



Geoportal Server

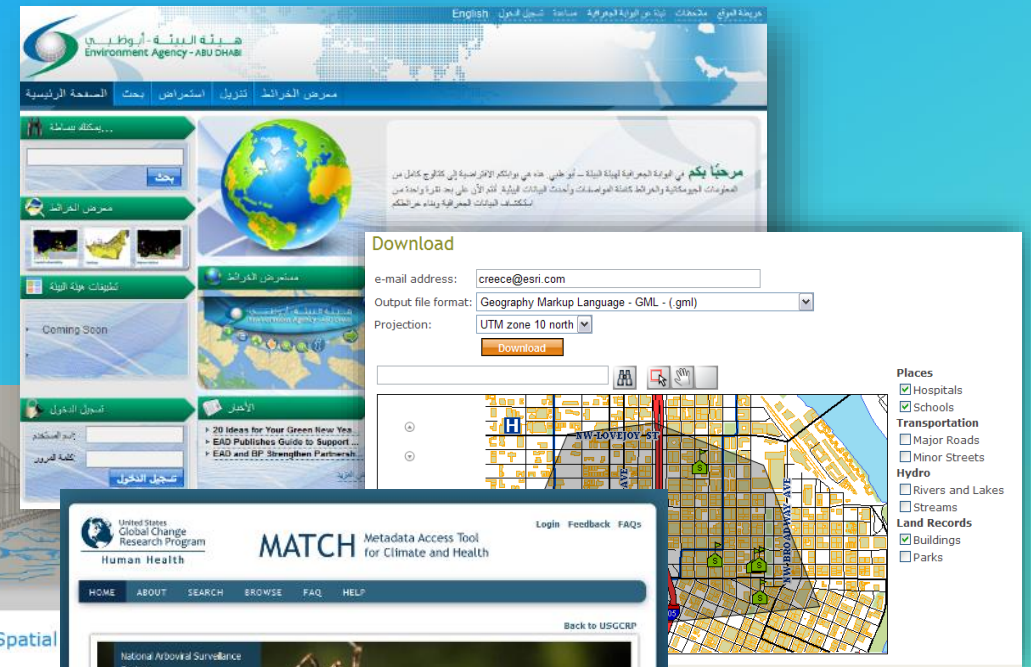
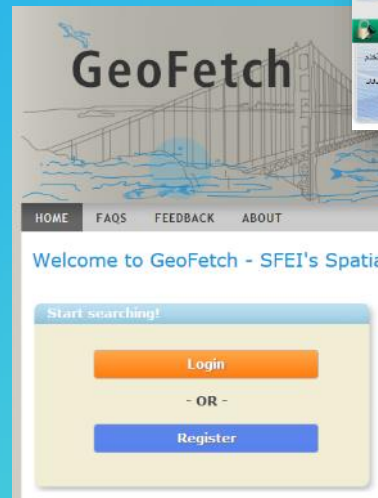
@MARTENHOGEWEG

2018 Esri Developer Summit | Palm Springs, CA

Esri Geoportal Server

Enabling discovery and use of geospatial resources in heterogeneous environments

- Search and view geospatial resources
- Manage, publish, and store metadata
- View live map services
- Download data
- In business since 2003
- Open Source since 2010



1.2.6



2.0.0



Components Extending ArcGIS

2.5.2



1.2.7



Stand-alone Metadata Catalog

1.2.9



The Universe



~~Everything~~

The other Universe



~~Everything, the sequel~~

Everything

Extending ArcGIS

Using Geoportal Server Components



Extending ArcGIS Using Geoportal Server Components

Epic	Description
Catalog	Further development of the 2.x Geoportal Catalog
Search Component	Provides OGC CSW 2.0.2/3/0 API to ArcGIS Enterprise/Online
Harvester	Flexible stand-alone harvester that can read/write to OGC catalogs, DCAT, ArcGIS Online/Enterprise, Geoportals
Metadata Editor	Built on the JS API framework, this enables a web-based metadata editor, supporting standards-based custom metadata profiles (BLM, USACE, USDA, NASA, ...)
WAB Widgets	Widgets for Web AppBuilder to provide federated search, OGC Context Document read/write, publish web map.
ArcGIS Pro Add-in	Providing federated search

Catalog 2.5.2

<https://github.com/Esri/geoportal-server-catalog>

- Flexible and scalable metadata catalog
- Configurable Search Facets
- Index standards-based metadata
- Configure custom search index
- Support Project Open Data DCAT
- OGC CSW 2.0.2/3.0
- LDAP/OAuth integration
- Metadata collections

The screenshot displays the search facets section of the Esri Geoportal Server Catalog. At the top, there is a search bar with the text "Search..." and a magnifying glass icon. Below the search bar, there are several facets, each with a dropdown arrow on the left and a list of items on the right. The facets are: "Map" with radio buttons for "Anywhere" (selected), "Intersects", and "Within"; "Temporal Extent"; "Item Modified"; "Topic Category" with a list of categories including "climatologyMeteorologyAtmosphere (23460)", "transportation (9670)", "inlandWaters (3233)", "oceans (1204)", "environment (1198)", "biota (195)", "imageryBaseMapsEarthCover (45)", "geoscientificInformation (23)", and "elevation (21)"; "Service Type"; "Data Access Type" with a list of service types including "ArcGIS MapServer (29418)", "WMS (24721)", "WFS (346)", "SOS (27)", "KML (22)", "JSON (11)", and "THREDDS (4)"; "Metadata Type" with a list of metadata types including "iso19115-2 (37120)", "fgdc (37069)", "dc (30201)", "iso19115 (122)", and "arcgis (1)"; "Organizations"; and "Keywords".

Harvester 2.5.2

<https://github.com/Esri/geoportal-server-harvester>

- Harvest from
 - OGC CSW 2.0.2, 3.0
 - CKAN 1.1
 - ArcGIS Server services
 - ArcGIS Online/Enterprise
 - Geoportal Server 1.x (Migration tool) and 2.x
 - Web Accessible Folder or UNC Paths
- Harvest to
 - Folder
 - Geoportal Server 2.x
 - ArcGIS Online/Portal for ArcGIS
- Command Line Interface

Broker

Type: Portal for ArcGIS

Title: Portal for ArcGIS

URL:

Folder:

User name: ArcGIS Server Services

User password: Web Accessible Folder

Emit XML:

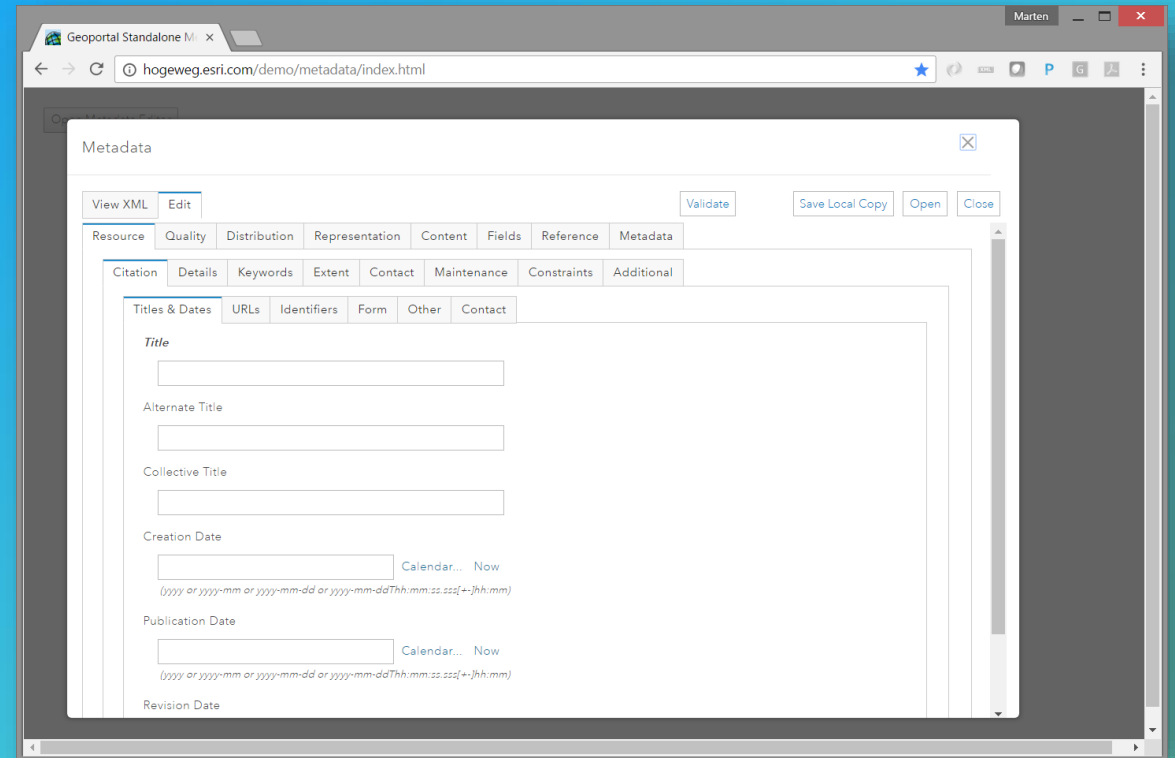
Emit JSON:

Submit

Stand-alone Metadata Editor

<https://github.com/Esri/arcgis-js-api/tree/master/dijit/metadata>

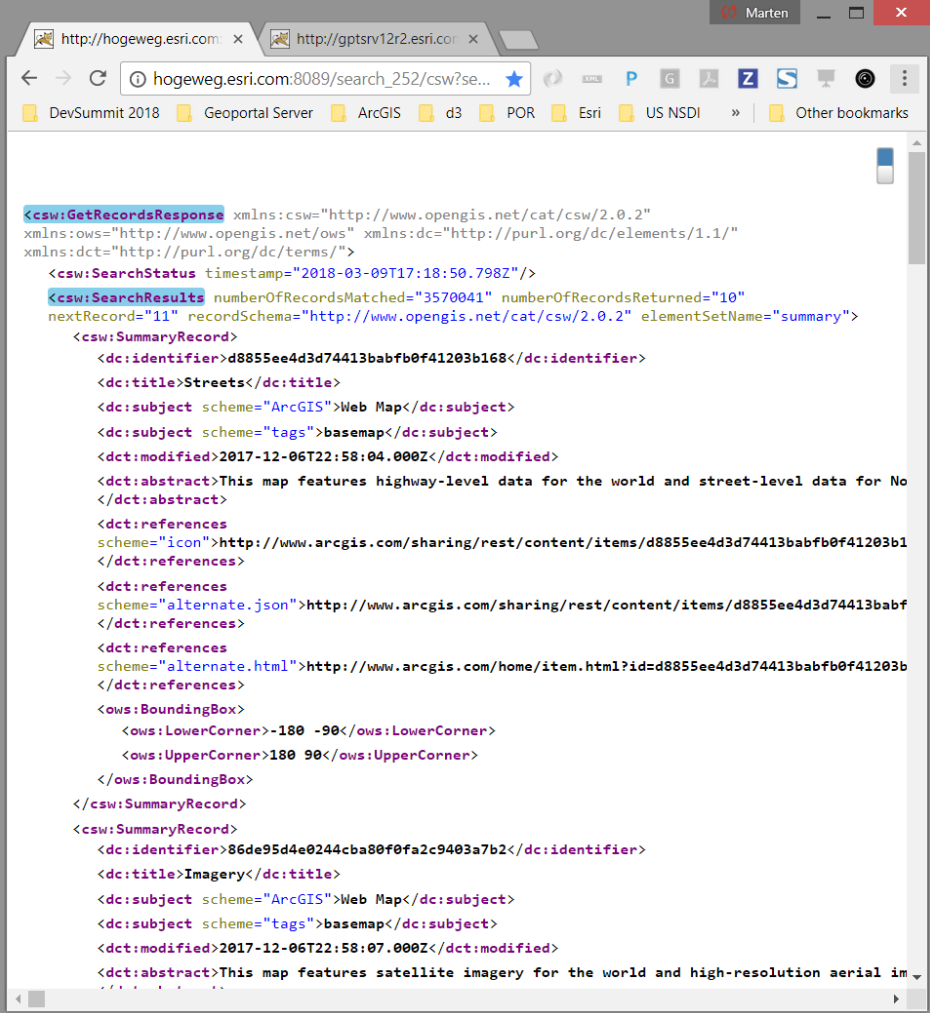
- Part of JS API
- Used in ArcGIS Online/Portal for ArcGIS
- One Page JS/HTML App
- Load/Save to Local File
- Transform/Validate Metadata
- Support any XML Specification
 - GeoPlatform Profile of ISO 19115-1
 - SDSFIE-M
 - BLM Profile of FGDC CSDGM
 - DataCite



Search Component

OpenSearch and CSW API

- Independent Component
- Provides OpenSearch CSW 2.0.2*, and CSW 3.0
- Sources may be
 - ArcGIS Online (+ Subscriptions)
 - Portal for ArcGIS
 - CSW 2.0.2
- JavaScript core
- Wrappers for
 - Web App - Java (Nashorn)
 - Web AppBuilder Widget - JavaScript
 - ArcGIS Pro Addin - C#

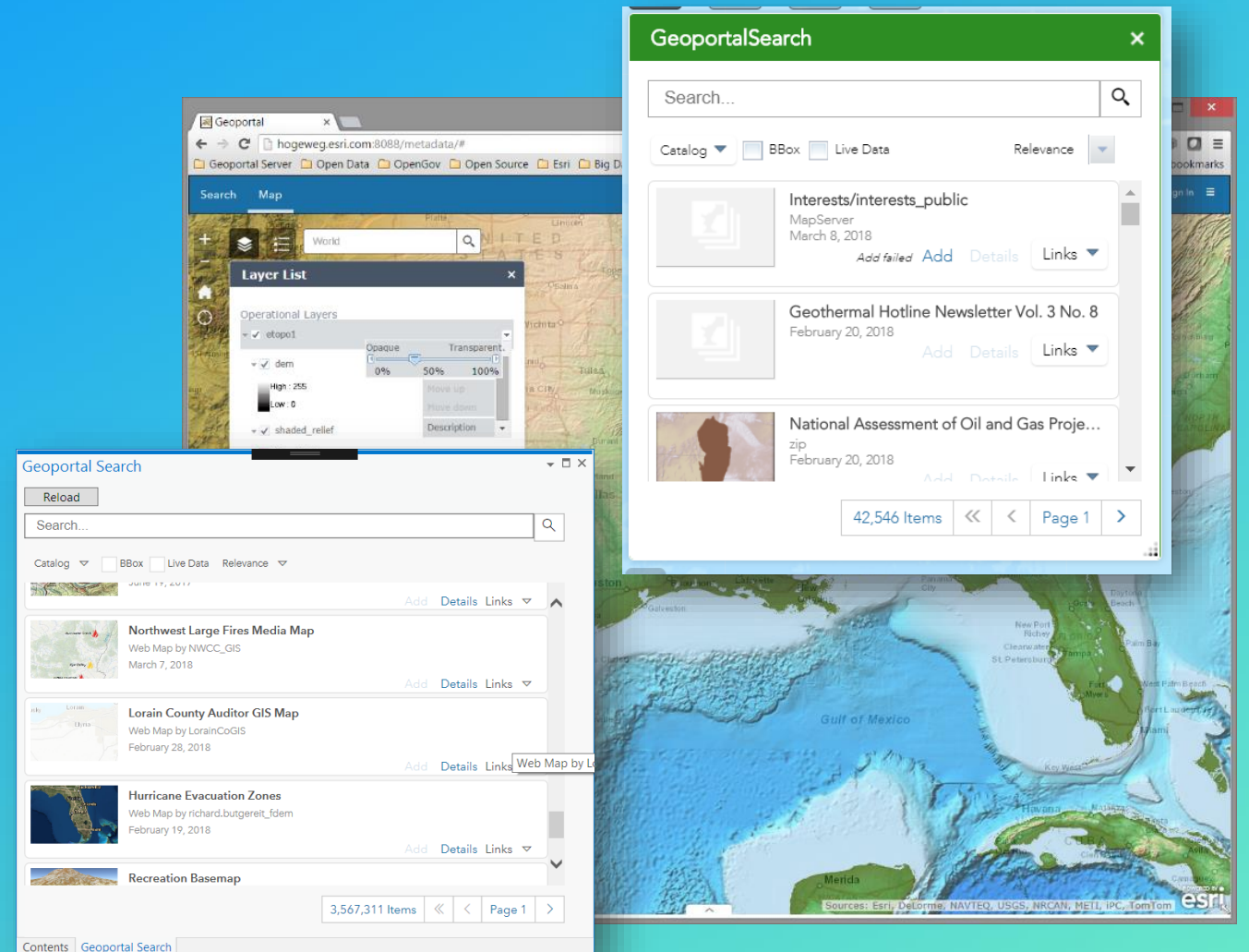


```
<csw:GetRecordsResponse xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
xmlns:ows="http://www.opengis.net/ows" xmlns:dc="http://purl.org/dc/elements/1.1/"
xmlns:dct="http://purl.org/dc/terms/">
  <csw:SearchStatus timestamp="2018-03-09T17:18:50.798Z"/>
  <csw:SearchResults numberOfRecordsMatched="3570041" numberOfRecordsReturned="10"
nextRecord="11" recordSchema="http://www.opengis.net/cat/csw/2.0.2" elementSetName="summary">
    <csw:SummaryRecord>
      <dc:identifier>d8855ee4d3d74413babfb0f41203b168</dc:identifier>
      <dc:title>Streets</dc:title>
      <dc:subject scheme="ArcGIS">Web Map</dc:subject>
      <dc:subject scheme="tags">basemap</dc:subject>
      <dct:modified>2017-12-06T22:58:04.000Z</dct:modified>
      <dct:abstract>This map features highway-level data for the world and street-level data for No
</dct:abstract>
      <dct:references
scheme="icon">http://www.arcgis.com/sharing/rest/content/items/d8855ee4d3d74413babfb0f41203b1
</dct:references>
      <dct:references
scheme="alternate.json">http://www.arcgis.com/sharing/rest/content/items/d8855ee4d3d74413babf
</dct:references>
      <dct:references
scheme="alternate.html">http://www.arcgis.com/home/item.html?id=d8855ee4d3d74413babfb0f41203b
</dct:references>
      <ows:BoundingBox>
        <ows:LowerCorner>-180 -90</ows:LowerCorner>
        <ows:UpperCorner>180 90</ows:UpperCorner>
      </ows:BoundingBox>
    </csw:SummaryRecord>
    <csw:SummaryRecord>
      <dc:identifier>86de95d4e0244cba80f0fa2c9403a7b2</dc:identifier>
      <dc:title>Imagery</dc:title>
      <dc:subject scheme="ArcGIS">Web Map</dc:subject>
      <dc:subject scheme="tags">basemap</dc:subject>
      <dct:modified>2017-12-06T22:58:07.000Z</dct:modified>
      <dct:abstract>This map features satellite imagery for the world and high-resolution aerial im
</dct:abstract>
    </csw:SummaryRecord>
  </csw:SearchResults>
</csw:GetRecordsResponse>
```

Widgets for Web AppBuilder and ArcGIS Pro

<https://github.com/Esri/geoportal-server-catalog/tree/master/geoportal-search/src/main/resources/platform>

- Federated Search
 - CSW, Elasticsearch, Geoportal 2.x, ArcGIS Online/Portal for ArcGIS
- OGC Context (read/write)*
- Publish Web Map*



*Only for Web AppBuilder

Show Me the Money





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Metadata in ArcGIS



Current status of metadata support in ArcGIS for Desktop

	ArcMap 10.x	Pro 2.0	Pro 2.1
Metadata styles for geospatial metadata standards	✓	✓	✓
Display and edit full metadata	✓	✓	✓
Map layers have metadata	✗	✓ (limited)	✓
Import and export metadata	✓	✗	✗
Manage metadata programmatically	✓	✓ (limited)	✓ (improved)
Manage metadata with geoprocessing tools	✓	✗	✗
Publish map with full metadata	✓	✗	✗
Customize the metadata editor	✓	✗	✗

Roadmap for ArcGIS Platform

ArcGIS Pro

- Import and export metadata 2.2
- Publish full metadata 2.2
- Spellcheck in metadata editor 2.2+
- Additional capabilities in .Net SDK 2.2
 - Import/Export/Save As
- Metadata Toolkit for customization

ArcGIS Online and Enterprise

- Metadata for map layers
- Categories for organizing items
- Mark items as authoritative
- Deprecate items
- Extensible metadata styles
- Relationships between items



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