MontaVista Linux Professional Edition 5.0

montavista™

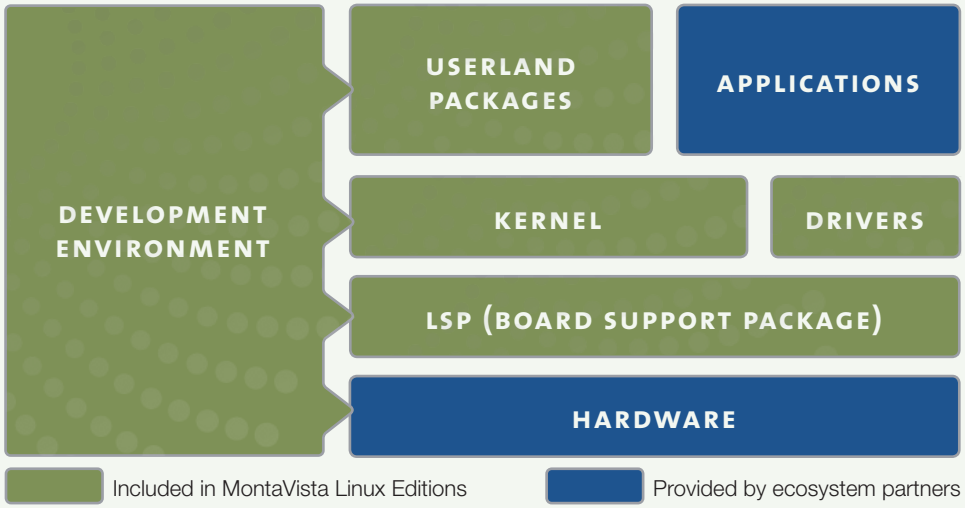
Comprehensive Development Platform Provides Greater Control and Reduced Time to Market

Development teams today are under tremendous pressure to build leading-edge features into their intelligent devices, while getting them to market as quickly as possible. MontaVista® Linux® Professional Edition (Pro) is the ideal platform for developers who want all the benefits of an open source development platform, as well as the ability to achieve rapid time to market. Pro enables state-of-the-art development across a wide array of intelligent device markets, including networking and communications, instrumentation and control, aerospace and defense, SOHO devices, and medical electronics.

Most Powerful Linux Environment for Intelligent Devices

MontaVista® Pro 5.0 addresses the twin challenges faced by product teams selecting a development environment: speed and control. As an integrated, pre-tested environment, MontaVista Linux can be installed quickly and developers can be up and running right away. Consisting entirely of open source Linux, teams have complete control to customize it themselves and leverage the vast open source Linux code base.

MontaVista Linux offers the most complete pre-integrated Linux development platform



The MontaVista Professional Edition 5.0 includes everything a developer needs to build a platform or application for intelligent devices:

- Kernel – Only commercial embedded Linux solution on Kernel 2.6.18+, providing more up-to-date software development environment options.
- Linux Support Package (LSP) – Board support package including everything required to support a wide range of hardware platforms, including x86, ARM, MIPS, Xscale, and PPC.
- Userland Packages – Preconfigured and tested library of application packages such as Apache, FTP, and SSH, to support virtually any development need.
- Pre-Tested Drivers – A complete set of pre-built and tested drivers.
- Development Environment – Eclipse-based environment for both platform and application developers.

In addition, MontaVista has built a worldwide ecosystem of partners providing a wide variety of proven Linux technology solutions and tools. This includes over 200 best-of-breed partners in integrated platforms, integration and consulting, semiconductors, boards, developer tools, and applications.

HIGHLIGHTS

Core Features

- 2.6.18+ Kernel
- X86 Dual Core & Hyperthreading
- ALSA
- LSB 3.0 Compliance
- uClibc support
- ARM EABI
- Updates to packages and tools
- iSCSI
- IPv6 Certification Ready
- Serial RIO
- USB Client & Gadget
- USB On-The-Go

RTOS Performance in Linux

- User-Space Support
- Priority Queuing
- Priority Inheritance
- Robust Futexes
- HRT with Ktimers

Significant reduction in footprint >75%

- uClibc

New ADK Brings the Power of Linux to Application Developers

- Eclipse-Based IDE
- Memory Leak Detection
- Performance Profiling
- Memory Usage Analysis

Enhanced I/O Support

- Serial Rapid I/O
- USB OTG
- IPv6

"2.6.18+" includes several features that have been back ported from 2.6.19 and 2.6.20 kernel.

Advanced Developer Tools

MontaVista provides a comprehensive set of Eclipse-based developer tools, including the Platform Development Kit (PDK) 5.0, providing direct control over the MontaVista Linux development environment, and the Application Development Kit (ADK) 5.0, providing all the tools application developers need to get products to market quickly and efficiently.

PDK 5.0 provides everything required to create and deliver a MontaVista Linux-based development platform. Including an industry-standard Eclipse IDE, broad CPU and board support, advanced analysis tools, target application packages, and complete source code, the MontaVista PDK 5.0 is the ultimate embedded Linux development solution.

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 operating system technology. MontaVista ADK 5.0 hosts on Windows®, Solaris™ and Linux operating systems and supports integration with third-party Eclipse-based components and other tools.

Broadest Hardware Support

MontaVista Professional Edition 5.0 supports board-level platforms across five major CPU architectures, providing superior performance through unique processor family-specific tool chains. This breadth of choice allows development teams to choose hardware that will maximize their systems' performance at the lowest possible cost.

Real Time Performance

MontaVista Linux delivers the real-time response required by many embedded applications. With real-time advances and preemptible kernel technology originally developed by MontaVista, worst case real-time response can scale to the sub-50-microsecond range. This meets or exceeds most real-time processing requirements. We have achieved this performance through a number of technologies: User-Space Support, Priority Queuing, Priority Inheritance, Robust Futexes, and HRT with Ktimers. With HRT, programmers can implement time bases and event-driven algorithms with microsecond accuracy, eliminating the need for cycle-wasting polling and busy loops.

© 2007 MontaVista Software, Inc. All rights reserved. Linux is a registered trademark of Linus Torvalds. MontaVista and DevRocket are trademarks or registered trademarks of MontaVista Software, Inc. All other names mentioned are trademarks, registered trademarks or service marks of their respective companies. MVPRODS0507

SPECIFICATIONS

Hardware Support

- ARM (ARM, Texas Instruments)
- MIPS (AMD, Broadcom, MTI, NEC, Toshiba)
- PowerPC (AMCC, Freescale, IBM)
- XScale (Intel)
- X86 (586, Pentium 2, Pentium 3, Pentium 4)

For a complete list, visit **http://www.mvista.com**

Development Hosts

- Red Hat Enterprise Linux 3.0 & 4.0 32bit & 64bit
- SUSE Linux 10.1 Workstation 32 & 64 bit
- SUSE Linux Enterprise Server 9 service pack 2
- Sun Solaris 8.0, 9.0
- Microsoft Windows 2000 service pack 4+, XP service pack 2+

Device Support

- Storage (IDE. Serial ATA, SCSI, Flash, iSCSI)
- Display (serial console, framebuffer, touch screen, LCD)
- Multimedia (audio chipsets, MPEG decoders)
- USB (1.1 Host & Client, USB2.0 Host, USB OTG)
- Standard I/O (serial, IrDA, PS/2, parallel port)
- Ethernet (10/100/1000)
- Wireless (802.11b, 802.11g)

Networking

- TCP/IP IPv6
- Wireless networking
- Remote access
- Internet access
- VLAN
- E-mail, Chat
- Boot/Resolution
- Large number of networking utilities
- IPSec (IKE)
- Routing (Zebra)
- Web services (clients & servers)
- iSCSI
- IPv6 Certification Ready
- Serial RIO
- USB Client & Gadget
- USB On-The-Go

File System Support

- EXT 2, EXT 3, JFFS2, XFS, CRAMFS, NFSv3, YAFFS2, squashFS

Graphics Support

Based on Xorg with support for:

- X Windows
- GLib, gpp, gtk2
- FreeType
- ATK
- IceWM, Matchbox
- Pango

Graphics support is provided on supported LSPs through a standard frame buffer I/O mechanism.

PDK 5.0

- Eclipse-based analysis tools: platform image builder, system trace, system profile
- CPU architecture cross tool chain
- Linux Support Package (BSP)
- Target application packages
- Source code

ADK 5.0

- DevRocket™ 5: Eclipse-based IDE with memory leak detection, performance profiling, memory usage analysis
- CPU architecture cross tool chain
- Virtual Target Environment

montavista™

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