

Geospatial Information Infrastructure Technical Support



GII Geocoding User Guide

Version 1.0

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Revision History

Version Number	Version Date	Revisions Made by	Description of Revisions
Version .1	3/7/2016	Michael Karikari	Develop Draft
Version .2	3/7/2016	Lew Summers	Added to Draft
Version			

1. OVERVIEW

The mission of the Department of Homeland Security (DHS) Geospatial Management Office (GMO) Geospatial Information Infrastructure (GII) implementation support for the DHS geospatial objectives and services. As such, the GII enterprise geospatial solution platform has been upgraded to take advantage of the new capabilities offered in ArcGIS for Server 10.3.1 and Portal for ArcGIS 10.3.1.

These capabilities improved the accessibility, functionality and user interface for both web and desktop environments. Through the use of proprietary token-based authentication mechanism users or applications can authenticate themselves by providing a token instead of a user name and password. Publishing map services for the purpose of sharing to group or specific decision making process is also available to users and will be described below as it relates geocoding CSV and TXT files.

Geocoding is defined as processes of converting addresses (like "1600 Amphitheatre Parkway, Mountain View, CA") into geographic coordinates (like latitude 37.423021 and longitude -122.083739), which you can use to place markers on a map, or position the map.

2. SCOPE

The guide covers the following capabilities within GII Portal:

- Find a specific location via an address search
- Import a CSV into GII Portal so it can be shared as spatial element in a map
 - Latitude/Longitude
 - Street Address
- Batch Geocode using Bing

3. PREREQUISITES

The following prerequisites must be in place in order for a user to successfully access or perform the different GII Portal capabilities:

All Users:

- Must have an active HSIN user account
- Comma, semicolon or tab delimited CSV or TXT file with Latitude/Longitude or Street Address fields

4. MANUAL ADDRESS SEARCH USING GII PORTAL

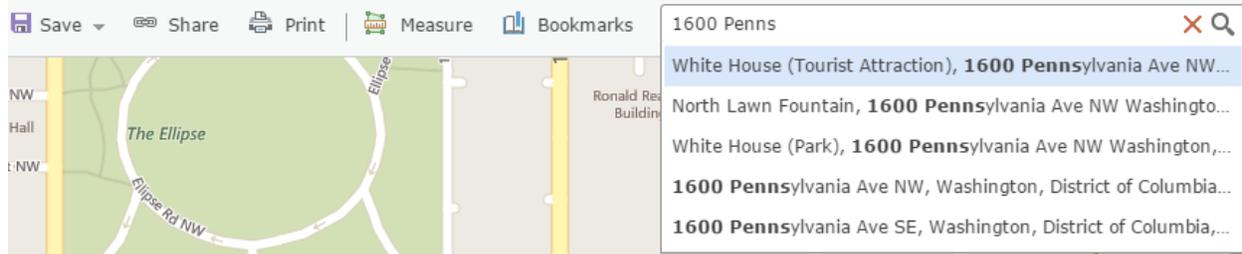
All HSIN users have the ability to perform address searches from the GII Portal interface.

- 1) Click "Map" from the main navigation pane



HOME GALLERY **MAP** SCENE GROUPS MY CONTENT MY ORGANIZATION

- 2) Type in the street address or major point of interest into the search field and click enter



5. PUBLISH SERVICE VIA CSV/TXT FILE USING GII PORTAL

There are multiple ways to add location points to a map with GII using a csv/txt file

- 1) Open **My Content** and click **Add Item**.
 - The **Add Item** window opens
- 2) Choose **On my Computer** from the **The item is** options.
- 3) Click the browse button, and choose the file on your computer.
 - CSV files need to contain address information or latitude-longitude coordinates in decimal degrees. CSV files must be formatted and saved as **.csv**. Other text-based file types cannot be published
- 4) Type a title.
- 5) Type tag terms separated by commas.
 - Tags are words or short phrases that describe your item and help people find your item when searching. **Federal land** is considered one tag, while **Federal,land** is considered two tags
- 6) Check the box next to **Publish this file as a feature layer**.
 - If you leave the box unchecked, your data file is added to **My Content** but no feature layer is published. You can publish the features later if you want
- 7) Choose to locate the features using latitude-longitude or address.

- **Latitude-Longitude** – To ensure Portal is able to easily publish records as points on map ensure that first two fields are the lat and long. Portal can automatically detect fields with the following names:

- Latitude, Longitude
- Lat, Long
- Y, X
- Ycenter, Xcenter
- Point_y, Point_x

- **Address** – If geocoding street address Portal can automatically detect fields with the following names:

- Address
- City
- State
- Zip

8) Review the field types and location fields. You can change them if necessary.

- Click a **Field Type** cell to choose a different type
- Click a **Location Field** cell to choose a different field

9) Click **Add Item**.

10) Now that csv is now published as a hosted feature layer. It can be viewed in the map viewer by adding to map from the item's detail page or searching for it from the Map Viewer interfacing using tags associated with csv.

**By default, the hosted feature layer can only be accessed by the publisher. You can share the hosted feature layer and the file with everyone in your organization or members of specific groups.*

6. BATCH GEOCODING USING MICROSOFT BING

The GII Bing Geocoding Service can be accessed at the following URL:

<https://gii.dhs.gov/BatchGeocode.aspx>

The geocoding service allows users to batch geocode many address records per session. Five data columns are required to complete the batch geocoding process. The user can also include additional data columns that describe the point feature. Required columns to be included in the batch file: **ID, Address, City, State, ZIP Code**

- 1) Files supported for Upload: Microsoft Excel version 97 - 2003 (.xls) and Microsoft Excel version 2007 - 2010 (.xlsx)
- 2) Enter a title for the geocode request in the test box labeled 'Name of Job'. This field can also remain blank.
- 3) Upload a file by clicking browse. A windows explorer window will open. Browse to the file that will be uploaded and click open.
- 4) After the file has been uploaded to the geocode server, you can leave the site or continue to browse through our other services. The geocode process will take a few minutes to complete.
- 5) The file status will change from 'yellow' to 'green' when the geocode request has completed processing.
- 6) Once the file has been geocoded, it can be downloaded as a KML or Excel, or be viewed in the pop-up map window.

**Only the first 100 results can currently be viewed in the pop-up map window. Geocoded files can be downloaded up to 14 days after being uploaded*

Upload Geocode Job

Name of Job:

Upload File:

View/Download Results

Status	Job Title	File Name	Date Created
No records to display.			