ATLAS IPv6 Status and Plans

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ATLAS status

- Master JIRA: https://its.cern.ch/jira/browse/CSOPS-1071
- Assuming site has dual stack storage. WN will talk to the following central nodes:
- For Panda:
 - Production Panda Servers: aipanda03[0-7].cern.ch
- For Rucio:
 - Auth nodes: rucio-auth-prod-0[1,2].cern.ch
 - Prod nodes through 3 HA proxy frontends ruciolb-prod-0[1-3].cern.ch
 - All use http(s).



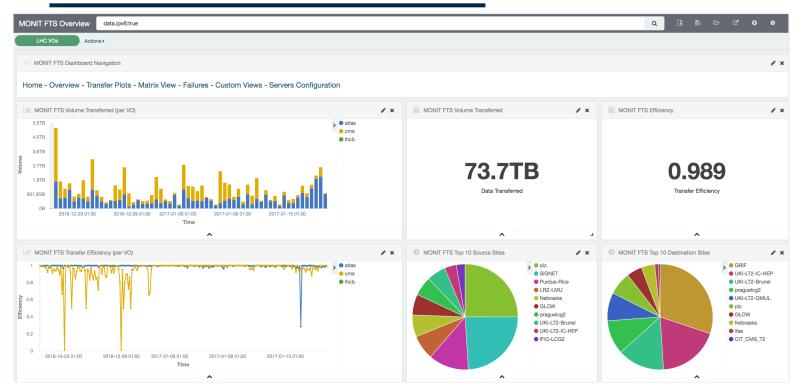
Dual Stack Storage

- ATLAS encourage all sites to upgrade their storage to dual stack.
- Only CERN FTS is configured to allow FTS transfers via IPv6 currently.
 - BNL will upgrade early February 2017.
 - RAL will upgrade eventually.
- Currently: If a site upgrades to dual stack contact DDM support so they can switch you to CERN FTS.

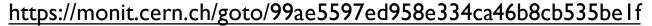




FTS Transfers



- Dual stack storage appears to be working.
- Add "data.ipv6:true" to any FTS monitor page for IPv6 only traffic.







Rucio

- At the end of last year, Rucio team migrated all nodes to CC7.
 - Enabled IPv6 at the same time.
- All required nodes are now done!
- Rucio UI web front (rucio-ui.cern.ch) also made dual stack.







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IPv6 only CPU

- We have been testing using QMUL and Brunel as they have some IPv6 only CPU already:
 - Brunel has a WN behind normal queue.
 - Production jobs not affected.
 - QMUL has IPv6 WN as part of their farm. Use NAT64 to handle requests to external IPv4 machines.
 - Production jobs not affected.





<u>Panda</u>

- Panda production nodes still IPv4 only.
- aipanda007.cern.ch (dev node is dual stack)
 - Pilots running against Brunel / QMUL.
 - Debugging problems with pilot code.
- Still believe we can meet April 2017 deadline.

• Other services (Frontier, APF, AGIS) we intend to have upgraded by 2018.





Conclusions

