

Package ‘RcppUUID’

February 9, 2022

Type Package

Title Generating Universally Unique Identifiers

Version 1.1.1

Description Provides functions to generating a vector of Universally Unique Identifiers (UUID).
Used implementation from the Boost C++ library. Supported random (version 4) and name (version 5) UUIDs.

URL <https://artemklevtsov.gitlab.io/rcppuuid>,
<https://gitlab.com/artemklevtsov/rcppuuid>

BugReports <https://gitlab.com/artemklevtsov/rcppuuid/-/issues>

License GPL (>= 2)

Imports Rcpp

Suggests tinytest, uuid, microbenchmark

LinkingTo Rcpp, BH

Encoding UTF-8

NeedsCompilation yes

RoxygenNote 7.1.2

Author Artem Klevtsov [aut, cre] (<<https://orcid.org/0000-0003-0492-6647>>)

Maintainer Artem Klevtsov <a.a.klevtsov@gmail.com>

Repository CRAN

Date/Publication 2022-02-09 05:10:02 UTC

R topics documented:

RcppUUID	2
uuid_generate_name	2
uuid_generate_nil	3
uuid_generate_random	4
uuid_validate	4

Index	6
--------------	----------

RcppUUID

Generating Universally Unique Identifiers

Description

Provides functions to generating a vector of Universally Unique Identifiers (UUID). Used implementation from the Boost C++ library. Supported random (version 4) and name (version 5) UUIDs. UUIDs generation are parallelized by OpenMP.

Author(s)

Maintainer: Artem Klevtsov <a.a.klevtsov@gmail.com> ([ORCID](#))

See Also

Useful links:

- <https://artemklevtsov.gitlab.io/rcppuuid>
 - <https://gitlab.com/artemklevtsov/rcppuuid>
 - Report bugs at <https://gitlab.com/artemklevtsov/rcppuuid/-/issues>
-

uuid_generate_name

Generate UUIDs Version 5

Description

Function generates name-based uuid is derived from content in a namespace. A uuid with identical content shall yield the same uuid. Hashing algorithm is SHA1.

Usage

```
uuid_generate_name(x, ns = "x500dn")
```

Arguments

x	Character vector.
ns	Namespace string. Allowed values: dns, url, oid, x500dn.

Value

Character vector with UUIDs.

Note

This function generates valid uuids for the NA and empty strings.

References

https://www.boost.org/doc/libs/1_72_0/libs/uuid/doc/uuid.html#Name%20Generator

Examples

```
# generate name UUIDs
uuid_generate_name(c("one", "two"))
```

uuid_generate_nil	<i>Generates Nil UUIDs</i>
-------------------	----------------------------

Description

Function generates nil uuids.

Usage

```
uuid_generate_nil(n = 1L)
```

Arguments

n Number of generated UUIDs.

Value

Character vector with UUIDs.

References

https://www.boost.org/doc/libs/1_72_0/libs/uuid/doc/uuid.html#Nil%20Generator

Examples

```
# generate nil UUIDs
uuid_generate_nil(2)
```

uuid_generate_random *Generate UUIDs Version 4*

Description

Function generates uuids using operating system provided entropy.

Usage

```
uuid_generate_random(n = 1L)
```

Arguments

n Number of generated UUIDs.

Value

Character vector with UUIDs.

References

https://www.boost.org/doc/libs/1_72_0/libs/uuid/doc/uuid.html#Random%20Generator

Examples

```
# generate random UUIDs
uuid_generate_random(2)
```

uuid_validate *Validate UUIDs*

Description

Function validates uuids.

Usage

```
uuid_validate(x)
```

Arguments

x Character vector.

Value

Logical vector.

Examples

```
# validate UUIDs
uuid_validate(uuid_generate_random(2))
uuid_validate(uuid_generate_nil(2))
uuid_validate(uuid_generate_name(c("one", "two")))
uuid_validate(c("a", ""))
```

Index

RcppUUID, [2](#)
RcppUUID-package (RcppUUID), [2](#)

uuid_generate_name, [2](#)
uuid_generate_nil, [3](#)
uuid_generate_random, [4](#)
uuid_validate, [4](#)