Informatica Cloud

Google Geocode Connector

September 2018

Overview:

Google Geocoding converts addresses into geographic coordinates, such as latitude and longitude. Geocoding is often used to provide input to identify locations on a mapping service. The Google Geocode Connector package enables Informatica Intelligent Cloud Services (IICS) developers to easily incorporate Google Geocoding into their Cloud Application Integration projects.

For example, "1600 Pennsylvania Avenue, Washington DC", returns the latitude and longitude values of 38.8976633 and -77.0365739, and the full address of "1600 Pennsylvania Ave NW, Washington, DC 20500, USA"

Prerequisites:

- Google Geocode Connector package
- Appropriate role/permissions on Informatica Intelligent Cloud Service to perform an IMPORT operation

Use Case: Generate geo-coordinates for a given address

The process is invoked by passing in a single string containing an address, with fields separated by commas or semicolons. Google processes the address and returns longitude and latitude values, and the fully formatted address.

1. Invoke with a valid street address
2. Results of the geocoding address lookup
   a. Latitude
   b. Longitude
   c. Full Street Address with postal code

Quick Setup

1. Download the [Google Geocode Connector package](#) from the Informatica [CAI Github Repository](#).
2. Import the package into your CAI workspace
3. After the import is complete, you will have a project named "Google Geocode" with three assets
   a. "Google Geocode API" Service Connector
   b. Google-Geocode-API-actions Connection
   c. "Geocode an address" Process
4. Publish the "Google Geocode API" Service Connector
5. Publish the Google-Geocode-API-actions Connection
6. Publish the "Geocode an address" Process
7. Test the process in your REST tool of choice (Postman, Insomnia, RESTed, etc.)
   a. Define a POST operation with a raw body of type "JSON (application/json)"
   b. Use the service address from the published "Geocode an address" process
   c. Use JSON-encoded input
      i. Address_input – comma or semicolon separated street address
         ```
         {
           "address_input": "1600 Pennsylvania Ave, Washington DC"
         }
         ```
   d. Get result with latitude and longitude values, and fully formatted address with postal code
      i.
         ```
         {
           "Latitude_out": 38.8976633,
           "Longitude_out": -77.0365739,
           "FormattedAddress_out": "1600 Pennsylvania Ave NW, Washington, DC 20500, USA"
         }
         ```

Detailed Setup:

1. Download the Google Geocode Connector package from the Informatica CAI Github Repository.
2. Import the package into your Cloud Application Integration (CAI) workspace.
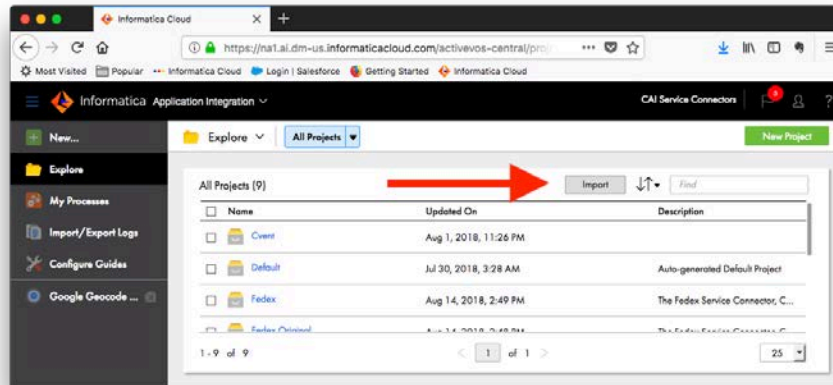
3. Upon completion, the import process will have created a new project named "Google Geocode" at the root level of your CAI workspace, containing three assets.

   a. "Google Geocode API" Service Connector
   b. Google-Geocode-API-actions Connection
   c. "Geocode an address" process

4. Publish the "Google Geocode API" Service Connector
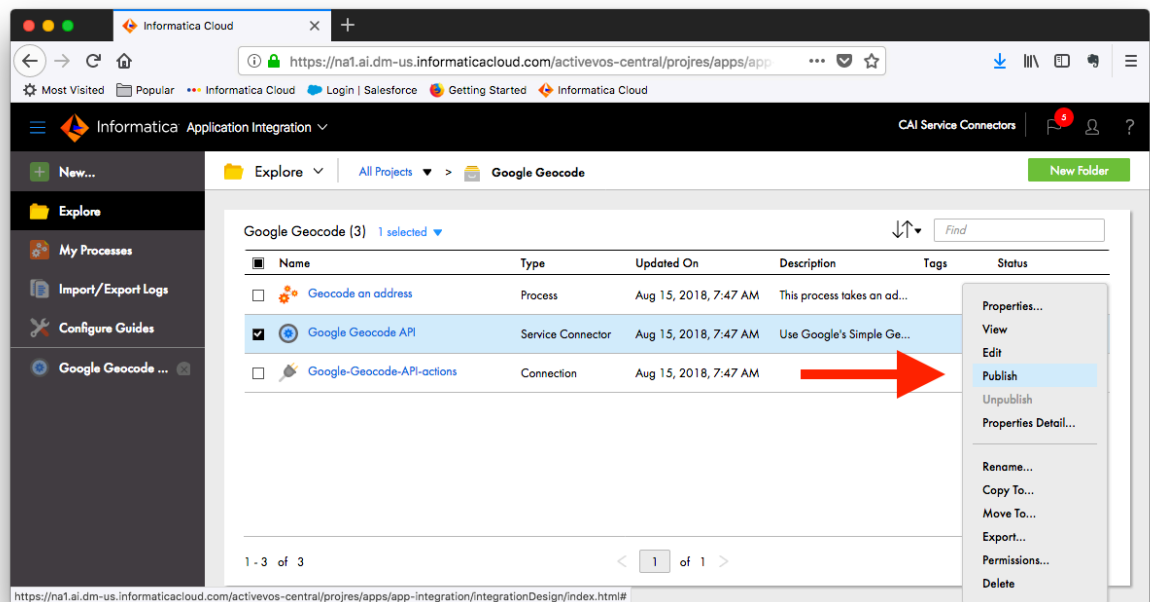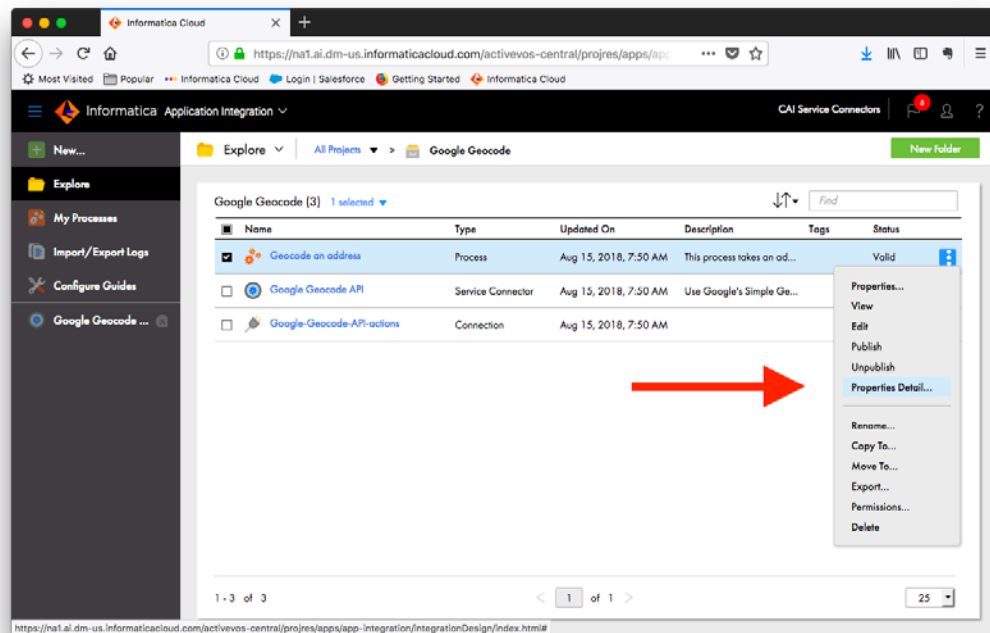
5. Publish the Google-Geocode-API-actions Connection
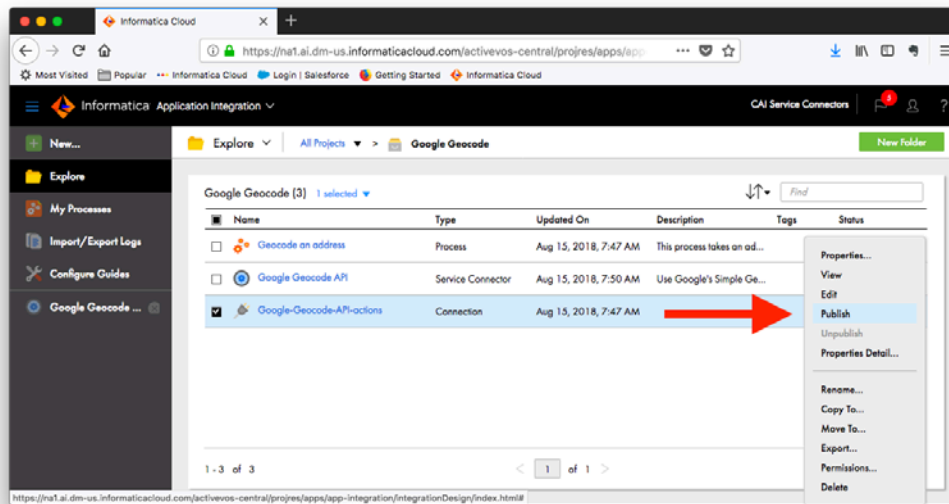
6. Publish the "Geocode an address" Process
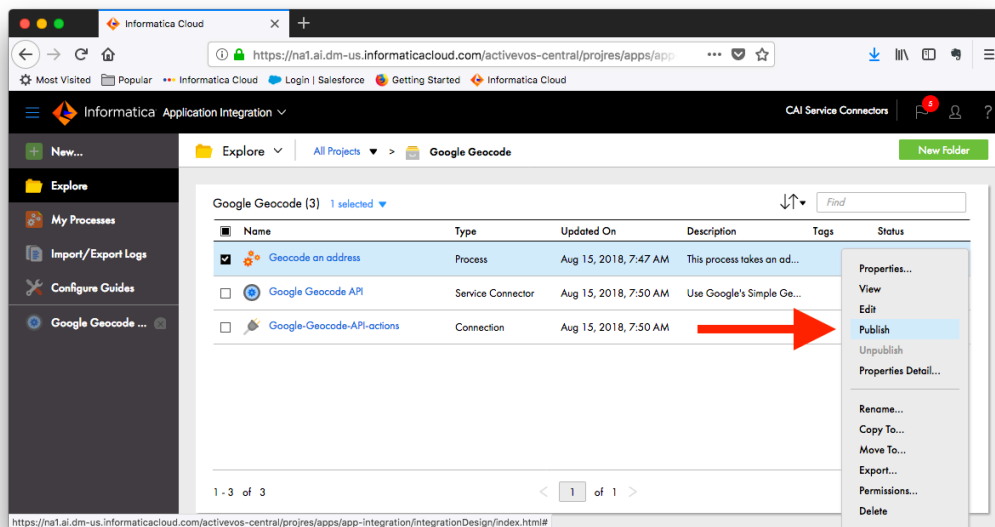
7. Test with the REST tool of your choice, such as Postman, RESTed, or Insomnia.
   a. Define a POST operation with a raw body of type "application/json"
   b. Open the Properties Detail section of the "Geocode an address" Process.

   c. Copy the Service Address of the process.
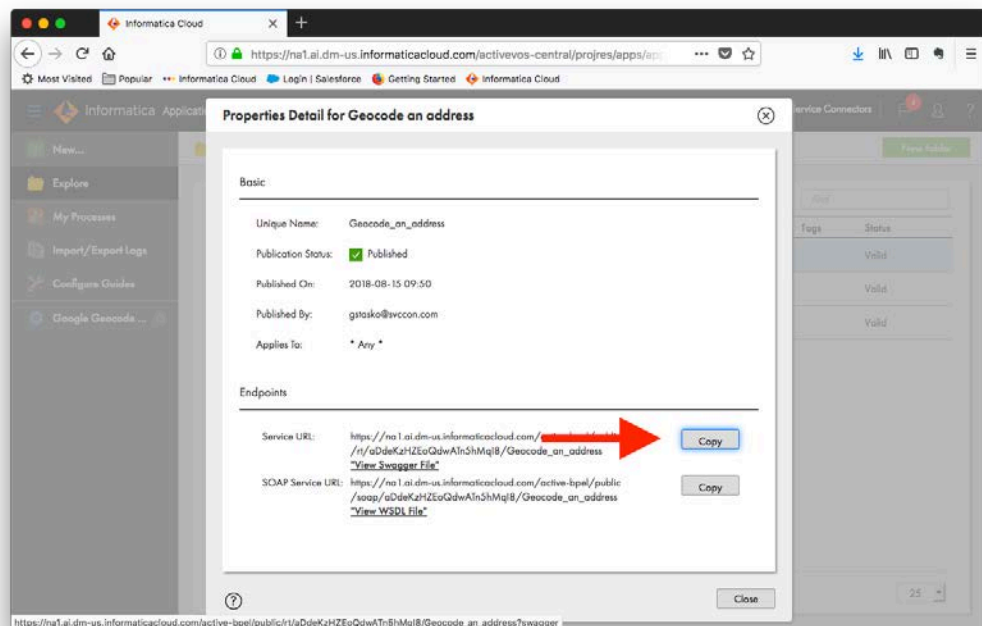
d. Enter an address in the body of the request in this format:

   i. {

   "address_input": "1600 Pennsylvania Ave, Washington DC"

   }

e. Get a response like this:

   i. {

   "Latitude_out": 38.8976633,

   "Longitude_out": -77.0365739,

   "FormattedAddress_out": "1600 Pennsylvania Ave NW, Washington, DC 20500, USA"

   }

f. Postman

g. RESTed

{
    "address_input": "1600 Pennsylvania Ave, Washington DC"
}

Untitled 3

https://na1.ai.dm-us.informaticacloud.com/active-   POST
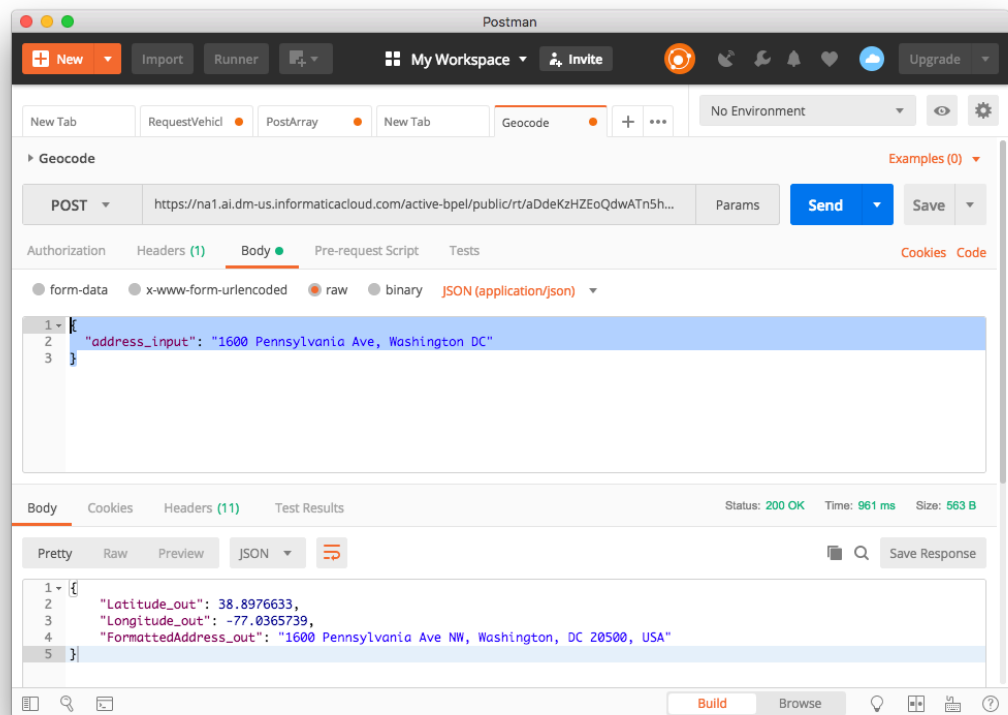
Authorization   Advanced   ☑ Follow Redirects

Header Field	Header Value

+ −

Parameter Name	Parameter Value
☑ address_input	1600 Pennsylvania Ave, Washington DC

JSON-encoded   + −

{
  "address_input": "1600 Pennsylvania Ave, Washington DC"
}

☐ Use Custom HTTP Body   UTF8

Parameters | HTTP Body

Response Headers

HTTP/1.1 200 OK

Access-Control-Allow-Credentials: true
Content-Type: application/json;charset=utf-8
X-InstanceId: 214401799187091456
Strict-Transport-Security: max-age=31536000; includeSubDomains; preload
Connection: keep-alive
Vary: Accept-Encoding
Date: Wed, 15 Aug 2018 15:16:12 GMT
X-Frame-Options: SAMEORIGIN
Content-Encoding: gzip
Cache-Control: no-store,no-cache,must-revalidate
Transfer-Encoding: Identity

Response Body   Display Options ▾

{
    "Latitude_out": 38.8976633,
    "Longitude_out": -77.0365739,
    "FormattedAddress_out": "1600 Pennsylvania Ave NW, Washington, DC 20500, USA"
}

Send Request