

# Esri Geoportal Server Helps Organizations Collaborate

Esri Geoportal Server, a free, open source product, helps organizations build and administer geoportals Web sites where data producers can register their geospatial resources for others to discover and consume.

Geoportals help maintain the quality, currentness, and availability of registered resources by providing tools for evaluating new entries, controlling access to metadata and resources, and integrating the geoportals with other enterprise systems.

This functionality means that geoportals can enhance collaboration and data sharing among government and private agencies. By connecting geospatial data and service producers with consumers, geoportals reduce data redundancy, which saves time and money. By improving sharing of the authoritative version of data throughout an organization, it helps maintain data integrity.

The geoportals server was released under the Apache 2.0 license, which allows developers to freely customize and redistribute the software. Esri is using SourceForge to host and distribute the software and source code. This familiar platform will make it easy to incorporate contributions to the product from the open source community.

The geoportals does not duplicate resources but stores and catalogs resource metadata as well as the information for accessing those resources. Esri Geoportal Server inventories all metadata for registered geospatial resources in an Open Geospatial Consortium, Inc. (OGC)-compliant Catalog Service for the Web (CSW) 2.0.2 geoportals catalog service. It supplies simple integration with external Web sites and applications through its support of REST, GeoRSS, KML, SOAP, and ATOM.

Geoportals support simple authentication or user authentication, with an external Lightweight Directory Access Protocol (LDAP), for access and security. Access to metadata can be designated as unrestricted, public-protected, or restricted at the record level. By automatically monitoring registered resources, the geoportals can synchronize any changes to the catalog service.

Data producers can publish their resources to the geoportals simply by registering the resource's metadata. Publishers can directly cre-

Free,  
open source  
product  
now  
available

The screenshot shows the NCDC's Geodata Portal interface. The top navigation bar includes 'HOME' and 'SEARCH'. The main content area is titled 'Metadata Details' and contains the following information:

- Identification Information:**
  - Title: Climate Indices
  - Dataset ID: gov.noaa.ncdc:000702
  - Originator: National Climatic Data Center, NES015, NOAA, U.S. Department of Commerce
  - Publication Date: Unknown
  - Website URL: <http://www7.ncdc.noaa.gov/CDO/CDODivisionalSelect.jsp>
  - Resource (Server) URL: <http://gis.ncdc.noaa.gov/vesb/div.html>
- Abstract:** Climate Indices is a product offered by The National Climatic Data Center (NCDC). This provides data access to current U.S. temperature, precipitation and drought indices. Divisional indices included are: Precipitation Index, Palmer Drought Severity Index, Palmer Hydrological Drought Index, Modified Palmer Drought Severity Index, Temperature, Palmer Z Index, Cooling Degree Days, Heating Degree Days, 3-Month Standardized Precipitation Index (SPI), 2-Month (SPI), 3-Month (SPI), 6-Month (SPI), 12-Month (SPI) and the 24-Month (SPI). All of these indices, except for the SPIs, are available for Regional, State and National views as well. These data are extracted from the U.S. Temperature-Precipitation-Drought Index (DSI-9640) (C00005) and are updated on a monthly basis. Data formats include space delimited text, comma delimited text, xml and graphical outputs.
- Purpose:** To make a wide range of climatic data available to researchers and the public.
- Progress:** Completed
- Frequency:** As Needed
- Time Period of Content:**
  - Data Range:
    - Begin Date: 1995-01-01
    - End Date: Present

▲ Many organizations, such as the National Oceanic and Atmospheric Administration's (NOAA) National Climatic Data Center (NCDC), are using Geoportal Server.

ate metadata in the Web application, upload existing metadata to the geoportals, or allow the geoportals to autogenerate metadata. Simple tools are provided for generating and registering metadata, and supported resources include datasets, analyses, tools, and Web services. In addition, the Publish Client that comes with the geoportals server lets data publishers register geospatial resources directly from ArcCatalog.

The geoportals supports and provides templates for several common metadata profiles—Federal Geographic Data Committee (FGDC), Dublin Core, and International Organization for Standardization (ISO) including support for the North American and Infrastructure for Spatial Information in Europe (INSPIRE) profiles.

The easy-to-use interface lets others discover and access resources registered with the geoportals for use in their projects by searching on keywords and by location. Smart matching—enhanced by the ontology service—and smart ranking quickly identify the most promising results. Searches can be made on

▲ With the CSW clients for ArcGIS, geospatial data and services in a geoportals can be searched, accessed, and used directly in ArcMap and ArcGIS Explorer.

multiple types of search providers, including standards-based XSW systems, Web 2.0 (OpenSearch) systems, content management systems (CMS), and document management systems (DMS). With the CSW clients for ArcGIS, geospatial data and services in a geoportals can be searched, accessed, and used directly from ArcMap and ArcGIS Explorer.

Search results can be previewed using the geoportals's streamlined map previewer, or the geoportals can be integrated with an organization's existing map viewer. Geoportals provide direct access to live Web services for preview and use. Once located, data can be efficiently downloaded using the Clip-Zip-Ship task. The area of interest in the dataset is specified, and the geoportals extracts it, packages it into a ZIP file, and e-mails the data.

Many organizations around the world are using Geoportal Server. Visit [bit.ly/bDIFG8](http://bit.ly/bDIFG8) to view these sites. To learn more about Geoportal Server or download it, visit [esri.com/geoportal](http://esri.com/geoportal).