

# Design of Shibboleth-based Authorization in C3-Grid

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- Use Case
  - Portal-based data access
  - Initially for C3-Grid
  - Eventually for Earth Science Community

- Grid middleware: Globus TK 4
- AAI: Shibboleth
- Portal: GridSphere
  - With Shibboleth Plugin
- GridShib
  - SAML Tools at the portal
  - GridShib for GT at the resources

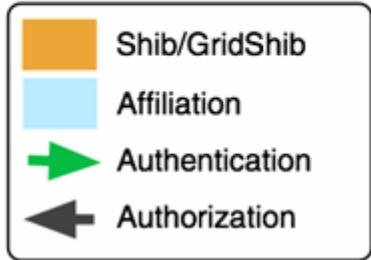
- Step 1 (April 2007)
  - Participating C3 partners set Shib IdP up
- Step 2 (June 2007)
  - „Shibbolized“ GridSphere
  - Portal-based trust
  - Simple VO management
- Step 3 (December 2007)
  - GridShib „Science Gateway“
  - Access control at the resource providers
- Step 4 (April 2008)
  - „Real“ VO management based on IVOM findings

- Set-up of Shibboleth IdPs at the participating C3 partners
  - Federation membership in DEMOaar, DFN-AAI
- AWI provides simple test SP

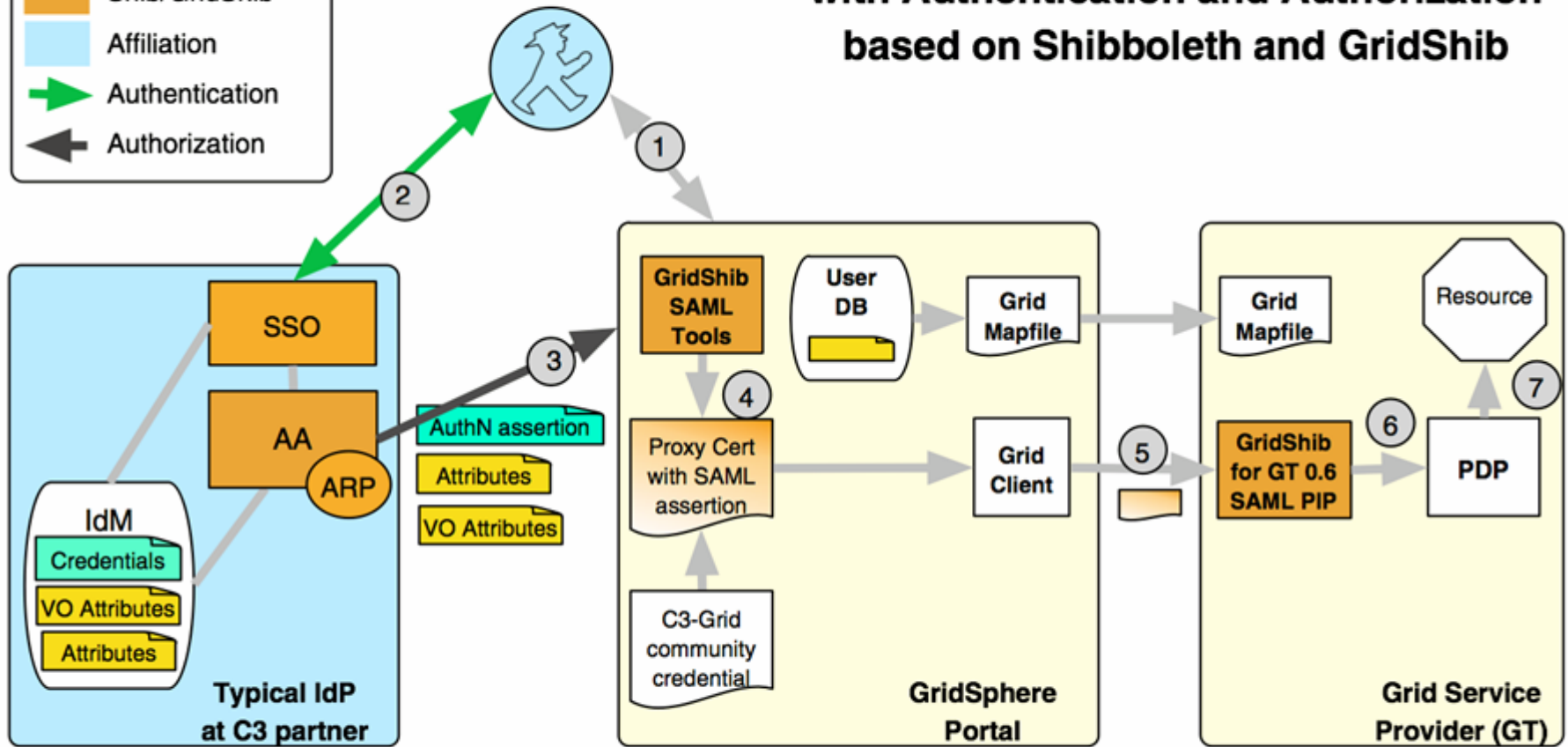
- Integration of Shibboleth-based authentication and authorization at the Portal (GridSphere)
- Simple VO management
  - Distributed at the IdPs
  - eduPersonEntitlement: c3-member
- Resource providers trust the Portal
- Mapping on a **single** C3 user at the providers
- Required component:  
„Shib-enabled“ GridSphere

- Integration of GridShib solution for TeraGrid Science Gateways
- GridShib SAML Tools
  - Binding of SAML assertions into X.509 proxy certificates
- GridShib for GT
  - SAML PIP for Globus Toolkit
  - For Globus 4.0.x and above
- Roadmaps C3 and GridShib „match“

## Federation



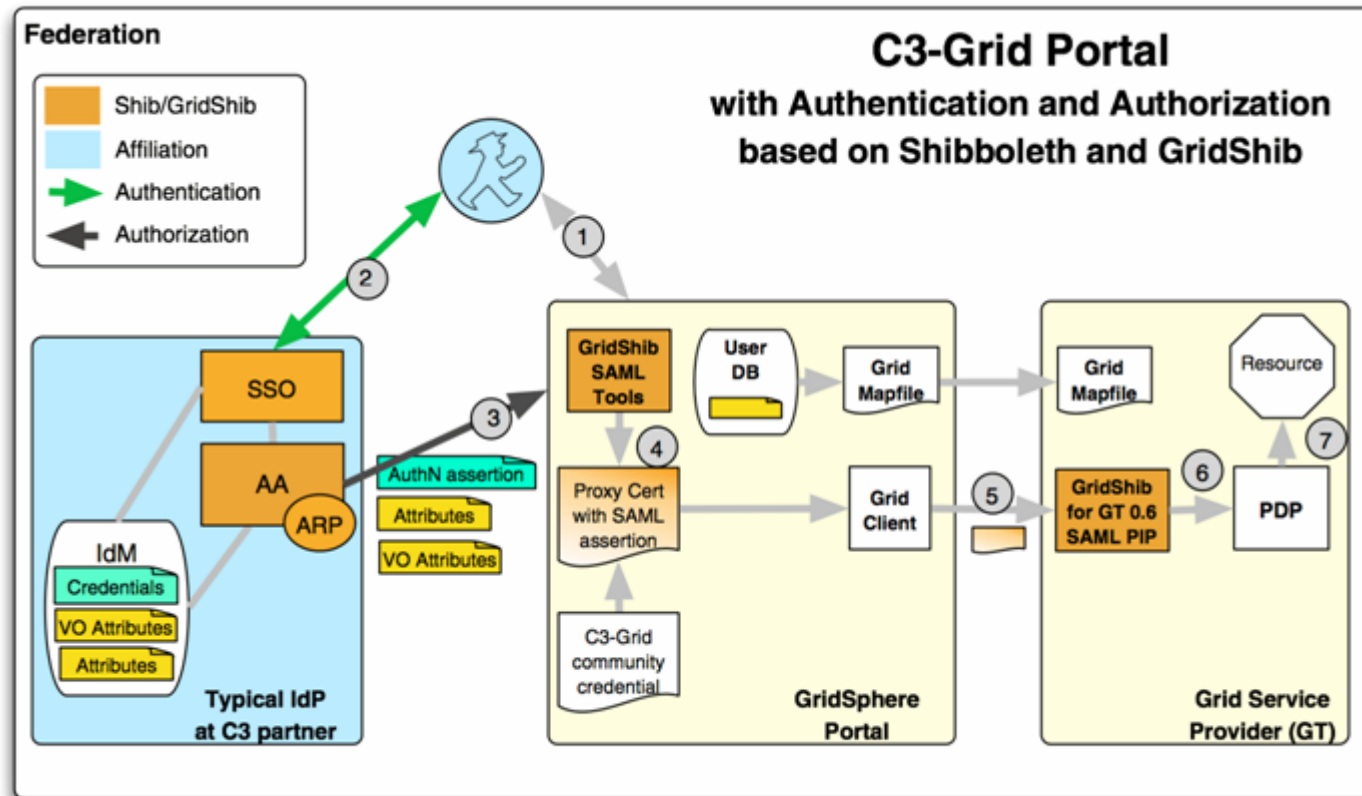
## C3-Grid Portal with Authentication and Authorization based on Shibboleth and GridShib





- „Real“ VO management system
  - VO self-administration
  - Sub-VOs
- Will be based on findings of IVOM project
  - IVOM: „Interoperability and Integration of VO Management technologies in D-Grid“

- Shibboleth: <http://shibboleth.internet2.edu/>
- eduPerson: <http://www.educause.edu/eduperson/>
- GridShib: <http://gridshib.globus.org/>
- GridShib Roadmap:  
[http://dev.globus.org/wiki/GridShib\\_Development\\_Roadmap](http://dev.globus.org/wiki/GridShib_Development_Roadmap)
- GridShib Science Gateway:  
<https://spaces.internet2.edu/display/GS/TeraGrid> und  
<https://spaces.internet2.edu/display/GS/NanoHUBTestbed>
- DEMOaar Federation: <http://aar.vascoda.de/test/demo.php>
- IVOM: <http://dgi.d-grid.de/index.php?id=314>
- C3-Grid: <http://www.c3-grid.de/>



AWI 2007

- Thanks!
- Questions?