What's New in Geocoding and the Road Ahead

Jeff Rogers and Brad Niemand
Overview
Subhead Here

- A quick review of ArcGIS Geocoding
- World Geocoding Enhancements
- New Batch Geocoding Tool for the Portal Map Viewer
Intro
ArcGIS Geocoding
Geocoding

Geosearch

Batch Geocoding

Reverse Geocoding
ArcGIS is a complete system for Geocoding and Geocoding is an essential capability of ArcGIS.
World Geocoding Online

Esri World Geocoding Service

Easily convert addresses to locations and back

Get a Free Account
Browse the Docs

San Francisco, CA 94123

World Geocoding On-Premises

World Geocoder for ArcGIS

Securedly map your global addresses behind your firewall.

Country Geocoding On-Premises

StreetMap Premium for ArcGIS

High-Quality Street Data for Display, Routing, and Geocoding

Build your own with ArcGIS

Products
What’s New
for World Geocoding Online
What’s New Resources

ArcGIS REST API: World Geocoding Service

What’s new in the World Geocoding Service
May 2017

Quality Improvements

- Enhanced reverse geocoding—All types of features can be returned by the reverse geocoding operation, including POIs, postal boundaries, and administrative boundaries.
- Improved intersection search—Intersections can now be found between disconnected streets, such as at cul-de-sacs and highway overpasses, and at roundabouts.
- Improved coordinate search—Coordinate search has been improved with more supported input formats such as Military Grid Reference System (MGRS), United States National Grid (USNG), and degrees-minutes-seconds (DMS).
- Stream-level geocoding is supported for many additional countries: ABR, AIZ, BOC, BOL, COC, CUB, CXR, CYP, DOM, ECU, EGY, ELY, GHA, HND, MKR, MWI, NRV, HUN, MLT, MUX, MWI, PRY, SLV, SVN, and TUR. (See the complete list of supported countries for details.)
- Improved POI search—You can now search for POI names with addresses and postal codes using the FindPlaceNearExtents operation.
- Batch geocoding of POIs is now supported with the geocodebatch operation.
- Various geocoding quality improvements for some geographic regions.


Enhanced World Geocoding Coverage
25 additional countries where street addresses can be located

Plus:
Australia (G-NAF)
New Zealand (LINZ)
China (English)

Now 135 Countries
with Street Addresses
Enhanced Address and Place Matching
The Geocoding Algorithm is better at locating addresses and places

Algorithm is better at resolving poor quality addresses

Re: 30853 Loma Linda Rd (NA), Temecula, CA, 92592
10408 S 198th West Ave, Bill Jones, Sapulpa, OK

Batch Geocode POIs

Esri New York St
Esri Vienna VA
Prospect Park Redlands
Marina Park San Diego

Suggestions match only valid house numbers as you type
Enhanced Intersection Matching
Intersection geocoding finds more types of intersections

- Roads that are close to each other
- Roads that pass over but don’t intersect
- Roads entering roundabouts
Enhanced Reverse Geocoding

Results now include POI, Postal, Admin Areas as well as Countries - where the data is available

<table>
<thead>
<tr>
<th>Feature Type</th>
<th>Search Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Intersection</td>
<td>10 meters</td>
</tr>
<tr>
<td>Street Address (near)</td>
<td>7 meters</td>
</tr>
<tr>
<td>POI centroid</td>
<td>25 meters</td>
</tr>
<tr>
<td>Point Address</td>
<td>25 meters</td>
</tr>
<tr>
<td>Street Address (distant)</td>
<td>100 meters</td>
</tr>
<tr>
<td>POI area</td>
<td>within boundary</td>
</tr>
<tr>
<td>Postal or Locality area</td>
<td>within boundary</td>
</tr>
</tbody>
</table>

Developer API - more control over the features that are returned with the new featureTypes parameter
Enhanced Coordinate Geocoding
MGRS, USNG and DMS Geosearch is built in....

GeoSearch coordinates
MGRS: 07VEH3258214688

DMS: 147° 52' 23" E, 14° 21' 19" N
New Enhancements Timeline (2017-18)

- World Geocoding Service
  - ArcGIS Online Now

- World Geocoder Following 10.5.1 Release
  - Early Q3 2017

- StreetMap Premium

- Custom Locators

Customers on maintenance receive the update
What’s New

Batch Geocoding Analysis Tool for On-Premises
Geocode Locations from Table
On-Premises Map Viewer

- A new Map Viewer Analysis tool for geocoding large tables located on your Portal
  - Recommended way to geocode large tables quickly
  - Returns all output fields from the geocoding service

- Works using geocoding services that are federated with your portal
  - Including Esri’s World Geocoding Service and Locator Services hosted by your organization

- Allows your administrator to optimize geocoding
  - Administrators can configure the system to deliver performance and manage load
Geocode Locations from Table

1. Choose the Table from Portal
2. Choose the Locator
3. Select Single or Multi Line Fields
4. Review and adjust the input fields
5. Set the Output format (XLS, CSV or feature service)
6. Set the Output name and location

RUN ANALYSIS
More About Geocode Locations from Table

• Configuration for Administrators