

# Systemnahe Programmierung SS24

---

## Funktionen aus libconfig

---

[https://hyperrealm.github.io/libconfig/libconfig\\_manual.html](https://hyperrealm.github.io/libconfig/libconfig_manual.html)

The boolean values `CONFIG_TRUE` and `CONFIG_FALSE` are macros defined as `(1)` and `(0)`, respectively.

Function: `void config_init (config_t * config)`

Function: `void config_destroy (config_t * config)`

These functions initialize and destroy the configuration object `config`.

`config_init()` initializes the `config_t` structure pointed to by `config` as a new, empty configuration.

`config_destroy()` destroys the configuration `config`, deallocating all memory associated with the configuration, but does not attempt to deallocate the `config_t` structure itself.

Function: `int config_read_file (config_t * config, const char * filename)`

This function reads and parses a configuration from the file named `filename` into the configuration object `config`. It returns `CONFIG_TRUE` on success, or `CONFIG_FALSE` on failure; the `config_error_text()` and `config_error_line()` functions, described below, can be used to obtain information about the error.

Function: `int config_lookup_int (const config_t * config, const char * path, int * value)`

Function: `int config_lookup_int64 (const config_t * config, const char * path, long long * value)`

Function: `int config_lookup_float (const config_t * config, const char * path, double * value)`

Function: `int config_lookup_bool (const config_t * config, const char * path, int * value)`

Function: `int config_lookup_string (const config_t * config, const char * path, const char ** value)`

These functions look up the value of the setting in the configuration `config` specified by the path `path`. They store the value of the setting at `value` and return `CONFIG_TRUE` on success. If the setting was not found or if the type of the value did not match the type requested, they leave the data pointed to by `value` unmodified and return `CONFIG_FALSE`.

Storage for the string returned by `config_lookup_string()` is managed by the library and released automatically when the setting is destroyed or when the setting's value is changed; the string must not be freed by the caller.