



Sharing geospatial resources with Geoportal Server

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Esri Geoportal Server is a free open source product that enables discovery and use of geospatial resources including datasets, rasters, and Web services. It helps organizations manage and publish metadata for their geospatial resources to let users discover and connect to those resources. The Geoportal Server supports standards-based clearinghouse and metadata discovery applications.

With Esri Geoportal Server, you can

- **Reduce time and redundancy** of data production by connecting geospatial data and service producers with consumers.
- **Maintain data integrity** by allowing organizations to easily share the authoritative version of data among its users.
- **Enable easy search and discovery** of existing geospatial data and services by allowing users to create and manage descriptions of their geospatial resources and supporting easy-to-use, sophisticated, data discovery technologies.

In Earth Observation systems the Geoportal Server acts as a bridge between providers and consumers of services and data. It provides a means to search and view geospatial resources, and to manage, publish, and store metadata, enabling the discovery and use of EO resources. Producers can benefit from Geoportal functionality to publish and store metadata describing data and services. Consumers can benefit from Geoportal functionality to discover, evaluate, and use (e.g. preview, download) resources. Consumer and data producer points of view are not restricted to their community – consumers are generally interested in finding relevant data as much as data and service producers are willing to maximize the sharing and use of those: therefore the capability of dealing with multiple catalogs from different communities is a key Geoportal feature for both consumers and producers. This need is part of different initiatives (e.g. GEOSS, INSPIRE) and implies the need of handling a vast range of metadata profiles supporting a user-transparent range of discovery, evaluation and use functionality.

Many encodings and metadata data models have been developed and used in different communities and this is one of the issues Geoportal Server addressed. The Geoportal allows to configure and manage different metadata profiles (e.g. DC, ISO, FGDC, INSPIRE, EO specific) as well as configure and federate distributed catalogues based on different standards. Search interfaces harmonizing different metadata profiles offered by the Geoportal include OGC CSW 2.0.2, OGC CSW 2.02 ISO AP, EO based profiles and OpenSearch.

The presentation will cover

- Solutions for indexing and harmonizing search criteria among different metadata models and markups
- Search interfaces
- Ideas and mechanisms for developing and leveraging relationships between resources (e.g. semantic relations, code lists)
- Integration of ontology services to support multilingual and semantic search