

# Package ‘rhub’

April 11, 2024

**Title** Tools for R Package Developers

**Version** 2.0.0

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

**License** MIT + file LICENSE

**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**

...           Deprecated.

---

check_for_cran	<i>This function is deprecated and defunct. Please see <a href="#">rhubv2</a>.</i>
----------------	--

---

**Description**

This function is deprecated and defunct. Please see [rhubv2](#).

**Usage**

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

**Arguments**

...           Deprecated.

---

check_on_linux	<i>This function is deprecated and defunct. Please see <a href="#">rhubv2</a>.</i>
----------------	--

---

**Description**

This function is deprecated and defunct. Please see [rhubv2](#).

**Usage**

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

```
check_on_windows(...)
```

```
check_on_macos(...)
```

```
check_on_debian(...)
```

```
check_on_ubuntu(...)
```

```
check_on_fedora(...)
```

```
check_on_solaris(...)
```

```
check_on_centos(...)
```

```
check_with_roidrel(...)
```

```
check_with_rrelease(...)
```

```
check_with_rpatched(...)
```

```
check_with_rlevel(...)
```

```
check_with_valgrind(...)
```

```
check_with_sanitizers(...)
```

### Arguments

...           Deprecated.

---

get_check	<i>This function is deprecated and defunct. Please see <a href="#">rhubv2</a>.</i>
-----------	--

---

### Description

This function is deprecated and defunct. Please see [rhubv2](#).

### Usage

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

### Arguments

...           Deprecated.

---

last_check	<i>This function is deprecated and defunct. Please see <a href="#">rhubv2</a>.</i>
------------	--

---

### Description

This function is deprecated and defunct. Please see [rhubv2](#).

### Usage

```
last_check(...)
```

### Arguments

...           Deprecated.

---

list_my_checks	<i>This function is deprecated and defunct. Please see <a href="#">rhubv2</a>.</i>
----------------	--

---

**Description**

This function is deprecated and defunct. Please see [rhubv2](#).

**Usage**

```
list_my_checks(...)
```

**Arguments**

...           Deprecated.

---

list_package_checks	<i>This function is deprecated and defunct. Please see <a href="#">rhubv2</a>.</i>
---------------------	--

---

**Description**

This function is deprecated and defunct. Please see [rhubv2](#).

**Usage**

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

**Arguments**

...           Deprecated.

---

list_validated_emails	<i>This function is deprecated and defunct. Please see <a href="#">rhubv2</a>.</i>
-----------------------	--

---

**Description**

This function is deprecated and defunct. Please see [rhubv2](#).

**Usage**

```
list_validated_emails(...)
```

**Arguments**

...           Deprecated.

---

<code>local_check_linux</code>	<i>This function is deprecated and defunct. Please see <a href="#">rhubv2</a>.</i>
--------------------------------	--

---

**Description**

This function is deprecated and defunct. Please see [rhubv2](#).

**Usage**

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

**Arguments**

...           Deprecated.

---

<code>local_check_linux_images</code>	<i>This function is deprecated and defunct. Please see <a href="#">rhubv2</a>.</i>
---------------------------------------	--

---

**Description**

This function is deprecated and defunct. Please see [rhubv2](#).

**Usage**

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

**Arguments**

...           Deprecated.

---

<code>platforms</code>	<i>This function is deprecated and defunct. Please see <a href="#">rhubv2</a>.</i>
------------------------	--

---

**Description**

This function is deprecated and defunct. Please see [rhubv2](#).

**Usage**

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

**Arguments**

...           Deprecated.

---

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	<i>Request a new token for submissions to the R Consortium runners</i>
--------------	--

---

### 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	<i>Submit a package to the R Consortium runners</i>
-----------	---

---

### 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 <a href="#">rhub_platforms()</a> for a current list. If not specified, then you can select the platforms interactively. Must be specified in non-interactive sessions.
email	Email address. You must have a token on the local machine, that corresponds to the email address, see <a href="#">rc_new_token()</a> . 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

*R-hub v2*

---

## 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'll not 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:*

- Your package will be public for the world, and will be stored in the <https://github.com/r-hub2> 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 <a href="#">rhub_platforms()</a> .
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	<i>Check if the current or the specified package is ready to use with R-hub</i>
-------------	---

---

**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	<i>List R-hub platforms</i>
----------------	-----------------------------

---

**Description**

List R-hub platforms

**Usage**

```
rhub_platforms()
```

**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	<i>This function is deprecated and defunct. Please see <a href="#">rhubv2</a>.</i>
----------------	--

---

**Description**

This function is deprecated and defunct. Please see [rhubv2](#).

**Usage**

```
validate_email(...)
```

**Arguments**

...           Deprecated.

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