

EX1021

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/ Can I use Google Maps API to reverse geocode a lat...

Options

Community Survey

Can I use Google Maps API to reverse geocode a lat/long value in a Service?



[jamesso](#)



10-Marble

Apr 03, 2017 07:30 PM

I am using the Google Maps widget in a Mashup and I can set a location property for my thing that way: latitude and longitude.

Using the Google Maps API (API key required from Google) you can convert a lat/long to an address string. (reverse geocode) Google has examples where you make an HTTPS request as a URL in the browser and then get back JSON that includes a value for the common address string.

I have used the PostText and GetJSON using the ContentLoaderFunctions mechanism to interact with an endpoint that understands REST.

But, and I may be missing something, I don't see how to get the JSON content that comes back from the https request in the browser via REST. There are no CURL examples that I could find to REST-ify the Maps API usage.

Can anyone offer a suggestion? I would like a service to pass my location property's lat and long to Google at an external URL and then get the location string that I can save as a property.

If this is built into ThingWorx, a pointer to an explanation would be appreciated.

Thanks,

Jim

Solved! [Go to Solution.](#)[LOGIN](#)Labels: [Troubleshooting](#)

0 Kudos

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ACCEPTED SOLUTION

[jamesso](#)

10-Marble

[\(To:jamesso\)](#)

Apr 04, 2017 12:40 AM

✓ I figured this out. You do use the GetJSON function via ContentLoaderFunctions reference . This gets usable address text corresponding to the lat and long that are derived from the location property.

Here is the service logic that works for me (where you use the Maps API key you get from Google):

```
var params = {  
    ignoreSSLerrors: true /* BOOLEAN */,  
    useNTLM: false /* BOOLEAN */,  
    timeout: 60 /* NUMBER */,  
    url: "https://maps.googleapis.com/maps/api/geocode/json?latlng=" +  
me.tagLocation.latitude +  
    "," + me.tagLocation.longitude + "&key=YOUR_API_KEY" /* STRING */,  
};
```

```
// result: JSON
```

```
var result = Resources["ContentLoaderFunctions"].GetJSON(params);
```

```
me.rawJSON = result;
```

```
me.tagLocationText = result.results[0].formatted_address;
```

[View solution in original post](#)

[1 Kudo](#)[Reply](#)[Notify Moderator](#)

12 REPLIES

[posipova](#)

20-Turquoise

Apr 03, 2017 10:07 PM



LOGIN

[\(To:jamesso\)](#)

Let me get back to you tomorrow during the US office hours, I may have an old working example for you.



0 Kudos

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[jamesso](#)

10-Marble

Apr 03, 2017 10:28 PM

[\(To:posipova\)](#)

Thanks Polina. I will look for a posting tomorrow.



0 Kudos

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[jamesso](#)

10-Marble

[\(To:jamesso\)](#)

Apr 04, 2017 12:40 AM

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    useNTLM: false /* BOOLEAN */,  
    timeout: 60 /* NUMBER */,  
    url: "https://maps.googleapis.com/maps/api/geocode/json?latlng=" +  
    me.tagLocation.latitude +
```

```
"," + me.tagLocation.longitude + "&key=YOUR_API_KEY" /* STRING */,  
};  
// result: JSON  
var result = Resources["ContentLoaderFunctions"].GetJSON(params);  
me.rawJSON = result;  
me.tagLocationText = result.results[0].formatted_address;
```

[1 Kudo](#)[Reply](#)[Notify Moderator](#)[stephenf](#) ptc

Apr 04, 2017 11:14 AM

5-Regular Member [\(To:jamesso\)](#)

JAMES SOLDERITSCH wrote:

I figured this out. You do use the GetJSON function via ContentLoaderFunctions reference . This gets usable address text corresponding to the lat and long that are derived from the location property.

Here is the service logic that works for me (where you use the Maps API key you get from Google):

```
var params = {  
    ignoreSSLErrors: true /* BOOLEAN */,  
    useNTLM: false /* BOOLEAN */,  
    timeout: 60 /* NUMBER */,  
    url:  
    "
```

Glad you got it working. I have an example that uses Google's reverse geocoding api, and plugs it into a mashup -- happy to share if you need any further assistance with this. As you mentioned, it utilizes the GetJSON function of "ContentLoaderFunctions".

Stephen



0 Kudos

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[jamesso](#)

Apr 04, 2017 01:56 PM

10-Marble [\(To:stephenf\)](#)

Stephen,

Always looking for good example code.
Would be happy to learn what you have done.

Jim



0 Kudos

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[stephenf](#)

Apr 05, 2017 09:43 AM

5-Regular Member [\(To:jamesso\)](#)

Sure thing. Take a look at these example entities (Attachment). Includes a very simple mashup for entering an address and getting

a lat/long back from the Google Geocoding API -- most likely in the exact same way that yours works.

Note - you need enter your Geocoding API key in the service "ConvertAddress" on the GoogleGeocodeCallTemplate Thing Template before the service will work!
Best of luck, let me know if you have any questions.

 **google_geocoding_example_entities.twx.zip**



0 Kudos

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[jamezzo](#) 

Apr 05, 2017 05:59 PM 

10-Marble [\(To:stephenf\)](#)

I have been getting by with the academic instance of ThingWorx supporting the udemy IoT course. I can't import a twx file into that platform since I do not have admin rights. I could stand up a local developer instance I suppose and import that into it. Are there other alternatives to "read" the service logic?
Thanks
Jim



0 Kudos

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Apr 06, 2017 09:26 AM

5-Regular Member [\(To:jamesso\)](#)

James,

No problem. I converted it to an xml file. Give this a try.

Stephen

[google_geocoding_example_entities.zip](#)

0 Kudos

[Reply](#)[Notify Moderator](#)[jamesso](#)

Apr 06, 2017 02:54 PM

10-Marble [\(To:stephenf\)](#)

Thanks Stephen,

I can read this and plan to adapt it for use in my mashup.

Jim

[1 Kudo](#)

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Apr 06, 2017 04:10 PM

5-Regular Member [\(To:jamesso\)](#)

Great to hear. Hope you find it useful!



0 Kudos

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Apr 20, 2017 01:29 AM

18-Opal [\(To:stephenf\)](#)

i try your code..

Error executing service

Wrapped java.net.ssl.SSLException: java.lang.RuntimeException: Unexpected error: java.security.InvalidAlgorithmParameterException: the trustAnchors parameter must be non-empty Cause: java.lang.RuntimeException: Unexpected error: java.security.InvalidAlgorithmParameterException: the trustAnchors parameter must be non-empty

but come up error..

do you know why this error come up?



0 Kudos

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Apr 25, 2017 11:21 AM

5-Regular Member

(To:CHASEONHO)

Never seen that error before, although I was not using this with SSL enabled. It looks like it is related to that. Check your SSL setup, and reference some online articles: [java - Error - trustAnchors parameter must be non-empty - Stack Overflow](#)



0 Kudos

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Recommendations

🔍 ✓ [Property values are repeating while using QueryPro...](#)

LOGIN

🔍 ✓ [Libraries Google Maps](#)

🔍 ✓ [Google Map Extension](#)

🔍 ✓ [Use Thingworx Service as REST API](#)

🔍 ✓ [How to send data to Google Map extension](#) 

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