Grid Deployment Area Meeting

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for GDA

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Agenda

- Status of LCG-2
  - Issues:
    - RLS compatibility (RM, POOL, GFAL) — Flavia Donno
    - Deployment Status: the classic SE — Markus Schulz
    - LCG-2 SRM SE Status — Jean-Philippe Baud
    - The EIS testbed status: testing environment — Flavia Donno
- Experiments status
  - Issues from Alice
  - Issues from CMS
  - Issues from ATLAS
  - Issues from LHCb

Status of LCG-2

RLS and POOL

- Case-sensitivity
  - In LCG-1 (EDG 1.4) RLS attributes were case sensitive
  - In EDG 2.x WP2 changed DB schema:
    - Attribute mapped to a column name
    - SQL is no longer case sensitive!
    - Only found when using POOL as RLS client (now)
    - Propose: implement case-preservation now, understand longer term solutions but implementation should be seen in terms of other needed RLS/RM work
  - The proposed solution only involve the RLS server side
    - New RLS server made available by the RLS team
    - Today or early tomorrow EIS testbed will be able to use it
    - Experiments can test while certification process proceeds.

RLS Naming – affects all clients

- File naming (srm://, srb://, sfn://, rfio://, etc.)
  - Original paper (2001, CERN, FNAL, LBNL, etc) proposed common syntax
    - LFN:, GUID:, SRM:, etc.
    - GFAL & RM both implement (and require!) this
    - Expects that user provides file name always with a prefix even for a "trivial" local file name (i.e. LFN:)
- The RM has been changed to drop prefixes in LFNs and GUIDs. SFNs still in place (thanks to Heinz Stockinger).
    - CMS has agreed to always use valid SFNs even with POOL:
      srm://<hostname>/path/filename
    - What about other experiments ?
- Few tests already performed and the solution works OK for Classic SE. Need to find a definitive solution which includes the SRM.

SE Status – today

- SE (now for Alice and CMS): available via gridftp
  - Castor (gridftp) at CERN to tape
  - Configured as local SE to all sites
  - Could have local (classic) disk-only at sites
    - No space management – has to be watched and done by hand, no idea of available space
    - Detailed migration plan needed for SRM-SE
  - GRIS at CERN works today for Castor MSS and dCache/Enstore
  - RM works almost with Castor MSS and dCache/Enstore.
  - RB verified also
  - BrokerInfo needs verification
- Will also be at CNAF and PIC (once this works)

Deployment Status

- Current Status (Monday 02/09)
  - 8 Core Sites
    - FZK, Barcelona-PIC, FNAL (limited Cpu, access to ENSTORE), CNAF,NIKHEF, Taipei (test classical SE), RAL
  - Features of the version currently distributed (Pre-release)
    - No classic SE distributed (assumed SRM)
    - RM non interoperable with CASTOR via gridFTP
    - RLS production endpoints
    - Information provider for CASTOR MSS in place
  - Tests done on the production system
    - Intermediate version of RM and CASTOR gridFTP
    - Combination works, except a small problem when an sfn is given that places files in the root of the storage area of a VO. (Workaround available).
    - Some sites have not fully implemented the software distribution mechanism (access rights, environment variables, (we are chasing them))

Deployment Status

- Plan for the next few days
  - Upgrade sites to the version of the C&T on Monday
    - Return of the classic SE
    - Disks only at all sites except those that run CASTOR
    - Publish the CASTOR gridFTP MSS SEs in CNAF, CERN, PIC
  - Features of this version
    - Sites with disk only storage can provide staging space
    - The disk only space is not managed space, has to be seen as a staging buffer
    - RM and SE interoperate
    - Alternative additional BDII that allows easy inclusion and exclusion of sites
    - New version of GridICE monitoring
  - Not covered by this version
    - POOL<->RM interoperability
    - RM/CASTOR storage root access via SFNs
  - Resources
    - Limited (< 50 Nodes)
    - Can be added when functionality is adequate for ALICE
    - CERN has approx 150 nodes reserved for this

Deployment Status

- Plan for the next few weeks
  - As soon we get a version that allows RM/POOL/MSS interoperation
    - Go with FIO through the process of upgrading the LSF nodes
    - Add UI capabilities (with FIO) to LXPLUS
    - Integrate MSS with dcache frontend
- SRM
  - Deployment after:
    - SRM SE interoperates with the RM/POOL/GFAL
    - SRM interface for disk only systems available

LCG-2 SE status (1)

- Mass Storage access – to tape
  - SRM interfaces exist for Castor, Enstore/dCache, HPSS
    - There are still compatibility issues between Fermilab and CERN (in the security part)
  - Lyon (HPSS) – meeting took place 3rd February: the proposed solutions were not accepted and we will continue to work with them on a solution
- Disk-based SE's
  - (Packaged version of Castor disk pool manager – no longer available)
  - Packaged version of dCache – receiving it today
- GFAL included in LCG-2 – it has been tested against CASTOR SRM and rfio as well as against Enstore/dCache SRM

LCG-2 SE status (2)

- Replica Manager – a few more fixes were applied last week to make it work with CASTOR GridFTP and SRM.
- Pending issues on SRM
  - Automatic sub-directories creation in dCache SRM: fix being tested
  - Delete method in dCache SRM being developed (mandatory for disk-only sites)
  - Poor error reporting

The EIS testbed status: configuration and testing environment

- EIS testbed available to experiments to perform initial tests.
  - EDG-RM interface to gridftp based CASTOR MSS server
  - New RLS catalogues with “case-sensitive entries” problem fixed
  - POOL compatible EDG-RM clients ready. They will be installed on EIS tomorrow for experiments.
  - Experiment software installation and tag publication
  - We try to make available new features as soon as ready.
- For access, please send e-mail to support-eis@cern.ch
- Other tests can be possible. Please, let us know
- EIS group available to help experiment with all grid-related issues for Data Challenge. Please, ask your EIS contact.

Next Meeting

- 23 February 2004 from 14:00 till 16:00