Package: nettskjema.tsd (via r-universe)

September 7, 2024

Type Package

Title Decrypt and Organise Nettskjema Data Within TSD

Version 0.0.1

Description Working with Nettskjema (<https://nettskjema.no/>) data
inside TSD can be challenging. This package aims to aid users
in managing their incoming Nettskjema data by decrypting the
data and storing the nettskjema data and meta-data in
convenient and standardised ways. This package functionality
currently only works on the Linux VMs of TSD, and for version 1
of the nettskjema data delivery to TSD.

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Encoding UTF-8

Depends R (>= 3.0.0)

Imports jsonlite, pbapply, utils

Suggests rmarkdown, knitr, remotes, devtools, testthat (>= 3.0.0),
spelling

RoxygenNote 7.2.0

VignetteBuilder knitr

Language en-US

URL <https://github.com/LCBC-UiO/nettskjema.tsd>,
<https://lcbc-uio.github.io/nettskjema.tsd/>

BugReports <https://github.com/LCBC-UiO/nettskjema.tsd/issues>

Roxygen list(markdown = TRUE)

Config/testthat/edition 3

Repository https://lcbc-uio.r-universe.dev

RemoteUrl https://github.com/LCBC-UiO/nettskjema.tsd

RemoteRef HEAD

RemoteSha 6cc227eb549006ef83c0db3d7f9c424bf6481ecf

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nettskjema_tsd_apply_edits

Apply edits to nettskjema data

Description

Nettskjema data can at times contain errors that require manual editing. Editing raw files directly is not recommended practice, as logging these changes often is not maintained over time. Applying edits to nettskjema data through a more transparent manner means keeping raw data in its original state, while also keeping track of the changes needed. This function needs a json formatted file to apply edits to either raw csv or json data from nettskjema. TODO: make vignette with instructions on edit.json TODO: make functions to initiate/add edits

Usage

```
nettskjema_tsd_apply_edits(
  input_file,
  edits_file,
  output_file = NULL,
  verbose = NULL
)
```

Arguments

input_file	string. file path to the raw nettskjema file, that contains all answers for a form, you want to apply edits to.
edits_file	string. file path to the json with the edits that should be applied
output_file	character. Path to output file.
verbose	logical. Should the function output status messages. Default is TRUE.

Value

data.frame with edited nettskjema data

---

nettskjema_tsd_apply_edits_all

Apply edits to all nettskjema data

Description

Apply edits to all nettskjema data

Usage

```
nettskjema_tsd_apply_edits_all(
  input_dir = NULL,
  pattern = NULL,
  suffix = "-ed",
  project = NULL,
  output_dir = NULL
)
```

Arguments

input_dir	directory path where the input files are
pattern	regex pattern to match files with
suffix	character. String to be added at the end of files with edits applied.
project	current TSD project. Will automatically auto-detect project.
output_dir	character. Path to output directory.

Value

data frame with edits applied

---

nettskjema_tsd_csv2data

Combine csv's from Nettskjema (on TSD)

Description

The submissions received on TSD arrive as both csv and jsons. Combining all these files produce the entire data from a form. This function combines all the csv within TSD to create a unified data.frame. If `output_file` is provided, will also write the the data for a file.

Usage

```
nettskjema_tsd_csv2data(input_dir, output_file = NULL)
```

Arguments

`input_dir`	character. Path to input directory.
`output_file`	character. Path to output file.

Value

data.frame with all data

Examples

```
## Not run:
nettskjema_tsd_csv2data("/durable/nettskjema-submissions/cleaned/80902")

nettskjema_tsd_csv2data("/durable/nettskjema-submissions/cleaned/80902",
    output_file = "/durable/nettskjema-submissions/cleaned/80902/data.csv")

## End(Not run)
```

---

nettskjema_tsd_decrypt_all_forms
Decrypt all Nettskjema forms

Description

Given that all forms are placed in the same basic folder structures (as they are delivered to TSD), this function will detect all forms in the path provided and decrypt all the forms available.

Usage

```
nettskjema_tsd_decrypt_all_forms(
  path = NULL,
  project = NULL,
  output_dir = NULL,
  rerun_all = FALSE,
  verbose = NULL,
  ...
)
```

Arguments

path	path to the folder containing all the forms
project	current TSD project. Will automatically auto-detect project.
output_dir	character. Path to output directory.
rerun_all	logical. Should the process be run on all files, even those previously run. Default is FALSE.
verbose	logical. Should the function output status messages. Default is TRUE.
...	other arguments to [mapply](#)

Value

success list

---

nettskjema_tsd_decrypt_file

Decrypt nettskjema file

Description

Decrypt nettskjema file

Usage

```
nettskjema_tsd_decrypt_file(
  path,
  output_path = gsub("\\.asc", "", path),
  pretty = TRUE
)
```

Arguments

path	path to file to decrypt
output_path	path to output decrypted file to. NULL will return file content to R.
pretty	logical. Should the submission json's be prettified. Default is TRUE.

Value

raw decrypted file content as text

---

nettskjema_tsd_decrypt_form
Decrypt all files associated with a form

Description

Decrypt all files associated with a form

Usage

```
nettskjema_tsd_decrypt_form(
  path,
  rerun_all = FALSE,
  output_dir = NULL,
  verbose = NULL,
  ...
)
```

Arguments

path	path to the folder with encrypted data
rerun_all	logical. Should the process be run on all files, even those previously run. Default is FALSE.
output_dir	character. Path to output directory.
verbose	logical. Should the function output status messages. Default is TRUE.
...	other arguments to [nettskjema_tsd_decrypt_file](#)

Value

nothing. Writes decrypted files to a folder.

---

nettskjema_tsd_import_key
Import GPG key

Description

As a security measure, all submissions to Nettskjema data in to TSD are encrypted. These encrypted files need to be decrypted before they can be sorted and prepared for use in R (or other programs). To decrypt the data, R needs to have access to the secret key that will verify that the decryption is ok to carry out. This function will import the necessary key for the decryption to take place. If the key-file for the decryption is not automatically detected, contact IT to learn where your key has been stored. Any R-script you will run can then specify the location of the key-file either directly in the call to this function, or as an R-environment variable 'nettskjema.tsd.keyfile=/full/path/to/keyfile'.

Usage

```
nettskjema_tsd_import_key(path = NULL, verbose = NULL)
```

Arguments

path	full path to the key-file.
verbose	logical. Should the function output status messages. Default is TRUE.

Value

Nothing. Imports the key to the session

Examples

```
## Not run:
nettskjema_tsd_import_key()
nettskjema_tsd_import_key(verbose = FALSE)
nettskjema_tsd_import_key(path = "/my/keyfile/path/secret.asc")

## End(Not run)
```

---

nettskjema_tsd_json2data

Combine csv's from Nettskjema (on TSD)

Description

The submissions received on TSD arrive as both csv and jsons. Combining all these files produce the entire data from a form. This function combines all the jsons within TSD to create a unified data.frame. If `output_file` is provided, will also write the the data for a file.

Usage

```
nettskjema_tsd_json2data(input_dir, output_file = NULL)
```

Arguments

input_dir	character. Path to input directory.
output_file	character. Path to output file.

Value

data.frame with all data

Examples

```
## Not run:
nettskjema_tsd_json2data("/durable/nettskjema-submissions/cleaned/80902")

nettskjema_tsd_json2data("/durable/nettskjema-submissions/cleaned/80902",
    output_file = "/durable/nettskjema-submissions/cleaned/80902/data.csv")

## End(Not run)
```

---

nettskjema_tsd_keyfile

Nettskjema TSD keyfile location

Description

As a security measure, all submissions to Nettskjema data in to TSD are encrypted. These encrypted
files need to be decrypted before they can be sorted and prepared for use in R (or other programs).
To decrypt the data, R needs to have access to the secret key that will verify that the decryption is
ok to carry out. This function can verify the existence of a key-file given a specified location, or
attempt to auto-detect a key-file.

Usage

```
nettskjema_tsd_keyfile(
  path = Sys.getenv("nettskjema.tsd.keyfile"),
  project = NULL,
  verbose = NULL
)
```

Arguments

path	full path to the key-file
project	current TSD project. Will automatically auto-detect project.
verbose	logical. Should the function output status messages. Default is TRUE.

Value

character with the full verified path

Examples

```
## Not run:
nettskjema_tsd_keyfile()
nettskjema_tsd_keyfile(path = "/my/keyfile/path/secret.asc")

## End(Not run)
```

nettskjema_tsd_organise_all_forms
Decrypt all forms associated with a project

Description

Decrypt all forms associated with a project

Usage

```
nettskjema_tsd_organise_all_forms(rerun_all = FALSE, ...)
```

Arguments

rerun_all	logical. Should the process be run on all files, even those previously run. Default is FALSE.
...	arguments to pass to nettskjema_tsd_organise_form

Value

nothing. Writes decrypted files to a folder.

nettskjema_tsd_organise_form
Decrypt all files associated with a form

Description

Decrypt all files associated with a form

Usage

```
nettskjema_tsd_organise_form(
  formid,
  project = NULL,
  output_dir = NULL,
  rerun_all = FALSE,
  verbose = NULL,
  pretty = TRUE
)
```

Arguments

`formid`	integer or character. Form number to process
`project`	current TSD project. Will automatically auto-detect project.
`output_dir`	directory to output data
`rerun_all`	logical. Should the process be run on all files, even those previously run. Default is FALSE.
`verbose`	logical. Should the function output status messages. Default is TRUE.
`pretty`	logical. Should the submission json's be prettified. Default is TRUE.

Value

logical. If new entries were decrypted or not.

`nettskjema_tsd_submission_path`

Find the path for encrypted Nettskjema data

Description

Find the path for encrypted Nettskjema data

Usage

```
nettskjema_tsd_submission_path(project = NULL)
```

Arguments

`project`	current TSD project. Will automatically auto-detect project.

Value

single character path

read_nettskjema_tsd	*Read nettskjema data*

Description

Utility function to read in nettskjema data. forced all columns to character to not loose leading zero.

Usage

```
read_nettskjema_tsd(path)
```

Arguments

path   string path to a nettskjema file

Value

a dataframe with nettskjema data

Examples

```
## Not run:
read_nettskjema_tsd("/tsd/pxx/nettskjema/form.csv")

## End(Not run)
```

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