

# Package: xxhashlite (via r-universe)

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**Type** Package

**Title** Extremely Fast Hashing of R Objects, Raw Data and Files using 'xxHash' Algorithms

**Version** 0.2.2

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**Description** Extremely fast hashing of R objects using 'xxHash'. R objects are hashed via the standard serialization mechanism in R. Raw byte vectors and strings can be handled directly for compatibility with hashes created on other systems. This implementation is a wrapper around the 'xxHash' 'C' library which is available from <<https://github.com/Cyan4973/xxHash>>.

**License** MIT + file LICENSE

**URL** <https://github.com/coolbutuseless/xxhashlite>

**BugReports** <https://github.com/coolbutuseless/xxhashlite/issues>

**Encoding** UTF-8

**RoxygenNote** 7.3.1

**Suggests** testthat

**Depends** R (>= 3.5.0)

**Copyright** This package includes code from the 'xxhash' written Yann Collet. See file 'inst/LICENSE-xxhash' for copyright information of the original library.

**Repository** <https://coolbutuseless.r-universe.dev>

**RemoteUrl** <https://github.com/coolbutuseless/xxhashlite>

**RemoteRef** HEAD

**RemoteSha** 1ded4178580d6214e118ab242624b97025209b25

## Contents

xxhash . . . . .	2
xxhash_con . . . . .	2
xxhash_file . . . . .	3
xxhash_raw . . . . .	4

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xxhash	<i>Calculate the hash of an arbitrary R object.</i>
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### Description

This function will calculate the hash of any object understood by `base::serialize()`.

### Usage

```
xxhash(robj, algo = "xxh128", as_raw = FALSE)
```

### Arguments

<code>robj</code>	Any R object
<code>algo</code>	Select the specific xxhash algorithm. Default: 'xxh128'. (the latest algorithm in the xxhash family) Valid values: 'xxh32', 'xxh64', 'xxh128', 'xxh3'
<code>as_raw</code>	Return the hash as a raw vector of bytes instead of string? Default: FALSE. If TRUE, then the raw bytes are returned in big-endian order - which is what xxHash considers the <i>canonical</i> form.

### Value

String representation of hash. If `as_raw = TRUE` then a raw vector is returned instead.

### Examples

```
xxhash(mtcars)
xxhash(mtcars, algo = 'xxh3', as_raw = TRUE)
```

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xxhash_con	<i>Calculate the hash of data from a connection object</i>
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### Description

Calculate the hash of data from a connection object

### Usage

```
xxhash_con(con, algo = "xxh128", as_raw = FALSE)
```

**Arguments**

con	connection
algo	Select the specific xxhash algorithm. Default: 'xxh128'. (the latest algorithm in the xxhash family) Valid values: 'xxh32', 'xxh64', 'xxh128', 'xxh3'
as_raw	Return the hash as a raw vector of bytes instead of string? Default: FALSE. If TRUE, then the raw bytes are returned in big-endian order - which is what xxHash considers the <i>canonical</i> form.

**Value**

String representation of hash. If as\_raw = TRUE then a raw vector is returned instead.

**Examples**

```
filename <- system.file('DESCRIPTION', package = 'base', mustWork = TRUE)
xxhash_con(file(filename))
```

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xxhash_file	<i>Calculate the hash of a file</i>
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**Description**

Calculate the hash of a file

**Usage**

```
xxhash_file(file, algo = "xxh128", as_raw = FALSE)
```

**Arguments**

file	filename
algo	Select the specific xxhash algorithm. Default: 'xxh128'. (the latest algorithm in the xxhash family) Valid values: 'xxh32', 'xxh64', 'xxh128', 'xxh3'
as_raw	Return the hash as a raw vector of bytes instead of string? Default: FALSE. If TRUE, then the raw bytes are returned in big-endian order - which is what xxHash considers the <i>canonical</i> form.

**Value**

String representation of hash. If as\_raw = TRUE then a raw vector is returned instead.

**Examples**

```
filename <- system.file('DESCRIPTION', package = 'base', mustWork = TRUE)
xxhash_file(filename)
```

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`xxhash_raw`*Calculate the hash of a raw vector or string*

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**Description**

This performs a hash of the raw bytes - not of the serialized representation.

**Usage**

```
xxhash_raw(vec, algo = "xxh128", as_raw = FALSE)
```

**Arguments**

<code>vec</code>	raw vector or single character string
<code>algo</code>	Select the specific xxhash algorithm. Default: 'xxh128'. (the latest algorithm in the xxhash family) Valid values: 'xxh32', 'xxh64', 'xxh128', 'xxh3'
<code>as_raw</code>	Return the hash as a raw vector of bytes instead of string? Default: FALSE. If TRUE, then the raw bytes are returned in big-endian order - which is what xxHash considers the <i>canonical</i> form.

**Value**

String representation of hash. If `as_raw = TRUE` then a raw vector is returned instead.

**Examples**

```
vec <- "hello"  
xxhash_raw(vec)  
vec <- as.raw(c(0x01, 0x02, 0x99))  
xxhash_raw(vec)
```

# Index

xxhash, [2](#)  
xxhash\_con, [2](#)  
xxhash\_file, [3](#)  
xxhash\_raw, [4](#)