Package ‘icesVocab’

January 15, 2021

Title ICES Vocabularies Database Web Services
Date 2021-01-14
Version 1.1.9
Imports utils, xml2
Description R interface to access the RECO POX web services of the ICES (International Council for the Exploration of the Sea) Vocabularies database <https://vocab.ices.dk/services/POX.aspx>.
License GPL-3
URL https://vocab.ices.dk/services/POX.aspx
RoxygenNote 7.1.1
Encoding UTF-8
BugReports https://github.com/ices-tools-prod/icesVocab/issues
Suggests testthat
NeedsCompilation no
Author Colin Millar [aut, cre], Arni Magnusson [aut]
Maintainer Colin Millar <colin.millar@ices.dk>
Repository CRAN
Date/Publication 2021-01-15 00:00:02 UTC

R topics documented:

- icesVocab-package ................................................. 2
- findAphia .......................................................... 2
- findCode .......................................................... 3
- findCodeType ..................................................... 4
- getCodeDetail .................................................... 5
- getCodeList ...................................................... 6
- getCodeTypeList .................................................. 7

Index 8
icesVocab-package  Vocabularies Database Web Services

Description

R interface to access the web services of the ICES Vocabularies database of reference codes.

Details

Get full tables:

- `getCodeTypeList`  all code types
- `getCodeList`  codes of a given type
- `getCodeDetail`  details for a given code

Look up specific codes:

- `findAphia`  species code

Author(s)

Colin Millar and Arni Magnusson.

References

ICES Vocabularies database: http://vocab.ices.dk.
ICES Vocabularies web services: http://vocab.ices.dk/services/POX.aspx.

findAphia  Find Aphia Code

Description

Look up Aphia code for a given species.

Usage

`findAphia(species, latin = FALSE, regex = FALSE, full = FALSE)`

Arguments

- `species`  the species name, either in English (default) or Latin.
- `latin`  whether the species name is in Latin.
- `regex`  whether to match the species name as a regular expression.
- `full`  whether to return a data frame with all species columns.
**findCode**

**Details**
Species name matches are case-insensitive.

**Value**
A vector of Aphia codes (default) or a data frame if full is TRUE.

**Author(s)**
Arni Magnusson.

**See Also**
`getCodeList` can be used to get all Aphia codes; see example on that help page.
`icesVocab-package` gives an overview of the package.

**Examples**

```r
findAphia("cod")
findAphia("Gadus morhua", latin = TRUE)

# Multiple matches
findAphia(c("cod", "haddock", "saithe"))

# Regular expressions
findAphia("ray", regex = TRUE, full = TRUE)
findAphia("Sebastes", latin = TRUE, regex = TRUE, full = TRUE)
```

---

**findCode**

*Find a Key*

**Description**
Look up a key for a given code and code type.

**Usage**

```r
findCode(code_type, code, regex = TRUE, full = FALSE)
```

**Arguments**

- `code_type` a search string for a code type, e.g. SpecWorms, or simply worms.
- `code` a search string for a code, e.g. a species name, cod, or ship name, Clupea.
- `regex` whether to match as a regular expression.
- `full` whether to return a data frame.
findCodeType

Details

Matches are case-insensitive.

Value

A vector of keys (default) or a data frame if full is TRUE.

See Also

getCodeList can be used to get all code types; see example on that help page.
icesVocab-package gives an overview of the package.

Examples

## Not run:
findCode("aphia", "cod")

# Multiple matches
findCode("aphia", c("cod", "haddock", "saithe"), full = TRUE)

findCodeType("ship", full = TRUE)
findCode("ship", "clupea", full = TRUE)

## End(Not run)

findCodeType

Find a Key

Description

Find a lookup key corresponding to a code type.

Usage

findCodeType(code, date = NULL, regex = TRUE, full = FALSE)

Arguments

code a code name, e.g. Gear Type, or DATRAS to find all DATRAS related codes.
date restrict output to code types modified after a given date in yyyy-mm-dd format, e.g. "2010-12-01"
regex whether to match the stock name as a regular expression.
full whether to return a data frame with all stock list columns.

Value

A vector of keys (default) or a data frame if full is TRUE.


**getDescription**

**See Also**

- `getCodeTypeList` gets a list of code types.
- `icesVocab-package` gives an overview of the package.

**Examples**

```r
findCodeType("worms")
findCodeType("DATRAS", full = TRUE)
findCodeType("DATRAS", full = TRUE, date = "2010-01-01")
```

---

**getDescription**  
Get Details

**Description**

Get details for a given code.

**Usage**

```r
generateDetails(code_type, code)
```

**Arguments**

- `code_type`  
  the code type, e.g. SpecWoRMS.
- `code`  
  the code, e.g. 101170.

**Value**

A data frame.

**See Also**

- `getCodeTypeList` and `getCodeList` get code types and codes of a given type.
- `icesVocab-package` gives an overview of the package.

**Examples**

```r
# Species code 101170 - Myxine glutinosa
generateDetails("SpecWoRMS", 101170)

# find details of Haddock using the aphia ID
generateDetails("species", "haddock", full = TRUE)
```
getCodeList

Get Codes

Description
Get codes of a given code type.

Usage
getCodeList(code_type, date = NULL)

Arguments
- code_type: the code type, e.g. SpecWoRMS.
- date: restrict output to codes modified after a given date in yyyy-mm-dd format, e.g. "2010-12-01".

Value
A data frame.

See Also
getCodeTypeList and getCodeDetail get code types and code details.
findCodeType and findAphia provide support for searching the code type and code lists.
icesVocab-package gives an overview of the package.

Examples

# Aphia Species codes
findCodeType("aphia", full = TRUE)
codes <- getCodeList("SpecWoRMS")
head(codes)

findAphia("cod", full = TRUE)
**getDescription**

Get all code types. Mainly useful as a reminder of what code types are available.

**Usage**

generateDescription(date = NULL)

**Arguments**

date restrict output to code types modified after a given date in yyyy-mm-dd format, e.g. "2010-12-01"

**Value**

A data frame.

**See Also**

generateDescription and generateDetail get codes of a given type and code details.
findCodeType searches for a code types based on a search string.
icesVocab-package gives an overview of the package.

**Examples**

# Find code type for World Register of Marine Species (WoRMS)
types <- generateDescription()
types[grep("worms", tolower(types$Description)),]

findCodeType("worms", full = TRUE)

# The code type "SpecWoRMS" can be used when calling generateDescription()
Index

findAphia, 2, 2, 6
findCode, 3
findCodeType, 4, 6, 7

getCodeDetail, 2, 5, 6, 7
getCodeList, 2–5, 6, 7
getCodeTypeList, 2, 5, 6, 7

icesVocab (icesVocab-package), 2
icesVocab-package, 2