

Overview of our components: glexec, lcas, lcm maps and job repository

Gerben Venekamp & Oscar Koeroo

- **Our dependencies**
 - And what functionality are they fulfilling?
 - Which problems can be foreseen?
- **What are your "problem" dependencies?**
- **What would you like to replace them with?**
- **Any other comments on this restructuring.**

- **LCAS**
 - OpenSSL lib
 - Globus lib
 - Interface from edg-gatekeeper and edg-gridftpd to the framework
 - Makes use of some handy Globus functions
- **LCAS-VOMS plugin**
 - voms_api
 - Gridsite-core
 - For GACL and later XACML support

- **LCMAPS**
 - OpenSSL lib
 - Globus lib
 - Interface from edg-gatekeeper and edg-gridftpd to the framework
 - Makes use of some handy Globus functions
- **LCMAPS VOMS plugins**
 - voms_api
- **LCMAPS JobRep plugin**
 - Jobrepository-api
- **Job Repository API**
 - unixODBC
- **LCMAPS AFS plugin**
 - Some AFS lib
- **LCMAPS LDAP enforcement plugin**
 - LDAP lib

- **Glxec**
 - LCAS
 - LCMAPS
 - OpenSSL, Globus, ...

- **LCAS and LCMAPS have interfaces to them which use Globus specific calls**
 - Perfectly fine in GT2.4
 - Seems to be fine in GT4.x (pre WS)
 - Tests showed no problems
 - Real life experiences on production environments are unknown
- **The inherent dependency through VOMS to Globus**
 - We're still using the Globus based VOMS api
- **We can do without the Globus lib by leveraging OpenSSL functions directly**
 - This will make it easier to use LCAS and LCMAPS from other components
- **Note: Our current 'No Globus' build is actually a "No (inherited) OpenSSL"**
 - This means: no OpenSSL, no Globus and no VOMS
 - Only in the form of strings of each of the credentials

- **LCAS and LCMAPS have interfaces to them which use Globus specific calls**
 - Replace with commonly (> RHEL 3.0) deployed OpenSSL functions
- **The inherent dependency through VOMS to Globus**
 - Switch to the “No Globus VOMS API”

- **OpenSSL API is not always the easy to understand**
 - Oscar is getting a good grasp
 - Globus functions are gradually replaced

- We try to minimize the Globus dependency to an absolute minimum
- New component in CVS that acts as the glue between globus call-outs and LCAS/LCMAPS
- We have been working at it for some time now