

CREATE TEXT TO SPEECH SERVICE

Installation of Watson-TTS Client library Provided by Python

Code:

```
pip install --upgrade "ibm-watson>=6.1.0"
```

```
Command Prompt
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\sibis>pip install --upgrade "ibm-watson>=6.1.0"
Requirement already satisfied: ibm-watson>=6.1.0 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (6.1.0)
Requirement already satisfied: ibm-cloud-sdk-core==3.*,>=3.3.6 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-watson>=6.1.0) (3.16.0)
Requirement already satisfied: requests<3.0,>=2.0 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-watson>=6.1.0) (2.28.1)
Requirement already satisfied: python-dateutil>=2.5.3 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-watson>=6.1.0) (2.8.2)
Requirement already satisfied: websocket-client==1.0 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-watson>=6.1.0) (1.1.0)
Requirement already satisfied: PyJWT<3.0.0,>=2.4.0 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-cloud-sdk-core==3.*,>=3.3.6->ibm-watson>=6.1.0) (2.6.0)
Requirement already satisfied: urllib3<2.0.0,>=1.26.0 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-cloud-sdk-core==3.*,>=3.3.6->ibm-watson>=6.1.0) (1.26.12)
Requirement already satisfied: six>=1.5 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from python-dateutil>=2.5.3->ibm-watson>=6.1.0) (1.16.0)
Requirement already satisfied: idna<4,>=2.5 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (3.4)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (2022.9.24)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (2.1.1)

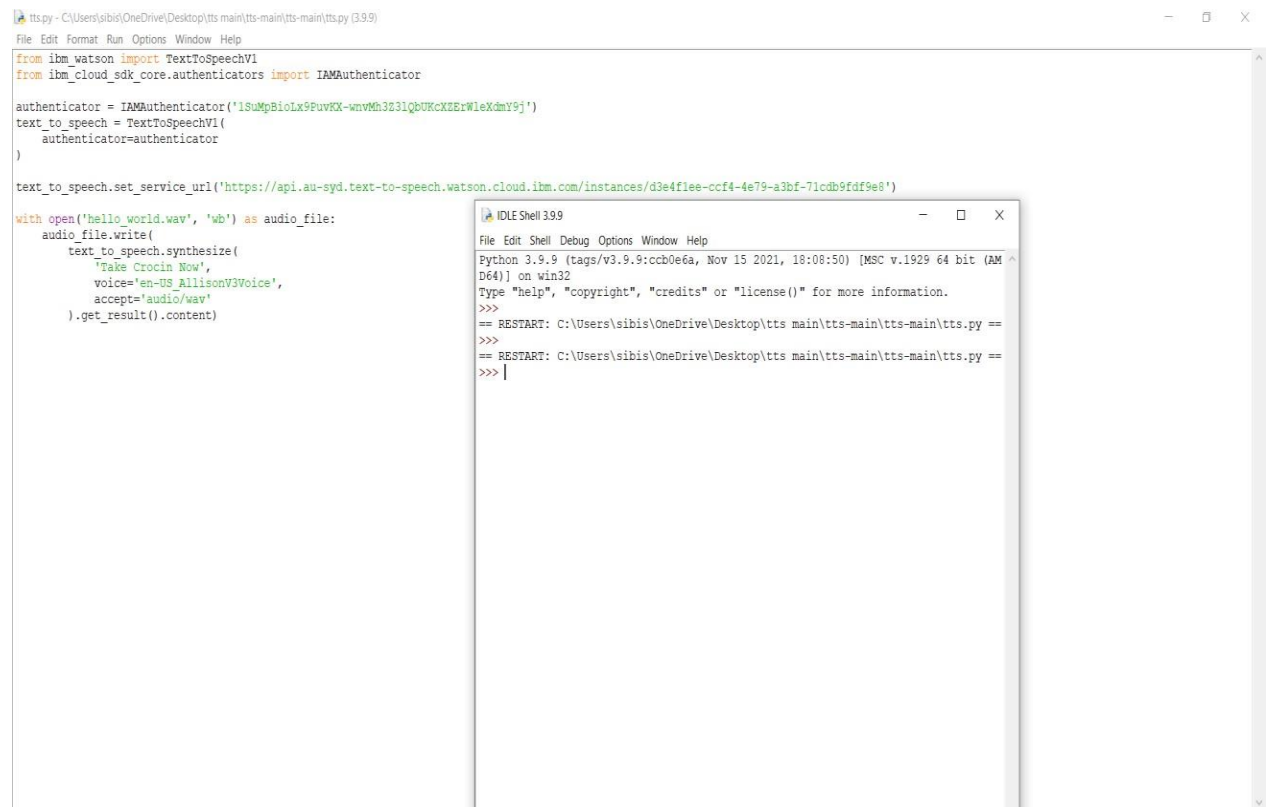
C:\Users\sibis>
```

Service Creation Status & Credential Details:

The screenshot shows the IBM Watson Text to Speech service dashboard. The service is named "Text to Speech-rk" and is in an "Active" state. The dashboard includes a sidebar with navigation options: Manage, Getting started, Service credentials, Plan, and Connections. The main content area has a "Start by viewing the tutorial" section with links to the "Getting started tutorial" and "API reference". A "Plan" section shows the "Lite" plan with an "Upgrade" button. The "Credentials" section displays the API key and URL, with options to "Download" or "Show credentials".

STATUS: ACTIVE

Execution & Test Run of Program to Access TTS:



The screenshot displays a Python IDE with a file named `tts.py` and an integrated terminal window.

Python Code (tts.py):

```
tts.py - C:\Users\sibis\OneDrive\Desktop\tts main\tts-main\tts-main\tts.py (3.9.9)
File Edit Format Run Options Window Help
from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator

authenticator = IAMAuthenticator('lsuMpBiolx9Puv6X-wnvMh3Z3lQbUKCXEErWleXdmY9j')
text_to_speech = TextToSpeechV1(
    authenticator=authenticator
)

text_to_speech.set_service_url('https://api.au-syd.text-to-speech.watson.cloud.ibm.com/instances/d3e4f1ee-ccf4-4e79-a3bf-71cdb9fdf9e8')

with open('hello_world.wav', 'wb') as audio_file:
    audio_file.write(
        text_to_speech.synthesize(
            'Take Crocin Now',
            voice='en-US_AllisonV3Voice',
            accept='audio/wav'
        ).get_result().content
    )
```

Terminal Output (IDLE Shell 3.9.9):

```
IDLE Shell 3.9.9
File Edit Shell Debug Options Window Help
Python 3.9.9 (tags/v3.9.9:ccb0e6a, Nov 15 2021, 18:08:50) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:\Users\sibis\OneDrive\Desktop\tts main\tts-main\tts-main\tts.py ==
>>>
== RESTART: C:\Users\sibis\OneDrive\Desktop\tts main\tts-main\tts-main\tts.py ==
>>> |
```