

Sun and Linux Fact Sheet



Horizontal Solutions

- Core Infrastructure: Web, application server, e-mail, file/print, firewall, proxy, cache
- High-Performance and Technical Computing (HPTC): Compute farms, grid computing
- Custom Application Development
- Desktop

Vertical Solutions

- Financial Services
- Telco
- Technical Markets: Electronic design automation (EDA), mechanical computer-aided design (MCAD), electronic computer-aided design (ECAD), energy, life sciences, scientific research, and other data-intensive markets
- Government
- Education
- Retail

The Linux Market and Sun

- The open systems server market is growing rapidly, with the majority of deployments on 32-bit, x86-based entry-level servers. Core infrastructure and *edge* applications are the most widely deployed; database deployments are starting.
- Linux is complementary to the Solaris™ Operating System (OS). Sun resells the leading Linux distributions — Red Hat Enterprise Linux and SUSE LINUX Enterprise Server — and certifies its servers for Microsoft Windows. In short, Sun offers customers the choice of running Linux, Solaris, or Windows environments on Sun servers.
- Sun is one of the largest contributors of intellectual property — after the University of California, Berkeley — to the open source community, and continues to expand its participation.
- For CIOs looking for desktops with open source software policies, higher levels of data/application mobility and security, and better total cost of ownership (TCO) metrics, Sun offers a compelling new desktop solution — the Sun Java™ Desktop System — at extremely attractive price points.

Sun and Linux Key Points

- **Offering Branded Linux:** Sun's global alliances with Red Hat and SUSE allow Sun to ship and support Red Hat Enterprise Linux and SUSE LINUX Enterprise Server.
- **Providing Choice:** Sun is the only company to bring Linux and the #1 UNIX® OS — the Solaris OS — to the AMD Opteron and Intel Xeon x86-based platforms.
- **Adding Value:** Sun delivers considerable customer value for Linux with Java technology, the Java Desktop System, the Java Enterprise System, and Sun services.
- **Delivering Savings With Flexible Subscription Prices:**
 - \$50 per desktop for the Java Desktop System
 - \$100 per user for the Java Enterprise System
 - \$.33 per citizen for the Java Enterprise System for federal, state, and local governments
- **One-Stop Linux Support:** Sun provides Linux support and training by leveraging its global and comprehensive infrastructure for all its Linux offerings.
- **Standardizing Network Services With the Java Enterprise System:** Through Sun's planned release of the Java Enterprise System for Linux, Sun provides customers with the ability to standardize on a single set of Java technology-based network services with systems based on Linux.

Offering Branded Linux

- Red Hat Enterprise Linux
- SUSE LINUX Enterprise Server

- **Open Source Involvement:** Continuing its involvement with the open source community, Sun has joined the Open Source Development Lab (OSDL) to help further the development of open standards and to lend its expertise in the data center and carrier-grade markets.
 - **Desktop Solution:** Sun delivers a complete desktop solution aimed at providing a 3x–5x cost savings over other desktops. The Java Desktop System is a highly secure and open desktop client.
- Sun in the Open Source Community**
Sun created, sponsors, and actively participates in:
- OpenOffice.org
 - NetBeans tools platform
 - N1™ Grid Engine
 - Project JXTA™ technology
 - Brazil: Web application development (Sun Labs project)
 - Java Reliable Multicast Service™ library: Java libraries and services for building reliable multicast-aware applications
 - Liberty Alliance: The interoperability prototype
 - Project Looking Glass: Open sourced 3D desktop environment
 - Java.com
- Sun actively contributes to key open source projects:*
- GNOME.org, Mozilla.org, Funding NFSv4 implementation to Linux, Funding of Blackdown (JDK™ port to Linux), ABIcheck (enabling release-to-release application compatibility), GNUlpr: printing, WBEM (Java technology-based implementation of Web-based enterprise management)
- **Middleware Products on Linux:** Sun currently delivers the complete Java Enterprise System 2004Q2 product suite on Red Hat Enterprise Linux 2.1; plans for the Java Enterprise System Release 3 include support for Red Hat Enterprise Linux 3.
 - **Java Everywhere:** All Java technology for the server and desktop is available on Linux: Java 2 Platform, Standard Edition (J2SE™ platform); Java 2 Platform, Enterprise Edition (J2EE™ platform); Java Web Services Developer Pack; and the Jini™ Starter Pack.
 - **Enterprise Development Platform:** Sun delivers an enterprise development platform for Linux: Java Studio Enterprise plus Sun Studio developer tools. In addition, Sun has contributed 150+ staff years of work for NetBeans™ software, which serves as the foundation for Java Studio Creator and Java Studio Enterprise. Java Studio Creator is defining the next generation of visual and highly productive development tools for the Java platform.
 - **Solaris and Linux OS Compatibility:** Sun is delivering compatibility between Linux and Solaris environments today through Java technology and common interfaces and tools (such as lxrun and LinCAT in the Solaris 9 OS and Project Janus in the upcoming Solaris 10 OS). Sun also helps drive the latest compatibility standards, such as LSB.

- Apache.org: Tomcat project (JavaServer Pages™ (JSP™) framework), Ant (Java technology-based build tool), Crimson project (contributed XML parser technology and XALAN utility), Batik project (Java technology-based toolkit for scalable vector graphics)
- Member of the Free Standards Group (Linux standards organization)
- Co-chairing Linux internationalization effort (Li18nux)
- Member of Linux international
- Support community efforts to port Linux to UltraSPARC® architecture

Solaris and Linux OS Compatibility

Java Platform — Application-level Compatibility

- Soon, run Linux applications *unchanged* on the Solaris 10 OS
- Java and J2EE technology: Equal availability on Linux and the Solaris OS
- Common application engine through Java Virtual Machine (JVM™) distribution
- The modern enterprise standard for cross-platform compatibility
- Common application suites and tools

Linux and Solaris Software — Source Code Compatibility

- Running open source applications, which are precompiled, prebuilt applications for the Solaris OS
 - Many with full support from Sun (Apache, Samba, Sendmail, etc.)
- Linux API compatibility
 - Adherence to UNIX industry standards (i.e., POSIX)
 - Linux and open source libraries are incorporated into the Solaris OS
 - Common system tools and services
 - lxr in the Solaris OS (x86 Platform Edition) for running Linux binaries

- Coming soon: Project Janus service with the Solaris 10 OS lets you run Linux applications unchanged on the Solaris OS on x86 platforms
- LinCAT (Linux Compatibility Toolkit): Simplifies creating and maintaining source code across platforms
- Compatible developer environments: Java Studio

Linux/x86 System Management

- Sun Control Station software manages x86-based systems, and provides
 - Software provisioning services, including deployment, monitoring, and update of large numbers of Linux servers and Java Desktop System environments
 - Lights-out management
 - Image management using Kickstart
- Integration with the industry-leading N1 Grid Engine provides grid management and increased utilization of resources
 - Interacts with leading Simple Network Management Protocol (SNMP)-based system management solutions, such as Sun Management Center, CA Unicenter, HP OpenView, and Tivoli
- Additional features: Supports Intel hardware management standards; the Intelligent Platform Management Interface (IPMI); browser-based user interfaces; secure connections; Linux (Red Hat Enterprise Linux AS/ES/WS 2.1); management of hundreds of servers

Sun Products/Technologies Supporting Linux

Java Technology for Linux

- Java 2 Platform, Enterprise Edition (J2EE); Java 2 Platform, Standard Edition (J2SE); and Java 2 Platform, Micro Edition (J2ME™) toolkit

Java Desktop System

- Java Desktop System, Release 2: Provides a fully integrated Java desktop with advanced manageability and auto-update features

Get the Details

Find out more about Sun and Linux by visiting sun.com/linux

- Integrated client software: StarOffice™ productivity suite; Java 2 Platform, Standard Edition (J2SE platform); Mozilla™ browser; Evolution; and the GNOME Desktop

StarOffice 7 Office Productivity Suite and OpenOffice.org

- The StarOffice suite runs seamlessly across Red Hat and SUSE platforms
- OpenOffice.org is supported on the Solaris OS, Linux, and Microsoft Windows; ports created for Irix, Mac OS X, and FreeBSD
- Over 38.5 million downloads

Java Enterprise System

- Over 300,000 licenses sold
- Enterprise messaging, calendar, e-mail, portal, directory, application server, and printing services now available on Linux

Identity Management

- Provides provisioning, meta-directory, federation, Security Assertions Markup Language (SAML) support, and enterprise-level directory services for Linux customers

N1 Grid Technology

- N1 Grid Service Provisioning System: Enables administrators to auto-deploy, configure, and update network services
- N1 Grid Engine and N1 Grid Engine Enterprise

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Tools

- Sun Java Studio 5, Standard Edition: Integrated development environment (IDE) for the Java platform, supporting Solaris, Red Hat Enterprise Linux, and Windows 2000 and XP Professional environments
- Sun Studio 9 (for C, C++, Fortran, and the N1 Grid Toolkit): IDE for the development and deployment of enterprise applications on Sun platforms; supports Solaris and Linux platforms
- Java Studio Creator: Visual development tools to support Solaris, Linux, and Microsoft Windows environments

Training

- Sun Developer Network: An always-on connection between the developer community and Sun's development innovation
- Over 800,000 developer members

Hardware

- New AMD Opteron-based workstations
 - Sun Java Workstation W1100z: Single AMD Opteron processor, up to 2 UltraATA disk drives, and up to 8 GB of memory
 - Sun Java Workstation W2100z: Up to 2 Opteron processors, up to 2 Ultra320 SCSI disk drives, and up to 16 GB of memory

Both workstations are available with the Solaris or branded Linux operating systems.

- New AMD Opteron-based servers
 - Sun Fire™ V20z server: 32- and 64-bit mode, up to 2 AMD Opteron 200 Series processors, up to 16 GB of memory, and up to two hot-swap, RAID-capable Ultra320 SCSI disks
 - Sun Fire V40z servers: 32- and 64-bit mode, up to 4 AMD Opteron 800 Series processors, up to 32 GB of memory, and up to six hot-swap Ultra320 SCSI disks

Both servers are available with branded Linux and the Solaris 9 OS for x86 platforms.
 - Sun Fire V60x: Single Intel Xeon processor, up to 6 GB of memory, and 1U form factor
 - Sun Fire V65x: Up to two Intel Xeon processors, up to 12 GB of memory, and 2U form factor
- Both the Sun Fire V60x and V65x systems are available with branded Linux or the Solaris 9 OS for x86 platforms.*
- Sun Ray™ ultra-thin client: All-in-one design, hot-desking, built-in projector port (for the Sun Ray 150), stateless, smart card-enabled desktop

Storage

- Supports Linux on a variety of data center, midrange, and workgroup storage products, including the Sun StorEdge™ series systems and array products

Awards

- Sun Fire V20z and V40z servers:
 - Linux Magazine's Emperor Class Award
 - Best Hardware Platform, Product Excellence Awards, Linux Work China
- Java Enterprise System and Java Desktop System: Best Application/Management Systems, Product Excellence Awards, Linux Work China
- Project Looking Glass: Won Java Developer Journal Editors' Choice Award, 7/2/04
- Java Desktop System: Won eWeek Analyst's Choice Award, 6/21/04
- StarOffice: Presentation Magazine's "Standing Ovation Award" in the software category for "Presentation Creation, Best Budget Buy" (12/03)
- StarOffice/OpenOffice: Won Linux Journal-Reader's Choice Award, in the Favorite Office Program category, 7/10/03
- NetBeans IDE 3.5.1: Developer.com Product of the Year 2003, Java Tool/Add-in category (12/03)
- Sun Java Studio: Developer.com Product of the Year 2003, Development Tool category (12/03)

Learn More

Get the inside story on the trends and technologies shaping the future of computing by signing up for the Sun Inner Circle program. You'll receive a monthly newsletter packed with information, plus access to a wealth of resources. Register today at sun.com/joinic.

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