MontaVista Linux Application Development Kit 5.0

Application Development Kit Enhances Productivity and Speeds Time to Market

Teams developing intelligent devices must build feature-rich applications to differentiate their products and get them to market quickly. With tight product development cycles, tools that enable speedy application deployment can make the difference between success and failure in the marketplace.

MontaVista® ADK 5.0 is a fully graphical integrated development environment (IDE) based on industry-standard Eclipse, providing the tools and functionality needed to develop embedded applications built on MontaVista® Linux®. MontaVista ADK 5.0 hosts on Windows®, Solaris™ and Linux operating systems and supports integration with third-party Eclipse-based components and other tools.

MontaVista Linux Developer Tools Family

MontaVista Software provides a comprehensive suite of developer tools, including the Platform Development Kit (PDK) 5.0, providing direct control over the MontaVista Linux platform and development environment, and the Application Development Kit 5.0, comprising all the tools application developers need to bring intelligent devices to market quickly and efficiently.

Platform Development Kit	Application Development Kit
GUI-Based Analysis Tools	DevRocket 5 Integrated Development Environment
Architecture Cross Tool Chain	Architecture Cross Tool Chain
Linux Support Package (BSP)	Virtual Target Environment
Target Application Packages	
Source Code	

The MontaVista ADK 5.0 includes:

- DevRocket™ 5 –award-winning MontaVista IDE delivered as completely standard Eclipse plug-ins, includes advanced analysis tools for memory leak detection, performance profiling, and memory usage analysis.
- CPU Architecture Cross Tool Chain – A complete set of Linux cross tools – including compliers, debuggers, and run-time libraries – required to build application binaries for specific CPU types. Covers x86, ARM, MIPS, XScale, and Power (PPC) architectures.
- Virtual Target Environment – A complete, bootable instance of MontaVista Linux 5 running within a host-based virtual environment, with advanced debugging and analysis tools including a 586 tool chain targeting virtual target execution.

Supports Previous Versions of MontaVista Linux

With MontaVista Linux on its 5th generation release, many application development teams already have a significant code base on MontaVista Linux versions 3.1 and 4.0. The backward-compatible MontaVista ADK 5.0 allows developers to use these previous version tool-chains in addition to MontaVista Linux 5.0, supporting easy discovery and porting of existing MontaVista Linux installations, making all editions dynamically available from within one interface.

HIGHLIGHTS

- **Comprehensive application Development Kit enables rapid development of differentiating applications on MontaVista Linux-based platforms**
- **Eclipse-based DevRocket 5 IDE provides an intuitive, interactive, and accessible development environment**
- **Supports broad set of target processors, including x86, ARM, MIPS, XScale, and Power (PPC) architectures**
- **Architecture cross tool chain including compilers, debuggers, and run-time libraries to build applications for specific CPU architectures**
- **Analysis tools including Memory Leak Detection, Performance Profiling, and Memory Usage Analysis, all delivered through an intuitive graphical interface**
- **Virtual Target Environment enables advanced debugging and analysis from day-one of development, reducing late porting/integration risk**
- **"One-click" automates and streamlines the edit/compile/debug cycle**
- **Backward compatibility allows developers to access and integrate previous versions of MontaVista Linux from within a single interface**

Eclipse-Based Graphical Development Environment and Tools

Many Linux development and analysis tools rely on command-line interfaces (CLIs), and parsing reams of text-based output can be difficult and time-consuming. To boost productivity, the MontaVista ADK provides an intuitive, interactive, and accessible Eclipse-based graphical user interface for performance and analysis tools and can plug into any Eclipse-based development environment. Because the ADK 5.0 takes full advantage of the Eclipse platform and the Eclipse ecosystem, developers do not have to run a separate IDE to target the MontaVista Linux environment.

"One-Click" Automated Edit/Compile/Debug Cycle

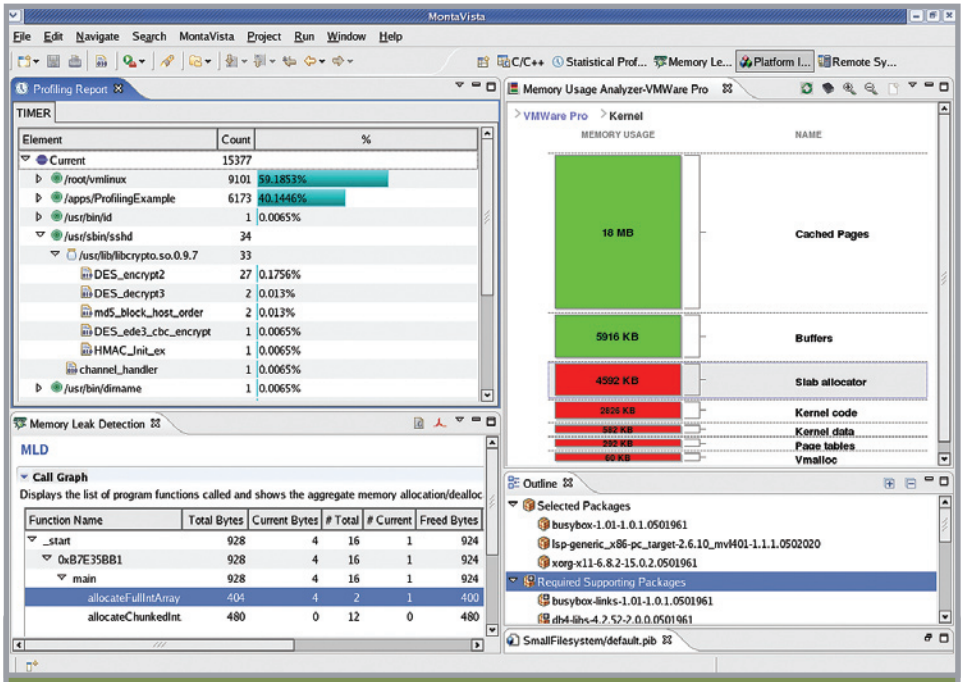
"One-click" streamlines the edit/compile/debug cycle, eliminating the multiple manual steps involved in building binaries, copying them to a target, launching the debug sever, and connecting back to the host. It easily supports multiple MontaVista Linux editions and versions with completely automated target delivery setup and debug capabilities, and dynamically switches between tool-chains and targets to ease porting and support for multiple CPU architectures.

Catch Bugs and Bottlenecks with Advanced Analysis Solutions

When developing applications, identifying performance bottlenecks and memory leaks can be difficult and time consuming. Left unresolved, these issues can cripple a development effort. The MontaVista ADK integrates several best-of-breed Linux tools and delivers them in an intuitive and interactive graphical interface. These include MPatrol to identify memory leaks; OProfile to find the greatest contributors of CPU utilization; and tools that deliver a graphical depiction of memory usage across the Linux kernel and applications, and most importantly, of available memory of the system.

Virtual Target Environment Reduces Late Porting Risk

Typically application developers receive access to working target hardware very late in the development cycle, and porting and integration issues exposed at that stage can introduce significant project delays. The MontaVista Virtual Target Environment reduces this risk by allowing developers to utilize MontaVista Linux tool chains and a fully functioning target from the beginning of the development cycle.



ADK 5.0 includes a fully Eclipse-based environment for a more intuitive, interactive, and accessible experience

MVADKDS0507

SPECIFICATIONS

MVL Edition / Version Support*
Professional 3.1, 4.0, and 5.0
Mobilinux 3.1, 4.1
Carrier Grade Edition 3.1, 4.0

Development Hosts
Linux (RHEL 3/4, SLES 9/10)
Sun Solaris 8, 9, 10
Microsoft Windows 2000/XP

Analysis and Optimization Tools*
Application Pre-Linking
Library Optimization
Memory Leak Detection
Memory Usage Analysis
Application Profiling

Eclipse Support
Eclipse 3.2 Plug-ins
C/C++ Developer Toolkit (CDT) 3.1
Remote Systems Explorer 1.0

LSP and Toolchains
Architecture Cross Tools
GCC 4.2 Compiler and Debugger
uClibc and glibc support

Virtual Target
VMware-hosted MontaVista Professional 5.0 Edition
Full execution, debugging and analysis environment
Complete package set
586 cross toolchain

*Analysis tools available as supported by specific editions/versions

MontaVista Software, Inc.
2929 Patrick Henry Drive
Santa Clara, CA 95054

Tel : 408.572.8000
Fax : 408.572.8005
email: sales@mvista.com

www.mvista.com