# Package 'rhub'

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Title Tools for R Package Developers

Version 2.0.1

**Description** R-hub v2 uses GitHub Actions to run 'R CMD check' and similar package checks. The 'rhub' package helps you set up R-hub v2 for your R package, and start running checks.

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URL https://github.com/r-hub/rhub, https://r-hub.github.io/rhub/

BugReports https://github.com/r-hub/rhub/issues

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check

This function is deprecated and defunct. Please see rhubv2.

## Description

This function is deprecated and defunct. Please see rhubv2.

# Usage

check(...)

## Arguments

check\_for\_cran

## Description

This function is deprecated and defunct. Please see rhubv2.

Deprecated.

## Usage

```
check_for_cran(...)
```

#### Arguments

...

check\_on\_linux This function is deprecated and defunct. Please see rhubv2.

## Description

This function is deprecated and defunct. Please see rhubv2.

## Usage

```
check_on_linux(...)
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```

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#### Arguments

. . .

Deprecated.

get\_check

This function is deprecated and defunct. Please see rhubv2.

## Description

This function is deprecated and defunct. Please see rhubv2.

#### Usage

```
get_check(...)
```

## Arguments

... Deprecated.

```
last_check
```

This function is deprecated and defunct. Please see rhubv2.

## Description

This function is deprecated and defunct. Please see rhubv2.

## Usage

last\_check(...)

## Arguments

... Deprecated.

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list\_my\_checks

## Description

This function is deprecated and defunct. Please see rhubv2.

## Usage

list\_my\_checks(...)

#### Arguments

...

Deprecated.

list\_package\_checks This function is deprecated and defunct. Please see rhubv2.

## Description

This function is deprecated and defunct. Please see rhubv2.

#### Usage

```
list_package_checks(...)
```

## Arguments

... Deprecated.

list\_validated\_emails This function is deprecated and defunct. Please see rhubv2.

## Description

This function is deprecated and defunct. Please see rhubv2.

#### Usage

list\_validated\_emails(...)

#### Arguments

local\_check\_linux This function is deprecated and defunct. Please see rhubv2.

#### Description

This function is deprecated and defunct. Please see rhubv2.

## Usage

```
local_check_linux(...)
```

## Arguments

...

Deprecated.

local\_check\_linux\_images

This function is deprecated and defunct. Please see rhubv2.

## Description

This function is deprecated and defunct. Please see rhubv2.

#### Usage

```
local_check_linux_images(...)
```

#### Arguments

... Deprecated.

platforms

This function is deprecated and defunct. Please see rhubv2.

## Description

This function is deprecated and defunct. Please see rhubv2.

#### Usage

```
platforms(...)
```

#### Arguments

rc\_list\_local\_tokens Show your tokens for the R Consortium runners

## Description

Lists all tokens stored on the local machine.

#### Usage

```
rc_list_local_tokens()
```

#### Value

Data frame with string columns email and token.

## See Also

Other RC runners API: rc\_list\_repos(), rc\_new\_token(), rc\_submit()

rc\_list\_repos List your repositories created by the R Consortium runners

#### Description

Lists repositories created by rc\_submit() submissions.

#### Usage

rc\_list\_repos(email = NULL)

## Arguments

email Email address. We try to detect this, but if the detection fails, you can specify it explicitly.

## Value

Data frame with columns:

- repo\_name: Name of the repository.
- repo\_url: URL of the repository.
- builds\_url: URL to the builds of the repository.

Additional columns and customized printing will be probably added later to the result.

## See Also

Other RC runners API: rc\_list\_local\_tokens(), rc\_new\_token(), rc\_submit()

rc\_new\_token

#### Description

To build and check R packages on the RC runners of R-hub, you'll need to verify your email address. R-hub will send a token to your email address, and this token will be stored on your computer.

#### Usage

```
rc_new_token(email = NULL, token = NULL)
```

#### Arguments

| email | Email address to verify We try to detect this, but if the detection fails, you can specify it explicitly. If this argument is missing (or NULL), then you can specify it interactively. |
|-------|---|
| token | Token to add. If you already received a token in an email from R-hub, you can specify that here.  |

## Details

You need to store a token on every computer you want to submit jobs from, either using the same token from the email you got, or you can request additional tokens for the new machines. Your old token will stay valid as well.

If you already have a token from a previous version of R-hub, you can reuse that and you don't need to do anything.

Run

```
rhub:::email_file()
```

to see the file rhub uses to store your tokens.

#### See Also

Other RC runners API: rc\_list\_local\_tokens(), rc\_list\_repos(), rc\_submit()

rc\_submit

## Description

Submit a package to the R Consortium runners

#### Usage

```
rc_submit(path = ".", platforms = NULL, email = NULL, confirmation = NULL)
```

## Arguments

| path         | Path to package file or package directory.  |
|--------------|---|
| platforms    | Platforms to checks. See <pre>rhub_platforms()</pre> for a current list. If not speci-<br>fied, then you can select the platforms interactively. Must be specified in non-<br>interactive sessions.         |
| email        | Email address. You must have a token on the local machhine, that corresponds to the email address, see rc_new_token(). If not specified (or NULL) then the email address of the package maintainer is used. |
| confirmation | You must set this to TRUE to submit a package from a non-interactive session.   |

## Value

A list with data about the submission, invisibly. Currently it has:

- result: Should be the string "OK".
- repo\_url: URL to the repository.
- actions\_url: URL to the builds inside the repository.
- id: Build id. This is a string with a randomly generated id.
- name: Build name, this is a string, the concatenation of the build platforms.

More fields might be added later.

## See Also

rhub\_platforms() for a list of supported platforms.

Other RC runners API: rc\_list\_local\_tokens(), rc\_list\_repos(), rc\_new\_token()

rhubv2

#### Description

Start here to learn about R-hub v2, especially if you used the previous version of R-hub before.

#### R-hub v2

#### Introduction:

R-hub v2, i.e. version 2 or later of the rhub package, is a completely new check system. In this article we highlight the differences between the old and the new system.

There are two ways to use R-hub v2. The recommended way is to store your R package in a GitHub repository and use the rhub\_\*() functions to start checks on GitHub Actions, using your own GitHub account.

Alternatively, if you don't want to store your R package at GitHub, you can use the rc\_\*() functions to run checks in a shared GitHub organization at https://github.com/r-hub2, using the R Consortium runners. See more about the R Consortium runners below.

#### **Transitioning from R-hub v1:**

*Requirements for using R-hub v2:* 

- First, you need a GitHub account.
- Second, you need to have your R package in a GitHub repository. In your local git clone make sure that the origin git remote is set to the GitHub repository.
- Third, you need a GitHub Personal Access Token and you need to store it in the git credential store on your machine. You can use gitcreds::gitcreds\_set() to add the token to the git credential store.

Call rhub\_setup() from the local git clone to set up R-hub v2 for your package. This adds a GitHub Actions workflow to your local repository. Push this change to GitHub, into your default git branch and then you are ready to call start checks with rhub\_check().

#### Differences from R-hub v1:

- The check picks up the package from GitHub, so it does not use changes in your local git clone. You need to push the changes to GitHub first. You can use a non-default branch, with the branch argument of rhub\_check().
- You won't get an email about the check results. But you'll receive regular GitHub notifications about check failures, unless you opt out. Github can also turn these into emails if you like.
- There is no live output from the check at the R console. See the 'Actions' tab of your repository on GitHub for a live check log.
- Many more specialized platforms are available.
- Most platforms use binary packages, so checks and in particular installing dependencies is much faster.

#### Private repositories:

GitHub Actions is free for public repositories. For private repositories you also get some minutes for free, depending on the GitHub subscription you have. See About billing for GitHub Actions for details.

#### Branches:

You can run checks on any branch that you push to GitHub, but you'll need to add the R-hub workflow file (.github/workflows/rhub.yaml within your repo) must be present in **both** the default branch (usually main) and also in the branch you want to run the check on.

#### The R Consortium runners:

If you don't want to put your package on GitHub, you can still use the rhub package to run package checks on any supported platform using a shared pool of runners in the https://github.com/r-hub2 GitHub organization.

The process is similar to the first version of R-hub:

- Set your working directory to the R package you want to check.
- Obtain a token from R-hub, to verify your email address:

rc\_new\_token()

(You do not need to do this, if you already submitted packages to a previous version of R-hub from the same machine, using the same email address. Call rc\_list\_local\_tokens() to check if you already have tokens.)

• Submit a build with

rc\_submit()

• Select the platforms you want to use, and follow the instructions and the link provided to see your check results.

Limitations of the R Consortium runners:

- You package will be public for the world, and will be stored in the https://github.com/rhub2 organization. Your check output and results will be public for anyone with a GitHub account. If you want to keep your package private, you can put it in a private GitHub repository, and use the rhub\_setup() and rhub\_check() functions instead.
- The R Consortium runners are shared among all users, so you might need to wait for your builds to start.
- You have to wait at least five minutes between submissions with rc\_submit().
- Currently you need to create a GitHub account to see the check logs of your package. You don't need a GitHub account to submit the checks.

To avoid these limitations (except for the need for a GitHub account), put your package in a GitHub repository, and use the rhub\_setup() and rhub\_check() functions instead of rc\_submit() and the R Consortium runners.

rhub\_check

Check a package on R-hub

## Description

Check a package on R-hub

#### Usage

```
rhub_check(gh_url = NULL, platforms = NULL, r_versions = NULL, branch = NULL)
```

## Arguments

| gh_url     | GitHub URL of a package to check, or NULL to check the package in the current directory.  |
|------------|---|
| platforms  | Platforms to use, a character vector. Use NULL to select from a list in interactive sessions. See rhub_platforms().   |
| r_versions | Which R version(s) to use for the platforms that supports multiple R versions. This argument is not implemented yet.  |
| branch     | Branch to use to run R-hub. Defaults to the current branch if gh_url is NULL. Otherwise defaults to "main". Note that this branch also need to include the rhub.yaml workflow file. |

## Value

TODO

rhub\_doctor

Check if the current or the specified package is ready to use with R-hub

## Description

Errors if the package or repository is not set up correctly, and advises on possible solutions.

## Usage

rhub\_doctor(gh\_url = NULL)

## Arguments

gh\_url Use NULL for the package in the current working directory. Alternatively, use the URL of a GitHub repository that contains an R package that was set up to use with R-hub.

rhub\_platforms List R-hub platforms

## Description

List R-hub platforms

#### Usage

rhub\_platforms()

## rhub\_setup

## Value

Data frame with columns:

- name: platform name. Use this in the platforms argument of rhub\_check().
- aliases: alternative platform names. They can also be used in the platforms argument of rhub\_check().
- type: "os" or "container".
- os\_type: Linux, macOS or Windows currently.
- container: URL of the container image for container platforms.
- github\_os: name of the OS on GitHub Actions for non-container platforms.
- r\_version: R version string. If "\*" then any supported R version can be selected for this platform.
- os\_name: name of the operating system, including Linux distribution name and version for container actions.

rhub\_setup

```
Setup the current R package for use with R-hub
```

#### Description

It adds or updates the R-hub workflow file to the current package, and advises on next steps.

#### Usage

```
rhub_setup(overwrite = FALSE)
```

#### Arguments

overwrite if TRUE, rhub\_setup() will overwrite an already existing workflow file.

## Value

Nothing.

validate\_email

# Description

This function is deprecated and defunct. Please see rhubv2.

## Usage

validate\_email(...)

## Arguments

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