Manticore is a high-level parallel programming language aimed at general-purpose applications running on multi-core processors. Manticore supports parallelism at multiple levels: explicit concurrency and coarse-grain parallelism via CML-style constructs and fine-grain parallelism via various lightweight notations, such as parallel tuple expressions and NESL/Nepal-style parallel array comprehensions.

We have been working on a compiler and runtime system for Manticore since the beginning of 2007. Currently we have most of the parallel features implemented and running on Linux and MacOS X on the x86-64 (a.k.a. AMD64) architecture. Our current implementation efforts are focused on performance tuning, extending the language implementation with NESL-style flattening, and adding mutable state cleanly.

### Recently Updated

- **Installation instructions**
- **Documentation**
- **Compiler Overview**
- **Runtime configuration-file format**
- **Logging**
- **Flat-heap implementation notes**
- **proposed move to System F**
- **C calls**
- **Set-once memory**
- **Fiber-local storage**
- **MLB**
- **Inline BOM**
- **Compiler Overview**
- **Work Items**
- **Compile on Windows**
- **Atomicity**
- **Scheduler**