Google Maps Integration Package

Readme

Version 1.1
08/10/2020

Table of Contents

1.   Introduction

This document contains all essential information for the user to make full use of this A2019 Google Maps Integration Package. It includes a description of the functions and capabilities and step-by-step procedures for setup & configuration.

1.1   Overview

This package enables integration of A2019 RPA Bots with Google Maps API features and functionality. The package provides actions to authenticate with a Google Cloud Platform, and perform several actions leveraging the Google Maps API capabilities, such as searching places listed in Maps, getting distance and travel time information, geocoding and retrieving time zone information.

A typical use of this package would involve first authenticating a user's API Key, then using the actions to generate any specific Maps search results, or display a static Map image in an interactive form.

1.2   Use cases

The key use cases include:

- Places Search
- Distance and travel time calculations
- Geocoding (Lat/Long coordinates)
- Retrieve image of map/location
- Time Zone search

2.   Requirements & Prerequisites

2.1   System Requirements

Enterprise A2019 (Cloud deployed) and Community Edition device requirements.
Review the machine hardware specifications, operating system versions, and browser types supported by Automation Anywhere Enterprise for creating and running bots and command packages as an Enterprise A2019 (Cloud deployed) or Community Edition user on your local machine.

2.2   Prerequisites

User must have a Google Cloud Platform API Key generated with access to the following APIs. The APIs must be enabled and the API Key must be unrestricted or restricted with the following APIs selected as authorized to use with that API Key.

- Maps Static API

- Distance Matrix API

- Places API

- Geocoding API

- Time Zone API

3. Getting Started

3.1 Quick Start

3.1.1 Setup

Log on to Google Cloud Platform and get an API Key:

https://developers.google.com/places/web-service/get-api-key

Restrict API Key to appropriate enabled APIs:

https://cloud.google.com/docs/authentication/api-keys

Ensure API Key is enabled for the following APIs:

- Maps Static API
- Distance Matrix API
- Places API
- Geocoding API
- Time Zone API

When complete, the Google Maps integration package is ready to be used in A2019.

3.1.2 Configuration and Use

This package contains the following actions:

Google Maps

- Distance
- End Session
- Geocode
- Get Map Image
- Search Places
- Start Session
- Time Zone

Action	Description	Parameters
Start Session	Starts Session and authenticates with Google Cloud Platform	Inputs: • Session Name • API Key
Distance	Returns the full origin address, destination address, travel time and distance in a dictionary variable	Inputs: • Session Name • Origin Address • Destination Address • Distance units (Imperial or Metric) • Travel Mode (Default is "driving") Dictionary Output: <table><tr><th>Key</th><th>Value</th></tr><tr><td>Origin</td><td>Full Origin Address</td></tr><tr><td>Destination</td><td>Full Destination Address</td></tr><tr><td>Distance</td><td>Distance provided in the selected units</td></tr><tr><td>Duration</td><td>Travel time/duration based on distance</td></tr></table>
Geocode	Returns Latitude and Longitude coordinates based on an address input	Inputs: • Session Name • Address Output Dictionary Variable: <table><tr><th>Key</th><th>Value</th></tr><tr><td>Latitude</td><td>Latitude Coordinate of Address</td></tr><tr><td>Longitude</td><td>Longitude Coordinate of Address</td></tr></table>
Get Map Image	Downloads static maps image to designated file location. Map is centered around address/location specified, and zoom/size of image are as configured in the action.	Inputs: • Session Name • Center of map (specify address or place to act as the center of the maps image) • Zoom level – 1 through 20+. Level 1 shows entire World Map. Level 20 shows individual streets/buildings. • Type: Roadmap, Satellite image, Terrain or Hybrid • Pixel size – e.g. 600x400 returns an image sized to 600x400 pixels • File Path for output image – specify a file path (.png format) to download the image file.
Search Places	Enter search terms to find matching places returned by Google Maps (i.e. Search terms "Pizza Dallas, TX") will return multiple	Inputs: • Session Name • Search Terms

	results for restaurants serving pizza in Dallas, TX.	**Outputs:** • Results are output to a table variable with the following format: o Name | Address | Open Now | Rating Name: name of place returned by Google Maps Address: Full address of place Open now: Yes or No based on whether that place is open currently Rating: Google Maps rating of place
Time Zone	Returns time zone name based on input latitude/longitude coordinates	**Inputs:** • Session Name • Coordinates: o Latitude o Longitude **Output:** • String variable containing the name of the time zone (e.g. Pacific Daylight Time)
End Session	Ends Session for DataRobot package	**Inputs:** • Session Name

4.   Support & FAQs

4.1   Support

Free bots are not officially supported.   You can get access to Community Support through the following channels:

- You can get access to Community Support, connecting with other Automation Anywhere customers and developers on APeople – the Bot Building Forum, the Bot Store Support Forum, or the Developers Everywhere Group.
- Automation Anywhere also provides a Product Documentation portal which can be accessed for more information about our products and guidance on Enterprise A2019.

4.2   FAQs

For questions relating to Enterprise A2019: See the Enterprise A2019 FAQs.

Appendix A: Record of Changes

No.	Version Number	Date of Change	Author	Notes
1	*1.0.0*	*07/28/2020*	*J Dickson*	
2	*1.1.0*	*08/10/2020*	*J Dickson*	*Code Improvements, Added Action Descriptions*

Appendix B: References

No.	Topic	Reference Link
1	Overview of Enterprise A2019	Click here
2	Guidance: Building basic A2019 bots	Click here
3	Guidance: Building A2019 action packages	Click here
4	APeople Community Forum	Click here
5	Automation Anywhere University	Click here