

Using Fedora Atomic as workstation

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Fedora Infrastructure

Note

Atomic -> RPM-OSTree

Outline

- Background
- Limitations
- Setting up
- Tooling
- My experiences

Why use it?

- Entire root filesystem readonly
- Root filesystem signed
- Easy to revert to previous tree
- Fun!

Limitations

- No workstation trees available yet
- Very little documentation and bugs slow
- Adding packages is tricky and slow
 - Docker
 - Virtualization
 - Flatpak?

Setting up

1. Create a custom tree
2. Deploy a tree
3. Provision
4. Work

Creating a tree

Decisions to make:

- Initial package set
- OS Version
- Delivery mechanism
- Compose machine

Creating a tree

Preparations:

1. Create initial treefile
2. Set up scripts and automation
3. Generate PGP signing key

Note: Treefile doesn't support comps groups.
expand-treefile.py will expand these for you.

Execution:

1. Run rpm-ostree compose
2. Publish built tree
3. Install tree
4. Test, probably jump to 1 lots of times

Deploying tree

Kickstart with either:

- Netinstall image
- PXE

```
ostreesetup --osname=... --url=...
```

Goal: fully automated, regular reimage.

Deploying tree

Special post-deployment tooling:

Secure Provisioning (SecProv)

- After preparation, securely set LUKS, GRUB, root and user passwords

Experiences

- Takes a while to get used to
- Rollbacks quite nice

Resources

- <https://github.com/puiterwijk/puiterwijk-Atomic>
- <https://github.com/puiterwijk/secprov>
- <https://github.com/puiterwijk/development-environments>
- <https://patrick.uitervijk.org/>
- puiterwijk @ FreeNode

Questions?