

Package ‘icesTAF’

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Version 4.3.0

Title Functions to Support the ICES Transparent Assessment Framework

Depends TAF (>= 4.3.0)

Imports icesVocab (>= 1.3.1), icesDatsu (>= 1.2.1), icesSAG (>= 1.6.2), jsonlite, rlang, icesConnect, httr

Description Functions to support the ICES Transparent Assessment Framework <<https://taf.ices.dk>> to organize data, methods, and results used in ICES assessments. ICES is an organization facilitating international collaboration in marine science.

License GPL-3

URL <https://taf.ices.dk>, <https://github.com/ices-tools-prod/icesTAF>

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icesTAF-package	<i>Functions to Support the ICES Transparent Assessment Framework</i>
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Description

Functions to support the ICES Transparent Assessment Framework, to organize data, methods, and results used in ICES assessments.

Author(s)

Colin Millar and Arni Magnusson.

References

ICES Transparent Assessment Framework: <https://taf.ices.dk>.
To explore example TAF stock assessments, see the introductory [video](#) and [tutorial](#).
The [TAF Wiki](#) provides additional help resources.

See Also

- Useful links:
- <https://taf.ices.dk>
 - <https://github.com/ices-tools-prod/icesTAF>

artifact	<i>Make an Artifact File Entry</i>
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Description

Form and validate an artifact as an export from a TAF repository.

Usage

```
artifact(path, type = c("adhoc", "FLStock", "SAG"), ..., check = TRUE,
  quiet = FALSE)
```

Arguments

- | | |
|-------|---|
| path | The relative path to a file to be added, e.g. "data/indices.csv". |
| type | the type of output, e.g. FLStock, SAG_upload |
| ... | a list of metadata to be attributed to the entry. |
| check | logical, should the artifact be checked for validity? |
| quiet | logical, should the function be quiet? |

See Also

[check.artifact](#) [write.artifacts](#)

Examples

```
sag_file <- system.file("SAG", "sol_27_4.xml", package = "icesTAF")
sag <- artifact(sag_file, type = "SAG", check = FALSE)
sag

## Not run:
# to check the artifact, use:
sag <- artifact(tmpfile, type = "SAG")
# or
check.artifact(sag)

## End(Not run)
```

check.artifact	<i>Check an Artifact File Entry</i>
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Description

Validate an artifact as an export from a TAF repository.

Usage

```
check.artifact(artifact, check.metadata = TRUE, check.type = TRUE,
  quiet = FALSE)
```

Arguments

artifact	an artifact object made using <code>artifact</code> .
check.metadata	logical, should the metadata be checked against the ICES Vocabulary database?
check.type	logical, should type specific artifact checks be run?
quiet	logical, should the function be quiet?

Examples

```
## Not run:
sag_file <- system.file("SAG", "sol_27_4.xml", package = "icesTAF")
sag <- artifact(sag_file, type = "SAG", check = FALSE)
check.artifact(sag)

## End(Not run)
```

get.artifacts	<i>Get a List of TAF Artifacts</i>
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Description

Get a list of TAF artifacts and their metadata, i.e., all the FLStocks, SAG upload files, RCEF files, and other files uploaded to TAF.

Usage

```
get.artifacts(year = NULL, stock = NULL, ...)
```

Arguments

year	the assessment year, e.g. 2015, default all years.
stock	a stock name, e.g. lin.27.5a, default all stocks.
...	arguments passed to taf_get .

Value

A data frame.

Author(s)

Colin Millar.

See Also

[icesTAF-package](#) gives an overview of the package.

Examples

```
## Not run:  
artifacts <- get.artifacts(2023)  
nshad_artifacts <- get.artifacts(stock = "had.27.46a20")  
  
## End(Not run)
```

read.artifacts	<i>Read an Artifact File</i>
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Description

Read and validate an artifact file.

Usage

```
read.artifacts(file = "ARTIFACTS.json", check = TRUE)
```

Arguments

file	the name of the artifacts file to read
check	logical, should the artifact be checked for validity?

taf.skeleton.sa.org	<i>TAF Skeleton</i>
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Description

Create initial directories and R scripts for a new TAF analysis using a stock assessment created on stockassessment.org.

Usage

```
taf.skeleton.sa.org(path = ".", stockname, force = FALSE)
```

Arguments

path	where to create initial directories and R scripts. The default is the current working directory.
stockname	The short-form name of a stock on stockassessment.org.
force	whether to overwrite existing scripts.

Value

Full path to analysis directory.

See Also

[taf.skeleton](#) creates an empty generic TAF skeleton.
[icesTAF-package](#) gives an overview of the package.

Examples

```
## Not run:
taf.skeleton.sa.org(stockname = "WBCod_2021_cand01")

## End(Not run)
```

taf_api	<i>Build a SAG web service url</i>
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Description

utility to build a url with optional query arguments

Usage

```
taf_api(service, ...)
```

Arguments

- service the name of the service
- ... name arguments will be added as queries

Value

a complete url as a character string

Examples

```
taf_api("hi", bye = 21)
taf_api("FLStocks")
```

taf_get	<i>Get a url</i>
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Description

Get a url, optionally using an ICES authentication token

Usage

```
taf_get(url, retry = TRUE, quiet = getOption("icesTAF.messages") %||%
FALSE, verbose = FALSE, content = TRUE,
use_token = getOption("icesTAF.use_token") %||% FALSE)

taf_get_cached(url, retry = TRUE, quiet = getOption("icesTAF.messages")
%||% FALSE, verbose = FALSE, content = TRUE,
use_token = getOption("icesTAF.use_token") %||% FALSE)
```

Arguments

url	the url to get.
retry	should the get request be retried if first attempt fails? default TRUE.
quiet	should all messages be suppressed, default FALSE.
verbose	should verbose output from the http request be returned? default FALSE.
content	should content be returned, or the full http response? default TRUE, i.e. content is returned by default.
use_token	should an authentication token be sent with the request? default is the value of the option icesSAG.use_token.

Value

content or an http response.

Functions

- `taf_get_cached()`: cached version of `taf_get`

See Also

[taf_api](#) builds a SAG web service url.
[icesTAF-package](#) gives an overview of the package.

Examples

```
## Not run:
taf_get(taf_api("FLStocks"))

## End(Not run)
```

taf_post	<i>Post to a url</i>
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Description

Post to a url using an ICES authentication token

Usage

```
taf_post(url, body = list(), verbose = FALSE)
```

Arguments

- url the url to post.
- body a list of named arguments to be sent as the body of the post request.
- verbose should verbose output from the http request be returned? default FALSE.

Value

content of the http response.

See Also

- [taf_api](#) builds a TAF web service url.
- [icesTAF-package](#) gives an overview of the package.

write.artifacts	<i>Write an Artifact File</i>
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Description

Validate and write an artifact file.

Usage

```
write.artifacts(..., append = TRUE, check = TRUE)
```

Arguments

- ... a list of artifact objects made using artifact.
- append logical, should the new artifacts be appended to the existing file?
- check logical, should the artifact be checked for validity?

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