

Storage management is more than CSI driver

How to solve issues with PV's

Yusuf YILDIZ
yusuf.yildiz@linbit.com

Who we are

Linux Open Source Block Storage Pioneer



IOPS world record



Official Coding in
Linux Kernel since 2009



20 years block
storage experience



Leader in HA, DR,
Software Defined Storage

What are the issues?

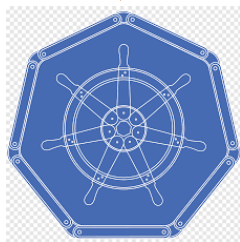
LIN^{STOR}

Common
Interface



CSI DRIVER

Install, Implement
Issues



LINSTOR
OPERATOR

Data
Locality



STORK

Long
Failovers



LINSTOR HA

Deployment
Serialization



YAML

Management
Issues



KUBECTL PLUGIN

How Does it Work?

In Kernel data-path

- Reduce number of context switches
- Saving on CPU/memory resources
- Minimal latency for block-IO operations
- Optional load-balancing for READs

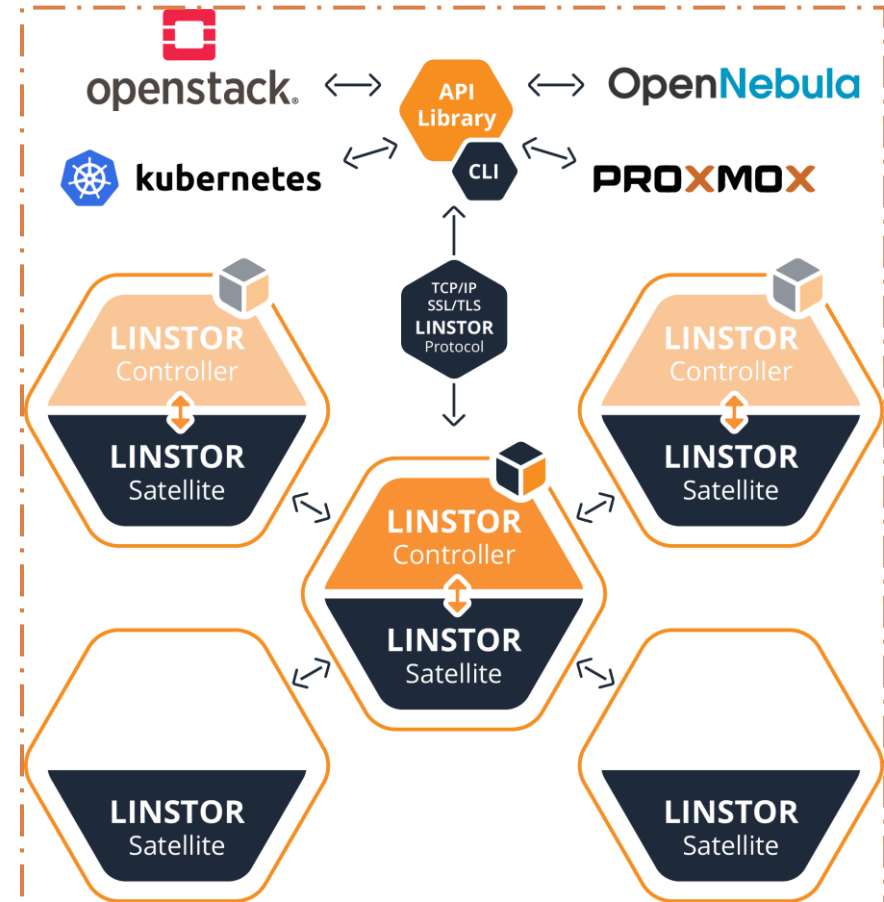
Build on existing components

- DRBD, LVM, ZFS, LUKS, VDO, ...
- Help day2 operations by leveraging on the operation teams prior knowledge
- Build on the shoulders of giants

Hyper-Converged

Very well suitable for hyper-converged deployment

- Reduced network load for reads
- Reduces latency
- LINBIT SDS' Low resource consumption leaves most of CPU and memory for workload. About 0.5% of a single core are consumed by DRBD under heavier IO load (measured with an analytics DB)



LINSTOR CONNECTORS

LINSTOR



PROXMOX



Thank You

Questions & Answers



yusuf.yildiz@linbit.com



<https://www.linbit.com>