

Package ‘sessioncheck’

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Title Checks Session Status

Version 0.1.1

Description Provides tools for checking whether an R session is in a clean state, including the global environment, attached packages, loaded namespaces, attached environments, session run time, R options, locale settings, and system environment variables. Intended as a safer replacement for the common 'rm(list = ls())' idiom: rather than silently wiping the global environment, sessioncheck() surfaces problems so the user can make an informed decision.

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Language en-US

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<https://sessioncheck.djnavarro.net/>

BugReports <https://github.com/djnavarro/sessioncheck/issues>

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check_attached_environments
<i>Check environments attached to the search path</i>

Description

Individual session check function that inspects the names of attached non-package environments. Session checkers can produce errors, warnings, or messages if requested.

Usage

```
check_attached_environments(  
  action = "warn",  
  allow_attached_environments = NULL  
)
```

Arguments

- action Behavior to take if the status is not clean. Possible values are "error", "warn", "message", and "none". The default is action = "warn".
- allow_attached_environments Character vector containing names of environments that are "allowed", and will not trigger an action if attached to the search path.

Details

This checker inspects all environments on the search path. This includes attached packages, anything added using attach(), and the global environment. When allow_attached_environments = NULL, package environments do not trigger an action, nor do "tools:rstudio", "tools:positron", "tools:callr", or "Autoloader". The global environment and the package environment for the **base** package never trigger actions.

Value

Invisibly returns an object of class sessioncheck_status.

See Also

[check_attached_packages\(\)](#), [check_loaded_namespaces\(\)](#), [check_globalenv_objects\(\)](#), [check_sessiontime\(\)](#), [check_required_options\(\)](#), [check_required_locale\(\)](#), [check_required_sysenv\(\)](#)

Examples

```
check_attached_environments(action = "message")
```

check_attached_packages

Check attached packages

Description

Individual session check function that inspects the attached packages. Session checkers can produce errors, warnings, or messages if requested.

Usage

```
check_attached_packages(action = "warn", allow_attached_packages = NULL)
```

Arguments

action Behavior to take if the status is not clean. Possible values are "error", "warn", "message", and "none". The default is action = "warn".

allow_attached_packages Character vector containing names of packages that are "allowed", and will not trigger an action if attached to the search path.

Details

This checker inspects the list of packages that have been attached to the search path (e.g., via `library()`). Regardless of the value of `allow_attached_packages`, R packages that have "base" priority (e.g., **base**, **utils**, and **grDevices**) do not trigger an action. When `allow_attached_packages = NULL` these are the only packages that will not trigger actions.

Value

Invisibly returns an object of class sessioncheck_status.

See Also

[check_loaded_namespaces\(\)](#), [check_globalenv_objects\(\)](#), [check_attached_environments\(\)](#),
[check_sessiontime\(\)](#), [check_required_options\(\)](#), [check_required_locale\(\)](#), [check_required_sysenv\(\)](#)

Examples

```
check_attached_packages(action = "message")
```

```
check_globalenv_objects
```

Check global environment objects

Description

Individual session check functions that inspect the contents of the global environment and the names of attached non-package environments. Session checkers can produce errors, warnings, or messages if requested.

Usage

```
check_globalenv_objects(action = "warn", allow_globalenv_objects = NULL)
```

Arguments

<code>action</code>	Behavior to take if the status is not clean. Possible values are "error", "warn", "message", and "none". The default is <code>action = "warn"</code> .
<code>allow_globalenv_objects</code>	Character vector containing names of objects that are "allowed", and will not trigger an action.

Details

This checker inspects the state of the global environment and takes action based on the objects found there. When `allow_globalenv_objects = NULL`, variables in the global environment will not trigger an action if the name starts with a dot. For example, `.Random.seed` and `.Last.value` do not trigger actions by default.

Value

Invisibly returns an object of class `sessioncheck_status`.

See Also

[check_attached_packages\(\)](#), [check_loaded_namespaces\(\)](#), [check_attached_environments\(\)](#),
[check_sessiontime\(\)](#), [check_required_options\(\)](#), [check_required_locale\(\)](#), [check_required_sysenv\(\)](#)

Examples

```
check_globalenv_objects(action = "message")
```

```
check_loaded_namespaces
```

Check loaded namespaces

Description

Individual session check function that inspects the loaded namespaces. Session checkers can produce errors, warnings, or messages if requested.

Usage

```
check_loaded_namespaces(action = "warn", allow_loaded_namespaces = NULL)
```

Arguments

<code>action</code>	Behavior to take if the status is not clean. Possible values are "error", "warn", "message", and "none". The default is <code>action = "warn"</code> .
<code>allow_loaded_namespaces</code>	Character vector containing names of packages that are "allowed", and will not trigger an action if loaded via namespace.

Details

This checker inspects the list of loaded namespaces (packages that have been loaded but not attached). Regardless of the value of `allow_loaded_namespaces`, R packages that have "base" priority (e.g., **base**, **utils**, and **grDevices**) do not trigger an action, nor does the **sessioncheck** package itself, since the package namespace must be loaded in order to call the function.

Value

Invisibly returns an object of class `sessioncheck_status`.

See Also

[check_attached_packages\(\)](#), [check_globalenv_objects\(\)](#), [check_attached_environments\(\)](#), [check_sessiontime\(\)](#), [check_required_options\(\)](#), [check_required_locale\(\)](#), [check_required_sysenv\(\)](#)

Examples

```
check_loaded_namespaces(action = "message")
```

check_required_locale *Check required values for locale settings*

Description

Individual session check function that inspects the locale settings. Session checkers can produce errors, warnings, or messages if requested.

Usage

```
check_required_locale(action = "warn", required_locale = NULL)
```

Arguments

action Behavior to take if the status is not clean. Possible values are "error", "warn", "message", and "none". The default is action = "warn".

required_locale A named list of required locale settings. If any of these are missing or have different values to the required values, an action is triggered.

Value

Invisibly returns an object of class sessioncheck_status.

See Also

[check_attached_packages\(\)](#), [check_loaded_namespaces\(\)](#), [check_globalenv_objects\(\)](#), [check_attached_environment\(\)](#), [check_sessiontime\(\)](#), [check_required_options\(\)](#), [check_required_sysenv\(\)](#)

Examples

```
check_required_locale(action = "message", required_locale = list(LC_TIME = "en_US.UTF-8"))
```

check_required_options
Check required values for options

Description

Individual session check function that inspects the options. Session checkers can produce errors, warnings, or messages if requested.

Usage

```
check_required_options(action = "warn", required_options = NULL)
```

Arguments

- action** Behavior to take if the status is not clean. Possible values are "error", "warn", "message", and "none". The default is `action = "warn"`.
- required_options** A named list of required options. If any of these options are missing or have different values to the required values, an action is triggered.

Value

Invisibly returns an object of class `sessioncheck_status`.

See Also

[check_attached_packages\(\)](#), [check_loaded_namespaces\(\)](#), [check_globalenv_objects\(\)](#), [check_attached_environment\(\)](#), [check_sessiontime\(\)](#), [check_required_locale\(\)](#), [check_required_sysenv\(\)](#)

Examples

```
check_required_options(action = "message", required_options = list(scipen = 0L, max.print = 50L))
```

`check_required_sysenv` *Check required values for system environment variables*

Description

Individual session check function that inspects system environment variables. Session checkers can produce errors, warnings, or messages if requested.

Usage

```
check_required_sysenv(action = "warn", required_sysenv = NULL)
```

Arguments

- action** Behavior to take if the status is not clean. Possible values are "error", "warn", "message", and "none". The default is `action = "warn"`.
- required_sysenv** A named list of required system environment variables. If any of these variables are missing or have different values to the required values, an action is triggered.

Value

Invisibly returns an object of class `sessioncheck_status`.

See Also

[check_attached_packages\(\)](#), [check_loaded_namespaces\(\)](#), [check_globalenv_objects\(\)](#), [check_attached_environment\(\)](#), [check_sessiontime\(\)](#), [check_required_options\(\)](#), [check_required_locale\(\)](#)

Examples

```
check_required_sysenv(action = "message", required_sysenv = list(R_TEST = "value"))
```

check_sessiontime	<i>Check session run time</i>
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Description

Individual session check function that inspects the session run time information. Session checkers can produce errors, warnings, or messages if requested.

Usage

```
check_sessiontime(action = "warn", max_sessiontime = NULL)
```

Arguments

action	Behavior to take if the status is not clean. Possible values are "error", "warn", "message", and "none". The default is action = "warn".
max_sessiontime	Maximum session time permitted in seconds before the checker takes action

Value

Invisibly returns an object of class sessioncheck_status.

See Also

[check_attached_packages\(\)](#), [check_loaded_namespaces\(\)](#), [check_globalenv_objects\(\)](#), [check_attached_environment\(\)](#), [check_sessiontime\(\)](#), [check_required_options\(\)](#), [check_required_locale\(\)](#), [check_required_sysenv\(\)](#)

Examples

```
check_sessiontime(action = "message")
```

coercion_methods	<i>Coerce session check object to a data frame</i>
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Description

Coerce session check object to a data frame

Usage

```
## S3 method for class 'sessioncheck_status'
as.data.frame(x, row.names = NULL, optional = FALSE, ...)

## S3 method for class 'sessioncheck_sessioncheck'
as.data.frame(x, row.names = NULL, optional = FALSE, ...)
```

Arguments

x	An object of class sessioncheck_status or sessioncheck_sessioncheck
row.names	Ignored
optional	Ignored
...	Ignored

Value

A data frame

display_methods	<i>Format and print sessioncheck objects</i>
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Description

Format and print sessioncheck objects

Usage

```
## S3 method for class 'sessioncheck_status'
format(x, ...)

## S3 method for class 'sessioncheck_sessioncheck'
format(x, ...)

## S3 method for class 'sessioncheck_status'
print(x, ...)

## S3 method for class 'sessioncheck_sessioncheck'
print(x, ...)
```

Arguments

<code>x</code>	An object of class <code>sessioncheck_status</code> or <code>sessioncheck_sessioncheck</code>
<code>...</code>	Ignored

Value

Character vector

<code>sessioncheck</code>	<i>Checks the overall status of the R session</i>
---------------------------	---

Description

Individual session check functions that each inspect one way in which an R session could be considered not to be "clean". Session checkers can produce errors, warnings, or messages if requested.

Usage

```
sessioncheck(action = NULL, checks = NULL, ...)
```

Arguments

<code>action</code>	Behavior to take if the status is not clean. Possible values are "error", "warn", "message", and "none". If the user does not specify an action the default to set <code>action = "warn"</code> .
<code>checks</code>	Character vector listing the checks to run. If the user does not specify the checks, the default is to run <code>checks = c("globalenv_objects", "attached_packages", "attached_environments")</code> .
<code>...</code>	Arguments passed to individual checks.

Details

`sessioncheck()` allows the user to apply multiple session checks in a single function. The following arguments are recognized via `...`:

- `allow_globalenv_objects` is passed to `check_globalenv_objects()`
- `allow_attached_packages` is passed to `check_attached_packages()`
- `allow_attached_environments` is passed to `check_attached_environments()`
- `allow_loaded_namespaces` is passed to `check_loaded_namespaces()`
- `max_sessiontime` is passed to `check_sessiontime()`
- `required_options` is passed to `check_required_options()`
- `required_locale` is passed to `check_required_locale()`
- `required_sysenv` is passed to `check_required_sysenv()`

Other arguments are ignored.

Value

Invisibly returns an object of class `sessioncheck_sessioncheck`.

Examples

```
sessioncheck(action = "message")
```

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