

# Package ‘pingr’

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**Title** Check if a Remote Computer is Up

**Version** 2.0.4

**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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**URL** <https://r-lib.github.io/pingr/>, <https://github.com/r-lib/pingr>

**BugReports** <https://github.com/r-lib/pingr/issues>

**Depends** R (>= 3.6)

**Imports** processx, utils

**Suggests** covr, ps, testthat (>= 3.0.0)

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apple_captive_test	<i>Download Apple's captive portal test</i>
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**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()
```

---

is_online	<i>Is the computer online?</i>
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---

**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](https://opendns.com), if `method == "dns"`, or an HTTPS query to [icanhazip.com](https://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"))
```

**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")
```

---

ns1

*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**

```
ns1(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. <a href="https://en.wikipedia.org/wiki/List_of_DNS_record_types">https://en.wikipedia.org/wiki/List_of_DNS_record_types</a> for the record types.
class	Query class. This is usually 1L, i.e. "Internet". See e.g. <a href="https://www.iana.org/assignments/dns-parameters/dns-parameters.xhtml#dns-parameters-2">https://www.iana.org/assignments/dns-parameters/dns-parameters.xhtml#dns-parameters-2</a> 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.

**Examples**

```
ns1("r-project.org")
ns1("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

*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**

<code>destination</code>	Host name or IP address.
<code>port</code>	Port.
<code>continuous</code>	Logical, whether to keep pinging until the user interrupts.
<code>verbose</code>	Whether to print progress on the screen while pinging.
<code>count</code>	Number of pings to perform.
<code>timeout</code>	Timeout, in seconds. How long to wait for a ping to succeed.
<code>fail_on_dns_error</code>	If TRUE then <code>is_up()</code> fails if the DNS resolution fails. Otherwise it will return FALSE.
<code>check_online</code>	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.

**Examples**

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

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

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