

STXXL 1.4.1

STXXL 1.4.1 has been released

STXXL is an implementation of the C++ standard template library STL for external memory (out-of-core) computations, i.e., STXXL implements containers and algorithms that can process huge volumes of data that only fit on disks. While the compatibility to the STL supports ease of use and compatibility with existing applications, another design priority is high performance.

What's new in 1.4.1 ?

- * Integrated support for kernel based asynchronous I/O on Linux (new file type "linuxaio"), which exploits Native Command Queuing (NCQ) if available.
- * Merged stxxl::unordered_map branch, which provides a hash map backed by external memory.
- * Replaced struct default_completion_handler with a NULL pointer, thus avoiding superfluous new/delete work for each I/O request
- * Added stxxl::external_shared_ptr which is a proxy class to allow use of shared_ptr classes inside stxxl containers
- * Fixing bugs and warnings on 32-bit systems (yes, they still exist).
- * Adding support for MinGW-w64 (64-bit) systems with working SJLJ thread implementations.

What was new in 1.4.0 ?

- * reorganized source hierarchy into include/ lib/ tests/ examples/ doc/ tools/
- * CMake build system for cross-platform compilation
- * greatly improved documentation with tutorials and examples
- * efficient external matrix operations
- * new containers stxxl::sequence and stxxl::sorter
- * improved .stxxl disk configuration files and additional options
- * simple examples and skew3 as real-world stream application
- * support for Visual Studio 2012 and 2013 _without_ Boost