

# The Eclipse Parallel Debugger

Part of the Eclipse Parallel Tools  
Platform Project

<http://eclipse.org/ptp>

# Eclipse Parallel Debugger

## Key Features

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- Tightly integrated with Eclipse IDE
  - Preserves Eclipse “look and feel”
  - Uses PTP runtime and widgets
  - Uses standard Eclipse debug widgets
  - Provides services for other integrated tools
- Designed for very large parallel programs (1000+ procs)
  - UI tested to 90,000 processes
  - Simulated 40,000 processes
- Language neutral
  - Uses any source editor available (C/C++/Fortran)
  - Identical interface for multiple languages

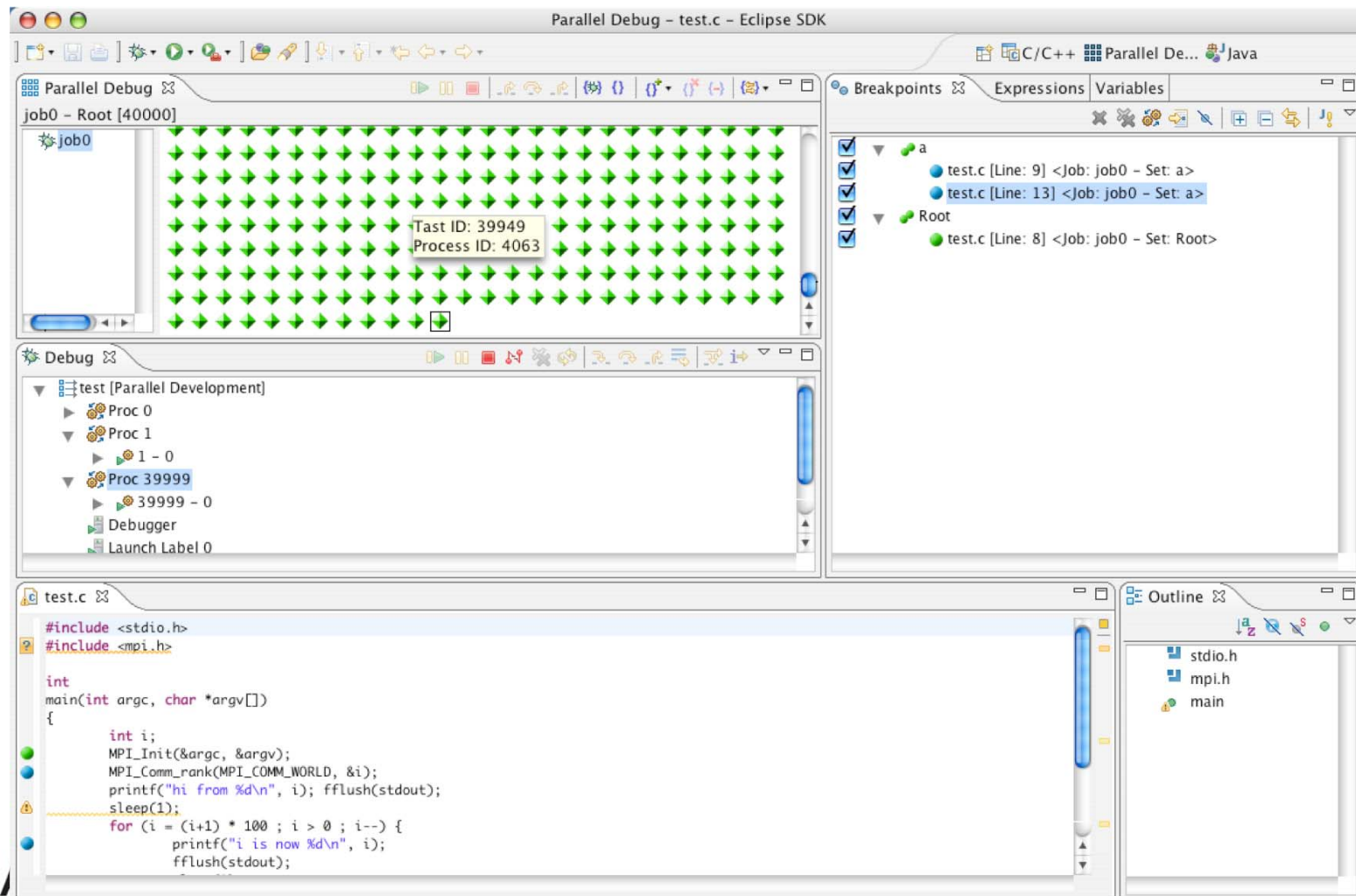
# Eclipse Parallel Debugger

## Key Features (cont...)

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- Supports debugging of multiple jobs simultaneously
  - Users can switch between multiple parallel jobs
  - Manages process status, breakpoints, etc. for multiple jobs
- Manages “sets” of processes
  - Creation/deletion/modification of process “sets”
  - Can be used for any debug commands: breakpoint, step, etc.
- High level external debug API
  - Simplifies integration with external debug infrastructure
- Open source
  - The only open source GUI-based parallel debugger currently available

# Eclipse Parallel Debugger User Interface



# Eclipse Parallel Debugger

## Pros & Cons

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- Pros
  - Designed for scalability
  - Highly integrated
  - Extensible
  - Services available for other tools
  - Open source
- Cons
  - Heavyweight server processes
  - May be difficult to support unusual architectures (e.g. Red Storm)
  - Early days; full functionality not yet available
  - Initial implementation relies on OpenRTE
  - Needs contribution from other sources