Secure Geocoding in ArcGIS

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Agenda

• Introduction to Geocoding
• Benefits of Esri Geocoding
• Esri Geocoding Options
• What’s New & Resources
• Case Study
• Demo
• Q&A
Geocoding

Geosearch

Batch Geocoding

Reverse Geocoding
“Geocoding is a foundational step to understanding your data”
ArcGIS is a complete system for Geocoding
and Geocoding is an essential capability of ArcGIS
Desktop Geocoding

• Desktop is a client you can use to author and consume geocoding

• Users can supplement what Esri provides using their own data
Geocoding on Devices

- Esri Apps and Mobile SDKs support geosearch and reverse geocoding
- World Geocoding service is built in
- Also works with an organizations hosted geocoding services
- Works offline with packages that support locators
Web Geocoding

- ArcGIS Viewer for Portal
- Apps built from Web App Templates
- WebAPIs

- Support Geocoding
- Esri World Geocoding is built-in
- Also works with an Organizations Hosted Geocoding Services
- 135 Countries @ Street Level
- Global Places and Points of Interest
  - Single end-point
  - Ready-to-Use
380 New York Street
Redlands, CA 92373
Ringstraße 7
85402 Kranzberg
Products
World Geocoding Online

World Geocoding On-Premises

Products

StreetMap Premium for ArcGIS

Country Geocoding On-Premises

Build your own with ArcGIS
StreetMap Premium for ArcGIS

- Geocode + Map Display + Route
- Local data solution.
  - By State, Country or Region
- For On-Premises.
  - Use with Desktop or Server
What’s New
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
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 new types of features can be returned by the reverse geocoding operation, including POIs, postal boundaries, and administrative boundaries.
- Improved intersection search: Interactions 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 degree-minute-seconds (DMS).
- Stream-level geocoding is supported for many additional countries: ABR, AIZ, BOC, BOL, COC, CYC, CUB, CXR, CYP, DOC, ECU, FI, GEO, LBJ, USA, MNP, NWS, NTT, NXY, NXY, NXY, ST, TUR, and UTD. (See the complete list of supported countries for details).
- Improved POI search: You can now search for POIs with addresses and postal codes using the `FindAddressAssemblages` operation.
- Batch geocoding of POIs is now supported with the geocoding service operation.
- Various geocoding quality improvements for some geographic regions.


Case Study
“We had to search and scrub websites for weeks to identify and attempt to validate data,” said James Martinez, population health and GIS analyst at LLUH. “In many cases, the data was not geocoded and required a lot of cleansing. Data quality was a major problem.”
“Maps depicting both community assets and patients’ medical data can be a powerful tool to show stakeholders the patients’ proximity to community health assets.”

Case Study –
http://arcg.is/2gfUZSm
Secure Geocoding in ArcGIS
Bruce
Demonstration & Live Discussion

- Give me an address to try!
- Leveraging Portal(s) to manage the geocoding environment
  - Geocoding in a Web Map
  - Geocoding by publishing CSV items
- Geocoding in ArcGIS Desktop apps
- Geocoding APIs
- Accelerating batch geocoding
Questions

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