Package ‘opencpu’

February 22, 2022

Title Producing and Reproducing Results
Version 2.2.7
License Apache License 2.0
Encoding UTF-8

BugReports https://github.com/opencpu/opencpu/issues
Depends R (>= 3.0.0)
Imports evaluate (>= 0.12), httpuv (>= 1.3), knitr (>= 1.6), jsonlite
(>= 1.4), remotes (>= 2.0.2), sys (>= 2.1), webutils (>= 0.6),
curl (>= 4.0), rappdirs, zip, mime, protolite, brew, openssl
Suggests arrow, unix (>= 1.5.3), haven, pander, R.rsp, svglite
SystemRequirements pandoc, apparmor (optional)
VignetteBuilder knitr, R.rsp

Description A system for embedded scientific computing and reproducible research with R.
The OpenCPU server exposes a simple but powerful HTTP api for RPC and data interchange
with R. This provides a reliable and scalable foundation for statistical services or
building R web applications. The OpenCPU server runs either as a single-user development
server within the interactive R session, or as a multi-user Linux stack based on Apache2.
The entire system is fully open source and permissively licensed. The OpenCPU website
has detailed documentation and example apps.

LazyData yes
RoxygenNote 7.1.1
NeedsCompilation no
Author Jeroen Ooms [aut, cre] (<https://orcid.org/0000-0002-4035-0289>)
Maintainer Jeroen Ooms <jeroen@berkeley.edu>
Repository CRAN
Date/Publication 2022-02-22 09:20:11 UTC
R topics documented:

apps
ocpu-server

Index

---

<table>
<thead>
<tr>
<th>apps</th>
<th>OpenCPU Application</th>
</tr>
</thead>
</table>

Description

Manage installed OpenCPU applications. These applications can be started locally using `ocpu_start_app` or deployed online on `ocpu.io`.

Usage

```r
install_apps(repo, ...)
remove_apps(repo)
installed_apps()
available_apps()
update_apps(...)
```

Arguments

- **repo**: a github repository such as `user/repo`, see `install_github`.
- **...**: additional options for `install_github`

Details

OpenCPU apps are simply R packages. For regular users, apps get installed in a user-specific app library which is persistent between R sessions. This is used for locally running or developing web applications.

When running these functions as `opencpu` user on an OpenCPU cloud server, apps will be installed in the global `opencpu` server app library; the same library as used by the OpenCPU Github webhook.

See Also

Other `ocpu`: `ocpu-server`
Examples

```r
## Not run:
# List available demo apps
available_apps()

# Run application from: https://github.com/rwebapps/nabel
ocpu_start_app("rwebapps/nabel")

# Run application from: https://github.com/rwebapps/markdownapp
ocpu_start_app("rwebapps/markdownapp")

# Run application from: https://github.com/rwebapps/stockapp
ocpu_start_app("rwebapps/stockapp")

# Run application from: https://github.com/rwebapps/appdemo
ocpu_start_app("rwebapps/appdemo")

# Show currently installed apps
installed_apps()

## End(Not run)
```

---

**ocpu-server**  
*OpenCPU Single-User Server*

**Description**

Starts the OpenCPU single-user server for developing and running apps locally. To deploy your apps on a cloud server or ocpu.io, simply push them to github and install the opencpu webhook. Some example apps are available from `github::rwebapps/`.

**Usage**

```r
ocpu_start_server(
  port = 5656,
  root = "/ocpu",
  workers = 2,
  preload = NULL,
  on_startup = NULL,
  no_cache = FALSE
)

ocpu_start_app(app, update = TRUE, ...)
```

**Arguments**

- **port**: port number
- **root**: base of the URL where to host the OpenCPU API
workers  number of worker processes
preload    character vector of packages to preload in the workers. This speeds up requests
to those packages.
on_startup function to call once server has started (e.g. `utils::browseURL`)
no_cache   sets Cache-Control: no-cache for all responses to disable browser caching.
Useful for development when files change frequently. You might still need to
manually flush the browser cache for resources cached previously. Try pressing
CTRL+R or go incognito if your browser is showing old content.
app        either the name of a locally installed package, or a github remote (see `install_apps`)
update     checks if the app is up-to-date (if possible) before running
...        extra parameters passed to `ocpu_start_server`

See Also

Other ocpu: `apps`

Examples

```r
## Not run:
# List available demo apps
available_apps()

# Run application from: https://github.com/rwebapps/nabel
ocpu_start_app("rwebapps/nabel")

# Run application from: https://github.com/rwebapps/markdownapp
ocpu_start_app("rwebapps/markdownapp")

# Run application from: https://github.com/rwebapps/stockapp
ocpu_start_app("rwebapps/stockapp")

# Run application from: https://github.com/rwebapps/appdemo
ocpu_start_app("rwebapps/appdemo")

# Show currently installed apps
installed_apps()

## End(Not run)
```
Index

* **ocpu**
  * apps, 2
    * ocpu-server, 3
  apps, 2, 4
  available_apps (apps), 2
  install_apps, 4
  install_apps (apps), 2
  install_github, 2
  installed_apps (apps), 2
  ocpu (ocpu-server), 3
  ocpu-server, 3
  ocpu_start_app, 2
  ocpu_start_app (ocpu-server), 3
  ocpu_start_server, 4
  ocpu_start_server (ocpu-server), 3
  opencpu (ocpu-server), 3
  remove_apps (apps), 2
  strings (ocpu-server), 3
  update_apps (apps), 2
  utils::browseURL, 4