“Building Clients for the AuScope Spatial Information Services Stack (SiSS)”

AuScope Grid Information Services Architecture

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AuScope Grid

• What is AuScope Grid?

• Charged with delivering software infrastructure to enable Geoscience Community to have easy, interoperable access to data, informational and computational resources

• Establishing governance and sustainability of services

• Delivering solutions to research and government organisations
Why is this necessary?
Part of our problem... data access is not standardised across organisations

1st Step: Standardise the Information Models

- Not a storage problem...
  - Exchange
- Semantics and structure
  - GeosciML, OGC
- Tool support
  - Creation and validation

OGC
Open Geospatial Consortium, Inc.
Geography Markup Language
The Service Architecture

Discovery Layer
- Discovery Portal
- Analysis Workflow

Community Agreed Service Interfaces and Information Models

Exchange Layer
- URN Resolver Service
- Vocabulary Service
- Geological Survey Web Feature Service (WFS)

Resources
- Standard Vocabularies
- Government Department Data
- AuScope service catalog

The Spatial Information Services Stack

Tools of the trade
- Community Agreed Service Interfaces and Information Models
- AuScope/CSIRO
- GeoServer
- Sesame
- deegree
- openRDF.org

With Application Schemas

Government Department Data

With Application Schemas
A solution: Open standards based earth science information infrastructure

Example: Earth Resource Delivery

Discovery Layer
- Discovery Portal
- Analysis Workflow

Exchange Layer
- URN Resolve Service
- openRDF.org
- GeoServer
- GeoNetwork

Resources
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Thank you and for more information:

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Earth Simulation and Modelling
Earth Imaging and Structure
National Virtual Core Library

Auscope aims to establish a world class research infrastructure to characterise the structure and evolution of the Australian continent in a global context from surface to core in space and time

Geospatial framework and Earth Dynamics
Auscope Grid and Interoperability
Earth Computation and Evolution

AN ORGANISATION FOR A NATIONAL EARTH SCIENCE INFRASTRUCTURE PROGRAM