

Definition: Create instance of text to speech service for implementing artificial intelligence functionalities using IBM cloud.

AIM: Making text to speech by the use of git bash tool.

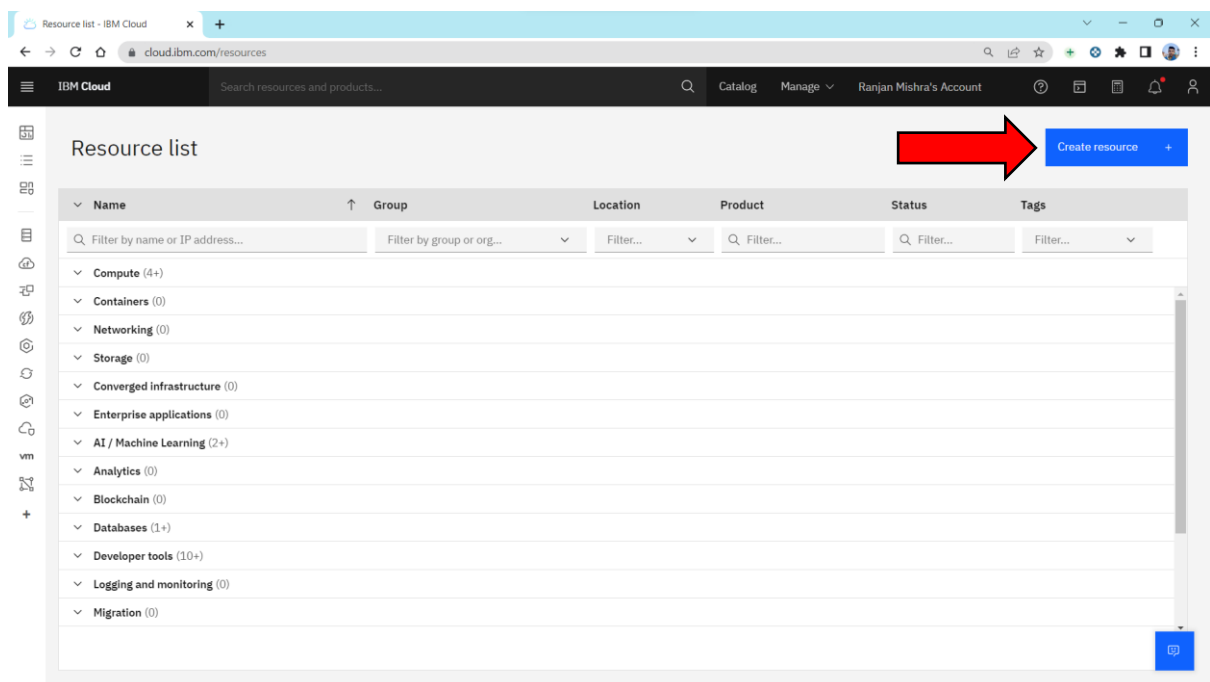
Outcome/Learning: Developing a Text to Speech with the help of IBM & git tool.

Working/Perform: First we want to IBM cloud text to speech service or API key then with the help git bash tool or by using API key we will convert text to speech.

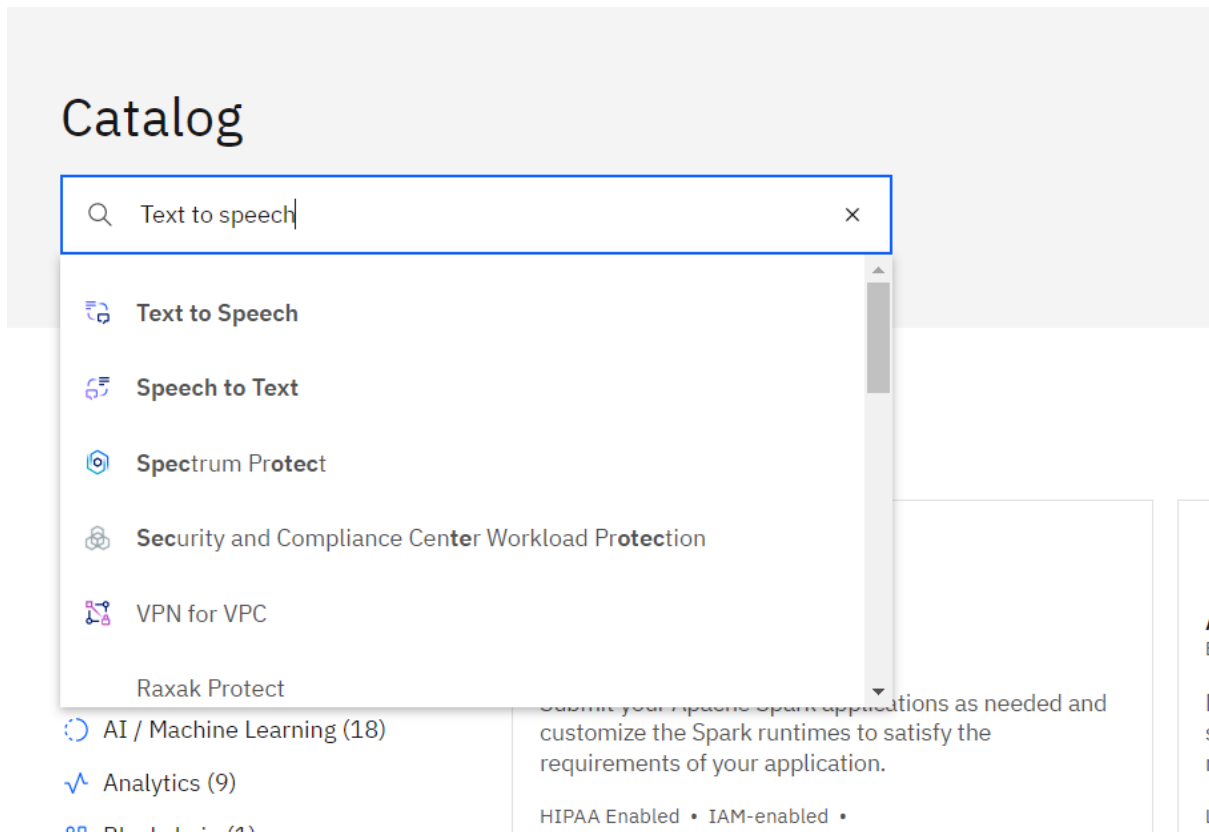
Required Tool: IBM cloud tool

Git bash tool

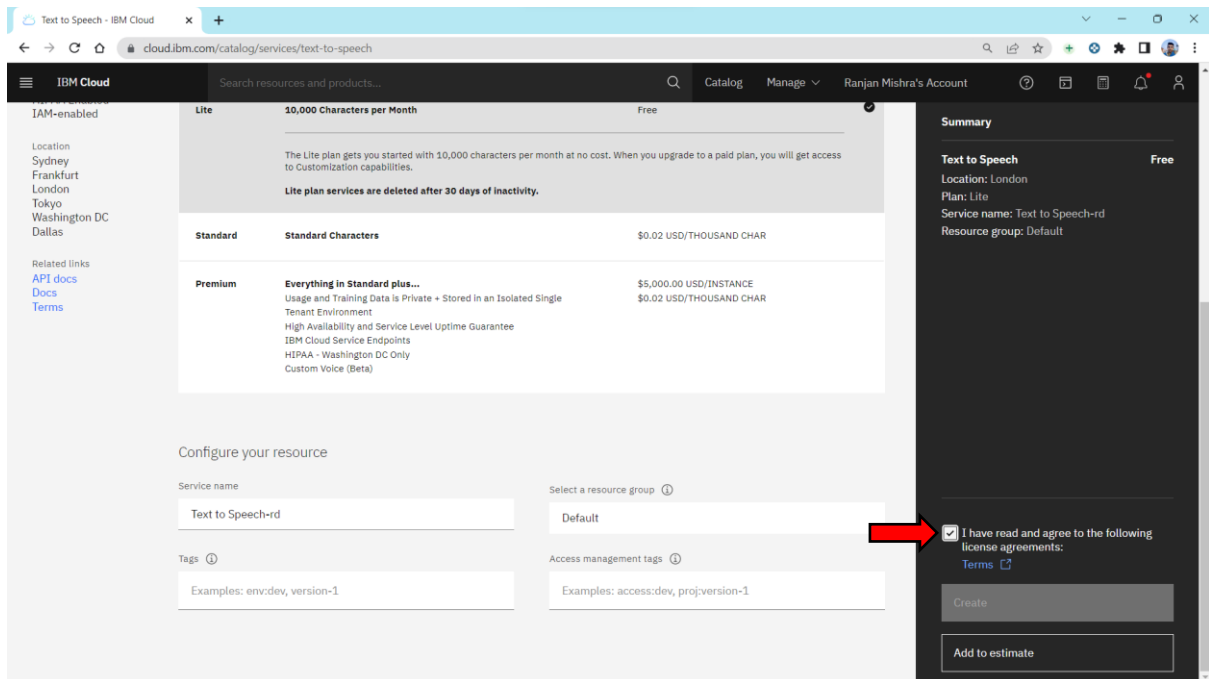
STEP 1: Go to the resource list and click on the create resource.



STEP2: In Catalog search Text-to-Speech and click on it.



Step 3: Now check the check box in right side bottom corner and click on create.



STEP 4: After clicking on create a new page will open and from this page scroll and copy the first script and paste it on notepad.

more information, see [Playing an audio file](#).

Synthesize text in US English

The following command use the `POST /v1/synthesize` method to synthesize US English input to audio. The request uses the voice `en-US_MichaelV3Voice`. It produces audio in the WAV format.

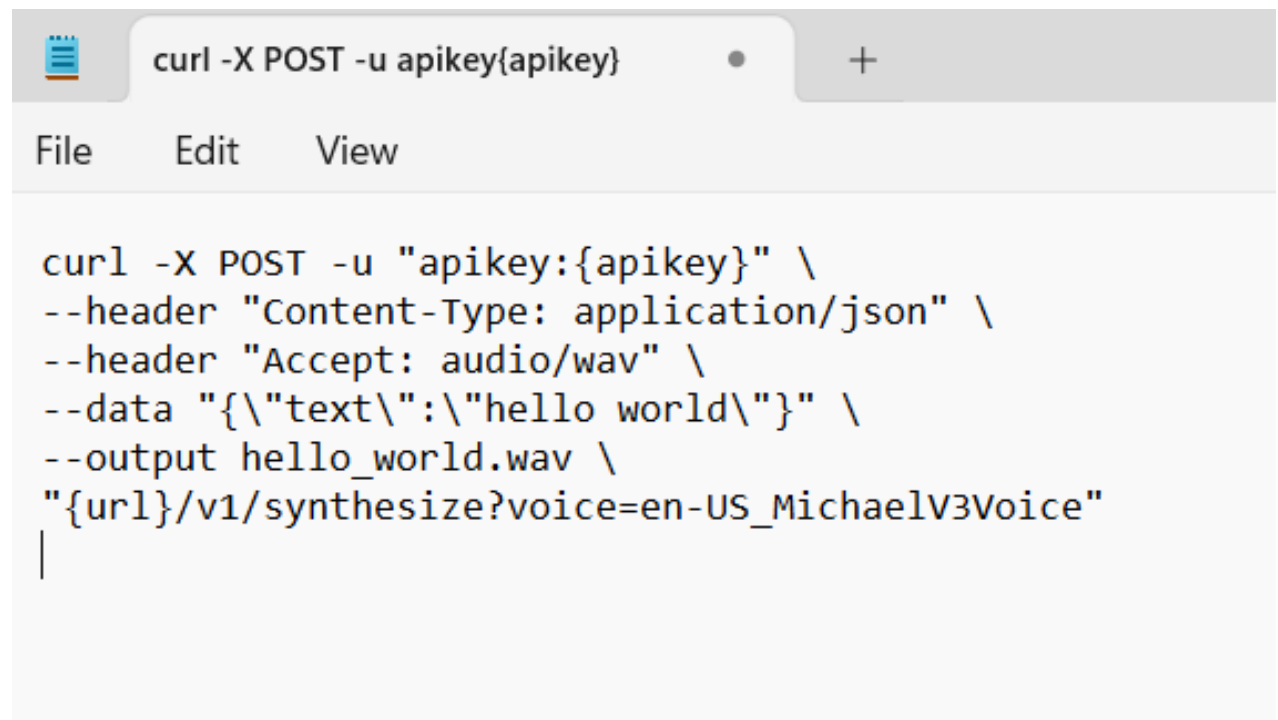
- ① Issue the following command to synthesize the string "hello world". The request produces a WAV file that is named `hello_world.wav`.



```
$ curl -X POST -u "apikey:{apikey}" \
--header "Content-Type: application/json" \
--header "Accept: audio/wav" \
--data '{"text":"'hello world'"}' \
--output hello_world.wav \
"{url}/v1/synthesize?voice=en-US_MichaelV3Voice"
```



- Replace `{token}` with the access token for your service instance.
- Replace `{url}` with the URL for your service instance.



```
curl -X POST -u "apikey:{apikey}" \
--header "Content-Type: application/json" \
--header "Accept: audio/wav" \
--data '{"text":"'hello world'"}' \
--output hello_world.wav \
"{url}/v1/synthesize?voice=en-US_MichaelV3Voice"
```

Step5: Now make some changes in script like put API key from IBM CLOUD, in text write text which you want to convert in speech, in output write the name of file and put URL from IBM cloud.

```
1 curl -X POST -u "apikey:SiYDC_mwO3lWAJxfhCVQn3BuaT-JiE0wYkD7kkQDySNz" \  
2 --header "Content-Type: application/json" \  
3 --header "Accept: audio/wav" \  
4 --data "{\"text\":\"welcome to my world\"}" \  
5 --output hello_world.wav \  
6 "https://api.eu-gb.text-to-speech.watson.cloud.ibm.com/instances/be80930d-8203-4b33-8982-5787d2840f05/v1/synthesize?voice=en-US_MichaelV3Voice"  
7
```

Step6: We can get API key and URL from service credential page click on drop down menu of auto generated service credentials.

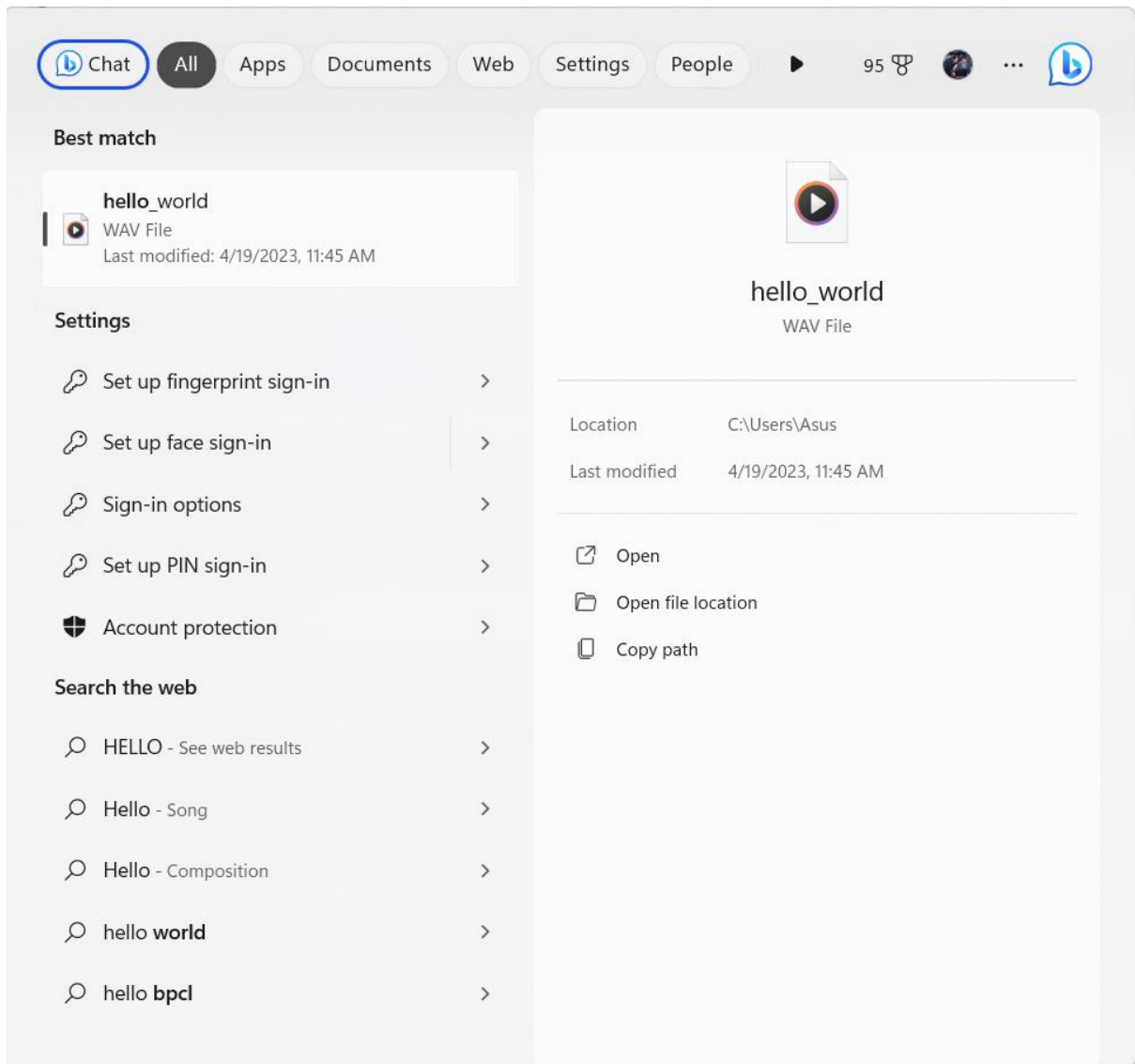
Key name	Date created
Auto-generated service credentials	2023-04-18 9:34 PM

```
{  
  "apikey": "J50A3-vjh0FUE2dlNFyfZd5QgXD2TN_YOVkauGWysEe3",  
  "iam_apikey_description": "Auto-generated for key crn:vl:bluemix:public:text-to-speech:eu-gb:a/107c513686b14aa589:2d59354d-d40b-40bc-ad82-fea9e3c699e3:resource-key:086e4c72-9c65-4f2e-99cc-1c16f5ee9ddf",  
  "iam_apikey_name": "Auto-generated service credentials",  
  "iam_role_crn": "crn:vl:bluemix:public:iam:::serviceRole:Manager",  
  "iam_serviceid_crn": "crn:vl:bluemix:public:iam-identity:a/107c513686b14aaa8ac7f10307ccd589::serviceid:Serviceid",  
  "url": "https://api.eu-gb.text-to-speech.watson.cloud.ibm.com/instances/2d59354d-d40b-40bc-ad82-fea9e3c699e3"  
}
```

Step7: Now copy the script from notepad and paste it in git bash tool and press enter.

```
Asus@LAPTOP-446UK8P1 MINGW64 ~  
$ curl -X POST -u "apikey:SiYDC_mwO3lWAJxfhCVQn3BuaT-JiE0wYkD7kkQDySNz" \  
> --header "Content-Type: application/json" \  
> --header "Accept: audio/wav" \  
> --data "{\"text\":\"welcome to my world\"}" \  
> --output hello_world.wav \  
> "https://api.eu-gb.text-to-speech.watson.cloud.ibm.com/instances/be80930d-8203-4b33-8982-5787d2840f05/v1/synthesize?voice=en-US_MichaelV3Voice"  
% Total % Received % Xferd Average Speed Time Time Time Current  
Dload Upload Total Spent Left Speed  
100 68308 0 68278 100 30 14911 6 0:00:05 0:00:04 0:00:01 17001  
Asus@LAPTOP-446UK8P1 MINGW64 ~  
$
```

Step8: Now search file in system with name given in output in script and play the audio.



Click on open and play the sound file.

