# Package: bnfimage (via r-universe)

August 26, 2024

Title 'BnF Image API' Client

Version 0.1.0		
<b>Description</b> Provides an R client for the image API of 'Bibliothèque Nationale de France' (BnF, National Library of France) <a href="https://api.bnf.fr/api-iiif-de-recuperation-des-images-de-gallica#/">https://api.bnf.fr/api-iiif-de-recuperation-des-images-de-gallica#/</a> .		
License GPL-3		
Encoding UTF-8		
Imports httr, magick, tibble, ratelimitr		
<pre>URL https://rekyt.github.io/bnfimage/,</pre>		
https://github.com/Rekyt/bnfimage/		
BugReports https://github.com/Rekyt/bnfimage/issues		
<b>Roxygen</b> list(markdown = TRUE)		
RoxygenNote 7.1.1		
Suggests testthat ( $\geq 2.1.0$ ), vcr ( $\geq 0.4.1.92$ ), knitr, rmarkdown		
VignetteBuilder knitr		
Repository https://rekyt.r-universe.dev		
RemoteUrl https://github.com/Rekyt/bnfimage		
RemoteRef HEAD		
<b>RemoteSha</b> 78c8382ca8ee8c4219fa821b329cc82179abba52		
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bi\_all\_data

bi\_all\_data

Retrieve both image data and metadata

#### **Description**

This function queries both data and associated metadata from a BNF image using specified parameters and return the information in a tidy data.frame

## Usage

```
bi_all_data(
  identifier = NULL,
  region = c(0L, 0L, 500L, 500L),
  size = "full",
  rotation = 0,
  quality = c("native", "color", "gray", "bitonal"),
  format = c("jpg", "tif", "png", "gif", "jp2", "pdf")
)
```

#### **Arguments**

identifier [character(1+)] one or multiple identifier(s) of the document that begins with "ark:/" [character(1) or integer(4)] region either "full" to retrieve the full image or a vector of four integers that defines the region to extract from the image. The vector has the form (x0, y0, w, h)with x0, y0 the coordinates of the top left point of the extracted region (with the origin at the top left of the image), w the width of the extracted region and hthe height of the extracted region. size [character(1) or integer(2)] either "full" to retrieve the full region or a vector of two integers that defines the size of the final image rotation [numeric(1)] an integer that defines the rotation in degrees to apply to the final image (0 for no rotation) quality [character(1)] • "native" for native colors of the image or, • "color" for the image in color, • "gray" for levels of gray, • "bitonal" for only black and white pixels. format [character(1)] • "jpg" for JPEG image,

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```
"tif" for TIFF image,
"png" for PNG image,
"gif" for GIF image,
"jp2" for JP2 image,
"pdf" for PDF image.
```

## Value

a tibble with both the image and the metadata, with one row per identifier

bi\_image

Retrieve image from BNF

## Description

Retrieve image from BNF

## Usage

```
bi_image(
  identifier = NULL,
  region = c(0L, 0L, 500L, 500L),
  size = "full",
  rotation = 0,
  quality = c("native", "color", "gray", "bitonal"),
  format = c("jpg", "tif", "png", "gif", "jp2", "pdf")
)
```

## Arguments

identifier	[character(1)] identifier of the document that begins with "ark:/"
region	[character(1) or integer(4)] either "full" to retrieve the full image or a vector of four integers that defines the region to extract from the image. The vector has the form $(x0, y0, w, h)$ with $x0$ , $y0$ the coordinates of the top left point of the extracted region (with the origin at the top left of the image), w the width of the extracted region and h the height of the extracted region.
size	[character(1) or integer(2)] either "full" to retrieve the full region or a vector of two integers that defines the size of the final image
rotation	[numeric(1)] an integer that defines the rotation in degrees to apply to the final image (0 for no rotation)
quality	[character(1)]

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- "native" for native colors of the image or,
- "color" for the image in color,
- "gray" for levels of gray,
- "bitonal" for only black and white pixels.

format

[character(1)]

- "jpg" for JPEG image,
- "tif" for TIFF image,
- "png" for PNG image,
- "gif" for GIF image,
- "jp2" for JP2 image,
- "pdf" for PDF image.

## **Details**

By default bnfimage implements rate limitation through the ratelimitr package. The query are limited to a maximum of 1 every 3 seconds to avoid being blocked by the BnF server. This is the limit at which the BnF server considers the queries to be malicious. For the moment this limitation cannot be lifted.

#### Value

a matrix of the image

bi\_metadata

Retrieve BnF image metadata

#### Description

Retrieve BnF image metadata

#### **Usage**

```
bi_metadata(identifier = NULL)
```

#### Arguments

```
identifier [character(1)]
```

identifier of the document that begins with "ark:/"

#### **Details**

By default bnfimage implements rate limitation through the ratelimitr package. The query are limited to a maximum of 1 every 3 seconds to avoid being blocked by the BnF server. This is the limit at which the BnF server considers the queries to be malicious. For the moment this limitation cannot be lifted.

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## Value

A nested list which contains the metadata of a single element. The list is for now not formatted and provide the full metadata returned by the API.

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