Package: geyser (via r-universe)

November 4, 2026

Title Gene Expression displaYer of SummarizedExperiment in R

Version 1.5.0

Description Lightweight Expression displaYer (plotter / viewer) of SummarizedExperiment object in R. This package provides a quick and easy Shiny-based GUI to empower a user to use a SummarizedExperiment object to view and plot gene expression data.

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LazyData false

biocViews Software, ShinyApps, GUI, GeneExpression

Imports bslib (>= 0.6.0), BiocStyle, ComplexHeatmap, cowplot, dplyr, DT, ggbeeswarm, ggplot2, ggrepel, ggh4x, htmltools, magrittr, pals, RColorBrewer, rlang, R.utils, shiny, shinyjs, S4Vectors, SummarizedExperiment, tibble, tidyselect, tidyr, yaml

Suggests airway, knitr, DESeq2, rmarkdown, stringr, testthat (>= 3.0.0)

Config/testthat/edition 3

VignetteBuilder knitr

SystemRequirements pandoc (>= 2.8) - https://pandoc.org

Encoding UTF-8

URL https://github.com/davemcg/geyser

BugReports https://github.com/davemcg/geyser/issues

RoxygenNote 7.3.2

Config/pak/sysreqs cmake make libicu-dev libpng-dev libuv1-dev perl zlib1g-dev

Repository https://bioc.r-universe.dev

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`apply_config` *Configuration Helper Functions for Geyser*

Description

Functions to handle loading, saving, and applying configurations

Apply a configuration to the Shiny session

Usage

```
apply_config(config, session, rv)
```

Arguments

`config`	List containing configuration parameters
`session`	Shiny session object
`rv`	reactiveValues object containing app state

`apply_embedded_config` *Apply embedded config from SummarizedExperiment if present*

Description

Apply embedded config from SummarizedExperiment if present

Usage

```
apply_embedded_config(rse, session, rv)
```

Arguments

`rse`	SummarizedExperiment object
`session`	Shiny session object
`rv`	reactiveValues object

apply_pending_group_filters *Apply pending group filters to dynamic UI*

Description

Apply pending group filters to dynamic UI

Usage

```
apply_pending_group_filters(rv, input, session)
```

Arguments

rv	reactiveValues object
input	Shiny input object
session	Shiny session object

apply_pending_sample_filter *Apply pending sample filter to table*

Description

Apply pending sample filter to table

Usage

```
apply_pending_sample_filter(rv, input)
```

Arguments

rv	reactiveValues object
input	Shiny input object

create_config_download_handler *Create configuration download handler*

Description

Create configuration download handler

Usage

```
create_config_download_handler(input)
```

Arguments

input	Shiny input object

extract_config_from_metadata *Extract geyser config from SummarizedExperiment metadata*

Description

Extract geyser config from SummarizedExperiment metadata

Usage

```
extract_config_from_metadata(rse)
```

Arguments

rse	SummarizedExperiment object

Value

List containing config or NULL if not found

geyser *geyser*

Description

Run shiny app to use SummarizedExperiment object to display genomics data

Usage

```
geyser(
  rse = NULL,
  app_name = "geyser",
  primary_color = "#3A5836",
  secondary_color = "#d5673e",
  computer_data_dir = NULL
)
```

Arguments

rse	SummarizedExperiment object. If NULL (the default), the app will start with a file upload screen.
app_name	Title name that goes on the top left of the Shiny app
primary_color	The title bar color
secondary_color	The plot action button color
computer_data_dir	Optional folder path to existing SummarizedExperiment RDS files.

Value

A Shiny app object

Examples

```
if (interactive()) {
  load(system.file('extdata/tiny_rse.Rdata', package = 'geyser'))
  geyser(tiny_rse, "Test RSE")
}
```

`setup_config_preset_observer` *Setup configuration preset observer*

Description

Setup configuration preset observer

Usage

```
setup_config_preset_observer(input, session, rv)
```

Arguments

`input`	Shiny input object
`session`	Shiny session object
`rv`	reactiveValues object

`setup_config_upload_observer` *Setup configuration upload observer*

Description

Setup configuration upload observer

Usage

```
setup_config_upload_observer(input, session, rv)
```

Arguments

`input`	Shiny input object
`session`	Shiny session object
`rv`	reactiveValues object

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