

# Package ‘klassR’

June 8, 2022

**Type** Package

**Title** Classifications and Codelists for Statistics Norway

**Version** 0.1.11

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**Description** Functions to search, retrieve and apply classifications and codelists using Statistics Norway's API <<https://www.ssb.no/klass>> from the system 'KLASS'. Retrieves classifications by date with options to choose language, hierarchical level and formatting.

**Imports** tm, httr, jsonlite

**BugReports** <https://github.com/statisticsnorway/klassR/issues>

**License** Apache License 2.0

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.2.0

**Suggests** testthat (>= 3.0.0),

**Config/testthat/edition** 3

**NeedsCompilation** no

**Repository** CRAN

**Date/Publication** 2022-06-08 09:00:02 UTC

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ApplyKlass	<i>Match and convert a classification</i>
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## Description

Match and convert a classification

## Usage

```
ApplyKlass(
  x,
  klass,
  date = NULL,
  variant = NULL,
  correspond = NULL,
  language = "nb",
  output_level = NULL,
  output = "name",
  format = TRUE
)
```

## Arguments

x	Input vector
klass	Classification number
date	Date for classification (format = "YYYY-mm-dd"). Default is current date
variant	The classification variant to fetch (if a variant is wanted).
correspond	ID number for target in correspondence table. For correspondence between two dates within the same classification, use correspond = TRUE.
language	Default "nb" for Norwegian (Bokmål). Also "nn" (Nynorsk) and "en" (English available for some classifications)
output_level	Desired output level
output	String describing output. May be "name" (default), "code" or "both".
format	Logical for whther to run formatting av input vector x (Default = TRUE), important to check if formatting is in one level.

## Value

A vector or data frame is returned with names and/or code of the desired output level.

**Examples**

```
data(klassdata)
kommune_names <- ApplyKlass(x = klassdata$kommune, klass = 131, language = "en", format=FALSE)
```

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CorrespondList	<i>Correspondence list Print a list of correspondence tables for a given class with source and target IDs</i>
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**Description**

Correspondence list Print a list of correspondence tables for a given klass with source and target IDs

**Usage**

```
CorrespondList(klass, date = NULL)
```

**Arguments**

klass	Classification number
date	Date for classification (format = "YYYY-mm-dd"). Default is current date

**Value**

Data frame with list of correspondence tables, source ID and target ID.

**Examples**

```
CorrespondList("7")
```

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GetFamily	<i>Identify corresponding family from a classification number</i>
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**Description**

Identify corresponding family from a classification number

**Usage**

```
GetFamily(klass)
```

**Arguments**

klass	Classification number
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**Value**

Family number

**Examples**

```
GetFamily(klass = 7)
```

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GetKlass	<i>Fetch classification data Fetch Statistics Norway classification data using API</i>
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**Description**

Fetch classification data Fetch Statistics Norway classification data using API

**Usage**

```
GetKlass(
  klass,
  date = NULL,
  correspond = NULL,
  variant = NULL,
  output_level = NULL,
  language = "nb",
  output_style = "normal"
)
```

**Arguments**

klass	Number/string of the classification ID/number. (use <code>Klass_list()</code> to find this)
date	String for the required date of the classification. Format must be "yyyy-mm-dd". For an interval, provide two dates as a vector. If blank, will default to today's date.
correspond	Number/string of the target correspondence (if a correspondence table is requested).
variant	The classification variant to fetch (if a variant is wanted).
output_level	Number/string specifying the requested hierarchy level (optional).
language	Two letter string for the requested language output. Default is Bokmål ("nb"). Nynorsk ("nn") and English ("en") also available for some classification.)
output_style	String variable for the output type. Default is "normal". Specify "wide" for a wide formatted table output.

**Value**

The function returns a data frame of the specified classification/correspondence table. Output variables include: code, parentCode, level, and name for standard lists. For correspondence tables variables include: sourceCode, sourceName, targetCode and targetName. For time correspondence tables variables include: oldCode, oldName, newCode and newName. For "wide" output, code and name with level suffixes is specified.

**Examples**

```
# Get classification for occupation classifications
head(GetKlass(klass = "7"))
# Get classification for occupation classifications in English
head(GetKlass(klass = "7", language = "en"))
```

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GetName	<i>Get the name of a classification version</i>
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**Description**

Get the name of a classification version

**Usage**

```
GetName(version)
```

**Arguments**

version	Version number
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**Value**

string or vector of strings with name of version

**Examples**

```
GetName("33")
```

GetVersion *Get version number of a class given a date*

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**Description**

Get version number of a class given a date

**Usage**

```
GetVersion(klass = NULL, date = NULL, family = NULL, klassNr = FALSE)
```

**Arguments**

klass	Classification number
date	Date for version to be valid
family	Family ID number if a list of version number for all classes is desired
klassNr	True/False for whether to output classification numbers. Default = FALSE

**Value**

Number, vector or data frame with version numbers and classification numbers if specified.

**Examples**

```
GetVersion(7)
```

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klassdata *Testdata for klassR package*

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**Description**

A dataset containing variables for testing of Statistics Norways classification API with the klassR package. Some observations are missing or incorrect for testing and demonstrations.

**Usage**

```
klassdata
```

**Format**

A data frame containing 100 rows and 7 variables:

**ID** Identification number

**sex** 1/2 variable for sex

**education** 4-digit number for education standard ISCED97 (level and subject area) NUS (klass = 66) 2015.01.01

**kommune** 4-digit code for Norwegian municipality (klass = 131). Based on 2015.01.01

**kommune2** Numeric variable for Norwegian municipality with dropped leading zero's for testing (klass = 131). Based on 2015.01.01

**nace5** 5-digit code for industry (NACE). Based on 01.01.2015 standard industry codes (klass = 7)

**occupation** 4-digit occupation codes using standard for STYRK-08 (klass = 7) 2015.01.01

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ListFamily	<i>Classification family list Print a list of all families and the number of classifications in each</i>
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**Description**

Classification family list Print a list of all families and the number of classifications in each

**Usage**

```
ListFamily(family = NULL, codelists = FALSE, language = "nb")
```

**Arguments**

family	Input family ID number to get a list of classifications in that family
codelists	True/False for whether to include codelists. Default = FALSE
language	Two letter string for the requested language output. Default is Bokmål ("nb"). Nynorsk ("nn") and English ("en").

**Value**

dataset containing a list of families

**Examples**

```
ListFamily(family = 1)
```

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ListKlass	<i>Classification list</i> Get a full list of all classifications and codelists
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**Description**

Classification list Get a full list of all classifications and codelists

**Usage**

```
ListKlass(codelists = FALSE, language = "nb")
```

**Arguments**

codelists	True/False for whether to include codelists. Default = FALSE
language	Two letter string for the requested language output. Default is Bokmål ("nb"). Nynorsk ("nn") and English ("en").

**Value**

A data frame containing a full list of classifications. The data frame includes the classification name, number, family and type.

**Examples**

```
head(ListKlass(codelists = TRUE))
```

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SearchKlass	<i>Search Klass</i>
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**Description**

Search Klass

**Usage**

```
SearchKlass(query, codelists = FALSE, size = 20)
```

**Arguments**

query	String with key word to search for
codelists	True/False for whether to include codelists. Default = FALSE
size	The number of results to show. Default = 20.

**Value**

Data frame of possible classifications that match the query



*SearchKlass*

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**Examples**

```
SearchKlass("occupation")
```

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