

---

# **libreactor Documentation**

***Release 1.0.0***

**Fredrik Widlund**

**Nov 04, 2017**



---

## Contents

---

<b>1</b>	<b>Introduction</b>	<b>3</b>
<b>2</b>	<b>Contents</b>	<b>5</b>
2.1	API Reference . . . . .	5
2.2	Changes in libreactor . . . . .	6
<b>3</b>	<b>Indices and Tables</b>	<b>7</b>



This is the documentation for [libreactor](#) 1.0.0, last updated Nov 04, 2017.



# CHAPTER 1

---

## Introduction

---

Extendable event driven high performance C-abstractions.

`libreactor` is licensed under [Apache License 2.0](#); see LICENSE in the source distribution for details.





## 2.1 API Reference

### 2.1.1 Library Version

The libreactor version uses [Semantic Versioning](#) and is of the form *A.B.C*, where *A* is the major version, *B* is the minor version and *C* is the patch version.

When a new release only fixes bugs and doesn't add new features or functionality, the patch version is incremented. When new features are added in a backwards compatible way, the minor version is incremented and the micro version is set to zero. When there are backwards incompatible changes, the major version is incremented and others are set to zero.

The following preprocessor constants specify the current version of the library:

**LIBREACTOR\_VERSION\_MAJOR**, **LIBREACTOR\_VERSION\_MINOR**, **LIBREACTOR\_VERSION\_PATCH**

Integers specifying the major, minor and patch versions, respectively.

**LIBREACTOR\_VERSION** A string representation of the current version, e.g. "1.2.1"

### 2.1.2 reactor\_core

reactor\_core is the main event loop object, and has low level interfaces to handle file descriptor events.

**reactor\_core**

This private data structure represents the main event loop object.

void **reactor\_core\_construct** ()

Constructs a thread local reactor\_core object singleton.

void **reactor\_core\_destruct** ()

Destructs a thread local reactor\_core object singleton.

void **reactor\_core\_register** (int *fd*, reactor\_user\_callback *\*callback*, void *\*state*, int *events*)  
Register *fd* in the reactor\_core. Events specified in the *events* mask will trigger the *callback* function with *state* included as argument.

void **reactor\_core\_deregister** (int *fd*)  
Deregister *fd* from the reactor\_core.

void **\*reactor\_core\_poll** (int *fd*)  
Returns a pointer to the pollfd structure representing the *fd*.

void **\*reactor\_core\_user** (int *fd*)  
Returns a pointer to the reactor\_user structure representing the *fd*.

int **reactor\_core\_run** ()  
Initiates the reactor\_core event loop.

## 2.2 Changes in libreactor

### 2.2.1 Version 1.0

Released 2017-02-10

- Initial release

## CHAPTER 3

---

### Indices and Tables

---

- `genindex`
- `search`



## R

reactor\_core (C type), [5](#)  
reactor\_core\_construct (C function), [5](#)  
reactor\_core\_deregister (C function), [6](#)  
reactor\_core\_destruct (C function), [5](#)  
reactor\_core\_poll (C function), [6](#)  
reactor\_core\_register (C function), [5](#)  
reactor\_core\_run (C function), [6](#)  
reactor\_core\_user (C function), [6](#)