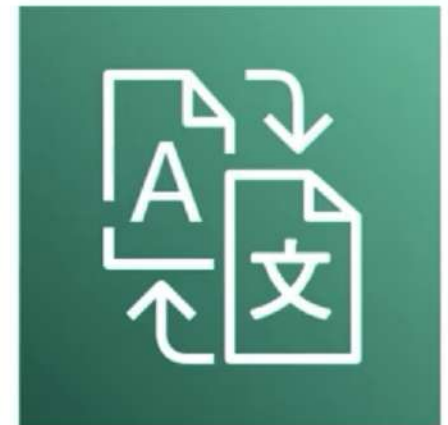


# Amazon Translate

---

**Amazon Translate** is a neural machine translation service for translating text between different languages.



Amazon Translate

# Amazon Translate API operations

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## Real-time translation

- `TranslateText`

## Asynchronous batch translation

- `StartTextTranslationJob`
- `DescribeTextTranslateJob`

## Supports multiple languages:

af, sq, am, ar, hy, az, bn, bs, bg, ca, zh, zh-TW, hr, cs, da, fa-AF, nl, en, et, fa, tl, fi, fr, fr-CA, ka, de, el, gu, ht, ha, he, hi, hu, is, id, ga, it, ja, kn, kk, ko, lv, lt, mk, ms, ml, mt, mr, mn, no, ps, pl, pt, pt-PT, pa, ro, ru, sr, si, sk, sl, so, es, es-MX, sw, sv, ta, te, th, tr, uk, ur, uz, vi, cy



# TranslateText settings

---

With Amazon Translate, you can customize settings for informal and formal languages.

## Set formality

- Informal: ¿Tú hablas español?
- Formal: ¿Usted habla español?
- Supported languages: French, German, Hindi, Italian, Japanese, Spanish

## Mask profanity

- Replace profane words and phrases with a gawlix string, such as: ?\$#@
- TranslateText uses a literal replacement, not a contextual one.

# Custom terminology

---

Customize vocabulary to define exceptions for translation.

## Define a custom terminology

- For example, the service might translate *Elastic Block Store* into Spanish as *Tienda elástica de bloques*.

## Supply the file

- Supported data formats: CSV, TSV, and TMX.
- The file can be either unidirectional or multidirectional.
- For multidirectional formats, any column can be used as a primary language:

en	sp	jp
Elastic Block Store	Elastic Block Store	Elastic Block Store

# To avoid translating

---

Put the non-translated text into a tag to avoid translating the text.

## Input

- Say in English: `<p translate=no>Hello how are you?<p>`

## Output

- Diga en inglés: `<p translate=no>Hello how are you?<p>`

# Parallel datasets

---

Customize batch translation jobs using parallel datasets.

- Influence style, tone, and word choice.
- Use the `CreateParallelData` API to import translation from Amazon S3.

en	sp
How are you?	¿que tal?

**Let's pop that out into its own tab.**







Go to Anything (P)

- machine-learning
  - exercise-comprehend
  - exercise-rekognition
  - exercise-texttract
  - exercise-transcribe-trans
    - index.html
    - Raf01\_320.mov
    - transcribe.json
    - transcribe\_translate.py
    - translated.json
  - solution-comprehend
  - solution-rekognition
  - solution-texttract
  - solution-transcribe-trans
- exercise-source.zip
- README.md

```
python3 - "ip-172-31-59-1" x  bash - "ip-172-31-59-170" x  transcribe_translate.py x (+)

1 import json
2 import re
3 import boto3
4 from random import choice
5
6 re_sentence = ""(?:\w\.\w.)(?<![A-Z][a-z]\.)(?<=\.|\?)\s""
7
8 with open("transcribe.json") as file:
9     transcribe = json.load(file)
10
11 # build array of start times
12 times = [item["start_time"] for item in transcribe["results"]["items"] if "start_time" in item]
13
14 translate = boto3.client('translate')
15 transcript = transcribe["results"]["transcripts"][0]["transcript"]
16 sentences = re.split(re_sentence, transcript)
17 word_ptr = 0
18 translated_arr = []
19
20 for sentence in sentences:
21     #####
22     # Replace this code and implement the code to translate from Brazilian Portuguese (pt-BR) to a supported language.
23     #####
24     translated_text = ''.join(choice((str.upper, str.lower))(c) for c in sentence)
25     # translated = translate.translate_text(
26     #     Text=sentence,
27     #     SourceLanguageCode='pt-BR',
28     #     TargetLanguageCode='en-US'
29     # )
30     # translated_text = translated["TranslatedText"]
31
32     translated_arr.append({ "start_time" : times[word_ptr], "translated" : translated_text})
33     word_count = len(re.findall(r'\w+', sentence))
34     word_ptr += word_count
35
36 print(json.dumps(translated_arr, indent=2))
```

We set up a regular expression, here.

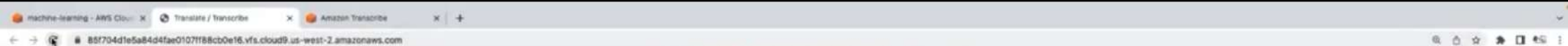
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python3 - "ip-172-31-59-1" x python3 - "ip-172-31-59-1" x transcribe\_translate.py x

```
rus:~/environment/exercise-transcribe-translate $ python3 transcribe_translate.py
[
  {
    "start_time": "1.4",
    "translated": "Hello, welcome you want to learn more about the services of."
  },
  {
    "start_time": "6.79",
    "translated": "It is an immense pleasure for me to teach you everything I know, my name is Raphael and I work at Amazon Web Services, creating training
you are enjoying this learning journey using the artificial intelligence services that the Amazon cloud offers."
  },
  {
    "start_time": "25.44",
    "translated": "Did you know that Amazon offers services to help you with computer vision, defect detection on assembly lines, recognition of data in te
s metrics, source code improvement, and even artificial intelligence in the industrial sector."
  },
  {
    "start_time": "44.53",
    "translated": "All of this to improve the experience of your customers."
  }
]
rus:~/environment/exercise-transcribe-translate $
```

And I can see start times and an English translation, there.



## Transcription

Olá, seja bem vindo você quer aprender mais sobre os serviços da. É um prazer imenso para mim te ensinar tudo o que eu sei, meu nome é Raphael e ao trabalho na Amazon Web Services, criando treinamentos como esse aqui que você está assistindo, esperamos que você esteja curtindo essa jornada de aprendizado usando os serviços de inteligência artificial que a nuvem da Amazon oferece. Você sabia que a Amazon oferece serviços para te ajudar com visão computacional, detecção de defeitos em linhas de montagem, reconhecimento de dados em texto e conteúdo falado, métricas de negócios do setor de saúde, melhoria de código fonte e até mesmo a inteligência artificial no ramo industrial. Tudo isso para melhorar a experiência de seus clientes.

## Translation

Hello, welcome you want to learn more about the services of. It is an immense pleasure for me to teach you everything I know, my name is Raphael and I work at Amazon Web Services, creating trainings like the one you are watching, we hope you are enjoying this learning journey using the artificial intelligence services that the Amazon cloud offers. Did you know that Amazon offers services to help you with computer vision, defect detection on assembly lines, recognition of data in text and spoken content, healthcare business metrics, source code improvement, and even artificial intelligence in the industrial sector. All of this to improve the experience of your customers.

I hit refresh, and there we go.