

Allinea OPT – A revolution in code optimization



The Optimization and Profiling Tool is a solution for application developers who require optimal performance on large-scale parallel architectures

OPT is the first of Allinea's new generation of Grid-enabled tools for HPC, with a client/server architecture that works transparently on local or remote compute resources

OPT is cross-platform, providing the same easy to use interface whatever O/S and processor type – why learn a new tool for every development platform?

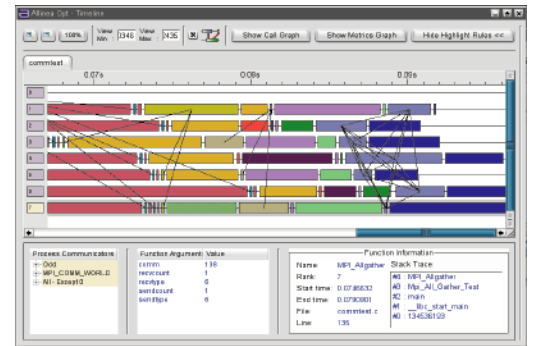
OPT highlights and analyzes the bottlenecks in your software

OPT can compare multiple runs to assess code scalability

Supports scalar sampling

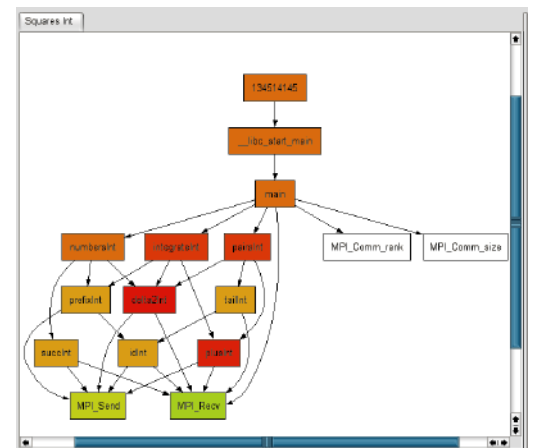
C, C++ and Fortran support

Target your optimization effort where it's needed !



MPI tracing

OPT's new approach to message tracing brings clarity and insight



Call-graph visualization

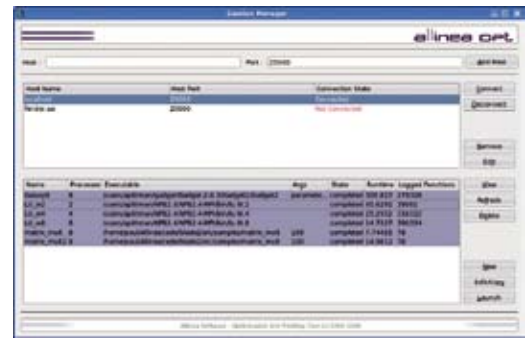
Colour highlighted call-graphs will quickly locate your troublespots

Scalable Versatile Intuitive

- An easy to use and powerful graphical user interface
- Multi-session and multi-user capabilities
- Timeline display with filtering and stack information
- Displays history of MPI calls with information on timing, message sizes and other key parameters
- Selective filtering for efficient profiling
- Fast and highly configurable data analysis
- Access to CPU and PAPI performance statistics, with cache profiling
- No need to instrument your code
- In-depth call-graph analysis highlights communication and computation imbalance as well as waiting processes
- Connect to several profiling sessions and access historical results remotely and securely
- View statistical overviews and detailed views of user-defined metrics; for multiple jobs, across chosen processors and against time
- Configure function measurement and granularity at runtime
- Complete parallel profiling of computation for all functions
- Auto creation of command line jobs
- Metric time view
- Per user job, logging information
- Enhanced batch launch facility

COMPATIBILITY

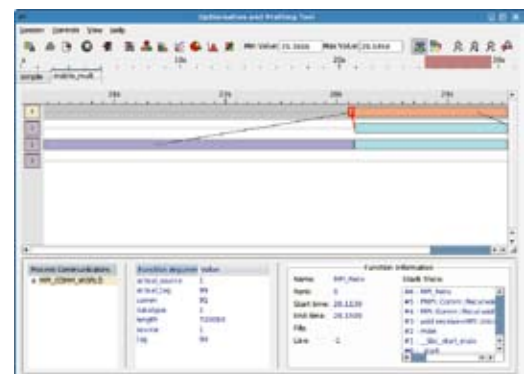
- Available for most Linux distributions
- Support for the latest processors and platforms X86, X86-64, IA64, Power, IBM Cell BE and Blue Gene P
- All major MPI implementations
- Compatible with compilers from all major vendors including: Absoft, Intel, Pathscale, Portland Group and the GNU compiler suite



Grid-enabled job control
OPT's web service allows you to connect to remote optimization sessions



Metric Overviews
High-level information provides a first pass at the optimization process



New 'Time Range' widget