# Azure Translator 3.0 REST Services Documentation

## Important Payment and Subscription Links

* [Azure Portal](https://portal.azure.com/" \l "home)
* [Pay-as-you-go rates](https://azure.microsoft.com/en-us/offers/ms-azr-0003p/)
* [Limits, Quotas and Restratins](https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/azure-subscription-service-limits)
* Howto [Cancel subscription](https://docs.microsoft.com/en-us/azure/cost-management-billing/manage/cancel-azure-subscription)

## Documentation Links:

* Translator Documentation [home page](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/) (which is excellent)
* [Quick Start Guide](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/quickstart-translator?tabs=csharp)
* Documentation on [github](https://github.com/MicrosoftDocs/azure-docs/blob/main/articles/cognitive-services/Translator/reference/v3-0-translate.md).

## Translator Summary

### List of Supported Languages

Do this query:

https://api.cognitive.microsofttranslator.com//Languages?api-version=3.0

### Endpoint for All Translator Version 3.0 Requests

The endpoint or base URL for a Translator 3.0 request is:

|  |  |
| --- | --- |
| **Country** | **Endpoint** |
| United States | **https://api.cognitive.microsofttranslator.com** |

The version of Translator we will use will be 3.0, which is specified as a query string parameter. For example, to request tranlation of input text, we append “/translate” to the endpoint and then supply the version number:

**https://api.cognitive.microsofttranslator.com/translate?api-version=3.0**

### The Five Azure Translator 3.0 (REST API) Request Types

Azure Translator 3.0 supports the five types of services. Each uses a different URL “route” that is appened to the endpoint. The REST requests types are listed below.

| Request Type | URL “route” | Method | Description |
| --- | --- | --- | --- |
| [**languages**](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-languages) | **/languages** | GET | Returns the set of languages currently supported by the translation, transliteration, and dictionary methods. This request does not require authentication headers and you do not need a Translator resource to view the supported language set. |
| [**translate**](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-translate) | **/translate** | POST | Translate specified source language text into the target language text. |
| [**breakSentence**](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-break-sentence) | **/breaksentence** | POST | Returns an array of integers representing the length of sentences in a source text. |
| [**dictionary/lookup**](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-dictionary-lookup) | **/dictionary/lookup** | POST | Returns alternatives for single word translations. |
| [**dictionary/examples**](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-dictionary-examples) | **/dictionary/examples** | POST | Returns how a term is used in context. |

Since version 3.0 of Translator will always be used, the five request types will begin with these extended URLs:

| Request Type | URL “route” | **Endpoint + route + API Version** |
| --- | --- | --- |
| [**languages**](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-languages) | **/languages** | **https://api.cognitive.microsofttranslator.com/languages?api-version=3.0** |
| [**translate**](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-translate) | **/translate** | **https://api.cognitive.microsofttranslator.com/translate?api-version=3.0** |
| [**breakSentence**](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-break-sentence) | **/breaksentence** | **https://api.cognitive.microsofttranslator.com/breaksentence?api-version=3.0** |
| [**dictionary/lookup**](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-dictionary-lookup) | **/dictionary/lookup** | **https://api.cognitive.microsofttranslator.com/dictionary/lookup?api-version=3.0** |
| [**dictionary/examples**](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-dictionary-examples) | **/dictionary/examples** | **https://api.cognitive.microsofttranslator.com/dictionary/examples?api-version=3.0** |

**Important**: **api-verions=3.0** must be the first query string parameter.

### Translator 3.0 Translate Requests

Translate REST API [documentation](https://docs.microsoft.com/en-us/rest/api/cognitiveservices/translator/translator/translate" \l "request-body).

#### Endpoint and Route

**https://api.cognitive.microsofttranslator.com/translate?api-version=3.0**

Endpoint is in blue and route is in read.

#### Translator 3.0 Required Headers

#### Autehtication Headers

Azure Translator supports [several methods of authentication](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-reference)  including authentication with a regional resource (which does not require the a header with “Authorization” to be sent). The table below shows

authorizaion with a regional resource.

| Headers | Description | My Values |
| --- | --- | --- |
| **Ocp-Apim-Subscription-Key** | The value is the Azure **secret key** for your subscription to Translator. | See your Azure portal account for your keys. |
| **Ocp-Apim-Subscription-Region** | The value is the **region** of the translator resource. | **eastus2** is an example region. |

#### Header for Content and Length

|  |  |
| --- | --- |
| Headers | Description |
| Content-Type | Specifies the content type of the payload.  Accepted value is **application/json;charset=UTF-8** |
| Content-Length (See comments below) | The length of the request body. This is NOT Needed for *translation* requests |

Comments:

I believe **json** is the default setting Guzzle uses for Content-Type. Thus, **Content-Length** is not really required for the translation request.

The [Get Sentence Length](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/quickstart-translator?tabs=csharp" \l "get-sentence-length-during-translation)”section of the [Quick Start guide](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/quickstart-translator?tabs=csharp) explains if you set (when requesting **translation?api-version=3.0** ) the query parameter “**includeSentenceLength=true”**, the input and output sentence lengths will be also returned in the response.

#### Optional Headers

|  |  |
| --- | --- |
| Headers | Description |
| X-ClientTraceId | A **client-generated GUID** to uniquely identify the request. You can omit this header if you include the trace ID in the query string using a query parameter named ClientTraceId. |

#### Translate Request Body

See [https://docs.microsoft.com/en-us/rest/api/cognitiveservices/translator/translator/translate#request-body](https://docs.microsoft.com/en-us/rest/api/cognitiveservices/translator/translator/translate" \l "request-body)

The body of the request is a JSON array. Each array element is a JSON object with a string property named Text, which represents the string to translate. The following limitations apply:

* The array can have at most 25 elements.
* The entire text included in the request cannot exceed 5,000 characters including spaces.

Example input JSON array of two JSON objects:

[ {"Text":"Freitag"}, {"Text":"Montag"} ];

#### Translator 3.0 Optional Query Parameters

#### Required Parameters

| Query parameter | Description |
| --- | --- |
| **api-version** | Required parameter.  Version of the API requested by the client. Value must be **3.0**. |
| **to** | Required parameter.  Specifies the language of the output text. The target language must be one of the [supported languages](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-languages) included in the translation scope. For example, use to=de to translate to German.  It's possible to translate to multiple languages simultaneously by repeating the parameter in the query string. For example, use to=de&to=it to translate to German and Italian. |

#### Optional Parameters

These query paramters apply (TODO: double check) to all five Tranaslor requst types above.

| Query parameter | Description |
| --- | --- |
| **from** | Optional parameter.  Specifies the language of the input text. Find which languages are available to translate from by looking up [supported languages](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-languages) using the translation scope. If the from parameter is not specified, automatic language detection is applied to determine the source language.   You must use the from parameter rather than autodetection when using the [dynamic dictionary](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/dynamic-dictionary) feature. |
| **textType** | Optional parameter.  Defines whether the text being translated is plain text or HTML text. Any HTML needs to be a well-formed, complete element. Possible values are: **plain** (default) or **html**. |
| category | Optional parameter.  A string specifying the category (domain) of the translation. This parameter is used to get translations from a customized system built with [Custom Translator](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/customization). Add the Category ID from your Custom Translator [project details](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/custom-translator/how-to-create-project" \l "view-project-details) to this parameter to use your deployed customized system. Default value is: general. |
| profanityAction | Optional parameter.  Specifies how profanities should be treated in translations. Possible values are: NoAction (default), Marked or Deleted. To understand ways to treat profanity, see [Profanity handling](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-translate" \l "handle-profanity). |
| profanityMarker | Optional parameter.  Specifies how profanities should be marked in translations. Possible values are: Asterisk (default) or Tag. To understand ways to treat profanity, see [Profanity handling](https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-translate" \l "handle-profanity). |
| includeAlignment | Optional parameter.  Specifies whether to include alignment projection from source text to translated text. Possible values are: true or false (default). |
| **includeSentenceLength** | Optional parameter.  Specifies whether to include sentence boundaries for the input text and the translated text. Possible values are: true or false (default). |
| suggestedFrom | Optional parameter.  Specifies a fallback language if the language of the input text can't be identified. Language autodetection is applied when the from parameter is omitted. If detection fails, the suggestedFrom language will be assumed. |
| fromScript | Optional parameter.  Specifies the script of the input text. |
| toScript | Optional parameter.  Specifies the script of the translated text. |
| allowFallback | Optional parameter.  Specifies that the service is allowed to fall back to a general system when a custom system does not exist. Possible values are: true (default) or false.   allowFallback=false specifies that the translation should only use systems trained for the category specified by the request. If a translation for language X to language Y requires chaining through a pivot language E, then all the systems in the chain (X->E and E->Y) will need to be custom and have the same category. If no system is found with the specific category, the request will return a 400 status code. allowFallback=true specifies that the service is allowed to fall back to a general system when a custom system does not exist. |

#### Example Response Object

**Input Request Body**

The input is an json array of two json objects:

[ {"text":"Freitag"}, {"text":"Montag"} ];

**Response Object**

This is the joson response object:

[{"translations": [

{

"text": "Friday",

"to": "en",

"sentLen": {

"srcSentLen": [

7

],

"transSentLen": [

6

]

}

}

]

},

{

"translations": [

{

"text": "Monday",

"to": "en",

"sentLen": {

"srcSentLen": [

6

],

"transSentLen": [

6

]

}

}

]

}

]