Package 'port4me'

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Version 0.7.1

Imports utils

Suggests tools, rmarkdown, knitr

VignetteBuilder knitr

Title Get the Same, Personal, Free 'TCP' Port over and over

Description An R implementation of the cross-platform, language-independent ``port4me'' algorithm (<https://github.com/HenrikBengtsson/port4me>), which (1) finds a free Transmission Control Protocol ('TCP') port in [1024,65535] that the user can open, (2) is designed to work in multi-user environments, (3), gives different users, different ports, (4) gives the user the same port over time with high probability, (5) gives different ports for different software tools, and (6) requires no configuration.

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URL <https://github.com/HenrikBengtsson/port4me>

BugReports <https://github.com/HenrikBengtsson/port4me/issues>

Encoding UTF-8

RoxygenNote 7.3.1

NeedsCompilation yes

Author Henrik Bengtsson [aut, cre, cph]
 (<https://orcid.org/0000-0002-7579-5165>),
 Jeroen Ooms [ctb] (C code for testing availability of TCP ports,
 (<https://orcid.org/0000-0002-4035-0289>)

Maintainer Henrik Bengtsson <henrikb@braju.com>

Repository CRAN

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R topics documented:

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port4me   *Gets a Personalized TCP Port that can be Opened by the User*

Description

Gets a Personalized TCP Port that can be Opened by the User

Usage

```
port4me(
  tool = NULL,
  user = NULL,
  prepend = NULL,
  include = NULL,
  exclude = NULL,
  skip = NULL,
  list = NULL,
  test = NULL,
  max_tries = 65535L,
  must_work = TRUE
)
```

Arguments

tool	(optional) The name of the software tool for which a port should be generated.
user	(optional) The name of the user. Defaults to `Sys.info()[["user"]]`.
prepend	(optional) An integer vector of ports to always consider.
include	(optional) An integer vector of possible ports to return. Defaults to `1024:65535`.
exclude	(optional) An integer vector of ports to exclude.
skip	(optional) Number of non-excluded ports to skip. Defaults to `0L`.
list	(optional) Number of ports to list.
test	(optional) A port to check whether it can be opened or not.
max_tries	Maximum number of ports checked, before giving up. Defaults to `65535L`.
must_work	If TRUE, then an error is produced if no port could be found. If FALSE, then `-1` is returned.

Value

A port, or a vector of ports. If `test` is given, then TRUE is if the port can be opened, otherwise FALSE.

See Also

The default values of the arguments can be controlled via environment variables. See port4me.settings for details.

Examples

```
port <- port4me()
print(port)

port <- port4me(tool = "rstudio")
print(port)

port <- port4me("rstudio") ## short for the above
print(port)

ports <- port4me(tool = "rstudio", list = 5L)
print(ports)

avail <- port4me(test = 4321)
print(avail)
```

| port4me.settings | *Settings Used by the 'port4me' Package* |

Description

Below are the environment variables that are used by the **port4me** package and packages enhancing it.

WARNING: Note that the names and the default values of these settings may change in future versions of the package. Please use with care until further notice.

Details

PORT4ME_EXCLUDE: Controls the default value for argument exclude of [port4me()](). Ports and port sequences should be separated by commas. Port sequences should be specified as a start and end port separated by a hyphen. Example: `PORT4ME_EXCLUDE=4444,5000-5999,8080`. (Default: empty)

PORT4ME_INCLUDE: Controls the default value for argument include of [port4me()](). The format should be the same as for `PORT4ME_INCLUDE`. (Default: empty)

PORT4ME_PREPEND: Controls the default value for argument prepend of [port4me()](). The format should be the same as for `PORT4ME_INCLUDE`. (Default: empty)

PORT4ME_SKIP: Controls the default value for argument skip of [port4me()](). (Default: 0)

PORT4ME_TOOL: Controls the default value for argument tool of [port4me()](). (Default: empty)

PORT4ME_USER: Controls the default value for argument user of [port4me()](). (Default: `Sys.info()[["user"]]`))

Site-wide and built-in settings

PORT4ME_EXCLUDE_SITE, PORT4ME_INCLUDE_SITE, PORT4ME_PREPEND_SITE: Additional sets of ports
        to be excluded, included, and prepended. These are typically set for all users ("site wide") by
        a systems administrator or similar. (Default: empty)

PORT4ME_EXCLUDE_UNSAFE: Additional sets of ports to be excluded that are considered unsafe to
        open in a web browser. Special token "{chrome}" expands to the value of environment vari-
        able PORT4ME_EXCLUDE_UNSAFE_CHROME. Special token "{firefox}" expands to the value
        of environment variable PORT4ME_EXCLUDE_UNSAFE_FIREFOX. The default is to exclude the
        ports that Chrome and Firefox blocks. (Default: "{chrome},{firefox}")

PORT4ME_EXCLUDE_UNSAFE_CHROME: The set of ports that the Chrome web browser considers un-
        safe and therefore blocks. (Default: ports blocked by Chrome)

PORT4ME_EXCLUDE_UNSAFE_FIREFOX: The set of ports that the Firefox web browser considers un-
        safe and therefore blocks. (Default: ports blocked by Firefox)

Settings for debugging

PORT4ME_DEBUG: If true, extensive debug messages are generated. (Default: false)

See Also

Environment variables can be configured for R, by setting them in your personal ~/.Renviron file,
e.g.

```
PORT4ME_EXCLUDE=4848,8080
```

For more information, see the Startup help page.

Examples

```
Sys.setenv(PORT4ME_EXCLUDE = "4444,5000-5999,8080")
port4me()
```

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