



DM and DT services: update

Lucia Morganti



Tools and technologies

We carried out an extensive investigation to know exactly which DM and DT protocols and which AAI are used/wished by every experiment @Tier1.

https://docs.google.com/spreadsheets/d/1vFtRWLWUUAy4V9mOel0nN6qIWz9TzOMDJ_HgiMXPNs/edit#gid=2119846053

- Growing interest for token-based authentication (LHC, AMS, Belle, Compass, CTA, Dampe, Enubet, Famu, Gerda, Juno, Km3Net, **Limadou, Padme, Virgo**).
- Dataclient basically not used any more
- Growing interest for WebDAV and XrootD as DM/DT tools (**Compass, Glast, Limadou, Padme, AMS**)



XrootD

- For AMS, installed and configured in ds-906.cr.cnaf.infn.it
 - Both server and manager (redirector)
 - Jobs both read and write with xrootd
 - In the dedicated /storage/gpfs_ams/xrootd, AMS has successfully replicated the directory tree which is equivalent to the one @CERN (EOS)
 - Waiting for CERN in order to proceed with XrootD federation
-
- Open action: install xrootd for Compass, Limadou and Padme in ds-914.cr.cnaf.infn.it (xrootd endpoint dedicated to small experiments)



WebDAV with tokens for Virgo

- Activity in the context of “CNAF-Lyon data transfer for Virgo”: FTS works with GridFTP but we would like to use it with HTTP and Third-Part-Copy.
- Tokens are necessary given FTS does not support username/password (in use @Lyon). Lyon is still testing the plugin for tokens in iRODS.
- StoRM WebDAV with support for TPC is installed in ds-815.cr.cnaf.infn.it
- A dedicated IAM instance has been configured: <https://iam-virgo.cloud.cnaf.infn.it>, and we asked for integration with Edugain, as agreed with Luca Rei.



WebDAV with tokens for Virgo

- Once registered, an access token can be retrieved @ <https://iam-virgo.cloud.cnaf.infn.it/iam-test-client/> (or via bash script)
- With that token (no need for proxy), the dedicated WebDAV storage area can be accessed:

```
davix-ls --capath /etc/grid-security/certificates/ -H "Authorization:  
Bearer ${AT}" https://gridftp-storm-archive.cr.cnaf.infn.it:8443/virgowd/
```

- The same approach could be implemented for the other interested non-LHC experiments, i.e. Limadou, Compass, NEWSDM
 - Multiple IAM instances vs group-support in the same IAM instance (need development)?



Dedicated xfer nodes for DOMA TPC

- Currently, the endpoints used for DOMA TPC tests are ds-808 and ds-908, which are also WebDAV and XrootD endpoints for ATLAS
- Being a “sound endpoint” in most of the tests run daily so far, we would like to provide dedicated nodes to DOMA TPC stress tests.
- xfer-1 (ds-816) and xfer-2 (ds-916) have been installed and configured with the latest version of StoRM WebDAV which implements basic support for Third-Party-Copy
- As soon as Andrea Ceccanti will have tested them, we will provide both nodes to DOMA TPC for their stress tests (vo DTEAM)