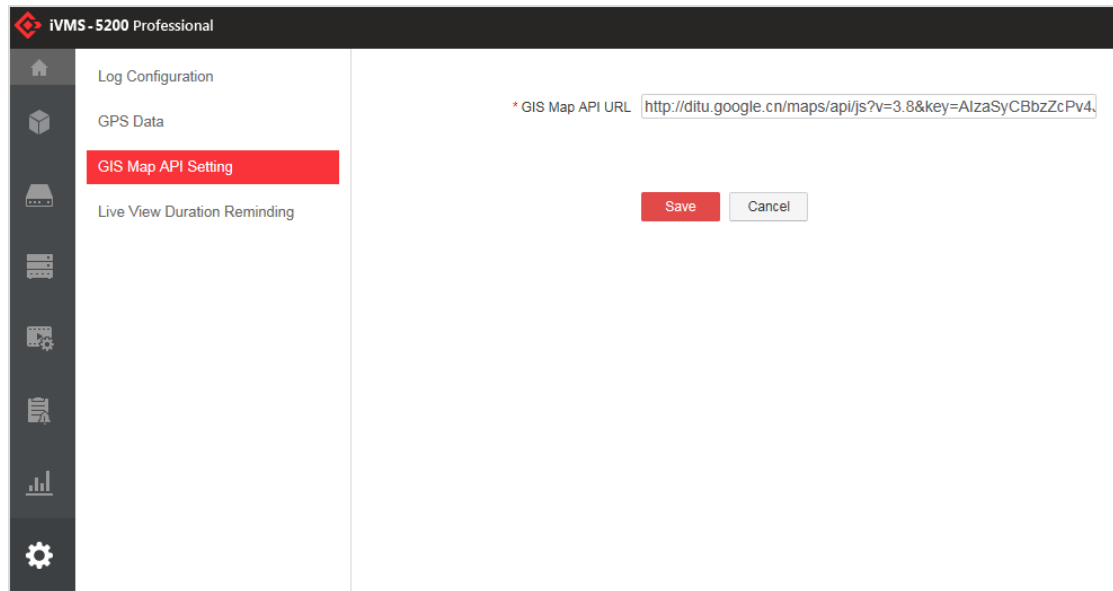


# **How to Apply the Google Maps API**

## **Key**

## 1. Google Map API

In mobile surveillance platform, the platform client needs the map API URL to download GIS map and show the location of vehicles. The Google API URL can be input in the platform. Then the client can download the map from google server. The location where can be input the URL in the platform is showed as below.



The previous URL that was adopted is introduced as below.

For China:

<http://ditu.google.cn/maps/api/js?v=3.8&key=&sensor=false&language=zh-CN&libraries=geometry>

For outside of China:

<http://maps.googleapis.com/maps/api/js?v=3.8&key=&sensor=false&language=en-GB&libraries=geometry>

But recently, Google updated the strategy of map API, and the new projects can't use the URL above again. All projects are recommended to apply the API key from Google website to support the GIS Map function. So this paper is introducing how to apply the Google Map API key.

Please pay attention to that, the apply steps may be different in different countries.

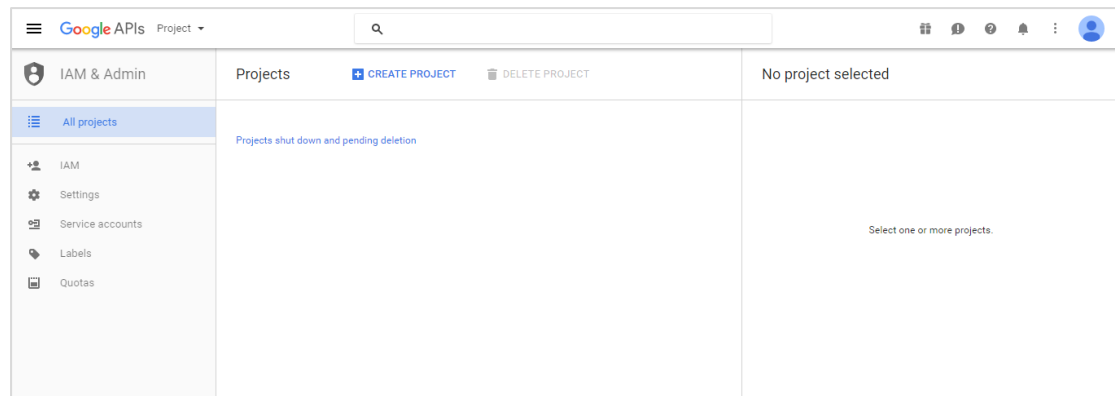
## 2. Key Apply Steps

1. Login to this website:

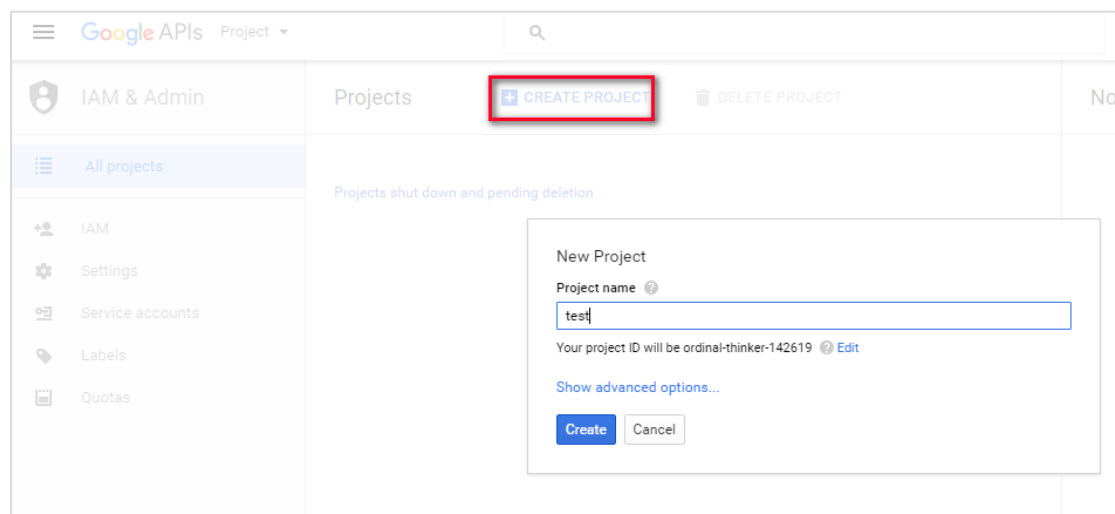
<https://console.developers.google.com>

It will require you to login the website with a google account, if you don't have one, please apply it first.

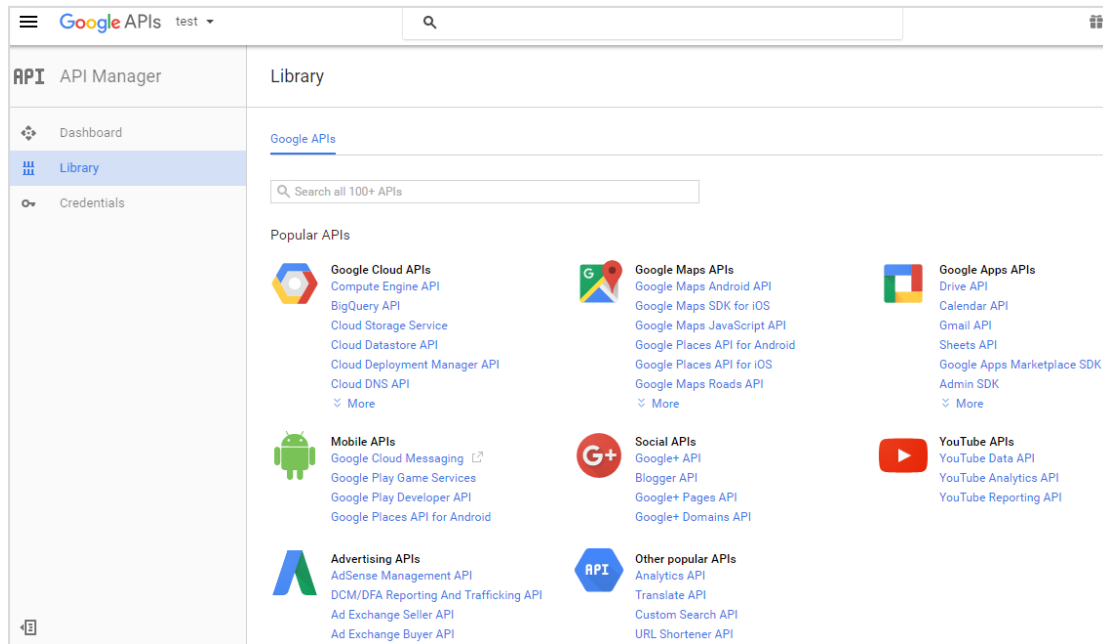
2. After you signed in, if your page didn't show as below, you should input the link in step 1 again.



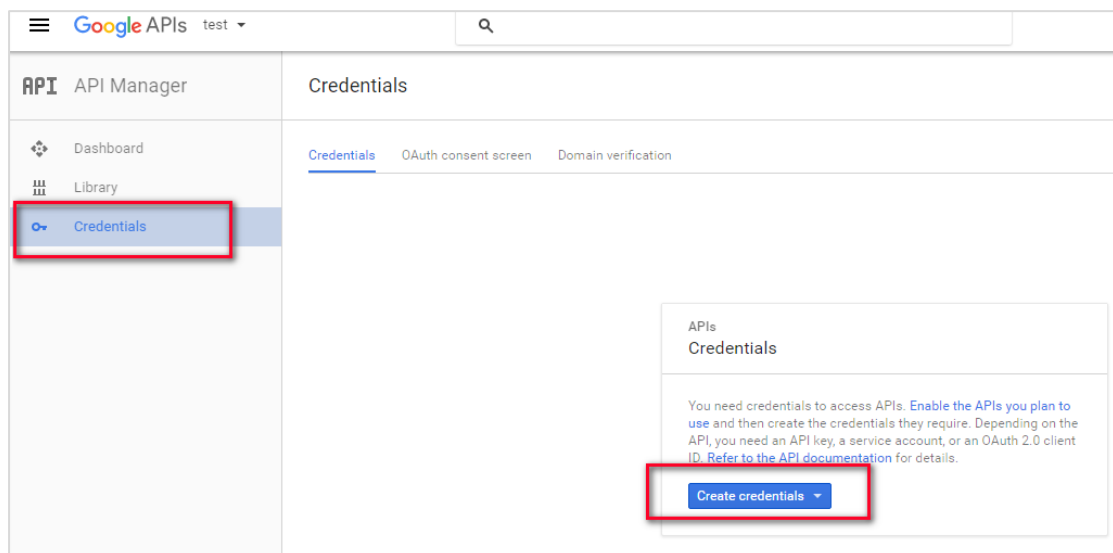
3. Now, you should create a new project. Input the project name, and click Create.



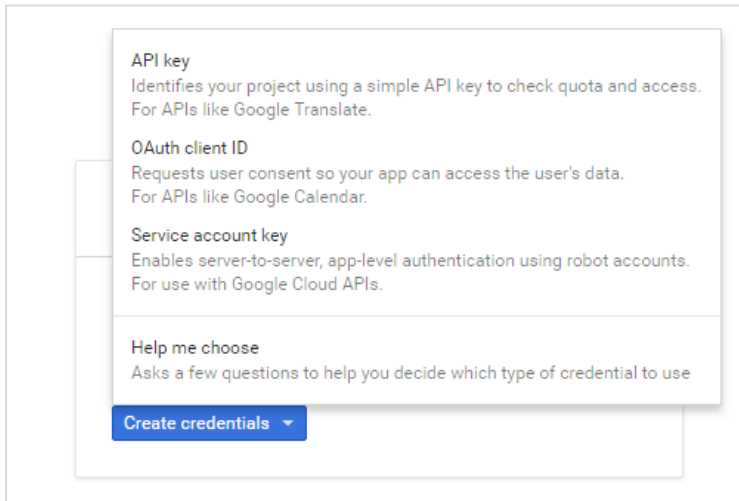
4. After the above steps, you will find that you have already open the google map API library.



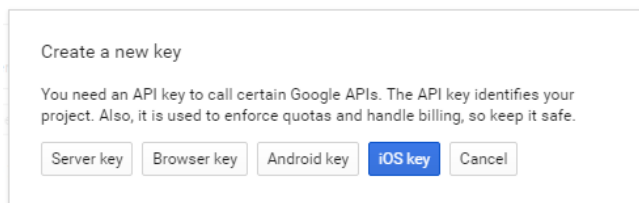
5. Please choose “Credentials” on the left side. Then click “Create credentials”.



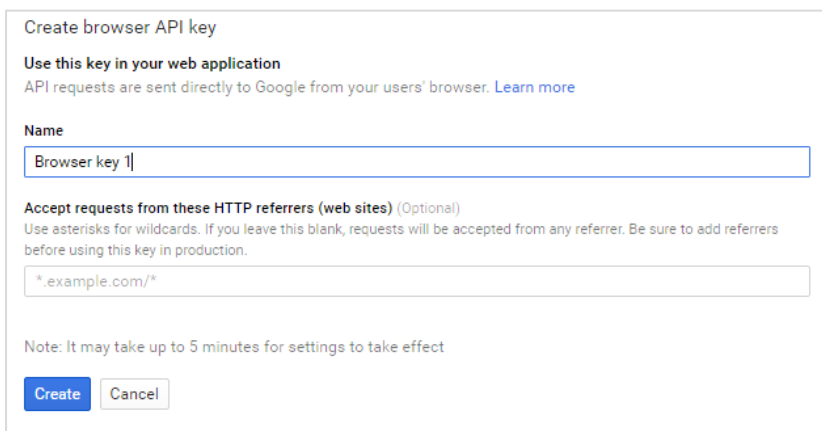
6. For now, we can click the first one, “API key”,



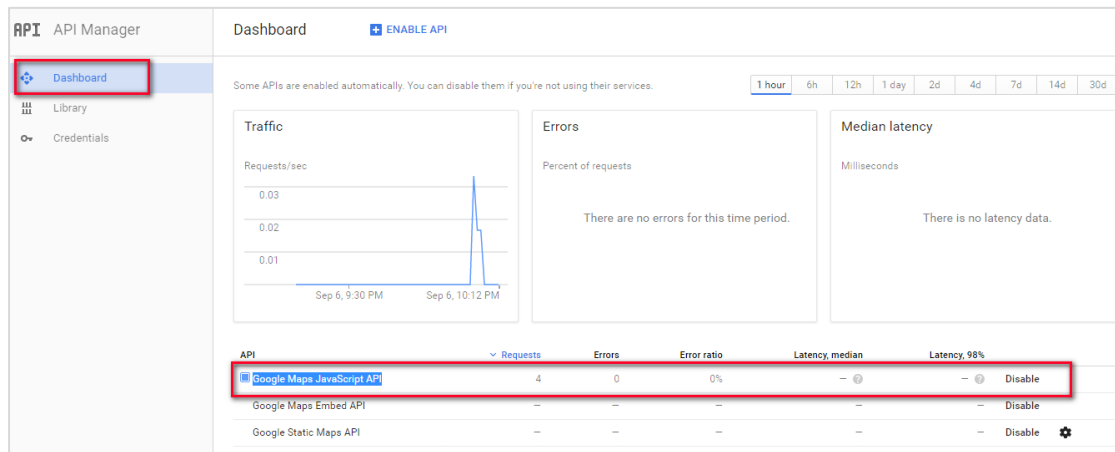
7. Then we choose the second one, "Browser key".



8. Just click Create in the following page, then the key will generated.



9. Now you have already got the key, but there are still several steps you need to configure. First, in your project, you have to enable the "Google Maps JavaScript API" in dashboard, as you can see from the below snapshot:



**Tips:**

If it is not abled, the key still can't be used.

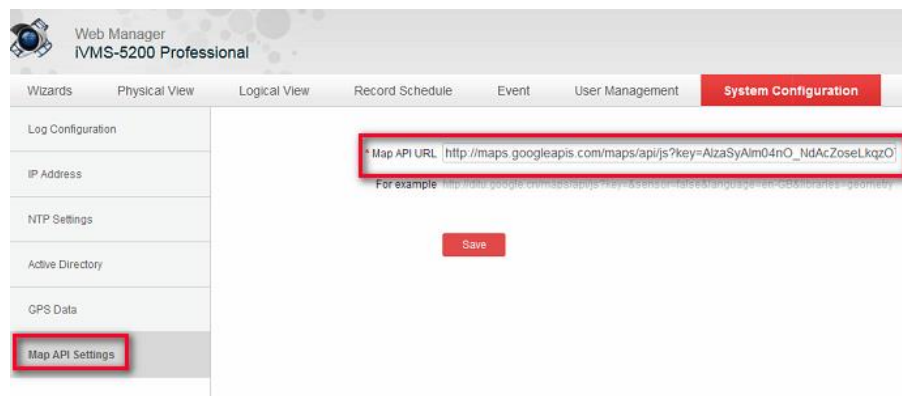
You can find the "Google Maps JavaScript API" in Library on the left side of the page.

Also you can find some statistics for the key in dashboard.

- Now, you can use the key in iVMS-5200, please find the input box on web manager, and input the link like this: <http://maps.googleapis.com/maps/api/js?key=KEY&callback=initMap>.  
(The red character you should replace it with the key that you just applied)

**Tips:**

Usually, it can be used after 5 minutes after you created the key.



Then you can see the google map work correctly on your control client.

Control Panel GIS Map

Mobile Video Recorder(MVR) Search Refresh Edit Map

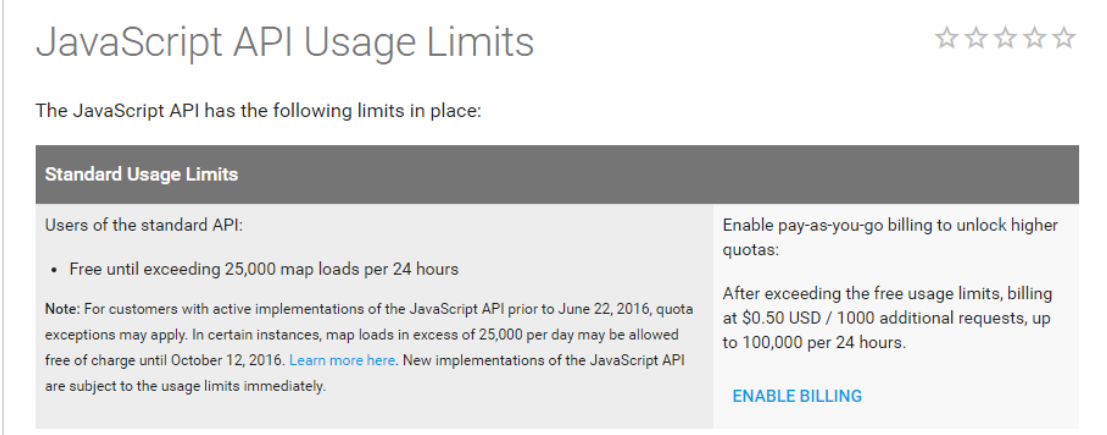
Position Measure Select Send Message History Playback Show Track Full Screen

Mobile Video Recorder(MVR)

- B018047
- 636116055

### 3. FAQ

1. Google have implemented a simple 25,000 map loads per day free limit for new Google Maps JavaScript API, Static Maps API, and Street View Image API implementations. If the project exceeds the limitation, please enable the billing.



The screenshot shows the 'JavaScript API Usage Limits' page. At the top right, there are five stars. Below the title, it states 'The JavaScript API has the following limits in place:'. A dark grey header reads 'Standard Usage Limits'. Underneath, it says 'Users of the standard API:' followed by a bullet point: 'Free until exceeding 25,000 map loads per 24 hours'. A 'Note' follows, explaining that for customers with active implementations prior to June 22, 2016, quota exceptions may apply, but new implementations are subject to the limits immediately. To the right, it says 'Enable pay-as-you-go billing to unlock higher quotas:' and 'After exceeding the free usage limits, billing at \$0.50 USD / 1000 additional requests, up to 100,000 per 24 hours.' At the bottom right of this section is a blue button labeled 'ENABLE BILLING'.

2. For customers with active domains created before June 22, 2016, who are exceeding 25,000 map loads per day using Maps JavaScript API, Static Maps API, or Street View Image API, but not currently charged for overages: you are not subject to billing until October 12, 2016. After October 12, 2016, these domains will be charged for map loads in excess of the 25,000 free daily limitations. If you choose not to enable billing and you exceed the daily limit, map loads above 25,000 will receive an error and the API will cease to function for the rest of the day.

3. Google now calculated as the sum of client-side JavaScript queries and web service API server-side queries.

4. When will the platform use this JavaScript?

1) Map initialization

a. Open or refresh the map, when you configure the events such as fence crossing alarm on the Web Client;

b. Open or refresh the map on the Mobile control client;

2) Call the google service (Click the Ehome device in the GIS map in mobile control client, and read the detailed information)

3) Other scenarios.

Generally, 25,000 can support most of the projects.

5. The maximum billable limit defaults to 100,000 requests per day. You can change this limit by clicking the edit icon next to the Total quota on the Quotas page of the API in the Google API Console.

### Enable Billing

If your use of the standard JavaScript API exceeds the free usage limits, you can purchase excess map loads online by [enabling billing](#) on the project. Once billing has been enabled, if you exceed the free usage limits, you will be billed at \$0.50 USD / 1000 additional requests, up to 100,000 daily.

The maximum billable limit defaults to 100,000 requests per day. You can [change this limit](#) by clicking the edit **icon** next to the **Total quota** on the **Quotas** page of the API in the Google API Console.

If your API usage reaches your billable limit on any given day, your application will not be able to access the API for the remainder of that day.

Google [charges](#) you at the beginning of each month for the previous month's activity, using your [specified payment method](#).

6. We no longer support keyless access (any request that doesn't include an API key). Future product updates are only available for requests made with an API key.
7. Active domains created before June 22, 2016, continue to be able to access the Google Maps JavaScript API, Static Maps API, and Street View Image API without an API key. They are not affected by keyless access being unavailable for new domains.  
For the Google Maps Geocoding API, Directions API, Distance Matrix API, Elevation API, and Time Zone API, keyless requests now have a shared global quota which has been set to ensure existing applications do not break. We do not intend to raise this quota limit in the future and advise all developers to use a key in order to guarantee their quality of service. Applications that continue to make keyless requests may experience some periodic service degradation if other keyless applications' usage spikes and draws down the global quota.
8. Google reset for the calculation of the daily quota consumption in the Midnight of Pacific Time.