ATOMIC STATE OF THE UNION

Lightning Talk: The latest and greatest in Red Hat’s container initiative

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WAT?

What is Atomic (for the uninitiated)
Atomic Host
A faster moving, purpose built host

Making Atomic Host modular and further isolating software stacks from OS Updates

- Built for containers, hypervisors, embedded systems, storage & network appliances, etc
- rpm-ostree only
  - Highly secure read-only OS (/usr)
  - Reliable upgrade & rollback
  - Flexibility via host extension model
Releases

We’ve been averaging one release about every 5-6 weeks

* Excludes asynchronous security updates
Multi-Docker

Some thought we were going too fast, others thought to slow!
OSTree Unlock

Others wanted easier ways to troubleshoot Atomic Hosts
Devmode

Developers asked for an easier way to use Atomic on their workstation
Features

In fact, we’ve had more than 85 significant features introduced in the last year.

- Multiple Docker Versions
- OSTree Unlock
- Package Layering
- Runc
- Skopeo
- Devmode
- System Containers
- MicroDNF
- Containerized Kubernetes
Fedora Atomic Host

At the start of the year we started targeting a release every two weeks (compared to Fedora’s 2 times per year cadence)

See things first in Fedora!

- 18 releases in the last year
- That’s almost one release every three weeks!
Upstream Efforts

- SELinux support with OverlayFS
- POSIX compliance for OverlayFS
- user namespaces
- Shiftfs
- Container live migration
- OpenShift Origin on CentOS and Fedora Atomic Host
- Ongoing containerization
Credits

- Tortoise and hare - [https://commons.wikimedia.org/wiki/File:The_Tortoise_and_the_Hare_-_Project_Gutenberg_etext_19993.jpg](https://commons.wikimedia.org/wiki/File:The_Tortoise_and_the_Hare_-_Project_Gutenberg_etext_19993.jpg)
- Lego Man - [https://pixabay.com/p-499799/?no_redirect](https://pixabay.com/p-499799/?no_redirect)
- Confused - [https://www.flickr.com/photos/83633410@N07/7658298768](https://www.flickr.com/photos/83633410@N07/7658298768)
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