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 light-weight 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](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [Documentation](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [Compiler Overview](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [Runtime configuration-file format](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [Flat-heap implementation notes](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [Logging](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [proposed move to System F](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [C calls](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [Set-once memory](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [Fiber-local storage](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [MLB](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [Inline BOM](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [Compiler Overview](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [Work Items](#)  
  Oct 15, 2012 • updated by Lars August Bergstrom • view change
- [Compile on Windows](#)  
  Oct 12, 2012 • updated by Lars August Bergstrom • view change
- [Atomicity](#)  
  Oct 12, 2012 • updated by Lars August Bergstrom • view change
- [Scheduler](#)  
  Oct 12, 2012 • updated by Lars August Bergstrom • view change