

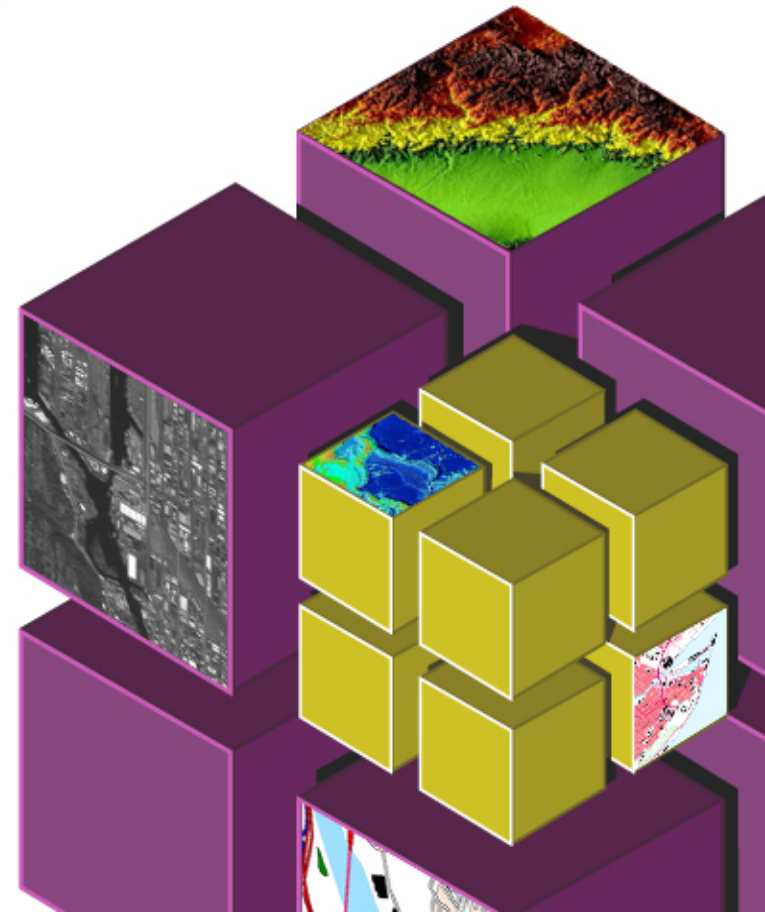


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Role-based Access Control

Best Practices for Geospatial SOA

2008 NSDI CAP Project





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Key Points

- **Participants, Scope and Objectives**
- **Project Design**
- **Best Practices Use Case Examples**



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Participants

- **U.S. Army Corps of Engineers, Water Resources Institute**
- **CubeWerx**
- **Potential participants include other CAP 2008 Category 2 Participants and Federal organizations like EPA**



Scope

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- Design, deploy and document reusable services and applications for one of the most important (but least understood) areas of Geospatial SOA – Role-based Access Control.
- Satisfy multi-agency requirements through modeling and deployment of business processes and related data/service components.
- Help the NSDI to shed rigid and inward-looking approaches and transform into a more agile, responsive and customer-centric framework driven by collaborative partnerships.
- Advance technology that can support regulatory data interoperability between organizations like USACE, EPA and USFWS.



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Why is this Important?

- Geospatial SOA based on OGC®/ISO influencing Federal Enterprise Architecture (FEA) Geospatial Profile (esp. data access).
- Efforts have matured to a point where broad acceptance is now dependent on capacity to secure data resources.
- Organizations like USACE that are considering participation in the NSDI must also consider how to establish distributed security frameworks for role-based access control to SOA resources.
- Requirements will increase as data access transitions into collaborative data management - services like the Web Feature Server- Transactional (WFS-T).



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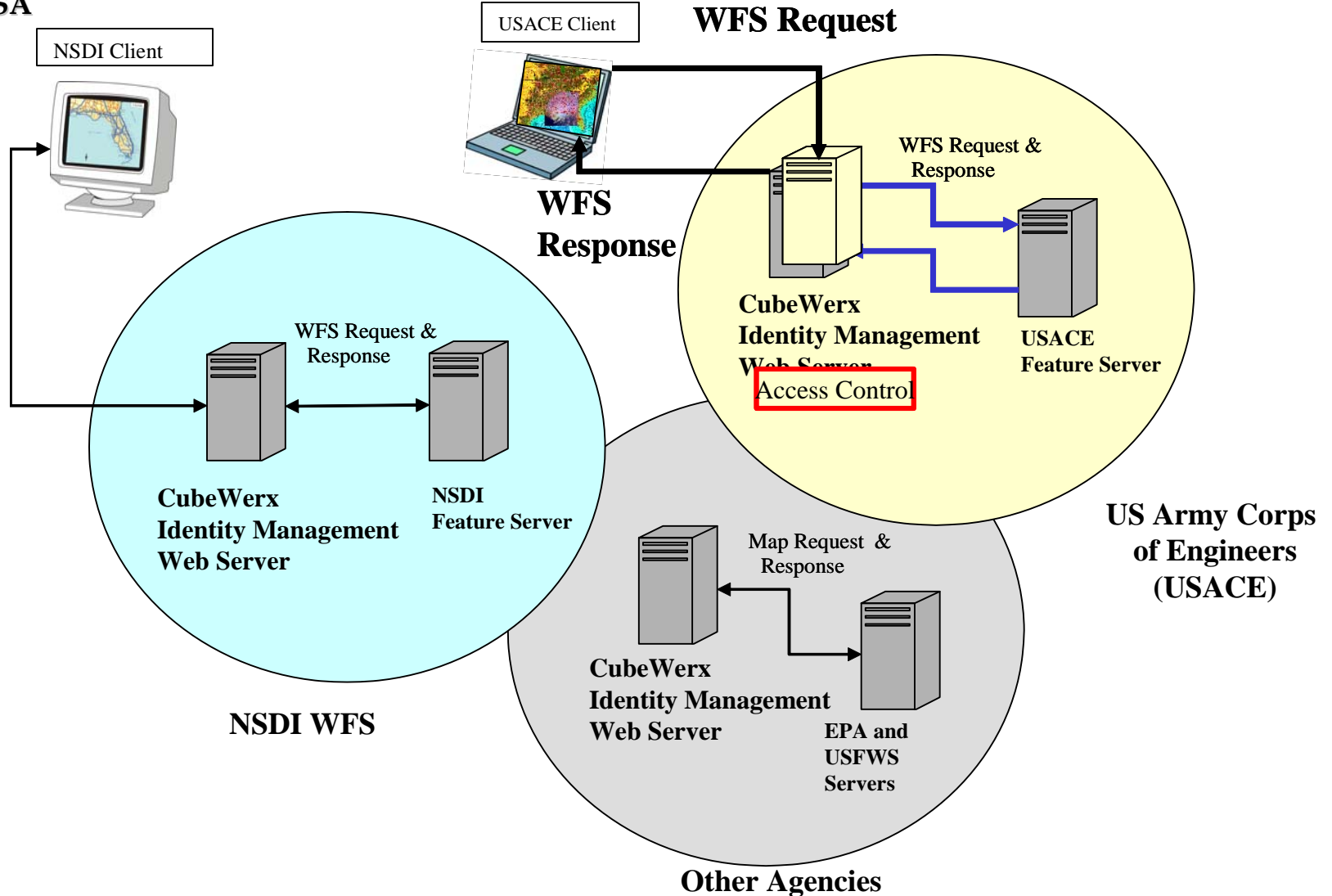
(very) High-level Objectives

- Define and document **Best Practices** in Geospatial SOA for Role-based Access to GeoData as a key component of USACE and NSDI Business Process requirements.
- Leverage CubeWerx's investment in developing solutions to solve this important security challenge.
- Demonstrate capabilities that have value across all application and spatial data stewardship domains, including development of Access Control Rules.
- Collaboratively document **Best Practices** and the implemented operating capability to address common requirements of the NSDI and Geospatial Line of Business.



High-level View...

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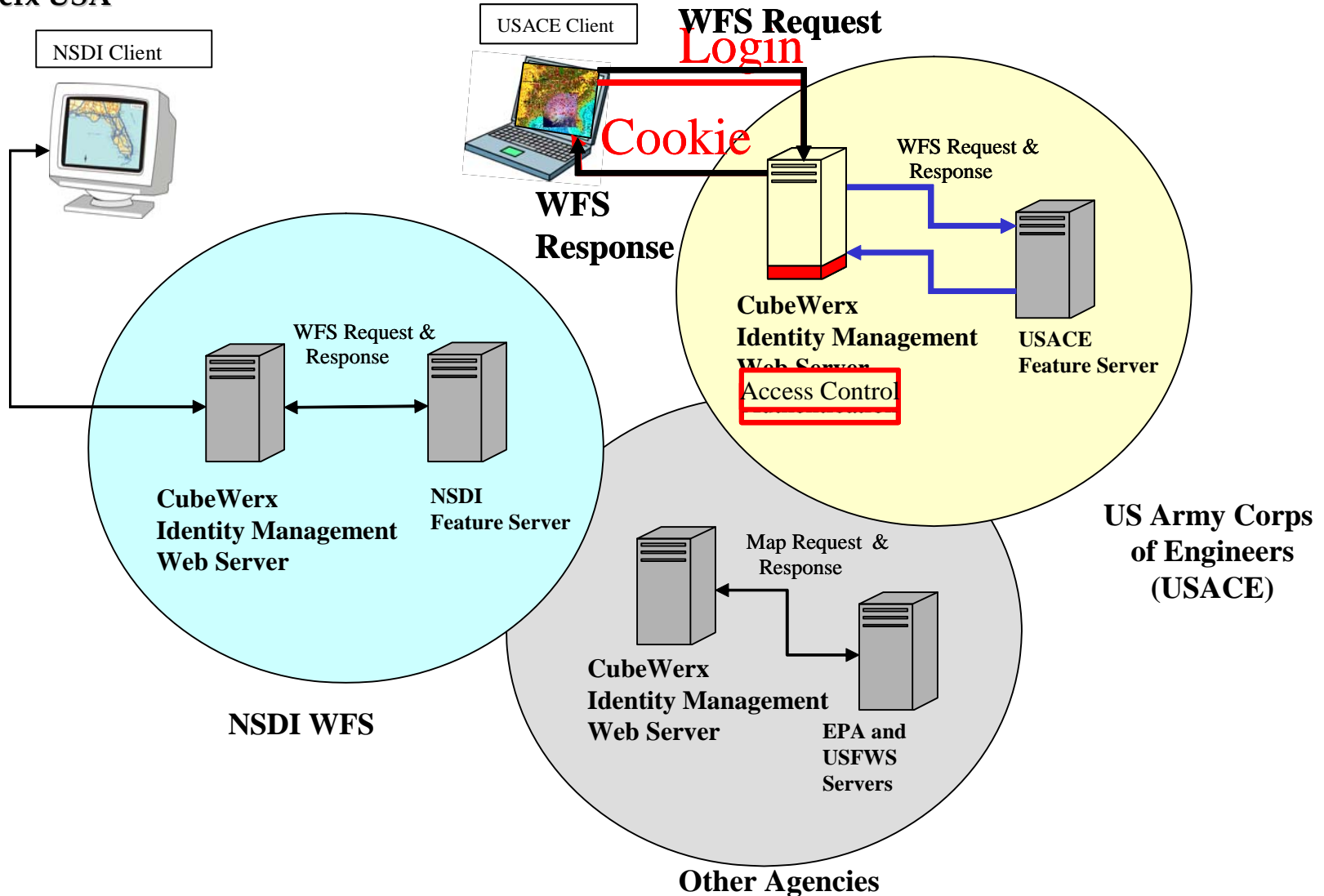
Project Design

- Community Outreach and Collaboration with other Category 2 participants - defining common SOA definitions, modeling approach and deployment strategies.
- Development & Integration of IMS and clients to work with the NSDI Framework Data Service and sample USACE resources.
- Definition of related USACE Business Process Requirements in coordination with regulatory data interoperability requirements between USACE, EPA and USFWS.
- Documentation of the USACE implementation including findings and recommendations as to “lessons learned” and Best Practices.



Use Case Examples

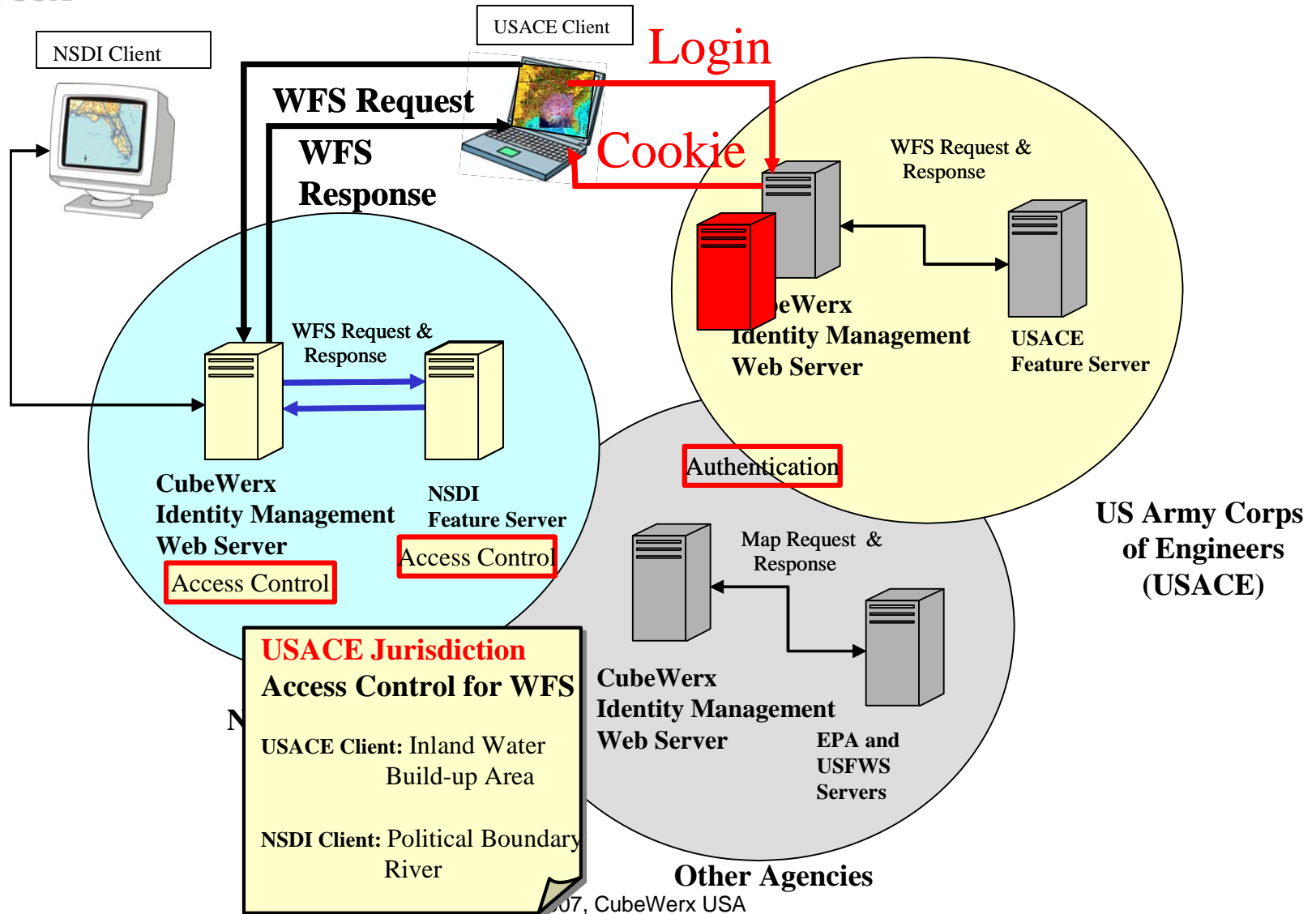
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Use Case Examples

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ACL Editor and other tools will help drive out Best Practices

The screenshot shows a Mozilla browser window displaying the CubeWerx IMS web application. The browser title is "CubeWerx IMS - version 1.1 - Mozilla". The application header includes "Identity Management Server v1.1" and navigation links for "Manage Users", "Manage Groups", and "Edit Access Control Rules". The main content area is titled "CubeSERV Access Control Rules Editor, version 4.1.11" and shows the process of editing a rule group for "Portal_Manager".

Users, Groups and/or Roles:
(comma-separated list; precede group/role with "%")

Allowed Requests:

- WMS:GetCapabilities
- WMS:GetMap
- WMS:GetFeatureInfo
- WMS:DescribeLayer
- WMS:Extract
- WMS:GetLegendGraphic
- WMS:GetLegend
- WMS:GetStyles

Excluded Requests:

Allowed Layers:

- *.Foundation

Excluded Layers:

Reminder: changes made here will not be active until the "Save" button on the previous page is pressed.

OK Cancel



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