

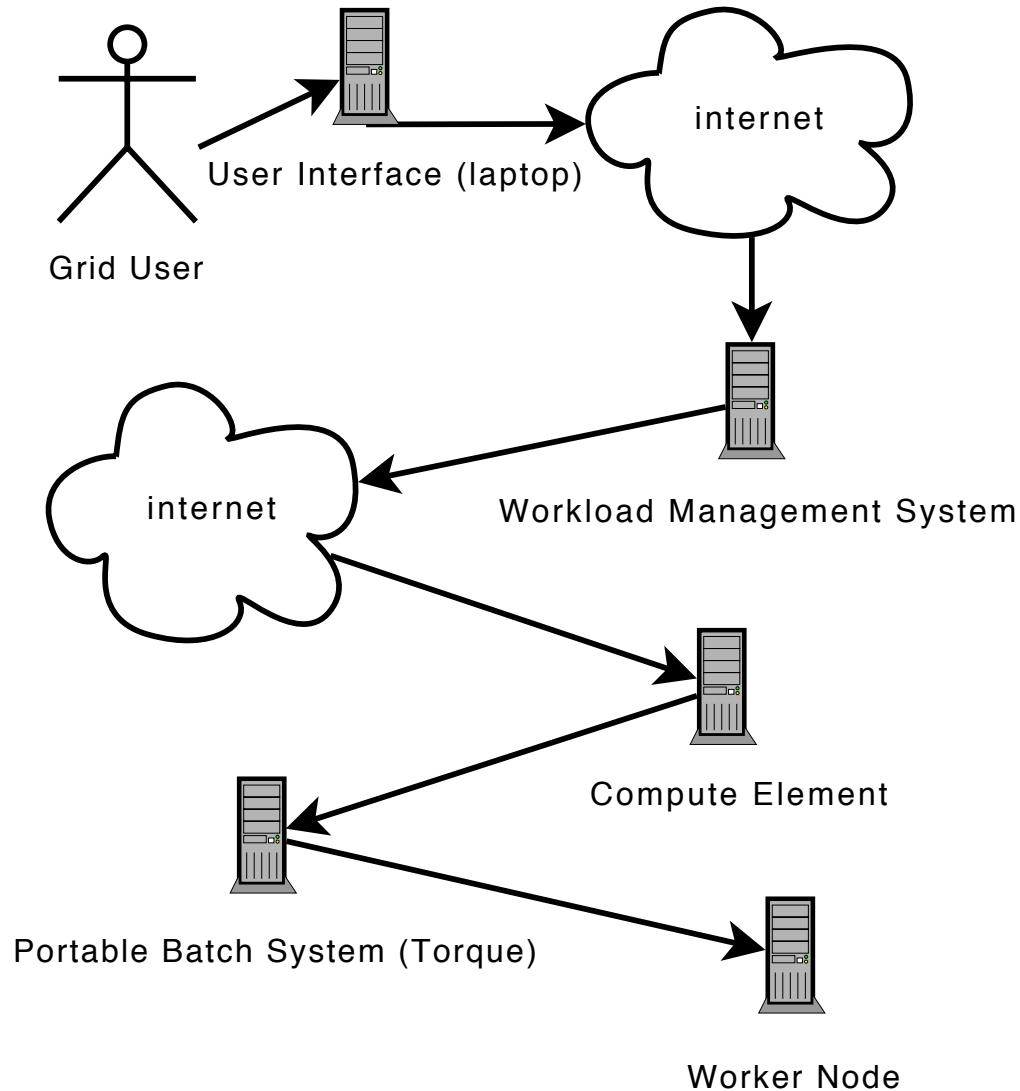
# SCAS - status update

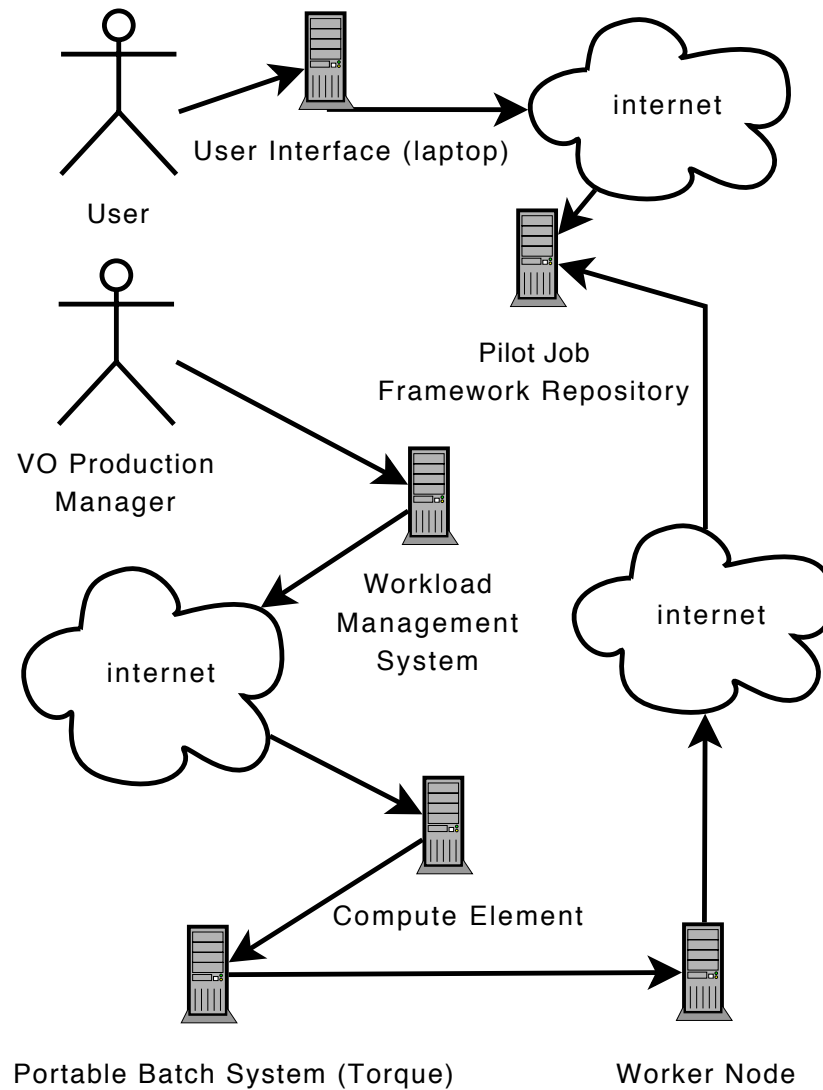
## Site Central Authorization Service

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*JRA1*

- **What is SCAS and what is its primary use case?**
- **Achievements**
  - Interoperability between middleware stack providers
  - Pilot Jobs
- **Its future, planned work items, etc**

## Area of interest



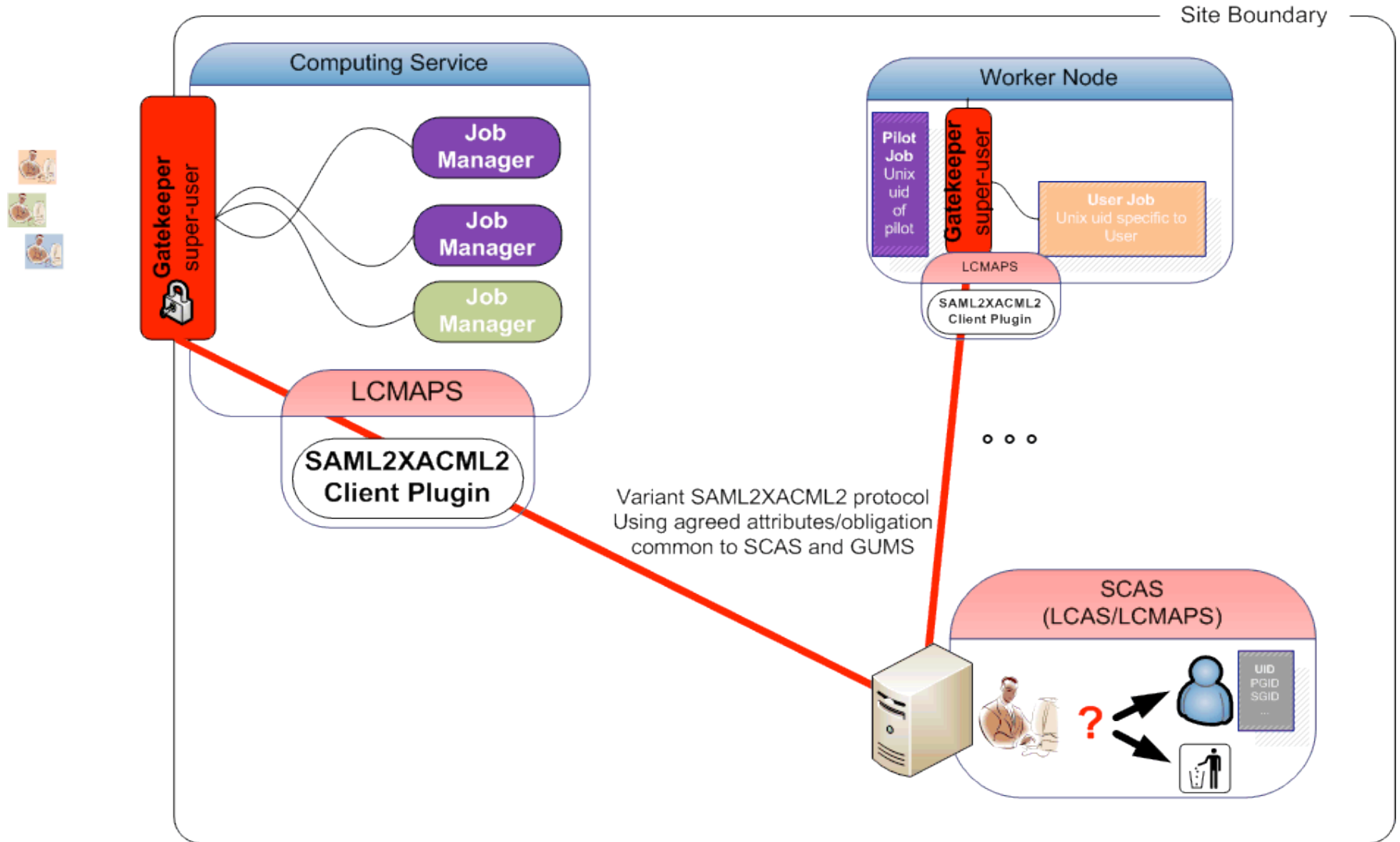


# SCAS

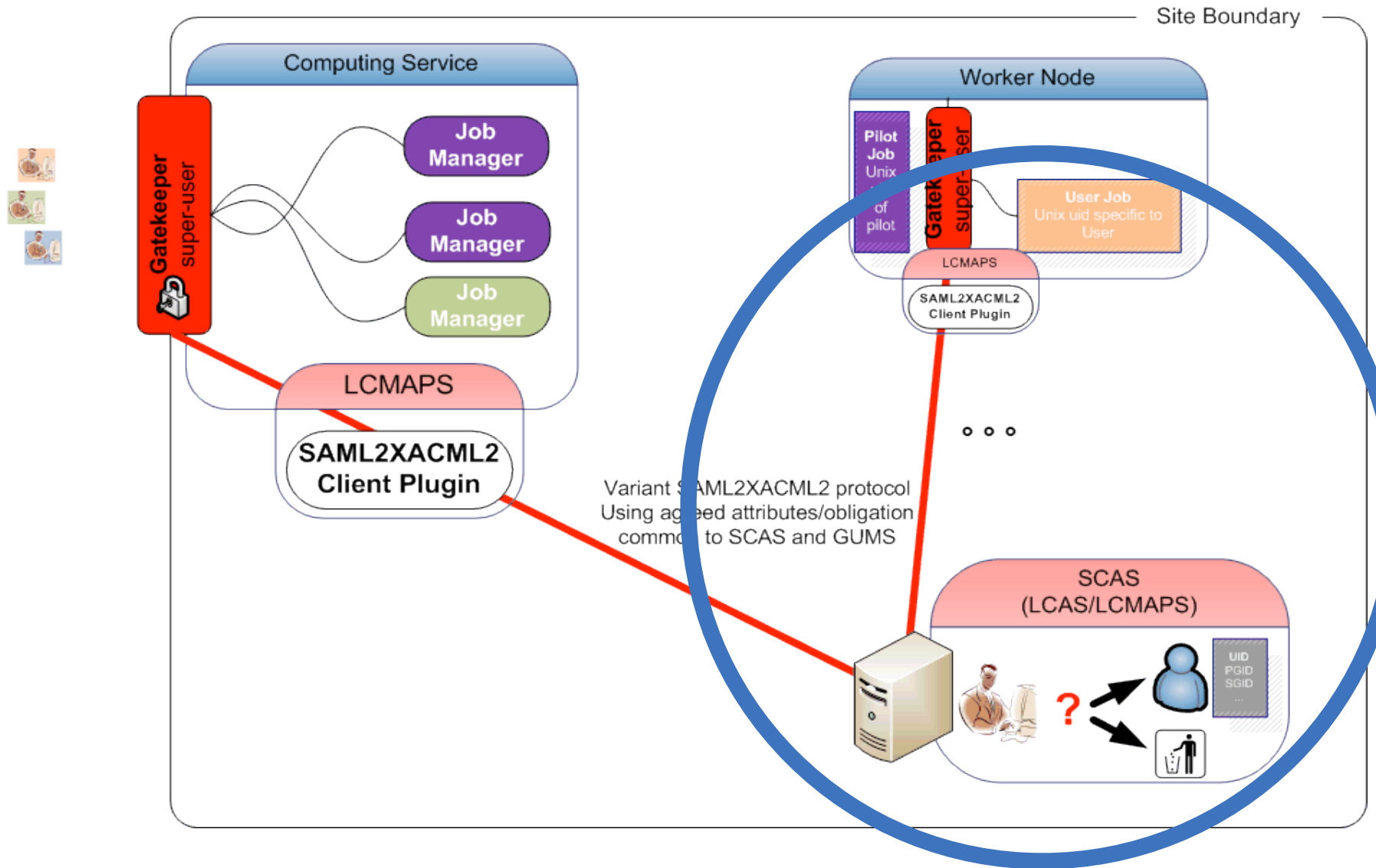
## Site Central Authorization Service

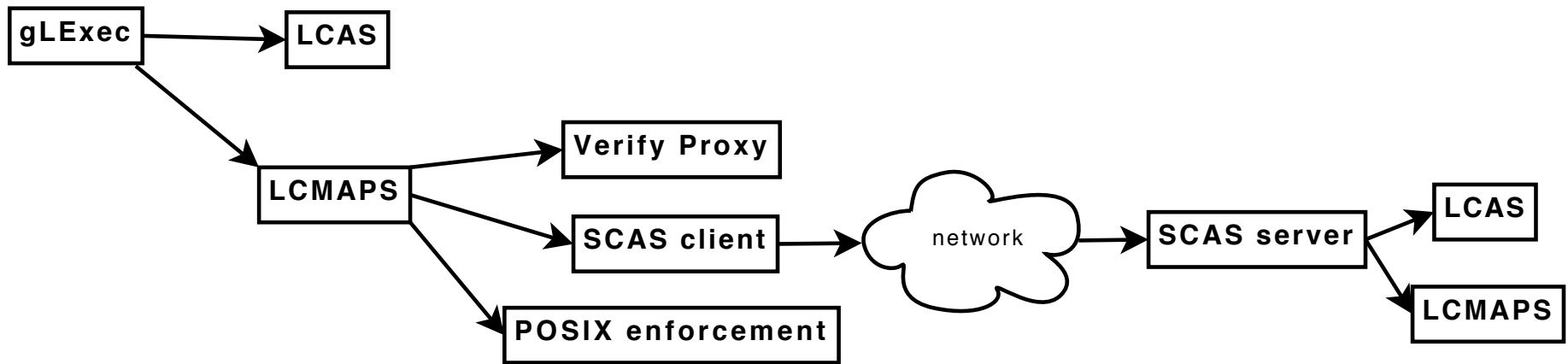
## The Site Central Authorization Service

- **It implements a client/server architecture to query:**
  - Authorization decisions (LCAS), allow/ban:
    - From a trusted resource
    - From an authorized pilot job executor
    - For an authorized user
  - Centralized grid identity to Unix ID translations (LCMAPS)
    - Full LCMAPS support
      - *VOMS pool and local accounts mappings*
      - *Non VOMS pool and local account mappings*
- **Uses mutually authenticated SSL/TLS**





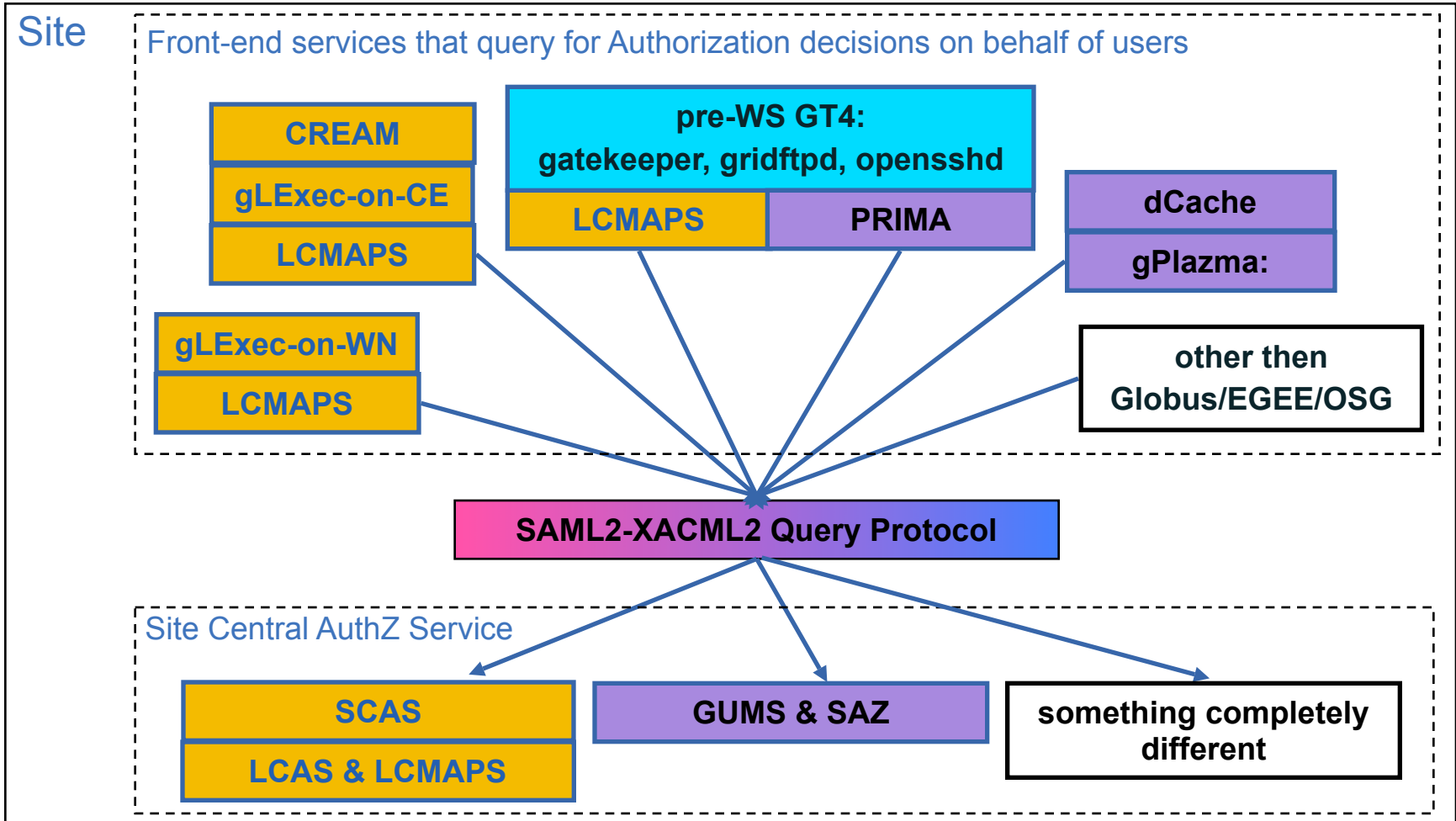




# Interoperability

Legenda: Color code indicates component developers:

Globus	EGEE	OSG / Privilege Project	Globus, EGEE, OSG / Privilege Project
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- **Profiled document on the used attributes & obligations:**
  - “An XACML Attribute and Obligation Profile for Authorization Interoperability in Grids” by **Condor, EGEE, Globus and OSG**
    - <https://edms.cern.ch/document/929867/2>
- **Description on each attribute and obligation**
  - Namespace usage
  - Semantically
  - Pragmatically
- **How to make changes without breaking interoperability**
- **Attributes and obligations like:**
  - Subject DN(s), FQAN(s), resource(s), type of resource, interaction method with the resource, etc.
  - Unix UID, Unix GID, Username, AFS token, RootPath, HomeDir, etc.

## current SCAS status

- **PPS sites:**
  - FZK
  - Lancaster
  - IN2P3
  - Nikhef (not officially a PPS site)
- **Pre-Production phase finished, moved to Production**
  - The PPS exposed a few bugs, which have been fixed.
- **Production setup at Nikhef**
  - Two SCAS servers (VMs): {graszaad,grasmaaier}.nikhef.nl
  - 1100+ Cores (job slots) with gLExec as SCAS client

- **Still planned:**
  - Expanding to multiple platforms
    - Currently a bugfix has to be committed to complete the move to CentOS5 and other platforms with a native OpenSSL library > 0.9.8a
  - No new features are planned
  - Performance boost
    - Adoption of the new Globus SAML2-XACML2 library version with the requested network layer improvements
      - *Estimate improvement of a factor 10.*
        - The hardware will be the new limit
      - *Guessing on 100Hz full SSL handshakes + account mappings **per SCAS instance** as a sustained rate on today's common hardware.*
- **SCAS will go into maintenance mode**



- **The site central solution allows for improved emergency response**
  - Central blacklist
  - Consistent mappings across a cluster or a site for all the supported services
  - Easy ramp up to global ban listing
  
- **Profiled document on the used attributes:**
  - “An XACML Attribute and Obligation Profile for Authorization Interoperability in Grids”
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