Package 'pingr'

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Title Check if a Remote Computer is Up
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Description Check if a remote computer is up. It can either just call the system ping command, or check a specified TCP port.
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pingr-package

Check if the local or remote computer is up

Description

Check if a remote computer is up. It can either just call the system ping command, or check a specified TCP port.

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See Also

Useful links:

- https://github.com/r-lib/pingr#readme
- Report bugs at https://github.com/r-lib/pingr/issues

apple_captive_test

Download Apple's captive portal test

Description

If the test page, returns "Success" that means that the computer is connected to the Internet.

Usage

```
apple_captive_test()
```

Details

Note that this function will fail if the computer is offline. Use is_online() to check if the computer is online.

Examples

```
apple_captive_test()
```

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is_online

Is the computer online?

Description

Check if the computer is online. It does three tries:

- Retrieve Apple's Captive Portal test page, see apple_captive_test().
- Queries myip.opendns.com on OpenDNS, see my_ip().
- Retrieves icanhazip.com via HTTPS, see my_ip(). If any of these are successful, it returns TRUE.

Usage

```
is_online(timeout = 1)
```

Arguments

timeout

Timeout for the queries. (Note: it is currently not used for the DNS query.)

Value

Possible values:

- TRUE Yes, online.
- FALSE No, not online.

Examples

```
is_online()
```

my_ip

Query the computer's public IP address

Description

It can use a DNS query to opendns.com, if method == "dns", or an HTTPS query to icanhazip.com, see https://github.com/major/icanhaz. The DNS query is much faster, the HTTPS query is secure.

Usage

```
my_ip(method = c("dns", "https"))
```

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Arguments

method

Whether to use a DNS or HTTPS query.

Value

Computer's public IP address as a string.

Examples

```
my_ip()
my_ip(method = "https")
```

nsl

DNS query

Description

Perform a DNS query for a domain. It supports custom name servers, and querying DNS records of certain class and type.

Usage

```
nsl(domain, server = NULL, type = 1L, class = 1L)
```

Arguments

domain	Domain to query.
server	Custom name server IP address, to use. Note that this must be an IP address currently. E.g. 8.8.8.8 is Google's DNS server.
type	Record type to query, an integer scalar. 1L is an A record, 28L is an AAAA record, etc. See e.g. https://en.wikipedia.org/wiki/List_of_DNS_record_types for the record types.
class	Query class. This is usually 1L, i.e. "Internet". See e.g. https://www.iana.org/assignments/dns-parameters/dns-parameters.xhtml#dns-parameters-2 for all DNS classes.

Value

A list of two entries currently, additional entries might be added later:

- answer: a data frame of DNS records, with columns: name, class, type, ttl, data. data is a list column and contains the IP(6) address for A and AAAA records, but it contains other data, e.g. host name for CNAME, for other records. If pingr could not parse a record (it only parses the most common records types: A, AAAA, NA, PTR, CNAME, TXT, MX, SOA), then the data of the record is included as a raw vector.
- flags: a named logical vector of flags aa, tc, rd, ra, ad, cd. See the RFC (https://www.ietf.org/rfc/rfc1035.txt) for these. On Windows they are all set to NA currently.

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Examples

```
nsl("r-project.org")
nsl("google.com", type = 28L)
```

ping

Ping a remote server, to see if it is alive

Description

This is the classic ping, using ICMP packages. Only the system administrator can send ICMP packages, so we call out to the system's ping utility.

Usage

```
ping(
  destination,
  continuous = FALSE,
  verbose = continuous,
  count = 3L,
  timeout = 1
)
```

Arguments

destination Host name or IP address.

continuous Logical, whether to keep pinging until the user interrupts.

verbose Whether to print progress on the screen while pinging.

count Number of pings to perform. timeout Timeout for a ping response.

Value

Vector of response times. NA means no response, in milliseconds. Currently NAs are always at the end of the vector, and not in their correct position.

Examples

```
ping("8.8.8.8")
ping("r-project.org")
```

ping_port

ping_port

Check if a port of a server is active, measure response time

Description

Check if a port of a server is active, measure response time is_up() checks if a web server is up.

Usage

```
ping_port(
   destination,
   port = 80L,
   continuous = FALSE,
   verbose = continuous,
   count = 3L,
   timeout = 1
)

is_up(
   destination,
   port = 80,
   timeout = 0.5,
   fail_on_dns_error = FALSE,
   check_online = TRUE
)
```

Arguments

destination Host name or IP address.

port Port.

continuous Logical, whether to keep pinging until the user interrupts. verbose Whether to print progress on the screen while pinging.

count Number of pings to perform.

timeout Timeout, in seconds. How long to wait for a ping to succeed.

fail_on_dns_error

If TRUE then is_up() fails if the DNS resolution fails. Otherwise it will return

FALSE.

check_online Whether to check first if the computer is online. Otherwise it is possible that the

computer is behind a proxy, that hijacks the HTTP connection to destination.

Value

Vector of response times, in milliseconds. NA means no response within the timeout.

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Examples

```
ping_port("r-project.org")

is_up("google.com")
is_up("google.com", timeout = 0.01)
```

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