



# Gridification status report

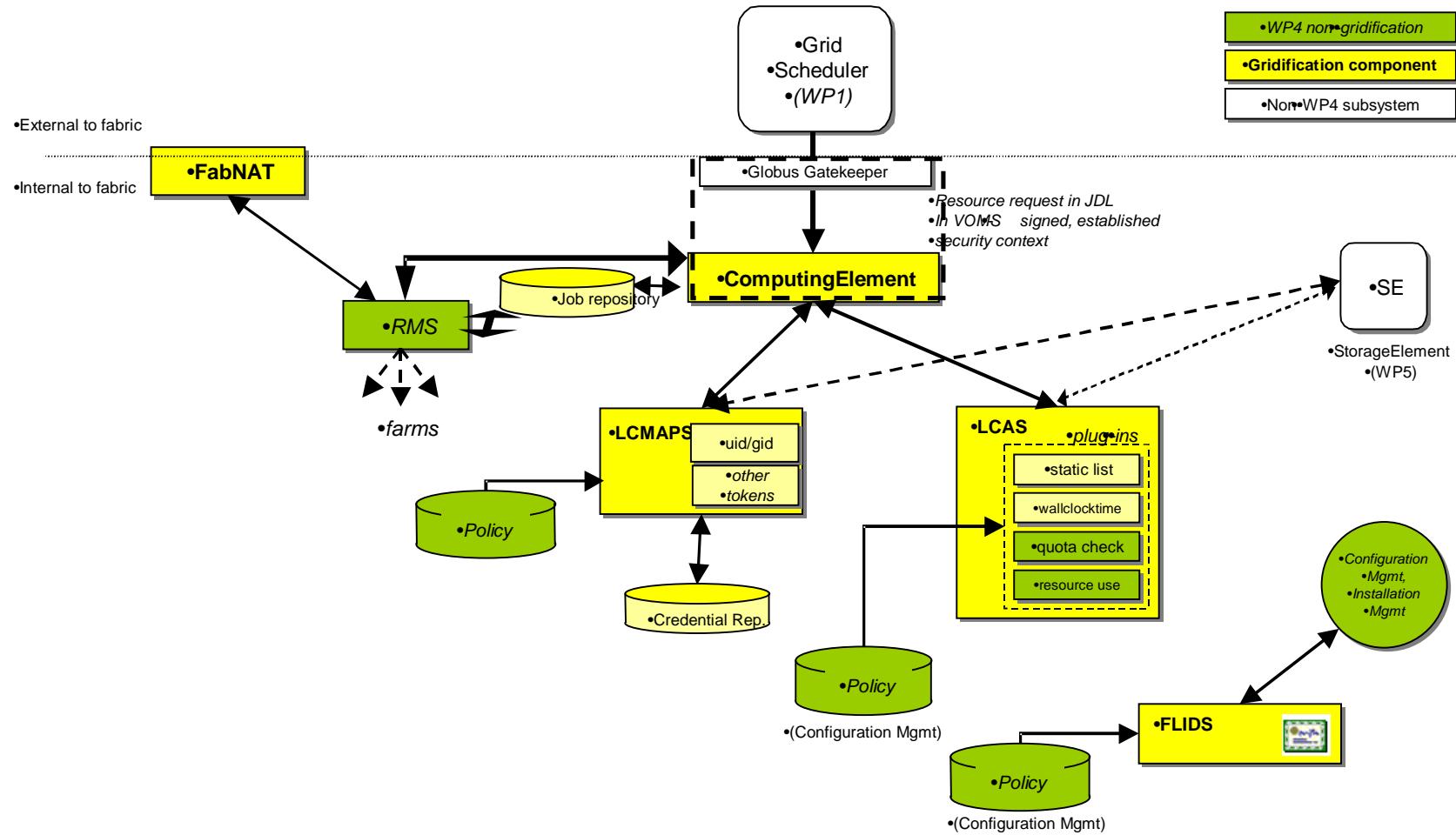
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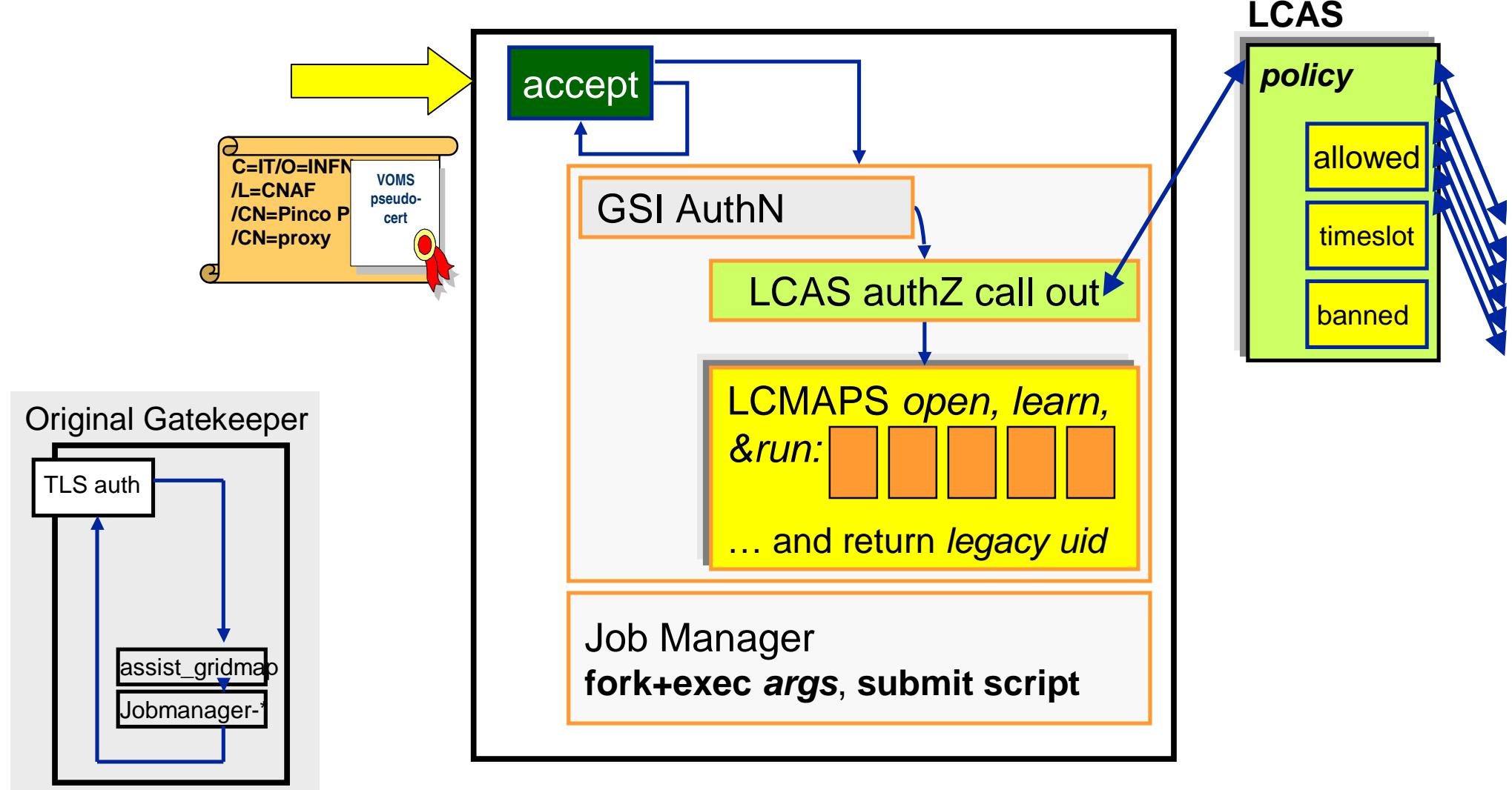


# Gridification Architecture





# Authentication control flow EDG gatekeeper





# Local Centre Authorization Service (LCAS)

## ◆ Current version LCAS-1.1

- Authorization plugin framework, library
- Authorization decision based on proxy certificate and RSL
- **3 plugins provided:** lcas\_userallow.mod, lcas\_userban.mod, lcas\_timeslots.mod
- Documentation: <http://www.dutchgrid.nl/DataGrid/wp4/lcas/edg-lcas-1.1/>

## ◆ Future developments

- VOMS plugin (authorization decision based on VO, (sub)group, role)
  - Delivery: end of July
- LCAS-2.0:
  - Server implementation (API does hopefully not change)
  - Use policy description language (pdl) from LCMAPS
  - Upgrade API plugins to LCMAPS plugin API (introspect)
  - Delivery: July/August



# Local Credential Mapping Service (LCMAPS)

- ◆ LCMAPS-1.0 (more in David's talk)

- *Plug-in framework, driven by comprehensive policy description language*
- Mapping based on user identity, VO affiliation, site-local policy
- Provides local credentials needed for jobs in fabric
- Supports standard UNIX credentials (incl. pool accounts), AFS tokens, Krb5
- Delivery LCMAPS + plugins: end of June
- Apidoc: <http://www.dutchgrid.nl/DataGrid/wp4/lcmaps/edg-lcmaps-0.0.1/apidoc/html/index.html>



## LCMAPS - modules

- ◆ **VOMS** from role info and local mapfile assign gid (A)
- ◆ **PoolAccounts** from username assign unique uid (A)
- ◆ **PoolGroups** from (VOMS) groupname assign unique gid (A)
- ◆ **LocalAccount** from username assign local existing unique uid (A)
- ◆ **AFS/Krb5** get token based on user DN info (A)
- ◆ **POSIX process** setuid() and setegid() (E)
- ◆ **POSIX LDAP** update distributed user database (E)
- ◆ **Krb5** run job via k5cert (E)
- ◆ ...



## edg-gatekeeper

- ◆ Current version: edg-gatekeeper-2.1

- Supports LCAS-1.1 (either "dlopened" or linked in)
  - Independent from globus-gatekeeper (based on GT-2.2)

- ◆ Future versions:

- edg-gatekeeper-2.2
    - Supports LCAS-1.1 and LCMAPS-1.0
    - Delivered with LCMAPS-1.0 (end of June)
  - edg-gatekeeper-2.3
    - Supports LCAS-2.0 and LCMAPS-1.0
    - Delivered with LCAS-2.0 (July/August)



# Data GRID Job Repository

- ◆ Keeps a log of incoming and stores local job info
  - Repository and access API
  - LDAP directory
  - Store job status, credential mapping (plugin LCMAPS), job description
- ◆ Release: september 2003
- ◆ main user RMS



# FabNat and FLIdS

## ◆ FabNat

- Provides a method for streaming connections to be channeled into local fabric
- Information provider and tunnel request specification (RSL)
- Foreseen delivery: November
- Still required ??

## ◆ Fabric Local Identity Service (FLIdS)

- Automated CA with policy engine
- Perl script with SSL module (openssl calls)
- Foreseen delivery: September
- Still required ??



# Timetable gridification components

Component	Release	Integration
LCMAPS-1.0 (+ edg-gatekeeper-2.2)	End of June	July ? (after VOMS)
LCAS-2.0 (server + VOMS plugin)	End of July/August	< September
Job Repository	End of August	September
FLIDS	September	??
FABNAT	November	??