Package 'echoconda'

August 30, 2021

Type Package

Title echoverse module: conda environment management

Version 0.99.0

Description Various utility functions to find, build, and use conda environments from within R.

URL https://github.com/RajLabMSSM/echoconda

BugReports https://github.com/RajLabMSSM/echoconda/issues

Encoding UTF-8

LazyData false

Depends R (>= 3.6.0)

SystemRequirements Python (>= 3.7.0)

biocViews

Imports devtools,
magrittr,
utils,
R.utils,
reticulate

Suggests rmarkdown,
remotes,
knitr,
testthat (>= 3.0.0)

RoxygenNote 7.1.1

VignetteBuilder knitr

License GPL (>= 3) + file LICENSE

Config/testthat/edition 3

R topics documented:

`activate_env` *Activate conda env*

Description

Activate conda env

Usage

```
activate_env(conda_env = "echoR", verbose = TRUE)
```

Arguments

`conda_env`	Conda environment to use.
`verbose`	Print messages.

See Also

Other conda: `create_echoR_env()`, `env_from_yaml()`, `find_env_rlib()`, `install_conda()`

Examples

```
activate_env(conda_env = "echoR")
```

`create_echoR_env` *Create conda env for* **echolocatoR**

Description

Create a new env (or update and existing one) with the necessary Python, R, and command line packages to run **echolocatoR**.

Usage

```
create_echoR_env(
  conda_env = "echoR",
  python_version = NULL,
  channel = c("conda-forge", "bioconda", "r"),
  python_packages = c("pandas>=0.25.0", "pyarrow", "scikit-learn", "bitarray",
    "networkx", "rpy2", "scipy", "pandas-plink"),
  r_packages = c("r-base", "r-devtools"),
  cli_packages = c("tabix", "plink", "macs2"),
  force_install = FALSE,
  auth_token = devtools::github_pat()
)
```

Arguments

conda_env	The name of the conda env you want to create.
python_version	The version of Python to be used in this Conda environment. The associated Python package from Conda will be requested as python={python_version}. When NULL, the default python package will be used instead. For example, use python_version = "3.6" to request that the Conda environment be created with a copy of Python 3.6. This argument will be ignored if python is specified as part of the packages argument, for backwards compatibility.
channel	An optional character vector of Conda channels to include. When specified, the forge argument is ignored. If you need to specify multiple channels, including the Conda Forge, you can use c("conda-forge", <other channels>).
python_packages	Python packages to install.
r_packages	R packages to install.
cli_packages	Command Line Interface packages to install.
force_install	If env already exists, force create a new one.
auth_token	GitHub authentication token.

Details

By default uses *echoR*, the conda environment distributed with **echolocatoR**.

- plinkhttps://anaconda.org/bioconda/plink
- tabixhttps://anaconda.org/bioconda/tabix

See Also

Other conda: activate_env(), env_from_yaml(), find_env_rlib(), install_conda()

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env_from_yaml *Create conda env from yaml file*

Description

Create conda env from yaml file

Usage

```
env_from_yaml(
  yaml_path = file.path("https://github.com", "RajLabMSSM/echolocatoR",
    "raw/master/inst", "conda/echoR.yml")
)
```

Arguments

yaml_path	Path to local or remote yaml file with conda build specifications.

See Also

Other conda: activate_env(), create_echoR_env(), find_env_rlib(), install_conda()

find_env_rlib *Find the R library for a specific env*

Description

Find the R library for a specific env

Usage

```
find_env_rlib(conda_env = "echoR", suffix = "lib/R/library/")
```

Arguments

conda_env	Conda environment name.
suffix	Suffixes to use when searching for R library.

See Also

Other conda: activate_env(), create_echoR_env(), env_from_yaml(), install_conda()

find_package *Find package executable*

Description

Find package executable

Usage

```
find_package(package, conda_env = "echoR", verbose = TRUE)
```

Arguments

package	Name of a package within a conda env.
conda_env	Conda environment name.
verbose	Print messages.

See Also

Other CONDA: find_python_path()

Examples

```
# Tabix
tabix <- find_package(package = "tabix", conda_env = "echoR")
tabix <- find_package(package = "tabix", conda_env = NULL)
# bgzip
bgzip <- find_package(package = "bgzip", conda_env = "echoR")
bgzip <- find_package(package = "bgzip", conda_env = NULL)
```

find_python_path *Find the python file for a specific env*

Description

Find the python file for a specific env

Usage

```
find_python_path(conda_env = "echoR", verbose = TRUE)
```

Arguments

conda_env	Conda environment name.
verbose	Print messages.

See Also

Other CONDA: find_package()

Examples

```
python <- find_python_path(conda_env = "echoR")
```

install_conda *Install conda if it's missing*

Description

Install conda if it's missing

Usage

```
install_conda(conda_path = "auto", verbose = FALSE)
```

Arguments

conda_path	Path to conda executable.
verbose	Print messages.

See Also

Other conda: activate_env(), create_echoR_env(), env_from_yaml(), find_env_rlib()

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