

Speech to Text customization and recognition GUI tool manual

Version 1.0

Reference, prerequisites

- Adding words

- <https://www.ibm.com/watson/developercloud/doc/speech-to-text/custom.shtml#addWords>

- Adding Corpus

- <https://www.ibm.com/watson/developercloud/doc/speech-to-text/custom.shtml#addCorpora>

- API reference

- <https://www.ibm.com/watson/developercloud/speech-to-text/api/v1/>

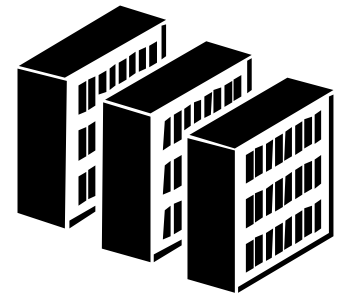
- API Explorer

- <https://watson-api-explorer.mybluemix.net/apis/speech-to-text-v1>

- Watson Developer Tools

- <https://www.ibm.com/watson/developercloud/developer-tools.html>

1. Custom Language Model



1-1. Create new custom language models (CLM)

Fill in the blanks and click buttons in the order shown in right figure.

The screenshot shows the 'Speech To Text Customize ver.8.1' application window. It contains the following elements and numbered steps:

- Endpoint:** A text field containing 'https://stream.watsonplatform.net/speech-to-text/api'.
- Username:** A text field containing a blueed-out username, with a red circle ① next to it.
- Password:** A password field with masked characters.
- Manage custom language models section:**
 - name:** A text field containing 'Test', with a red circle ② next to it.
 - Model:** A dropdown menu showing 'ja-JP_BroadbandModel'.
 - Description:** A text field containing 'This is test.', with a red circle ③ next to it.
 - Create:** A button to create the model.
 - List Models:** A button with a red circle ④ next to it.
 - Delete:** A button with a red circle ⑤ next to it.
 - Delete All:** A button.
- Model List:** A text area displaying the following information:
 - Name: Test , ID: 68a67ab0-65e0-11e7-a2b2-17481cb0c9b8
 - Name: Test , ID: 6dda2190-7b33-11e7-85f6-435b156592c7

1-2. Add and delete Corpora

1. Select your CLM.
2. Select a corpus file.
3. Enter corpus name then add corpus.
4. List up corpora and confirm the status is “ANALYZED” rather “BEING_PROCESSED”.

Format of txt :
Only UTF-8 is available

List Models

Delete

Delete All

Name: Test , ID: 68a67ab0-65e0-11e7-a2b2-17481cb0c9b8

Name: Test , ID: 6dda2190-7b33-11e7-85f6-435b156592c7

Select Model

6dda2190-7b33-11e7-85f6-435b156592c7

Get Status

csv File

Add Words

Get Words

Delete Words

Corpus txt File

Corpus Name

Add Corpus

List Corpora

Delete Corpus

ation/training data/healthcare.txt

HealthCare

HealthCare, BEING_PROCESSED

```
1 |Am I at risk for health problems during travel?
2 |Some people are more likely to have health problems when traveling outside the United States.
3 |How Is Coronary Microvascular Disease Treated?
4 |If you're diagnosed with coronary MVD and also have anemia, you may benefit from treatment for that condition.
```

1-3. Add and delete Words

Select csv file and click buttons in the order shown in right.

```
1 Hz,hertz
2 hrs, hours
3 kg,kilogram,kilograms
4 Pa,pascal,pascals
5 kPa,kilopascal,kilopascals
6 dB,decibel,decibels
7 N,neuton,neutons
```

Format of csv :
Word, SoundsLike
Only UTF-8 is available

The screenshot shows a web application interface for managing models and corpora. The interface is divided into several sections:

- Model Management:** Includes buttons for 'List Models', 'Delete', and 'Delete All'. A text area displays 'Name: A new custom model name , ID: b25569e0-443f-11e7-85f6-435b156592'.
- Model Selection:** A 'Select Model' button is next to a text field containing the ID 'b25569e0-443f-11e7-85f6-435b156592c7'. A 'Get Status' button shows the status 'PENDING'.
- Word Management:** Includes buttons for 'Add Words', 'Get Words', and 'Delete Words'. A text area displays a list of words and their soundslike values: 'T&DI,[T. and D. I.]', 'UIC,[U. I. C]', 'V,[volt, volts]', 'VAC,[V. A. C.]', 'W/m2,[watt per square mete]', 'dB,[decibel, decibels]', 'hrs,[hours]', and 'kN,[kilonewton, kilonewtons]'.
- Corpus Management:** Includes buttons for 'Add Corpus', 'List Corpora', and 'Delete Corpus'. A text area displays 'HealthCare, BEING_PROCESS'.

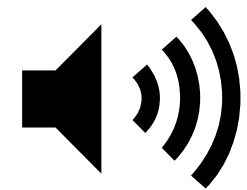
Red circled numbers 1 through 4 indicate the sequence of actions to be performed:

1. Click 'Select Model'
2. Click 'Add Words'
3. Click 'Get Words'
4. Click 'Delete Words'

1-4. Training

Select Model	b25569e0-443f-11e7-85f6-435b156592c7	Get Status	PENDING
csv File	Words_all_Abbr_num_unit.csv	Corpus txt File	ation/training data/healthcare.txt
Add Words	T&DI,[T. and D. I.] UIC,[U. I. C] V,[volt, volts] VAC,[V. A. C.] W/m2,[watt per square mete dB,[decibel, decibels] hrs,[hours] kN,[kilonewton, kilonewtons]	Corpus Name	HealthCare
Get Words		Add Corpus	HealthCare, BEING_PROCESSED
Delete Words		List Corpora	
		Delete Corpus	
① Training		Status	現在 62 個の単語が登録されています。

2. Speech Recognition



2-1. Recognize wav file

Fill in the blanks and click buttons in the order shown in right figure.
(5 and 6 are optional)

STT Recognize ver.4.1 smartformat-en-mic

Endpoint:

① Username: Password:

② Model: ☒ Time Stamp

☐ Use Customization ☐ Output Text File (only wav file) ⑥

③ wav File: Start mic input

④ Upload Stop mic input

[2.6]my greatest strength is that I have a lot of initiative I'm looking for a better way to do things that were

2-2. Recognize mic input

Fill in the blanks and click buttons in the order shown in right figure.
(5 is optional)

STT Recognize ver.4.1 smartformat-en-mic

Endpoint

Username Password

Model

☐ Use Customization

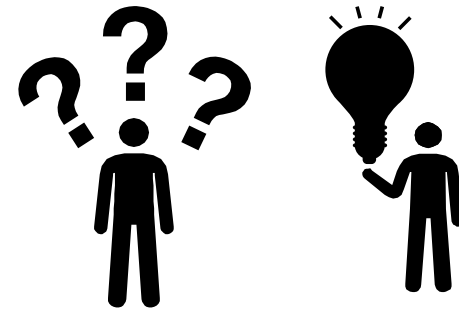
☒ Time Stamp
☐ Output Text File (only wav file)

wav File

Upload

[1.3]Mike chick
[7.27]test

3. Trouble Shooting



3-1. FAQ

- “synchronized error” is shown when adding Words
 - Connection error.
- How can delete a single Word?
 - That function is not supported yet. Delete all the Words and then newly add all Words from csv file.
- Transcription of wave file is interrupted.
 - Issue that should be solved. Please split your wave file using wavFileSplitter_alpha.jar
- Other error
 - Restart the application.