

ARCGIS WORLD GEOCODER

FREQUENTLY ASKED QUESTIONS (FAQS) DOCUMENT

NOTE: This document can be found online on the [ArcGIS World Geocoder Product Page](#).

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Overview

What is ArcGIS World Geocoder?

ArcGIS World Geocoder enables you to map worldwide addresses quickly and accurately behind your firewall at a fixed **Annual Subscription License** cost. Input addresses from around the world and accurately display them on a map using one single locator. ArcGIS World Geocoder is built using the best available reference data from authoritative sources to provide **global geocoding**, with street-level geocoding (street name, street addresses, point addresses) for 149 countries including key global economies, as well as place-level coverage for other landmarks and cities.

What are the key capabilities of the ArcGIS World Geocoder?

There are 3 key capabilities of the ArcGIS World Geocoder and Esri Geocoding competency in general:

1. **Interactive Search** – locate an address on the map one request at a time. **Suggestions** feature is built-in, to get list of multiple candidates as you type.
2. **Batch Geocoding** – submit a spreadsheet or a table of addresses and get the coordinates in one process. A very powerful GIS task that most users are interested in!
3. **Reverse Geocoding** – submit a coordinate and get back a textual description of the location in the form of an address or place – great solution for your field workers using GIS on mobile!

What do I get with the ArcGIS World Geocoder?

ArcGIS World Geocoder is delivered as a solution product from Esri that includes:

- ArcGIS Enterprise software
- Data/Locators (*actual basemap data not included*)
- Esri Professional Services

*As a solution product, the product is sold as a total solution and the components **cannot** be quoted separately.*

Does ArcGIS World Geocoder come with hardware?

No. As security policies vary from organization to organization, especially in the public safety, defense, and intel sectors, users will need to supply their own hardware, based on the required specifications that Esri has defined. To expedite delivery and implementation, the required hardware will need to be acquired before licensing the World ArcGIS Geocoder.

Should you want Esri to provide an additional purchase option for the server hardware, please contact EsriHWRequest@esri.com.

How is the ArcGIS World Geocoder delivered to me?

Once licensed, Esri Professional Services will schedule a 3-5 day on-site visit at your organization to deliver, configure, test, deploy, and implement the ArcGIS World Geocoder.

What is the difference between the different product levels; Basic, Standard, and Advanced?

All the product levels deliver the same quality and data. The only difference is in terms of the batch geocoding and volume limit, as outlined in this table.

	Advanced**	Standard	Basic
Throughput	Interactive geocoding + up to 16 concurrent batch jobs*	Interactive geocoding + up to 4 concurrent batch jobs*	Interactive geocoding + up to 4 concurrent batch jobs*
Volume Limit	Unlimited	Unlimited	250 Million / year

**The number of concurrent batch geocode jobs that can occur simultaneously depends on the product option selected. Users may experience a time-out message if the number of concurrent batch jobs allowed per the licensed product option is exceeded.*

***Additional batch jobs in increments of 4 can be added to the Advanced product for an additional cost.*

What happens if a customer submits more concurrent batch jobs than supported?

The number of concurrent batch geocode jobs that can occur simultaneously depends on the product option selected (up to **16** for Advanced; up to **4** for Standard or Basic). Users may experience a time-out message if the number of concurrent batch jobs allowed per the licensed product option is exceeded.

How many geocodes can I likely reach with each option?

Assuming you are using the ArcGIS World Geocoder on the required hardware specifications and you are batch geocoding during normal business hours, 220 days / year, 8 hours / day:

- With the **Advanced** option, you can likely reach up to **5 billion geocodes** per year.
- With the **Standard** option, you can likely reach up to **1 billion geocodes** per year.
- With the **Basic** option, you are limited to **250 million geocodes** per year per the license agreement.

Where are you getting these volume numbers? Has Esri tested the ArcGIS World Geocoder?

Yes. Esri has tested the ArcGIS World Geocoder on the Esri required hardware specifications.

Product Comparison

What is the difference between ArcGIS World Geocoder and ArcGIS StreetMap Premium?

ArcGIS World Geocoder is a unified global dataset specifically for geocoding, providing you with a single locator to which you can submit local and global addresses for geocoding. It includes Data/Locators, ArcGIS Enterprise software and Esri Professional services. No basemaps are included.

ArcGIS StreetMap Premium is Esri's dedicated Map Display (basemaps), Geocoding, and Routing data product for use behind the firewall. ArcGIS StreetMap Premium is meant for users that need data for a few countries or a specific region. It includes basemaps but it is NOT a globally unified dataset. It does NOT include ArcGIS Enterprise software or Esri Professional services.

What is the difference between the ArcGIS Online World Geocoding service and the ArcGIS World Geocoder?

- **From a feature-function perspective**, both ArcGIS Online World Geocoding service and ArcGIS World Geocoder are functionally equivalent.
- **From a coverage perspective**, both provide similar coverage, with the exception being China and South Korea for the ArcGIS World Geocoder.

The ArcGIS World Geocoder deliverable is a snapshot of the ArcGIS Online World Geocoding service, acquired at a specific time. As such, there are certain times where the available functions and content coverage may be marginally different due to new updates in the online service that are not yet part of the ArcGIS World Geocoder deliverable.

- **From a pricing perspective**, ArcGIS Online World Geocoding service provides a variable pricing model based on pay per use. The ArcGIS World Geocoder is licensed on a fixed annual subscription basis, and you are free to geocode as much as you need within the Advanced and Standard products; with the Basic product, you are limited to 250 million geocodes per year at a fixed price.
- **From a deployment perspective**, ArcGIS Online World Geocoding service is ready to use in ArcGIS client applications and configurable in developer apps. The ArcGIS World Geocoder needs to be hosted behind the firewall, but once deployed, it can also be used in ArcGIS client applications and developer apps.

Will ArcGIS World Geocoder return the same results as the ArcGIS Online World Geocoding service or ArcGIS StreetMap Premium?

Yes. All Esri geocoding capabilities use the same underlying data to build the locators.

I am a developer at a reinsurance organization building critical GIS apps to evaluate risk – is this solution right for me?

Absolutely! The ArcGIS World Geocoder provides a ready-to-use Restful and SOAP API that can be configured in your apps to help your organization evaluate risk and make policy decisions for your clients all over the world.

For more information on the API and how you can configure it in your application, please visit the documentation for the ArcGIS Online World Geocoding service. <https://developers.arcgis.com/rest/geocode/api-reference/overview-world-geocoding-service.htm>

Licensing

Can I use my existing ArcGIS Enterprise software, such as a license that is available through my EA?

No. The ArcGIS Enterprise software included with the ArcGIS World Geocoder for is to power the geocoding capability of this on-premises solution and is considered separate of **any** existing ArcGIS Enterprise software, even those acquired through an Enterprise Agreement (EA). You cannot bring your own license to this solution and discounts for existing software will not be applied.

Can I use the ArcGIS Enterprise license included with the ArcGIS World Geocoder for other resources than the ArcGIS World Geocoder?

No. The ArcGIS Enterprise license included with the ArcGIS World Geocoder must be dedicated to host the World Geocoding service.

Does ArcGIS World Geocoder include ArcGIS Portal entitlements?

Yes. ArcGIS World Geocoder includes an ArcGIS Enterprise Standard license. As such, five (5) Portal for ArcGIS Named Users are provided for use with ArcGIS World Geocoder.

Is there an additional cost associated with a Staging license of ArcGIS World Geocoder if a Production license has been purchased?

Yes. There is an additional cost for an ArcGIS World Geocoder Staging license to cover the ArcGIS Enterprise software. A staging license may be used for development as well as testing.

If a customer wants to set up a failover environment, do they need to purchase an additional product license?

In support of the licensed production environment, ArcGIS World Geocoder is permitted in active/passive failover environments with no additional license fees. In this scenario, the 2nd system is only activated once the production system goes down. Additional license(s) are required for active/active failover.

If a customer licenses the ArcGIS World Geocoder, can they use it to provide geocoding functionality to their customers?

No. The ArcGIS World Geocoder is for INTERNAL USE only. If a you/customer would like to discuss licensing for a different use case, please email WorldGeocoder@esri.com.

If we are currently using the ArcGIS Online World Geocoding service, can we point to the ArcGIS World Geocoder on-premises solution to avoid using credits?

Yes. An ArcGIS Online Administrator can configure the solution to point to a locally hosted geocoding service.

How often is ArcGIS World Geocoder updated?

As part of the Annual Subscription License, the ArcGIS World Geocoder is updated approximately 6 months after its initial installation, then twice a year for all subsequent Annual Subscription Licenses that are purchased. Professional Services includes a visit of up to three (3) days of on-site support to perform an update of the ArcGIS World Geocoder during which the Esri consultant will refresh the data/locators and/or software with the then latest version that has been certified for that specific ArcGIS World Geocoder release. Updates after the first year are dependent on the continued purchase of Annual Subscription Licenses for the ArcGIS World Geocoder.

Can I continue to use the ArcGIS World Geocoder if I *don't* continue to purchase a continued Annual Subscription License?

No. The initial purchase of the ArcGIS World Geocoder includes a right-to-use license for one year that is extended through the purchase of subsequent Annual Subscription Licenses. Esri's agreement with its data providers does not allow perpetual use of the ArcGIS World Geocoder. If a user does not purchase subsequent Annual Subscription

Licenses, the user will be required to sign a Certificate of Uninstallation that the data/locators have been erased/destroyed and that the ArcGIS Enterprise software has also been removed.

Can I get a Trial or Evaluation copy of the ArcGIS World Geocoder?

The best way to evaluate ArcGIS World Geocoder from quality and functionality standpoint is to use the ArcGIS Online World Geocoding service. Since they both use the same underlying data, you can test the geocoding functionality using your addresses as an indicator of the results you will see in ArcGIS World Geocoder.

If the actual data is needed to understand the process of hosting and deploying a geocoding service on-premises, you can request an evaluation copy of ArcGIS StreetMap Premium for a specific country. Once you publish the service, you can open the service up to team members to get a sense of the performance.

If necessary, a Proof of Concept (POC) installation of the ArcGIS World Geocoder for can be considered. If interested in discussing this concept, please e-mail worldgeocoder@esri.com.

Data, Coverage

What data is used to build the locators for ArcGIS World Geocoder?

We primarily use HERE data. In a few cases we have obtained data from local places where HERE data is not available.

I understand it's a World Geocoder...but where can I find detail on the actual coverage?

The coverage of the ArcGIS World Geocoder is similar to that of the ArcGIS Online World Geocoding service. Please refer to: <https://developers.arcgis.com/rest/geocode/api-reference/geocode-coverage.htm>

NOTE: The only exceptions are for China and South Korea; Esri cannot deliver this data in the ArcGIS World Geocoder due to political restrictions in those countries.

How are China and South Korea handled in ArcGIS World Geocoder?

There is a big challenge for any organization that delivers geocoding capabilities in certain countries due to strict government regulations. While Esri cannot deliver the data, Esri has solved the issue by hosting the service locally inside the borders of the country; such as China. The server is then federated to the global service. This is transparent to the end user and only exposed through the API. The customer will need to be willing to connect to an external web service for these countries. This configuration will be done by Esri Professional Services when they are on site to install and configure the ArcGIS World Geocoder solution.

Does the ArcGIS World Geocoder include any basemaps that can be accessed and used for display purposes?

No. ArcGIS World Geocoder contains only the Locators. You will need to provide your own basemap data for displaying results on a map.

What are your recommendations for basemap data?

[ArcGIS Online](#) basemaps are a good option for the use case where a customer purchases ArcGIS World Geocoder for so they do not consume credits for geocoding but have internet access and can take advantage of the online basemaps.

The following options are all *on-premises solutions* for obtaining basemap data:

[ArcGIS StreetMap Premium](#) includes vector basemap data for map display and routing, but the product itself is geared towards users wanting to geocode locally.

[ArcGIS Data Appliance](#) contains precached and preloaded imagery, basemaps, and reference layers that would be delivered on a network attached device as a read-only solution.

[ArcGIS Data Appliance: Esri Vector Basemaps](#) provides rich, detailed maps from industry-leading data providers on a USB flash drive loaded with vector tiles, styles, and a style publishing tool.

[ArcGIS Data Appliance: OSM Vector Basemaps](#) provides detailed maps from contributors with local knowledge on a USB flash drive loaded with vector tiles, styles, and a style publishing tool.

Can I use the ArcGIS World Geocoder with my own street basemap data?

Yes. However, the locators provided with the ArcGIS World Geocoder are based on the ArcGIS Online World Geocoding service, which is mostly based on HERE data. Good basemap options are the ArcGIS Online World Geocoding service, the ArcGIS Data Appliance, or ArcGIS StreetMap Premium product. If you do use your own street basemap data, there is chance of inconsistencies where the geocoding results may not line up as expected.

Requirements – Software, Hardware, Cloud

What are a customer’s software, hardware or cloud requirements for ArcGIS World Geocoder?

Software requirements

ArcGIS World Geocoder is based on ArcGIS Enterprise software which is supported on both Windows and Linux platforms. The following table lists the minimum software requirements.

Software Component	Minimum Version
Operating System (Windows)	Refer to the ArcGIS Enterprise software requirements, which can be viewed at the following URL: http://enterprise.arcgis.com/en/system-requirements/10.6/windows/arcgis-server-system-requirements.htm
Operating System (Linux)	Refer to the ArcGIS Enterprise software requirements, which can be viewed at the following URL: http://enterprise.arcgis.com/en/system-requirements/10.6/linux/arcgis-server-system-requirements.htm
ArcGIS Enterprise	10.7

Hardware requirements

There are different hardware requirements depending on the edition of ArcGIS World Geocoder that you have licensed—Basic, Standard, or Advanced. Please be aware of the edition you are using when you determine the hardware configuration on which to host World Geocoder.

The hardware specifications listed in the following tables apply to both Windows and Linux platforms.

Hardware requirements for **Basic** and **Standard** editions

Hardware Component	Minimum required
CPU	4 physical cores with hyper-threading enabled. This amounts to 8 logical processors.
Memory	64 GB RAM
Hard drives	2 x 100 GB solid state drives (1 for OS and software, 1 for ArcGIS World Geocoder content)

Hardware requirements for **Advanced** edition

Hardware Component	Minimum required
CPU	16 physical cores with hyper-threading enabled. This amounts to 32 logical processors.
Memory	128 GB RAM
Hard drives	2 x 100 GB solid state drives (1 for OS and software, 1 for ArcGIS World Geocoder content)

Note: Instead of using a single machine that meets the hardware requirements for the Advanced edition, you can use four smaller machines that each meet the minimum requirements for the Basic and Standard editions in an ArcGIS Enterprise site or behind a load balancer.

Cloud requirements

The ArcGIS World Geocoder can be set up on IT infrastructure provided by different cloud platforms. At this version, the ArcGIS World Geocoder is documented and tested for use on a cloud platform provided by Amazon Web Services (AWS). ArcGIS World Geocoder can be deployed in AWS using the Windows and Linux based ArcGIS Enterprise 10.7 Amazon Machine Images (AMI's) provided by Esri. The specific AWS components that are required are listed in the following tables. The below recommended specs can be used as a reference for deploying on other similar cloud configurations.

There are different requirements depending on the edition of ArcGIS World Geocoder that you have licensed—Basic, Standard, or Advanced. Please be aware of the edition you are using when you determine the configuration on which to host the ArcGIS World Geocoder.

The specifications listed in the following tables apply to both Windows and Linux platforms.

Instance recommendation for **Basic** and **Standard** editions

Cloud Component	Minimum required
Elastic Compute Cloud (EC2) instance	A single R3 High-Memory Double Extra Large (r3.2xlarge) or R4 High-Memory Double Extra Large (r4.2xlarge) EC2 instance. The r3.2xlarge and r4.2xlarge instances support 26-27 compute units, where one compute unit provides the equivalent CPU capacity of a 1.0-1.2 GHz 2007 Opteron or 2007 Xeon processor. The instance provides 8 virtual CPUs and 61 GB of memory.
Storage	One additional Elastic Block Store (EBS) volume of 35 GB to permanently store the ArcGIS World Geocoder content.

Instance recommendation for **Advanced** edition

Cloud Component	Minimum required
Elastic Compute Cloud (EC2) instance	A single R3 High-Memory Eight Extra Large (r3.8xlarge) or R4 High-Memory Eight Extra Large (r4.8xlarge) EC2 instance. The r3.8xlarge and r4.8xlarge instances support 99-104 compute units where one compute unit provides the equivalent CPU capacity of a 1.0-1.2 GHz 2007 Opteron or 2007 Xeon processor. The instance provides 32 virtual CPUs and 244 GB of memory.
Storage	One additional Elastic Block Store (EBS) volume of 35 GB to permanently store the ArcGIS World Geocoder content.

Can the ArcGIS World Geocoder support any other Cloud Environments other than Amazon Web Services (AWS)?

Yes, the ArcGIS World Geocoder can be set up on IT infrastructure provided by different cloud platforms. The ArcGIS World Geocoder has been documented and tested on AWS. Should you desire the ArcGIS World Geocoder to be placed on another supported Esri Cloud Environment, please e-mail WorldGeocoder@esri.com.

If the ArcGIS World Geocoder server is hosted in the US and someone submits a job from another country, i.e. Australia, is there a time lag?

There are latency considerations. This is very dependent on network capabilities and network connections.

Support and Legal

Whom do I contact if I need support for ArcGIS World Geocoder?

Support pertaining to map data issues is provided by Esri Support Services. If you are in the United States, contact Esri Technical Support [online](#) or call 1-888-377-4575, available from 5:00 a.m. to 5:00 p.m. (Pacific Time), Monday–Friday, excluding Esri holidays.

Where can I find the terms of use for the ArcGIS World Geocoder?

The **ArcGIS Enterprise** software and **Data/Locators** included with the ArcGIS World Geocoder solution requires terms of the agreements that can be found at <http://www.esri.com/legal/software-license>. All **Professional Services** included with the ArcGIS World Geocoder solution will be performed in accordance with the terms and conditions of the Professional Services Agreement (G363CT). See <https://www.esri.com/content/dam/esrisites/en-us/media/legal/services/professional-svcs-agmt.pdf>.

Additional Resources

- **Product page:** www.esri.com/worldgeocoder
- **REST API Documentation:** <https://developers.arcgis.com/rest/geocode/api-reference/overview-world-geocoding-service.htm>
- **Coverage/Language support:** <https://developers.arcgis.com/rest/geocode/api-reference/geocode-coverage.htm> - better understand coverage by country and what languages are supported and quality of geocoding per country.

Related Products

ArcGIS StreetMap Premium: www.esri.com/streetmap

ArcGIS Data Appliance: www.esri.com/dataappliance