

# Package ‘bspm’

August 24, 2020

**Type** Package

**Title** Bridge to System Package Manager

**Version** 0.3.5

**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.

**License** MIT + file LICENSE

**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

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`bspm-package`*bspm: Bridge to System Package Manager*

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### 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](#)

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`integration`*Enable/Disable Bridge to System Package Manager*

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### 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*

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## 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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