpm -q kernel
kernel-4.18.0-0.rc1.git4.1.fc29.x86_64
$ rpm-ostree status
State: idle; auto updates enabled (check; timer inactive)
Deployments:
• ostree://onerepo:fedora/rawhide/x86_64/workstation
  Version: Rawhide.20180623.n.0 (2018-06-23 09:14:16)
  Commit: 942d0fa0d62ed7f260b6e9a833c02a7f5d9bcdd…
...

$ rpm-ostree upgrade
1 metadata, 0 content objects fetched; 569 B transferred in 1 seconds
No upgrade available.
What’s the advantage?

- Image-based
- Atomic updates
- Easy rollbacks
- Efficient downloads
Learning to walk

$ rpm-ostree install gdb

$ systemctl reboot

Can still install rpms → package layering
Learning to walk

```bash
$ buildah from fedora
$ buildah run fedora-working-container bash

$ dnf install /usr/bin/gtk3-demo

$ gtk3-demo
(gtk3-demo:23022): Gtk-WARNING **: cannot open display:
```
Taking flight

A ready-made ‘toolbox’ container:

$ ./toolbox

$ gtk3-demo --run theming_style_classes
Supporting developers

- Container tools: docker / podman / buildah / skopeo
- Mini-openshift / oc / flatpak-builder
- Tools for ‘pet’ containers, a toolbox (soon)
- Terminal support for containers (eventually)
Other alternatives

- flatpak-builder
- GNOME Builder

$ flatpak install flathub org.gnome.Builder
Flatpak for applications

- Isolated from the OS
- Updated independently and safely
- Flathub for content:  [www.flatpak.org](https://www.flatpak.org)
- Soon: Flatpaks built from rpms in Fedora
Not all roses

Rawhide is still rawhide:

- broken composes
- failing boots

Booting the previous image is easy → fearless updates
Not all roses

gnome-shell[2934]: Failed to create backend: Failed to initialize renderer: Missing extension for GBM renderer: EGL_KHR_platform_gbm

Asked to provide the output of eglinfo, I booted into runlevel 3 and:

$ rpm-ostree install egl-utils

$ systemctl reboot
Not all roses

Now, at the boot prompt, I was faced with the choice between

- the broken image
- the broken image + egl-utils
Recovery

$ ostree log fedora/rawhide/x86_64/workstation
commit fa09fd6d2551a501bcd3670c84123a22e4c704ac30d9cb421fa76...
...
<< History beyond this commit not fetched >>

# ostree pull --depth=5 onerepo fedora/rawhide/x86_64/workstation

# ostree admin deploy 76723f34b8591434fd9ec0
When can you try it out?

- February 2018: Fedora Atomic Workstation SIG founded
- Spring 2018: Fedora 28 includes a preview of Silverblue
- Fall 2018: Fedora 29, first Silverblue release
- Spring 2019: Fedora 30, Silverblue ready for prime time (?)
References

Silverblue website: www.teamsilverblue.org

Silverblue docs: docs.teamsilverblue.org

Forum: discussion.fedoraportect.org

Flathub: www.flathub.org

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