

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"

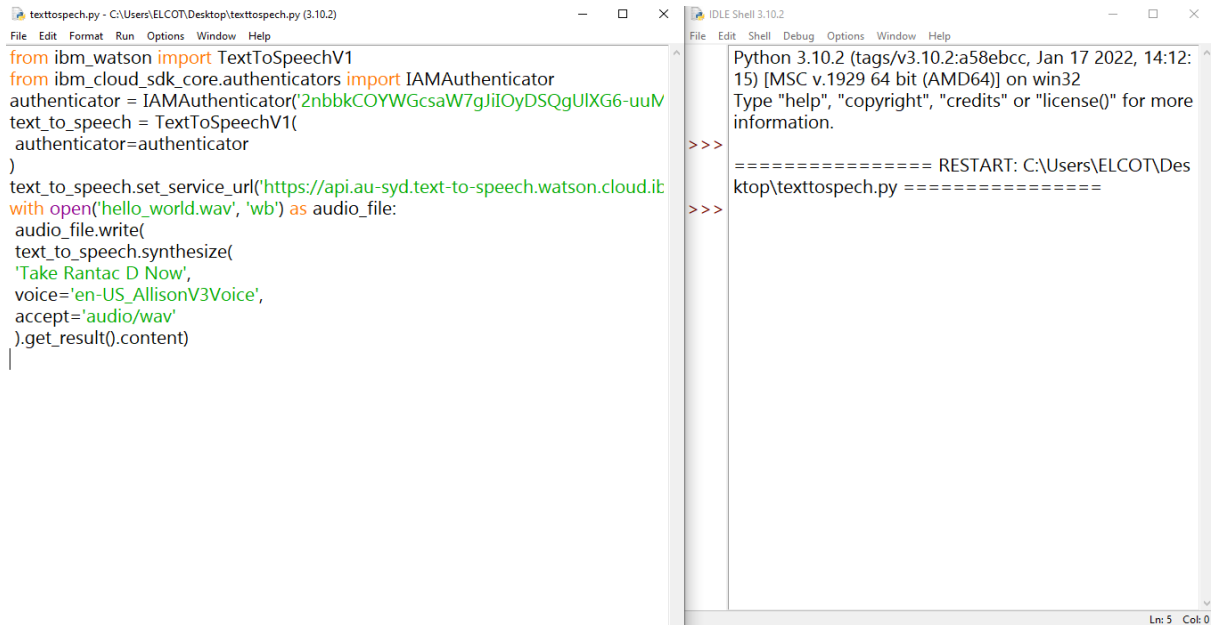
```
C:\Users\ELCOT>pip install --upgrade "ibm-watson">=6.1.0"
Requirement already satisfied: ibm-watson>=6.1.0 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (6.1.0)
Requirement already satisfied: websocket-client==1.1.0 in c:\users\elcot\appdata\local\programs\python\python310\lib\site-packages (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 interface. At the top, the navigation bar includes the IBM Cloud logo, a search bar, and links for Catalog, Manage, and the user's account (MD TAHIR P R's Account). The main content area shows the 'Text to Speech-a5' service, which is 'Active'. A left sidebar lists management options: Getting started, Service credentials, Plan, and Connections. The main panel is divided into sections: 'Start by viewing the tutorial' with links for 'Getting started tutorial' and 'API reference'; 'Credentials' with fields for 'API key' and 'URL' (https://api.au-syd.text-to-speech.watson.cloud.ibm.com/); and 'Plan' showing the 'Lite' plan with an 'Upgrade' button.

STATUS : ACTIVE

Execution & Test Run of Program to Access TTS:



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

```
from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator
authenticator = IAMAuthenticator('2nbbkCOYWGcsaW7gJilOyDSQgUIlXG6-uuV')
text_to_speech = TextToSpeechV1(
    authenticator=authenticator
)
text_to_speech.set_service_url('https://api.au-syd.text-to-speech.watson.cloud.ibm.com/paths/tts_v1_text-to-speech-watson-1')
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 of the IDE indicates 'Ln: 5 Col: 0'.

RESULT : SUCCESSFULLY CREATED