

Package ‘xxhashlite’

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Type Package

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

Version 0.2.2

Maintainer Mike Cheng <mikefc@coolbutuseless.com>

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>>.

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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.

NeedsCompilation yes

Author Mike Cheng [aut, cre, cph],
Yann Collet [ctb, cph] (Author of the embedded xxhash library)

Repository CRAN

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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)
```

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)
```

xxhash_raw	<i>Calculate the hash of a raw vector or string</i>
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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

vec	raw vector or single character string
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

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

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