Package 'qoi'

May 9, 2026

Type Package

Title Read and Write QOI Images

Date 2024-04-17

Version 0.1.0

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URL https://github.com/JohannesFriedrich/qoi4R

BugReports https://github.com/JohannesFriedrich/qoi4R/issues

Description The new QOI file format offers a very simple but efficient image compression algorithm. This package provides an easy and simple way to read, write and display bitmap images stored in the QOI (Quite Ok Image) format. It can read and write both files and in-memory raw vectors.

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Encoding UTF-8

NeedsCompilation yes

RoxygenNote 7.3.1

Depends R (>= 2.10)

LazyData true

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Repository CRAN

Date/Publication 2024-04-17 17:40:12 UTC

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readQOI *Read an QOI image into a RGB(A) raster array*

Description

Read an QOI image into a RGB(A) raster array

Usage

```
readQOI(qoi_image_path)
```

Arguments

`qoi_image_path` character (**required**): Path to a stored qoi-image

Value

A matrix with integer (0-255) RGB(A) values with dimensions height x width x channels. Until now 3 (RGB) and 4 (RGBA) channels are integrated in the specification. If the decoding went wrong the returned value is NULL.

Author(s)

Johannes Friedrich

Examples

```
## (1) Read RGBA values from file
path <- system.file("extdata", "Rlogo.qoi", package="qoi")
rlogo_qoi <- readQOI(path)
dim(rlogo_qoi)

## (2) plot them
plot.new()
```

Rlogo_RGBA *RGBA values for the Rlogo (https://www.r-project.org/logo/)*

Description

RGBA values for the Rlogo (https://www.r-project.org/logo/)

Format

[matrix] with 561 x 724 x 4 elements

Author(s)

Johannes Friedrich

writeQOI *Write an QOI image from an RGB(A) raster array or matrix*

Description

Write an QOI image from an RGB(A) raster array or matrix

Usage

```
writeQOI(image, target = raw())
```

Arguments

image	matrix (**required**): Image represented by a integer matrix or array with values in the range of 0 to 255.
target	character or connections or raw: Either name of the file to write, a binary connection or a raw vector (raw() - the default - is good enough) indicating that the output should be a raw vector.

Value

The result is either stored in a file (if target is a file name), in a raw vector (if target is a raw vector) or sent to a binary connection.

Author(s)

Johannes Friedrich

Examples

```
## (1) Write to raw() -> see bytes
bin <- writeQOI(Rlogo_RGBA)
rawToChar(head(bin)) ## qoif

## Not run:
## (2) Write to a *.qoi file
writeQOI(Rlogo_RGBA, "Rlogo_RGBA.qoi")

## End(Not run)
```

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