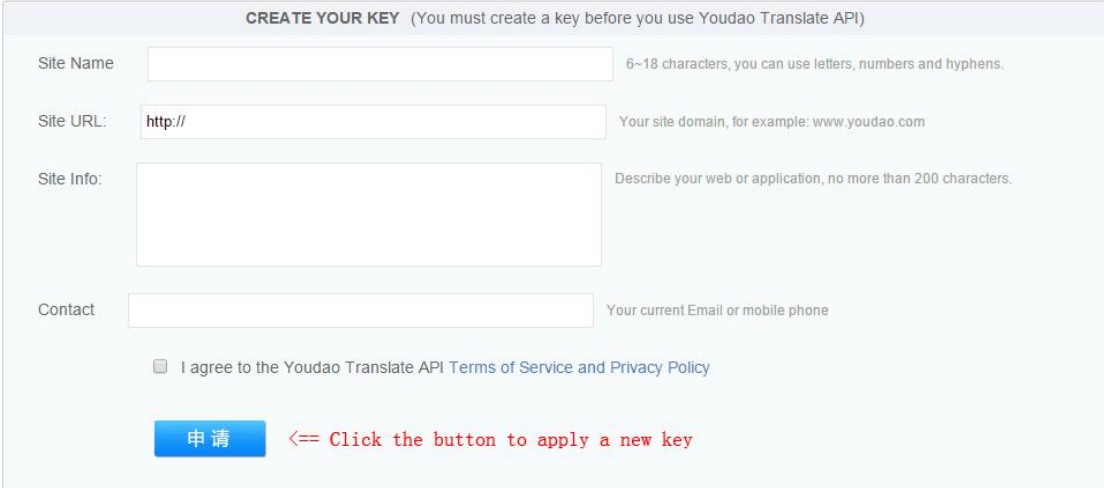# Youdao Translate Open API

Contents

Introduction

This document is intended for developers who want to write application that can interact with the Youdao Translate API. Youdao Translate API is a tool that automatically translates text from one language to another language (e.g. Chinese to English) with the dictionary result if any. You can use the Youdao Translate API to programmatically translate text in your web pages or apps. Youdao Translate API is a free service and also has a paid version.

The document details the background knowledge that you need to use the Youdao Translate API **FREE** Version.

Setup

To get started using Youdao Translate API, you need to visit the website and first create a key.

Figure 1 Create a Key

- Site Name
  It is a short name of your site or application. The name should be 6~18 characters. You can use letters, numbers and hyphens. And the name should be started and ended with numbers/letters. For example: Youdao
- Site URL
  The site where you will use the Youdao Translate API. For example: www.youdao.com
- Site Info
  Some short descriptions of your site or application. No more than 200 characters.
- Contact details
  Your current email or mobile phone number. For example: admin@example.com

Remember Your API key and keyfrom in the following when succeed in creating the key.

Figure 2 your key and keyfrom

You can create a key in either the page of "Translate Data API" or the page of "Translator Web Widget".　See the following part of "Translate Data API" and "Translator Web Widget" to know how to use them.

Limits

Youdao Translate API is a free service and we limit the request as followings:
- The number of requests per hour is 1000 each **key**;
- The text to be translated in a single request should less than 400 characters.

Contact us if you need more.

Translate Data API

Translate concepts

Youdao Translate is a tool that automatically translates text from one language to another language. Youdao Translate also return some dictionary results if any.

The source text is the text to be translated. The source language is the language that the source text is written in. The target language is language that the source text is translated into.

Working with the result

You can translate text from one language to another language be sending an HTPP GET request to its URI. The URI for a request has the following format:

```
GET
https://fanyi.youdao.com/openapi.do?parameters
```

Five query parameters are required with each translation request.

- **API key**

  Use the **key** query parameter to identify your application.

- **API keyfrom**

  Use the **keyfrom** query parameter to identify your application.

- **Source text string**

  Use the **q** query parameter to identify the string to translate.

- **Target result formatting**

  Use the **doctype** query parameter to identify the result format.

- **Request Type**

  Use the **type** query parameter to identify the request need return data or other script.

All other query parameters are optional (See *Query parameter reference*). The URL for the GET, including parameters, must be less than 400 characters. The example link protocol is HTTPS but both HTTPS and HTTP should be available.

Example 1

Here is an example of how this works in the Translate API, using the default language detector strategy and only getting translation result.

```
GET
https://fanyi.youdao.com/openapi.do?key=INSERT-YOUR-KEY&keyfrom=INSERT-YOUR-KEYFROM&type=data&doctype=json&only= translate&q=world
```

If the request succeeds, the server responds a 200 OK HTTP status code and the data properties:

```
JSON
200 OK
{
        "translation":[
                    "世界"
        ],
        "query":"world",
        "errorCode":0
}
```

In this example, the response is simply the ' **translation'** field, with the translation, the '**query'** field, with the source text, the '**errorCode**' field, with the error information (See *Error code reference*).

Example 2

Here is another example asking both translation and dictionary results.

```
GET
https://fanyi.youdao.com/openapi.do?key=INSERT-YOUR-KEY&keyfrom=INSERT-YOUR-KEYFRO
M&type=data&doctype=json&q=world
```

If the request succeeds, the server responds a 200 OK HTTP status code and the response should be:

```
JSON
200 OK
{
    "errorCode":0,
    "query":"world",
    "translation":["世界"],
    "basic":{
        "phonetic":"w3：ld",
        "explains":[
            "n. 世界；领域；宇宙；世俗；全人类；物质生活"
        ]
    },
    "web":[
        {"value":["世界","界","天下"],"key":"world"},
        {"value":["世界纪录","世界之最","创世记"],"key":"world record"},
        {"value":["我的小小世界","我的世界","自一方"],"key":"My World"}
    ]
}
```

In this example, the response contains additional dictionary result. The '**basic**' field is a simple but basic dictionary result, with phonetic and basic explains. The '**web**' field is a list of short phrases which contains the source word and its meanings.

Example 3

Here is another example passing multiple source texts to translate:

```
GET
https://fanyi.youdao.com/openapi.do?key=INSERT-YOUR-KEY&keyfrom=INSERT-YOUR-KEYFRO
M&type=data&doctype=json&q=Hello.%0AMy%20Name%20is%20Youdao.%20What%20is%20yo
ur%20name?
```

And the response should be:

```
JSON
```

```
200
{
        "translation":[
                    "你好。\n 我的名字叫有道。你叫什么名字?"
        ],
        "query":"Hello.\nMy Name is Youdao. What is your name?",
        "errorCode":0
}
```

Example 4

Here is another example using xml.

https://fanyi.youdao.com/openapi.do?key=***INSERT-YOUR-KEY***&keyfrom=***INSERT-YOUR-KEYFROM***&type=data&doctype=xml&q=Hello%20world&only=translate

And the response should be:

```
XML
200
<?xml version="1.0" encoding="UTF-8"?>
<youdao-fanyi>
    <errorCode>0</errorCode>
    <query><![CDATA[Hello world]]></query>
    <translation>
            <paragraph><![CDATA[你好,世界]]></paragraph>
        </translation>
</youdao-fanyi>
```

Example 5

Here is another example using jsonp.

https://fanyi.youdao.com/openapi.do?key=***INSERT-YOUR-KEY***&keyfrom=***INSERT-YOUR-KEYFROM***&type=data&doctype=jsonp&q=Hello%20world&only=translate&callback=show

And the response should be:

```
show(
    {"translation":["你好,世界"],
    "query":"Hello world",
    "errorCode":0
    }
);
```

Note: **callback**=show is the client-side implementations.

Query parameter reference

Parameter	Meaning	Notes
callback	A JavaScript function to run when the response is received	✧ This optional parameter allows you to specify a JavaScript function to handle query results for pure client-side implementations.
doctype	Result format	✧ The parameter allows you to indicate that the translated text should be rendered with JSON, XML or JSONP format. ✧ JSON with doctype=json ✧ XML with doctype=xml ✧ JSONP with doctype=jsonp
key	Your API key	✧ This API requires a valid key for all requests.
keyfrom	Your API keyfrom	✧ This API requires a valid keyfrom for all requests.
l	Language Type, source and target	✧ The language of the source text and the language to translate the source text into. ✧ The value should be one of the language codes in Language reference. ✧ If l is not set, Youdao Translate API try to auto-detect the source language and use the following strategy: ■ If the source language is Chinese, translate it into English; ■ If the source language is non-Chinese, translate it into Chinese. ✧ Default: l=AUTO
q	Source text	✧ The text to be translated. ✧ The text should be encoded with UTF-8. ✧ You can concatenate source texts with "\n" in a single request to translate multiple texts.
type		✧ Make type=data always
only	The output content	✧ Translate the source text, or just search the dictionary, or do both. ✧ If only=translate, the API returns only translation result. ✧ If only=dict, the API returns only dictionary result if any. ✧ Default: only=both

Language reference

Language Code	Source Language	Target Language
ZH_CN2EN	Chinese Simplified/Traditional	English
ZH_CN2JA	Chinese Simplified/Traditional	Japanese
ZH_CN2KR	Chinese Simplified/Traditional	Korean
ZH_CN2FR	Chinese Simplified/Traditional	French
ZH_CN2RU	Chinese Simplified/Traditional	Russian
ZH_CN2SP	Chinese Simplified/Traditional	Spanish
EN2ZH_CN	English	Chinese Simplified
JA2ZH_CN	Japanese	Chinese Simplified
KR2ZH_CN	Korean	Chinese Simplified
FR2ZH_CN	French	Chinese Simplified
RU2ZH_CN	Russian	Chinese Simplified
SP2ZH_CN	Spanish	Chinese Simplified

Error code reference

Error code	Meaning	Notes	
0	Success		
20	The source text in one request is too long.	✧	The source text must be less than 4K characters.
30	The server is down.		
40	Not support language code		
50	Invalid key		
60	No dictionary result	✧	The request uses only=dict but Youdao Translate API does not have any dictionary results for the source text.

Translator Web Widget

The Widget is the easiest, fastest, and most cost-effective way to integrate page localization on your website. The only thing is to insert a short JavaScript in your website. Then you can enjoy it.

Add a pop-up Widget

When you use the mouse to select some texts in the demo page, a pop-up tip will tell you the meaning of the texts. Try the demo in our site.

How

Insert the following code in your website; replace your own keyfrom and key.

<div id="YOUDAO_SELECTOR_WRAPPER" style="display:none; margin:0; border:0; padding:0; width:320px; height:240px;"></div>
<script type="text/javascript" src="http://fanyi.youdao.com/openapi.do?keyfrom=*INSERT-YOUR-KEYFROM*&key=*INSERT-YOUR-KEY*&type=selector&version=1.2&translate=on" charset="utf-8"></script>

Example 1: Select a word

Figure 3 double-click or select a word in the website and the dictionary result

Example 2: Select a sentence

Figure 4 select a sentence and get the translation

Tips

Use the following scripts if you only need the dictionary result.

```
  <div  id="YOUDAO_SELECTOR_WRAPPER"  style="display:none;  margin:0;  border:0;  padding:0;
width:320px; height:240px;"></div>
<script                                                          type="text/javascript"
src="http://fanyi.youdao.com/openapi.do?keyfrom=INSERT-YOUR-KEYFROM&key=INSERT-YOUR
-KEY&type=selector&version=1.2" charset="utf-8"></script>
```

If only parts of your website need to be translated, add them in a div with an id. Then use the following scripts.

```
<div    id="YOUDAO_SELECTOR_WRAPPER"    bindTo="INSERT-YOUR-TOBE-TRANSLATED-DIV-ID"
style="display:none; margin:0; border:0; padding:0; width:320px; height:240px;"></div>
<script                                                          type="text/javascript"
src="http://fanyi.youdao.com/openapi.do?keyfrom=INSERT-YOUR-KEYFROM&key=INSERT-YOUR
-KEY&type=selector&version=1.2&translate=on" charset="utf-8"></script>
```

Add an online dictionary Widget

When you use the mouse to select some texts in the demo page, the dictionary result or machine

translation result will be shown in the widget. And the user can also search their queries. [Try the demo](#) in our site.

How

Insert the following code in your website; replace your own keyfrom and key.

```
<div id="YOUDAO_DICTER_WRAPPER" style="display:none; margin:0; border:0; padding:0;
width:320px; height:240px;"></div>
<script                                                          type="text/javascript"
src="http://fanyi.youdao.com/openapi.do?keyfrom=INSERT-YOUR-KEYFROM&key=INSERT-YOUR
-KEY&type=dicter&version=1.2&select=on" charset="utf-8"></script>
```
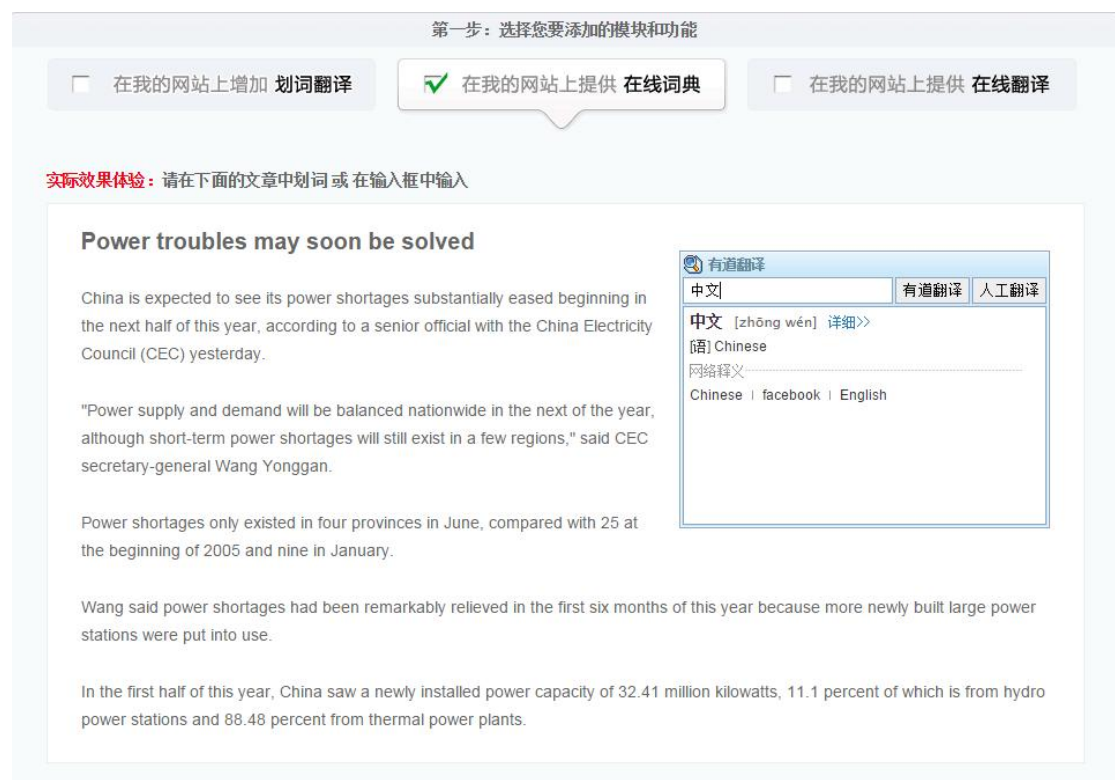
Example 1: Search your own query

Figure 5 search a Chinese word
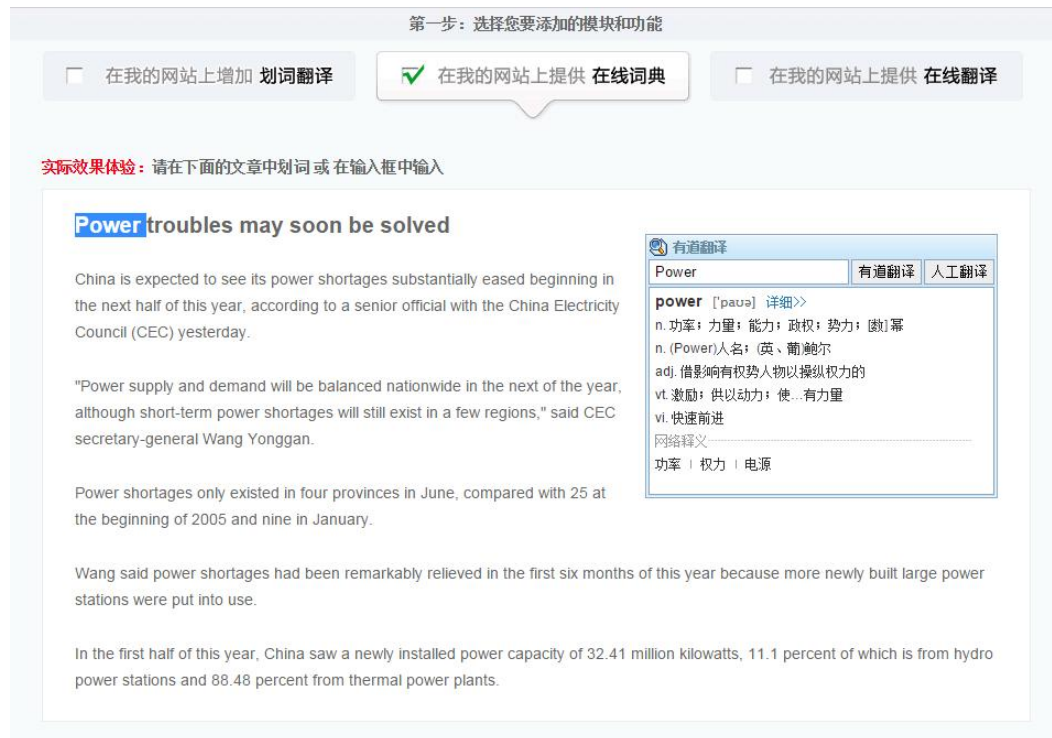
Example 2: Select a word

Figure 6 select a word and show the result in the dictionary

Tips

Use the following scripts if you only need the search function.

```
<div id="YOUDAO_DICTER_WRAPPER" style="display:none; margin:0; border:0; padding:0;
width:320px; height:240px;"></div>
<script                                                        type="text/javascript"
src="http://fanyi.youdao.com/openapi.do?keyfrom=INSERT-YOUR-KEYFROM&key=INSERT-YOUR
-KEY&type=dicter&version=1.2" charset="utf-8"></script>
```

If only parts of your website need to be translated, add them in a div with an id. Then use the following scripts.

```
<div id="YOUDAO_DICTER_WRAPPER" bindTo="INSERT-YOUR-TOBE-TRANSLATED-DIV-ID"
style="display:none; margin:0; border:0; padding:0; width:320px; height:240px;"></div>
<script                                                        type="text/javascript"
src="http://fanyi.youdao.com/openapi.do?keyfrom=INSERT-YOUR-KEYFROM&key=INSERT-YOUR
-KEY&type= dicter&version=1.2&translate=on" charset="utf-8"></script>
```

Add an online machine translation Widget

When you use the mouse to select some texts in the demo page, only the machine translation result will be shown in the widget. And the user can also search their queries. Try the demo in our site.

How

Insert the following code in your website; replace your own keyfrom and key.

```
<div id="YOUDAO_FANYIER_WRAPPER" style="margin:0; border:0; padding:0; width:320px; height:240px;"></div>
<script type="text/javascript" src="http://fanyi.youdao.com/openapi.do?keyfrom=INSERT-YOUR-KEYFROM&key=INSERT-YOUR-KEY&type=fanyier&version=1.2&select=on" charset="utf-8"></script>
```
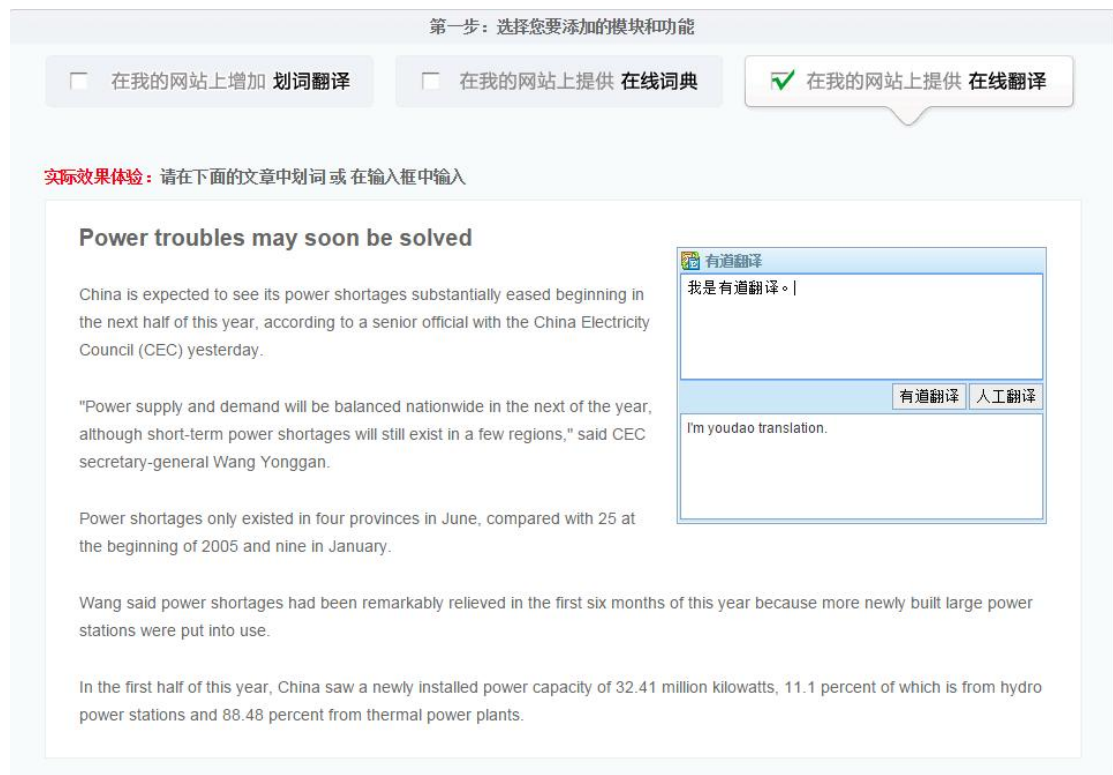
Example 1: Translate a sentence

Figure 7 translate a sentence
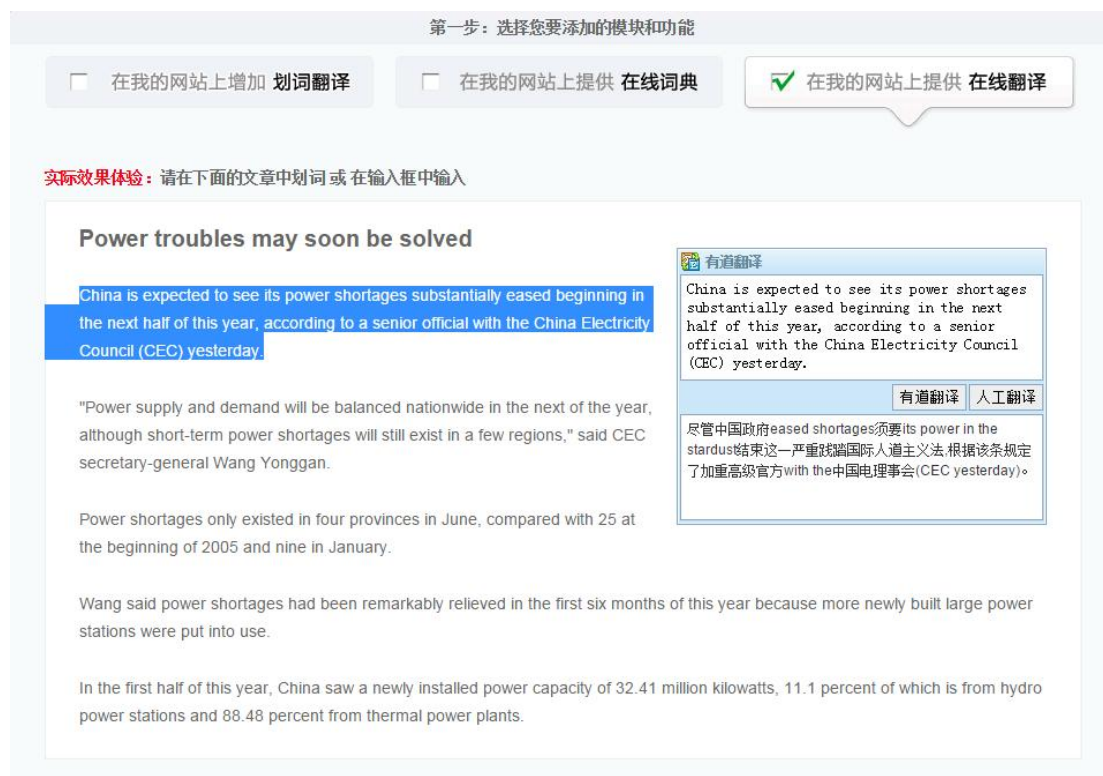
Example 2: Select a sentence

Figure 8 select a sentence and get the translation

Tips:

Use the following scripts if you only need the search function.

```
<div id="YOUDAO_FANYIER_WRAPPER" style="margin:0; border:0; padding:0; width:320px;
height:240px;"></div>
<script                                                type="text/javascript"
src="http://fanyi.youdao.com/openapi.do?keyfrom=INSERT-YOUR-KEYFROM&key=INSERT-YOUR
-KEY&type=fanyier&version=1.2" charset="utf-8"></script>
```

If only parts of your website need to be translated, add them in a div with an id. Then use the following scripts.

```
<div id="YOUDAO_FANYIER_WRAPPER" bindTo="INSERT-YOUR-TOBE-TRANSLATED-DIV-ID"
style="margin:0; border:0; padding:0; width:320px; height:240px;"></div>
<script                                                type="text/javascript"
src="http://fanyi.youdao.com/openapi.do?keyfrom=INSERT-YOUR-KEYFROM&key=INSERT-YOUR
-KEY&type=fanyier&version=1.2&select=on" charset="utf-8"></script>
```

Contact us

Website

- http://fanyi.youdao.com
- http://fanyi.youdao.com/openapi

Email

- translate-service@corp.youdao.com