

Package: rrdb (via r-universe)

August 17, 2024

Type Package

Title A Simple Round Robin Database

Version 0.0.1

Date 2024-04-18

Description A simple round robin database for storing fixed length histories of timeseries data. Inspired by whisperDB, but not feature or structure compatable.

License GPL (>= 3)

Encoding UTF-8

Depends R (>= 4.0.0)

Imports xts, zoo

BugReports <https://github.com/waternumbers/rrdb/issues>

URL <https://waternumbers.github.io/rrdb/>,
<https://github.com/waternumbers/rrdb>

RoxygenNote 7.3.1

Suggests tinytest, knitr, rmarkdown

VignetteBuilder knitr

Language en-GB

Repository <https://waternumbers.r-universe.dev>

RemoteUrl <https://github.com/waternumbers/rrdb>

RemoteRef HEAD

RemoteSha ff1934c53ae3afd648ac30ee89ea18f0abac8aaa

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create_db	<i>Create a database</i>
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Description

Create a round robin database for a series of numeric data collected at regular time intervals

Usage

```
create_db(fn, tz_step, n, m, tz_origin = 0, size = 8)
```

Arguments

fn	file name
tz_step	step of time series data in seconds
n	number of steps to store
m	number of data points at each time step
tz_origin	origin of time steps in seconds
size	size in bits of the written numeric data

Details

The value `tz_origin` can be thought of as the offset from 1970-01-01 00:00:00 (0 epoch time) of the closest observation time e.g. if observations were recorded hourly at 5 minutes past the hour `tz_step=3600` and `tz_origin = 300`

Value

invisible(TRUE) but called for the bi-product of creating the file

read_db	<i>Read data from the database</i>
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Description

Reads data for a specified time window from the database

Usage

```
read_db(fn, strt, fnsh, tz = "UTC")
```

Arguments

fn	file name
strt	POSIXct (or interger) object for the start of the period
fnsh	POSIXct (or interger) object for the end of the period
tz	time zone used for the output

Value

an xts object containing any data in the time period

update_db	<i>Update the data in a database</i>
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Description

Adds data to the database overwriting existing data in a round robin fashion

Usage

```
update_db(fn, D, check = TRUE)
```

Arguments

fn	file name
D	the xts data object to write to the file
check	should the age of the overwritten data be checked

Value

Invisible(TRUE) but Called for the bi-product of updating the data

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