Package: colorfast (via r-universe)

December 24, 2024

Type Package

Title Fast Conversion of R Colors to Color Component Values and Native
Packed Integer Format

Version 1.0.0.9001

Maintainer Mike Cheng <mikefc@coolbutuseless.com>

Description Color values in R are often represented as strings of
hexadecimal colors or named colors. This package offers fast
conversion of these color representations to either an array of
red/green/blue/alpha values or to the packed integer format
used in native raster objects. This fast conversion of colors
is implemented using an order-preserving minimal perfect hash
derived from Majewski et al (1996) ``A Family of Perfect Hashing
Methods'' <doi:10.1093/comjnl/39.6.547>.

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URL https://github.com/coolbutuseless/colorfast

BugReports https://github.com/coolbutuseless/colorfast/issues

Encoding UTF-8

RoxygenNote 7.3.2

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

Config/testthat/edition 3

VignetteBuilder knitr

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

RemoteUrl https://github.com/coolbutuseless/colorfast

RemoteRef HEAD

RemoteSha 633e002e58104254f9922889e8ed4a5bb076d031

Contents

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col_to_int	*Fast conversion of colors-as-strings to an integer vector of packed RGBA values.*

Description

Packed RGBA values are used in R's native raster objects.

Usage

```
col_to_int(col)
```

Arguments

col   Character vector of color names. Supports all R color names (e.g. "red", "hot-
                pink") and hex colors of the form: "#RRGGBBAA", "#RRGGBB", "#RGBA"
                and "#RGB".

Value

Integer vector where the 4 bytes making up each integer represent the RGBA values of the color

Examples

```
col_to_int(c("hotpink", "#abc", "#abcd", "#aabb99", "#aabb9980"))
```

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col_to_rgb	*Fast conversion of colors-as-strings to a matrix of RGBA integers*

Description

This is a faster replacement for `grDevices::col2rgb()` which uses a hash lookup of R color names (rather than a linear search).

Usage

```
col_to_rgb(col)
```

Arguments

col   Character vector of color names. Supports all R color names (e.g. "red", "hot-
                pink") and hex colors of the form: "#RRGGBBAA", "#RRGGBB", "#RGBA"
                and "#RGB".

Value

An integer matrix with four rows and number of columns the length of the input.

Examples

```
col_to_rgb(c("hotpink", "#abc", "#abcd", "#aabb99", "#aabb9980"))
```

---

int_to_col *Fast conversion of colors-as-packed-RGBA-integers to hexadecimal*

Description

Packed RGBA values are used in R's native raster objects.

Usage

```
int_to_col(icol)
```

Arguments

icol   Integer vector (where the 4 bytes making up each integer represent the RGBA values of the color)

Value

Character vector

Examples

```
icols <- col_to_int(c("hotpink", "#abc", "#abcd", "#aabb99", "#aabb9980"))
int_to_col(icols)
```

Index