

# Package ‘pingers’

October 14, 2022

**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.

**Version** 0.1.1

**Date** 2018-10-17

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

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

**Depends** R (>= 3.4.0)

**License** MIT + file LICENSE

**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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**Repository** CRAN

**Date/Publication** 2018-10-26 15:00:03 UTC

## R topics documented:

capture_logs . . . . .	2
get_destinations . . . . .	3

pingers_heatmap . . . . .	3
ping_capture . . . . .	4
shuffle . . . . .	5

<b>capture_logs</b>	<i>Capture ISP network logs</i>
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## 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)
```

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get_destinations	<i>Get ISP destinations</i>
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## 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)
```

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pingers_heatmap	<i>Packet Loss Heatmap</i>
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## 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
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**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)
```

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shuffle	<i>Shuffle dataframe rows randomly</i>
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## Description

Randomly reorder the rows of a dataframe

## Usage

```
shuffle(data)
```

## Arguments

data	dataframe to shuffle
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## Value

reordered dataframe

## Examples

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

# Index

capture\_logs, [2](#)  
get\_destinations, [2, 3](#)  
ping\_capture, [2, 4](#)  
pingers\_heatmap, [3](#)  
shuffle, [5](#)