



Your Databases with SUSE® Linux Enterprise

The enterprise database sits at the heart of every data center. In fact, enterprise database applications and the associated data are often some of the most important assets that a corporate IT department is asked to maintain and secure. Charged with protecting and delivering the mission-critical data that drives the business, IT has traditionally deployed these databases on the best servers and the most robust operating systems.

Until quite recently, UNIX* was the operating system of choice for these deployments. Historically, UNIX offered superior reliability and security when compared to other commercial operating systems. Large database vendors like Oracle and IBM optimized their databases for UNIX environments and supported all the important UNIX-based

architectures, including AIX*, HP-UX* and Solaris*. Unfortunately, the reliability and security of UNIX deployments came at a high price—both in terms of software and hardware acquisition costs. In today's enterprise, UNIX systems are among the most expensive systems to purchase and maintain.

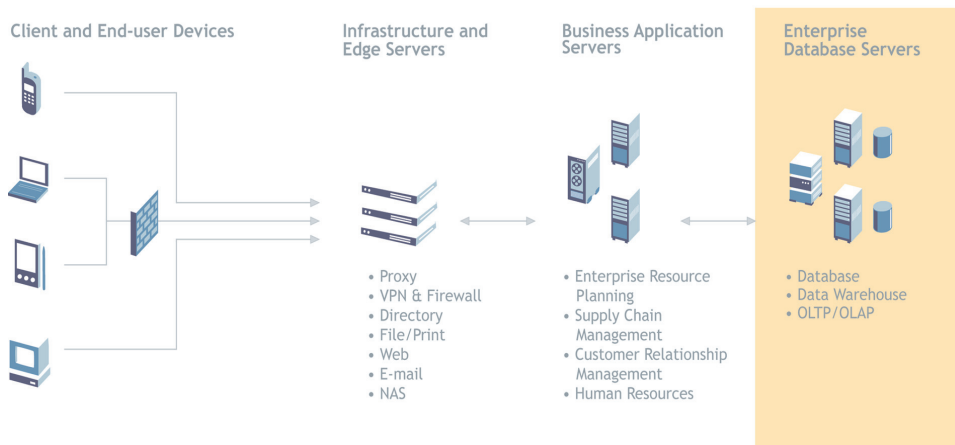


Figure 1. Linux Deployment in the Enterprise

- **Solutions:**
 - Data Center
- **Products:**
 - SUSE Linux Enterprise Server
 - ZENworks Linux Management



“SUSE came in like a knight on a white horse. They were extremely responsive and addressed our 10 biggest issues right off the bat. SUSE Linux was the only solution that allowed us to move forward with our chosen architecture—Oracle, Linux, IBM and PolyServe.”

Michael Prince
CIO
Burlington Coat Factory
Warehouse Corporation



Novell has an established track record of success in the data center and can assist in your Linux migration from concept through delivery.

Databases Certified on SUSE Linux Enterprise

- IBM DB2
- MySQL
- Oracle 8
- Oracle 9i
- Oracle 10g
- Oracle RAC
- PostgreSQL

Cluster File Systems Certified on SUSE Linux Enterprise

- Polyserve
- Veritas
- OCFS 2

With the maturation of Linux* into an enterprise-class operating system, IT executives now have a choice. Linux can be deployed on all the major enterprise hardware architectures, from x86 systems to the most sophisticated clustered and gridded environments to mainframes. For new deployments or IT initiatives, Linux is often the preferred operating system. It can be deployed everywhere and is reliable, secure and scalable.

Today, Linux is supported by almost all of the major commercial database vendors, including Oracle and IBM. In situations where a commercial database is not required, robust open source alternatives, like MySQL* and PostgreSQL, are available. For many vendors, Linux has become the reference platform for database development, so new releases are developed first for Linux architectures and then ported to other platforms.

Because of the expenses associated with maintaining UNIX deployments, savvy IT directors everywhere are adopting Linux for enterprise database workloads. By migrating their enterprise databases to a Linux platform, IT executives achieve the same levels of performance, reliability, scalability and security with much lower levels of annual investment. Savings of up to 80 percent for hardware, maintenance and software expenses are not uncommon.

If you are still running your enterprise databases on non-Linux systems, you should consider switching your databases and applications systems to run on SUSE® Linux Enterprise Server from Novell®. With global scale and a wealth of enterprise experience, Novell has an established track record of success in the data center and can assist in your Linux migration from concept through delivery.

Run Your Databases on SUSE Linux Enterprise

Backed by the extensive Novell support infrastructure and partner network, SUSE Linux Enterprise Server is a secure, reliable platform for open source computing in the enterprise. SUSE Linux Enterprise Server offers unmatched performance and scalability, comprehensive open source functionality and support for a broad range of hardware platforms and software applications. SUSE Linux Enterprise Server also provides open application programming interfaces (APIs) and other development tools that simplify Linux integration and customization. As a result, organizations can lower operational costs across servers, increase computing utilization and protect corporate data.

For enterprise database deployments, SUSE Linux Enterprise Server is an ideal choice. It enjoys the support of most of the major vendors, including IBM and Oracle, and it includes the leading open source database alternatives like MySQL and PostgreSQL. For clustered storage and applications environments, SUSE Linux Enterprise Server works with solutions from Oracle, PolyServe, Veritas and others. SUSE Linux Enterprise Server

Why Linux? Why Now?

Linux has become the operating system of choice for database deployments in the enterprise. Highly scalable and extremely secure, Linux delivers UNIX-like performance, scalability and reliability without the need to purchase and maintain expensive and specialized hardware. In short, Linux delivers UNIX performance at commodity hardware prices.

delivers industry-leading flexibility, security and reliability. It's ready to meet your needs.

Guarantee Data Privacy

Your database is home to your most important business information. That means security and data privacy are critical to any operating system that you choose.

Novell is deeply committed to ensuring the security of its products and services. As part of that commitment, Novell strongly supports the Common Criteria Evaluation and Validation Scheme. The Common Criteria evaluation and certification system creates a reliable, internationally recognized way for consumers to evaluate and gain confidence in the security of IT products. By defining clear, robust security standards and establishing an independent security evaluation process, the Common Criteria promote the benefits and efficiencies that secure computing environments can provide to individuals, businesses and governments. SUSE Linux Enterprise Server 10 with Service Pack 1 is currently under evaluation of being compliant with Common Criteria-Controlled Access Protection Profile, Evaluation Assurance Level 4+ (CC-CAPP/EAL4+), a certificate previous versions of SUSE Linux Enterprise Server also had achieved.

Moreover, SUSE Linux Enterprise Server 10 builds on the inherent security of Linux by integrating a wide range of essential server- and desktop-specific security capabilities,

including encryption, firewalls, certificate creation and management, authentication, access control and proxy management.

You can further secure your Linux deployments by implementing AppArmor™, an open source offering from Novell included with SUSE Linux Enterprise Server. AppArmor is the most effective and easy-to-use Linux application security system on the market. It protects the operating system and applications from the harmful side effects of internal or external attacks, malicious applications and viruses. As a result, you can protect mission-critical data, reduce system administration costs and ensure compliance with government regulations.

Lower Management Costs

With an array of unique management features, SUSE Linux Enterprise Server is the easiest Linux to deploy, configure and maintain across the enterprise.

SUSE Linux Enterprise Server simplifies management with YaST, a comprehensive installation, configuration and administration suite unique to the SUSE Linux Enterprise platform. YaST gives IT administrators a common foundation for managing not just operating system components but also accompanying services and third-party applications. Novell ZENworks® Linux Management complements YaST by enabling IT administrators to centrally control how they deploy and update

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www.novell.com

Supported Hardware Vendors

- HP
- IBM
- Dell
- EMC
- AMD
- SGI
- SUN
- Fujitsu Siemens Computers
- Network Appliance

Supported Chip Architectures

- AMD 64
- Intel64
- Intel Itanium
- IBM POWER
- IBM System z
- IBM S/390
- x86 32-bit
- Dual & multi-core processors

What Will I Save?

Because every organization is different, it's difficult to predict exact expense reductions or ROI returns that will result from a Linux implementation. However, an August 2005 study from the Robert Francis Group shows that migrating a UNIX database solution to Linux on x86 machines can reduce hardware costs by up to 51 percent and reduce software costs by up to 62 percent. When comparing a Linux solution on x86 hardware to Microsoft* Windows* on x86, the same study showed that Linux offers a 43 percent hardware savings and a 45 percent software savings over Windows.

—TCO for Application Servers: Comparing Linux with Windows and Solaris, Robert Frances Group, August 2005

systems inside the firewall. By using YaST and integrating ZENworks Linux Management, administrators can easily install, configure, update, secure and manage SUSE Linux Enterprise Server.

Virtualize Your Database

With SUSE Linux Enterprise 10, Novell has offered the first enterprise-class Linux platform to fully support Xen* 3.0 for virtualization. The Xen code and management tools ship as part of SUSE Linux Enterprise 10. With Xen, you can run multiple databases on the same piece of hardware with minimal performance impact. As a result, you can more than double server utilization, reduce server sprawl and lower costs.

Choose Novell for Linux

When you choose the SUSE Linux Enterprise platform, you get the best-engineered Linux from a vendor who can deliver a global ecosystem to surround it. When you choose Novell, you get:

- *Technical support available 24x7x365 from more than 800 support technicians*
- *A consulting organization to support you from design through implementation*
- *Training that can bring your IT staff up-to-speed on the latest technologies*
- *Indemnification to protect you financially*
- *A broad selection of open source and proprietary software optimized to run on a Linux platform*

Novell has more than a 20-year history of delivering the support and services that an enterprise expects from its vendor. When you make the move to Linux, it's important to select a vendor that will be your partner every step of the way.

Contact us today to learn more. Visit www.novell.com/datacenter or call 1 800 529 3400 to set up a meeting with a Novell sales representative.



Contact your local Novell Solutions Provider, or call Novell at:

1 800 714 3400 U.S./Canada
1 801 861 1349 Worldwide
1 801 861 8473 Facsimile

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When Is the Best Time to Move?

The sooner you move to Linux, the sooner you'll enjoy the savings that Linux deployments can bring to your organization. However, for most organizations the logical time to make the move to Linux is during a major IT milestone. Typically, operating system upgrades make the most sense at the time of a planned hardware upgrade, a renewal of software or hardware maintenance or when a major software application is upgraded. Because hardware costs and hardware maintenance costs are often the largest contributors to an IT organization's expenses, migrating to Linux when you update your hardware will deliver you the most savings.