

[RD]MS|DFC

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# 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 !!!

# DMS: v6r14

- 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

# DMS: v6r15

- 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)

# DMS: v6r15

- Conditional instantiation: [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)



# DMS: v6r15

- 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 instantiation of catalog now follow the CS definition (before: all masters, read and write)
  - Careful with that axe Eugene: explicit instantiation 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
  - Differentiates 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”