

# Oxford Site Update 2023 HEP SYSMAN



# Tier2 Summary

- 122 Worker Nodes, 6022 Cores
- Centos 7, ARC CE 6, HTCondor 9
- Storage-less, XCache
- 20Gb Network Uplink / 100Gb Backbone
- New AHUs in Data Centre PUE 1.5 > 1.2

# Plans

- Centos7 (EOL June 2024) to Alma9
- Puppet to Ansible
- HTCondor 9 to HTCondor 10
- ARC CE 6 to ARC CE 7?
- New worker Nodes
- XCache Virtual Placement

# Progress: Centos 7 to Alma 9

- Local cluster interactive servers ready for Beta
- Local cluster HTCondor 10.5 with token security ready for Beta testing
- Many infrastructure servers already running Alma 9
- Experience mostly positive
- No Tier 2 servers migrated yet.....

# Progress: Puppet to Ansible

- Centos 7 all provisioned with puppet
- EL8 and EL9 all provisioned with Ansible
- Ansible so much simpler!! Easier to “read”
- Use only built-in modules. EL8 to EL9 migration very straightforward.
- No going back ;)

# Progress: HTCondor 9 to 10

- Local test cluster running HTCondor 10 on EL9
- Moved from legacy password authentication to new token authentication mechanism.
- Like using “roles” in configuration. Less “boiler-plate”. Config simpler.
- Only “feature” release available for EL9 (10.5) LTS version not yet available.

# Progress: New Worker Nodes

- Just ordered 10x new worker nodes
- Lenovo ThinkSystem 1U SR645
- 2x AMD EPYC 7763 64-core CPU
- 256 logical cores / 1TB memory per node
- 2560 logical cores to replace 1536 “guzzlers”
- Hardware not supported by Centos7
- KVM or EL9?

# XCache Virtual Placement

- Have working Xcache server for ATLAS Jobs running on EL8
- Vip and others trying to configure Virtual Placement XCache server on EL9
- Ran into compatibility problems with OpenSSL v3 on EL9 server and OpenSSL v1 on Centos7 client.



# Worries!

- Can we migrate everything to EL9 in 12-months
- Only have 0.5FTE
- Cluster OK, but what about Argus, Bdii, VOMS etc.