

# Package: RcppUUID (via r-universe)

February 3, 2025

**Type** Package

**Title** Generating Universally Unique Identifiers

**Version** 1.1.2

**Date** 2025-01-31

**Description** Using the implementation in Boost C++ library, functions are provided to generate vectors of 'Universally Unique Identifiers (UUID)' from R supporting random (version 4) and name (version 5) 'UUIDs'. The initial repository was <https://gitlab.com/artemklevtsov/rcppuuid>.

**URL** <https://github.com/eddelbuettel/rcppuuid>

**BugReports** <https://github.com/eddelbuettel/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://eddelbuettel.r-universe.dev>

**RemoteUrl** <https://github.com/eddelbuettel/rcppuuid>

**RemoteRef** HEAD

**RemoteSha** 91990344a077237cdddddffa8ffa74ac5d6f7e492

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RcppUUID	<i>Generating Universally Unique Identifiers</i>
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### 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	<i>Generate UUIDs Version 5</i>
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### 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](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"))
```

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uuid_generate_nil	<i>Generates Nil UUIDs</i>
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**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](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*

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

**Examples**

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

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uuid\_validate            *Validate UUIDs*

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**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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