Package: filearchy (via r-universe)

May 13, 2026

Title Write Imagery to Tiles

Version 0.1.0.9003

Description Create directory structure of image tiles.

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Encoding UTF-8

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Imports fs, furrr, gdalraster (>= 1.10.9110), grout (>= 0.0.2.9009), methods, PROJ, reproj, tibble, vapour, vaster

Remotes hypertidy/grout, USDAForestService/gdalraster, hypertidy/vaster, hypertidy/reproj

Config/pak/sysreqs cmake libgdal-dev gdal-bin libgeos-dev make libicu-dev libuv1-dev libxml2-dev libzstd-dev libproj-dev

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

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RemoteUrl https://github.com/hypertidy/filearchy

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Contents

gdal_tiles *Create tiles, like gdal2tiles.py*

Description

Create png or jpeg tiles from any GDAL DSN in slippy map format, this consists of zoom level directories: 0/, 1/, 2/, etc that contain similar column diretories with row files in them. The format is "z/x/y.png" with combinations of `z = 0:maxzoom, x = 0:maxrow, y = 0:maxcol`. Not every possible combination will exist, only those that represent the data as input will be generated.

Usage

```
gdal_tiles(
  dsn,
  zoom = NULL,
  blocksize = 256L,
  profile = "mercator",
  output_dir = tempfile(),
  overwrite = FALSE,
  update = FALSE,
  dry_run = TRUE,
  xyz = FALSE,
  format = c("png", "jpeg"),
  write_html = TRUE,
  minmaxzoom = NA,
  title = "",
  copyright = "copyright ..."
)
```

Arguments

dsn	input dataset, file path, VRT string, or any DSN GDAL can open and warp from
zoom	zooms to render, can be a single number multiple (from 0:23)
blocksize	size of tiles, defaults to 256
profile	domain to use, 'mercator', 'geodetic' (longlat), or 'raster'
output_dir	directory to write to, by default a tempdir is used
overwrite	clobber the output directory, delete it entirely if TRUE, FALSE is the default
update	if TRUE do not create tiles if they already exist, FALSE by default and irrelevant if overwrite=TRUE
dry_run	if TRUE only the scheme is built and returned as a data frame
xyz	the row orientation default FALSE means row zero is at the bottom (TMS style), if TRUE the zero row is at the top (XYZ style)
format	'png' or 'jpeg'
write_html	TRUE by default, writes HTML index see Details

`minmaxzoom`	optional, two values to set the html index range independently of the rendered levels
`title`	title for HTML output
`copyright`	copyright statement for HTML output

Details

Currently we write a leaflet.html by default. Note that if you run with 'update' with a different set of zooms in a previous run then the html will be overridden by a different min and/or max zoom setting. The zoom range can be set independently of the generated or existing tiles by using `minmaxzoom`.

Value

the tile scheme, invisibly as a dataframe

Examples

```
dsn <- system.file("extdata/gebco_ovr5.vrt", package = "filearchy", mustWork = TRUE)
## parallelize here
#future::plan(multicore)
tiles <- gdal_tiles(dsn, dry_run = TRUE)
if (!interactive()) unlink(tiles$path)
#future::plan(sequential)
```

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