Package ‘ipa’

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Title Convert Between Phonetic Alphabets

Version 0.1.0

Description Converts character vectors between phonetic representations. Supports IPA (International Phonetic Alphabet), X-SAMPA (Extended Speech Assessment Methods Phonetic Alphabet), and ARPABET (used by the CMU Pronouncing Dictionary).

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URL https://github.com/rossellhayes/ipa

BugReports https://github.com/rossellhayes/ipa/issues

Depends R (>= 2.10)

Imports stringi

Suggests covr, testthat

Encoding UTF-8

LazyData true

RoxygenNote 7.1.0

NeedsCompilation no

Author Alexander Rossell Hayes [aut, cre, cph]

Maintainer Alexander Rossell Hayes <alexander@rossellhayes.com>

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arpa

Convert phonetic representation from ARPABET (CMU)

Description
Converts to IPA or X-SAMPA

Usage
arpa(x, to = c("ipa", "xsampa"))
arpabet(x, to = c("ipa", "xsampa"))
cmu(x, to = c("ipa", "xsampa"))

Arguments
x A phonetic character vector in ARPABET
to The phonetic alphabet to convert to. Defaults to "ipa". "sampa" is an accepted alias for "xsampa".

Value
A character vector the same length as x

See Also
convert_phonetics() to convert between any phonetic representations
ipa() to convert from IPA
sampa() and xsampa() to convert from X-SAMPA

Examples
arpa("HH EH L OW")
arpa(c("HH EH L OW", "W ER L D"))
arpa("HH EH L OW", "xsampa")
arpa(c("HH EH L OW", "W ER L D"), "xsampa")
**convert_phonetics**  
*Convert between phonetic representations*

**Description**

Converts between IPA, X-SAMPA and ARPABET (used by the CMU Pronouncing Dictionary)

**Usage**

```r
convert_phonetics(
  x,
  from = c("ipa", "xsampa", "arpabet"),
  to = c("ipa", "xsampa", "arpabet")
)
```

**Arguments**

- `x`: A phonetic character vector in IPA, X-SAMPA, or ARPABET
- `from`: The phonetic alphabet to convert from
- `to`: The phonetic alphabet to convert to. "sampa" is an accepted alias for "xsampa". "arpa" and "cmu" are accepted aliases for "arpabet".

**Value**

A character vector the same length as `x`

**See Also**

- `ipa()` to convert from IPA
- `sampa()` and `xsampa()` to convert from X-SAMPA
- `arpa()`, `arpabet()` and `cmu()` to convert from ARPABET (CMU)

**Examples**

```r
convert_phonetics('%hE"loU', from = "xsampa", to = "ipa")
convert_phonetics(c('%hE"loU', "w3'l'd"), from = "xsampa", to = "ipa")
convert_phonetics('%hE"loU', from = "xsampa", to = "arpabet")
convert_phonetics(c('%hE"loU', "w3'l'd"), from = "xsampa", to = "arpabet")

convert_phonetics('HH EH L OW', from = "arpabet", to = "ipa")
convert_phonetics(c('HH EH L OW', "W ER L D"), from = "arpabet", to = "ipa")
convert_phonetics('HH EH L OW', from = "arpabet", to = "xsampa")
convert_phonetics(c('HH EH L OW', "W ER L D"), from = "arpabet", to = "xsampa")
```

# `convert_phonetics()` supports raw Unicode input or escaped Unicode sequences
# (\uxxxx), but raw Unicode is not supported in R package documentation,
# hence the ugly examples
ipa

Convert phonetic representation from IPA

Description

Converts to X-SAMPA or ARPABET (used by the CMU Pronouncing Dictionary)

Usage

ipa(x, to = c("xsampa", "arpabet"))

Arguments

x
A phonetic character vector in IPA

to
The phonetic alphabet to convert to. Defaults to "xsampa". "sampa" is an accepted alias for "xsampa". "arpa" and "cmu" are accepted aliases for "arpabet".

Value

A character vector the same length as x

See Also

convert_phonetics() to convert between any phonetic representations
sampa() and xsampa() to convert from X-SAMPA
arpa(), arpabet() and cmu() to convert from ARPABET (CMU)

Examples

# `ipa()` supports raw Unicode input or escaped Unicode sequences (\uxxxx),
# but raw Unicode is not supported in R package documentation,
# hence the ugly examples
ipa("\\u02cch\\u025b\\'lo\\u028a")
ipa(c("\\u02cch\\u025b\\'lo\\u028a", "w\\u025dld"), from = "ipa", to = "xsampa")

ipa("\\u02cch\\u025b\\'lo\\u028a", to = "arpabet")
ipa(c("\\u02cch\\u025b\\'lo\\u028a", "w\\u025dld"), to = "arpabet")
sampa

Convert phonetic representation from X-SAMPA

Description

Converts to IPA or ARPABET (used by the CMU Pronouncing Dictionary)

Usage

sampa(x, to = c("ipa", "arpabet"))
xsampa(x, to = c("ipa", "arpabet"))

Arguments

x
A phonetic character vector in X-SAMPA

to
The phonetic alphabet to convert to. Defaults to "ipa". "arpa" and "cmu" are accepted aliases for "arpabet".

Value

A character vector the same length as x

See Also

convert_phonetics() to convert between any phonetic representations
ipa() to convert from IPA
arpa(), arpabet() and cmu() to convert from ARPABET (CMU)

Examples

sampa(’%hE”loU’)
sampa(c(’%hE”loU’, ”w3’1d”))

sampa(’%hE”loU’, ”arpabet”)
sampa(c(’%hE”loU’, ”w3’1d”), ”arpabet”)
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