

# Online VC demo (for personalized offline VC)

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# Outline

個人化離線語音裝置-線上版本

## ● 兩種 Online VC 實作方式

### ▣ Python SpeechRecognition 套件 (上週進度)

- Python 有提供已經打包好的套件 (SpeechRecognition) 供使用
- 為免費版，但無法自動偵測語言、說話者分段標記等功能
- 已經完成使用麥克風輸入，轉換成文字再轉換成 Google 小姐的語音

1. Demo 影片：<https://youtu.be/HYQNHAK2Eco>

### ▣ Google API (本週進度)

- 完成透過 Speech-to-text 與 Text-to-speech 兩個 API 將語音透過麥克風輸入轉換成文字再轉換成 Google 人工合成語音

## ● 下週規劃

### ▣ 離線版本實作

- 環境建置 (使用 Linux 環境架設 YMDVC 執行環境)

# 附錄－API 實作結果

# Debug

```
return wrapped_func(*args, **kwargs)
File "/home/fg6ts30/env/lib/python3.7/site-packages/google/api_core/retry.py", line 286, in retry_wrapped_func
    on_error=on_error,
File "/home/fg6ts30/env/lib/python3.7/site-packages/google/api_core/retry.py", line 184, in retry_target
    return target()
File "/home/fg6ts30/env/lib/python3.7/site-packages/google/api_core/grpc_helpers.py", line 75, in error_remapped_callable
    six.raise_from(exceptions.from_grpc_error(exc), exc)
File "<string>", line 3, in raise_from
google.api_core.exceptions.PermissionDenied: 403 Your application has authenticated using end user credentials from the Google Cloud SDK or Google Cloud Shell which are not supported by the speech.googleapis.com. We recommend configuring the billing/quota_project setting in gcloud or using a service account through the auth/impersonate_service_account setting. For more information about service accounts and how to use them in your application, see https://cloud.google.com/docs/authentication/.
(env) fg6ts30@cloudshell:~/python-speech/samples/snippets$
```

使用了第一種方法

## Method 1:

Create a service account and set up the Cloud SDK to use the service account.

Example command:

```
gcloud auth activate-service-account test@development-123456.iam.gserviceaccount.com --key-
```

## Method 2:

Set the environment variable `GOOGLE_APPLICATION_CREDENTIALS` to point to your service account JSON file.

```
set GOOGLE_APPLICATION_CREDENTIALS=/fullpath/service-account.json
```

## Method 3:

<https://stackoverflow.com/questions/56823383/your-application-has-authenticated-using-end-user-credentials-from-the-google-cl/56826028>

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Is chess a good gam

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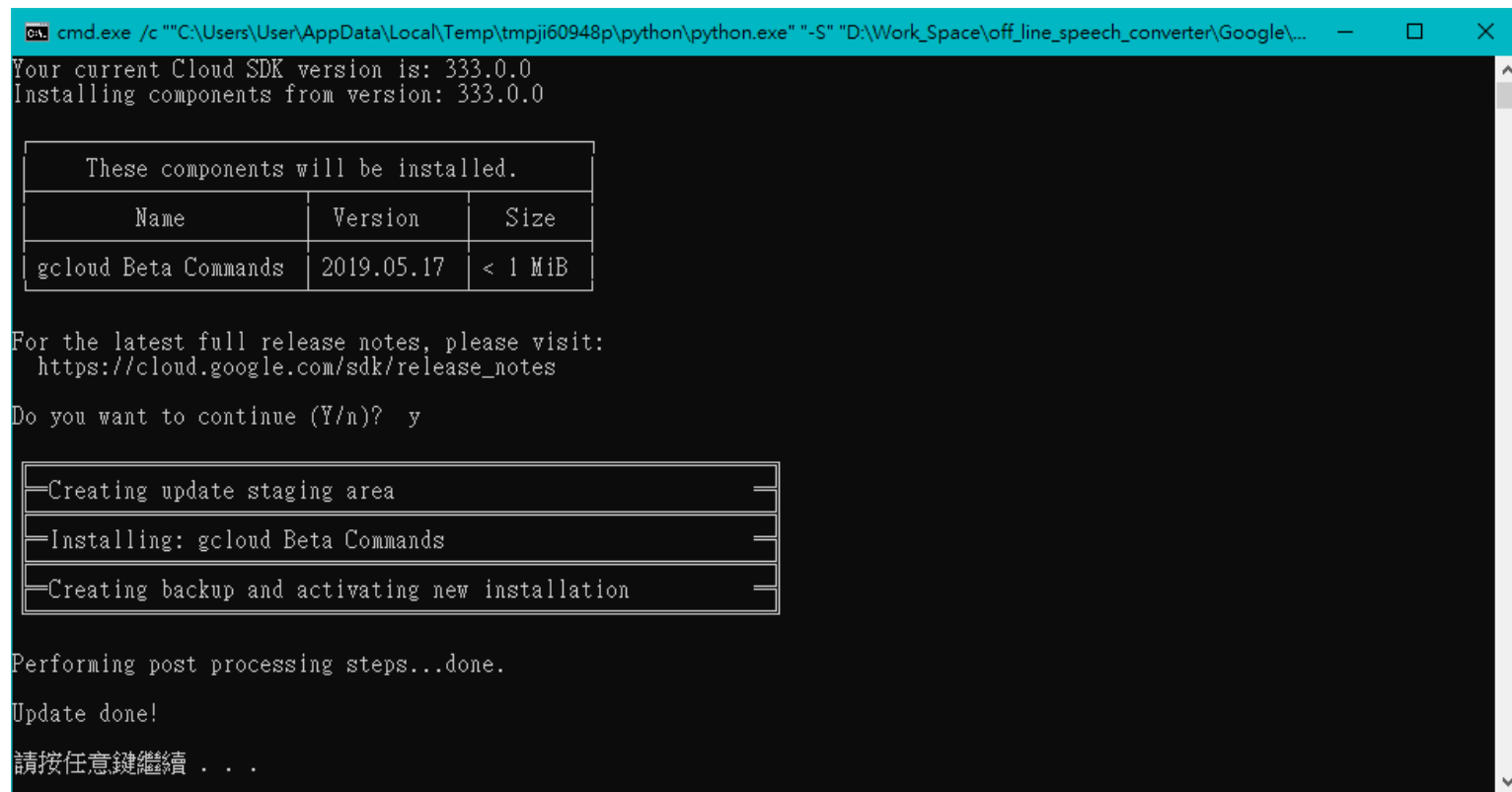
Why do we ask for \*a series to define the n variable?

If I pull a metal bar fo

# Debug

<https://cloud.google.com/sdk/gcloud/reference/auth/application-default/set-quota-project?hl=zh-TW>

輸入以下指令：`gcloud beta auth application-default set-quota-project`



```
cmd.exe /c "C:\Users\User\AppData\Local\Temp\tmpji60948p\python\python.exe" "-S" "D:\Work_Space\off_line_speech_converter\Google\..."  
Your current Cloud SDK version is: 333.0.0  
Installing components from version: 333.0.0  


| These components will be installed. |            |         |
|-------------------------------------|------------|---------|
| Name                                | Version    | Size    |
| gcloud Beta Commands                | 2019.05.17 | < 1 MiB |

  
For the latest full release notes, please visit:  
https://cloud.google.com/sdk/release\_notes  
Do you want to continue (Y/n)? y  


|                                                  |   |
|--------------------------------------------------|---|
| —Creating update staging area                    | — |
| —Installing: gcloud Beta Commands                | — |
| —Creating backup and activating new installation | — |

  
Performing post processing steps...done.  
Update done!  
請按任意鍵繼續 . . .
```

執行完成解決問題

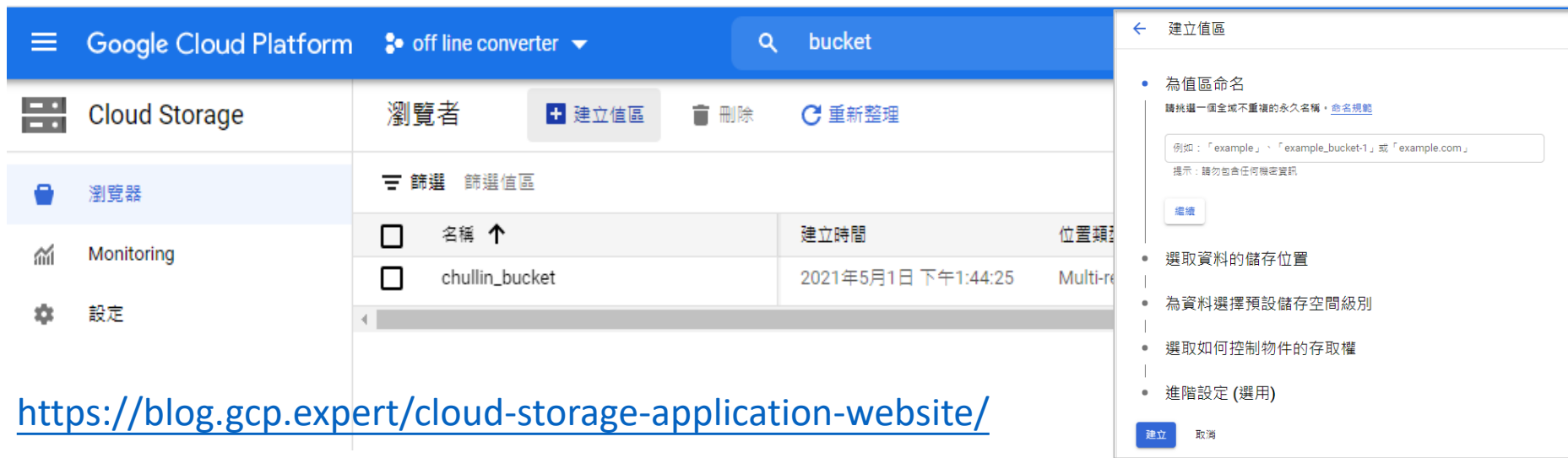
# Debug

要求 gcs\_uri 位置，出現錯誤：

400 Audio URI `D:/Work\_Space/off\_line\_speech\_converter/SpeechRecognition/output.mp3` is an invalid GCS path.

在轉換前需要將音檔上傳至 google，要求的路徑為 google 另一項服務

## 創建 bucket



The screenshot shows the Google Cloud Platform console interface. The top navigation bar includes the Google Cloud Platform logo, the text 'off line converter', and a search bar containing 'bucket'. The left sidebar shows the 'Cloud Storage' section with options for '瀏覽器' (Browser), 'Monitoring', and '設定' (Settings). The main content area displays a table of buckets. The first row shows a bucket named 'chullin\_bucket' created on May 1, 2021, at 1:44:25 PM, with a location of 'Multi-region'. A dialog box titled '建立值區' (Create Bucket) is open on the right side of the screen. The dialog box has a back arrow and a title bar. It contains a list of steps: '為值區命名' (Name the bucket), '選擇資料的儲存位置' (Select storage location), '為資料選擇預設儲存空間級別' (Select default storage class), '選擇如何控制物件的存取權' (Select access control), and '進階設定 (選用)' (Advanced settings). The '命名' step is currently active, showing a text input field with the name 'chullin\_bucket'. Below the input field, there is a '繼續' (Continue) button. At the bottom of the dialog box, there are '建立' (Create) and '取消' (Cancel) buttons.

<https://blog.gcp.expert/cloud-storage-application-website/>

# Debug (最後結果)

音檔內容為：  
2021年4月30日，但4辨識錯誤  
需要咬字、發音準確

```
Anaconda Prompt (Anaconda3) - "C:\Users\User\Anaconda3\condabin\conda.bat" activate offline_converter

(offline_converter) D:\Work_Space\off_line_speech_converter\Quickstarts\python-speech\samples\snippets>python quickstart1.py
why
1
2
3
Transcript: 2021年10月30
Transcript: 2021年10月30
4
(offline_converter) D:\Work_Space\off_line_speech_converter\Quickstarts\python-speech\samples\snippets>_
```

輸入為 wav 檔：為雙聲道，須設定 (default = 單聲道)