

Deadlocks

This lesson gives an overview of deadlocks which might occur during implementation of concurrency in C++.

A deadlock is a state in which two or more threads are blocked because each thread waits for the release of a resource before it releases its own resource.

There are two main reasons for deadlocks:

1. A mutex has not been unlocked.
2. You lock your mutexes in a different order.

For overcoming the second issue, techniques such as [lock hierarchies](#) are used in classical C++.

For the details about deadlocks and how to overcome them with modern C++, read the subsection [issues of mutexes](#) and [locks](#).