Package 'aws.polly'

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Type Package

Title Client for AWS Polly

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Description A client for AWS Polly <http://aws.amazon.com/documentation/polly>, a speech synthesis service.

License GPL (>= 2)

URL https://github.com/cloudyr/aws.polly

BugReports https://github.com/cloudyr/aws.polly/issues

Imports httr, jsonlite, aws.signature (>= 0.3.4), tuneR

Encoding UTF-8

RoxygenNote 7.0.2

NeedsCompilation no

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Description

Client for AWS Polly

Details

This is a client for AWS Polly, a speech synthesis service.

Author(s)

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See Also

AWS Polly Documentation

get_lexicon *Lexicons*

Description

List, put, and delete lexicons

Usage

```
get_lexicon(lexicon, token, ...)

put_lexicon(lexicon, content, ...)

delete_lexicon(lexicon, ...)
```

Arguments

lexicon	A character string specifying the name of a lexicon. If missing, a list of available lexicons is returned.
token	Optionally, a pagination token.
...	Additional arguments passed to pollyHTTP.
content	A character string containing the content of the PLS lexicon.

Details

Note: put_lexicon will overwrite an existing lexicon with the same name.

Value

A list.

Examples

```
## Not run:
list_lexicons()

## End(Not run)
```

`get_synthesis` *Synthesize Speech*

Description

Pass text to the synthesis API and return an audio file

Usage

```
get_synthesis(
  text,
  voice,
  format = c("mp3", "ogg_vorbis", "pcm"),
  rate = c(22050, 16000, 8000),
  lexicon = NULL,
  ssml = FALSE,
  ...
)

synthesize(text, voice, ...)
```

Arguments

`text`	Either a plain text character string (maximum 1500 characters) or a character string containing SSML (`ssml` should be set to `TRUE`).
`voice`	A character string specifying the name of an AWS Polly voice. See `list_voices`.
`format`	A character string specifying an output file format.
`rate`	An integer value specifying the audio frequency in Hertz.
`lexicon`	Optionally, a character vector (max length 5) specifying the names of lexicons to apply during synthesis. See `get_lexicon`.
`ssml`	A logical indicating whether `text` contains SSML markup.
`...`	Additional arguments passed to `pollyHTTP`.

Value

`get_synthesis` returns a raw vector (i.e., the bytes representing the audio as the requested file format). `synthesize` is a convenience wrapper around that, which returns an object of class "Wave" (see `Wave`).

Examples

```
## Not run:
hello <- synthesize("hello world!", voice = "Geraint")
if (interactive() & require("tuneR")) {
    try(play(hello))
}

## End(Not run)
```

`list_voices` *List available voices*

Description

Retrieve a list of available voices

Usage

```
list_voices(language = "en-US", token, ...)
```

Arguments

`language`	An ISO 3166 country identification tag.
`token`	Optionally, a pagination token.
`...`	Additional arguments passed to `pollyHTTP`.

Value

A data frame of available names.

Examples

```
## Not run:
list_voices(language = "cy-GB")

## End(Not run)
```

pollyHTTP *Execute AWS Polly API Request*

Description

This is the workhorse function to execute calls to the Polly API.

Usage

```
pollyHTTP(
  action,
  query = list(),
  headers = list(),
  body = NULL,
  verb = c("GET", "POST", "PUT", "DELETE"),
  version = "v1",
  raw_response = if (verb == "POST") TRUE else FALSE,
  verbose = getOption("verbose", FALSE),
  region = Sys.getenv("AWS_DEFAULT_REGION", "us-east-1"),
  key = NULL,
  secret = NULL,
  session_token = NULL,
  ...
)
```

Arguments

action	A character string specifying the API action to take
query	An optional named list containing query string parameters and their character values.
headers	A list of headers to pass to the HTTP request.
body	A request body
verb	A character string specifying the HTTP verb to implement.
version	A character string specifying the API version.
raw_response	A logical indicating whether to return the raw response body.
verbose	A logical indicating whether to be verbose. Default is given by `options("verbose")`.
region	A character string specifying an AWS region. See locate_credentials.
key	A character string specifying an AWS Access Key. See locate_credentials.
secret	A character string specifying an AWS Secret Key. See locate_credentials.
session_token	Optionally, a character string specifying an AWS temporary Session Token to use in signing a request. See locate_credentials.
...	Additional arguments passed to GET.

Details

This function constructs and signs an Polly API request and returns the results thereof, or relevant debugging information in the case of error.

Value

If successful, a named list. Otherwise, a data structure of class "aws-error" containing any error message(s) from AWS and information about the request attempt.

Author(s)

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