

Update from CMS

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Status of the infrastructure (1/2)

- The CMS Submission Infrastructure (based on glideinWMS) is compatible with dual stack, both at the central nodes and at sites
- schedd nodes for analysis
 - Configuration changes to enable dual stack have been deployed in production
 - Only change needed it to set `PREFER_IPV4 = False` after draining the node and restart
 - Finished on 3 October
- schedd nodes for production
 - Similar but slower process due to the nodes being always very busy
 - Configuration change applied together with WMAgent software updates to minimize downtime
 - Found a bug in HTCondor at FNAL by which authentication tokens do not work correctly if IPv6 is preferred
 - Migration of the schedd nodes at CERN is proceeding, it will take some weeks to complete

Status of the infrastructure (2/2)

- Slots at sites
 - About 1/3 of the connections between worker nodes and the CERN collector goes via IPv6 (or at least IPv6 preferred)
 - Already a very good result, considering that WLCG does not require IPv6 on worker nodes!
- IPv6-only test cluster at CERN running Hammercloud jobs since several months without issues

Status of storage

- CMS is the experiment with the highest fraction of Tier-2 storage accessible via IPv6 (about 95%)
- Only a few sites missing, but progress is being made
 - Vienna: GSIFTP issues bypassed by disabling the protocol
 - Swierk: doing some tests to resolve a routing issue
 - MIT and NCHC: on hold

Conclusions

- IPv6 for job submission and management widely used in production
 - Occasional issues, e.g. with tokens, but no show-stoppers
 - Sites with IPv6 on WNs work fine and there are many of them
- IPv6 on storage almost ubiquitous, transparent to the data management