

GRNET/UoA Testbed features at a glance

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- Modular site configuration
- Separate CE/Torque setup
- Dedicated MySQL server
- Cream CE
- DPM
 - Separate head/pool nodes
 - dpm-https
- Short Lived Credential Service
- Short Deadline Jobs



Modular site configuration

- **Enabling Grids for E-sciencE**
- YAIM support a modular configuration style
- This is not so commonly used
- Our testbed uses the following configuration (yaim-4.0.5)
 - edgusers.conf
 - siteinfo
 - group.d
 - services
 - site-info.def
 - vo.d
 - users.conf
 - wn-list.conf
- Bugs found (e.g. 40652, 33928, 40654)

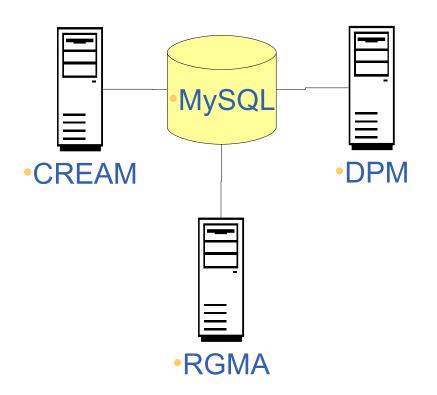


Central MySQL

Single MySQL server on separate node

Databases served

- accounting (RGMA)
- cnsdb (DPM)
- dpmdb (DPM)
- delegationdb (CREAM)
- creamdb (CREAM)





- Different service requirements
 - e.g. Cream CE needs ref. Integrity (INNODB) not others (bug 40669)
- Installation of one service may interfere with others
 - YAIM will overwrite permissions sometimes
 - There are no common yaim functions for remote MySQL





Testing pathways

- Direct submission with command line tool or through API
- Through a WMS via ICE (unavailable)

Tested Features

- Installation (e.g. bug 3911, separate LRMS node problems etc.)
- Stress test
- Integration with LRMS
- Monitoring

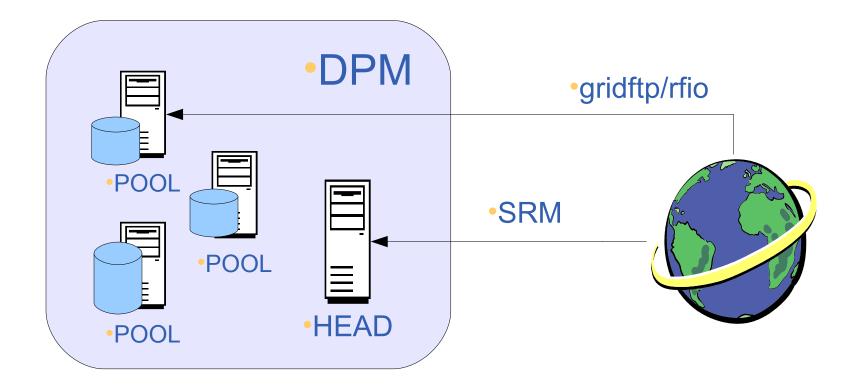




Separate Head/Pool Nodes:

- DPM feature by design
- Scalability improvements
 - In storage space
 - In throughput
- Deployment issues in yaim







- Access w/ HTTP GET and POST
- Apache voms authentication
- Yaim conf var: DPM-HTTPS
- Worked but is now broken (checked during last yaim core certification with DPM-xxx 1.6.10)
 caused by dpm head/pool separation



- Users must be authenticated before accessing services.
 - In the Grid user identity is asserted via X.509 trust
 - In a Shibboleth AAI federation user identity is asserted by the IdP
- SLCS provides grid/aai interoperability
- X.509 procedures avoided while middleware unaffected
- Bugs creep out of nowhere, testing important
 - e.g. Special characters in DNs



SLCS architecture

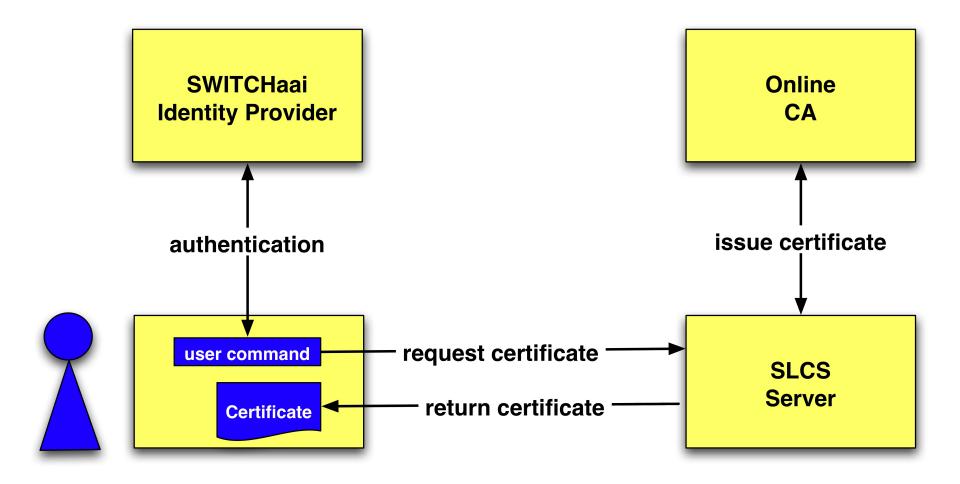


Image source SWITCH.CH



SLCS testing at our site

Enabling Grids for E-sciencE

- Testing with CAS SSO on IdP (SWITCH)
- HTML parser of SSO login page buggy
- Attribute Release Policy unsupported
- Yaim configuration of slcs-client missing
- Future directions :
 - Different SSO's
 - Different IdP pages
 - SOAP enabled IdP
- see patch 1693



Enabling Grids for E-sciencE

• A EGEE job is a Short Deadline Job (SDJ) when:

- It has a deadline constraint.
- It is guaranteed to complete in a short time.
- It is unexpected, ie. there isn't any prior reservation.

Manual LRMS configuration needed

- implemented and documented at LAL
- Torque queues
- Maui reservations
- JDL example: Requirements = RegExp(".*jobmanager.*\.sdj\$",other.GlueCEUniqueID)
- No yaim functions
- More info here





- For more info see our Testbed info page in twiki
- Thanks!