## AstroGrid SSO prototypes

Progress since Victoria Interop Guy Rixon September 2006

### **Objectives**

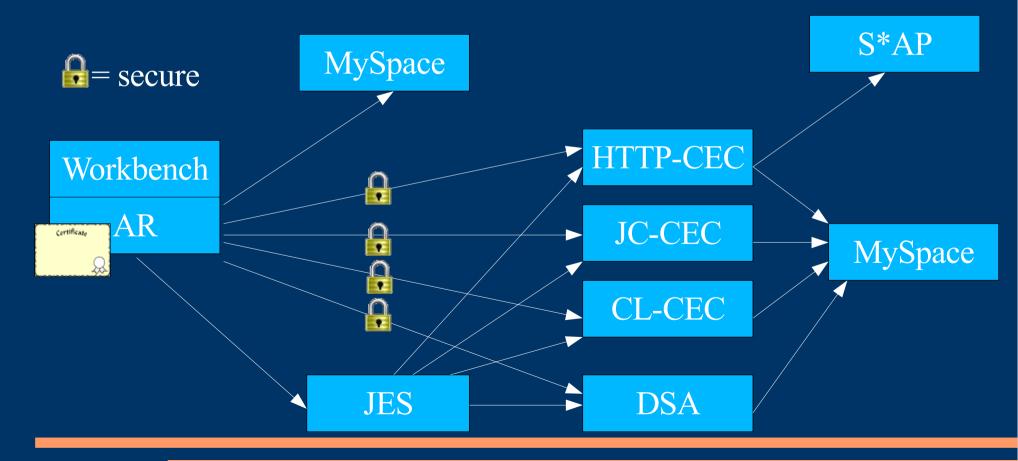
- Implement IVOA SSO standards
  - As a reference implementation for IVOA
  - In EuroVO/AG components, for production use
    - AR + Workbench
    - Application servers
    - ADQL services
    - Community services
  - As a library for developers of new services
    - AR
    - AstroGrid "Facade" library

## Coding progress: digital signature

- Digital signatures on SOAP now working
  - Worked round Axis bugs
  - Made it work with DSA
  - Tested in UKIDSS prototype at ROE
- Available\* in A/G "security facade
  - Client and server code
  - => easy to add to new services
  - (\* = available after next merge; maybe next week)

#### And that means ...?

- Workbench/AR apps authenticate to CEA services
  - Includes app servers, DSA
  - Excludes JES, S\*AP, MySpace
  - Excludes delegation to other SOAP services

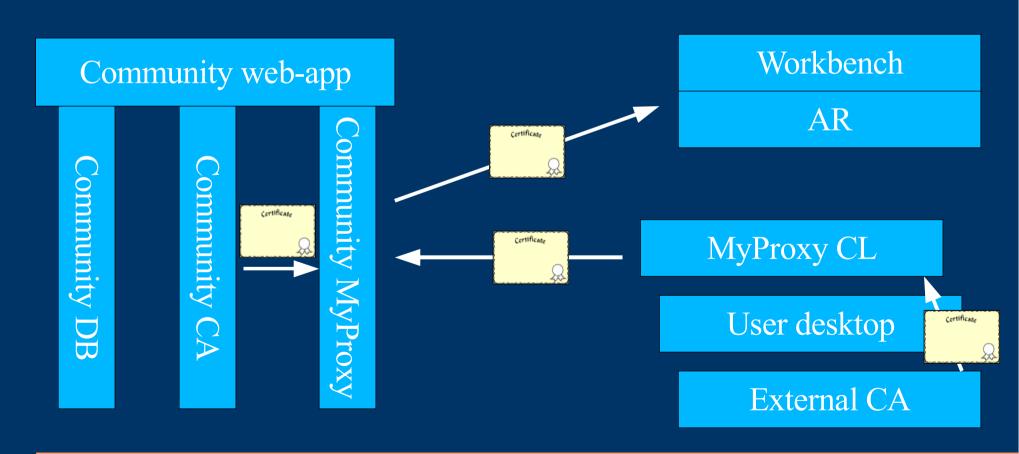


# Coding progress: community

- Prototype of certificate-aware community
  - Has internal certificate authority (CA)
  - Can use external CA
  - Works with MyProxy
  - Drop-in replacement for existing community web-app
  - Comparable to PURSE
  - Not derived from PURSE code

#### And that means ...?

- Upgrade existing communities with certificates
- Issue own certificates
- Work with UK e-Science certificates



# MyProxy: brings in Globus?

- Yes, but not the bits that bite.
- Needed:
  - Java libraries from "Java CoG kit" 1.2 (inside AR)
  - MyProxy server ex GT4
- Not needed:
  - Globus "SimpleCA"
  - Globus security configuration
  - Globus CL tools (except the MyProxy ones)
  - Globus gatekeepers, GridFTP, etc, etc, etc.
- Quite easy to install (honest, Guv!)

#### Reflections

- Digital signatures on SOAP are fragile
  - Be very careful with XML details
  - Bad SOAP toolkits (Axis) break signatures
  - Java CoG seems to be only RFC3820 implementation
- MyProxy works very well BUT...
  - doesn't work easily through firewalls
  - Need e.g. WS-Trust as well as MyProxy?
- It's simpler without web portals
  - Top-level client gets to hold proxy certificate
  - Web browser doesn't do MyProxy
- Need the other standards to make all this useful:
  - Delegation
  - Groups

### Next steps

- Complete, release community-with-CA-and-MyProxy
- Finish, release pluggable authorization for CEA/DSA
- TLS-secured server for S\*AP with RFC3820
- Community linked to external DB
- Community-defined groups