Package 'Rtts'

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Type Package

Title Convert Text into Speech

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Author Xiaodong Deng

Maintainer Xiaodong Deng <xd_deng@hotmail.com>

Description Convert text into speech (voice file in 'mp3' or 'wav' format) with APIs offered by Google Translate and ITRI TTS (Text-To-Speech service, Industrial Technology Research Institute, Taiwan. http://tts.itri.org.tw/). Two main functions are given corresponding these two APIs, tts_google() and tts_ITRI(). For tts_google(), only English is supported. For tts_ITRI(), English and Chinese (both traditional and simplified) are supported, and user can specify the speaker accent, speed and volume. Both functions require internet connection.

URL http://me.seekingqed.com/

License GPL-3

LazyData TRUE

NeedsCompilation no

Repository CRAN

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R topics documented:

`tts_google`	*Convert Text into Speech*

Description

Convert text into speech (voice files in .mp3 format) using the API offered by Google Translate (https://translate.google.com). Only English is supported for this function.

Internet connection is required.

Usage

```
tts_google(content, destfile = paste(getwd(),"r.mp3",sep="/"))
```

Arguments

content   The content to convert into speech. In string format.

destfile   where to save the voice file generated and the voice file name. Default path is the current working path.

Details

Convert text into speech (voice files in .mp3 format) using the API offered by Google Translate. No extra software or platform support is required to use this function.

Note

[1] This function can only help convert restricted-length text (roughly nchar(text)<=100); [2] Try to use only comma and period for separation.

Author(s)

Xiaodong Deng

References

https://translate.google.com

Examples

```
# Used default value for destfile argument,
# so the generated voice file will be saved in the working directory.
tts_google("Hello.")
```

---

tts_ITRI   *Convert Text into Speech Using ITRI TTS service via SOAP*

Description

Using the API offered by ITRI TTS (http://tts.itri.org.tw/), this function helps convert text into speech. After sending the text, corresponding voice file will be downloaded and saved.

English and Chinese (both tradition and simplified) are supported. And users can specify the speaker accent, speed, and volume (default setting is given).

Internet connection is required.

Usage

```
tts_ITRI(content, speed, volume, speaker, destfile)
```

Arguments

content	The text user would like to convert into speech. The content can be English and Chinese (both traditional and simplified).
speed	The speed of the speaker in the voice file generated. The range is -10 to 10, in numerical type. Default value is 0.
volume	The volume of the speaker in the voice file generated. The range is 0 to 100, in numerical type. Default value is 100.
speaker	Select the speaker. The applicable options include: [1] English & Chinese: "Bruce", "Theresa", "Angela", "MCHEN_Bruce", "MCHEN_Joddess"; [2] Only English: "ENG_Bob", "ENG_Alice", "ENG_Tracy". Default value is "Bruce".
destfile	Where to save the generated voice file. It should contain both the path and the full file name. If leave blank, the file will be saved in the working directory by default.

Details

This function sends the text to the ITRI TTS (http://tts.itri.org.tw/) server via SOAP, and download the voice file from it.

Note

Please note that using this function may make the text contents you submitted released unpurposely.

The text contents you submitted and corresponding voice files will be saved on the ITRI TTS server for 24 hours and others can access (as this package uses a default account).

Please give consideration if the text you want to convert is confidential.

Author(s)

Xiaodong Deng

References

http://tts.itri.org.tw/development/web_service_api.php

Examples

```
text <- "Hello."

# Using default setting: speed=0, volume=100, speaker="Bruce".
# Using default value for destfile argument,
# i.e. save the voice file in the working directory.
tts_ITRI(text)
```

---

tts_ITRI_getID	*Get request ID from ITRI TTS service via SOAP*

Description

This functions helps send the text which user would like to convert into speech to the SOAP server and return the assigned ID. The content can be English and Chinese (both traditional and simplified).

Usage

```
tts_ITRI_getID(content, speed, volume, speaker)
```

Arguments

content	The text user would like to convert into speech. The content can be English and Chinese (both traditional and simplified).
speed	The speed of the speaker in the voice file generated. The range is -10 to 10, in numerical type.
volume	The volume of the speaker in the voice file generated. The range is 0 to 100, in numerical type.
speaker	Select the speaker. The applicable options include: [1] English & Chinese: "Bruce", "Theresa", "Angela", "MCHEN_Bruce", "MCHEN_Joddess"; [2] Only English: "ENG_Bob", "ENG_Alice", "ENG_Tracy".

Details

This function sends the content that the user would like to convert into speech to the ITRI TTS server via SOAP. An ID will be returned for further process.

This function will work as a part of function tts_ITRI().

Value

A string which contains the request ID assigned by the ITRI TTS server.

Author(s)

Xiaodong Deng

References

http://tts.itri.org.tw/development/web_service_api.php

Examples

```
text <- "hello."

# Using default setting: speed=0, volume=100, speaker="Bruce".
tts_ITRI_getID(text, speed=0, volume=100, speaker="Bruce")
```

---

tts_ITRI_getStatus	*Check the Text-To-Speech Convertion Progress Status*

Description

This function helps check if the text-to-speech convertion is completed on the ITRI TTS server. Only after the convertion is completed will the tts_ITRI() function proceed and finish the voice file downloading.

Usage

```
tts_ITRI_getStatus(voice_ID)
```

Arguments

voice_ID   The ID obtained from ITRI TTS server via SOAP using tts_ITRI_getID() function.

Value

A string containing the informatin about the text-to-speech convertion progress on ITRI TTS server.

Author(s)

Xiaodong Deng

References

http://tts.itri.org.tw/development/web_service_api.php

Examples

```
text <- "Hello."
ID <- tts_ITRI_getID(text, speed=0, volume=100, speaker="Bruce")
tts_ITRI_getStatus(ID)
```

---

tts_ITRI_getURL   *Get URL of Voice File from ITRI TTS service via SOAP*

Description

This function helps obtain the URL of voice file with the ID obtained using `tts_ITRI_getID()`
function via SOAP.

Usage

```
tts_ITRI_getURL(voice_ID)
```

Arguments

voice_ID   The ID obtained from ITRI TTS server via SOAP using `tts_ITRI_getID()`
                  function.

Value

A string containing the URL with which we can download the converted voice file.

Author(s)

Xiaodong Deng

References

http://tts.itri.org.tw/development/web_service_api.php

Examples

```
text <- "Hello."
ID <- tts_ITRI_getID(text, speed=0, volume=100, speaker="Bruce")
voice_url <- tts_ITRI_getURL(ID)
```

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