

# Package ‘teal.logger’

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**Title** Logging Setup for the 'teal' Family of Packages

**Version** 0.3.0

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**Description** Utilizing the 'logger' framework to record events within a package, specific to 'teal' family of packages. Supports logging namespaces, hierarchical logging, various log destinations, vectorization, and more.

**License** Apache License 2.0

**URL** <https://insightengineering.github.io/teal.logger/>,  
<https://github.com/insightengineering/teal.logger/>

**BugReports** <https://github.com/insightengineering/teal.logger/issues>

**Depends** R (>= 3.6)

**Imports** glue (>= 1.0.0), lifecycle (>= 0.2.0), logger (>= 0.3.0),  
methods, shiny (>= 1.6.0), utils, withr (>= 2.1.0)

**Suggests** knitr (>= 1.42), rmarkdown (>= 2.23), testthat (>= 3.1.7)

**VignetteBuilder** knitr, rmarkdown

**RdMacros** lifecycle

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## Contents

log_shiny_input_changes . . . . .	2
log_system_info . . . . .	3
register_handlers . . . . .	4
register_logger . . . . .	5
suppress_logs . . . . .	6
<b>Index</b>	<b>8</b>

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log\_shiny\_input\_changes  
*Auto logging input changes in Shiny app*

---

### Description

This is to be called in the server section of the Shiny app.

### Usage

```
log_shiny_input_changes(
  input,
  namespace = NA_character_,
  excluded_inputs = character(),
  excluded_pattern = "_width$",
  session = shiny::getDefaultReactiveDomain()
)
```

### Arguments

input	passed from Shiny server
namespace	(character(1)) the name of the namespace
excluded_inputs	(character) character vector of input names to exclude from logging
excluded_pattern	(character(1)) regexp pattern of names to be excluded from logging
session	the Shiny session

### Details

Function having very similar behavior as `logger::log_shiny_input_changes()` but adjusted for teal needs.

**Examples**

```
## Not run:
library(shiny)

ui <- bootstrapPage(
  numericInput("mean1", "mean1", 0),
  numericInput("mean2", "mean2", 0),
  numericInput("sd", "sd", 1),
  textInput("title", "title", "title"),
  textInput("foo", "This is not used at all, still gets logged", "foo"),
  passwordInput("password", "Password not to be logged", "secret"),
  plotOutput("plot")
)

server <- function(input, output) {
  log_shiny_input_changes(input, excluded_inputs = "password", excluded_pattern = "mean")

  output$plot <- renderPlot({
    hist(rnorm(1e3, input$mean, input$sd), main = input$title)
  })
}

shinyApp(ui = ui, server = server)

## End(Not run)
```

---

log\_system\_info

*Logs the basic information about the session.*

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**Description**

Logs the basic information about the session.

**Usage**

```
log_system_info()
```

**Value**

```
invisible(NULL)
```

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register_handlers	<i>Register handlers for logging messages, warnings and errors</i>
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### Description

Register handlers for logging messages, warnings and errors

### Usage

```
register_handlers(namespace, package = namespace)
```

### Arguments

namespace	(character(1)) the logger namespace
package	(character(1)) the package name

### Details

This function registers global handlers for messages, warnings and errors. The handlers will investigate the call stack and if it contains a function from the package, the message, warning or error will be logged into the respective namespace.

The handlers are registered only once per package and type. Consecutive calls will no effect. Registering handlers for package base is not supported.

Use `TEAL.LOG_MUFFLE` environmental variable or `teal.log_muffle` R option to optionally control recover strategies. If `TRUE` (a default value) then the handler will jump to muffle restart for a given type of condition and doesn't continue (with output to the console). Applicable for message and warning types only. The errors won't be suppressed.

### Value

NULL invisibly. Called for its side effects.

### Note

Registering handlers is forbidden within `tryCatch()` or `withCallingHandlers()`. Because of this, handlers are registered only if it is possible.

### See Also

[globalCallingHandlers\(\)](#)

**Examples**

```
## Not run:
register_handlers("teal.logger")
# see the outcome
globalCallingHandlers()

## End(Not run)
```

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register_logger	<i>Registers a logger instance in a given logging namespace.</i>
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**Description****[Experimental]****Usage**

```
register_logger(namespace = NA_character_, layout = NULL, level = NULL)
```

**Arguments**

namespace	(character(1) or NA_character_) the name of the logging namespace
layout	(character(1)) the log layout. Alongside the standard logging variables provided by the logging package (e.g. pid) the token variable can be used which will write the last 8 characters of the shiny session token to the log.
level	(character(1) or call) the log level. Can be passed as character or one of the logger's objects. See <a href="#">logger::log_threshold()</a> for more information.

**Details**

Creates a new logging namespace specified by the namespace argument. When the layout and level arguments are set to NULL (default), the function gets the values for them from system variables or R options. When deciding what to use (either argument, an R option or system variable), the function picks the first non NULL value, checking in order:

1. Function argument.
2. System variable.
3. R option.

layout and level can be set as system environment variables, respectively:

- teal.log\_layout as TEAL.LOG\_LAYOUT,
- teal.log\_level as TEAL.LOG\_LEVEL.

If neither the argument nor the environment variable is set the function uses the following R options:

- `options(teal.log_layout)`, which is passed to `logger::layout_glue_generator()`,
- `options(teal.log_level)`, which is passed to `logger::log_threshold()`

The logs are output to stdout by default. Check `logger` for more information about layouts and how to use `logger`.

### Value

`invisible(NULL)`

### Note

It's a thin wrapper around the `logger` package.

### See Also

The package vignettes for more help: `browseVignettes("teal.logger")`.

### Examples

```
options(teal.log_layout = "{msg}")
options(teal.log_level = "ERROR")
register_logger(namespace = "new_namespace")

logger::log_info("Hello from new_namespace", namespace = "new_namespace")
```

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suppress\_logs

*Suppress logger logs*

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### Description

This function suppresses `logger` when running tests via `testthat`. To suppress logs for a single test, add this function call within the `testthat::test_that` expression. To suppress logs for an entire test file, call this function at the start of the file.

### Usage

```
suppress_logs()
```

### Value

`NULL` invisible

**Examples**

```
testthat::test_that("An example test", {  
  suppress_logs()  
  testthat::expect_true(TRUE)  
})
```

# Index

`globalCallingHandlers()`, 4

`log_shiny_input_changes`, 2

`log_system_info`, 3

`logger::layout_glue_generator()`, 6

`logger::log_shiny_input_changes()`, 2

`logger::log_threshold()`, 5, 6

`register_handlers`, 4

`register_logger`, 5

`suppress_logs`, 6