

DPM usage by ATLAS

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- **Current N2N mapping working as expected**
- **Will be simplified with new naming convention (Rucio)**
 - **Path fully deterministic from filename**
 - **File renaming :Remotely through Webdav under evaluation**
 - **Expected timescale to stop LFC access : January 2014**

Number of directories

•New naming convention : `<scope>/01/1f/f4/<filename>`

→ Potentially : $1000 (\text{scope}) \cdot (16)^6 \sim 17$ billion directories within SE

Technically acceptable ?

- **Data access through xrootd and webdav under evaluation**
 - **few DPM sites requested to migrate to latest necessary DPM version (1.8.4)**
- **General migration to DPM 1.8.3 and further driven by EMI**
 - **But some sites down for few days for migration : *ISSUE***
- **No forum to agree between experiment and dev if upgrade necessary**
 - **If just related to stability → site/dev issue**
 - **If new or improved fonctionnality (not for site admin) → exp./dev. issue**

Life without srm : Accounting

- **Accounting necessary to detect and protect against dark data**
(physical files not known to DDM/LFC)

- **All 'top directories' can be mapped to a unique space token**

- **../atlasscratchdisk/... → ATLASSCRATCHDISK**
- **../atlasdatadisk/ → ATLASDATADISK**

→ **accounting can be made relying ONLY on file path, rather than space token**

ATLAS plans to migrate to a world without srm(ex : griftp) but needs online accounting based on file path ('du')

Life without srm : FTS3

- **New functionality in FTS3 : Able to reuse gridftp session**

→ **reduce number of authentications**

(question : restricted to files from same disk server ?)

- **Interesting for small file transfers**

BUT

- **'gridftp' does not know about space token (previous slide)**

- **'gridftp' in DPM still get files through headnode**

(bottleneck for massive transfers)

→ **ATLAS requests that gridftp protocol implementation in DPM**

- **authenticates and resolves the mapping**

to disk server done at headnode level

- **access physical file directly to disk servers without authenticating again**

(apparently similar way as implemented for http)

- **ADC Jamboree next week at CERN**