



# Reducing Complexity with Automated Virtualization

The data center you've always imagined is closer than you think. You can achieve high performance, security and availability—while you cut hardware and cooling costs, improve utilization and maximize your current investments. Do it all while simplifying data center management and improving your compliance picture. With virtualization and automated management solutions from Novell®, you can get the data center of tomorrow with today's technology.

### Get More from Your Servers with Virtualization

If your data center is like most others, your servers are using a fraction of their total compute power. In fact, the average server workload ranges from 5–40 percent of capacity. This means you're getting about 60 percent less value from your servers than you should be. With Virtualization from Novell, you can harness that unused power today and drastically decrease power, hardware and management costs. Our Virtualization solutions are fully interoperable with your existing IT infrastructure—even in mixed environments—giving you the freedom to:

- **Lower costs.** Consolidating servers can dramatically reduce the total cost required to maintain your infrastructure. And, when you couple server consolidation

*with centralized management, you can significantly lower the total cost of ownership for your entire data center.*

- **Gain flexibility.** With Virtualization from Novell, you can deploy virtual machine images dynamically and automatically on existing hardware. This adds more processing power at peak demand times as well as rapidly tests and deploys your new applications.
- **Increase server utilization.** Virtualization enables more efficient use of resources and increases server utilization up to 80 percent. This means that you can also extract more real work from the same underutilized resources.
- **Reduce power consumption.** With virtualization and consolidation, you can reduce cooling requirements, lower power bills and decrease management demands.

#### ■ Solutions:

Virtualization

#### ■ Products:

SUSE Linux Enterprise Server 10 SP1  
SUSE Linux Enterprise Virtual Machine Driver Pack  
Novell ZENworks Orchestrator  
Novell ZENworks Virtual Machine Management  
Novell Open Enterprise Server 2



“There’s no question about it—SUSE Linux Enterprise with Xen virtualisation helps us respond to our clients’ needs much faster than our competitors can.”

#### Adrian Bellini

CEO  
Cardium



Only Novell offers the ability to virtualize Linux, Windows and NetWare on one common platform with world-class support for all three operating systems. As a result, you gain the flexibility to reconfigure your applications and systems to increase server utilization without impacting performance.

It's a solution that maximizes efficiency and reduces your total cost of ownership. There's no better way to optimize your data center.

### ***Confront Data Center Challenges Today***

Resource utilization. Efficiency. Scalability. Availability. Manageability. Security. If you're like other IT managers worldwide, you confront these issues daily. The majority of today's data centers still run one application stack on one server, perpetuating server sprawl. Eventually, this means organizations will spend more money on hardware and on the resources to manage it. In fact, some data centers have added so many physical servers that they face space limitations, increased power consumption and higher thermal output. It's no wonder that businesses worldwide are working to reduce costs by purchasing fewer servers.

Moreover, deploying a server-based application is often a complex, time-consuming task. You have to choose hardware, install an operating system, change controls, tune parameters, calculate memory requirements, find adequate disk space and then, finally, perform the install. Yet there's pressure from your competitive market to deploy applications faster and more efficiently.

Fortunately, our solution enables you to confront those challenges cost effectively:

- *It is an enterprise-grade open source virtualization solution, so you can lower costs associated with expensive proprietary solutions.*

- *It is the only solution to offer virtualization for Windows\*, Linux\* and NetWare® on one platform with complete support, so you can consolidate and manage multiple VMs with a single console—even in a heterogeneous environment.*
- *It integrates seamlessly with existing infrastructures, so you can leverage your current IT investments.*
- *Its policy-based automation and lifecycle management tools enable you to align IT to business goals.*

### **Deploy Virtual Solutions to Your Toughest Data Center Problems**

If you're facing these challenges, Virtualization from Novell is the answer. It offers open source, operating system-based virtualization with cross-platform systems management. It is the most robust and best-supported open source virtualization solution for Windows server consolidation. When you deploy virtualization solutions using Novell technology, you get full interoperability with your existing IT infrastructure and an integrated suite of tools for virtualization management and automation. Only Novell offers the ability to virtualize Linux, Windows and NetWare on one common platform with world-class support for all three operating systems. As a result, you gain the flexibility to reconfigure your applications and systems to increase server utilization without impacting performance. It's a solution that maximizes efficiency and reduces your total cost of ownership. There's no better way to optimize your data center.

### ***Achieve Higher Resource Utilization***

Average server utilization in an enterprise environment ranges from five to 40 percent, leaving at least 60 percent of the available capacity unused (based on Novell customer interviews in October 2005). With the integrated Xen\* hypervisor included in SUSE® Linux Enterprise Server at no extra cost, you can reduce your total number of servers by



