



Catalog.Data.gov
CKAN Publisher Tutorial
to facilitate
GeoPlatform Geospatial Data
Discovery

October 2014

Publishing Tutorial Overview

◆ Overview:

■ GeoPlatform Goals

- ◆ One goal of geospatial resource discovery requires complete standards based metadata to be published to catalog.data.gov.

■ Metadata Publishing Workflow

- ◆ Metadata creation at the Dataset Manager/agency level
- ◆ Process flow to publication in catalog.data.gov
- ◆ End user utilization in GeoPlatform.gov

■ Metadata Publishing Process

- ◆ Current approach and features of the current approach
- ◆ Creating a new publisher account in data.gov
- ◆ Creating and editing a harvest source
- ◆ Harvest Types
- ◆ Harvest Validation, Harvest Report. Harvest Errors

■ Outcome

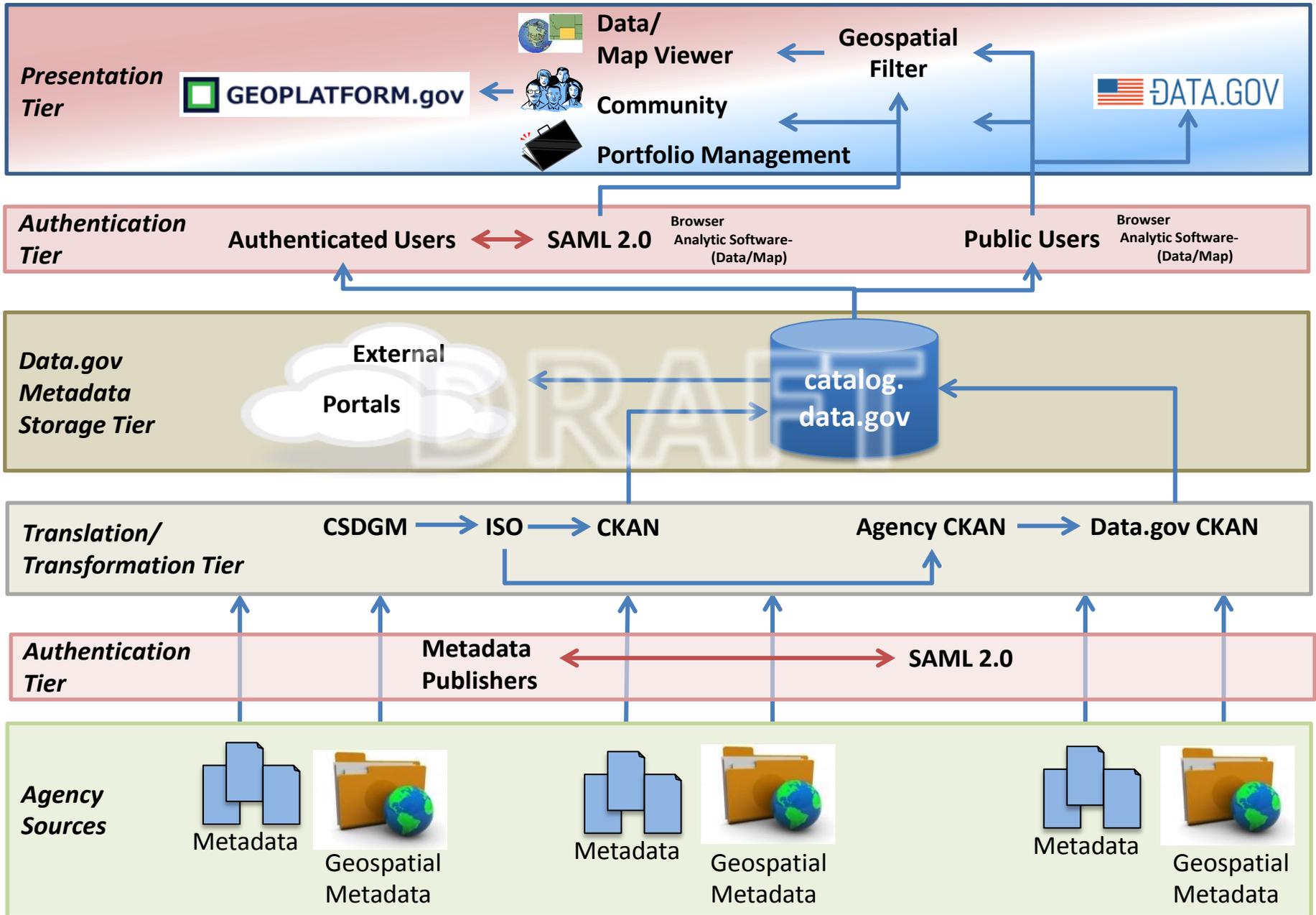
- ◆ Indexed geospatial search results
- ◆ Map based geospatial search results

GeoPlatform.gov Goals

◆ Goals:

- Provide a Platform for broad spectrum of users (technical experts, non-experts, and decision makers) to:
 - ◆ Discover authoritative geospatial data
 - Search/Catalog queried through **Data.gov**
 - *Filtered on geospatial metadata*
 - *Search query by text, map extents*
 - *Search presentation by source (text), by map viewer (through services)*
 - ◆ Discover geospatial resources
 - *National Geospatial Data Assets (NGDAs)*
 - *A-16 datasets*
 - *Federal, Tribal, State, Local, Academic geospatial datasets*
 - *“How To” guidance*
 - ◆ Facilitate the use of geospatial data and tools – links to data, services, and applications
 - ◆ Collaborate on geospatial information and ideas through Communities
 - A-16 Theme Communities
 - Cross-Agency Collaboration Communities
 - Agency “storefront” Communities
 - ◆ Efficiently manage geospatial portfolio investments through Marketplace

Metadata Publishing Workflow and Utilization by GeoPlatform.gov (Agency to End User)



Current Approach to Serving Geospatial Metadata

- ◆ The GeoPlatform.gov environment relies on Catalog.data.gov for its source of metadata that describes geospatial data
- ◆ Data.gov relies on metadata publishers to provide metadata:
 - Through direct publishing or agency bulk upload
 - Through best metadata practices:
 - ◆ Standards based metadata (CSDGM, ISO)
 - ◆ Metadata describing: online data access, data services, data based application
 - Through harvest sources that include:
 - ◆ federal, state, local, academic, and tribal sources
 - Geospatial metadata is currently “tagged” by data.gov as “geospatial data”
- ◆ GeoPlatform provides a customized index and visualization environment for geospatial filtered data from authoritative sources
 - Search Query:
 - ◆ Text based search
 - ◆ Map extent based search
 - Search Presentation
 - ◆ Indexed text based results index
 - ◆ Map based views for data linked through services

Features of the Current Environment

- ◆ Common catalog.data.gov search engine (CKAN) shared with Data.gov and GeoPlatform.gov
- ◆ Geospatial metadata provided by agencies in public Web folders or via OGC CSW protocol or through bulk upload
- ◆ Metadata “tagged” by data.gov as “geospatial data”
- ◆ Metadata format as CSDGM (FGDC) or ISO 191XX series
- ◆ Metadata collections are registered and harvested to refresh the index at catalog.data.gov
- ◆ Links in metadata point to: download, web services, applications, or other access URL
- ◆ Links to map services (wms) are launched in a map viewer; kml, shp, and GeoRSS will be supported in the future

Current Publication Process

- ◆ CSDGM (FGDC) or ISO metadata prepared by agencies are hosted in a CSW catalog or Web-accessible Folder (WAF), i.e., a browser enabled public web folder
- ◆ Publisher registers for Admin access
- ◆ Access request is reviewed and granted
- ◆ Publisher creates “harvest source” descriptions at catalog.data.gov
- ◆ Metadata are periodically harvested

Creating a Metadata Publishing Account and Harvesting your Metadata to catalog.data.gov

Creating a New Publisher Account

- ◆ Before you can publish metadata you must create a new publisher account
- ◆ To create a new account:
 - Go to:
<https://idm.data.gov/user/register>
 - The following “Create New Account” screen appears
 - ◆ “Log In” if you have an existing account
 - ◆ “Request a new password” if you have forgotten your existing password

[Create new account](#) [Log in](#) [Request new password](#)

Type Of User *
Public

Display Name *

E-mail *

A valid e-mail address. All e-mails from the system will be sent to this address. The e-mail address receive certain news or notifications by e-mail.

First Name Middle Name Last Name

CAPTCHA

This question is for testing whether you are a human visitor and to prevent automated sp

468

Type the text

Privacy & Terms

RECAPTCHA™

Create new account

Create New Publisher Account (Cont.)

- ◆ Select Publisher
 - The screen will change requesting detailed information
- ◆ Fill in all required information including Captcha
- ◆ Select “Create New Account”

[Create new account](#) [Log in](#) [Request new password](#)

Type Of User*
Publisher

Display Name*

E-mail*
A valid e-mail address. All e-mails from the system will be sent to this address. The e-mail address is to receive certain news or notifications by e-mail.

First Name* Middle Name* Last Name*

Organization Type*
- Select a value -

Job Title*

Street Address*

City*

State*
- Select a value -

Zip*

Business Phone*

CAPTCHA
This question is for testing whether you are a human visitor and to prevent automated spam:

468

Type the text

Privacy & Terms

reCAPTCHA™

Create new account

Publisher Account Review and Approval

- ◆ Usually within a business day, requests for a Publisher (or User) Account are reviewed and approved and associated with an Organization (domain)
- ◆ You will get a confirmation email that the account has been approved. This allows:
 - Metadata Publishing account access to Data.gov, CKAN, GeoPlatform.gov, You can also access ESRI ArcGIS Online (AGOL) backend (additional ESRI Sign In may be required)

Publisher Log-in

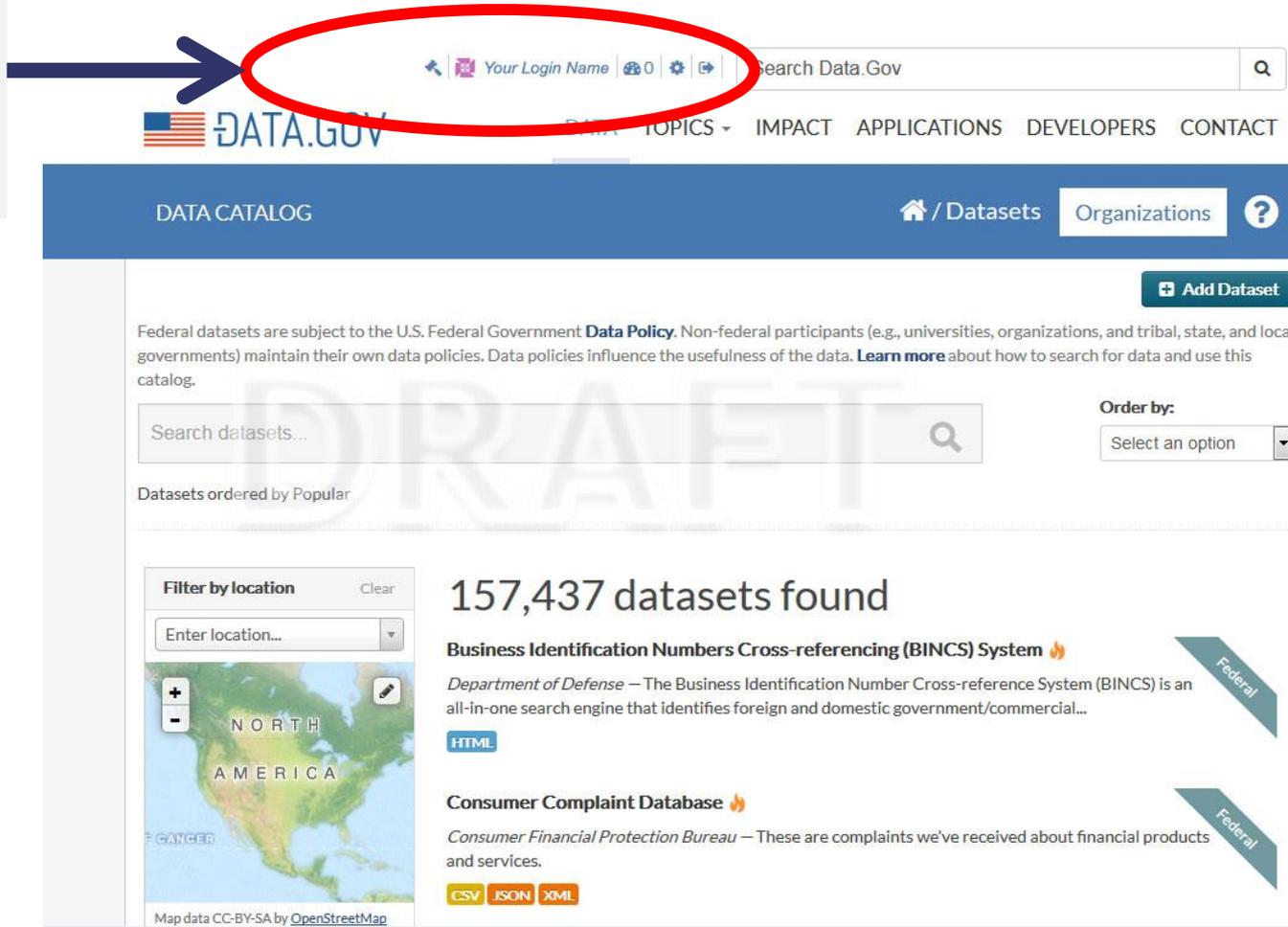
The screenshot shows the Data.gov homepage. At the top, there is a featured dataset titled "DTV Reception Maps" with a "Federal" tag. Below it, a search bar and a navigation menu are visible. The navigation menu includes links for "Data", "Topics", "Impact", "Applications", "Developers", "Contact", "About", "Open Government", "FAQ", "Media", "Glossary", "Federal Agency Participation", "Data Publishers", "Accessibility", "Data Policy", "Privacy Policy", "Performance.gov", "USA.gov", and "Login". The "Login" link is circled in red, and a blue arrow points to it.

The screenshot shows the "USER ACCOUNT" page on Data.gov. The page has a blue header with the "DATA.GOV" logo and the text "USER ACCOUNT". Below the header, there are three links: "Create new account", "Log in", and "Request new password". The "Log in" link is underlined. Below these links, there are two input fields: "E-mail" and "Password". The "E-mail" field has a red asterisk and a placeholder text "Enter your e-mail address.". The "Password" field has a red asterisk and a placeholder text "Enter the password that accompanies your e-mail.". Below the input fields, there is a blue "Login" button. A large "DRAFT" watermark is overlaid on the page.

Login with your credentials link in footer

Publisher Profile

Profile,
Feeds,
Settings



The screenshot shows the Data.Gov website interface. At the top, a navigation bar includes a search bar with the text "Search Data.Gov" and a search icon. To the left of the search bar, there is a user profile area with a red circle around it, containing a "Your Login Name" icon, a home icon, a settings icon, and a share icon. A blue arrow points from the text "Profile, Feeds, Settings" to this red circle. Below the navigation bar, there are links for "DATA TOPICS", "IMPACT", "APPLICATIONS", "DEVELOPERS", and "CONTACT". The main content area has a blue header with "DATA CATALOG" and navigation options for "Datasets" and "Organizations". A "Add Dataset" button is visible. Below this, there is a search bar for datasets and an "Order by:" dropdown menu. A large "DRAFT" watermark is overlaid on the page. The main content displays "157,437 datasets found" and lists two datasets: "Business Identification Numbers Cross-referencing (BINCS) System" and "Consumer Complaint Database". Each dataset entry includes a brief description, a "Federal" label, and format options like HTML, CSV, JSON, and XML. A "Filter by location" section on the left includes a map of North America.

Setting Up a Harvest Source

1. Go to **Organizations** and search for your organization, or use/save pathname based on your domain name,
<https://catalog.data.gov/organization/usgs-gov>
2. Click **About**
3. Click **Admin** (see/set org details)
4. Click **Harvest Sources**
5. Click **Add Harvest Source** or edit an existing one

Edit a Harvest Source

The screenshot shows a web browser at the URL `catalog.data.gov/harvest/edit/u-s-geological`. The page header includes the Data.gov logo and navigation links for DATA, TOPICS, IMPACT, APPLICATIONS, DEVELOPERS, and CONTACT. A secondary navigation bar shows 'DATA CATALOG', 'Datasets', and 'Organizations'. The main content area is titled 'U.S. Geological Survey, Department of the Interior / Harvest Sources / U.S. ... / Admin'. On the left, a sidebar displays 'U.S. Geological Survey Coastal Map' with the note 'There is no description for this harvest source' and a 'Datasets' count of 1299. The main content area contains a navigation bar with 'Dashboard', 'Jobs', 'Edit' (highlighted with a red box), 'Reharvest', 'Clear', and 'View harvest source'. Below this are form fields for 'URL' (containing `http://coastalmap.marine.usgs.gov/metadata/`), 'Title' (containing 'U.S. Geological Survey Coastal Map'), and 'Description' (with a note 'You can use Markdown formatting here'). A secondary URL `catalog.data.gov/harvest/u-s-geological-survey-coastal-map` is shown with an 'Edit' button.

Harvest Sources

The screenshot shows the DATA.GOV website interface. At the top, there is a navigation bar with 'DATA TOPICS - IMPACT APPLICATIONS DEVELOPERS CONTACT'. Below this is a blue header with 'DATA CATALOG' and navigation links for 'Datasets', 'Organizations', and a help icon. The main content area is titled 'Organizations / U.S. Geological Survey, Department ... / Admin'. On the left, there is a sidebar for the USGS organization, including its logo and a brief description. The main content area displays a list of harvest sources for the USGS, with a total of 39 sources. The first source is 'USGS National Geologic Map Database', which has 7496 datasets. Other sources include 'USGS LandCarbon Team' (2 datasets), 'USGS Historical Topographic Maps' (178755 datasets), 'geo-data-portal' (33 datasets), 'USGS NED Original Product Resolution (OPR) Downloadable Data Collection' (118 datasets), and 'NGTOC tests'.

DATA.GOV

DATA TOPICS - IMPACT APPLICATIONS DEVELOPERS CONTACT

DATA CATALOG / Datasets Organizations ?

Organizations / U.S. Geological Survey, Department ... / Admin

USGS
science for a changing world
U.S. Geological Survey,
Department of the
Interior
http://www.usgs.gov/ The
USGS is a federal science
agency that provides impartial
information on the health of
our ecosystems and
environment, the natural
hazards that... read more

Edit Datasets Members Harvest Sources View organization

39 harvest sources Add Harvest Source

USGS National Geologic Map Database
The NGMDB is a Congressionally mandated national archive of geoscience maps, reports, and stratigraphic information, developed according to standards defined by the cooperators (principally the USGS and the Association of American State Geologists). Included in this system is a comprehensive set of publication citations, stratigraphic nomenclature, downloadable content, unpublished source information, and guidance on standards development. The NGMDB contains information on more than 94,000 maps and related geoscience reports published from the early 1800s to the present day, by more than 630 agencies, universities, associations, and private companies.
Datasets: 7496

USGS LandCarbon Team
Data products developed as part of a national ecosystem assessment focused on changes in carbon stocks and fluxes in all the major ecosystems, and on the major natural and anthropogenic processes that control carbon cycling (such as climate change, land use, and wildland fires).
Datasets: 2

USGS Historical Topographic Maps
USGS Historical Quadrangle in GeoPDF. The USGS Historical Quadrangle Scanning Project (HQSP) is scanning all scales and all editions of topographic maps published by the U.S. Geological Survey (USGS) since the inception of the topographic mapping program in 1864.
Datasets: 178755

geo-data-portal
A metadata catalog that serves the USGS Geo Data Portal processing service.
Datasets: 33

USGS NED Original Product Resolution (OPR) Downloadable Data Collection
This data collection is the Original Product Resolution (OPR) Digital Elevation Model (DEM) as provided to the USGS. This DEM is delivered in the original resolution, with the original spatial reference. All elevation units have been converted to meters. These data may be used as the source of updates to the National Elevation Dataset (NED), which serves as the elevation layer of the National Map.
Datasets: 118

NGTOC tests
NGTOC tests

Create Harvest Source

Home / Harvest Sources / Create Harvest Source

Harvest sources

Harvest sources allow importing remote metadata into this catalog. Remote sources can be other catalogs such as other CKAN instances, CSW servers or Web Accessible Folders (WAF) (depending on the actual harvesters enabled for this instance).

URL:

This should include the http:// part of the URL

Title:

URL:

Description:

You can use [Markdown formatting](#) here

- Source type:
- CSW Server ?
 - Web Accessible Folder (WAF) ?
 - Single spatial metadata document ?
 - Geoportal Server ?
 - Web Accessible Folder (WAF) Homogeneous Collection ?
 - Z39.50 ?
 - ArcGIS REST API ?

Harvest Types

- ◆ OGC Catalog Service (CSW 2.0.2) carrying full FGDC (CSDGM) or ISO metadata
- ◆ Web Accessible Folder (WAF), i.e., a browse enabled public web folder
 - For homogeneous collections
- ◆ Single metadata file as XML (upload)
- ◆ Esri Geoportal Server instance
- ◆ Z39.50 server
- ◆ ArcGIS Online or Portal for ArcGIS

WAF for Homogeneous Collections

- ◆ CKAN allows for large collections of homogeneous data (e.g. TIGER, Landsat, bathy surveys) to be referenced by a parent record
 - Results in compact search results that references specific data
- ◆ Identify/create the parent metadata record
- ◆ The Resource Description URL contains the location of the WAF in which all child records exist
- ◆ In indexed search:
 - End user is presented with the parent record is returned as the initial search result
 - End user is presented with option search the entire collection

Harvest Validation

Update frequency: Weekly

Collection Metadata Url: eg. http://example.com/collection.xml

Validation:

- Autodetect
- ISO 19115 Metadata (ISO 19139 XSD)
- FGDC Minimal Validation
- FGDC CSDGM Version 2.0, 1998 (FGDC-STD-001-1998)
- FGDC CSDGM Biological Data Profile (FGDC-STD-001.1-1999)
- FGDC CSDGM Metadata Profile for Shoreline Data (FGDC-STD-001.2-2001)
- FGDC Extensions for Remote Sensing (FGDC-STD-012-2002)

Dataset visibility: Public

Organization: usgs-gov

Delete Save

[About](#) | [Accessibility](#) | [Contact Us](#) | [Data Policy](#) | [FAQ](#) | [Privacy Policy](#) | [Sitemap](#) | [USA.gov](#)

Harvest Validation

- ◆ Metadata are parsed and validated as either CSDGM or ISO.
 - If validated, the record is imported into the index
 - If not validated,
- ◆ Options:
 - Auto-detect
 - ISO 19115/19139 from NOAA NGDC
 - CSDGM Minimal validation (Xpath tests)
 - CSDGM Version 2 (1998)
 - CSDGM Biological Data Profile, Shoreline Data Profile, Extensions for Remote Sensing Data

Harvesting Scheduling and Updating

- ◆ Harvests are run on a schedule that you set
- ◆ Only new and updated records are detected in a WAF – if you need to delete then hit **Clear** to purge and fully reload
- ◆ Harvests will be scheduled and should complete within one business day
- ◆ An error report is available

Harvest Report

The screenshot shows the Data.gov interface for a harvest report. The browser address bar displays the URL: `catalog.data.gov/harvest/admin/u-s-geologi`. The page header includes the Data.gov logo and navigation links for DATA, TOPICS, IMPACT, APPLICATIONS, DEVELOPERS, and CONTACT. The main navigation bar shows 'DATA CATALOG' and 'Organizations' (selected). The breadcrumb trail is: `/ Organizations / U.S. Geological Survey, Department of the Interior / Harvest Sources / U.S. ... / Admin`. On the left, a sidebar for 'U.S. Geological Survey Coastal Map' shows 'There is no description for this harvest source' and 'Datasets: 1299'. The main content area features a 'Last Harvest Job' section with a 'DRAFT' watermark. It includes a summary: '10 errors', '2 added', '0 updated', and '0 deleted'. A table provides details for the job:

Id	52fcd304-8639-4fb7-89fb-f8122da8c4ea
Created	Sep 30, 2014, 20:48
Started	Sep 30, 2014, 20:48
Finished	Sep 30, 2014, 21:03
Status	Finished

Buttons for 'Dashboard', 'Jobs', 'Edit', 'Reharvest', 'Clear', and 'View harvest source' are visible. A 'View full job report' button is located at the bottom right of the job details.

Error Reporting

Document Errors

Count	Message
10	Transformation to ISO failed
9	The transformation service returned an error for object {0}: [409] net.sf.saxon.trans.XPathException: A sequence of more than one item is not allowed as the first argument of contains() ("USGS Pacific Science Center, S...", "U.S. Geological Survey, Coasta...")
1	The transformation service returned an error for object {0}: [409] net.sf.saxon.trans.XPathException: Cannot convert string to double: "4,700"
1	Point extent defined instead of polygon for object b0b9fe1e-671d-4275-8b42-a5d43346e75c

Error Report

Document Errors 11 documents with errors

114c4840ba70123873b83405f4a7ca2c63ae76d3

Remote content

Local content

Transformation to ISO failed

The transformation service returned an error for object {0}: [409]

net.sf.saxon.trans.XPathException: A sequence of more than one item is not allowed as the first argument of contains() ("USGS Pacific Science Center, S...", "U.S. Geological Survey, Coasta...")

1b372346bbdf9fc3a5b2db7d79aa9e810af4978f

Remote content

Local content

Transformation to ISO failed

The transformation service returned an error for object {0}: [409]

net.sf.saxon.trans.XPathException: A sequence of more than one item is not allowed as the first argument of contains() ("USGS Pacific Science Center, S...", "U.S. Geological Survey, Coasta...")

Reharvest and Clear

The screenshot shows the Data.gov website interface. The browser address bar displays `catalog.data.gov/harvest/edit/u-s-geological`. The page title is "U.S. Geological Survey Coastal Map". The breadcrumb trail is: `/ Organizations / U.S. Geological Survey, Department of the Interior / Harvest Sources / U.S. ... / Admin`. The main content area has a "DRAFT" watermark. At the top right of the main content area, there are buttons for "Dashboard", "Jobs", "Edit", "Reharvest", "Clear", and "View harvest source". The "Reharvest" button is highlighted with a blue arrow. Below the buttons, there are input fields for "URL:" (containing `http://coastalmap.marine.usgs.gov/metadata/`), "Title:" (containing "U.S. Geological Survey Coastal Map"), and "Description:". The "URL:" field has a note: "This should include the http:// part of the URL". Below the "Title:" field, there is a "URL:" field containing `catalog.data.gov/harvest/u-s-geological-survey-coastal-map` and an "Edit" button. A text box at the bottom of the page says "You can use Markdown formatting here".

Select Reharvest to reharvest or Clear to clear the contents

Reharvest and Clear

- ◆ If your collection is set to “Manual” or you wish to force a re-harvest of content, then click on **Reharvest**. It will process within a few hours.
- ◆ If you wish to flush the contents of the index or have deletions from a prior run, then click on **Clear** first

Metadata recommendations

Metadata guidance has been developed to optimize data discoverability within Data.gov and GeoPlatform.gov

General Guidance:

Metadata Recommendations Supporting Data Discovery and Use in Data.gov and GeoPlatform.gov

http://www.geoplatform.gov/sites/default/files/document_library/GeospatialMetadataBestPractices_20141010.pdf

NGDA Specific Guidance:

National Geospatial Data Assets (NGDA) Metadata Guidelines

http://www.geoplatform.gov/sites/default/files/document_library/NGDAMetadataGuidelines_20141010.pdf

Resultant Uses of Harvested Metadata in GeoPlatform

GeoPlatform.gov

GEOPLATFORM.gov fgdc Federal Geographic Data Committee

[Overview](#) | [Data](#) | [Maps](#) | [Communities/Agencies](#) | [Resources](#) | [Marketplace](#) | [Dashboards](#)

[Sign In](#) | [Help](#)

Explore

Develop

Publish

WWHGD Community Launched on GeoPlatform
 The World-Wide Human Geography Data (WWHGD) Working Group: Discovering Human Geography da... [➔](#)



88,546 Datasets
 Search geospatial datasets by terms above...
[Learn More](#)

News & Blogs - What's in the news and the latest information about GeoPlatform

Site Statistics & Data Metrics - site usage, popular pages, organizational dataset

Featured Applications



GeoPlatform - Climate Resources

Find data and tools related to climate change and its impacts that can help inform, prepare, and strengthen America's communities. This resource area is focused on providing easy access to data and resources related to coastal flooding, sea level rise, and their impacts. Over time, this area will expand to include additional data and tools relevant to other important climate-related impacts, including risks to human health, the food supply, and energy infrastructure.

[View Details](#)

[View more applications](#) ➔

Trending Data

Great Chile Earthquake of May 22, 1960 - Anniversary Edition

On May 22, 1960 (19:11 UTC), a Mw 9.5 earthquake occurred in southern Chile (39.5 S, 74.5 W). This was the largest earthquake ever instrumentally recorded. (It was not the largest in terms o...

U.S. Hourly Precipitation Data

Hourly Precipitation Data (HPD) is digital data set DSI-3240, archived at the National Climatic Data Center (NCDC). The primary source of data for this file is approximately 5,500 US Nationa...

Railroad Mileposts BNSF

Mileposts for BNSF railways in North Dakota. BNSF has given the State permission to publicly post this data...

Featured Maps

Sea Level Rise Planning Tool - New Jersey and New York State



NOAA, in partnership with FEMA, USACE, USGCRP, and CEQ has created a set of map services and related tools to help communities, residents, and other stakeholders consider risks...

[View Details](#)

Exploring Ocean Wind Energy



Offshore Wind is a viable source of energy capable of providing 900,000 megawatts (MW) of electricity—almost enough energy to power the entire country.

[View Details](#)

[View more maps](#) ➔

CKAN Open Source Catalog Software Utilized by GeoPlatform

The screenshot shows the GEOPLATFORM.gov website interface. At the top, there is a navigation bar with links for Overview, Data, Maps, Communities/Agencies, Resources, Marketplace, and Dashboards. A search bar is located in the top right corner. Below the navigation bar, the main content area is divided into several sections:

- Filter By Location:** Includes a map of North America and a search input field for location.
- Dataset Type:** A filter section showing 'Geospatial (88167)' as the selected type.
- Tags:** A filter section showing 'Temperature (25720)' and 'Physical (22938)' as available tags.
- Dataset Catalog:** The main content area displaying search results. It includes a search bar, a 'Search' button, and a dropdown menu for 'Order by: Popular'. Below this, two dataset entries are visible:
 - Great Chile Earthquake Of May 22, 1960 - Anniversary Edition:** A 'Federal' dataset with a description of a Mw 9.5 earthquake in southern Chile in 1960. It includes links for HTML format.
 - U.S. Hourly Precipitation Data:** A 'Federal' dataset with a description of hourly precipitation data from the National Climatic Data Center. It includes links for HTML, Esri REST, KMZ, PDF, and CSV formats.

Search Facets in GeoPlatform Search

The screenshot displays the GeoPlatform search interface. On the left, there are several search facets: 'Organizations' (with 'U.S. Geological Survey, Department of the Interior' selected), 'Tags' (with 'alaska' selected), 'Filter by location' (with a map of North America), 'Organization Types' (with 'Federal Government' selected), and 'Organizations' (with 'U.S. Geological Sur...' selected). The main search results area shows a list of datasets, including '67 datasets', 'Biodiversity Information', 'U.S. Geological Survey', 'North American B...', '2008 Presidential General Election, County Results - Direct Download', and 'USGS Water-Quality Data for the Nation - National Water Information System (NWIS)'. A text box on the right explains that search facets provide instantaneous combination search filtering on multiple filters as selected by users on the left. This example is of USGS source in Alaska. This is a sort of browse that facilitates data exploration. We plan to populate these search facets based on controlled vocabularies on the processed metadata, such as ISO Topic Category, National Geospatial Data Asset (NGDA/A-16) Theme, agency, resource type, and geographic extent.

Search by Map Extents

Home / Organizations / U.S. Geological Survey, ...



U.S. Geological Survey,
Department of the
Interior

http://www.usgs.gov/ The USGS is a federal science agency that provides impartial information on the health of our ecosystems and environment, the natural hazards that... read more

Contact

tnm_help@usgs.gov

Share on Social Sites

Google+
Twitter
Facebook

Dataset extent



Map data © OpenStreetMap contributors
Tiles by MapQuest

Dataset

USGS Land Cover (NLCD) Overlay Map Service from The National Map

Updated: Oct 01, 2014

The USGS Land Cover service from The National Map (TNM) consists of NLCD 1992, 2001, 2006, and 2011, which are National Land Cover Database (NLCD) classification schemes based primarily on Landsat satellite data along with ancillary data sources, such as topography, census and agricultural statistics, soil characteristics, wetlands, and other land cover maps. NLCD 1992 is a 21-class land cover classification scheme that has been applied consistently across the United States. The service provides land cover data at 30-meter resolution, and contains information on the canopy production, and other land cover issues in the United States. For additional information, see the NLCD 1992 data page.

When the resource type is determined to be viewable in a map viewer, a viewer will be launched. It is possible to have multiple access methods described and exploited from the metadata.

Data and Resources

-  **Esri Rest API Endpoint** [Visit page](#)
-  **Web Mapping Service** [View Map](#)
-  **Web Coverage Service** [Download](#)
-  **Web Page** [Download](#)
-  **Web Page** [Download](#)

Metadata Source

OpenLayers Viewer

Organizations / State of North Dakota / NDHUB.LANDCLASS_GAP_2010

NDHUB.LANDCLASS_GAP_2010

Download

URL: http://ndgishub.nd.gov/arcgis/services/All_LanduseLandcover/MapServer/WMSServer?
USGS 2010 GAP Landcover

View in Advanced Viewer

Resource Quality
Rating: License not open
About these ratings...



Map data CC-BY-SA by [OpenStreetMap](#) Tiles by [MapQuest](#)

Resources

- NDGIS web site
- Download USGS 2010 GAP ...

About this Resource

Last updated	Dec 07, 2013
Created	Dec 07, 2013

Advanced OpenLayers viewer

The screenshot displays a web-based map viewer interface. On the left, there is a sidebar with a 'Layers' panel containing a 'Layers' folder icon and a 'Legend' panel for 'NDHUB.LANDCLASS_USFWS_2002'. The legend lists categories: Clo, Crc, Ha, Intr, Naf, No, Tre, Ur, and Wa, each with a corresponding color swatch. The main map area shows a land cover map with a color-coded legend. A 'Feature Information' popup window is overlaid on the map, displaying the following data:

Field	Value
Value	3
OBJECTID	4
COUNT	22514376
CLASS_NAME	Introduced Vegetation

i.254.190:8088/viewer/?url=http%3A%2F%2Fndgishub.nd.gov%2Farcgis%2Fservices%2FAll_LanduseLandcover%2FMapServer%2FWMServer%3F&serviceType=WMS&mode=advanced

Questions?

FGDC Secretariat

geodata@usgs.gov

with cc to:

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