

Grid Technology



gLite->EMI2/UMD2 transition

GDB September 2012







Clients/Services



Services:

- we gave a recommendation for emi-1
 - Baseline Services page
 - services with long term state
 - · services without state
- relying on EGI staged rollout
 - overall a success
 - recently some incompatibilities observed
 - » CREAM-CE SL(6) ALICE

Clients:

- Started a validation for emi-1 WNs in spring
 - 6 sites, all experiments, the main SEs
- Didn't end with a clear result





The situation



- The infrastructure has not been keen to upgrade recently
 - Various reasons
 - ...some of them good
- Leaves us with obsolete and unsupported middleware on performing critical tasks
 - ...on obsolete OS (Feb 2012 for SL4 family)
 - Recent experience gives concrete examples of the risks
- The short/medium term does not offer a natural moment to upgrade
 - But we have to act to avoid future problems





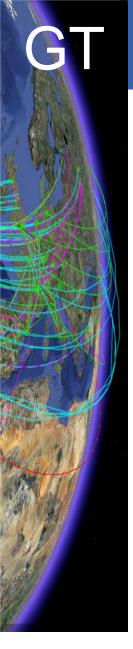
The situation



- The good news…
 - A number of sites are running up to date middleware versions (and have shared their experience)
 - FTS 2.2.8 deployment is entirely EMI based
 - CREAM has been adopted and validated in the EMI release
 - No reasons not to upgrade...
 - DPM has a number of EMI deployments out there
 - ...etc
- Bad news...

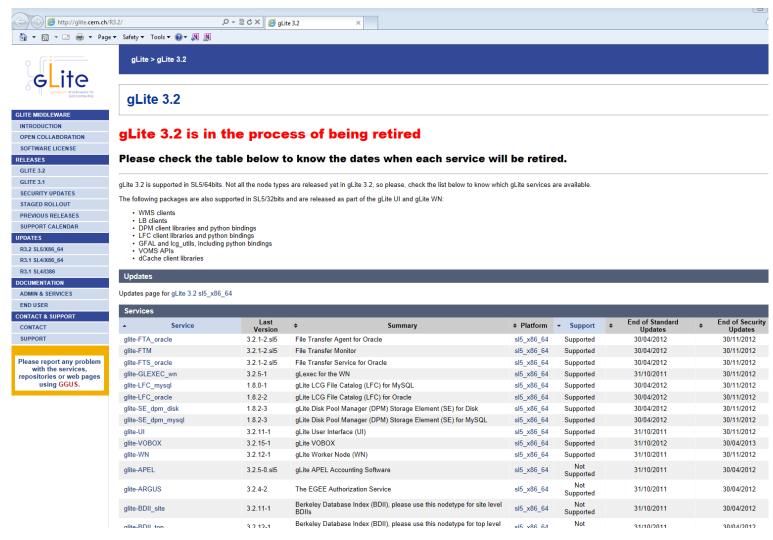






Not latest, not greatest...





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The EGI / WLCG message



- Obsolete middleware must be upgraded.
- "2" is better than "1"
 - EMI, UMD...
 - Much closer to how things will look post-EMI
- EGI will be following this up via NGIs.
- WLCG sites and experiments:
 - Balance between progress and stability
 - limited acceptance of risks
 - Unsupported software has risks and costs
 - Problems with WN & UI (ie the clients) need to be understood
 - Inc tarballs, Application area releases





Services



- Not a request for panic mass-upgrades
- Validation by WLCG experiments has to start
 - the EGI rollout doesn't cover the experiments explicitely
- There is no perfect moment to wait for
 - the long shutdown isn't a vacation from computing
- gLite is obsolete
 - DPM/LFC have a couple of months
 - Clients have a couple of months
- The advantages
 - Supported software
 - More reliable software
 - Better performing software (including new features)



Worker Node



- A group of willing sites have agreed to install the EMI2/SL5/64bit WN and make queues available
 - SL6 will follow
- Uses the EMI testing repository
 - Updates can be immediately produced
 - Bypassing EMI release process
 - A full client release (tarball etc.) will happen after WN validation
 - At this point the infrastructure can start upgrading
- Problem: Coordination and effort





Status:

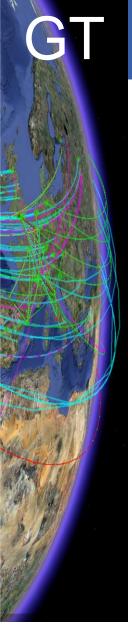


- Sites involved:
 - DESY: dCache, ATLAS and CMS
 - CERN: Castor and EOS, ATLAS and CMS
 - Rutherford: CASTOR, ATLAS and CMS ??
 - Brunel: DPM, CMS
 - INFN-Napoli: DPM, ATLAS
 - INFN-CNAF: STORM, ATLAS and CMS
- All work based on best effort
 - difficult to plan
 - experiments can start only after the sites have moved
 - Request for emi-2 test queues September 3rd
 - 3 replies



Presentation Title - 9





Next Steps



- Setup a page to track progress
 - get emi-2 / SL5 WNs verified
- Expand to services
- We need a more formal collaboration
 - this will increase overall efficiency
 - now individual sites and experiments cooperate locally
 - very difficult to get a reliable global view





Post emi ????



- Discussions on software lifecycle process is on-going
 - discussion of WLCG needs with EGI/EMI have started
 - a proposal prepared for the next WLCG-MB
- General approach
 - as much independence between PTs as possible
 - you need it, you provide it
 - there will be no one else ©
 - support for batch systems, re-locatable clients etc.
 - this is already happening, but sharing is slow

