

LXD: taking system containers to the next level Serge Hallyn @ CANONICAL .com

LXC

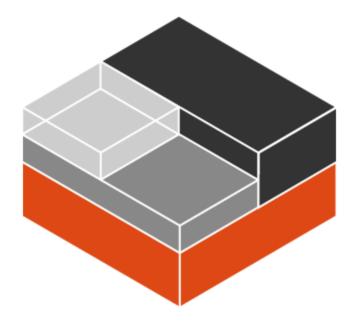
- Container manager
 - first public release in 2008
 - drives kernel features to present containers to userspace
- very configurable
 - flexible sharing with host
 - build containers by hand or with templates
 - stateless
- API + bindings (python, go, haskell, lua, ...)
- host-local, in fact container-local

LXD

- extend LXC over the network
- REST API over TLS
- openstack plugin
- clean command-line client
- improved container workflow
 - Image based
 - Each full LXD is also an image server
 - Image-only servers (images.linuxcontainers.org)
 - Clients can publish containers/snapshots as private or public images
- secure by default

LXD: the future

- live migration support
- API: purposely generic
 - Working with third parties implementing the LXD api
- remove some current limitations
 - Filesystem mounting
 - Audit
 - LSM stacking
 - Loop
- Hardware security enforcement



Questions?

github.com/lxc/lxd github.com/lxc/lxd/tree/master/specs