

Pete Eby & Michael Galloway March 2017

ALICE/USA CADES Infrastructure

Current Infrastructure

Ongoing Capabilities

Future Directions

CADES Alice Colleagues

ALICE/CADES Colleagues

Whis is helping with this effort

Pete Eby & Michael Galloway - Principals

Susan Hicks & Ryan Prout - Networking

Other CADES Team Members

ORNL::CE Current Capabilities

60 Compute Nodes (1,300 cores/7TB ram 18 kSH06)

10Gb/s Data Fabric

1Gb/s Mgmt Fabric

Torque/Maui Scheduling





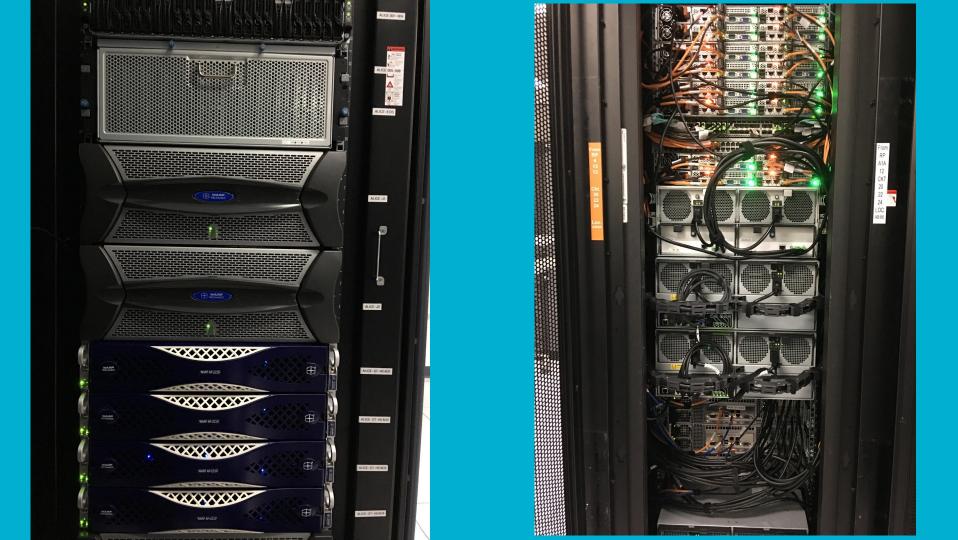
ORNL:SE Current Capabilities

1PB Current (1.5 installed)

4 FST's

- 10GB to each FST
- 4x 60 drive JBODs with 4TB drives
- 1x 60 drive JBOD with 10TB HGST Helium
- Multiple 6GB SAS connections

ZFS used for underlying file system



ORNL/ALICE Network

Management Network -- Some Capacity

Data Network -- At Capacity

Would need to add hardware for additional network services

ORNL/ALICE Power/Space/Cooling

Current Usage - About 80RU

Expansion Capability - Between 60RU and 80RU



ORNL/ALICE Future Directions

OSG Integration

Opportunistic Compute on CADES Compute Resources

LHCONE Integration

CE Capacity Increase (In Planning)

Data Processing Facility Scoping

Containerization of Infra Systems?