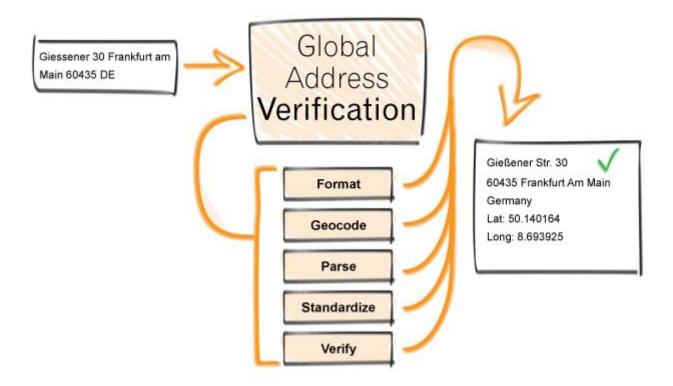


Global Address Web Service: Programmer's Quick Start

Overview

The Global Address web service is a real time address validation and correction service. Covering over 240+ different countries and territories around the world, this service allows you to ensure your address data is clean and accurate. Additionally, you can also parse the data and append latitude and longitude.



You can use Global Address to:

- Verify and correct addresses
- Return the address parsed into individual components
- Append latitude and longitude
- Transliterate the address from or into the native language of the input country
- Get the address formatted for mailing labels



COMMONLY USED FIELDS INPUT AND OUTPUT FROM THE SERVICE

INPUTs	Description
Transmission Reference	A unique string value identifying the request
Customer ID	License String from Melissa Data
Options	Configuration Options for the Web Service
Record ID	Unique ID if processing multiple records
Organization	Optional organization name
AddressLine1	Input address line
AddressLine2	Input address line
AddressLine3	Input address line
AddressLine4	Input address line
AddressLine5	Input address line
AddressLine6	Input address line
AddressLine7	Input address line
AddressLine8	Input address line
Locality	Input locality (city)
AdministrativeArea	Input Administrative Area (state, municipality)
PostalCode	Input Postal Code
Country	Input Country code or name

OUTPUTs	Description
Transmission Reference	A unique string value identifying the request
Transmission Results	Results of the transmission (success/fail)
Record ID	Unique ID if processing multiple records
Results	Results (status of the validation)
FormattedAddress	Full address in one field. Mailing label format.
Organization	Output organization
AddressLine1-8	Output address lines in 8 separate fields
Locality	Output locality (city)
AdministrativeArea	Output Administrative Area (state, municipality)
PostalCode	Output Postal Code
CountryName	Output Country Name
CountryISO3166_1_Alpha2	Output Country 2 letter code
Thoroughfare	Output delivery thoroughfare (street address)
Building	Building name
PremiseNumber	House number
SubPremiseNumber	Suite number
SubPremiseType	Suite name
Postbox	Post office box
Latitude	Geographic latitude coordinate
Longitude	Geographic longitude coordinate



License String

You should have been provided an encrypted and unique license string or Customer ID from Melissa Data. This is necessary for including with each request to the Global Address Web service. This value should be put into the CustomerID element in each Web service request.

If you do not have a license string, please contact your Melissa Data sales representative at 1-800-MELISSA (1-800-635-4772).

Global Address Web Service URL's

http://wiki.melissadata.com/index.php?title=Global Address Verification%3AURL

Country Verification Levels

Each country may have a different precision level of source data available. The address verification level as well as the geocoding level for each country is listed on the Address Coverage by Country page.

http://wiki.melissadata.com/index.php?title=Country Verification Levels

Basic Order of Operations

- 1. Create a request using the pre-defined structure in SOAP, XML, or JSON.
- 2. Fill in the request with your license or customer id.
- 3. Add address records to the <Records> array with anywhere from 1 to 100 <RequestRecord> items.
- 4. Send the request to the service using the SOAP endpoint for SOAP requests and the WEB endpoint for XML or JSON requests and receive a response back.
- 5. Parse the response and the results.

Sample Code

Here are some of the available sample code:

- SOAP in C#: ftp://ftp.melissadata.com/SampleCodes/Current/DQWS3/International/International_SOAP_CSharp9_Win.zip
- XML in JAVA: ftp://ftp.melissadata.com/SampleCodes/Current/DQWS3/International/International_XML_Java.zip
- REST in VBScript: ftp://ftp.melissadata.com/SampleCodes/Current/DQWS3/International/International_REST_VBScript_Win.zip

Sample REST Requests

- 1. https://address.melissadata.net/V3/WEB/GlobalAddress/doGlobalAddress?id=12345678&a1=22382%20avenida%20 empresa&loc=rancho%20santa%20margarita&admarea=CA&postal=92688&ctry=USA
- 2. https://address.melissadata.net/V3/WEB/GlobalAddress/doGlobalAddress?id=12345678&opt=DELIVERYLINES:ON&a1=22382%20avenida%20empresa&loc=rancho%20santa%20margarita&admarea=CA&postal=92688&ctry=USA

You can test using REST simply by filling in your license in the "id" field and putting the link into a browser URL bar. *NOTE* Internet explorer is known to have issues with putting non-ascii values in the URL. Google chrome works as expected in our tests.



Sample JSON Request

```
{"CustomerID":"12345678",
"Options":"DELIVERYLINES:ON",
"Records":
[{"RecordID":"1",
    "AddressLine1":"22382 Avenida Empresa",
    "Locality":"Rancho Santa Margarita",
    "AdministrativeArea":"CA",
    "PostalCode":"",
    "Country":"USA"}]}
```

Sample XML Request

```
<?xml version="1.0" encoding="utf-8"?>
<Request>
<TransmissionReference />
 <CustomerID>XXXXXXXX</CustomerID>
 <Options/>
 <Records>
  <RequestRecord>
  <RecordID>1</RecordID>
  <Organization>Melissa Data</Organization>
  <AddressLine1>22382 Avenida Empresa</AddressLine1>
  <AddressLine2 />
  <AddressLine3 />
  <AddressLine4 />
  <AddressLine5 />
  <AddressLine6 />
  <AddressLine7 />
  <AddressLine8 />
  <DoubleDependentLocality />
  <DependentLocality />
  <Locality>Rancho Santa Margarita</Locality>
  <SubAdministrativeArea />
  <AdministrativeArea>CA</AdministrativeArea>
  <PostalCode>92688</PostalCode>
  <SubNationalArea />
  <Country>USA</Country>
  <RecordOptions/>
  </RequestRecord>
 </Records>
</Request>
```

^{*}You must have "Accept: application/json" in the http header.

^{*}You can have "Accept: application/xml" in the http header, or leave it blank. "application/xml" is the default.



Single vs. Batch

Melissa Data cloud services are capable of both single record real-time processing and batch processing. The difference is simply in the number of records sent in each request. Melissa Data cloud services take an array of records. This array can contain a single record or 100 records. For a real-time process like a Web form entry or a call center application, send in a request with one record. For a batch processing scenario like a database, send requests of up to 100 records until all the records are processed. Note: Make sure each record in the request has a unique Record ID.

Sample Batch XML Request

```
<?xml version="1.0" encoding="utf-8"?>
```

- <Request>
- <TransmissionReference />
- <CustomerID>12345678</CustomerID>
- <Options/>
- <Records>
- <RequestRecord>
- <RecordID>1</RecordID>
- <Organization>Melissa Data</Organization>
- <AddressLine1>22382 Avenida Empresa</AddressLine1>
- <Locality>Rancho Santa Margarita</Locality>
- <AdministrativeArea>CA</AdministrativeArea>
- <PostalCode>92688</PostalCode>
- <Country>USA</Country>
- <RecordOptions/>
- </RequestRecord>
- <RequestRecord>
- <RecordID>2</RecordID>
- <Organization>Microsoft</Organization>
- <AddressLine1>15010 Northeast 36th Street</AddressLine1>
- <Locality>Redmond</Locality>
- <AdministrativeArea>WA</AdministrativeArea>
- <PostalCode>98052</PostalCode>
- <Country>USA</Country>
- <RecordOptions/>
- </RequestRecord>
- <RequestRecord>....</RequestRecord>
- <RequestRecord>....</RequestRecord>
- <RequestRecord>....</RequestRecord>
- </Records>
- </Request>



Interpreting Results

Melissa Data's Global Address Service uses Results Codes to determine if an address is good or bad. The Melissa Data Cloud Services use the following Results conventions:

- 1. CLOUD SERVICE ERRORS: SExx
- 2. CLOUD TRANSMISSION ERRORS: GEXX
- ADDRESS STATUS CODES: AVxx
 ADDRESS ERROR CODES: AExx
 ADDRESS CHANGE CODES: ACxx

The most important codes are the AV codes. The will tell you if the address we give back to you is good (and how good) or bad. The first digit can be a 1 (partially validated) or 2 (fully validated). The 2nd digit is to what level the address is validated to. The possible values are:

- 1- administrative area
- 2- locality
- 3- thoroughfare
- 4- premises
- 5- subpremise

For a country with good reference data like the US, a fully good address would be AV24 (a house) or AV25 (an apartment). Not every country has house number or subpremise data available. For a country with thoroughfare level data only, the maximum verification status is AV23 (thoroughfare).

Please reference the manual for more details.

Wiki Page

A product support Wiki is available for your convenience. In the Wiki, you will find documentation about the service in more detail.

http://wiki.melissadata.com/index.php?title=Global_Address_Verification

Misc. Considerations

Firewall

If you are behind a firewall, you may need to allow specific IP addresses access in order to communicate with the service. For a full list of IP Addresses, see <u>IP Address Information</u>.

Country required

The country input is required by the service. You must either put the country name, the ISO-3166 2 character code, 3 character code, or 2 digit country number.

(C) 2015 Melissa Data Corporation. All rights reserved.