Evolution, design, management and support for the CMS Online computing cluster

MARC DOBSON
ON BEHALF OF
CMS DAQ TEAM
Modular and versatile configuration and management system using Puppet
- Foreman for provisioning
- Flexibility to support a significant number of groups, heterogeneous configurations and software

System and health monitoring using Icinga2
- Including notifications on non standard metrics and failures

Performance metrics and plotting: investigations into Collectd, Grafana for full data correlation

Mechanism of Software repository snapshots, and dropbox software to allow user updates to their software

Flexible and redundant core infrastructure to support DAQ and sub-systems:
- High availability NAS technology
- Network redundancy and failover
- oVirt clusters allowing high availability through rapid migration of VMs