



New DM Clients and retirement plans for old ones

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Overview

- Retirement plan for gfal / lcg-util
- Status of gfal2
- Status of gfal2-util
- Release cycle
- Overview of gfal2-util
- More remarks about the LFC support
- Roadmap

Retirement plan for **gfal** / **lcg-util**

- Already on maintenance-mode only
 - Only critical bug-fixes
 - No new features
 - Including no extra work on IPv6 support
- Remember remember the 1st of November (2014)
 - Support for the old **gfal** and **lcg-util** will be completely stopped
 - They will be removed from EPEL repositories
- As discussed in the GDB 2013/09/08

Status of gfal2

- Gfal 2.3.0 available in EPEL
 - <https://admin.fedoraproject.org/updates/gfal2>
- ABI and API incompatible with gfal
- Lots of advantages
 - Write your application once, work with several protocols
 - srm, gsiftp, http, xrootd, ...
 - Reduced set of dependencies
 - Install what you need
 - Isolation
 - Modifications in one plugin leave others unaffected

Status of gfal2-util

- Built on gfal2 python bindings
 - Fully thread safe and Pythonic
- Ready for use
- But only available in our RC repository
 - Released 0.2.0, but waiting for review
 - Any reviewer in the room? 😊
 - https://bugzilla.redhat.com/show_bug.cgi?id=1027383

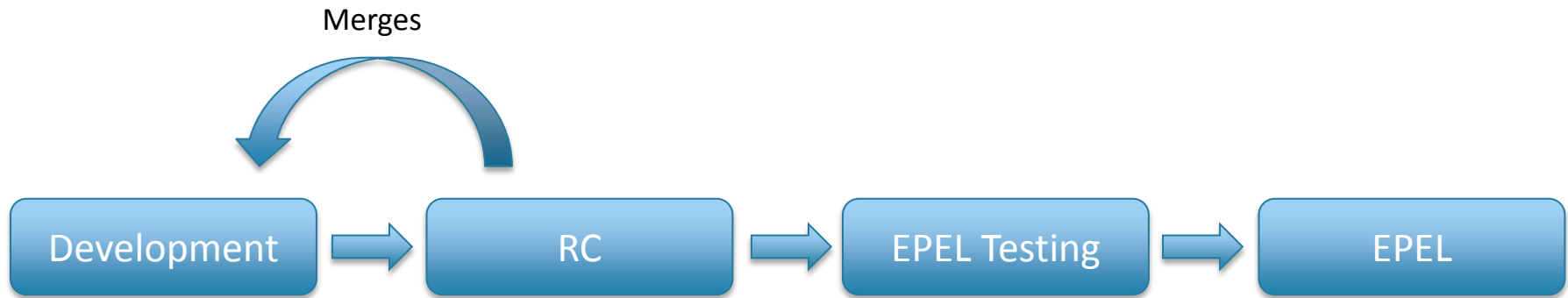
Status of gfal2-util

- Advantages:
 - Robust timeout support
 - Verbose and ultra-verbose mode available
 - No more cryptic errors (EINVAL)
 - All gfal2 supported protocols for free!
 - srm, gsiftp, http, dav, xrootd, file

Release cycle

- Distribution
 - EPEL 5 and 6
 - Application Area
 - Already removed from the EMI repositories
- Frequency
 - Minor releases, as needed
 - If there is something to fix, and as quickly as urgent is the bug fix
 - Major releases, depending on
 - Number of new features, and their urgency
 - Time since last release
 - There may be some coupling with FTS3 release cycle!

Release cycle for gfal2 components



- Increase of minor version
- New functionalities
- Non critical bug fixes
- Nightly tests
- Deployed in the FTS3 Development Services

- Increase of revision number
- Critical bug fixes
- Deployed in the FTS3 Pilot Service

- Increase of release number
- “Quarantine” stage of a release
- Packaging fixes
- Critical patches
- Beta testers welcome!

- Full production release

Overview of gfal2-util

Lcg-util	GFAL2-Util
lcg-cp	gfal-copy
lcg-ls	gfal-ls
lcg-del	gfal-rm
lcg-lr	No CLI available, API is there
lcg-get-checksum	gfal-sum
lcg-geturls, lcg-gt	gfal-xattr
lcg-stmd	Not available (?)
lcg-aa, lcg-cr, lcg-la, lcg-lg... and other catalog related cli	Partially available (gfal-xattr, gfal-copy and/or combination of commands)
-	gfal-save, gfal-cat

More remarks about the LFC support

- The LFN:// is deprecated
 - Guessing the catalog from the BDII or environment is non-deterministic
 - Hard to debug
 - More code, more lines, more bugs
 - We aim for simplification!
 - Can still be used, but LFC_HOST need to be defined
 - Or configured in /etc/gfal2.d/lfc_plugin.conf
- Long live the LFC://!
 - Catalog host name as part of the URL
 - lfc://prod-lfc-shared-central.cern.ch/grid/
 - ginfo can easily be used to retrieve the LFC host from the BDII if needed

More remarks about the LFC support

- Example

```
export LFC_HOST=`ginfo Endpoint InterfaceName=lcg-file-catalog URL |  
head -n 1 | cut -d ' ' -f 2`  
gfal-ls lfn://grid/vo/path
```

Roadmap

- Gfal 2.4.8 tagged and ready for release
 - It has been deployed in `fts3-pilot.cern.ch` for several weeks already
 - Includes several fixes needed for FTS3
 - Specially related to checksums
 - Partial listing of directories when using SRM
- Gfal2-util on review status
 - First functional set of command line tools

Roadmap

- For Gfal 2.5
 - LFC registration support
 - Multiple BDII support
 - Improved performance for extended directory listing (`ls -l`)
- For gfal utils 0.3
 - We need your feedback!

Roadmap

- Copy & Register will be a two step procedure

```
$ gfal-cp srm://source.ch/path/file srm://destination.uk/path/file  
$ gfal-cp srm://destination.uk/path/file lfc://lfc-host.cern.ch/grid/myvo/file
```

Questions?