Package: promr (via r-universe)

September 13, 2024

Type Package

Title Prometheus 'PromQL' Query Client for 'R'

Version 0.1.3

Description A native 'R' client library for querying the 'Prometheus' time-series database, using the 'PromQL' query language.

URL https://github.com/domodwyer/promr

BugReports https://github.com/domodwyer/promr/issues

License Apache License (>= 2)

Encoding UTF-8

LazyData true

Suggests httptest, testthat (>= 3.0.0)

Imports httr, tibble, urltools

Config/testthat/edition 3

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.0

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

RemoteUrl https://github.com/domodwyer/promr

RemoteRef HEAD

RemoteSha 09801af7a0b54774b7db15c4b2f2730496657367

Contents

`build_url` *Construct a URL for the specified query.*

Description

Construct a URL for the specified query.

Usage

```
build_url(base, query, start, end, step, timeout = NA)
```

Arguments

`base`	A hostname and schema to base the generated path off of.
`query`	A PromQL query.
`start`	A RFC3339 timestamp string, numerical unix timestamp, or POSIXct object.
`end`	A RFC3339 timestamp string, numerical unix timestamp, or POSIXct object.
`step`	A query resolution step width.
`timeout`	An optional query timeout value, defaulting to server-side limit. Note this timeout is capped to the server-side value.

Value

A URL to execute the query.

`cast_timestamp` *A helper function to map an input of various types to a timestamp string suitable for use with Prometheus.*

Description

A helper function to map an input of various types to a timestamp string suitable for use with Prometheus.

Usage

```
cast_timestamp(input)
```

Arguments

`input`	A RFC3339 timestamp string, numerical unix timestamp, or POSIXct object.

Value

A Prometheus-compatible timestamp that can be coerced to a string.

query_range *Evaluate an expression query over a range of time.*

Description

Evaluate an expression query over a range of time.

Usage

```
query_range(
  query,
  start,
  end,
  host = "http://127.0.0.1:9090",
  step = "10s",
  timeout = NA
)
```

Arguments

query	A PromQL query.
start	A RFC3339 timestamp string, numerical unix timestamp, or POSIXct object.
end	A RFC3339 timestamp string, numerical unix timestamp, or POSIXct object.
host	An optional host - defaulting to `http://127.0.0.1:9090`
step	An optional query resolution step width, defaulting to `10s`
timeout	An optional query timeout value, defaulting to server-side limit. Note this timeout is capped to the server-side value.

Value

A tibble of all series returned by the server, with nested measurements.

Examples

```
## Not run:
# Run a simple range query against the specified host.
query_range(
  "up",
  "2022-08-20T00:00:00Z",
  "2022-08-21T00:00:00Z",
  host = "http://127.0.0.1:9090"
)

# Run a server-side aggregation query, using the default local host.
query_range(
  "rate(http_requests_total[5m])",
  "2022-08-20T00:00:00Z",
```

```
  "2022-08-21T00:00:00Z"
)

# Specify the time range using POSIXct objects, and set the optional "step"
query_range(
  "rate(http_requests_total[5m])",
  strptime(
    "2022-08-20T20:10:30",
    format = "%Y-%m-%dT%H:%M:%S"
  ),
  strptime(
    "2022-08-21T20:10:30",
    format = "%Y-%m-%dT%H:%M:%S"
  ),
  step = "30s"
)

# Specify the time range using unix timestamps, and set an optional "timeout"
query_range(
  "rate(http_requests_total[5m])",
  1660989814,
  1661076214,
  timeout = "60s"
)

## End(Not run)
```

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