

IDE with new graphical perspective and the latest Linux technology

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MONTAVISTA LINUX PROFESSIONAL EDITION 3.1 (PRO) OFFERS A FULLY-INTEGRATED GRAPHICAL DEVELOPMENT ENVIRONMENT HOSTED ON LINUX, SOLARIS, AND NOW WINDOWS WORKSTATIONS, AS WELL AS POWERFUL NEW CAPABILITIES IN THE LINUX KERNEL AND PLATFORM CODE.



■ Embedded developers with experience with legacy RTOS tool kits, as well as applications programmers familiar with using tools targeted at desktop and enterprise development, have come to expect a full-featured, highly integrated development suite. When these developers first tried targeting Linux, they were often disappointed by the ubiquitous command-line interfaces and earlier IDE offerings. With the release of MontaVista Linux Professional Edition 3.1, developers can now enjoy the benefits of a fully-integrated development environment, built on Open Source Eclipse technology, designed to ease and accelerate the tasks involved with embedded application development and deployment.

MontaVista Linux Professional Edition 3.1 offers developers “DevRocket” – a complete IDE and tool kit with the following capabilities:

- Host support with common look-and-feel for Linux, Solaris and now Windows workstations
- Context-sensitive editing and language-aware program syntax checking
- Graphical source code and project management interface
- Integrated help and documentation
- Project wizards to simplify creation of applications and libraries
- Point and click interface for optimization and kernel configuration

- Integrated multi-threaded tracing tools for system and application performance analysis
- Target Memory leak detection and memory use analysis

Eclipse is actually a software backplane that supports “plugging-in” of key functionality such as code browsing and editing, source-level debugging, and other capabilities implemented in deliverable tools. This open architecture thereby not only benefits developers who use Eclipse-based IDEs such as MontaVista DevRocket, but fosters the creation of a growing ecosystem of ISVs and other third-parties who are building advanced plug-ins and tools to enhance the MontaVista Linux development process.

MontaVista Linux Professional Edition 3.1, in addition to introducing MontaVista DevRocket, brings many of the key GNU tools and other Open Source utilities up to date. In particular, developers can now leverage new capabilities in GDB 6.0, including debugging new Native POSIX Threads Library code, accessing thread-local storage, using separate executables and debugging symbol information, and leveraging additional compiler/DWARF-based back-trace information. GCC 3.3.2 primarily offers quality enhancements to users of GNU compiler tool chains, and also contains improvements in pipelined CPU support and processor-specific optimizations for x86, SH, MIPS, and PowerPC architectures.

In addition to offering developers the latest tools and graphical development capabilities, MontaVista Linux Professional Edition 3.1 updates the kernel version from 2.4.18 to the 2.4.20 and provides a variety of bug fixes, security enhancements, and feature enhancements. Building on this new base, MontaVista delivers:

- Integrated IPv6 built on USAGI project technology
- Support for VLANs (Virtual Local Area Networks)
- 20 new board-level platforms, bringing the total number of supported boards and systems to well over 100
- Greatly expanded real-time capabilities

With Pro 3.1, MontaVista continues to expand the scope and types of applications that can be built on MontaVista Linux. New real-time features and capabilities let MontaVista Linux Professional Edition 3.1 address the response needs of the great majority of embedded applications. These features include high-resolution POSIX timers which offer developers more control over real-time application behavior. By using POSIX timers, programmers can implement time bases and event-driven algorithms with microsecond accuracy, and eliminate the need for cycle-wasting polling and busy-loops. The O(1) real-time scheduler is replacing MontaVista’s

