

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\Lenovo>pip install --upgrade "ibm-watson>=6.1.0"
Collecting ibm-watson>=6.1.0
  Downloading ibm-watson-6.1.0.tar.gz (373 kB)
    ----- 373.5/373.5 kB 309.9 kB/s eta 0:00:00
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing metadata (pyproject.toml) ... done
Collecting python-dateutil>=2.5.3
  Downloading python_dateutil-2.8.2-py2.py3-none-any.whl (247 kB)
    ----- 247.7/247.7 kB 276.4 kB/s eta 0:00:00
Collecting websocket-client==1.1.0
  Downloading websocket_client-1.1.0-py2.py3-none-any.whl (68 kB)
    ----- 68.7/68.7 kB 288.2 kB/s eta 0:00:00
Requirement already satisfied: requests<3.0,>=2.0 in c:\users\lenovo\appdata\local\programs\python\python39\lib\site-packages (from ibm-watson>=6.1.0) (2.28.1)
Collecting ibm-cloud-sdk-core==3.*,>=3.3.6
  Downloading ibm_cloud_sdk_core-3.16.0-py3-none-any.whl (83 kB)
    ----- 83.7/83.7 kB 673.8 kB/s eta 0:00:00
Requirement already satisfied: urllib3<2.0.0,>=1.26.0 in c:\users\lenovo\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)
Collecting PyJWT<3.0.0,>=2.4.0
  Downloading PyJWT-2.6.0-py3-none-any.whl (20 kB)
Collecting six>=1.5
  Downloading six-1.16.0-py2.py3-none-any.whl (11 kB)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\lenovo\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: idna<4,>=2.5 in c:\users\lenovo\appdata\local\programs\python\python39\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\lenovo\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (2.1.1)
Building wheels for collected packages: ibm-watson
  Building wheel for ibm-watson (pyproject.toml) ... done
  Created wheel for ibm-watson: filename=ibm_watson-6.1.0-py3-none-any.whl size=370808 sha256=4f34db1c7aef21efa89f9e898f0fde132b6c7d2f0b2d1cca57ac777299a59c01
  Stored in directory: c:\users\lenovo\appdata\local\pip\cache\wheels\37\35\82\5828354d83eb219a1c8078964ba1f4eac12aa08671a16a9bfd
Successfully built ibm-watson
Installing collected packages: websocket-client, six, PyJWT, python-dateutil, ibm-cloud-sdk-core, ibm-watson
Successfully installed PyJWT-2.6.0 ibm-cloud-sdk-core-3.16.0 ibm-watson-6.1.0 python-dateutil-2.8.2 six-1.16.0 websocket-client-1.1.0

C:\Users\Lenovo>
```

Service Creation Status & Credential Details:

The screenshot shows the IBM Watson Text to Speech service console. At the top, the service is named 'Text to Speech-sv' and is marked as 'Active'. A left sidebar contains navigation links: 'Manage', 'Getting started', 'Service credentials', 'Plan', and 'Connections'. The main content area is divided into three sections. The top section, 'Start by viewing the tutorial', includes a 'Getting started tutorial' button and a link to the 'API reference'. The bottom section, 'Credentials', displays the 'API key' (a masked string) and the 'URL' (https://api.eu-gb.text-to-speech.watson.cloud.ibm.com/instances/0a5...). The right sidebar shows the 'Plan' section with 'Lite' selected and an 'Upgrade' button.

STATUS: ACTIVE

Execution & Test Run of Program to Access TTS:

```
from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator
authenticator = IAMAuthenticator('2nbbkCOYWGcsaW7gJiIOyDSQgUIXG6-uuV')
text_to_speech = TextToSpeechV1(
    authenticator=authenticator
)
text_to_speech.set_service_url('https://api.au-syd.text-to-speech.watson.cloud.ibm.com/instances/0a5...')
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
    )
```

RESULT: SUCCESSFULLY CREATED