Utilizing GOS Map and Data Services for Cross-agency Earth Science and Geospatial Cyberinfrastructure Communities

-- A 2009 NSDI CAP Cat.2 Project

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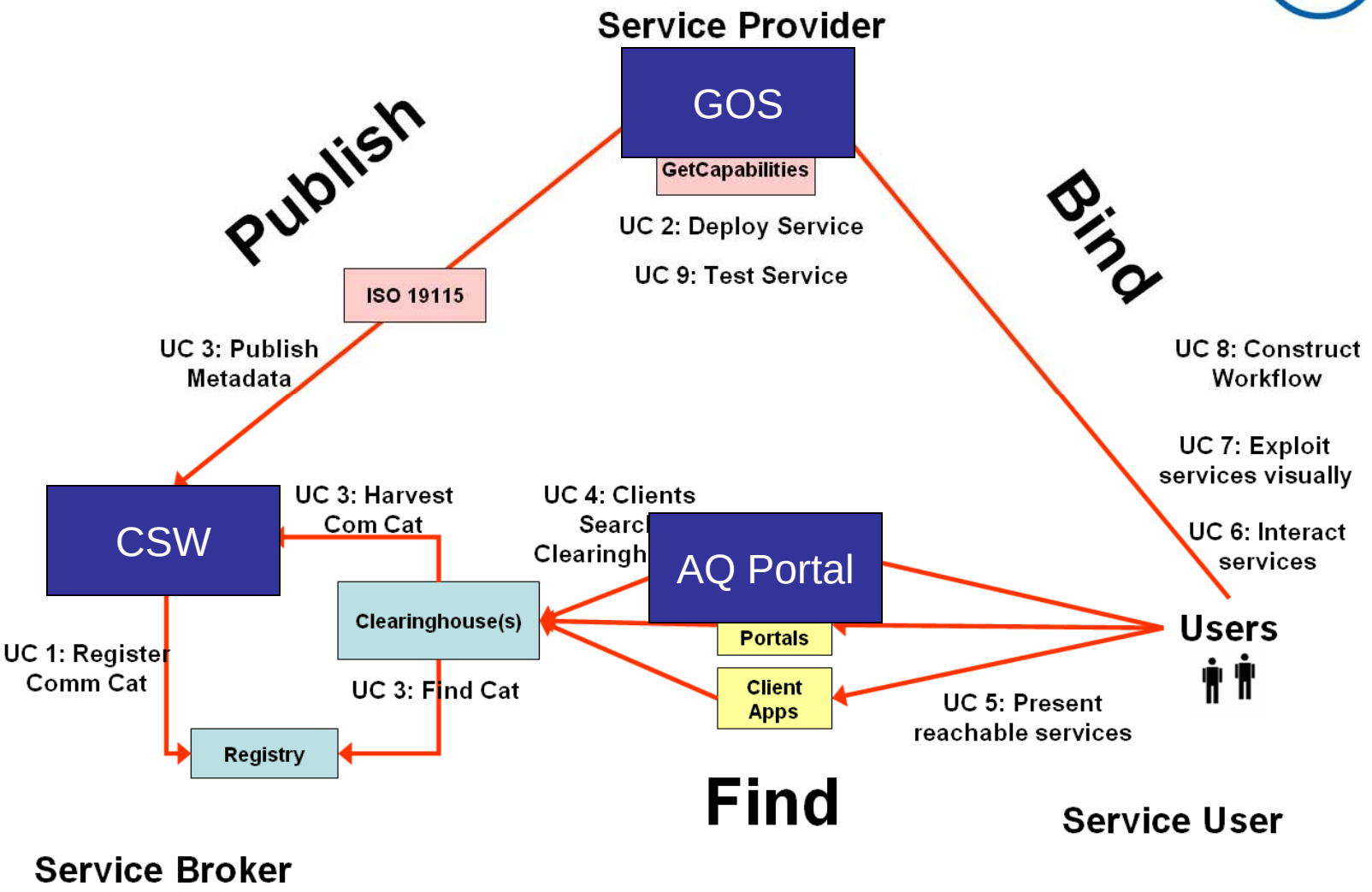
Objective

- Earth science communities needs relevant information and services from GOS
- Geographers need a cyberinfrastructure to support geospatial research, how to leverage GOS into that infrastructure
- Open-source portlets and standalone client to utilize (GOS) maps and data services to support Earth and geography science communities
- Advance through the partnership of GMU CISC, ESIP Federation, and AAG CISG.

Project Steps

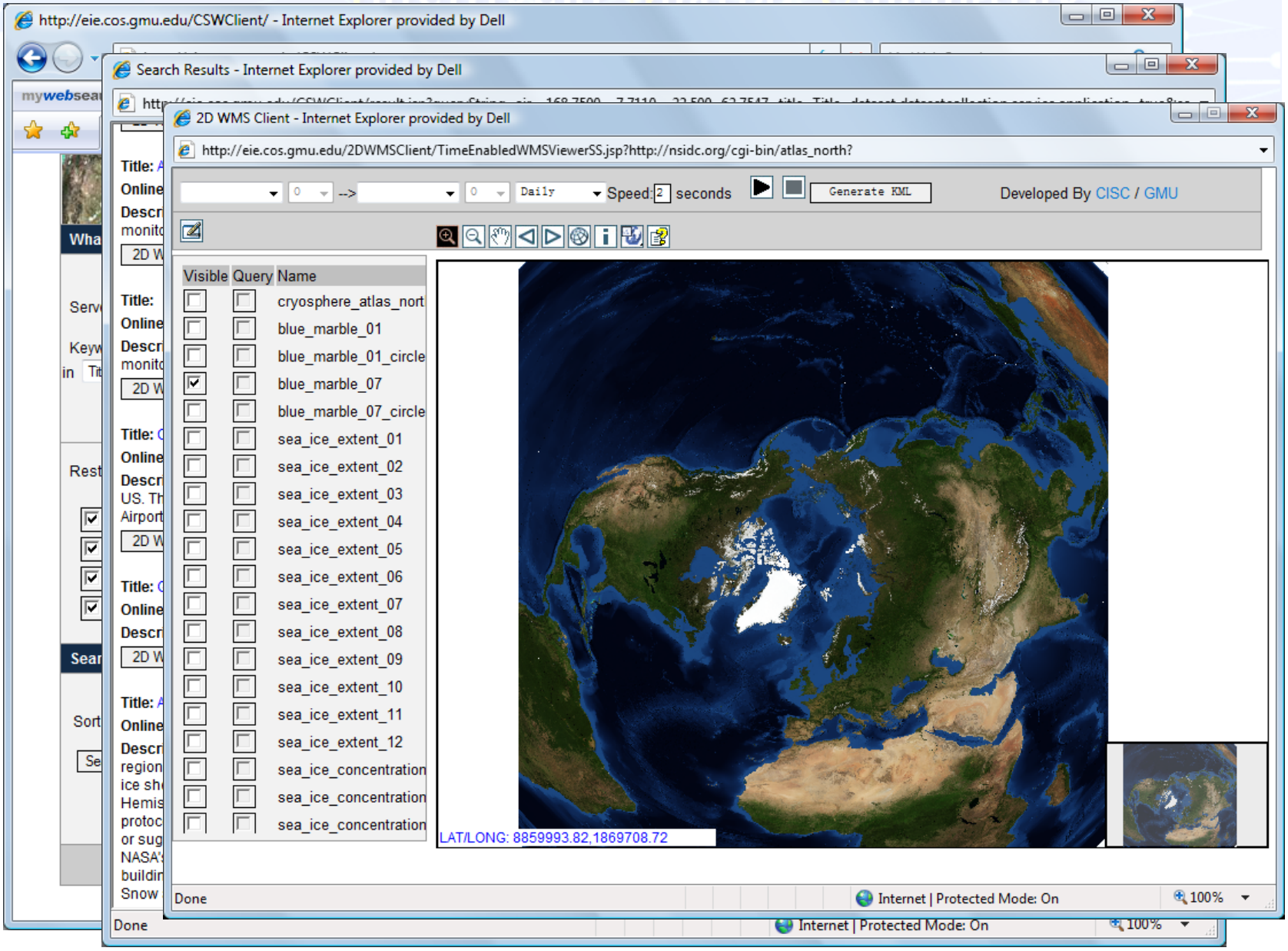
1) Organize the partners' experience on portlet/client development and access to GOS assets,
2) Develop testing modules based on the expertise and requirements,
3) Integrate the modules into the ESIP Testbed at ESIP HQ and CISC,
4) Test the portlet/client through the partnership,
5) Improve the portlets according to test feedbacks,
6) Repeat steps 4 & 5 as needed,
7) Open the portlet as open sources,
8) Wrap the portlets with desktop client and integrate with commercial software, such as ArcGIS,
9) Use the portlet/client for users at ESIP and AAG CISG and students within classes at GMU.

ESIP Testbeds: 1. Air Quality



(Falke S. & ESIP AQ working group 2009)

CSW Service & Client



ESIP Testbeds: 2. Products & Services

1. Permanent Unique Object Identifiers
2. **Semantic Web Services**
3. **Customized Inventories for GEOSS Societal Benefit Areas**
4. Metadata Harvesting
5. **Data and Service Quality**
6. **Metadata for Customized Product-Services**
7. Provenance
8. Deficiencies in ISO Standards

AAG CISG Committees

1. High Performance Computing (Qingfeng Guan, USGS GISC)
2. **Application & Visualization (Ben Tuttle /Univ. CO-Boulder and Michael Page/Emory University)**
3. **Knowledge & Metadata (Rob Raskin, NASA JPL)**
4. **SOA & SOC & Middleware (Xuan Shi, GIT)**
5. **Free and Open Source Geospatial Software (Jil Jang, Cleveland State University)**
6. Research (Shaowen Wang, UIUC)
7. Outreach (Jil Jiang, Ohio State Univ.)

Thank You

Q&A