

Package ‘bspm’

August 3, 2020

Type Package

Title Bridge to System Package Manager

Version 0.3.4

Description Enables binary package installations on Linux distributions. Provides functions to manage packages via the distribution's package manager. Also provides transparent integration with R's `install.packages()` and a fallback mechanism. When installed as a system package, interacts with the system's package manager without requiring administrative privileges via an integrated D-Bus service; otherwise, uses `sudo`. Currently, the following backends are supported: DNF, APT.

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Encoding UTF-8

OS_type unix

SystemRequirements systemd, python3-dbus, python3-(gobject|gi),
python3-(dnflapt)

Suggests tinytest

URL <https://github.com/Enchufa2/bspm>

BugReports <https://github.com/Enchufa2/bspm/issues>

RoxygenNote 7.1.1

NeedsCompilation no

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Repository CRAN

Date/Publication 2020-08-03 13:30:06 UTC

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 bspm-package

bspm: *Bridge to System Package Manager*

Description

Enables binary package installations on Linux distributions. Provides functions to manage packages via the distribution's package manager. Also provides transparent integration with R's `install.packages` and a fallback mechanism. When installed as a system package, interacts with the system's package manager without requiring administrative privileges via an integrated D-Bus service; otherwise, uses `sudo`. Currently, the following backends are supported: DNF, APT.

Author(s)

Iñaki Ucar

References

<https://github.com/Enchufa2/bspm>

See Also

[manager](#), [integration](#)

integration

Enable/Disable Bridge to System Package Manager

Description

Functions to enable or disable the integration of `install_sys` into `install.packages`. When enabled, packages are installed transparently from system repositories if available, and from the configured R repositories if not.

Usage

```
enable()
```

```
disable()
```

Details

To enable **bspm** system-wide by default, include the following:

```
suppressMessages(bspm::enable())
```

into the `Rprofile.site` file. To enable it just for a particular user, move that line to the user's `~/.Rprofile` instead.

See Also

[manager](#)

Examples

```
## Not run:
# install 'units' and all its dependencies from the system repos
bspm::enable()
install.packages("units")

# install packages again from CRAN
bspm::disable()
install.packages("errors")

## End(Not run)
```

manager

Manage Packages from System Repositories

Description

Talk to the system package manager to install/remove... packages from system repositories.

Usage

```
install_sys(pkgs)
```

```
remove_sys(pkgs)
```

```
discover()
```

Arguments

`pkgs` character vector of names of packages.

Details

If R runs with root privileges (e.g., in a docker container), these functions talk directly to the system package manager. Regular users are also able to install/remove packages without any administrative permission via the accompanying D-Bus service if **bspm** is installed as a system package. If not, these methods fall back on using `sudo` to elevate permissions (or `pkexec` in GUIs such as RStudio) in interactive sessions. Note that, if you want to fall back to `sudo` in a non-interactive session, you need to set `options(bspm.sudo=TRUE)`.

The `discover` method is only needed when e.g. a new repository is added that contains packages with different prefixes (for example, your system repositories may provide packages called `r-cran-*` and `r-bioc-*` and then you add a new repository that provides packages called `r-github-*`). Otherwise, it will not have any effect besides regenerating the internal configuration files.

Value

Functions `install_sys` and `remove_sys` return, invisibly, a character vector of the names of packages not available in the system.

See Also

[integration](#)

Examples

```
## Not run:  
# install 'units' and all its dependencies from the system repos  
bspm::install_sys("units")  
  
# now remove it  
bspm::remove_sys("units")  
  
## End(Not run)
```

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