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Description Project scaffolding and workflow tools for reproducible data science. Manages packages, tracks data integrity, handles database connections, generates notebooks, and publishes to S3-compatible storage. More information at [<https://framework.table1.org>](https://framework.table1.org).

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URL <https://framework.table1.org>, <https://github.com/table1/framework>

BugReports <https://github.com/table1/framework/issues>

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 BiocManager, cli, curl, cyclocomp, devtools, dplyr, DT, duckdb,
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add_project_to_config	<i>Add project to global configuration</i>
-----------------------	--

Description

Add project to global configuration

Usage

add_project_to_config(project_dir, project_name = NULL, project_type = NULL)

Arguments

- project_dir Path to project directory
- project_name Optional project name
- project_type Optional project type

Value

Invisibly returns the project ID

ai_generate_context	<i>Generate AI Context File</i>
---------------------	---------------------------------

Description

Generates the canonical AI context file (AGENTS.md) for a project. The file is intentionally thin: it carries project-specific facts (environment, packages, directories) plus an index of the Framework skills installed in `.claude/skills/`, which hold the detailed workflow instructions.

Usage

```
ai_generate_context(  
  project_path = ".",  
  project_name = NULL,  
  project_type = NULL,  
  config = NULL  
)
```

Arguments

project_path	Path to the project directory (default: current directory)
project_name	Name of the project (for header)
project_type	Project type: "project", "project_sensitive", "course", "presentation"
config	Project configuration (if NULL, reads from settings.yml)

Value

Character string with the complete AI context content

Examples

```
if (FALSE) {  
  # Generate AI context for current project  
  content <- ai_generate_context()  
  
  # Generate for a specific project type  
  content <- ai_generate_context(project_type = "project_sensitive")  
}
```

ai_regenerate_context	<i>Regenerate Dynamic Sections in AI Context File</i>
-----------------------	---

Description

Updates only the sections marked with `<!-- @framework:regenerate -->` in an existing AI context file, preserving user customizations in unmarked sections.

Usage

```
ai_regenerate_context(project_path = ".", sections = NULL, ai_file = NULL)
```

Arguments

project_path	Path to the project directory
sections	Which sections to regenerate. NULL = all regeneratable sections. Options: "environment", "packages", "data", "functions"
ai_file	Name of the AI context file (default: from settings or "CLAUDE.md")

Value

Invisible TRUE on success

Examples

```
if (file.exists("CLAUDE.md")) {  
  # Regenerate all dynamic sections  
  ai_regenerate_context()  
  
  # Regenerate only packages section  
  ai_regenerate_context(sections = "packages")  
}
```

ai_skills	<i>AI Skills Management</i>
-----------	-----------------------------

Description

Framework ships agent "skills" - focused instruction files (SKILL.md) that AI coding assistants load on demand. Skills are installed into a project's `.claude/skills/` directory and indexed from AGENTS.md, so both Claude Code (which discovers them natively) and other agents (which follow the paths listed in AGENTS.md) can use them.

ai_skills_update	<i>Update Framework Skills in a Project</i>
------------------	---

Description

Re-copies the Framework skill files (.claude/skills/framework-*/SKILL.md) from the installed package version into the project. Run this after upgrading the framework package to pick up improved skill instructions.

Usage

```
ai_skills_update(project_path = ".")
```

Arguments

project_path Path to the project directory (default: current directory)

Details

Only Framework-owned skills (prefixed framework-) are touched; any custom skills you add alongside them are left alone.

Value

Invisible character vector of updated skill names

Examples

```
if (FALSE) {  
  # Refresh skills after upgrading the framework package  
  ai_skills_update()  
}
```

ai_sync_context	<i>Sync AI Assistant Context Files</i>
-----------------	--

Description

Copies content from the canonical AI assistant file to all other AI files, adding a warning header to non-canonical files.

Usage

```
ai_sync_context(config_file = NULL, force = FALSE, verbose = TRUE)
```

Arguments

config_file	Path to configuration file (default: auto-detect settings.yml/settings.yml)
force	Logical; if TRUE, overwrite even if target is newer (default: FALSE)
verbose	Logical; if TRUE (default), show sync messages

Details

This function reads the `ai.canonical_file` setting from `settings.yml` and copies its content to all other AI assistant instruction files that exist in the project.

The canonical file is copied as-is. Non-canonical files receive a warning header indicating they are auto-synced and should not be edited directly.

Supported files:

- **AGENTS.md** - Cross-platform AI assistants
- **CLAUDE.md** - Claude Code
- **.github/copilot-instructions.md** - GitHub Copilot

Value

Invisible list with sync results

Examples

```
if (FALSE) {
# Sync AI context files
ai_sync_context()

# Force sync even if targets are newer
ai_sync_context(force = TRUE)

# Silent sync (for git hooks)
ai_sync_context(verbose = FALSE)
}
```

cache	<i>Cache a value</i>
-------	----------------------

Description

Cache a value

Usage

```
cache(name, value, file = NULL, expire_after = NULL)
```

Arguments

name	The cache name
value	The value to cache
file	Optional file path to store the cache (default: cache/{name}.rds)
expire_after	Optional expiration time in hours (default: from config)

Value

The cached value

cache_flush	<i>Clear all cached values</i>
-------------	--------------------------------

Description

Clear all cached values

Usage

```
cache_flush()
```

Value

Invisibly returns NULL.

cache_forget	<i>Remove a cached value</i>
--------------	------------------------------

Description

Remove a cached value

Usage

```
cache_forget(name, file = NULL)
```

Arguments

name	The cache name to remove
file	Optional file path of the cache (default: cache/{name}.rds)

Value

Invisibly returns NULL.

cache_get	<i>Get a cached value</i>
-----------	---------------------------

Description

Get a cached value

Usage

```
cache_get(name, file = NULL, expire_after = NULL)
```

Arguments

name	The cache name
file	Optional file path to store the cache (default: cache/{name}.rds)
expire_after	Optional expiration time in hours (default: from config)

Value

The cached value, or NULL if not found, expired, or hash mismatch

cache_list	<i>List all cached values</i>
------------	-------------------------------

Description

Returns a data frame of all cache entries with their names, expiration times, and status (expired or active).

Usage

```
cache_list()
```

Value

A data frame with columns:

name Cache key name
expire_at Expiration timestamp (NA if no expiration)
created_at When the cache was created
updated_at When the cache was last updated
last_read_at When the cache was last read
status Either "active" or "expired"

Returns an empty data frame if no cache entries exist.

Examples

```

if (FALSE) {
# List all cache entries
cache_list()

# Filter to see only expired caches
cache_list() |> dplyr::filter(status == "expired")
}

```

cache_remember	<i>Remember a value (get from cache or compute and store)</i>
----------------	---

Description

Attempts to retrieve a cached value by name. If the cache doesn't exist, is expired, or a refresh is requested, evaluates the expression and caches the result. This is the primary caching interface for expensive computations.

Usage

```

cache_remember(
  name,
  expr,
  file = NULL,
  expire_after = NULL,
  refresh = FALSE,
  expire = NULL
)

```

Arguments

name	The cache name (non-empty string identifier)
expr	The expression to evaluate and cache if cache miss occurs. Expression is evaluated in the parent frame.
file	Optional file path to store the cache (default: cache/{name}.rds)
expire_after	Optional expiration time in hours (default: from config). Character durations like "1 day" or "2 hours" are accepted.
refresh	Optional boolean or function that returns boolean to force refresh. If TRUE or if function returns TRUE, cache is invalidated and expression is re-evaluated.
expire	Optional alias for expire_after (accepts the same formats)

Value

The cached value (if cache hit) or the result of evaluating expr (if cache miss or refresh requested)

Examples

```

if (FALSE) {
  # Cache expensive computation
  result <- cache_remember("my_analysis", {
    expensive_computation()
  })

  # Force refresh when data changes
  result <- cache_remember("analysis", {
    run_analysis()
  }, refresh = file.mtime("data.csv") > cache_time)
}

```

capture_output	<i>Capture console output and errors from an expression</i>
----------------	---

Description

Capture console output and errors from an expression

Usage

```
capture_output(expr)
```

Arguments

expr	Expression to evaluate
------	------------------------

Value

List containing status (boolean), console_output (character vector), and result (return value or error)

cloud_login	<i>Log In to framework.pub</i>
-------------	--------------------------------

Description

Shows what connecting shares, asks for confirmation, then verifies the token and stores it in the native credential store for your platform – the macOS Keychain, Windows Credential Manager, or Linux Secret Service (via the keyring package) – falling back to a permission-restricted file in the Framework config directory. This is the whole onboarding:

Usage

```
cloud_login(token, verify = TRUE, consent = NULL)
```

Arguments

token	Your user token from framework.pub (Settings -> API tokens).
verify	Check the token against the cloud before saving (default TRUE).
consent	Set TRUE to confirm non-interactively (scripts, CI). In an interactive session you are prompted instead. What connecting shares is printed first and documented at https://framework.pub/privacy .

Details

```
framework::cloud_login("fw_...")
```

Value

Invisibly, where the token was stored ("keyring" or the file path).

See Also

[cloud_status\(\)](#), [cloud_logout\(\)](#), [cloud_settings\(\)](#)

cloud_logout	<i>Log Out of framework.pub</i>
--------------	---------------------------------

Description

Removes the stored token from the system keyring and any token files. Tokens can also be revoked server-side at framework.pub -> API tokens.

Usage

```
cloud_logout()
```

Value

Invisibly, TRUE.

cloud_settings	<i>Fetch Your Cloud Settings</i>
----------------	----------------------------------

Description

Retrieves your settings document from framework.pub. These settings are overlaid on local defaults when creating projects with `new()`.

Usage

```
cloud_settings()
```

Value

A list with revision, schema_version, and document.

cloud_status	<i>Check Cloud Connection Status</i>
--------------	--------------------------------------

Description

Reports whether a cloud token is configured and, if so, who it authenticates as.

Usage

```
cloud_status()
```

Value

Invisibly, TRUE if connected, FALSE otherwise.

cloud_sync	<i>Sync Your Settings with framework.pub</i>
------------	--

Description

Your cloud settings document is mirrored to cloud-settings.yml in the Framework config directory. Edit it there (or on the website) and sync. Your main settings.yml is never touched.

Usage

```
cloud_sync(direction = c("auto", "pull", "push"))
```

Arguments

direction One of "auto", "pull", "push".

Details

- pull fetches the cloud document (backing up local edits first).
- push sends your local mirror to the cloud.
- auto (default) chooses: pull when the cloud is ahead, push when only your local mirror changed, and stops with instructions when both changed.

Value

Invisibly, the current revision number.

See Also

`cloud_login()`, `cloud_settings()`

configure_global	<i>Configure Global Framework Settings</i>
------------------	--

Description

Unified function for reading and writing global Framework settings to `~/.frameworkrc.json`. This function provides a single source of truth for global configuration, used by both the CLI and GUI interfaces.

Usage

```
configure_global(settings = NULL, validate = TRUE)
```

Arguments

settings List. Settings to update (partial updates supported)

validate Logical. Validate settings before saving (default: TRUE)

Details**Global Settings Structure:**

- author - Author information (name, email, affiliation)
- defaults - Project defaults
 - project_type - Default project type ("project", "presentation", "course")
 - notebook_format - Default notebook format ("quarto", "rmarkdown")
 - ide - IDE preference ("vscode", "rstudio", "both", "none")
 - use_git - Initialize git repositories by default

- use_renv - Enable renv by default
- seed - Default random seed
- seed_on_scaffold - Set seed during scaffold()
- ai_support - Enable AI assistant support
- ai_assistants - List of AI assistants ("claude", "agents", etc.)
- ai_canonical_file - Canonical AI instruction file
- packages - Default package list
- directories - Default directory structure
- git_hooks - Git hook preferences
- projects - Registered projects list
- active_project - Currently active project path

Value

Invisibly returns updated global configuration

Examples

```
if (FALSE) {
  # Update author information
  configure_global(settings = list(
    author = list(
      name = "Jane Doe",
      email = "jane@example.com"
    )
  ))

  # Update default project type
  configure_global(settings = list(
    defaults = list(
      project_type = "presentation"
    )
  ))

  # Get current settings (read-only)
  current <- configure_global()
}
```

connections_list

List all connections (databases and object storage)

Description

Prints both database connections defined under connections: and object storage profiles (S3-compatible buckets). Use this to see everything Framework can talk to from your config.

Usage

```
connections_list()
```

Value

Invisibly returns NULL after printing summaries.

connections_s3	<i>S3 Connection Functions</i>
----------------	--------------------------------

Description

Functions for connecting to and interacting with S3-compatible storage.

data_add	<i>Add an existing file to the data catalog</i>
----------	---

Description

Registers an existing data file with the Framework data catalog. This allows you to track files that were created outside of Framework (e.g., downloaded from external sources, copied from other projects) and use them with `data_read()` using dot notation.

Usage

```
data_add(  
  file_path,  
  name = NULL,  
  type = NULL,  
  delimiter = "comma",  
  locked = TRUE,  
  update_config = TRUE  
)
```

Arguments

file_path	Path to the existing file (must exist)
name	Optional dot notation name for the data catalog (e.g., <code>inputs.raw.survey_data</code>). If NULL, derives name from file path relative to project root.
type	Optional type override. Auto-detected from file extension if NULL.
delimiter	Delimiter for CSV files ("comma", "tab", "semicolon", "space")
locked	Whether the file should be locked (hash-verified on read)
update_config	If TRUE (default), also updates the YAML config with the data spec

Value

Invisibly returns the data spec that was created

Examples

```
if (FALSE) {
  # Add a downloaded CSV file to the catalog
  data_add("inputs/raw/survey_results.csv", name = "inputs.raw.survey_results")

  # Now you can read it with dot notation
  data_read("inputs.raw.survey_results")

  # Add with auto-generated name
  data_add("inputs/intermediate/cleaned_data.rds")
  # Name will be derived as "inputs.intermediate.cleaned_data"
}
```

data_info

Get data specification from config

Description

Gets the data specification for a given dot notation path from settings.yml. Supports dot notation (e.g., "source.private.example"), relative paths, and absolute paths. Auto-detects file type from extension and applies intelligent defaults for common formats.

Usage

```
data_info(path)
```

Arguments

path	Dot notation path (e.g. "source.private.example"), relative path, or absolute path to a data file
------	---

Value

A list with data specification including:

- path - Full file path
- type - File type (csv, rds, stata, spss, sas, etc.)
- delimiter - Delimiter for CSV files (comma, tab, etc.)
- locked - Whether file is locked for integrity checking
- private - Whether file is in private data directory
- description - Optional description of the dataset (displayed when loading)

Examples

```
if (FALSE) {  
  # Get info from dot notation  
  info <- data_info("source.private.my_data")  
  
  # Get info from file path  
  info <- data_info("data/public/example.csv")  
}
```

data_list	<i>List all data entries from config</i>
-----------	--

Description

Lists all data specifications defined in the configuration, showing the data key, path, type, and description (if available).

Usage

```
data_list()
```

Value

A data frame with columns: name, path, type, locked, description

Examples

```
if (FALSE) {  
  # List all data entries  
  data_list()  
  
  # Use the alias  
  list_data()  
}
```

data_read	<i>Read data using dot notation path or direct file path</i>
-----------	--

Description

Supports CSV, TSV, RDS, Excel (.xlsx, .xls), Stata (.dta), SPSS (.sav, .zsav, .por), and SAS (.sas7bdat, .xpt) file formats.

Usage

```
data_read(path, delim = NULL, keep_attributes = FALSE, ...)
```

Arguments

path	Dot notation path (e.g. "source.private.example") or direct file path
delim	Optional delimiter for CSV files ("comma", "tab", "semicolon", "space")
keep_attributes	Logical flag to preserve special attributes (e.g., haven labels). Default: FALSE (strips attributes)
...	Additional arguments passed to read functions (readr::read_delim, readxl::read_excel, haven::read_*, etc.)

Value

The loaded data, typically a data frame or tibble.

data_save	<i>Save data using dot notation or file path</i>
-----------	--

Description

Save data using dot notation or file path

Usage

```
data_save(  
  data,  
  path,  
  type = NULL,  
  delimiter = "comma",  
  locked = TRUE,  
  force = FALSE  
)
```

Arguments

data	Data frame to save
path	Either: <ul style="list-style-type: none">• Dot notation: <code>inputs.raw.filename</code> resolves to <code>inputs/raw/filename.rds</code>• Direct path: <code>"inputs/raw/filename.csv"</code> uses path as-is Dot notation uses your configured directories (e.g., <code>inputs.raw</code> , <code>inputs.intermediate</code> , <code>outputs.private</code>).
type	Type of data file ("csv" or "rds"). Auto-detected from extension if path includes one.
delimiter	Delimiter for CSV files ("comma", "tab", "semicolon", "space")
locked	Whether the file should be locked after saving
force	If TRUE, creates missing directories. If FALSE (default), errors if directory doesn't exist.

Value

Invisibly returns the saved data.

data_verify	<i>Verify a Dataset Against the Integrity Ledger</i>
-------------	--

Description

Hashes the file behind a catalog name and compares it against the local `framework.db` record and the project's cloud ledger on `framework.pub`. Proves "the data I have is bit-identical to what was recorded" without the data ever leaving the machine.

Usage

`data_verify(name)`

Arguments

name	Data catalog name (e.g. <code>"inputs.raw.enrollment"</code>), as used with <code>data_read()</code> / <code>data_save()</code> .
------	--

Value

Invisibly, TRUE when every available record matches.

db_connect	<i>Get a database connection</i>
------------	----------------------------------

Description

Gets a database connection based on the connection name in config.yml. For most use cases, prefer `db_query()` or `db_execute()` which handle connection lifecycle automatically.

Usage

```
db_connect(name)
```

Arguments

name	Character. Name of the connection in config.yml (e.g., "postgres")
------	--

Value

A database connection object (DBIConnection)

Examples

```
if (FALSE) {  
  # Preferred: use db_query() which auto-disconnects  
  users <- db_query("SELECT * FROM users", "postgres")  
  
  # Manual connection management (remember to disconnect!)  
  conn <- db_connect("postgres")  
  DBI::dbListTables(conn)  
  DBI::dbDisconnect(conn)  
}
```

db_drivers_install	<i>Install database drivers</i>
--------------------	---------------------------------

Description

Interactive helper to install one or more database drivers. Provides helpful instructions and handles special cases (like ODBC).

Usage

```
db_drivers_install(drivers = NULL, repos = getOption("repos"))
```

Arguments

drivers Character vector. Database driver names to install (e.g., "postgres", "mysql", "duckdb"). If NULL, shows interactive menu.

repos Character. CRAN repository URL. Default: `getOption("repos")`

Value

NULL (invisible). Installs packages as side effect.

Examples

```
if (FALSE) {
  # Install specific drivers
  db_drivers_install(c("postgres", "mysql"))

  # Interactive mode
  db_drivers_install()
}
```

db_drivers_status	<i>Check if database drivers are installed</i>
-------------------	--

Description

Checks which database drivers are currently available on the system. Returns a data frame showing the status of all supported database drivers.

Usage

```
db_drivers_status(quiet = FALSE)
```

Arguments

quiet Logical. If TRUE, suppresses messages. Default: FALSE

Value

A data frame with columns:

- **driver**: Database driver name
- **package**: Required R package
- **installed**: Whether the package is installed
- **version**: Package version (if installed)

Examples

```
# Check all drivers
db_drivers_status()

# Quiet mode (no messages)
db_drivers_status(quiet = TRUE)
```

db_execute	<i>Execute a database statement</i>
------------	-------------------------------------

Description

Executes a SQL statement on a database without returning results. The connection is created, used, and automatically closed.

Usage

```
db_execute(query, connection_name, ...)
```

Arguments

query	SQL statement to execute
connection_name	Name of the connection in config.yml
...	Additional arguments passed to DBI::dbExecute

Value

Number of rows affected

Examples

```
if (FALSE) {
  rows <- db_execute("DELETE FROM cache WHERE expired = TRUE", "my_db")
}
```

db_list	<i>List all database connections from configuration</i>
---------	---

Description

Lists all database connections defined in the configuration, showing the connection name, driver, host, and database name (if applicable).

Usage

```
db_list()
```

Value

Invisibly returns NULL after printing connection list

Examples

```
if (FALSE) {  
  # List all connections  
  db_list()  
}
```

db_query	<i>Get data from a database query</i>
----------	---------------------------------------

Description

Gets data from a database using a query and connection name. The connection is created, used, and automatically closed.

Usage

```
db_query(query, connection_name, ...)
```

Arguments

query	SQL query to execute
connection_name	Name of the connection in config.yml
...	Additional arguments passed to DBI::dbGetQuery

Value

A data frame with the query results

Examples

```
if (FALSE) {  
  users <- db_query("SELECT * FROM users", "my_db")  
}
```

db_transaction	<i>Execute code within a database transaction</i>
----------------	---

Description

Wraps code execution in a database transaction with automatic commit on success and rollback on error. This ensures atomicity of multiple database operations.

Usage

```
db_transaction(conn, code)
```

Arguments

conn	Database connection
code	Expression or code block to execute within the transaction

Details

The function automatically:

- Begins a transaction with `DBI::dbBegin()`
- Executes the provided code
- Commits the transaction on success with `DBI::dbCommit()`
- Rolls back the transaction on error with `DBI::dbRollback()`

Transactions are essential for maintaining data integrity when performing multiple related operations. If any operation fails, all changes are rolled back.

Value

The result of the code expression

Examples

```

if (FALSE) {
  conn <- db_connect("postgres")

  # Basic transaction
  db_transaction(conn, {
    DBI::dbExecute(conn, "INSERT INTO users (name, age) VALUES ('Alice', 30)")
    DBI::dbExecute(conn, "INSERT INTO users (name, age) VALUES ('Bob', 25)")
  })

  # Transaction with error handling - auto-rollback on error
  tryCatch({
    db_transaction(conn, {
      DBI::dbExecute(conn, "INSERT INTO users (name) VALUES ('Alice')")
      stop("Something went wrong") # This will trigger rollback
    })
  }, error = function(e) {
    message("Transaction failed: ", e$message)
  })

  DBI::dbDisconnect(conn)
}

```

db_with

*Execute code with a managed database connection***Description**

Provides automatic connection lifecycle management. The connection is automatically closed when the code block finishes, even if an error occurs. This prevents connection leaks and ensures proper resource cleanup.

Usage

```
db_with(connection_name, code)
```

Arguments

connection_name	Character. Name of the connection in config.yml
code	Expression to evaluate with the connection (use conn to access the connection)

Value

The result of evaluating code

Examples

```

if (FALSE) {
# Safe - connection auto-closes
users <- db_with("my_db", {
  DBI::dbGetQuery(conn, "SELECT * FROM users WHERE active = TRUE")
})

# Multiple operations with same connection
result <- db_with("my_db", {
  DBI::dbExecute(conn, "INSERT INTO users (name) VALUES ('Alice')")
  DBI::dbGetQuery(conn, "SELECT * FROM users")
})

# Connection closes even on error
tryCatch(
  db_with("my_db", {
    stop("Something went wrong") # Connection still closes
  }),
  error = function(e) message(e$message)
)
}

```

docs_export

Export Package Documentation to Database

Description

Parses roxygen2-generated .Rd files and exports structured documentation to SQLite (for GUI) or other formats. This enables searchable documentation in the Framework GUI and powers the public documentation website.

Usage

```

docs_export(
  output_path = "docs.db",
  man_dir = "man",
  package_name = "framework",
  package_version = NULL,
  include_internal = FALSE,
  verbose = TRUE
)

```

Arguments

output_path	Path to SQLite database file. Default: "docs.db"
man_dir	Directory containing .Rd files. Default: "man"

package_name	Package name for metadata. Default: "framework"
package_version	Package version for metadata. Default: NULL (auto-detect)
include_internal	Include internal/non-exported functions. Default: FALSE
verbose	Print progress messages. Default: TRUE

Details

The exporter reads all .Rd files from the man/ directory and extracts:

- Function name, title, description, details
- Arguments/parameters with descriptions
- Usage signatures
- Examples (with dontrun detection)
- See Also references
- Custom sections and subsections
- Keywords

The SQLite output includes FTS5 full-text search for fast querying.

Value

Invisibly returns the database connection path

Examples

```
if (FALSE) {
# Export to default location (exported functions only)
docs_export()

# Export to custom location
docs_export("inst/gui/docs.db")

# Include internal/private functions too
docs_export("all_docs.db", include_internal = TRUE)

# Query the exported docs
con <- DBI::dbConnect(RSQLite::SQLite(), "docs.db")
DBI::dbGetQuery(con, "SELECT name, title FROM functions WHERE name LIKE 'data_%'")
DBI::dbDisconnect(con)
}
```

env_clear	<i>Clear R environment</i>
-----------	----------------------------

Description

Cleans up the R environment by removing objects, closing plots, detaching packages, and running garbage collection. Does not clear the console.

Usage

```
env_clear(keep = character(), envir)
```

Arguments

keep	Character vector of object names to keep (default: empty)
envir	The environment to clear

Value

Invisibly returns NULL

Examples

```
if (FALSE) {  
  # Clean a specific environment  
  env_clear(envir = my_env)  
  
  # Keep specific objects  
  env_clear(keep = c("config", "data"), envir = my_env)  
}
```

env_summary	<i>Summarize R environment</i>
-------------	--------------------------------

Description

Displays a summary of the current R environment including loaded packages, objects in the global environment, and memory usage.

Usage

```
env_summary(envir)
```

Arguments

envir	The environment to summarize
-------	------------------------------

Value

Invisibly returns a list with environment information

Examples

```
if (FALSE) {
  env_summary(envir = my_env)
}
```

fw_config_dir	<i>Get Framework config directory path</i>
---------------	--

Description

Returns the path to Framework's global configuration directory. Uses `tools::R_user_dir("framework", "config")` by default (CRAN compliant). Can be overridden with the `FW_CONFIG_HOME` environment variable.

Usage

```
fw_config_dir()
```

Value

Character string with the config directory path

git_add	<i>Stage Files for Commit</i>
---------	-------------------------------

Description

Add file contents to the staging area.

Usage

```
git_add(files = ".")
```

Arguments

files Character vector of file paths to stage, or "." for all (default)

Value

Invisibly returns TRUE on success

Examples

```
if (FALSE) {  
  git_add()          # Stage all changes  
  git_add("README.md") # Stage specific file  
  git_add(c("R/foo.R", "R/bar.R"))  
}
```

git_commit	<i>Commit Staged Changes</i>
------------	------------------------------

Description

Record changes to the repository with a commit message.

Usage

```
git_commit(message, all = FALSE)
```

Arguments

message	Commit message (required)
all	Logical; if TRUE, automatically stage modified/deleted files (default: FALSE)

Value

Invisibly returns TRUE on success

Examples

```
if (FALSE) {  
  git_commit("Fix bug in data loading")  
  git_commit("Update README", all = TRUE) # Stage and commit  
}
```

git_diff	Show Changes (Diff)
----------	---------------------

Description

Show changes between commits, working tree, etc.

Usage

```
git_diff(staged = FALSE, file = NULL)
```

Arguments

staged	Logical; if TRUE, show staged changes (default: FALSE shows unstaged)
file	Optional file path to show diff for specific file

Value

Invisibly returns the diff output as a character vector

Examples

```
if (FALSE) {  
  git_diff()           # Show unstaged changes  
  git_diff(staged = TRUE) # Show staged changes  
  git_diff(file = "R/foo.R")  
}
```

git_hooks_disable	Disable Specific Git Hook
-------------------	---------------------------

Description

Disables a specific hook in settings and reinstalls the pre-commit hook.

Usage

```
git_hooks_disable(hook_name, config_file = NULL, verbose = TRUE)
```

Arguments

hook_name	Name of hook: "ai_sync", "data_security", or "check_sensitive_dirs"
config_file	Path to configuration file (default: auto-discover settings.yml or settings.yml)
verbose	Logical; if TRUE (default), show messages

Value

Invisible TRUE on success

git_hooks_enable	<i>Enable Specific Git Hook</i>
------------------	---------------------------------

Description

Enables a specific hook in settings and reinstalls the pre-commit hook.

Usage

```
git_hooks_enable(hook_name, config_file = NULL, verbose = TRUE)
```

Arguments

hook_name	Name of hook: "ai_sync", "data_security", or "check_sensitive_dirs"
config_file	Path to configuration file (default: auto-discover settings.yml or settings.yml)
verbose	Logical; if TRUE (default), show messages

Value

Invisible TRUE on success

Examples

```
if (FALSE) {  
  git_hooks_enable("ai_sync")  
  git_hooks_enable("data_security")  
}
```

git_hooks_install	<i>Install Git Pre-commit Hook</i>
-------------------	------------------------------------

Description

Creates a pre-commit hook that runs Framework checks based on settings.yml settings.

Usage

```
git_hooks_install(config_file = NULL, force = FALSE, verbose = TRUE)
```

Arguments

config_file	Path to configuration file (default: "settings.yml")
force	Logical; if TRUE, overwrite existing hook (default: FALSE)
verbose	Logical; if TRUE (default), show installation messages

Details

Creates or updates .git/hooks/pre-commit to run enabled Framework hooks:

- **ai_sync**: Sync AI assistant context files before commit
- **data_security**: Run security audit to catch data leaks
- **check_sensitive_dirs**: Warn about unignored sensitive directories

Hook behavior is controlled by git.hooks.* settings in settings.yml.

Value

Invisible TRUE on success, FALSE on failure

Examples

```
if (FALSE) {  
  # Install hooks based on settings.yml  
  git_hooks_install()  
  
  # Force reinstall (overwrites existing hook)  
  git_hooks_install(force = TRUE)  
}
```

git_hooks_list	List Git Hook Status
----------------	----------------------

Description

Shows which hooks are enabled and their current status.

Usage

```
git_hooks_list(config_file = NULL)
```

Arguments

config_file	Path to configuration file (default: auto-discover settings.yml or settings.yml)
-------------	--

Value

Data frame with hook information

git_hooks_uninstall	<i>Uninstall Git Pre-commit Hook</i>
---------------------	--------------------------------------

Description

Removes the Framework-managed pre-commit hook.

Usage

```
git_hooks_uninstall(verbose = TRUE)
```

Arguments

verbose	Logical; if TRUE (default), show messages
---------	---

Value

Invisible TRUE if hook was removed, FALSE otherwise

git_log	<i>Show Commit Log</i>
---------	------------------------

Description

Show recent commit history.

Usage

```
git_log(n = 10, oneline = TRUE)
```

Arguments

n	Number of commits to show (default: 10)
oneline	Logical; if TRUE, show condensed one-line format (default: TRUE)

Value

Invisibly returns the log output as a character vector

Examples

```
if (FALSE) {  
  git_log()  
  git_log(n = 5)  
  git_log(oneline = FALSE) # Full format  
}
```

git_pull	<i>Pull from Remote</i>
----------	-------------------------

Description

Fetch and integrate changes from the remote repository.

Usage

```
git_pull(remote = "origin", branch = NULL)
```

Arguments

remote	Remote name (default: "origin")
branch	Branch name (default: current branch)

Value

Invisibly returns TRUE on success

Examples

```
if (FALSE) {  
  git_pull()  
  git_pull(remote = "origin", branch = "main")  
}
```

git_push	<i>Push to Remote</i>
----------	-----------------------

Description

Push commits to the remote repository.

Usage

```
git_push(remote = "origin", branch = NULL)
```

Arguments

remote	Remote name (default: "origin")
branch	Branch name (default: current branch)

Value

Invisibly returns TRUE on success

Examples

```
if (FALSE) {
  git_push()
  git_push(remote = "origin", branch = "main")
}
```

git_security_audit	<i>Security audit for Framework projects</i>
--------------------	--

Description

Performs a comprehensive security audit of data files in Framework projects, checking for unignored data files, git history leaks, and orphaned data files outside configured directories.

Usage

```
git_security_audit(
  config_file = NULL,
  check_git_history = TRUE,
  history_depth = "all",
  auto_fix = FALSE,
  verbose = TRUE,
  extensions = c("csv", "rds", "tsv", "txt", "dat", "xlsx", "xls", "sqlite", "db", "dta",
    "sav", "zsav", "por", "sas7bdat", "sas7bcat", "xpt", "parquet", "feather", "arrow",
    "json", "xml", "h5", "hdf5")
)
```

Arguments

config_file	Path to configuration file (default: auto-detect settings.yml/settings.yml)
check_git_history	Logical; if TRUE (default), check git history for leaked data files
history_depth	Character or numeric. "all" for full history, "shallow" for recent 100 commits, or numeric for specific commit count (default: "all")
auto_fix	Logical; if TRUE, automatically update .gitignore (default: FALSE)
verbose	Logical; if TRUE (default), show progress messages
extensions	Character vector of data file extensions to detect (default: common data formats)

Details

The security audit performs the following checks:

- **gitignore_coverage**: Verifies all private data files are in .gitignore
- **git_history**: Scans git history for accidentally committed data files
- **orphaned_files**: Finds data files outside configured directories
- **private_data_exposure**: Checks if private data is tracked by git

Status levels:

- **pass**: No issues found
- **warning**: Potential issues that should be reviewed
- **fail**: Critical security issues requiring immediate action

Value

A structured list containing:

summary Data frame with check names, status (pass/warning/fail), and counts

findings List of data frames with detailed findings for each check

recommendations Character vector of actionable recommendations

audit_metadata List with audit timestamp, Framework version, and config info

Examples

```
if (FALSE) {  
  # Basic audit (report only)  
  audit <- git_security_audit()  
  print(audit$summary)  
  View(audit$findings$orphaned_files)  
  
  # Quick scan without git history  
  audit <- git_security_audit(check_git_history = FALSE)  
  
  # Verbose with limited git history  
  audit <- git_security_audit(history_depth = 100, verbose = TRUE)  
  
  # Auto-fix mode (updates .gitignore)  
  audit <- git_security_audit(auto_fix = TRUE)  
}
```

git_status	<i>Show Git Status</i>
------------	------------------------

Description

Display the working tree status from the R console.

Usage

```
git_status(short = FALSE)
```

Arguments

short	Logical; if TRUE, show short format (default: FALSE)
-------	--

Value

Invisibly returns the status output as a character vector

Examples

```
if (FALSE) {
  git_status()
  git_status(short = TRUE)
}
```

gui	<i>Launch Framework GUI</i>
-----	-----------------------------

Description

Opens a beautiful web-based interface for Framework with documentation, project management, and settings configuration.

Usage

```
gui(port = 8080, host = "127.0.0.1", browse = TRUE, route = NULL)
```

Arguments

port	Port number to use (default: 8080)
host	Host address to bind to. Default "127.0.0.1" for local access only. Use "0.0.0.0" to allow connections from other machines (requires appropriate network security).
browse	Automatically open browser (default: TRUE)
route	Initial route to open (default: NULL for home page)

Details

The GUI requires the optional 'plumber' package, which in turn depends on 'sodium' (and the system libsodium library). Everything else in Framework works without it.

Value

Invisibly returns the plumber server object

See Also

[setup\(\)](#) for first-time configuration

Examples

```
if (FALSE) {  
  # Launch the GUI  
  framework::gui()  
  
  # Launch on specific port  
  framework::gui(port = 8888)  
  
  # Open directly to settings  
  framework::gui(route = "#/settings/basics")  
  
  # Run as standalone server (no browser, accessible from network)  
  framework::gui(port = 8080, host = "0.0.0.0", browse = FALSE)  
}
```

ledger_list	<i>List the Project's Cloud Ledger</i>
-------------	--

Description

List the Project's Cloud Ledger

Usage

```
ledger_list(name = NULL)
```

Arguments

name	Optional data catalog name to filter by.
------	--

Value

A data.frame of ledger entries, newest first.

ledger_push	<i>Import the Local Ledger into the Cloud</i>
-------------	---

Description

Reads the project's local framework.db (the SQLite ledger of record that data_save() always maintains) and appends any digests the cloud ledger does not yet have. This is the default way project history reaches framework.pub: an explicit, reviewable action rather than a network call on every save.

Usage

```
ledger_push()
```

Details

For per-save streaming instead – tamper-evident, since each entry lands before the file could be altered – set FW_LEDGER=live or options: cloud_ledger: live in the project's settings.yml.

Value

Invisibly, a list with pushed and up_to_date counts.

See Also

[data_verify\(\)](#), [ledger_list\(\)](#)

load_settings_catalog	<i>Read the Framework settings catalog</i>
-----------------------	--

Description

The catalog defines metadata (labels, hints) and default values for settings sections. Users can override the packaged defaults by placing a settings-catalog.yml file in their Framework config directory (tools::R_user_dir("framework", "config")). When an override exists it is merged on top of the packaged catalog.

Usage

```
load_settings_catalog(include_user = TRUE, validate = TRUE)
```

Arguments

include_user	Logical indicating whether to merge user overrides. Defaults to TRUE.
validate	Logical indicating whether to perform basic validation on the catalog structure. Defaults to TRUE.

Value

A nested list representing the settings catalog.

make_notebook

Create a Notebook or Script from Stub Template

Description

Creates a new Quarto (.qmd), RMarkdown (.Rmd) notebook, or R script (.R) from stub templates. Searches for user-provided stubs first (in stubs/ directory), then falls back to framework defaults.

Usage

```
make_notebook(
  name,
  type = NULL,
  dir = NULL,
  stub = "default",
  overwrite = FALSE,
  subdir = NULL
)
```

Arguments

name	Character. The file name. Extension determines type: <ul style="list-style-type: none"> .qmd: Quarto notebook (default if no extension) .Rmd: RMarkdown notebook .R: R script Examples: 1-init, 1-init.qmd, analysis.Rmd, script.R
type	Character. File type: "quarto", "rmarkdown", or "script". Auto-detected from extension if provided. If NULL (default): <ol style="list-style-type: none"> Checks config default_notebook_format (or legacy options\$default_notebook_format) Falls back to "quarto" (Framework is Quarto-first)
dir	Character. Directory to create the file in. Uses your project's configured directories\$notebooks setting. Default: "notebooks/".
stub	Character. Name of the stub template to use. Defaults to "default". User can create custom stubs in stubs/notebook-{stub}.qmd, stubs/notebook-{stub}.Rmd, or stubs/script-{stub}.R.
overwrite	Logical. Whether to overwrite existing file. Default FALSE.
subdir	Optional subdirectory under dir (e.g., "analyses/exploratory").

Details

Convenient aliases: Use `make_qmd()` or `make_rmd()` for explicit Quarto or RMarkdown notebook creation. Use `make_revealjs()` or `make_presentation()` for reveal.js presentations.

Default Output:

Notebooks are created in the `notebooks/` directory by default:

```
notebooks/
  1-data-cleaning.qmd
  2-analysis.qmd
  3-visualization.qmd
```

Extension Normalization:

- If name includes `.qmd` or `.Rmd`, type is auto-detected
- If no extension provided, `.qmd` is used (Quarto-first)
- Use `type = "rmarkdown"` to default to `.Rmd`

Stub Template Resolution:

The function searches for stub templates in this order:

1. User stubs: `stubs/notebook-{stub}.qmd` or `stubs/notebook-{stub}.Rmd`
2. Framework stubs: `inst/stubs/notebook-{stub}.qmd` or `inst/stubs/notebook-{stub}.Rmd`

Custom stub templates can use placeholders:

- `{filename}` - The notebook filename without extension
- `{date}` - Current date (YYYY-MM-DD)

Value

Invisible path to created notebook

See Also

`make_qmd()`, `make_rmd()`, `make_revealjs()`, `make_presentation()`

Examples

```
if (FALSE) {
  # Create notebooks/1-init.qmd (defaults to Quarto)
  make_notebook("1-init")

  # Create notebooks/analysis.Rmd (RMarkdown, extension-based)
  make_notebook("analysis.Rmd")

  # Explicit type parameter
  make_notebook("report", type = "rmarkdown")

  # Use custom stub template
  make_notebook("report", stub = "minimal")

  # Create in specific directory
```

```

make_notebook("explore", dir = "work")

# Convenient aliases (recommended for explicit types)
make_qmd("analysis")      # Always creates .qmd
make_rmd("report")        # Always creates .Rmd
make_revealjs("slides")   # Creates reveal.js presentation
make_presentation("deck") # Alias for make_revealjs()
}

```

make_presentation	<i>Create a Presentation</i>
-------------------	------------------------------

Description

Alias for `make_revealjs()`. Creates a Quarto reveal.js presentation.

Usage

```
make_presentation(name, dir = NULL, overwrite = FALSE, subdir = NULL)
```

Arguments

name	Character. The presentation name (with or without .qmd extension)
dir	Character. Directory to create the file in. Uses your project's configured <code>directories\$notebooks</code> setting. Default: "notebooks/".
overwrite	Logical. Whether to overwrite existing file. Default FALSE.
subdir	Optional subdirectory under dir (e.g., "slides/week-01").

Value

Invisible path to created presentation

See Also

`make_notebook()`, `make_revealjs()`

Examples

```

if (FALSE) {
# Create notebooks/deck.qmd with reveal.js format
make_presentation("deck")
}

```

make_qmd

*Create a Quarto Notebook***Description**

Convenient alias for `make_notebook(type = "quarto")`. Creates a .qmd file from stub templates.

Usage

```
make_qmd(name, dir = NULL, stub = "default", overwrite = FALSE, subdir = NULL)
```

Arguments

name	Character. The file name (with or without .qmd extension)
dir	Character. Directory to create the file in. Uses your project's configured <code>directories\$notebooks</code> setting. Default: "notebooks/".
stub	Character. Name of the stub template to use. Default "default".
overwrite	Logical. Whether to overwrite existing file. Default FALSE.
subdir	Optional subdirectory under dir (e.g., "slides/week-01").

Value

Invisible path to created notebook

See Also

[make_notebook\(\)](#), [make_rmd\(\)](#)

Examples

```
if (FALSE) {
  # Create notebooks/analysis.qmd
  make_qmd("analysis")

  # Use custom stub
  make_qmd("report", stub = "minimal")

  # Create in specific directory
  make_qmd("explore", dir = "work")
}
```

make_revealjs	Create a Reveal.js Presentation
---------------	---------------------------------

Description

Convenient alias for creating reveal.js presentations. Always creates a Quarto notebook with the revealjs stub template.

Usage

```
make_revealjs(name, dir = NULL, overwrite = FALSE, subdir = NULL)
```

Arguments

name	Character. The presentation name (with or without .qmd extension)
dir	Character. Directory to create the file in. Uses your project's configured <code>directories\$notebooks</code> setting. Default: "notebooks/".
overwrite	Logical. Whether to overwrite existing file. Default FALSE.
subdir	Optional subdirectory under dir (e.g., "slides/week-01").

Value

Invisible path to created presentation

See Also

[make_notebook\(\)](#), [make_qmd\(\)](#), [make_presentation\(\)](#)

Examples

```
if (FALSE) {  
  # Create notebooks/slides.qmd with reveal.js format  
  make_revealjs("slides")  
  
  # Create in specific directory  
  make_revealjs("presentation", dir = "presentations")  
}
```

`make_rmd`*Create an RMarkdown Notebook*

Description

Convenient alias for `make_notebook(type = "rmarkdown")`. Creates a .Rmd file from stub templates.

Usage

```
make_rmd(name, dir = NULL, stub = "default", overwrite = FALSE, subdir = NULL)
```

Arguments

<code>name</code>	Character. The file name (with or without .Rmd extension)
<code>dir</code>	Character. Directory to create the file in. Uses your project's configured <code>directories\$notebooks</code> setting. Default: "notebooks/".
<code>stub</code>	Character. Name of the stub template to use. Default "default".
<code>overwrite</code>	Logical. Whether to overwrite existing file. Default FALSE.
<code>subdir</code>	Optional subdirectory under <code>dir</code> (e.g., "analyses/exploratory").

Value

Invisible path to created notebook

See Also

[make_notebook\(\)](#), [make_qmd\(\)](#)

Examples

```
if (FALSE) {  
  # Create notebooks/analysis.Rmd  
  make_rmd("analysis")  
  
  # Use custom stub  
  make_rmd("report", stub = "minimal")  
  
  # Create in specific directory  
  make_rmd("explore", dir = "work")  
}
```

make_script	<i>Create an R Script from Stub Template</i>
-------------	--

Description

Convenience wrapper for `make_notebook()` that creates R scripts (.R files). This is identical to calling `make_notebook("name.R")`.

Usage

```
make_script(name, dir = NULL, stub = "default", overwrite = FALSE)
```

Arguments

name	Character. The script name (with or without .R extension). Examples: "process-data", "process-data.R"
dir	Character. Directory to create the script in. Uses your project's configured <code>directories\$scripts</code> setting. Default: "scripts/".
stub	Character. Name of the stub template to use. Defaults to "default". User can create custom stubs in <code>stubs/script-{stub}.R</code> .
overwrite	Logical. Whether to overwrite existing file. Default FALSE.

Details

This function is a convenience wrapper that:

1. Ensures the name ends with .R extension
2. Uses `script_dir` config option instead of `notebook_dir`
3. Calls `make_notebook()` with `type = "script"`

Default Output:

Scripts are created in the `scripts/` directory by default:

```
scripts/
  process-data.R
  build-features.R
  run-model.R
```

Value

Invisible path to created script

See Also

[make_notebook\(\)](#) for creating Quarto/RMarkdown notebooks

Examples

```
if (FALSE) {  
  # Create script (extension optional)  
  make_script("process-data")  
  make_script("process-data.R")  
  
  # Use custom stub  
  make_script("etl-pipeline", stub = "etl")  
  
  # Create in specific directory  
  make_script("analysis", dir = "analysis/")  
}
```

new	Create a New Project (Master Wrapper)
-----	---------------------------------------

Description

Flexible project creation interface. Alias for `new_project()` that accepts `type` as a parameter.

Usage

```
new(name = NULL, location = NULL, type = NULL, browse = interactive(), ...)
```

Arguments

name	Project name. If NULL (default), prompts interactively.
location	Directory path where project will be created. If NULL (default), prompts interactively.
type	Project type. One of "project" (default), "project_sensitive", "course", or "presentation".
browse	Whether to open the project folder after creation (default: TRUE in interactive sessions)
...	Additional arguments passed to 'project_

Value

Invisibly returns the result from `project_create()`

See Also

```
new\_project\(\), new\_project\_sensitive\(\), new\_presentation\(\), new\_course\(\)
```

Examples

```
if (FALSE) {
  # Create different project types
  new("analysis", "~/projects/analysis")
  new("study", "~/projects/study", type = "project_sensitive")
  new("slides", "~/projects/slides", type = "presentation")
  new("course-materials", "~/projects/course", type = "course")
}
```

new_course

*Create a Course Project***Description**

Shorthand for `new_project(..., type = "course")`. Creates a project structured for teaching materials with slides, assignments, and modules.

Usage

```
new_course(name = NULL, location = NULL, browse = interactive(), ...)
```

Arguments

name	Project name. If NULL (default), prompts interactively.
location	Directory path where project will be created. If NULL (default), prompts interactively.
browse	Whether to open the project folder after creation (default: TRUE in interactive sessions)
...	Additional arguments passed to 'project_

Value

Invisibly returns the result from `project_create()`

See Also

[new_project\(\)](#)

Examples

```
if (FALSE) {
  new_course("stats-101", "~/projects/stats-101")
}
```

new_presentation	<i>Create a Presentation Project</i>
------------------	--------------------------------------

Description

Shorthand for `new_project(..., type = "presentation")`. Creates a project optimized for RevealJS presentations.

Usage

```
new_presentation(name = NULL, location = NULL, browse = interactive(), ...)
```

Arguments

name	Project name. If NULL (default), prompts interactively.
location	Directory path where project will be created. If NULL (default), prompts interactively.
browse	Whether to open the project folder after creation (default: TRUE in interactive sessions)
...	Additional arguments passed to 'project_

Value

Invisibly returns the result from `project_create()`

See Also

[new_project\(\)](#)

Examples

```
if (FALSE) {  
  new_presentation("quarterly-review", "~/projects/q4-review")  
}
```

new_project	<i>Create a New Framework Project</i>
-------------	---------------------------------------

Description

Convenience wrapper for creating Framework projects from the command line. Uses global settings configured via `setup()` as defaults, prompts for missing required values (name and location).

Usage

```
new_project(
  name = NULL,
  location = NULL,
  type = "project",
  browse = interactive(),
  ...
)
```

Arguments

name	Project name. If NULL (default), prompts interactively.
location	Directory path where project will be created. If NULL (default), prompts interactively.
type	Project type. One of "project" (default), "project_sensitive", "course", or "presentation".
browse	Whether to open the project folder after creation (default: TRUE in interactive sessions)
...	Additional arguments passed to 'project_

Details

This function is designed for the streamlined workflow:

```
remotes::install_github("table1/framework")
framework::setup()      # One-time global configuration
framework::new_project() # Create projects using saved defaults
```

Global settings from `tools::R_user_dir("framework", "config")` are used for:

- Author information (name, email, affiliation)
- Default packages
- Directory structure
- Git settings
- AI assistant configuration
- Quarto format preferences

Value

Invisibly returns the result from `project_create()` (list with success, path, and project_id)

See Also

`setup()` for initial configuration, `project_create()` for full control

Examples

```
if (FALSE) {
# Interactive - prompts for name and location
new_project()

# With name and location specified
new_project("my-analysis", "~/projects/my-analysis")

# Create a sensitive data project
new_project("medical-study", "~/projects/medical", type = "project_sensitive")
}
```

`new_project_sensitive` *Create a Sensitive Data Project*

Description

Shorthand for `new_project(..., type = "project_sensitive")`. Creates a project with additional privacy protections for handling sensitive data.

Usage

```
new_project_sensitive(
  name = NULL,
  location = NULL,
  browse = interactive(),
  ...
)
```

Arguments

<code>name</code>	Project name. If NULL (default), prompts interactively.
<code>location</code>	Directory path where project will be created. If NULL (default), prompts interactively.
<code>browse</code>	Whether to open the project folder after creation (default: TRUE in interactive sessions)
<code>...</code>	Additional arguments passed to ‘project_

Value

Invisibly returns the result from `project_create()`

See Also

[new_project\(\)](#)

Examples

```
if (FALSE) {  
  new_project_sensitive("medical-study", "~/projects/medical")  
}
```

now	<i>Get current datetime</i>
-----	-----------------------------

Description

Get current datetime

Usage

`now()`

Value

Current datetime as an ISO 8601 formatted character string

outputs	<i>Output Save Functions</i>
---------	------------------------------

Description

First-class functions for saving tables, figures, models, and reports. These functions implement lazy directory creation with console feedback.

packages_install	<i>Install packages from configuration</i>
------------------	--

Description

Installs all packages defined in the configuration that are not already installed. This is the same logic used in `scaffold()`, but exposed as a standalone function.

Usage

```
packages_install()
```

Value

Invisibly returns TRUE on success

Examples

```
if (FALSE) {  
  # Install all configured packages  
  packages_install()  
}
```

packages_list	<i>List all packages from configuration</i>
---------------	---

Description

Lists all packages defined in the configuration, showing the package name, version pin (if specified), and source (CRAN or GitHub).

Usage

```
packages_list()
```

Value

Invisibly returns NULL after printing package list

Examples

```
if (FALSE) {  
  # List all packages  
  packages_list()  
}
```

packages_restore	<i>Restore packages from renv.lock</i>
------------------	--

Description

Wrapper around `renv::restore()` that requires Framework's renv integration to be enabled first.

Usage

```
packages_restore(prompt = FALSE)
```

Arguments

prompt	Logical. If TRUE, renv prompts before restoring.
--------	--

Value

Invisibly returns TRUE on success.

packages_snapshot	<i>Snapshot current package library (renv)</i>
-------------------	--

Description

Wrapper around `renv::snapshot()` that requires Framework's renv integration to be enabled first.

Usage

```
packages_snapshot(prompt = FALSE)
```

Arguments

prompt	Logical. If TRUE, renv prompts before writing the snapshot.
--------	---

Value

Invisibly returns TRUE on success.

packages_status	<i>Show renv package status</i>
-----------------	---------------------------------

Description

Wrapper around `renv::status()` that requires Framework's renv integration.

Usage

```
packages_status()
```

Value

The status object returned by `renv::status()`.

packages_update	<i>Update packages from configuration</i>
-----------------	---

Description

Updates packages defined in the configuration. If renv is enabled, uses `renv::update()`. Otherwise, reinstalls packages using standard installation methods.

Usage

```
packages_update(packages = NULL)
```

Arguments

`packages` Character vector of specific packages to update, or `NULL` to update all

Value

Invisibly returns `TRUE` on success

Examples

```
if (FALSE) {  
  # Update all packages  
  packages_update()  
  
  # Update specific packages  
  packages_update(c("dplyr", "ggplot2"))  
}
```

project_info	<i>Display project structure information</i>
--------------	--

Description

Shows configured directories and their status (created or pending lazy creation). Useful for understanding the project structure and discovering available paths.

Usage

```
project_info(verbose = FALSE)
```

Arguments

verbose	If TRUE, shows additional details about each directory
---------	--

Value

A data frame with directory information (invisibly)

Examples

```
if (FALSE) {  
  # Show project structure  
  project_info()  
  
  # Get detailed info  
  project_info(verbose = TRUE)  
}
```

project_list	<i>List all projects in global configuration</i>
--------------	--

Description

List all projects in global configuration

Usage

```
project_list()
```

Value

Data frame with project information

publish	<i>Publishing Functions</i>
---------	-----------------------------

Description

Functions for publishing notebooks, data, and files to S3 storage.

Upload files or directories to an S3 bucket. This is the generic publishing function - use `publish_notebook()` for Quarto documents or `publish_data()` for data files.

Usage

```
publish(
  source,
  dest = NULL,
  connection = NULL,
  overwrite = TRUE,
  self_contained = TRUE
)
```

Arguments

<code>source</code>	Character. Local file or directory path to upload.
<code>dest</code>	Character or NULL. Destination path in S3 bucket. If NULL, derives from source filename.
<code>connection</code>	Character or NULL. S3 connection name from config.yml. If NULL, uses the connection marked with <code>default: true</code> .
<code>overwrite</code>	Logical. Whether to overwrite existing files. Default TRUE.
<code>self_contained</code>	Logical. When publishing to framework.pub, whether to bundle an HTML file with its resources. Ignored for S3. Default TRUE.

Value

Character. The public URL(s) of uploaded file(s).

Examples

```
if (FALSE) {
  # Upload a single file
  publish("outputs/report.html")
  # -> https://bucket.s3.region.amazonaws.com/prefix/report.html

  # Upload with custom destination
  publish("outputs/report.html", dest = "reports/q4-2024.html")

  # Upload a directory
  publish("outputs/charts/", dest = "reports/charts/")
}
```

```
# Use specific connection
publish("data.csv", connection = "s3_backup")
}
```

publish_data

*Publish data to S3***Description**

Uploads a data frame or existing data file to S3.

Usage

```
publish_data(data, dest, format = "csv", connection = NULL, compress = FALSE)
```

Arguments

data	Data frame or character path to existing file.
dest	Character. Destination path in S3 (required for data frames).
format	Character. Output format when data is a data frame: "csv", "rds", "parquet", or "json". Default "csv".
connection	Character or NULL. S3 connection name, or NULL for default.
compress	Logical. Whether to gzip compress. Default FALSE.

Value

Character. Public URL of the published data.

Examples

```
if (FALSE) {
# Publish a data frame
publish_data(my_df, "datasets/customers.csv")

# Publish as RDS
publish_data(my_df, "datasets/customers.rds", format = "rds")

# Publish existing file
publish_data("outputs/model.rds", "models/v2/model.rds")
}
```

`publish_dir`*Publish a directory to S3*

Description

Recursively uploads all files in a directory to S3.

Usage

```
publish_dir(  
  dir,  
  dest = NULL,  
  connection = NULL,  
  pattern = NULL,  
  recursive = TRUE  
)
```

Arguments

<code>dir</code>	Character. Local directory path.
<code>dest</code>	Character or NULL. Destination prefix in S3. If NULL, uses the directory name.
<code>connection</code>	Character or NULL. S3 connection name, or NULL for default.
<code>pattern</code>	Character or NULL. Optional regex pattern to filter files.
<code>recursive</code>	Logical. Whether to include subdirectories. Default TRUE.

Value

Character vector. Public URLs of uploaded files.

Examples

```
if (FALSE) {  
  # Upload entire directory  
  publish_dir("outputs/dashboard/")  
  
  # Upload to specific location  
  publish_dir("outputs/dashboard/", dest = "dashboards/v2/")  
  
  # Upload only HTML files  
  publish_dir("outputs/", pattern = "\\\\.html$")  
}
```

publish_list	<i>List published files in S3</i>
--------------	-----------------------------------

Description

Lists files in an S3 bucket/prefix.

Usage

```
publish_list(prefix = NULL, connection = NULL, max = 1000L)
```

Arguments

prefix	Character or NULL. Prefix to filter by. If NULL, lists all files under the connection's configured prefix.
connection	Character or NULL. S3 connection name, or NULL for default.
max	Integer. Maximum number of files to list. Default 1000.

Value

Data frame with columns: key, size, last_modified.

Examples

```
if (FALSE) {  
  # List all published files  
  publish_list()  
  
  # List files under a prefix  
  publish_list("reports/")  
  
  # List from specific connection  
  publish_list(connection = "s3_backup")  
}
```

publish_notebook	<i>Publish a Quarto notebook to S3</i>
------------------	--

Description

Renders a Quarto document and uploads it to S3. The notebook is rendered to a temporary directory, uploaded, then cleaned up.

Usage

```
publish_notebook(
  file,
  dest = NULL,
  connection = NULL,
  self_contained = TRUE,
  format = "html",
  ...
)
```

Arguments

<code>file</code>	Character. Path to .qmd file.
<code>dest</code>	Character or NULL. Destination path in S3 (without extension). If NULL, derives from filename (e.g., "analysis.qmd" -> "analysis").
<code>connection</code>	Character or NULL. S3 connection name, or NULL for default.
<code>self_contained</code>	Logical. Whether to embed all resources. Default TRUE. Ignored if <code>static_hosting: false</code> (always renders self-contained).
<code>format</code>	Character. Output format. Default "html".
<code>...</code>	Additional arguments passed to quarto render.

Details

The URL format depends on the S3 connection's `static_hosting` setting:

- `static_hosting: true` -> uploads to `dest/index.html`, returns `dest/`
- `static_hosting: false` (default) -> uploads as `dest.html`, returns `dest.html`

Value

Character. Public URL of the published notebook.

Examples

```
if (FALSE) {
  # With static_hosting: true -> returns /analysis/
  # With static_hosting: false -> returns /analysis.html
  publish_notebook("notebooks/analysis.qmd")

  # Publish to specific location
  publish_notebook("notebooks/analysis.qmd", dest = "reports/2024/q4")

  # Publish non-self-contained (only with static_hosting: true)
  publish_notebook("notebooks/analysis.qmd", self_contained = FALSE)
}
```

quarto_generate_all	<i>Generate Quarto Configurations for Project</i>
---------------------	---

Description

Main entry point for generating all `_quarto.yml` files in a project. Generates root config and directory-specific configs based on project type.

Usage

```
quarto_generate_all(
  project_path,
  project_type,
  render_dirs = NULL,
  quarto_settings = NULL,
  directories = NULL,
  root_output_dir = NULL
)
```

Arguments

project_path	Character. Path to project root
project_type	Character. One of "project", "project_sensitive", "course", "presentation"
render_dirs	Named list. Render directories with their paths
quarto_settings	List. Quarto settings (html and revealjs configs)
directories	Named list. Source directories keyed the same as render_dirs
root_output_dir	Optional output directory to set on the root <code>_quarto.yml</code>

Value

List with success status and paths of generated files

quarto_regenerate	<i>Regenerate Quarto Configurations</i>
-------------------	---

Description

Regenerates all `_quarto.yml` files in a project. **WARNING: This will overwrite any manual edits.** Should only be called when user explicitly requests regeneration.

Usage

```
quarto_regenerate(project_path, backup = TRUE)
```

Arguments

- project_path Character. Path to project root
- backup Logical. If TRUE, backs up existing files before overwriting. Default TRUE.

Value

List with success status, backed up files, and regenerated files

read_framework_template	<i>Read the contents of a Framework template</i>
-------------------------	--

Description

Read the contents of a Framework template

Usage

```
read_framework_template(name)
```

Arguments

- name Template identifier (e.g., "notebook", "gitignore", "ai_claude")

Value

Character scalar containing template contents

read_frameworkrc	<i>Read global Framework configuration</i>
------------------	--

Description

Read global Framework configuration

Usage

```
read_frameworkrc(use_defaults = TRUE)
```

Arguments

- use_defaults Whether to merge with default structure (default: TRUE)

Value

List containing global configuration

`remove_project_from_config`*Remove project from global configuration*

Description

Remove project from global configuration

Usage

```
remove_project_from_config(project_id)
```

Arguments

<code>project_id</code>	Project ID to remove
-------------------------	----------------------

Value

Invisibly returns NULL

`renv_disable`*Disable renv for this project*

Description

Deactivates renv integration while preserving renv.lock for future use. Removes the `.framework_renv_enabled` marker file.

Usage

```
renv_disable(keep_renv = TRUE)
```

Arguments

<code>keep_renv</code>	Logical; if TRUE (default), keep renv.lock and renv/ directory
------------------------	--

Value

Invisibly returns TRUE on success

Examples

```
if (FALSE) {  
  renv_disable()  
}
```

renv_enable	<i>Enable renv for this project</i>
-------------	-------------------------------------

Description

Initializes renv integration for the current Framework project. This:

- Creates `.framework_renv_enabled` marker file
- Initializes renv if not already initialized
- Syncs packages from `settings.yml` to `renv.lock`
- Updates `.gitignore` to exclude renv cache

Usage

```
renv_enable(sync = TRUE)
```

Arguments

sync	Logical; if TRUE (default), sync packages from <code>settings.yml</code>
------	--

Value

Invisibly returns TRUE on success

Examples

```
if (FALSE) {  
  renv_enable()  
}
```

renv_enabled	<i>Check if renv is enabled for this project</i>
--------------	--

Description

Determines whether renv integration is active by checking for the `.framework_renv_enabled` marker file in the project root.

Usage

```
renv_enabled()
```

Value

Logical indicating whether renv is enabled

Examples

```
if (renv_enabled()) {
  message("Using renv for package management")
}
```

reset_framework_template

Reset a Framework template back to the packaged default

Description

Reset a Framework template back to the packaged default

Usage

```
reset_framework_template(name)
```

Arguments

name Template identifier (e.g., "notebook", "gitignore", "ai_claude")

Value

Invisibly returns the file path of the reset template.

result_list

List saved results from the framework database

Description

Retrieves a list of all saved results (tables, figures, models, reports, notebooks) that have been tracked via the save_* functions.

Usage

```
result_list(type = NULL, public = NULL)
```

Arguments

type Optional filter by type: "table", "figure", "model", "report", "notebook"

public Optional filter: TRUE for public results only, FALSE for private only

Value

A data frame with columns: name, type, public, comment, hash, created_at, updated_at. Returns an empty data frame if no results found or database unavailable.

Examples

```

if (FALSE) {
# List all results
result_list()

# List only tables
result_list(type = "table")

# List only public figures
result_list(type = "figure", public = TRUE)
}

```

save_figure	<i>Save a figure to the outputs directory</i>
-------------	---

Description

Saves a ggplot2 plot or base R graphics to the configured figures directory. The directory is created lazily on first use.

Usage

```

save_figure(
  plot = NULL,
  name,
  format = "png",
  width = 8,
  height = 6,
  dpi = 300,
  public = FALSE,
  overwrite = TRUE,
  ...
)

```

Arguments

plot	A ggplot2 object, or NULL to save the current plot
name	The name for the output file (without extension)
format	Output format: "png" (default), "pdf", "svg", or "jpg"
width	Width in inches (default: 8)
height	Height in inches (default: 6)
dpi	Resolution in dots per inch (default: 300)
public	If TRUE, saves to public outputs directory (for project_sensitive type)
overwrite	If TRUE, overwrites existing files (default: TRUE)
...	Additional arguments passed to ggsave or the graphics device

Value

The path to the saved file (invisibly)

Examples

```
if (FALSE) {
# Save a ggplot
p <- ggplot(mtcars, aes(mpg, hp)) + geom_point()
save_figure(p, "mpg_vs_hp")

# Save as PDF for publication
save_figure(p, "mpg_vs_hp", format = "pdf", width = 10, height = 8)

# Save to public directory
save_figure(p, "summary_plot", public = TRUE)
}
```

save_model

Save a model to the outputs directory

Description

Saves a fitted model object to the configured models directory. The directory is created lazily on first use.

Usage

```
save_model(model, name, public = FALSE, overwrite = TRUE, ...)
```

Arguments

model	A fitted model object (lm, glm, tidymodels workflow, etc.)
name	The name for the output file (without extension)
public	If TRUE, saves to public outputs directory (for project_sensitive type)
overwrite	If TRUE, overwrites existing files (default: TRUE)
...	Additional arguments passed to saveRDS()

Value

The path to the saved file (invisibly)

Examples

```

if (FALSE) {
  # Fit and save a model
  model <- lm(mpg ~ hp + wt, data = mtcars)
  save_model(model, "mpg_regression")
}

```

save_notebook

Save a rendered notebook to the outputs directory

Description

Renders a Quarto or R Markdown notebook and saves the output to the configured notebooks output directory. The directory is created lazily on first use.

Usage

```

save_notebook(
  file,
  name = NULL,
  format = "html",
  public = FALSE,
  overwrite = TRUE,
  embed_resources = TRUE,
  ...
)

```

Arguments

file	Path to the .qmd or .Rmd file to render
name	Optional new name for the output file (without extension). If NULL, uses the original notebook name.
format	Output format: "html" (default), "pdf", or "docx"
public	If TRUE, saves to public outputs directory (for project_sensitive type)
overwrite	If TRUE, overwrites existing files (default: TRUE)
embed_resources	If TRUE, creates a self-contained file with embedded resources (default: TRUE for html format)
...	Additional arguments passed to quarto render

Value

The path to the saved file (invisibly)

Examples

```
if (FALSE) {
  # Render and save a notebook
  save_notebook("notebooks/analysis.qmd")

  # Save with a custom name
  save_notebook("notebooks/analysis.qmd", name = "final_analysis")

  # Render to PDF
  save_notebook("notebooks/analysis.qmd", format = "pdf")

  # Save to public directory (for sensitive projects)
  save_notebook("notebooks/analysis.qmd", public = TRUE)
}
```

save_report	<i>Save a report to the outputs directory</i>
-------------	---

Description

Copies or moves a rendered report (HTML, PDF, etc.) to the configured reports directory. The directory is created lazily on first use.

Usage

```
save_report(file, name = NULL, public = FALSE, overwrite = TRUE, move = FALSE)
```

Arguments

file	Path to the report file to save
name	Optional new name for the file (without extension). If NULL, uses original name.
public	If TRUE, saves to public outputs directory (for project_sensitive type)
overwrite	If TRUE, overwrites existing files (default: TRUE)
move	If TRUE, moves the file instead of copying (default: FALSE)

Value

The path to the saved file (invisibly)

Examples

```
if (FALSE) {  
  # Save a rendered HTML report  
  save_report("notebooks/analysis.html", "final_analysis")  
  
  # Save to public directory  
  save_report("notebooks/summary.pdf", "public_summary", public = TRUE)  
}
```

save_table	<i>Save a table to the outputs directory</i>
------------	--

Description

Saves a data frame or tibble to the configured tables directory. The directory is created lazily on first use.

Usage

```
save_table(data, name, format = "csv", public = FALSE, overwrite = TRUE, ...)
```

Arguments

data	A data frame, tibble, or other tabular data
name	The name for the output file (without extension)
format	Output format: "csv" (default), "rds", "xlsx", or "parquet"
public	If TRUE, saves to public outputs directory (for project_sensitive type)
overwrite	If TRUE, overwrites existing files (default: TRUE)
...	Additional arguments passed to the underlying write function

Value

The path to the saved file (invisibly)

Examples

```
if (FALSE) {  
  # Save a simple table  
  save_table(my_results, "regression_results")  
  
  # Save as Excel  
  save_table(my_results, "regression_results", format = "xlsx")  
  
  # Save to public directory (for sensitive projects)  
  save_table(summary_stats, "summary", public = TRUE)  
}
```

```
}
```

scaffold

Initialize and load the project environment

Description

The primary entry point for working with Framework projects. Call this at the start of every notebook or script to set up your environment with all configured packages, functions, and settings.

Usage

```
scaffold(config_file = NULL)
```

Arguments

`config_file` Path to configuration file. If NULL (default), automatically discovers settings.yml or config.yml in the project.

Details

scaffold() performs the following steps in order:

1. **Standardizes working directory** - Finds and sets the project root, even when called from notebooks in subdirectories
2. **Loads environment variables** - Reads secrets from .env file
3. **Loads configuration** - Parses settings.yml for project settings
4. **Sets random seed** - For reproducibility (if seed is configured)
5. **Installs packages** - Any missing packages from the packages list
6. **Loads packages** - Attaches all configured packages
7. **Sources functions** - Loads all .R files from functions/ directory

After scaffold() completes, you have access to:

- All packages listed in settings.yml
- All functions from your functions/ directory
- Settings via settings("key") helper function
- Database connections configured in your project

Value

Invisibly returns NULL. The main effects are side effects: loading packages, sourcing functions, and creating the config object.

Project Discovery

When called without arguments, `scaffold()` searches for a Framework project by:

- Looking for `settings.yml` or `config.yml` in current and parent directories
- Checking for `.Rproj` or `.code-workspace` files with nearby settings
- Recognizing common Framework subdirectories (`notebooks/`, `scripts/`, etc.)

This means you can call `scaffold()` from any subdirectory within your project.

Configuration

The `settings.yml` file controls what `scaffold()` loads. Key settings include:

- `packages`: List of R packages to install and load
- `seed`: Random seed for reproducibility
- `directories`: Custom directory paths
- `connections`: Database connection configurations

See Also

- `project_create()` to create a new Framework project
- `standardize_wd()` for just the working directory standardization
- `settings()` to access configuration values after scaffolding

Examples

```
if (FALSE) {  
  # At the top of every notebook or script:  
  library(framework)  
  scaffold()  
  
  # Now you can use your configured packages and functions  
  # Access settings via the settings() helper:  
  settings("directories.notebooks")  
  settings("seed")  
}
```

scratch_capture	<i>Capture and Save Data to File</i>
-----------------	--------------------------------------

Description

Saves data to a file in various formats based on the object type and specified format. If no name is provided, uses the name of the object passed in. If no location is provided, uses the scratch directory from the configuration.

Usage

```
scratch_capture(x, name = NULL, to = NULL, location = NULL, n = Inf)
```

Arguments

x	The object to save
name	Optional character string specifying the name of the file (without extension). If not provided, will use the name of the object passed in.
to	Optional character string indicating the output format. One of: "text", "rds", "csv", "tsv". If not provided, will choose based on object type.
location	Optional character string specifying the directory where the file should be saved. If NULL, uses the scratch directory from the configuration.
n	Optional number of rows to capture for data frames (default: all rows)

Value

The input object x invisibly.

Examples

```
if (FALSE) {  
  # Save a character vector as text  
  scratch_capture(c("hello", "world"))  
  
  # Save a data frame as TSV  
  scratch_capture(mtcars)  
  
  # Save an R object as RDS  
  scratch_capture(list(a = 1, b = 2), to = "rds")  
}
```

scratch_clean	<i>Clean up the scratch directory by deleting all files</i>
---------------	---

Description

Clean up the scratch directory by deleting all files

Usage

```
scratch_clean()
```

Value

Invisibly returns NULL. Called for side effect of removing scratch files.

settings	<i>Get settings value by dot-notation key</i>
----------	---

Description

Framework’s primary configuration helper that supports both flat and hierarchical key access using dot notation. Automatically checks common locations for directory settings. Pretty-prints nested structures in interactive sessions.

Usage

```
settings(key = NULL, default = NULL, settings_file = NULL)
```

Arguments

key	Character. Dot-notation key path (e.g., "notebooks" or "directories.notebooks" or "connections.db.host"). If NULL, returns entire settings.
default	Optional default value if key is not found (default: NULL)
settings_file	Settings file path (default: checks "settings.yml" then "settings.yml")

Details

For directory settings, the function checks multiple locations:

- Direct: settings("notebooks") checks directories\$notebooks, then options\$notebook_dir
- Explicit: settings("directories.notebooks") checks only directories\$notebooks

File Discovery:

- Checks settings.yml first (Framework’s preferred convention)
- Falls back to settings.yml if settings.yml not found

- You can override with explicit settings_file parameter

Output Behavior:

- Interactive sessions: Pretty-prints nested lists/structures and returns invisibly
- Non-interactive (scripts): Returns raw value without printing
- Simple values: Always returned directly without modification

Value

The settings value, or default if not found. In interactive sessions, nested structures are pretty-printed and returned invisibly.

Examples

```
if (FALSE) {  
  # Get notebook directory (checks both locations)  
  settings("notebooks")  
  
  # Get explicit nested setting  
  settings("directories.notebooks")  
  settings("connections.db.host")  
  
  # Get entire section  
  settings("directories") # Returns all directory settings  
  settings("connections") # Returns all connection settings  
  
  # View entire settings  
  settings() # Returns full configuration  
  
  # With default value  
  settings("missing_key", default = "fallback")  
}
```

settings_read

Read project settings

Description

Reads the project settings from settings.yml or config.yml with environment-aware merging and split file resolution. Auto-discovers the settings file if not specified.

Usage

```
settings_read(settings_file = NULL, environment = NULL)
```

Arguments

- settings_file Path to settings file (default: auto-discover settings.yml or config.yml)
- environment Active environment name (default: R_CONFIG_ACTIVE or "default")

Value

The settings as a list

settings_write	<i>Write project settings</i>
----------------	-------------------------------

Description

Writes the project settings to settings.yml or config files

Usage

```
settings_write(settings, settings_file = NULL, section = NULL)
```

Arguments

- settings The settings list to write
- settings_file The settings file path (default: auto-detect settings.yml/config.yml)
- section Optional section to update (e.g. "data")

Value

Invisibly returns NULL.

setup	<i>Setup Framework (First-Time Configuration or Cloud Project Setup)</i>
-------	--

Description

Two modes, dispatched on the first argument:

Usage

```
setup(port = 8080, browse = TRUE, location = NULL)
```

Arguments

port	A project token string (cloud mode), or a port number for the legacy GUI (default: 8080)
browse	Automatically open browser/folder (default: TRUE)
location	Cloud mode only: where to create the project (prompted interactively when NULL)

Details

- `setup("fw_...")` with a **project token** from `framework.pub` pulls that project's cloud definition and scaffolds it locally.
- `setup()` (or with a port number) initializes Framework's global configuration and launches the legacy GUI for first-time setup.

Value

Cloud mode: invisibly, the `project_create()` result. GUI mode: invisibly returns the plumber server object.

See Also

`new()`, `cloud_login()`, `gui()`

Examples

```
if (FALSE) {
  # Set up a cloud-defined project by its token
  framework::setup("1|fw_abc123...")

  # First-time setup (legacy GUI)
  framework::setup()
}
```

standardize_wd

Standardize Working Directory for Framework Projects

Description

This function helps standardize the working directory when working with framework projects, especially useful in Quarto/RMarkdown documents that may be rendered from subdirectories.

Usage

```
standardize_wd(project_root = NULL)
```

Arguments

`project_root` Character string specifying the project root directory. If NULL (default), the function will attempt to find it automatically.

Details

The function looks for common framework project indicators:

- settings.yml or settings.yaml file
- .Rprofile file
- Being in common subdirectories (scratch, work)

It sets both the regular working directory and knitr's root.dir option if knitr is available.

Value

Invisibly returns the standardized project root path.

Examples

```
if (FALSE) {
  library(framework)
  standardize_wd()
  scaffold()
}
```

status

Show Framework project status

Description

Displays comprehensive information about the current Framework project including:

- Framework package version
- Project configuration
- Git status
- AI assistant configuration
- Git hooks status
- Package dependencies
- Directory structure

Usage

```
status()
```

Value

No return value, called for side effect of printing project status.

Examples

```
if (FALSE) {
  status()
}
```

storage_test	<i>Test storage connection</i>
--------------	--------------------------------

Description

Validates that S3/storage credentials and bucket access are working.

Usage

```
storage_test(connection = NULL)
```

Arguments

connection Character or NULL. Connection name, or NULL for default.

Value

Logical. TRUE if connection is valid.

Examples

```
if (FALSE) {
  # Test default storage connection
  storage_test()

  # Test specific connection
  storage_test("my_s3_backup")
}
```

`stubs_list`*List Available Stubs*

Description

Shows all available stub templates that can be used with `make_notebook()`.

Usage

```
stubs_list(type = NULL)
```

Arguments

`type` Character. Filter by type: "quarto", "rmarkdown", "script", or NULL (all).

Value

Data frame with columns: name, type, source (user/framework)

Examples

```
if (FALSE) {  
  # List all stubs  
  stubs_list()  
  
  # List only Quarto stubs  
  stubs_list("quarto")  
  
  # List only script stubs  
  stubs_list("script")  
}
```

`stubs_path`*Get Path to Stub Templates Directory*

Description

Returns the path to the user's stubs directory, or the framework stubs directory if no user stubs exist.

Usage

```
stubs_path(which = "auto")
```

Arguments

- which
- Character. Which directory to return:
 - "user" - User's project stubs directory (stubs/)
 - "framework" - Framework's built-in stubs directory
 - "auto" (default) - User directory if it exists, otherwise framework

Value

Character path to stubs directory

Examples

```
if (FALSE) {  
  # Get active stubs directory  
  stubs_path()  
  
  # Get framework stubs directory  
  stubs_path("framework")  
  
  # Get user stubs directory  
  stubs_path("user")  
}
```

stubs_publish	<i>Publish Stub Templates for Customization</i>
---------------	---

Description

Copies framework stub templates to your project's stubs/ directory, allowing you to customize them. Similar to Laravel's artisan vendor:publish command.

Usage

```
stubs_publish(type = "all", overwrite = FALSE, stubs = NULL)
```

Arguments

- type
- Character vector. Which stub types to publish:
 - "notebooks" - Quarto/RMarkdown notebook stubs
 - "scripts" - R script stubs
 - "all" - All stubs (default)
- overwrite
- Logical. Whether to overwrite existing stubs. Default FALSE.
- stubs
- Character vector. Specific stub names to publish (e.g., "default", "minimal"). If NULL (default), publishes all stubs of the specified type.

Details

Stub Customization Workflow:

1. Publish stubs to your project: `stubs_publish()`
2. Edit stubs in `stubs/` directory to match your preferences
3. Use `make_notebook()` or `make_script()` - your custom stubs are used automatically

Stub Naming Convention:

Stubs follow this naming pattern:

- Notebooks: `stubs/notebook-{name}.qmd` or `stubs/notebook-{name}.Rmd`
- Scripts: `stubs/script-{name}.R`

Framework searches user stubs first, then falls back to built-in stubs.

Available Placeholders:

Stubs can use these placeholders:

- `{filename}` - File name without extension
- `{date}` - Current date (YYYY-MM-DD)

Value

Invisible list of published file paths

See Also

[make_notebook\(\)](#), [make_script\(\)](#), [stubs_list\(\)](#), [stubs_path\(\)](#)

Examples

```
if (FALSE) {  
  # Publish all stubs  
  stubs_publish()  
  
  # Publish only notebook stubs  
  stubs_publish("notebooks")  
  
  # Publish specific stub  
  stubs_publish(stubs = "default")  
  
  # Overwrite existing stubs  
  stubs_publish(overwrite = TRUE)  
}
```

view	<i>View data in an interactive browser viewer</i>
------	---

Description

Opens an interactive, browser-based viewer for R objects. This is the primary function for viewing data frames, plots, lists, and other R objects with enhanced formatting.

Usage

```
view(x, title = NULL, max_rows = 5000)
```

Arguments

x	The data to view (data.frame, plot, list, function, or other R object)
title	Optional title for the view. If NULL, uses the object name.
max_rows	Maximum number of rows to display for data frames (default: 5000).

Value

Invisibly returns NULL. Opens a browser window.

Examples

```
if (FALSE) {  
  # View a data frame  
  view(mtcars)  
  
  # View with a title  
  view(iris, title = "Iris Dataset")  
  
  # View a ggplot  
  library(ggplot2)  
  p <- ggplot(mtcars, aes(mpg, hp)) + geom_point()  
  view(p)  
}
```

write_framework_template	<i>Overwrite a Framework template with new contents</i>
--------------------------	---

Description

Overwrite a Framework template with new contents

Usage

write_framework_template(name, contents)

Arguments

- | | |
|----------|--|
| name | Template identifier (e.g., "notebook", "gitignore", "ai_claude") |
| contents | Character string to write to the template file. |

Value

Invisibly returns the file path of the written template.

write_frameworkrc	<i>Write global Framework configuration</i>
-------------------	---

Description

Write global Framework configuration

Usage

write_frameworkrc(config)

Arguments

- | | |
|--------|--|
| config | List containing configuration to write |
|--------|--|

Value

Invisibly returns NULL

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