



## **Middleware Status**

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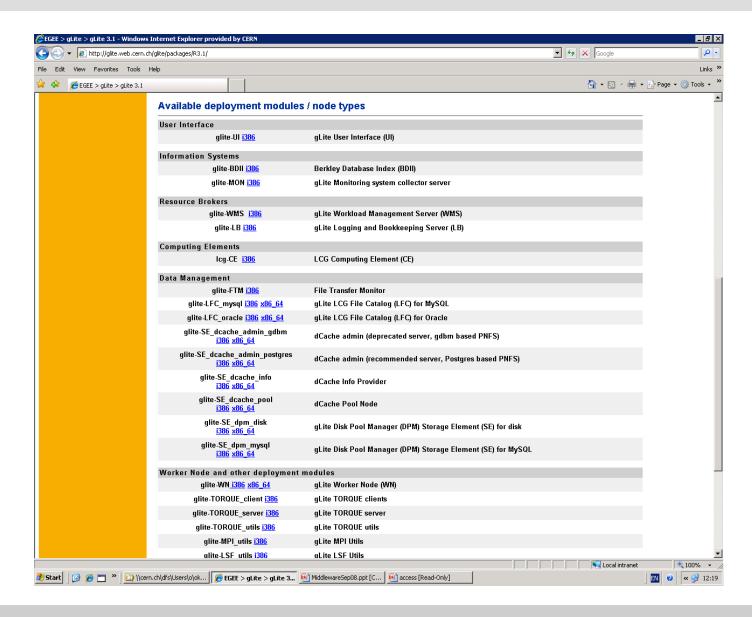
## Overview



- Middleware baseline
- Middleware roadmap
- Client distribution

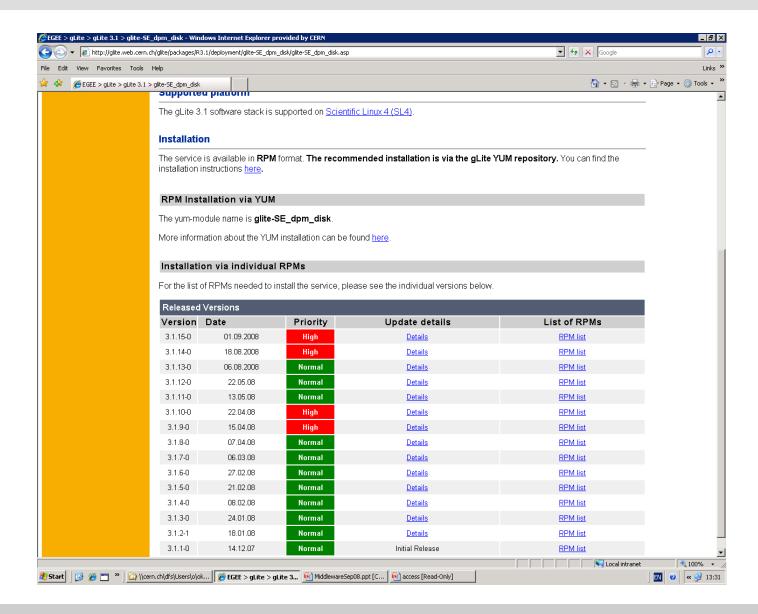
## gLite releases





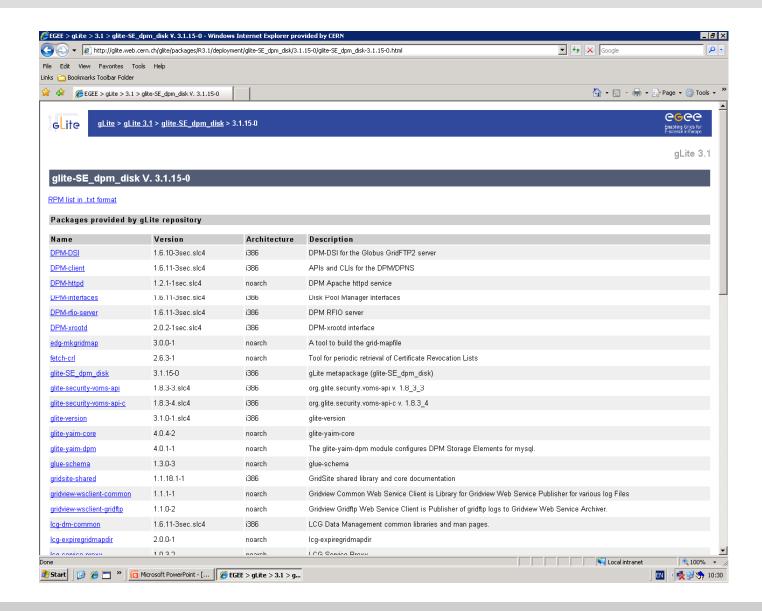
# Summary page for DPM\_disk





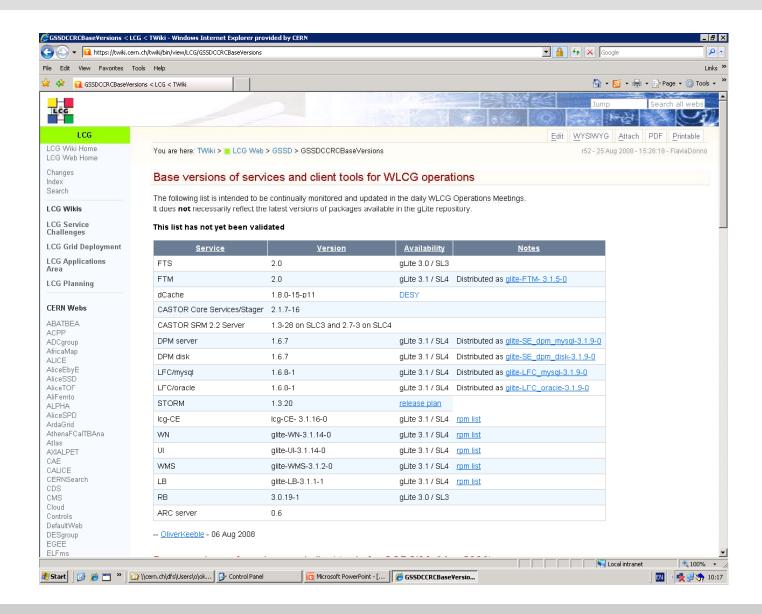
## The rpm list





### Baseline wiki





## What's also available



- DPM 1.6.11
  - Bugfix release
- DPM 1.6.10
  - Major release, DICOM, IPv6, many bugfixes
- DPM 1.6.7-4
  - Umask issue fixed (#34799)
- LFC 1.6.11
  - Bugfix release
- LFC 1.6.8-1
  - Bulk methods for LCHb and ATLAS
- Clients
  - gfal 1.10.17-2
  - lcg\_util 1.6.15-1

### WLCG Middleware Baseline



- How should this list be interpreted?
  - As a set of recommended versions?
  - As a set of minimum versions?
- How is this list maintained?
  - WLCG Daily ops meetings
  - This is basically still at the CCRC08 May level
    - Except CASTOR and dCache
- How should 'compliance' be monitored?
  - Service version info providers will help

## OSG



## Middleware roadmap



- What is on the way, and how does it map onto the LHC schedule?
- Given the inherent uncertainty in both the LHC schedule, and in the middleware development, attempting synchronisation is risky
- In any case, what is the real effect of the "shutdown"?
  - Raw data transfer reduced but otherwise,
    - Reprocessing
    - $\sqcap$  MC
    - Analysis
  - It's a good time to update FTS, but maybe not the CE.

## Middleware roadmap



- Clients on new 'platforms'
  - SL5 WN 32/64, SL5 UI 32
  - SL4/SL5 Python 2.5
  - Debian4/32 WN
  - SL4/SL5 + changed compiler ???
    - which one, 3 aren't an answer.
    - gcc4.3?
- Imminent or available updates
  - FTS/SL4 (available)
  - Globus bugfixes (available)
  - Icg-CE further performance improvements
  - Results of WN working group cluster publishing

## New Services



#### glexec/SCAS

- glexec is being verified for use with experiment frameworks in the PPS (setuid mode, without SCAS)
- SCAS still in 'developer testing'

#### CREAM

- First release to production imminent
- NOT as a replacement for lcg-CE
- Issues with proxy renewal

#### WMS/ICE

Patch under construction

#### Glue2

- OGF Public Comments are now over
- Glue WG will incorporate these during October
- Will be deployed in parallel as it is non backward compatible

### SL5



- Schedule announce by CERN envisaged SLC5 Ixbatch nodes in October
  - "Formal certification not yet started"
- Middleware can progress anyway with SL5 or CENTOS5
- We are on course, barring surprises in runtime testing...
- Based on VDT1.8 hope to upgrade to 1.10 very soon and base the rest of the release on this
- Contemplating an approach to build which would no longer allow co-location of services, apart from explicit exceptions
- Full schedule;
  - Clients
  - VOBOX
  - Storage 32/64
  - CE (NOT LCG-CE)
  - Target whenever ready but before 6/2009

### Client distribution



- A proposal has been circulated about using the experiments' software installation mechanism to distribute middleware clients.
  - Installation in an 'ops/dteam' shared area and publishing of availability via the InfoSys
- Advantages
  - Rapid deployment
  - Parallel Versions
    - □ Rollback
    - Allows definition of confidence levels 'old', 'default', 'new'
      - Patch #1641 introduced gfal-1.10.7 which
        - · Fixed some segfault problems
        - · Introduced bug #33288 (creation of non-existant sub-directories)
    - Multiplatform
  - Finer grained publishing of what's installed
    - This is possible outside of the proposal

## Alternative #1



- Can this be done in 'experiment space'?
- We provide versioned tarballs via the Application Area, and these are integrated and distributed by the experiments
- Advantages
  - Uses an accepted distribution model
  - No need to use a separate VO
- Disadvantages
  - Extra effort for the experiments
  - Duplication of installations
  - Not clear that reactivity would be improved
  - The would still need the mechanism for choosing the environment

### Alternative #2



- Sites are simply encouraged to install parallel versions of the middleware and publish appropriately
- Issues
  - Does not speed up deployment
  - Requires proactive participation from all sites
  - Symbolic tags 'default', 'latest' would be hard to coordinate

## Some responses



- The standard process will disappear
  - No site would be asked to remove rpms!
- This is a centralising process (contrary to EGEE policy)
  - This is a symptom of the fact that the sites concerned already share a middleware distribution
- RPM provides built-in integrity checking which is not available via the tarballs
  - The tarballs are built from rpm-installed nodes
- This would affect local users and default installations
  - This system would be invisible unless explicitly requested by a user
- Admins have to be available during upgrades
  - Multiple versions would be available simultaneously, thus a bad installation can easily be fixed or removed easily. In any case, it would not be published until it had been validated

### **Issues**



- Network shared storage is not up to it
  - This may be true... but what happens then with the experiment areas?
- Who would support this?
  - This would have to be supported by whatever team was managing the installations, not the site