

Linux Future and ATLAS Distributed Computing

HEPIX
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- 3 areas affecting ADC:
 - Grid worker nodes
 - Only require CVMFS and Python from the OS
 - Payloads are run in Singularity containers
 - Any Linux flavour should work for the base OS (e.g. already running on Ubuntu sites)
 - Grid middleware services
 - Computing and Storage Elements, e.g. HTCondorCE, ARC-CE, dCache, ...
 - Outside of ATLAS control, but sites should be able to run standard WLCG services
 - ADC central services
 - Machines in CERN data centre for running Rucio, PanDA, software builds, etc
 - Almost all currently running CentOS7
 - Will follow CERN strategy
 - But likely many will skip CentOS8 Stream and go directly to CentOS9 Stream (or whatever flavour CERN goes with)
- OS upgrades of any of these during Run-3 is in general not a problem
 - Unless the impact (downtime) is above the level of regular maintenance
- Not discussed here:
 - Online, TDAQ, for which migrations during the run may be a more significant concern
 - Software