



The USGIN CSW Client

A Primer

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Section 1: Introduction

The USGIN [CSW](#) Client is an ESRI ArcGIS AddIn for ArcMap. CSW stands for [Catalog Service for the Web](#).

When installed, the CSW Client provides ArcMap users with a simple interface with which they may load [web services](#) as layers within ArcMap.

Web services accessible via the CSW Client are as follows:

- AASG Geothermal Data web services
- OneGeology web services
- Geo.Data.Gov web services

This tutorial provides instructions pertaining to the context, installation, and use of the USGIN CSW Client. To continue the tutorial, click the links below.

Section 2: CSW Client Context

The USGIN CSW Client is a user interface that allows ArcMap users to easily make [Catalog Service for the Web \(CSW\)](#) requests.

Catalog services are web services that organize and query [metadata records](#), specifically metadata records describing [web services](#) that have been registered with a given catalog service (Figure 1).

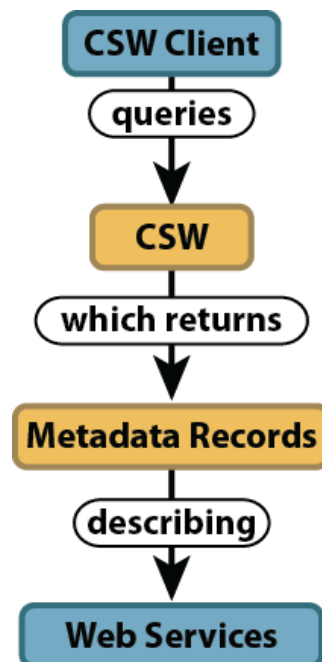


Figure 1: The relationship between the CSW Client and web services that have been registered with a given catalog service

Catalog service requests return [capabilities documents](#): [XML](#) documents describing the capabilities of a given web service. Capabilities documents can be accessed via web browsers.

The USGIN CSW Client queries specific catalog services for capabilities documents according to user-specified search terms. The CSW Client validates the resulting documents, interprets them, sifts through them, and presents the user with a list of web services that meet the search terms. These web services can then be loaded into ArcMap as layers.

Catalog services accessible via the CSW Client are as follows:

- The AASG Geothermal Data Catalog (<http://catalog.usgin.org/geoportal/catalog/main/home.page>)
- The OneGeology Catalog (<http://portal.onegeology.org/>)
- The Geo.Data.Gov Catalog (<http://geo.data.gov/geoportal/catalog/main/home.page>)

The CSW Client uses the [FGDC Service Status Checker](#) to validate the [schema](#) of capabilities documents returned by the client.

Section 3: CSW Client Installation

To install the USGIN CSW Client, take the following steps:

1. In a web browser of your choice, navigate to the following web location:

<http://lab.usgin.org/applications/doc/2nd-version-csw-client-application>

2. Download the 2nd version of the CSW Client application archive (**CswClient_v2.rar**)
3. Using a software application of your choice, extract the contents of the .rar archive.

Though Windows 7 lacks native support for .rar archives, the application 7-Zip is fully capable of extracting .rar archive content; additionally, 7-Zip is versatile, lightweight, and free-and-open-source. 7-Zip can be downloaded from the following web location:

<http://www.7-zip.org/>

4. Open the **CswClient_v2.esriAddIn** file you extracted from the archive
5. A dialogue box will appear (Figure 2); click **Install Add-In**

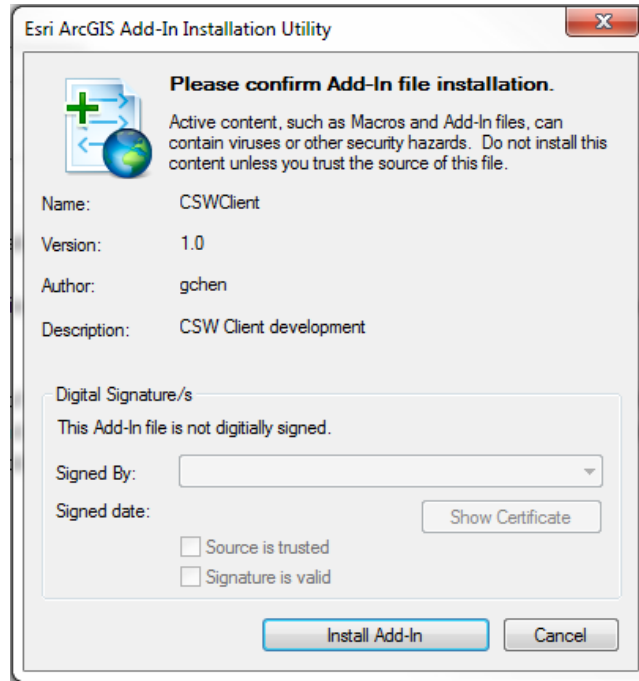


Figure 2: The ESRI Add-In Installation Utility

A dialogue box should appear indicating successful installation.

Section 4: Accessing the CSW Client

Having completed the steps described on the [previous page](#) of the tutorial, take the following steps to access the USGIN CSW Client:

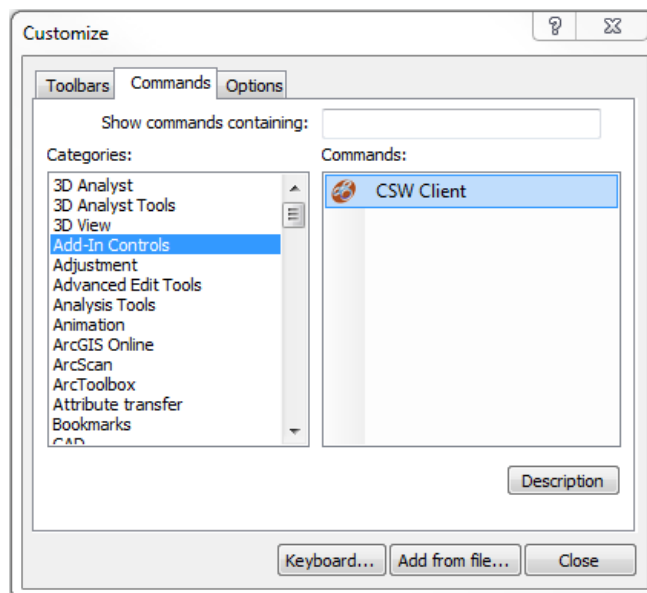


Figure 3: The *Customize* window

The USGIN CSW Client can now be used just by clicking the **CSW Client** button you have just added to your ArcMap toolbars. After manually closing ArcMap, the **CSW Client** button will always appear in the position you specified above.

Click the links below to continue this tutorial.

1. Open **ArcMap**
2. Create a new map or open a map of your choice
3. On the ArcMap menu bar, open the **Customize** window by clicking **Customize > Toolbars > Customize...**
4. Click the **Commands** tab in the **Customize** window that appears (Figure 3)
 1. Under **Categories**, click the **Add-In Controls** entry
 2. Click-and-drag the **CSW Client** command from the **Commands** list to an ArcMap toolbar of your choice
5. Click the **Close** button

Section 5: Using the CSW Client

To access the USGIN CSW Client in ArcMap, open ArcMap and either create a new map or open a map of your choice; click the button you added to the ArcMap toolbar in the [previous step](#) of this tutorial. The **CSW Client** window (Figure 4) will appear.

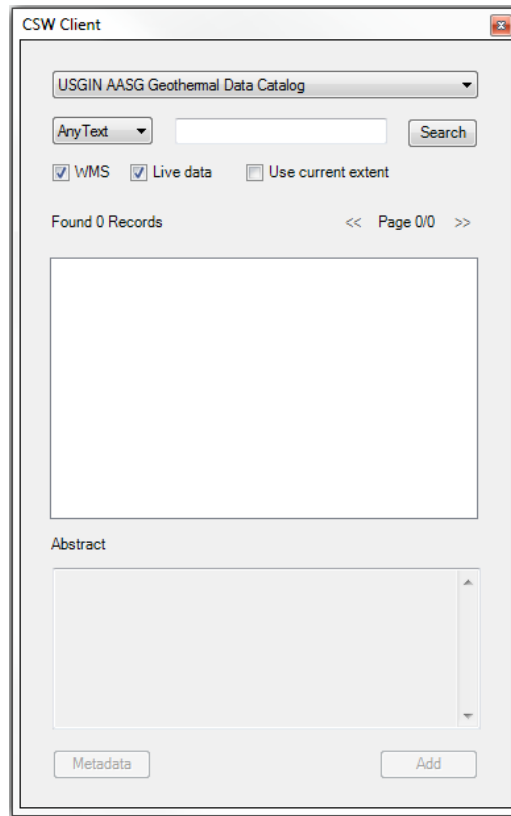


Figure 4: The **CSW Client** window

To use the CSW Client interface to load web services as layers within your ArcMap document, take the following steps:

1. Using the dropdown menu at the top of the **CSW Client** window, select the catalog service you wish to query. Query results are restricted to web services registered with a given catalog service.
2. Enter search terms into the field to the left of the **Search** button.
3. Use the dropdown menu to the left of the **Search** field to indicate whether or not you wish to restrict your search to the **Title** or **Abstract** fields within all queried [metadata records](#) (if you do not wish to restrict your search in this way, specify **AnyText** in the dropdown menu)
4. Use the check boxes to further restrict your search:
 - o The **WMS** checkbox restricts your search to [web map services](#)
 - o The **Live data** checkbox restricts your search to active [web services](#), as opposed to static documents within an associated repository
 - o The **Use current extent** checkbox restricts your search to results within the current map extent, as indicated by the active ArcMap window

5. Click **Search**; results will appear as a list of records within the **CSW Client** window
6. Select the desired result by clicking it in the **CSW Client** window; note that an abstract summarizing your selection will appear in the **Abstract** box.

Note: Click the **Metadata** button to see a complete ISO 19139-compliant [XML](#) metadata record describing the selected web service

7. Click the **Add** button to add the web service as a layer to your ArcMap document

The selected web service should appear as a layer within your ArcMap document.

This concludes the USGIN CSW Client tutorial.