



Plugable Authorisation LCAS and beyond?

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WP4 LCAS Authorization Service

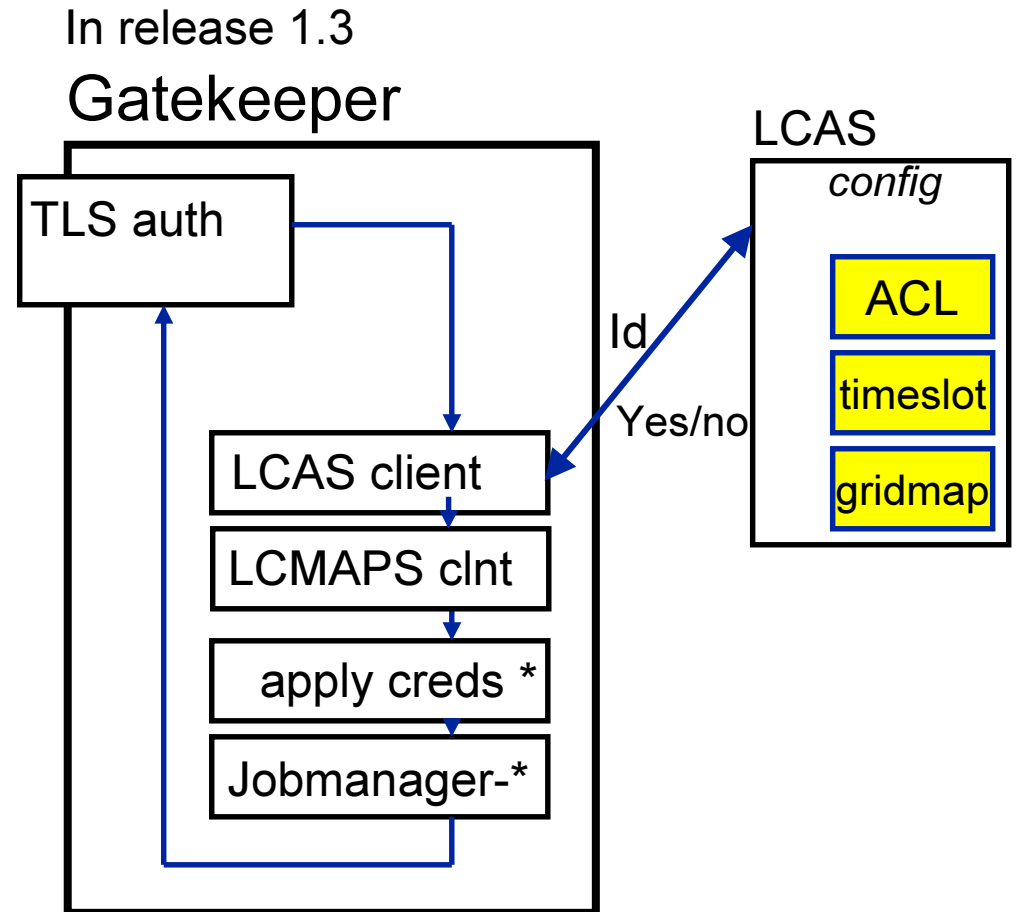
◆ LCAS pluggable authorization

- User Credentials
 - Name
 - Full proxy
- Job request details

◆ Framework

- combination of individual modules
- Simple policy scheme (ordered)
- Extensible (modules are .so 's)

◆ Near future (03Q1): 'daemon'





LCAS - modifications to service-level driver

- ◆ Design goal for LCAS: job-dependent "fine-grained" authorization
- ◆ Modules should avail over
 - User credential info
 - Job information

- ◆ This context info exceeds what's available on the GSI level:

```
int lcas_get_fabric_authorization(  
    gss_cred_id_t delegated_cred_handle,  
    char          *lcas_request);
```

- ◆ therefore, modification to service (gatekeeper) are required
- ◆ same hold for similar extension to GridFTP server
(still needs API standardisation)



Authorization Call-outs - GSI-only direction

- ◆ Von's proposal of September 13th:
 - Modify `globus_gss_assist_gridmapfile`
 - Support site-defined authorization + *uid mapping* call-outs
 - No fine-grained (no job-dependent authorization)
 - Requires mod's to `gridmap.c` only (like the PoolAccounts)

- ◆ Solves part of the authorization problem
 - Keeps authorization and credential mapping linked together
 - Jobs have to continue till site RMS to get rejected on budget, etc.
 - Is easy to do and has high potential for rapid acceptance (in PPDG+)

- ◆ If we want fine-grained authZ,
we should continue in the new GGF AuthZ working group!



Per user policies and prios in the CE

- ◆ Current schedulers (e.g. maui) do job management based on
 - Credentials (Unix uid+gid) and Accounts
 - Queue waiting time
 - Past usage and fair-share
 - Job attributed (requested time, memory, etc) e.g. for backfilling
 - Resources already used / in use
 - *"queues" are no longer used!*
- ◆ You can influence scheduling locally by setting weights already now
- ◆ Can lead to unexpected quirks!
 - Global scheduling based on free CPUs and Est. Traversal Time (ETT)
 - Currently: single estimate per "queue", no policy info