

Part X. Parallel Programming

The following libraries support the parallel programming model.

- Boost.Thread lets you create and manage your own threads.
- Boost.Atomic lets you access variables of integral types with atomic operations from multiple threads.
- Boost.Lockfree provides thread-safe containers.
- Boost.MPI originates from the supercomputer domain. With Boost.MPI your program is started multiple times and executed in multiple processes. You concentrate on programming the actual tasks that should be executed concurrently, and Boost.MPI coordinates the processes. With Boost.MPI you don't need to take care of details like synchronizing access on shared data. However, Boost.MPI does require an appropriate runtime environment.

Table of Contents

[44. Boost.Thread](#)

[45. Boost.Atomic](#)

[46. Boost.Lockfree](#)

[47. Boost.MPI](#)