

Package ‘pingers’

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Type Package

Title Identify, Ping, and Log Internet Provider Connection Data

Description To assist you with troubleshooting internet connection issues and assist in isolating packet loss on your network. It does this by allowing you to retrieve the top trace route destinations your internet provider uses, and recursively ping each server in series while capturing the results and writing them to a log file. Each iteration it queries the destinations again, before shuffling the sequence of destinations to ensure the analysis is unbiased and consistent across each trace route.

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URL <https://github.com/JesseVent/pingers>

BugReports <https://github.com/JesseVent/pingers/issues>

Depends R (>= 3.4.0)

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Encoding UTF-8

LazyData true

Imports dplyr, stringr, tibble, tictoc, tidyselect, data.table,
lubridate, plotly, reshape2

RoxygenNote 6.1.0

NeedsCompilation no

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|--------------|---------------------------------|
| capture_logs | <i>Capture ISP network logs</i> |
|--------------|---------------------------------|

Description

Repeat capturing network logs with parameters you specify from [ping_capture](#) and [get_destinations](#). This will output a csv file with your ping results displaying packet loss and average ping across the defined periods.

Usage

```
capture_logs(destinations = 9, pings = 50, log_path = NULL,
             sleep = NULL)
```

Arguments

| | |
|--------------|---|
| destinations | Retrieve the first n addresses in your ISP destinations |
| pings | Number of times to ping server |
| log_path | Optional: The path and filename to save the result set |
| sleep | Optional: Seconds to sleep for throughout iterations |

Value

csv file with captured network log information

Note

If the `log_path` parameter is not provided, it will default to saving a csv file in the current working directory called `network_logs.csv` prefixed with the current timestamp in the format '

Examples

```
## Not run:
capture_logs(destinations = 3, pings = 10, log_path = log, sleep = 20)

## End(Not run)
```

| | |
|------------------|-----------------------------|
| get_destinations | <i>Get ISP destinations</i> |
|------------------|-----------------------------|

Description

Trace route and grab the top n servers to assist isolating issues with individual nodes for your ISP.

Usage

```
get_destinations(keyword = NULL, top_n = NULL,  
  site = "google.com.au")
```

Arguments

| | |
|---------|--|
| keyword | Keyword to search for i.e. 'AAT' |
| top_n | Retrieve the first n addresses |
| site | Defaults to 'google.com.au' to trace route against |

Value

dataframe with server and IP range

Examples

```
## Not run:  
dest <- get_destinations(top_n = 3)  
print(dest)  
  
## End(Not run)
```

| | |
|-----------------|----------------------------|
| pingers_heatmap | <i>Packet Loss Heatmap</i> |
|-----------------|----------------------------|

Description

Generates a heatmap that displays the packet loss hotspots on an hourly basis during the week.

Usage

```
pingers_heatmap(logs = NULL)
```

Arguments

| | |
|------|-------------------|
| logs | network_logs file |
|------|-------------------|

Value

highcharts heatmap

Examples

```
## Not run:  
pingers_heatmap(net_logs)  
  
## End(Not run)
```

ping_capture

Ping Server

Description

Ping a server to capture response details

Usage

```
ping_capture(server, count)
```

Arguments

| | |
|--------|--------------------------------|
| server | IP address or URL of server |
| count | Number of times to ping server |

Value

dataframe with ping results

Examples

```
## Not run:  
dest <- get_destinations(top_n = 1)  
ping_res <- ping_capture(dest$ip[1], 10)  
print(ping_res)  
  
## End(Not run)
```

| | |
|---------|--|
| shuffle | <i>Shuffle dataframe rows randomly</i> |
|---------|--|

Description

Randomly reorder the rows of a dataframe

Usage

```
shuffle(data)
```

Arguments

data dataframe to shuffle

Value

reordered dataframe

Examples

```
{
ordered_df <- tibble::tibble(V1=1:26,V2=letters)
shuffled_df <- shuffle(ordered_df)
}
```

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