

The Vampir performance visualizer allows users to quickly analyze the runtime behavior of a parallel program. Scalable graphical data representation leverages the powerful human visual perception. Interactive navigation facilitates the rapid identification of inefficient or incorrect parts of a program.

Scalable Runtime Visualization

Scalable rendering algorithms and visualization techniques allow users to analyze hundreds of thousands of application processes. Vampir's analysis engine efficiently exploits available parallel compute power, high performance file systems, and distributed memory to enable interactive navigation in very large performance data sets.

Full Program Details

Vampir enables in-depth analysis of parallel application runtime behavior, interprocess communication, synchronization, and I/O. Aggregated statistics of function calls, communication, and I/O data dynamically adapt to the time range of hot-spots.

Performance Indicators

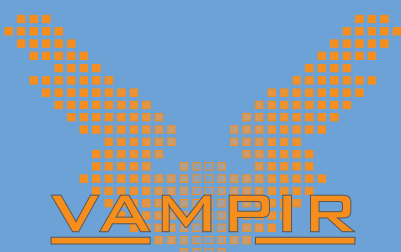
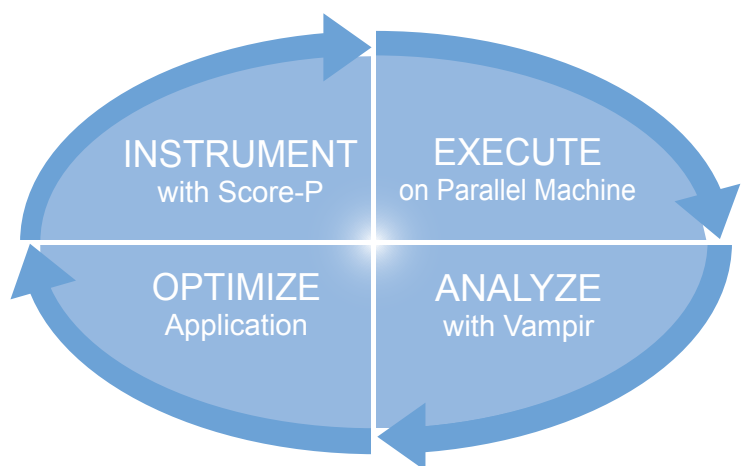
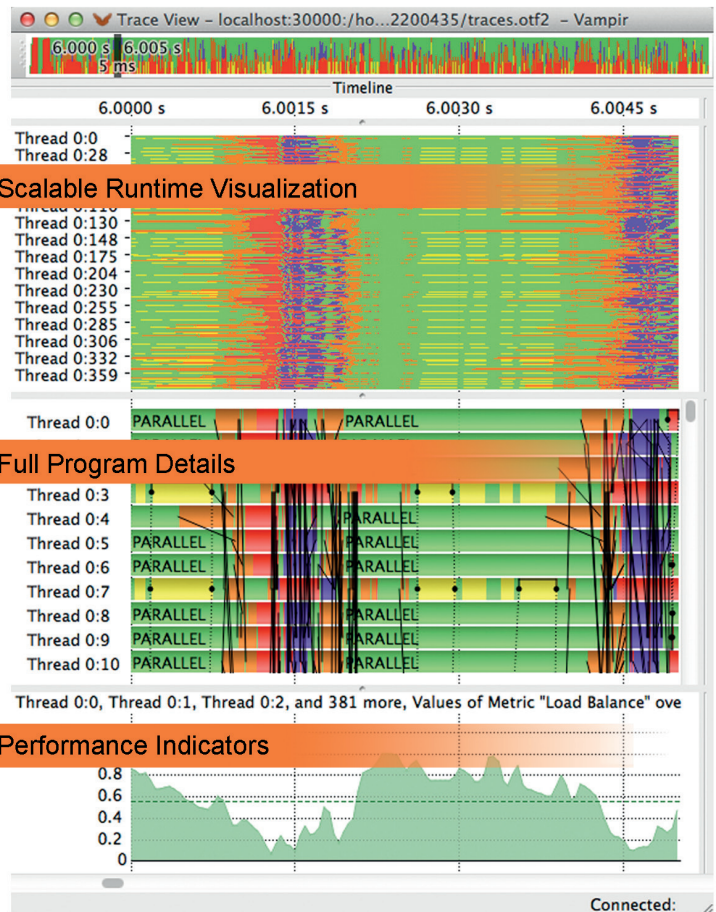
Visual analysis and correlation of a wide range of hardware and software performance counters with support for user-defined and derived metrics.

Code Optimization with Vampir

The analysis process consists of four stages:

- Code instrumentation to insert measurement points into the parallel program
- Run-time monitoring of a parallel run with a typical input data set on the target hardware
- Post-mortem analysis using interactive event trace visualization
- Code optimization based on analysis results

The first two steps are covered by the open source measurement system Score-P. The third step is performed with Vampir. Vampir supports a wide range of programming models: MPI, OpenMP, CUDA, GASPI/OpenSHMEM, Pthreads, and hybrid combinations. It runs on Linux, Windows, and Mac OS X.



EU CONTACT
GWT-TUD GmbH
E-mail: sales@vampir.eu
Web: www.vampir.eu

U.S. CONTACT
ParaTools, Inc.
E-mail: info@paratools.com
Web: www.paratools.com



event.vampir.eu