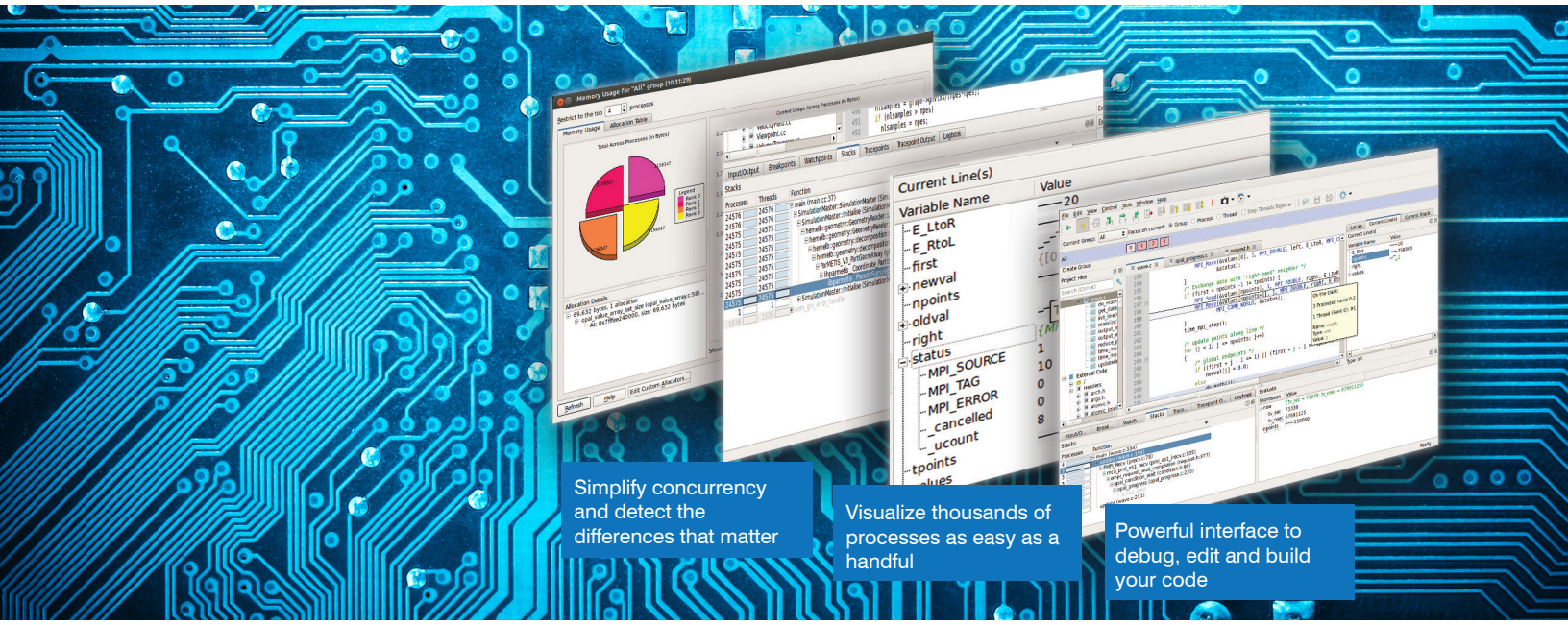
allinea DDT

Debug complex software problems fast

allinea FORGE



Allinea DDT helps programmers and scientists like us dig down to the levels where print statements cannot reach.

Dr. Vincent C. Betro, Computational Scientist, Oak Ridge National Laboratory

Allinea DDT is the scalable and intuitive debugger for developers of high-performance applications that need to fix bugs quickly and speed up the development process.

Simplifying complexity, effortlessly

Allinea DDT helps you to spend less time debugging and more time developing great software.

Lightning fast, intuitive and powerful control and display of simultaneous processes and threads, and extreme scalability make tackling parallel and multi-threaded code problems quick and easy – at any scale.

For developers, scientists, application analysts and support teams

- **Rapid** – takes you right to the application crash so there's no need to waste time inserting print statements and re-running the code
- **Be in control** – step, pause and evaluate by groups and individually to observe and understand application behavior
- **Find the cause** – variable, data and stack difference highlighting make identifying unusual data
- **Eliminate memory problems** – consign hard to find bugs, dangling pointers and memory leaks to history with powerful in-built memory debugging
- **Scalable** – over 70% of the world's largest supercomputers rely on Allinea DDT
- **Fits your workflow** – interactive, or offline and post-mortem access means system access doesn't need to delay your success
- **Easy to use** – Allinea DDT is a tool for every computational scientist and developer

Discover easy, scalable debugging with a free trial of Allinea DDT

www.allinea.com/trials

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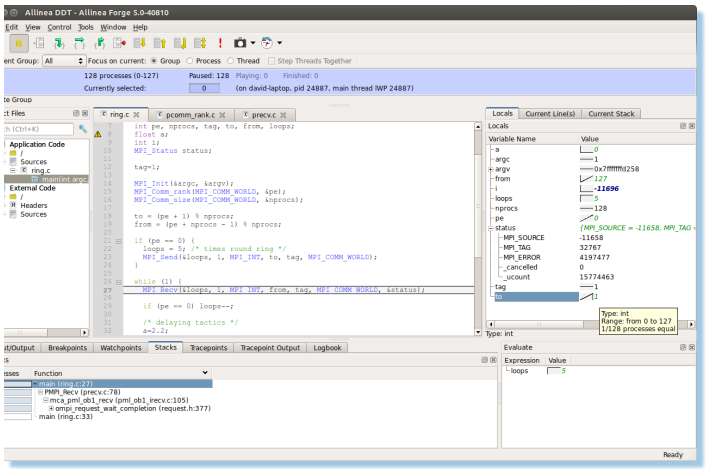
Forward thinking for debugging

Allinea DDT is more than a debugger – it leads in advanced capabilities that help you to discover the origins of software defects.

- Automatic tree-views of process and thread stacks that make erroneous behavior easy to see.
- Sparklines with outlier displays, change detection and cross- thread and process displays highlight variables and the differences that indicate problems.
- Version control integration and static analysis pinpoint code changes and the origins of faults automatically.
- Automatic recording of debugging sessions provide logbooks of behavior that can be compared and shared.
- Memory debugging that detects corruption and misuse of heap memory and finds memory leaks and



"Allinea DDT provides our team with the capability and scalability to address our ambitions. Very few tools integrate well into the complex workflows that are used for weather forecasting – Allinea DDT does so very well!"

Paul Selwood, UK Met Office

"With Allinea DDT, debugging is fast and enjoyable. It's easy to just pick up – it is outstanding for debugging multithreaded and parallel software."

Neil Catling, Chief Software Scientist, CGG

The most advanced debugger for Fortran, F90, C and C++ applications available

- Debug thread-level concurrency with OpenMP, TBB and pthreads.
- Distributed parallel support with MPI, including message and deadlock debugging.
- C++ and C++11 STL displays that are open and extensible to user-defined data types makes debugging and viewing complex classes straightforward.
- Graphical visualization of arrays and distributed arrays with advanced filtering.
- Supports the platforms that matter to you today and in the future with unrivalled NVIDIA CUDA and Intel Xeon Phi support.

The debugger for productive high performance computing

Allinea DDT is part of the Allinea Forge toolkit.

- It is quick and easy to master and designed for scientists, developer and analysts alike.
- A modern interface with code editing, full syntax highlighting and version control integration makes applying and testing code changes and bug fixes easy.
- Remote access clients make connecting to and debugging and editing on distant systems easy from OS/X, Windows or Linux.
- The common user interface with Allinea MAP enhances user adoption of debugging and shrinks the training and support costs.