ubuntu

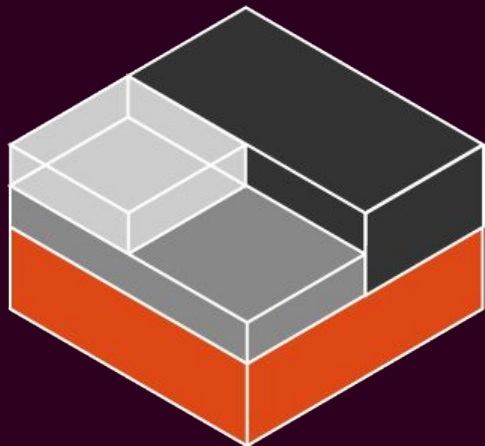# LXD - The container lighter-visor

FOSDEM 2016
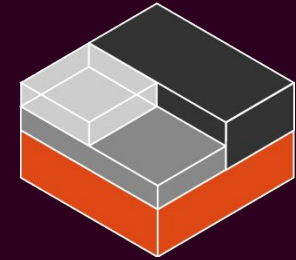Brussels, Belgium

Stéphane Graber
LXD project leader, Canonical Ltd.

stgraber@ubuntu.com   @stgraber
https://www.stgraber.org

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LXD: the container lighter-visor

➔ Simple
   Clean command line interface, simple REST API and clear terminology.

➔ Fast
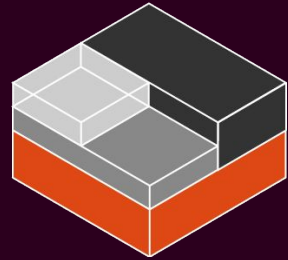   *No virtualization overhead so as fast as bare metal.*

➔ Secure
   Safe by default. Combines all available kernel security features.

➔ Scalable
   From a single container on a developer's laptop to thousands of containers per host in a datacenter.

LXD: the container lighter-visor

What it **IS**

| nova-compute-lxd | command line tool | your own client/script ? |

LXD REST API

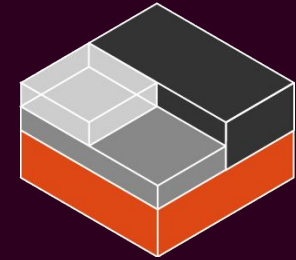| Host A	Host B	Host C	Host D	Host ...
LXD	**LXD**	**LXD**	**LXD**	**LXD**
LXC	**LXC**	**LXC**	**LXC**	**LXC**
Linux kernel	**Linux kernel**	**Linux kernel**	**Linux kernel**	**Linux kernel**

LXD: the container lighter-visor

➔ Another virtualization technology
   LXD tries to offer as similar a user experience as that of a virtual machine but it doesn't itself virtualize anything, you always get access to the real hardware and the real native performance.
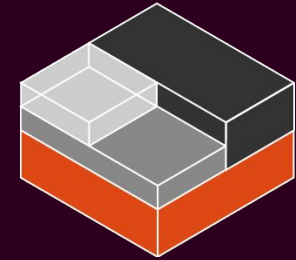
➔ A fork of LXC
   LXD uses LXC's API to manage the containers behind the scene.

➔ Another application container manager
   LXD only cares about full system containers and doesn't care about what runs inside the container.
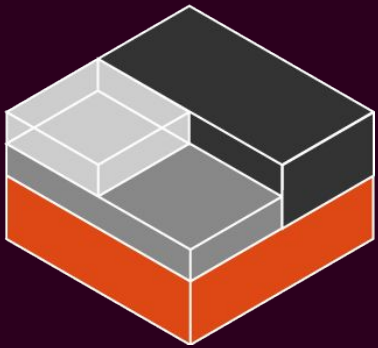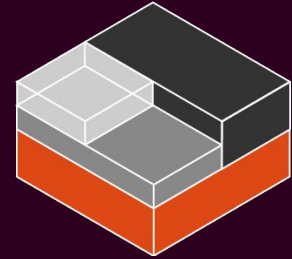
LXD: the container lighter-visor

➔ Integrates with Ubuntu OpenStack

➔ Easy to interface/interact with

➔ Perfect for idle workloads

➔ Direct hardware access

➔ Negligible overhead

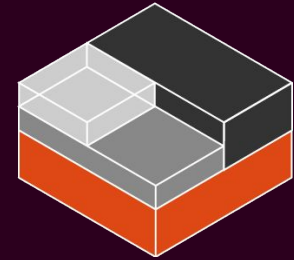➔ Fine grained resource limits

Demo time

LXD: the container hypervisor

➔ Improved live migration

➔ Resource usage reporting

➔ Support of all LXD features with OpenStack

➔ Juju support for LXD containers

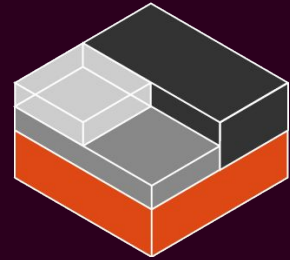➔ Support for running Docker inside LXD

LXD: the container hypervisor

Let's recap

→ Simple but powerful REST API to manage infrastructure containers

→ Image based

→ Trustable containers

→ Scalable

→ Designed with developers and enterprise in mind

LXD: the container hypervisor

➔ Written in Go

➔ Fully translatable

➔ API client in Go and python

➔ Apache2 licensed

➔ No CLA

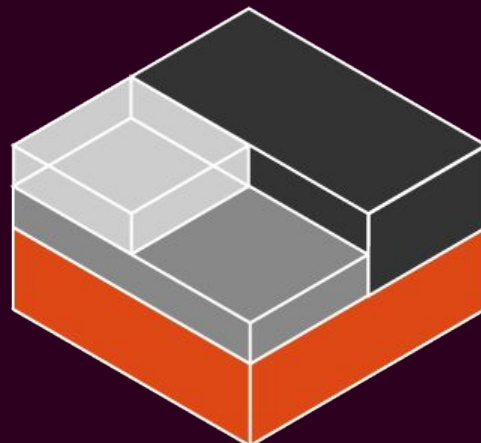git clone git://github.com/lxc/lxd

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stgraber@ubuntu.com   @stgraber
https://www.stgraber.org

https://linuxcontainers.org/lxd
https://github.com/lxc/lxd

ubuntu

Questions?

Try it yourself at: https://linuxcontainers.org/lxd/try-it

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