Quickstart: Using the gcloud tool

This page shows you how to send a speech recognition request to Speech-to-Text using the `gcloud` (https://cloud.google.com/sdk/gcloud/reference/ml/speech/) tool from the command line.

Speech-to-Text enables easy integration of Google speech recognition technologies into developer applications. You can send audio data to the Speech-to-Text API, which then returns a text transcription of that audio file. For more information about the service, see Cloud Speech-to-Text basics (https://cloud.google.com/speech-to-text/docs/basics).

Before you begin

1. Sign in (https://accounts.google.com/Login) to your Google Account.

   If you don't already have one, sign up for a new account (https://accounts.google.com/SignUp).

2. Set up a Cloud Console project.

   SET UP A PROJECT

   Click to:

   - Create or select a project.
   - Enable the Cloud Speech-to-Text API for that project.
   - Create a service account.
   - Download a private key as JSON.

   You can view and manage these resources at any time in the Cloud Console (https://console.cloud.google.com/).

3. Set the environment variable ***GOOGLE_APPLICATION_CREDENTIALS*** to the file path of the JSON file that contains your service account key. This variable only applies to your current shell session, so if you open a new session, set the variable again.

   Example: Linux or macOS

   Replace ***[PATH]*** with the file path of the JSON file that contains your service account key.

```
export GOOGLE_APPLICATION_CREDENTIALS="[PATH]"
```

For example:

```
export GOOGLE_APPLICATION_CREDENTIALS="/home/user/Downloads/service-account-fil
```

Example: Windows

Replace ***[PATH]*** with the file path of the JSON file that contains your service account key, and ***[FILE_NAME]*** with the filename.

With PowerShell:

```
$env:GOOGLE_APPLICATION_CREDENTIALS="[PATH]"
```

For example:

```
$env:GOOGLE_APPLICATION_CREDENTIALS="C:\Users\username\Downloads\[FILE_NAME].js
```

With command prompt:

```
set GOOGLE_APPLICATION_CREDENTIALS=[PATH]
```

4. Install and initialize the Cloud SDK (https://cloud.google.com/sdk/docs/).

Make an audio transcription request

Now you can use Cloud Speech-to-Text to transcribe an audio file to text. Use the following code sample to send a **`recognize`** (https://cloud.google.com/speech-to-text/docs/reference/rest/v1/speech/recognize) request to the Speech-to-Text API.

Open the command line shell and run the following command.

```
gcloud ml speech recognize gs://cloud-samples-tests/speech/brooklyn.flac \
    --language-code=en-US
```

This command requests that Cloud Speech-to-Text transcribe the audio contained in a FLAC (https://cloud.google.com/speech/docs/encoding) hosted at a publicly accessible location.

If the request is successful, the server returns a response in JSON format:

```
{
  "results": [
    {
      "alternatives": [
        {
          "confidence": 0.9840146,
          "transcript": "how old is the Brooklyn Bridge"
        }
      ]
    }
  ]
}
```


Congratulations! You've sent your first request to Cloud Speech-to-Text.

If you receive an error or an empty response from Cloud Speech-to-Text, take a look at the troubleshooting (https://cloud.google.com/speech-to-text/docs/troubleshooting) and error mitigation (https://cloud.google.com/speech-to-text/docs/error-messages) steps.

What's next

- Practice transcribing short audio files (https://cloud.google.com/speech-to-text/docs/sync-recognize).
- Learn how to batch long audio files for speech recognition (https://cloud.google.com/speech-to-text/docs/async-recognize).
- Learn how to transcribe streaming audio (https://cloud.google.com/speech-to-text/docs/streaming-recognize) like from a microphone.
- Get started with the Cloud Speech-to-Text in your language of choice by using a Cloud Speech-to-Text client library (https://cloud.google.com/speech-to-text/docs/reference/libraries).
- Work through the sample applications (https://cloud.google.com/speech-to-text/docs/samples).
- For best performance, accuracy, and other tips, see the best practices (https://cloud.google.com/speech-to-text/docs/best-practices) documentation.

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