

CREATE & CONFIGURE IBM CLOUD SERVICE

CREATE THE TEXT-TO-SPEECH SERVICE

Installation of Watson-TTS Client library Provided for Python:

Code:

Pip install -upgrade"ibm-watson">=6.1.0"

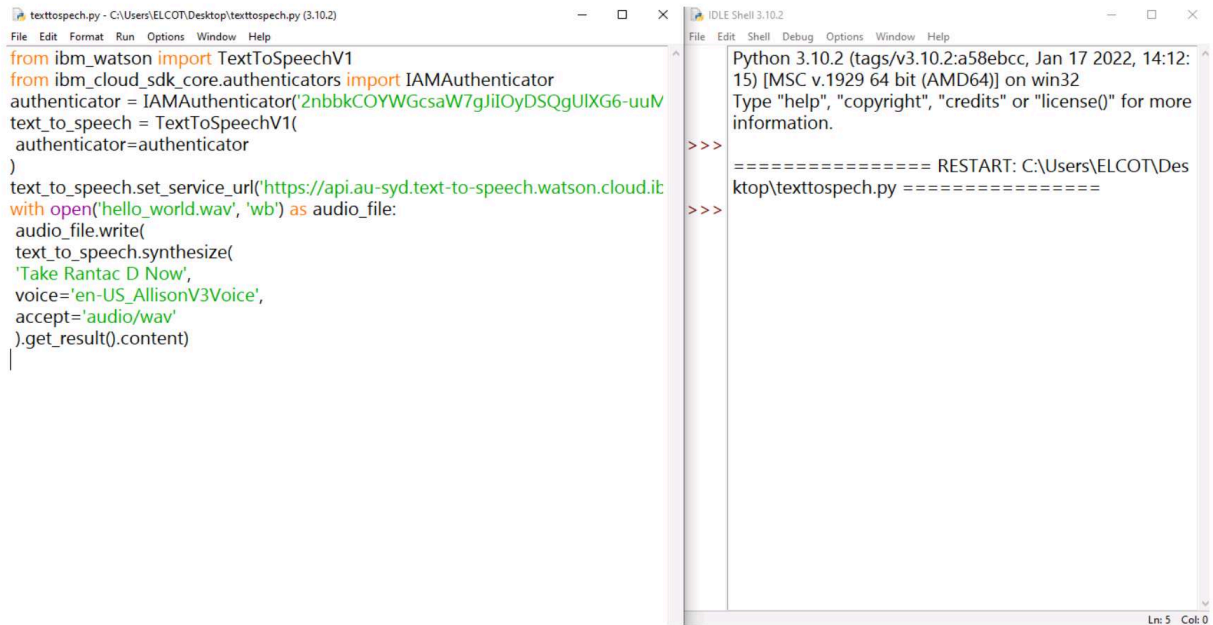
```
C:\Users\ELCOT>pip install --upgrade "ibm-watson">=6.1.0"
Requirement already satisfied: ibm-watson>=6.1.0 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (6.1.0)
Requirement already satisfied: websocket-client==1.1.0 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (from ibm-watson>=6.1.0) (1.1.0)
Requirement already satisfied: requests<3.0,>=2.0 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (from ibm-watson>=6.1.0) (2.28.1)
Requirement already satisfied: ibm-cloud-sdk-core==3.*,>=3.3.6 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (from ibm-watson>=6.1.0) (3.16.0)
Requirement already satisfied: python-dateutil>=2.5.3 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (from ibm-watson>=6.1.0) (2.8.2)
Requirement already satisfied: urllib3<2.0.0,>=1.26.0 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (from ibm-cloud-sdk-core==3.*,>=3.3.6->ibm-watson>=6.1.0) (1.26.12)
Requirement already satisfied: PyJWT<3.0.0,>=2.4.0 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (from ibm-cloud-sdk-core==3.*,>=3.3.6->ibm-watson>=6.1.0) (2.5.0)
Requirement already satisfied: six>=1.5 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (from python-dateutil>=2.5.3->ibm-watson>=6.1.0) (1.16.0)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (2022.9.24)
Requirement already satisfied: idna<4,>=2.5 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (3.4)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (2.1.1)
WARNING: You are using pip version 21.2.4; however, version 22.3 is available.
You should consider upgrading via the 'C:\Users\ELCOT\AppData\Local\Programs\Python\Python310\python.exe -m pip install --upgrade pip' command.
```

Service Creation Status & Credential Details:

The screenshot displays the IBM Cloud console for the 'Text to Speech-a5' service. The service is in an 'Active' state. The left sidebar shows the 'Manage' section with options for 'Getting started', 'Service credentials', 'Plan', and 'Connections'. The main content area includes a 'Start by viewing the tutorial' section with a 'Getting started tutorial' button and an 'API reference' link. Below this is the 'Credentials' section, which shows the 'API key' and 'URL' fields. The 'API key' is masked with dots, and the 'URL' is 'https://api.au-syd.text-to-speech.watson.cloud.ibm.com/'. To the right, there is a 'Plan Lite' section with an 'Upgrade' button.

STATUS : ACTIVE

Execution & Test Run of Program to Access TTS:



The screenshot displays a Python IDE with two windows. The left window, titled 'texttospech.py - C:\Users\ELCOT\Desktop\texttospech.py (3.10.2)', contains the following code:

```
from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator
authenticator = IAMAuthenticator('2nbbkCOYWGcsaW7gJlOyDSQgUIXG6-uuV')
text_to_speech = TextToSpeechV1(
    authenticator=authenticator
)
text_to_speech.set_service_url('https://api.au-syd.text-to-speech.watson.cloud.ibm.com/tekton/texttospech.py')
with open('hello_world.wav', 'wb') as audio_file:
    audio_file.write(
        text_to_speech.synthesize(
            'Take Rantac D Now',
            voice='en-US_AllisonV3Voice',
            accept='audio/wav'
        ).get_result().content
    )
```

The right window, titled 'IDLE Shell 3.10.2', shows the execution output:

```
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022, 14:12:15) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more
information.
>>>
===== RESTART: C:\Users\ELCOT\Desktop\texttospech.py =====
>>>
```

The status bar at the bottom right indicates 'Ln: 5 Col: 0'.

RESULT : SUCCESSFULLY CREATED