

## Competitive Guide

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# SUSE® Linux Enterprise Desktop: Decreasing Your Total Cost of Ownership

When and Why to Choose SUSE Linux Enterprise Desktop Over Windows Vista\*

**Novell.**

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# Rejecting High Desktop Costs in the Enterprise

**Gartner estimates that Windows security vulnerabilities have increased desktop TCO by as much as US\$200 per user per year.**

*"Automating Patch Management"*  
Feb. 2005, Symantec  
[www.symantec.com/enterprise/library/article.jsp?aid=automating\\_patch\\_management](http://www.symantec.com/enterprise/library/article.jsp?aid=automating_patch_management)

Cost is not always the most important consideration, but if you are purchasing hundreds or thousands of desktops, it becomes a vital part of the equation. The total cost of desktops stretches far beyond the initial licensing fee.

In the past, you were forced to spend much more for desktops than you should have because you were buying them from Microsoft. When the high licensing fees of Windows desktops are accompanied by additional costs—including Software Assurance (SA) for maintenance, licenses for office productivity tools and new hardware to run the memory- and processor-hungry Windows Vista—the price of your Windows\* desktops quickly becomes excessive. And that's before you add the costs of a System Management Server to manage your desktops and of Client Access Licenses (CAL) that allow you to access server software such as Exchange Server.

Moreover, even if you sign up for a three-year SA agreement, you might not actually receive a new release of desktop Windows because Microsoft\* innovation and development are so slow. (Five years passed between the release of Windows XP and Windows Vista.) When you use Windows desktops, you are using software that lags behind the competition in innovation. For instance, Microsoft lagged way behind in added functionality to Internet Explorer (IE) to make it somewhat comparable to Mozilla Firefox\*. When you consider the loss of business due to numerous Windows security flaws and the required System Management Server to manage your desktops, it's no wonder that IT managers worldwide are clamoring for a lower-cost alternative.

## A Solid Desktop Alternative at a Fraction of the Cost

We think of the nearly 800 million desktop users as falling into one of three categories:

- *Those who use one or more custom or ISV-delivered applications. They may need a browser to access applications, but they are not usually given e-mail access or productivity tools.*
- *Those who need a browser, e-mail access and productivity tools.*
- *Those who need a browser, e-mail access and productivity tools, and who also use various custom and ISV-delivered applications. It is important that they connect to and interoperate with other people and systems in their company.*

Almost all small businesses and large enterprises have users in each category, and some large enterprises and government agencies have thousands of desktop users in each category. Most people in the first two categories do not require expensive Windows XP or Windows Vista to do their jobs. SUSE® Linux Enterprise Desktop from Novell® costs up to 90 percent less than the price of Windows plus Office and has significantly better security.

SUSE Linux Enterprise Desktop satisfies the needs of most desktop users in the first and second categories and several of them in the third category. Novell is not positioning SUSE Linux Enterprise Desktop as a replacement for Windows desktops across the entire enterprise or government agency. Some category three "power" users need applications not yet available on SUSE Linux Enterprise Desktop, but others do not. If your organization has employees that fall into the first two

categories or this latter group, you should migrate to SUSE Linux Enterprise Desktop right away to take advantage of its significantly lower total cost of ownership (TCO).

Olhorst and Moltzen of CRN recently said, "SUSE Linux Enterprise Desktop 10 has the feature set, compatibility and flexibility to meet the needs of most corporate desktop users. What's more, at a price point roughly one-tenth of what Vista and Office 2007 will cost, SUSE Linux becomes harder to ignore."

## A Closer Look at SUSE Linux Enterprise Desktop

### Cost

SUSE Linux Enterprise Desktop is an attractive alternative to Vista for a mere US\$50 annual subscription. The initial cost of Windows Vista is six times higher. Add in maintenance and Vista becomes more than seven times as expensive over one year or more than four times as expensive over three years:

|                          | SUSE Linux Enterprise Desktop | Windows Vista Business Edition |
|--------------------------|-------------------------------|--------------------------------|
| License/Subscription Fee | US\$50                        | US\$299                        |
| Maintenance (per year)   | Included in subscription fee  | US\$86                         |
| Total (one year)         | US\$50                        | US\$385                        |
| Total (three years)      | US\$135                       | US\$557                        |

Source: Microsoft and Novell, September 2008

Microsoft Office Professional 2007 for Windows Vista costs \$499 per user. This makes the cost of Windows Vista Business Edition and Microsoft Office Professional 2007 almost US\$800 per user. And, when you include maintenance for Vista and Office, the first-year cost reaches an astronomical US\$1,029. SUSE Linux Enterprise Desktop comes bundled with OpenOffice.org 2 Novell Edition, so you get 90 percent of the functionality of Vista plus Office at less than 10 percent of the cost.

Buying Windows Vista and Microsoft Office 2007 licenses, along with paying for maintenance, is not the end of your costs. You will almost certainly have to buy new hardware to run some of Windows Vista's new features (such as Aero Glass). And if you have not upgraded your hardware in the past year, you may have to buy new hardware just to run Windows Vista at all, even without Aero Glass.

### Enterprise Security

Novell AppArmor™, which ships with SUSE Linux Enterprise Desktop, ensures a more secure desktop than Vista's security measures. In fact, some of Vista's security features are so intrusive that many reviewers—including those from the Yankee Group<sup>1</sup>—think users may simply turn them off. Novell AppArmor protects applications and systems against attacks and latent defects by isolating and controlling all applications that face the network. Many desktop applications communicate with the outside world through open network ports, leaving the applications and their host vulnerable to attack. AppArmor addresses threats inherent in many essential desktop applications by detecting and isolating unusual behavior by any given application. It is also transparent to applications.

When you think of Windows security, infamous viruses, worms, and long delays in patching

**Novell understands that users need to reduce and contain costs. SUSE Linux Enterprise Desktop is designed to easily coexist not only with Windows, but also with Mac OS X, UNIX and other operating systems.**

<sup>1</sup> Microsoft's Vista Won't Stop the Windows Security Aftermarket. ([www.eweek.com/article2/0,1895,1958355,00.asp](http://www.eweek.com/article2/0,1895,1958355,00.asp), [www.itjungle.com/two/two051006-story01.html](http://www.itjungle.com/two/two051006-story01.html))

**Because Linux is inherently more secure than Windows, and because of its included security features such as Novell AppArmor, SUSE Linux Enterprise Desktop offers a more secure alternative to Windows Vista.**

<sup>2</sup> "Automating Patch Management" Feb. 2005, Symantec [www.symantec.com/enterprise/library/article.jsp?aid=automating\\_patch\\_management](http://www.symantec.com/enterprise/library/article.jsp?aid=automating_patch_management)

<sup>3</sup> Microsoft's Vista Won't Stop the Windows Security Aftermarket. ([www.eweek.com/article2/0,1895,1958355,00.asp](http://www.eweek.com/article2/0,1895,1958355,00.asp), [www.itjungle.com/two/two051006-story01.html](http://www.itjungle.com/two/two051006-story01.html))

often come to mind. Security flaws are costing organizations hundreds of millions of dollars per year as they patch Windows and install new service packs marketed as providing better security. Gartner<sup>2</sup> estimates that Windows security vulnerabilities have increased desktop TCO by as much as US\$200 per user per year.

In May 2006, the Yankee Group issued a report on Windows Vista security. Its conclusions include the following<sup>3</sup>:

- Vista's security features may be so user unfriendly as to delay users' adoption of them.
- Microsoft's attempt to improve security in Vista is significantly off the mark.
- Vista did not close some of the biggest Windows security vulnerabilities such as those in Active X, NetBIOS, RPC, IIS and others.
- Clamping down on security and eliminating backwards compatibility (the source of many security problems) will cause tens of thousands of applications that rely on these legacy APIs and functions to stop working.
- Software developers using Vista indicate that the intrusive nature of the security features, such as User Account Control (UAC) aka User Access Protection (UAP), could turn off IT administrators and users.
- Some Vista security features require a user

*to gain permission to perform tasks that are easily done today. Rather than go through that hassle, users may simply ignore or turn off the features, making Vista no more secure than earlier versions without those features.*

- Many third-party applications need modifications to run on Vista, possibly delaying their availability by as much as a year.

Because Linux\* is inherently more secure than Windows, and because of its included security features such as Novell AppArmor, SUSE Linux Enterprise Desktop offers a more secure alternative to Windows Vista.

### Usability/Functionality

SUSE Linux Enterprise Desktop already compares favorably with Windows Vista in terms of usability/functionality while gaining the lead over Microsoft in desktop innovation. SUSE Linux Enterprise Desktop delivered functionality in July 2006 that Microsoft had been trying to include in Windows Vista during the five years since Windows XP was released.

SUSE Linux Enterprise Desktop offers usability and functionality comparable to Windows Vista and exceeding that of Windows XP. The following table provides a quick and easy comparison of bundled functionality:

| Functionality                   | SUSE Linux Enterprise Desktop   | Windows Vista   |
|---------------------------------|---|---|
| Usability-tested user interface | "Design first" methodology  | Extensively tested interface  |
| Integrated search               | Beagle®   | Vista Integrated Search   |
| Complete Web browsing           | Firefox   | Internet Explorer   |
| Multimedia support              | <ul style="list-style-type: none"> <li>■ RealPlayer* from RealNetworks*</li> <li>■ Macromedia* Flash Player</li> <li>■ Totem</li> <li>■ Helix Banshee™</li> <li>■ F-Spot</li> </ul> | <ul style="list-style-type: none"> <li>■ Windows Media Player</li> <li>■ Microsoft Photo Editor</li> <li>■ Windows Movie Maker</li> <li>■ RealPlayer from RealNetworks</li> </ul> |
| 3-D rendered interface          | 3-D Desktop Effects   | Aero Glass  |
| Productivity applications       | <ul style="list-style-type: none"> <li>■ OpenOffice.org 2 Novell Edition offering interoperability with MS Office</li> <li>■ Novell iFolder®</li> </ul>                             | No Office suite included. The standard choice is Microsoft Office 2007 at an added cost.  |
| Collaborative applications      | <ul style="list-style-type: none"> <li>■ Novell Evolution™</li> <li>■ Gaim instant messenger</li> </ul>   | <ul style="list-style-type: none"> <li>■ Windows Mail</li> <li>■ Windows Live Messenger</li> </ul>  |
| Virtualization                  | Xen* virtualization is included with SUSE Linux Enterprise Desktop 10 SP1 at no cost to the user  | No virtualization capability included with Vista  |

Novell conducted hundreds of tests and shot thousands of hours of video to observe how office workers use desktops. Based on the findings, Novell implemented a “design first” development methodology to deliver an innovative graphical environment in SUSE Linux Enterprise Desktop. The graphical environment provides a dramatically improved user experience with features like “application tiling” and “window-preview alt-tabbing,” which allow users to quickly organize their desktops.

SUSE Linux Enterprise Desktop includes new integrated search capabilities, powered by Beagle, which provide real-time indexing throughout the entire desktop. You have fast, easy access to all content and no longer need to worry about what, where and when you stored your work. Simple keyword searches return your documents, applications, e-mails, instant messages and recent Web searches—all in a single results window.

SUSE Linux Enterprise Desktop ships with Novell Evolution, one of the most widely used collaboration clients in the world. Novell Evolution features direct connections to Novell GroupWise®, Microsoft Exchange 2000/2003 and any collaboration server that supports the IMAP and POP standards. Connectivity to Lotus Notes\* is available via the Notes plug-in for its Workplace client technology. SUSE Linux Enterprise Desktop also introduced the first version of OpenOffice.org 2 Novell Edition with advanced Microsoft file compatibility, including pivot table import and support for Excel Visual Basic spreadsheet macros.

Because desktop users have to work with a company’s desktop infrastructure, SUSE Linux Enterprise Desktop is designed to interoperate with Microsoft Active Directory\*. Novell has more than 20 years of experience working with Windows desktops in its NetWare® server environments. We have integrated this knowledge into SUSE Linux

Enterprise Desktop so organizations can leverage their existing investments.

While Novell continues to aggressively compete with Microsoft, Microsoft is also an important partner. Our work with Microsoft is designed to ensure that Novell and Microsoft technology solutions operate seamlessly together. Novell is adding to its Microsoft interoperability capabilities via the recent Technical Collaboration Agreement (TCA) with Microsoft ([www.novell.com/linux/microsoft/press-conference\\_transcript.html](http://www.novell.com/linux/microsoft/press-conference_transcript.html)). The TCA roadmap includes increased interoperability for Novell eDirectory™ and Microsoft Active Directory and significant improvements in document format compatibility. For example, an OpenDocument Format (ODF) converter project is underway to provide translators that enable opening/saving ODF files in Office 2007 and opening/saving OpenXML Format files in OpenOffice.org. The translator for Word 2007 has already been released, and the translators for Excel 2007 and PowerPoint 2007 are expected in the second half of 2007.

Novell understands that organizations need to reduce and contain costs. SUSE Linux Enterprise Desktop is designed to easily coexist not only with Windows, but also with Mac\* OS X, UNIX\* and other operating systems.

## What Should You Do?

You need secure, reliable desktops that are ready for your business, and you shouldn’t have to pay a fortune in upgrade and licensing costs to get them. Before you sign up for more expensive desktop systems from Microsoft, take a look at SUSE Linux Enterprise Desktop. One of our representatives can lead you through a new interactive ROI tool. Analyzing your requirements and needs, this tool determines the cost of ownership of the highly functional, highly secure SUSE Linux Enterprise Desktop versus Windows Vista.

**Novell has continued to meet with business-oriented desktop users to determine the types of applications that they use in their daily work. You will benefit from these continued efforts to make SUSE Linux Enterprise Desktop a robust enterprise-class desktop system.**

For more information about how SUSE Linux Enterprise Desktop compares to Windows Vista, please visit: [www.novell.com/products/desktop/compare-to-vista.html](http://www.novell.com/products/desktop/compare-to-vista.html)

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