Package ‘opencpu’

February 21, 2020

Title Producing and Reproducing Results

Version 2.1.6

License Apache License 2.0

Encoding UTF-8

URL https://www.opencpu.org (website)
    https://github.com/opencpu/opencpu#readme (devel)

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 unix (>= 1.4), haven, feather, 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 7.0.2

NeedsCompilation no

Author Jeroen Ooms [aut, cre] (<https://orcid.org/0000-0002-4035-0289>)

Maintainer Jeroen Ooms <jeroen@berkeley.edu>

Repository CRAN

Date/Publication 2020-02-21 06:50:03 UTC
Description

Manage installed OpenCPU applications. These applications can be started locally using \texttt{ocpu\_start\_app}

Usage

\begin{verbatim}
install_apps(repo, ...)
remove_apps(repo)
installed_apps()
available_apps()
update_apps(...)
\end{verbatim}

Arguments

\begin{verbatim}
repo           a github repository such as user/repo, see \texttt{install\_github}.
...            additional options for \texttt{install\_github}
\end{verbatim}

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 \texttt{ocpu}: \texttt{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
ocpu-server

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)
nocache  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

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