[RD]MS|DFC

Christophe HAEN 6th DIRAC Workshop 23-25 May 2016

RMS: minor changes

- Minor fixes here and there
- v6r14
 - Do not always use the ReqProxy (in v6r13 but used more in v6r14)
 - Fixes and optimization of getBulkRequests
- v6r15
 - Better monitoring and control of ReqProxy
 - ReqProxy can skip over buggy Requests

RMS: minor changes

- v6r15
 - Slight change in the Request State machine, so watch out
 - Within one Request, Op1 Waiting and Op2 Failed:
 - Before: Request Failed
 - Now: Request Waiting

DFC

• V6r14:

- Web portal works with LHCb managers
- All tools, tests scripts & docs for LFC -> DFC available! (if you want support, that will cost you a hell lot of good drinks and food)

DFC

- V6r15:
 - For xxx in ["Owner", "Group", "Mode"]:
 for yyy in ["Directory", "File"]:
 suppress "set%s%s"%(yyy, xxx) method
 - Replaced by changePathXXX
 - Recursive !!!

- SE cache thread safe & VO aware
- Disk storages are preferred over tape
- Third party copy in native XRoot plugin
- SRM_FILE_BUSY: allow for deletion ([2470])
- FTS: memory leak (more episodes than Doctor Who!) -> reuse context

- Standard metadata set for SE [2779]
- Sanitize FC input, and map back user insanities for return at the plugin and FileCatalog levels
- FC.hasAccess: signature swap (method, lfns) -> (lfns, method)
- S_ERROR and unicode original playground
- Gfal2 plugins a bit more certified (still dependencies missing, and final certification tests)
- FTS:
 - Use of banning mechanism from RSS
 - New underlying library for connections (requests)

- Conditional instanciation: [2649]
 - Catalogs to be used under conditions
 - Different from permissions!
 - Boolean expressions
 - [Filename=startswith('/lhcb') & !Filename=find('/user/')] |
 Proxy=group.in(lhcb_mc, lhcb_data)
 - Easily extendable (currently: User, Group, VOMS, filename)
 - Still lack of production tests:) (but fair bunch of unit & certif tests)

- Streamlining FileCatalog object [2657]
 - FC plugins declare their interface -> UPDATE YOUR EXTENSION
 - Base class for mandatory methods (hasAccess, exists, getPathPermissions)
 - Methods are taken from the master catalog
 - Explicit instanciation of catalog now follow the CS definition (before: all masters, read and write)
 - Careful with that axe Eugene: explicite instanciation of a catalog will result in failures if not all the called methods are implemented ("no error returned from plugin")

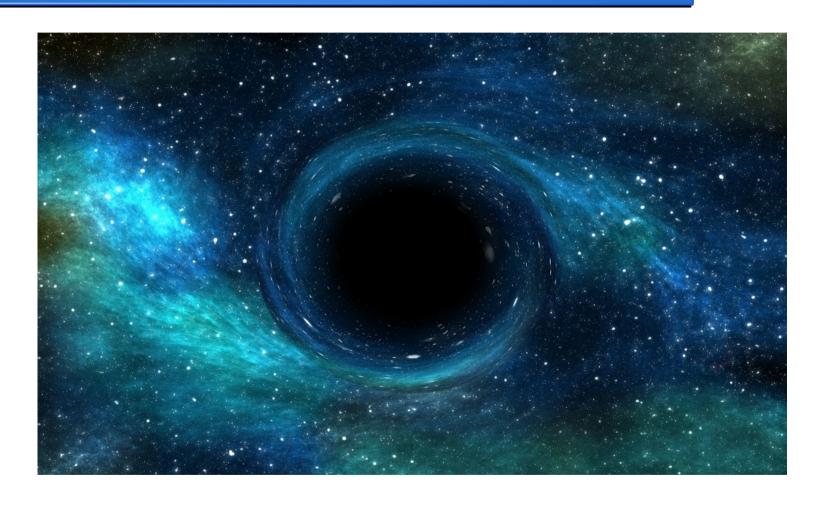
Future of the DMS already implemented but waiting for the pull request to be merged

- Data Logging: still useful but obsolete
- New FTS3 only [2826]
 - Not RMS driven anymore
 - Copying & Staging (also for jobs)
 - Support user files transfers
 - SQLAlchemy
 - Multiple agents
 - FTS activities and priorities
 - Compatible with monitoring message consuming
 - Needs rework because waited
 - Needs certification

Future of the DMS already implemented but waiting for the pull request to be merged

- Multi-protocol support [2668]
 - Possible list of protocols evaluated
 - Differenciates third party, access and write protocols
 - Global but can be specified at SE level
 - Storage plugins aware of input/output capabilities
 - Gfal2...

Future developments



"They talk of days for which they sit and wait, all will be revealed"