

UC



ArcGIS Online: World Geocoding

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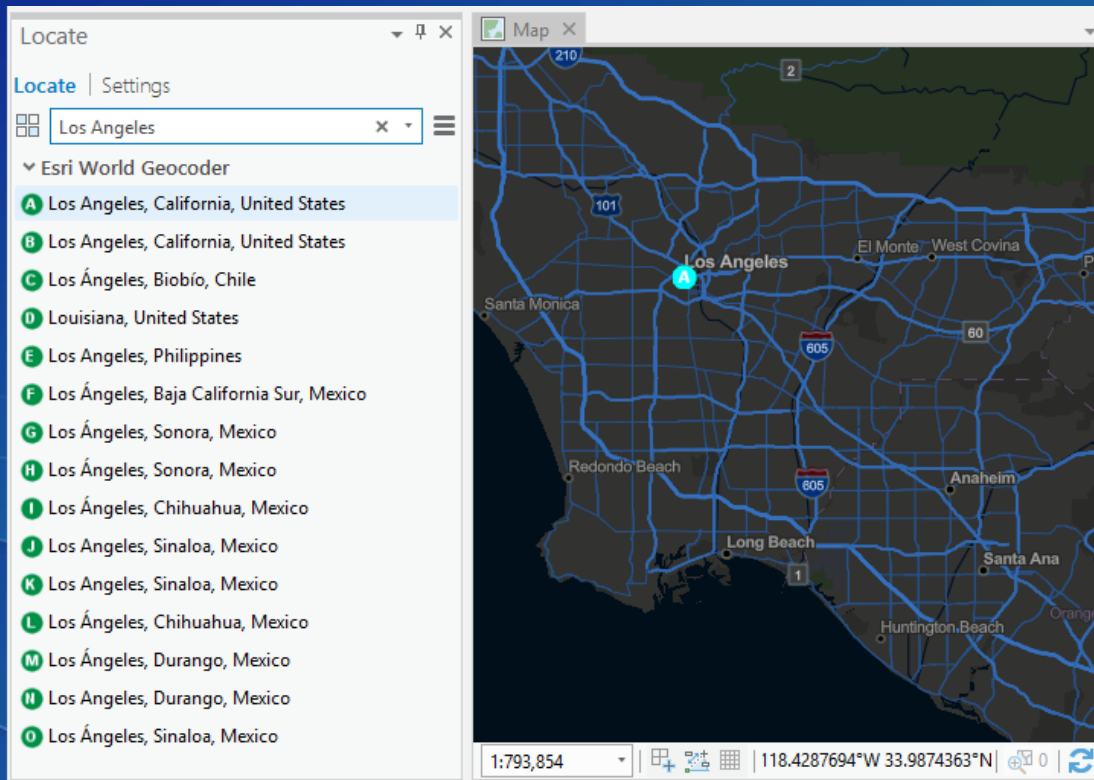
Nick Patel, Esri npatel@esri.com

Agenda

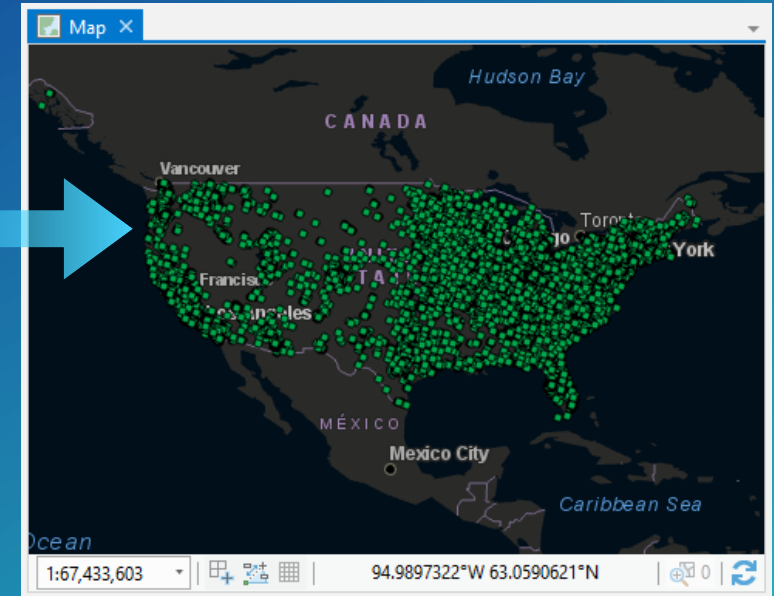
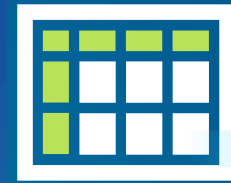
- **Introduction**
- **Benefits of Esri World Geocoding**
- **Overview of Esri's World Geocoding products**
- **What's New**
- **Demo**
- **Questions and Closing**

Geocoding

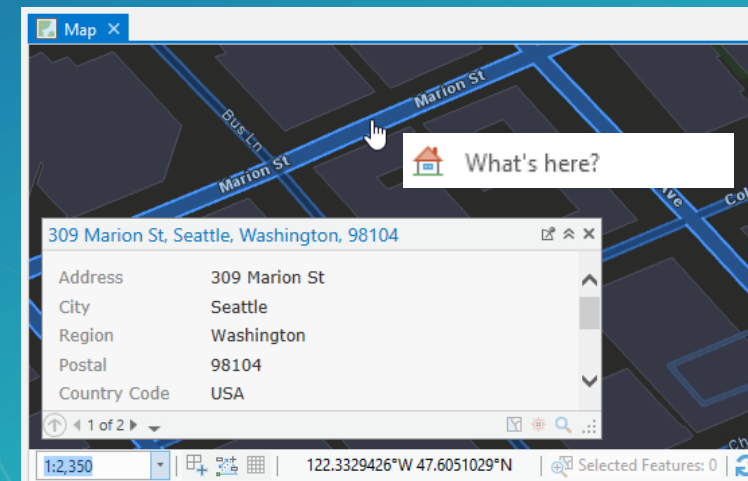
Geosearch



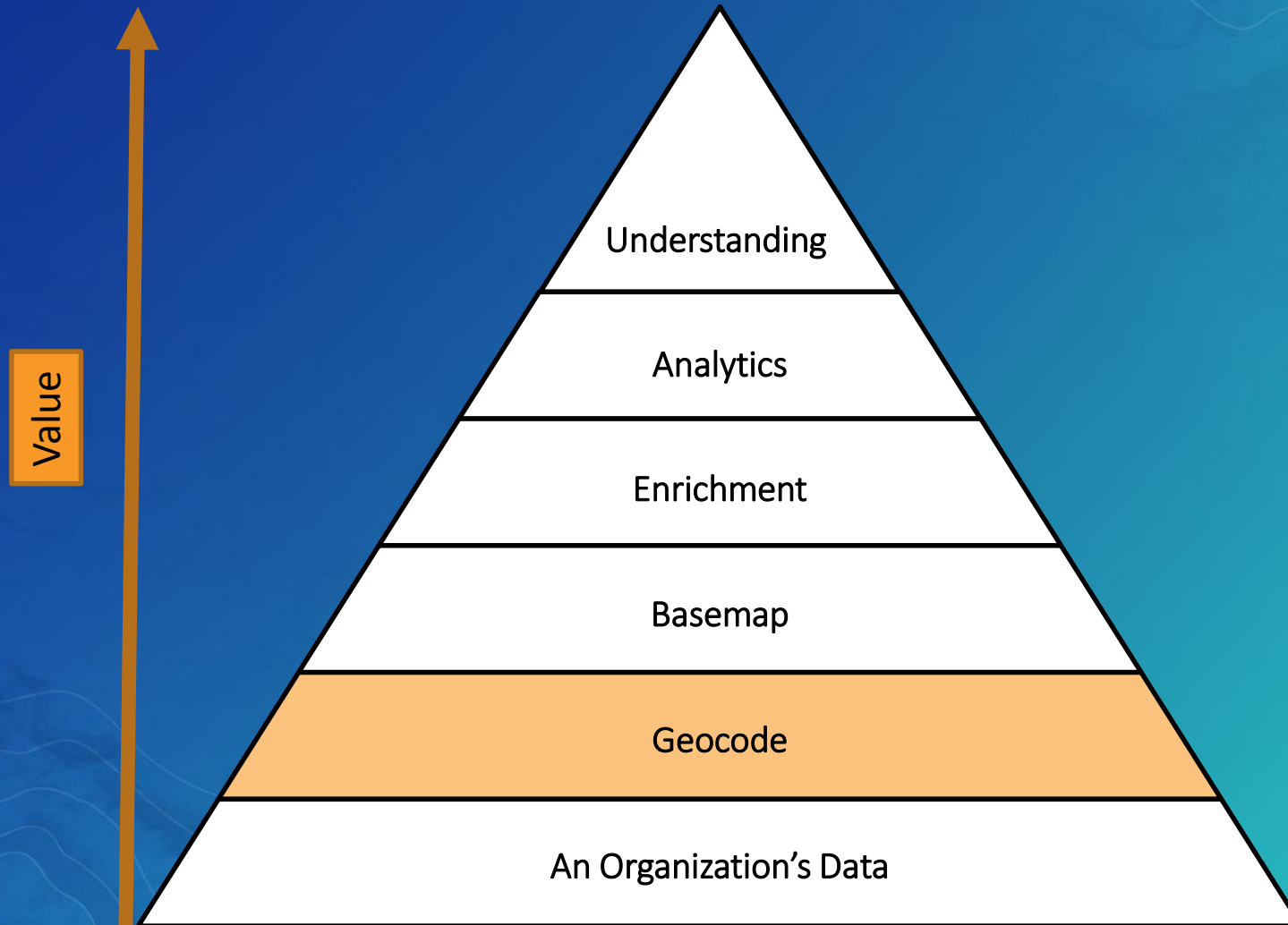
Batch Geocoding



Reverse Geocoding

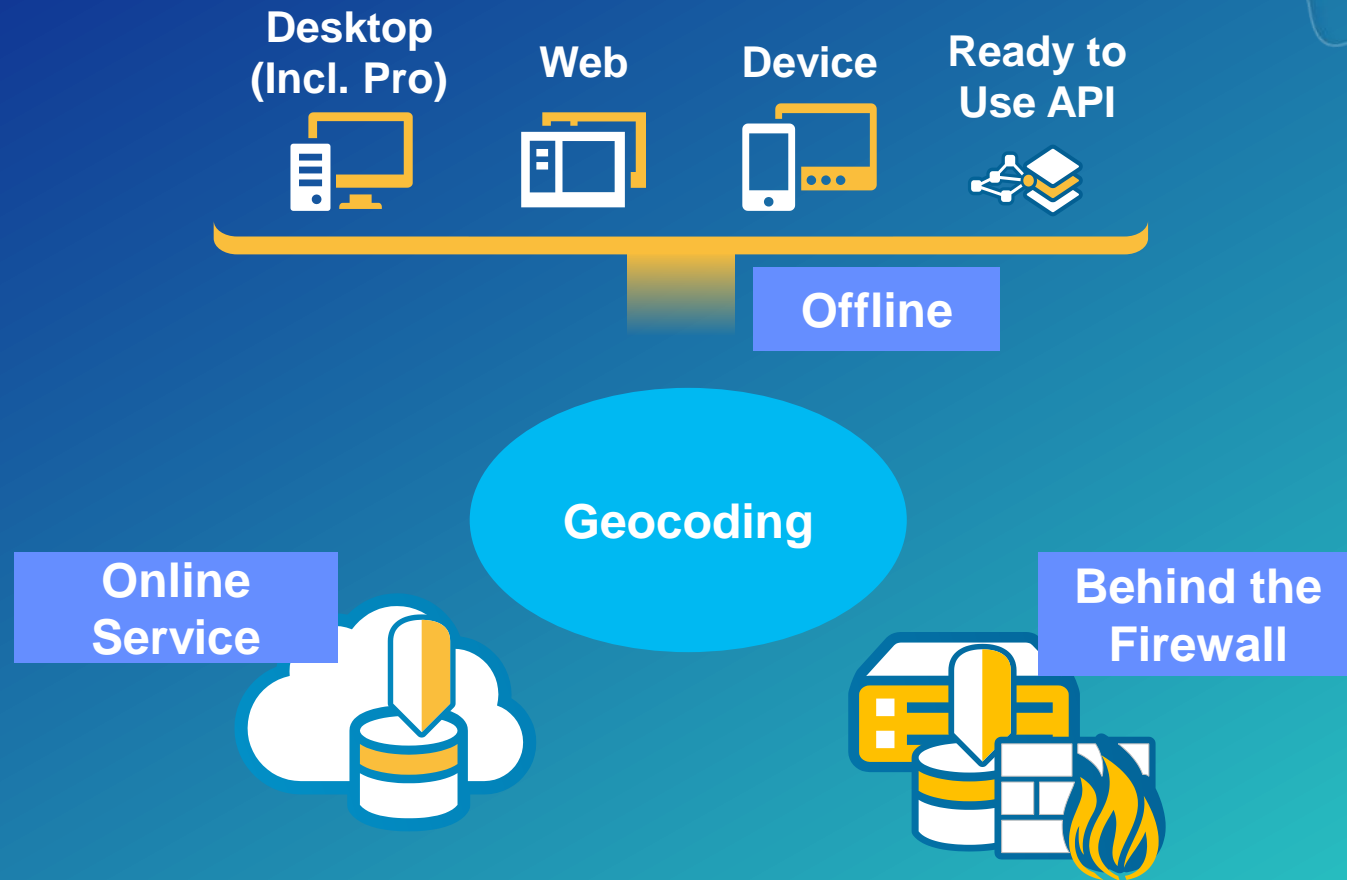


“Geocoding is a foundational step to understanding your data”



ArcGIS is a complete system for Geocoding

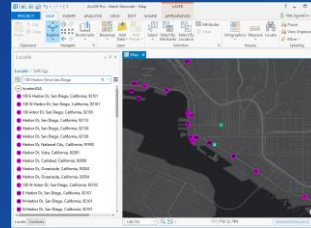
and Geocoding is an essential capability of ArcGIS



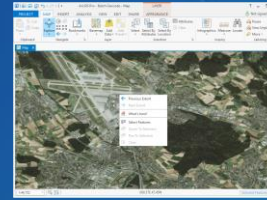
Desktop Geocoding

- Desktop is a client you can use to author and consume geocoding
- Users can supplement what Esri provides using their own data

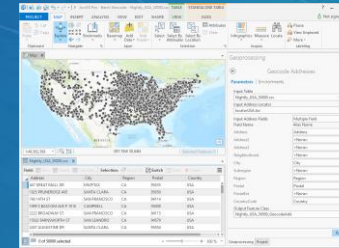
Geosearch



Reverse Geocode



Batch Geocoding



ArcGIS Pro



Authoring Locators



Create Map Packages with Locators

Publish Locator Services

Consume Locator Services and Map Packages with Locators

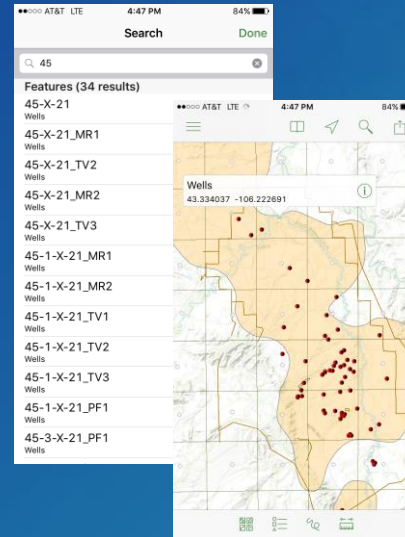
Portal for ArcGIS



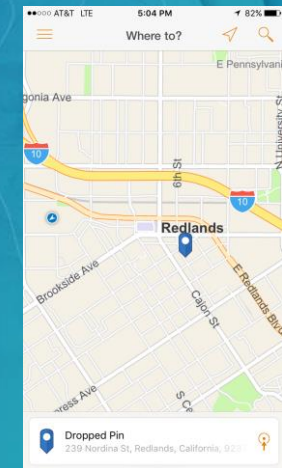
Geocoding on Devices

- 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

Geosearch



Reverse Geocode



Esri Apps



Consume
Locator Services and
Map Packages with Locators

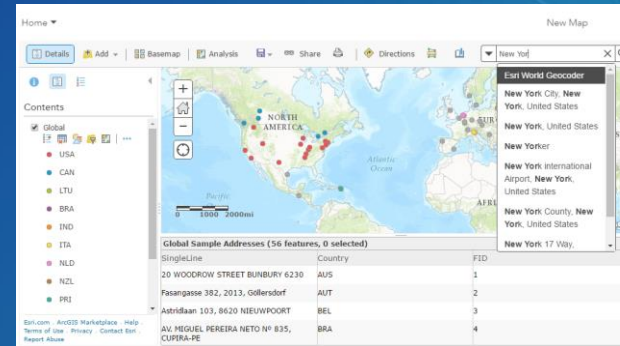
Portal for
ArcGIS



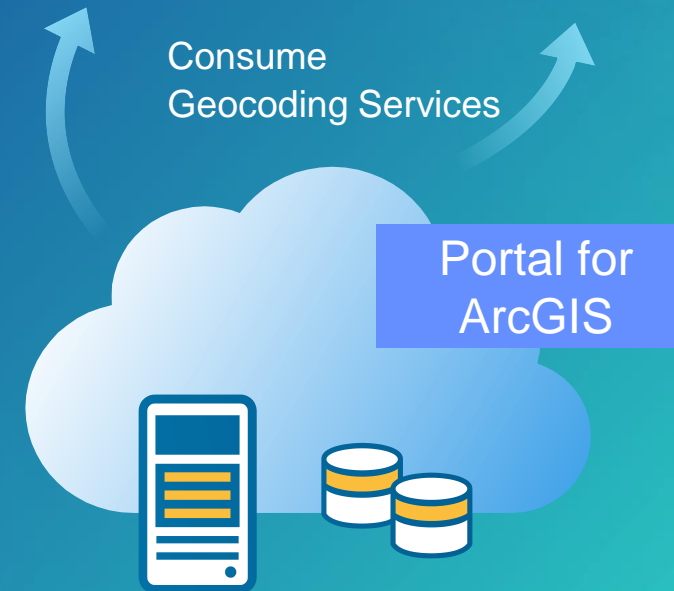
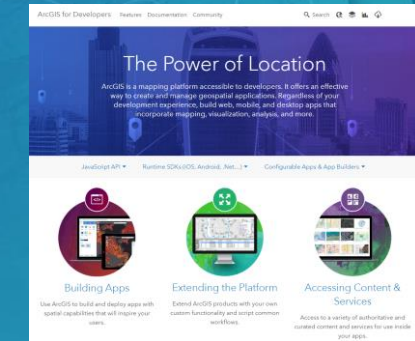
Web Geocoding

- 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

ArcGIS Portal Viewer App
Geosearch
Batch Geocoding



Web APIs
Geosearch
Batch Geocoding
Reverse Geocode



Benefits



Esri Distributor

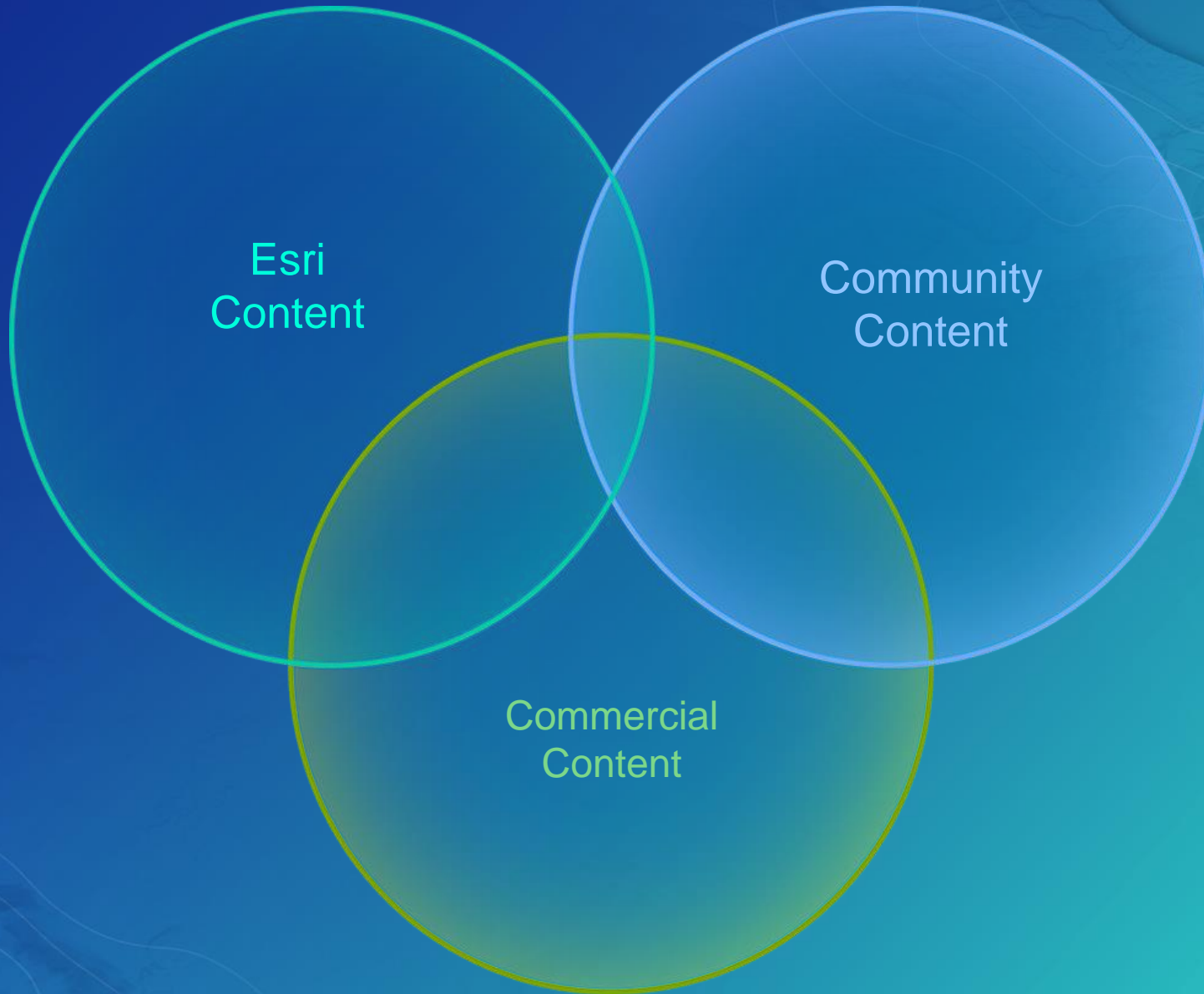
Esri
Content

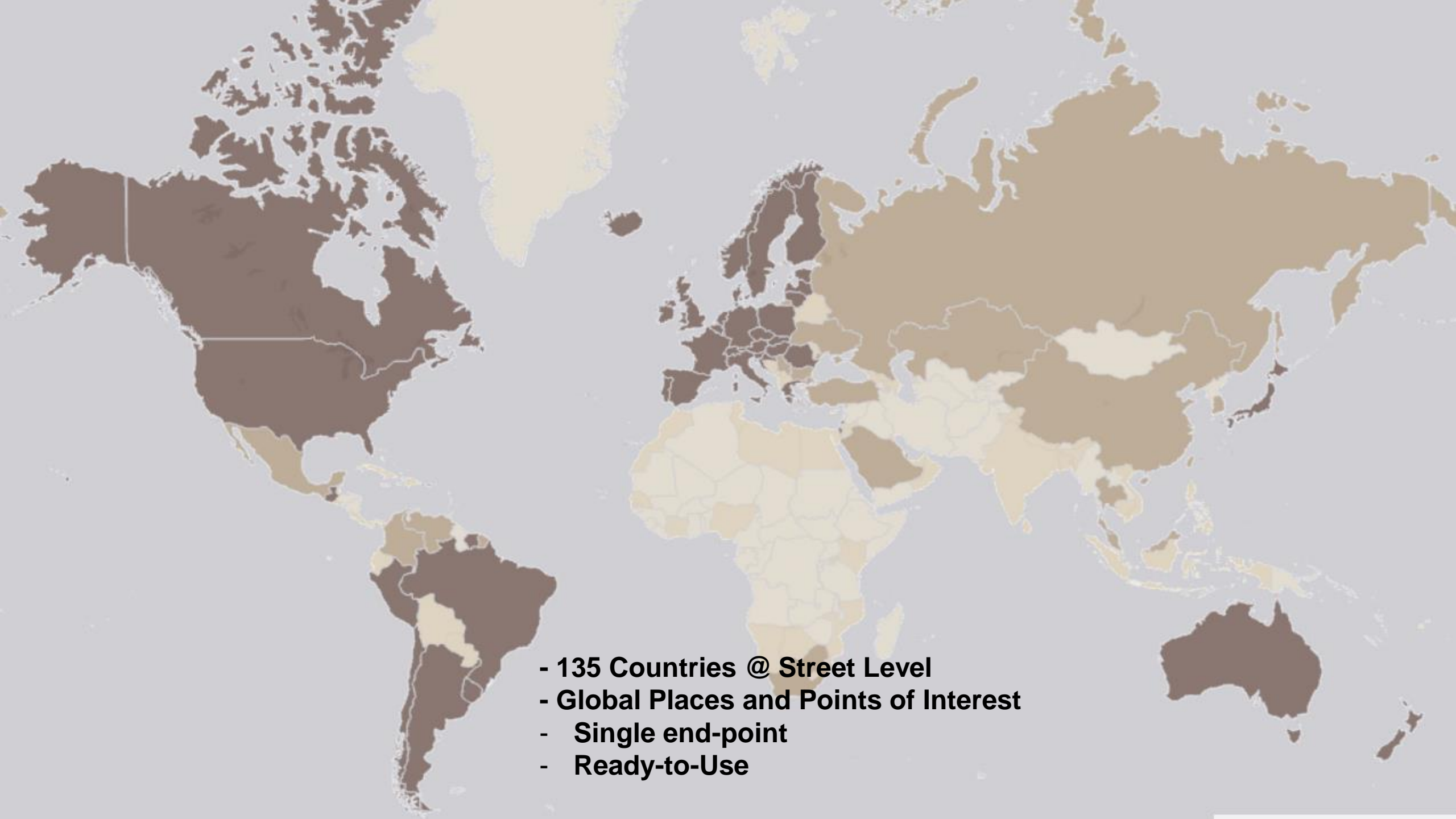
Community
Content

BAG NL
BEV AT
G-NAF AU, ...


Commercial
Content

HERE, iPC, ...





- 135 Countries @ Street Level
- Global Places and Points of Interest
- Single end-point
- Ready-to-Use

A woman with dark hair in a ponytail, wearing a red dress and a striped shirt, holds a white rectangular sign. The sign displays the address "380 New York Street" and "Redlands, CA 92373" in bold black text. The background is a blue gradient with abstract white line patterns.

380 New York Street
Redlands, CA 92373



**Ringstraße 7
85402 Kranzberg**

Products



World Geocoding Online

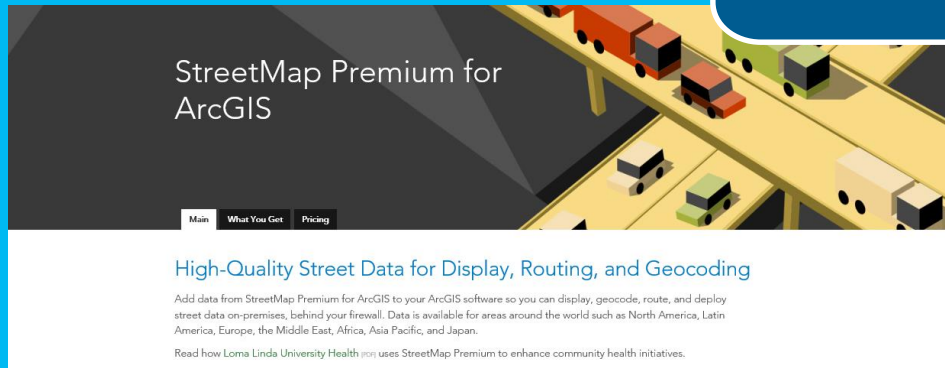


World Geocoding On-Premises

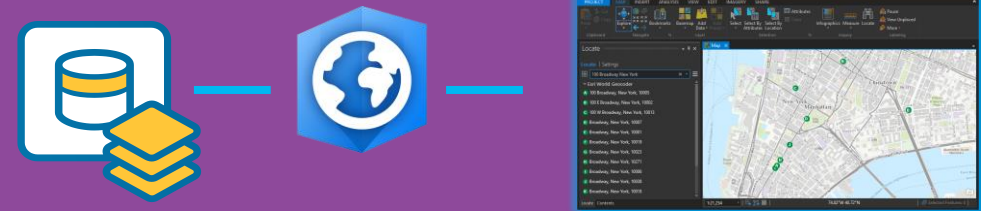


Products

StreetMap Premium for ArcGIS

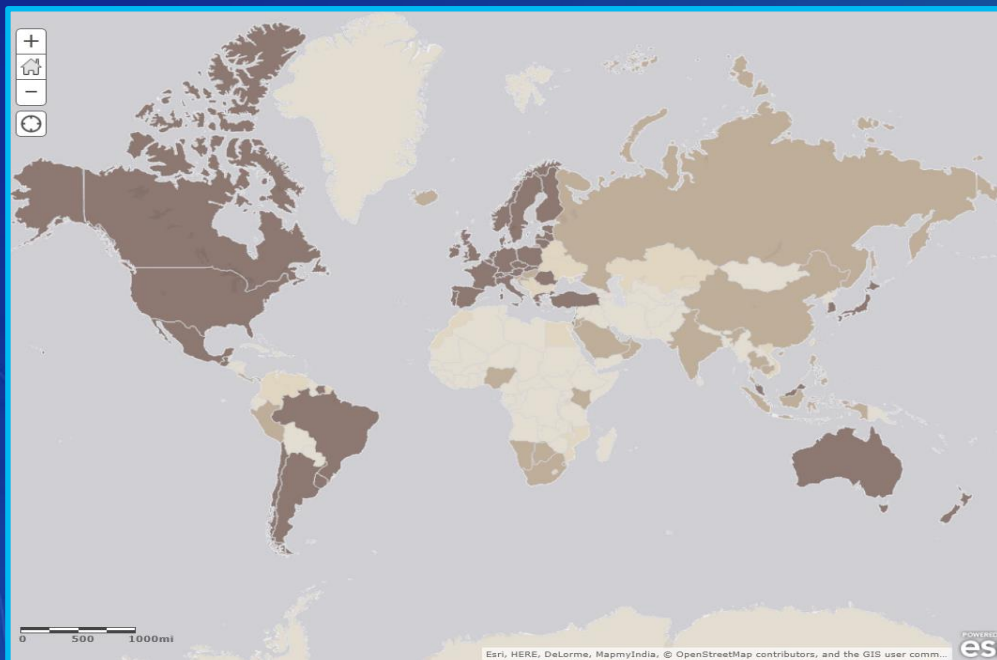


Country Geocoding On-Premises



Build your own with ArcGIS

Esri-hosted Online World Geocoding



Address Geocoding for 80% of world wide population
Also includes Places and Points of Interest for the World

It meets the needs of most organizations today



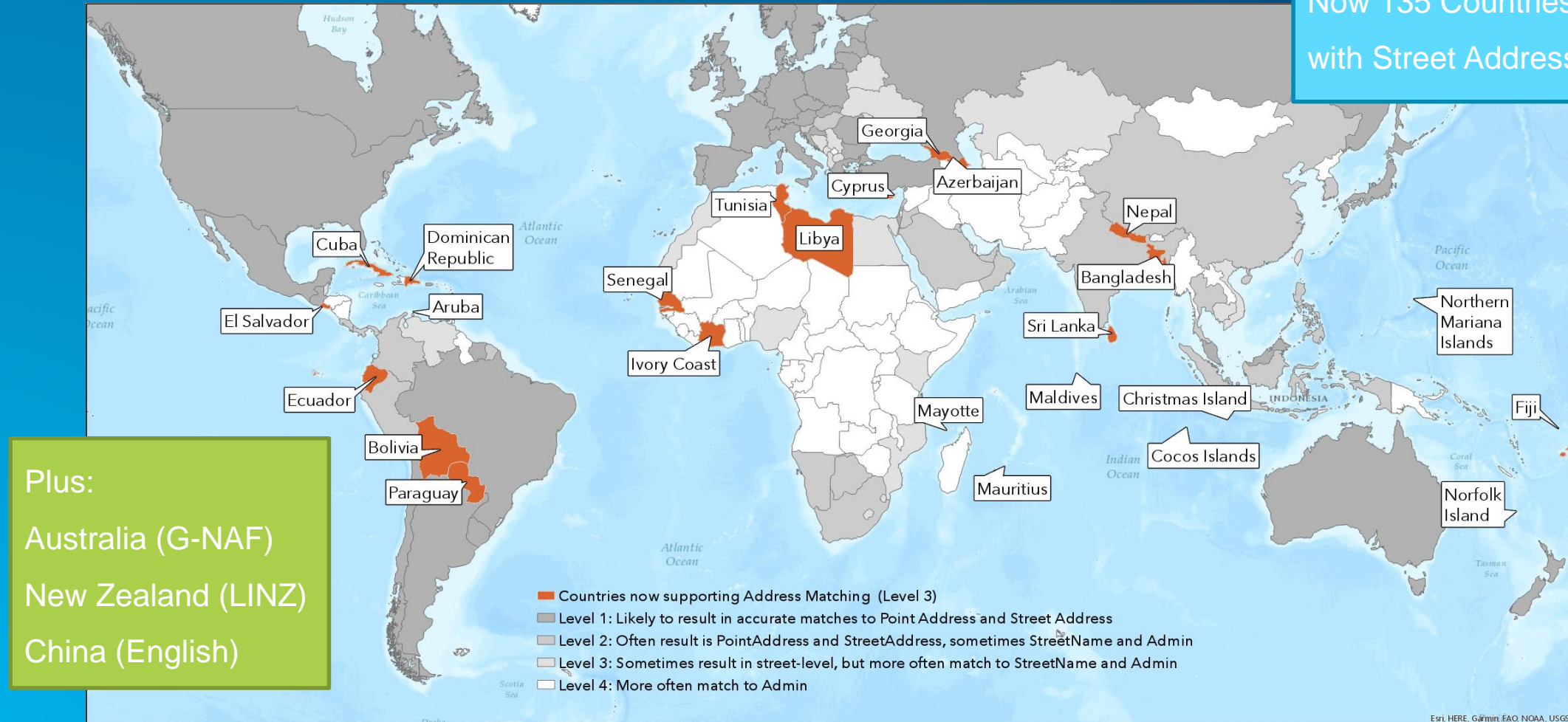
What's New



Enhanced World Geocoding Coverage

25 additional countries where street addresses can be located

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

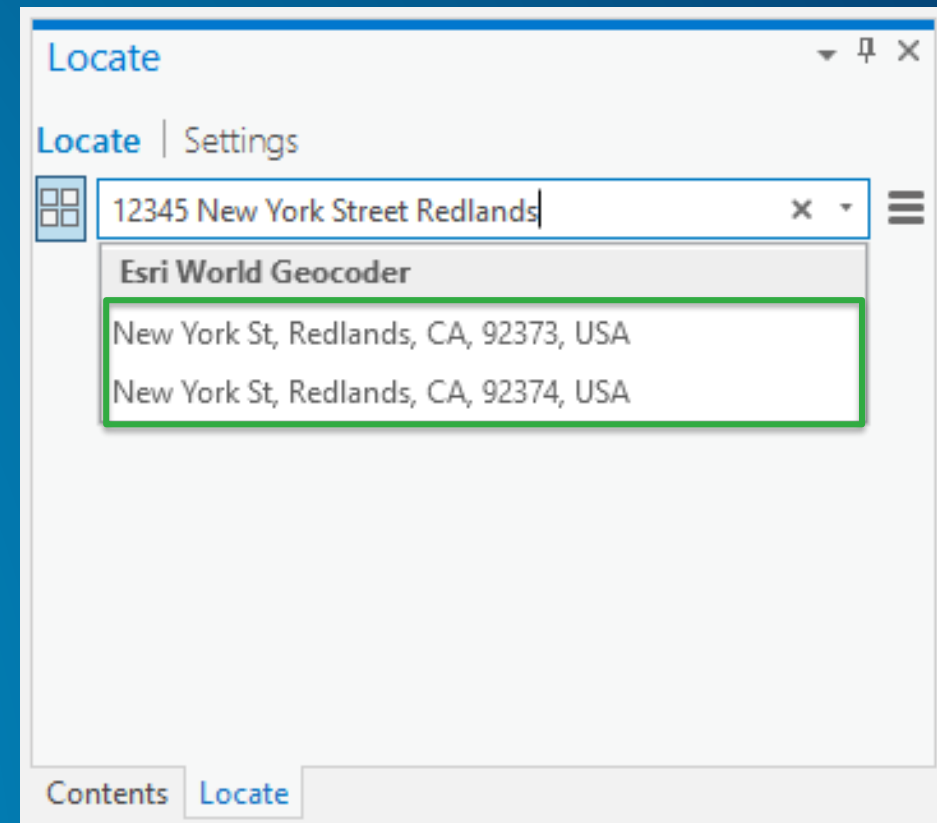
Esri New York St

Esri Vienna VA

Prospect Park Redlands

Marina Park San Diego

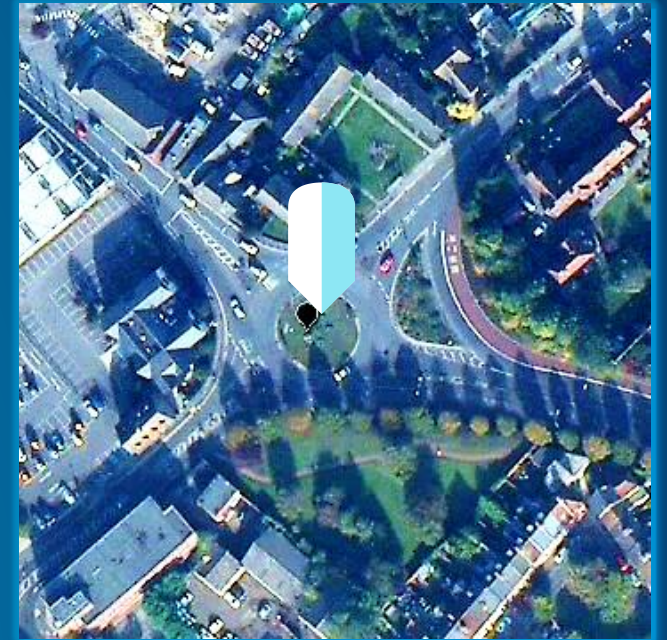
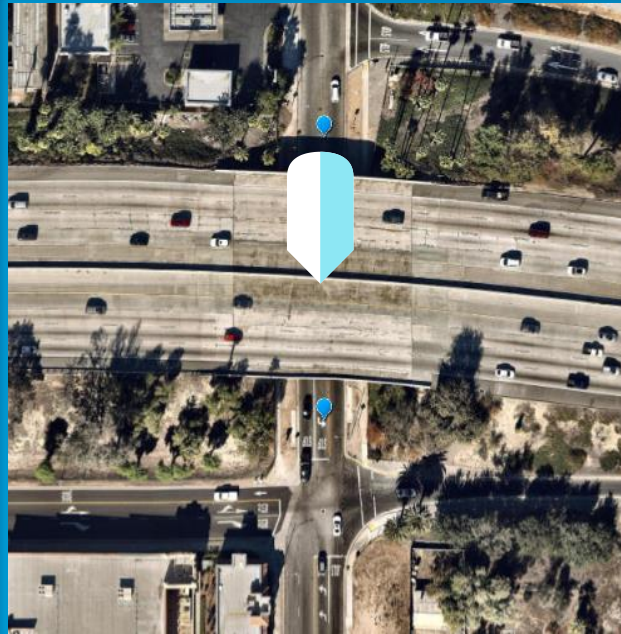
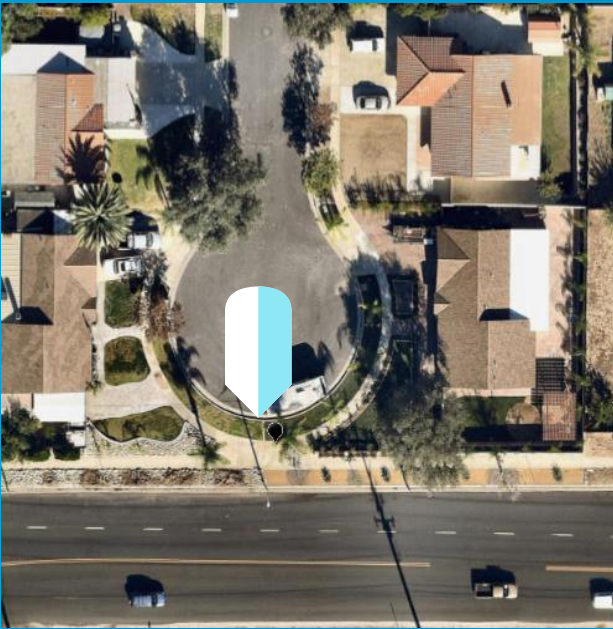
Suggestions match only valid house numbers as you type



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

What's here?

Petco Park

Match_addr

Petco Park

LongLabel

Petco Park, 100 Park Blvd, San Diego, CA, 92101, USA

ShortLabel

Petco Park

Addr_type

POI

Type

Sports Center

PlaceName

Petco Park

AddNum

100

Address

100 Park Blvd

Neighborhood

Gaslamp

City

San Diego

MetroArea

San Diego Metro Area

Subregion

San Diego

Region

California

Postal

92101

Country Code

USA

x:

-117.156578

y:

32.707483

Spatial Reference

GCS_WGS_1984



Feature Type	Search Tolerance
Street Intersection	10 meters
Street Address (near)	7 meters
POI centroid	25 meters
Point Address	25 meters
Street Address (distant)	100 meters
POI area	within boundary
Postal or Locality area	within boundary

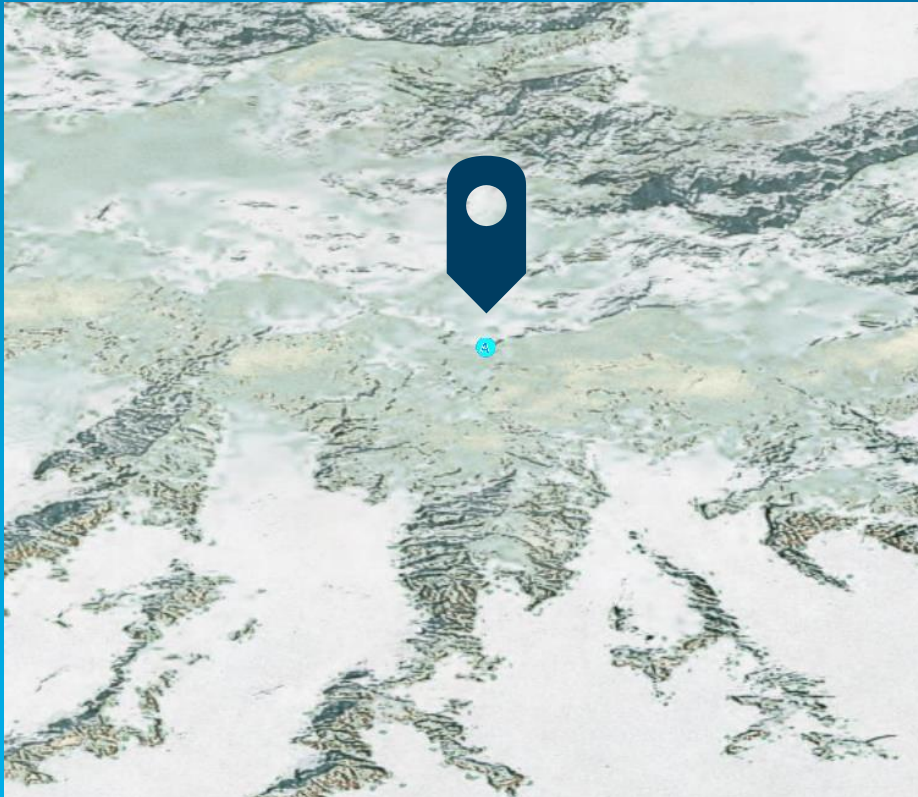
Developer API - more control over the features that are returned with the new featureTypes parameter

Enhanced Coordinate Geocoding

MGRS, USNG and DMS Geosearch is built in....

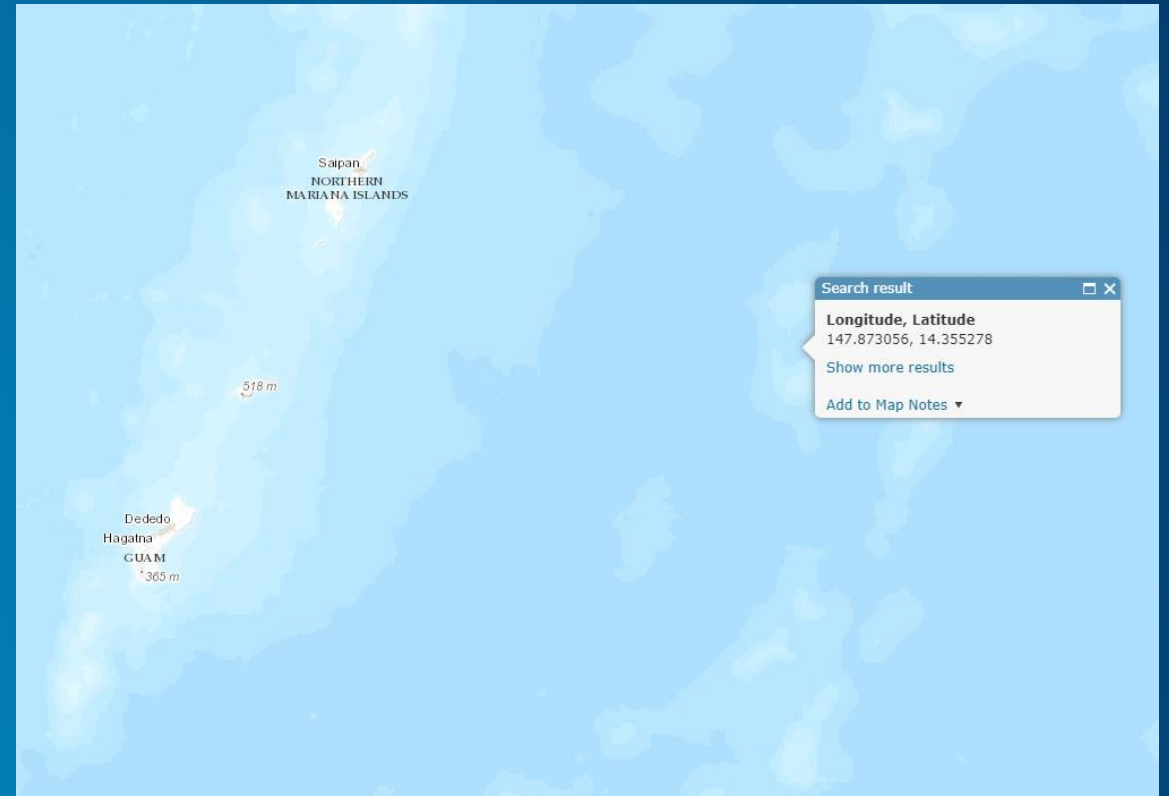
GeoSearch coordinates

MGRS: 07VEH3258214688



DMS: 147d 52m 23s E, 14d 21m 19s N

DMS: 147° 52' 23" E, 14° 21' 19" N



What's New Resources

The screenshot shows the Esri ArcGIS Blog homepage. The main article is titled "Major Enhancements to Esri World Geocoding service! (June 2017)" by pabel_nick on June 28, 2017. The article text states: "The ArcGIS Online World Geocoding service update that was released last night is not just another regular data update. It's a major release with significant enhancements. This blog will guide you through some of the new features and improvements you can expect to see in the service. You can find a complete list of changes and detailed information about available functionality in the [World Geocoding service documentation](#)."

The first enhancement listed is "1. Geocoding in more countries – You can now search for addresses in more countries than before. Previously the World Geocoding service boasted support for address-level geocoding in 109 countries. The list has expanded to an even more impressive 135 countries. We've also updated the reference data for most countries and added new authoritative address data sources for Australia (G-NAF) and Austria (BEV)."

Below the text is a world map titled "Figure 1: This Geocoding Coverage map demonstrates the countries for which there is address coverage in the World Geocoding Service and the languages they support, grouped by relative geocoding quality. The darker the shade, the higher the quality of geocoding. Complete coverage information and languages supported are available in the [developer documentation](#)." The map shows various countries shaded in different colors to represent geocoding quality.

On the right side of the blog post, there are sections for "This Blog" (with links for Sign in, Subscribe to the RSS Feed, and Comments RSS) and "Technical Communities" (listing various Esri products and their user counts, such as 3D GIS (290), Analysis & Geoprocessing (450), ArcGIS Enterprise (98), etc.).

<https://blogs.esri.com/esri/arcgis/2017/06/28/big-enhancements-geocoding/>

The screenshot shows the "ArcGIS REST API: World Geocoding Service" page. The main heading is "What's new in the World Geocoding Service" for "May 2017". Under the heading, it lists "Quality Improvements" with several bullet points:

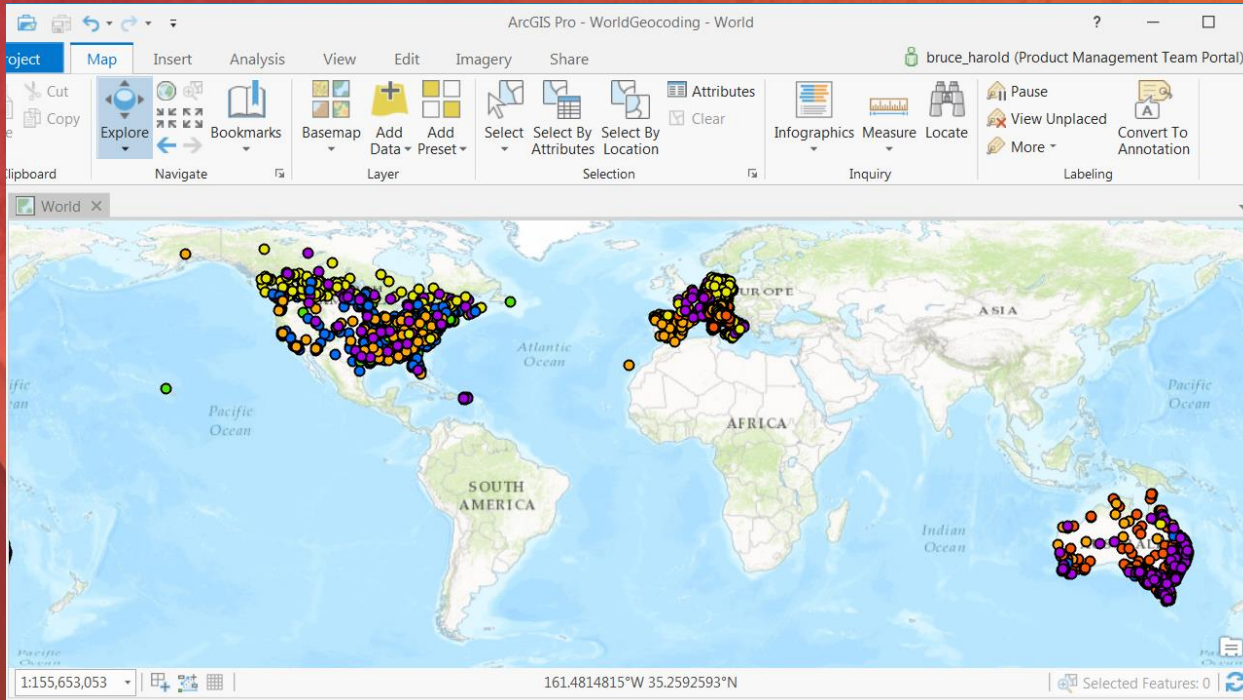
- Enhanced [reverse geocoding](#)—More types of features can be returned by the `reverseGeocode` operation, including POIs, postal boundaries, and administrative boundaries.
- Improved [intersection search](#)—Intersections can now be found between disconnected streets, such as at cul-de-sacs and highway 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).
- Street-level geocoding is supported for many additional countries: ABW, AZE, BGD, BOL, CCK, CIV, CUB, CXR, CYP, DOM, ECU, FJI, GEO, LBY, LKA, MDV, MNP, MUS, MYT, NCY, NFK, NPL, PRY, SEN, SLV, and TUN. 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 `findAddressCandidates` operation.
- [Batch geocoding of POIs](#) is now supported with the `geocodeAddresses` operation.
- Various geocoding quality improvements for some geographic regions.

On the right side of the page, there is a sidebar titled "In this topic" with a list of dates: May 2017, July 2016, March 2016, July 2015, December 2014, July 2014, March 2014, December 2013, September 2013, July 2013, and April 2013.

<https://developers.arcgis.com/rest/geocode/api-reference/whats-new-world-geocoding-service.htm>

World Geocoding Demo

Web and Desktop



Please Take Our Survey on the Esri Events App!

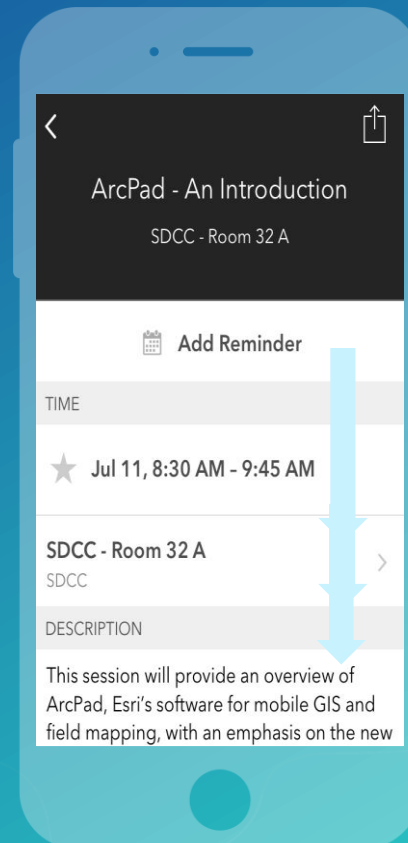
Download the Esri Events app and find your event



Select the session you attended



Scroll down to find the survey



Complete Answers and Select "Submit"





esri

THE
SCIENCE
OF
WHERE