

Package ‘apng’

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Type Package

Title Convert Png Files into Animated Png

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Depends bitops

Description Convert several png files into an animated png file.
This package exports only a single function `apng`. Call the
apng function with a vector of file names (which should be
png files) to convert them to a single animated png file.

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apng-package

Convert Png Files into Animated Png

Description

Convert several png files into an animated png file. This package exports only a single function 'apng'. Call the apng function with a vector of file names (which should be png files) to convert them to a single animated png file.

Note

The CRC implementation in this package was adopted from the W3 Portable Network Graphics (PNG) Specification (Second Edition): Annex D - Sample Cyclic Redundancy Code implementation. As such, special thanks go out to the authors of the specification: <https://www.w3.org/TR/PNG/#F-Relationship>.

Author(s)

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References

<https://www.w3.org/TR/PNG/>
https://wiki.mozilla.org/APNG_Specification

apng

Convert static pngs to animated png

Description

Combine multiple png files into an animated png file.

Usage

```
apng(input_files = c(), output_file = "output.png",  
      num_plays = 0, delay_num = 0, delay_den = 0,  
      dispose_op = APNG_DISPOSE_OP_NONE,  
      blend_op = APNG_BLEND_OP_SOURCE)
```

Arguments

<code>input_files</code>	to specify the names of the input files
<code>output_file</code>	the name of the output file
<code>num_plays</code>	the amount of times to repeat the animation (0 means forever)
<code>delay_num</code>	the numerator of the frame delay ($delay = \frac{delay_num}{delay_den}$)
<code>delay_den</code>	the denominator of the frame delay ($delay = \frac{delay_num}{delay_den}$)
<code>dispose_op</code>	the frame disposal strategy (APNG_DISPOSE_OP_NONE, APNG_DISPOSE_OP_BACKGROUND, APNG_DISPOSE_OP_PREVIOUS)
<code>blend_op</code>	the frame blending strategy (APNG_BLEND_OP_SOURCE, APNG_BLEND_OP_OVER) For more information on blending and frame disposal strategies see https://wiki.mozilla.org/APNG_Specification .

Value

Returns nothing, output is written to `output_file`.

Examples

```
input1 <- tempfile(pattern = "", fileext = ".png")
input2 <- tempfile(pattern = "", fileext = ".png")
output <- tempfile(pattern = "", fileext = ".png")

# Generate inputs.
png(filename=input1)
plot(1:40, (1:40)^2)
dev.off()
png(filename=input2)
plot(1:40, (-1*1:40)^3)
dev.off()

# Create an animated png.
apng(c(input1, input2), output)
```

APNG_BLEND_OP_OVER *Blend previous frame into alpha*

Description

When rendering a new frame, the previous frame is filled into the alpha of the new frame. For example, 50% red over blue makes purple.

Value

1

APNG_BLEND_OP_SOURCE *Completely replace the previous frame*

Description

When rendering a new frame, the region is filled as specified exactly by the new frame. For example, 50% red over blue makes 50% red over the background.

Value

0

APNG_DISPOSE_OP_BACKGROUND
 Prepare region as fully transparent

Description

Before a new frame is rendered, the region is replaced by the background color.

Value

1

APNG_DISPOSE_OP_NONE *Write over the current output buffer*

Description

Nothing is done to the existing buffer when a new frame is rendered.

Value

0

APNG_DISPOSE_OP_PREVIOUS
 Keep previous frame in rendering region

Description

Before a new frame is rendered, the region is restored to what it was before the previous frame.

Value

2

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