Package: RcppUUID (via r-universe)

August 31, 2024

Type Package

Title Generating Universally Unique Identificators

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

Roxygen list(markdown = TRUE)

Repository https://artemklevtsov.r-universe.dev

RemoteUrl https://gitlab.com/artemklevtsov/rcppuuid

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Contents

`RcppUUID` *Generating Universally Unique Identificators*

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)

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See Also

Useful links:

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

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`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` *Generates Nil UUIDs*

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", ""))
```

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