



## **Linux: Building Growth**

**Integrated Solutions Market  
Research Study**

**Application Middleware**

**Market Forecasts to 2003**

Market  
Strategies:

**Support  
Software  
Servers  
Alliances  
Partnering**

**Linux: An Open Source,  
Stable Operating System**

Market opportunity analysis

## **LINUX IS SIGNIFICANT**

*Multi-processor system  
User interfaces intuitive  
Enterprise support offered  
Internet applications  
Known and reliable  
Scalable system delivered  
Advanced multiuser system  
Multi-tasking system  
Intel PC operation  
Worldwide Internet  
Co-developed  
programming  
Workstation or server*

### **The Study Addresses These Questions:**

- *What is driving Linux markets?*
- *What are trends in Linux ?*
- *How do companies position?*
- *Which partner strategies work?*
- *How do partnerships work?*
- *What strategic alliances work?*
- *What are Linux directions?*

## You NEED This Study

# COMPANIES PROFILED

**Applix**  
**BEA Systems**  
**Caldera Systems**  
**Compaq**  
**Computer Associates**  
**Collective Technologies**  
**Corel Corporation**  
**Cygnus Solutions**  
**Debian**  
**Dell Computer**

**Empress**  
**Global Knowledge**  
**Hewlett Packard**  
**IBM / MQSeries**  
**KDE Information**  
**Lineo**  
**Linuxcare**  
**Lynx Real-Time**  
**Mandrake**  
**Motorola**

**Object Share**  
**Precision Insight**  
**QNX Software**  
**Red Hat Software**  
**SAP**  
**SuSE**  
**TurboLinux**  
**VA Linux**  
**Unify**  
**White Pine**

## Report Outline

### EXECUTIVE SUMMARY

#### 1. LINUX MARKET DESCRIPTION AND MARKET OPPORTUNITY

Linux Definition / Positioning	Platforms / Applications	User Interface Issues
Licensing / Development Effort	Stability / Limitations	Internet Service Provider
Linux Advantages Over NT	Linux Electronic Commerce	

#### 2. LINUX MARKET FORECASTS AND MARKETING STRATEGIES

Market driving forces	High performance research	Linux services and support
Advantages of open source	Single purpose existing systems	International
Internet markets	Communicaitons servers	Suse Europe
Market participants	Telecommunicaitons servers	Red Hat Europe
Market forecasts	Office applicaitons	TurboLinux Asia Pacific
Linux applications	Industry segments	Installation and setup
E-mail servers	Portals	Embedded systems
Distributed transaction servers	Distributed transaction servers	

#### 3. LINUX MARKET DYNAMICS AND PRODUCT DESCRIPTIONS

Supplier Role in Linux	Debian	Speech Recognition Technology
Continued Development	Dell Computers	Intel / Mandrake / Motorola
BEA	Empress Software	Object Share / VisualWorks,
Caldera	Global Knowledge	Precision Insight
Caldera Systems Targets	Hewlett Packard	Red Hat
Embedded Market	Hewlett Packard / Red Hat	E-Commerce Server
Internet Solutions	Hewlett Packard / Precision	Portal / Pricing
Caldera Systems / Sun	Insight	Training and Certification
ChiliSoft	IBM	Silicon Graphics
Compaq	Partnership	Sun Microsystems
Computer Associates	Red Hat / Caldera	SuSe / TurboLinux
Unicenter TNG Framework	TurboLinux / Customer	White Pine
Corel	Support	
Cygnus Solutions	Response to Competition	

#### 4. MOVE TO OPEN SYSTEMS SOFTWARE TECHNOLOGY

Reasons for Open Systems	Internet Transformation of	Open Source Changes
Impact of The Internet	Competitive Landscape	Internet Development

Open Source Software	Obstacles to Market Acceptance	Operating Systems Kernel
Open Source Alternatives	Desk Top Environments	Red Hat Linux Components
Proprietary Software	Lines of Code	Tools / Core / Extreme Linux
Operating System Kernel	Cross Platform Issues	Linux Boot Process
Benefits of Linux	Workstation Supercluster System	

**5. LINUX COMPANY PROFILES**

**6. LINUX AND OPEN SOURCE SOFTWARE MARKETING AND DISTRIBUTION STRATEGIES**

Value-Added Resellers	Cisco Systems / Red Hat	Applix And Caldera Systems 1
Red Hat Strategy	Custom operating systems	Empress Software and Lynx
Agents / Web / Alliances	Value of applications	Real-Time Systems
Red Hat /Computer	IBM Linux positioning	Debian Partners
Associates	BEA Linux positioning	Corel and the K Desktop

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**REPORT METHODOLOGY**

**This is the thirty first in a series of market forecasts of communications, telecommunications, Internet, and computer and telephone equipment. Intuitive learning systems and hiding complexity from the user form an integral part of telecommunications/data communications market convergence. The project leaders have significant experience preparing industry studies, having written over 300.**

Forecasts are based on primary research and proprietary data bases. In-depth interviews are conducted with a broad range of key vendor and user participants in the market. Opinion leaders and users are interviewed to determine market directions and new product features needed.

**ABOUT THE COMPANY**

WinterGreen Research, founded in 1985, provides strategic market assessments in telecommunications, communications equipment, health care and advanced computer technology. Industry reports focus on opportunities that will expand existing markets or develop major new markets. The reports assess new product and service positioning strategies, new and evolving technologies, and technological impacts on products, services, and markets. Market shares are estimated. Leading market participants are profiled, and their marketing strategies, acquisitions, and strategic alliances are discussed. The principals of WinterGreen Research have been involved in analysis and forecasting of international business opportunities in telecommunications and advanced computer technology markets for over 30 years.

**ABOUT THE PRINCIPAL AUTHORS**

Ellen T. Curtiss, Technical Director, co-founder of WinterGreen Research, conducts strategic and market assessments in technology-based industries. Previously she was a member of the staff of Arthur D. Little, Inc., for 23 years, most recently as Vice President of Arthur D. Little Decision Resources, specializing in strategic planning and market development services. She is a graduate of Boston University and the Program for Management Development at Harvard Graduate School of Business Administration. She is the author of recent studies on worldwide telecommunications markets and the Top Ten Telecommunications market analysis and forecasts.

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