Build a Service-Driven Data Center
Featuring SUSE® Linux Enterprise 11

Insert Presenter's Name (16pt)
Insert Presenter's Title (14pt)
Insert Company/E-mail (14pt)
The Service-Driven Data Center
Building a Service-Driven Data Center ...
... Requires an Agile IT Infrastructure

<table>
<thead>
<tr>
<th>Service-Driven Data Center Attributes</th>
<th>Agile IT Infrastructure Attributes</th>
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</thead>
<tbody>
<tr>
<td>Effectively delivers core business services</td>
<td>Reliable platform for <strong>mission-critical</strong> computing</td>
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<tr>
<td>Leverages all of your computing resources</td>
<td>A <strong>ubiquitous</strong> platform that supports a wide range of compute environments</td>
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<tr>
<td>Uses components that work well with each other</td>
<td>An <strong>interoperable</strong> platform for manageability and efficiency</td>
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So that you can reduce cost, complexity and risk across your environment
What you will learn

1. Why SUSE® Linux Enterprise 11 is the best platform to build your **agile** IT infrastructure

2. How SUSE Linux Enterprise 11 can **reduce** cost and complexity in your data center

3. How customers are using it to generate **business value** – today
Agenda

• SUSE Linux Enterprise Advantages

• SUSE Linux Enterprise 11 Innovations

• SUSE Linux Enterprise Products and Services

• Real-world Examples
SUSE Linux Enterprise Advantages
Introducing SUSE Linux Enterprise

The most interoperable platform for mission-critical computing from desktop to data center – physical and virtual
SUSE Linux Enterprise
Key Themes

Interoperability
Mission-critical Computing
Linux Ubiquity
Complete Interoperability for Your Mixed IT Environment

• Heterogeneous data centers are today's reality
• SUSE Linux Enterprise 11 delivers complete Windows interoperability

Novell / Microsoft Partnership
• Six areas of Linux/Windows technical collaboration
• Joint Interoperability Lab

Novell led Innovation
• Run .NET applications on Linux
• Desktop interoperability

Giving you the lowest-cost, most-manageable platform for enterprise computing
Mission-Critical Computing

• Performance, reliability, efficiency with world-class support

• SUSE Linux Enterprise 11 delivers mission-critical computing at the lowest cost of ownership

• HP and Novell are delivering optimized solutions engineered for availability, scalability and manageability
  – Leverage our experience from a rich 20-year history of joint development, marketing, sales and support of enterprise customers
  – Extensive qualification, training and certification processes

• Market leader for SAP on Linux, mainframe Linux and supercomputing

Enabling you to deliver high performance IT services with zero downtime
Linux Ubiquity: Powering Your Complete Environment

• Today’s IT infrastructure is heterogeneous
• SUSE Linux Enterprise 11 powers your complete environment
  – Common OS from desktop to data center
  – Large ISV ecosystem
  – Virtualization: the “Perfect Guest” OS for VMware, Xen and Hyper-V
  – Robust end-user computing solutions
  – Appliance-ready OS
• Certified with HP, the world’s leading Linux server provider
  – HP BladeSystems and next-generation HP ProLiant G6 servers – leading efficiency, extreme adaptability, scalable performance, and insight and control
  – HP Integrity – offering the scalability, availability and flexibility that the most demanding mission-critical applications need

Delivering the most value for your Linux investment
SUSE Linux Enterprise 11 Innovations
SUSE Linux Enterprise 11
Green IT Innovations

• Innovative power-saving capabilities that let you derive maximum performance per watt
  – More granular, file-based power profiles
  – “Tickless idle”: remove unnecessary CPU timer event activity

• Technical collaboration with Intel to maximize performance while reducing power consumption
  – Lower system idle power with integrated power gates that enable idle CPUs to go down to near zero
  – Dynamically turn cores on and off to adjust to performance needs
SUSE Linux Enterprise 11
Integrated Systems Management

• Fastest Linux update stack in the industry
• Enhanced YaST systems management and configuration framework
• Novell ZENworks® Linux Management 7.3
• Cross-platform systems management with Microsoft
  – System Center investments to enable management of Linux machines
  – Standardization on WS-Man in both Windows and SUSE Linux Enterprise as a common protocol to manage heterogeneous environments
  – CIM instrumentation for management by third-party solutions
SUSE Linux Enterprise
Products and Services
SUSE Linux Enterprise Server
Overview

• Highly **reliable, interoperable** and **manageable** server operating system

• Built to power **mission-critical workloads** in physical and virtual environments

• The natural **successor to UNIX**, backed by proven services for UNIX migration

• The only Linux **recommended by Microsoft and SAP**

• Complemented by product extensions that deliver **advanced capabilities**
SUSE Linux Enterprise Server
Xen Virtualization

• Integrated Xen hypervisor provides reliable, high performance virtualization

• Xen 3.3 delivers advanced capabilities

• Lowest cost solution – Host is included with OS, and you get unlimited VMs per system

• Additional management solutions are available

• Supports latest Intel processor and chipset-level virtualization advances
  – Intel VT FlexPriority
  – Intel VT FlexMigration
  – Intel VT for Direct I/O
SUSE Linux Enterprise Server for System z

• The optimized version of SUSE Linux Enterprise Server designed to run on IBM System z mainframes

• Advantages:
  – Fully supported by IBM, with #1 share for Linux on System z
  – Ideal for workload consolidation, providing major cost savings
  – Starter System available for testing and proofs of concept
  – More than 1,000 certified applications available

• New features:
  – Cross-architecture debugging
  – Dynamic add/remove of CPU and memory
  – Vertical CPU management for System z10
SUSE Linux Enterprise Real Time Extension

• A real-time operating system for time-sensitive, mission-critical applications

• Advanced technology elements:
  – Pre-emptive kernel
  – High-resolution timers
  – CPU shielding and assignment
  – InfiniBand

• World-record performance and proven customer success
  – Lowest latency ever for Reuters Market Data System
  – Used by Thomson Reuters, Thyssen Krupp and UMB Financial
SUSE Linux Enterprise High Availability Extension

• An integrated suite of robust, open source clustering technologies

• Enterprise-class capabilities with the affordability of open source:
  – Flexible, policy-driven clustering solution
  – Cluster-aware file system and volume manager
  – Continuous data replication
  – User-friendly tools
  – Virtualization-aware
SUSE Linux Enterprise Mono Extension

- A .NET application framework that allows you to run .NET-based applications on SUSE Linux Enterprise Server

- Key capabilities:
  - Run .NET applications on Linux (including ASP.NET)
  - Mainframe support for .NET applications
  - Performance and scalability advantages over Windows
  - Target Linux from Visual Studio

- Develop anywhere – deploy anywhere
  - Includes a toolchain for Linux
  - Runtime is binary-compatible with .NET on Windows
SUSE Linux Enterprise JeOS
(“Just enough Operating System”)

• A “bare-minimum” configuration of SUSE Linux Enterprise Server that is ideal for virtual appliances

• Key capabilities
  – Easy starting point for creating a custom OS
  – All SUSE Linux Enterprise Server certifications apply
  – Optimized to be the “Perfect Guest” OS across hypervisors

• Complemented by appliance creation and management tools

• Backed by a comprehensive appliance program and partnerships
SUSE Linux Enterprise Server with Expanded Support

- Commit to SUSE® Linux Enterprise now
- Move to SUSE Linux Enterprise Server over a 2-year period
- Receive technical support for Red Hat during that time
- Receive expert deployment guidance from Novell

Savings of up to 50%

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SUSE Linux Enterprise Desktop

• The market's only enterprise-quality Linux desktop
  – Seamless interoperability with existing systems
  – Dozens of essential productivity applications
  – Easy-to-use, highly secure and “green” desktop experience
  – Flexible and preloaded across a wide range of form factors

• New Features
  – Upgrades to key productivity applications
  – Enhanced multimedia capabilities
  – Green IT innovations
  – Nomad remote desktop capabilities
  – Simplified connection management
Novell and Partner Services
For SUSE Linux Enterprise

Consulting
- Core build
- UNIX to Linux migration
- SUSE Linux Enterprise Server management
- Server consolidation
- Version upgrades
- Enterprise application migration
- and much more...

Training
- First Look training included in subscriptions
- Fundamental and Administration courses
- Advanced Technical Training
- Certification programs for multiple needs

Support
- Customers rank Novell #1 in Linux support
- Only Linux vendor with SCP Certification
- Unlimited support center access with subscription
- Enterprise-level services
  - Service account management
  - Dedicated support resources
  - On-site support, health checks, etc.
Real World Examples
## Business Issues

- US$15 billion global retailer of office products and services
- Rapid global growth – both organically and through acquisitions
- Many operating system platforms: UNIX, Windows, Linux, AS/400
- Needs to streamline IT environment and reduce costs

## Workloads

- Applications: ERP (HR & Payroll), Oracle Financials, JDA Software
- Databases: Oracle RAC
- Middleware: Oracle

## Novell and Partner Solution

- SUSE Linux Enterprise Server
- HP servers

## Results

- Solution payback within 12 months
- Simplified and standardized IT environment
- Reduced hardware and other IT costs, plus power and cooling

"SUSE Linux Enterprise is a stable, secure and financially compelling solution." – Tim Toews, CIO, Office Depot

Office Depot

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Office Depot is a US$15 billion global retailer of office products and services. It has experienced rapid global growth – both organically and through acquisitions. The company operates on many operating system platforms: UNIX, Windows, Linux, and AS/400. It needs to streamline its IT environment and reduce costs.

### Workloads

- **Applications**: ERP (HR & Payroll), Oracle Financials, JDA Software
- **Databases**: Oracle RAC
- **Middleware**: Oracle

### Novell and Partner Solution

- **SUSE Linux Enterprise Server**
- **HP servers**

### Results

- **Solution payback within 12 months**
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Tim Toews, CIO of Office Depot, stated, "SUSE Linux Enterprise is a stable, secure and financially compelling solution."
| **Business Issues** | • US$6.4 billion global provider of IT solutions and services  
• Manages SAP systems for Siemens AG and outside clients  
• Serves 130,000 named accounts on SAP  
• Facing increasing UNIX hardware and maintenance costs |
|---------------------|---------------------------------------------------------------------------------------------------|
| **Workloads**       | • 300 mission-critical SAP systems  
• Oracle database servers  
• Web applications  
• Web servers |
| **Novell® and Partner Solution** | • SUSE Linux Enterprise Server  
• Intel processor-based servers including HP servers |
| **Results**         | • Reduced total cost of ownership by 25 percent  
• Avoided UNIX costs that would have been three times as large  
• Increased agility to respond quickly to customer demand  

“We can implement solutions faster and at lower cost with SUSE Linux Enterprise than we could with UNIX.”  
– Michael Gebauer, Architect, Siemens IT Solutions and Services
What You Have Learned

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Next Steps

• Learn more at www.novell.com/linux
• Download an evaluation copy at www.downloadlinux.com
DEMO
Xen Live Migration
DEMO

SUSE Linux Enterprise Mono Extension
DEMO
High Availability Failover
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