

Business White Paper

WORKGROUP COLLABORATION

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Novell® Teaming vs. Microsoft* Office SharePoint* Server

A Competitive Comparison of Next-generation Collaboration Solutions

Novell.

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Overview

Next-generation collaboration tools provide users with better ways to work in a flat world—to collaborate effectively across distances and time zones.

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- 1 "The Next American Frontier," Michael Malone. Wall Street Journal: May 19, 2008, A15.
 - 2 *Wikinomics: How Mass Collaboration Changes Everything.* Don Tapscott, Anthony Williams. Portfolio: 2006.

As a business or IT manager, you're no doubt concerned about improving productivity and reducing costs. And there's no better way to do both than by deploying a next-generation collaboration solution. To help you choose the best solution for your organization, this paper will review relevant business needs and market trends, explore how these tools improve work processes and propose a framework for evaluating your options. We'll begin with an analysis of next-generation collaboration systems and how they can provide a foundation for better business results. Next, we'll outline four criteria for choosing next-generation collaboration tools. Finally, to aid in the evaluation process, we'll provide a table comparing the features included in Novell® Teaming and Microsoft* Office SharePoint* Server (Microsoft SharePoint).

Why Next-generation Collaboration?

Several factors drive interest in next-generation collaboration solutions. Most importantly, informed managers understand that their organizations succeed when their employees are productive. They know that their people do their best when they have the right tools to help them coordinate their activities, find the information they need and develop their ideas.

Market and technology trends provide another reason to roll out next-generation collaboration solutions. Many users, accustomed to social networking on the Internet, want to use similar tools in their professional pursuits. Far from serving as a distraction, these users understand that next-generation collaboration tools can

make them more creative and increase their productivity.

In many workplaces, teams are distributed, and contributors may meet face to face only occasionally, or sometimes not at all. The results of a survey at one large company showed that almost 20 percent of employees had never met their boss face to face, and furthermore, half of those never expected to.¹ Next-generation collaboration tools provide users with better ways to work in a flat world—to collaborate effectively across distances and time zones.

Finally, both management and employees understand that they need technology to help them make the best possible use of work they produce: a document or presentation developed by one team for one purpose can often be put to work to solve other business problems as well. Next-generation collaboration tools facilitate this process.

How Next-generation Collaboration Improves Work Processes

The need for next-generation collaboration systems, however, goes beyond end-user demand, supporting distributed teams, reusing work products or even responding to market pressures. Don Tapscott and Anthony Williams, management professors and business consultants, describe a new way of working called "peer production" and say that it "will displace traditional corporation hierarchies as the key engine of wealth creation in the economy."² Next-generation collaboration systems support

these powerful new ways of working, which lead to greater productivity.

The prospect of next-generation collaboration started with the combination of the Internet, the World Wide Web and the pervasive use of e-mail. Together, these three tools made it easy for people to share ideas beyond organizational and geographic boundaries. Information and ideas flowed among people more freely than ever before. However, as is the case for any invention, these powerful new tools created a new set of problems.

The World Wide Web, for example, combined the ideas of hypertext documents and the Internet to help scientific researchers share information as they developed new ideas and conclusions. The subsequent explosion of Web sites went far beyond the scientific community. Though this did, indeed, make it easier to share information, it also created a new problem by requiring a Webmaster to develop Web sites and pages.

E-mail messages with attachments made it easy to share large documents with just about anyone in the world with the click of a button. The overuse, or misuse, of this pervasive and useful tool creates its own set of problems, including overloaded mailboxes and the need to manage a confusing jumble of document versions.

The idea behind next-generation collaboration, also referred to as “Web 2.0,” is to take the next step in enabling powerful new modes of peer production. This involves breaking the information logjam imposed by the static model of the Web, as well as the overload and frustration sometimes created by e-mail. A next-generation collaboration system makes it easy for anyone to use, develop or share information to enhance creativity and collaboration, all with the goal of increasing

productivity. This is at the core of the idea of peer production: people with the right skills applying themselves to the problem at hand without letting the tools get in the way.

Key Features of Next-generation Collaboration Systems

Search helps users find critical information—documents, presentations, spreadsheets, wikis and more—they need to accomplish a particular task. It also helps them find colleagues with expertise they can leverage, or information about related projects underway.

Workspaces help people coordinate their efforts and provide a context for work or information. They bring together the right information resources and people for a project or topic of interest: team members, goals, timelines, tasks, documents, images,



blogs, wiki articles and so on. When team members work next to each other, much of this contextual information is shouted over cubicle walls, shared in casual hallway conversations or discussed in after-hours gatherings. Team workspaces help put this information online, making it easier for members of distributed teams to come up to speed more quickly, avoid mistakes and preserve their work for future reference.

Information preparation, presentation and sharing are supported in workspace folders. Heavy information preparation includes using desktop productivity applications such as OpenOffice*, Microsoft Office and Adobe* Creative Suite to prepare documents, spreadsheets, presentations, designs, images and more. Developing these documents involves multiple reviews and revisions, often with changes marked for consideration. Light information preparation includes creating blogs, wikis and discussion forum postings, all of which can be done completely online. The final result of all information preparation is sharing documents with peers or publishing them to a larger audience.

Enterprise social networking tools help employees get to know each other. They also provide a range of casual, but essential, tools for building teams online. Through the use of personal workspaces, surveys, rating systems, tags, blogs, wikis and more, these tools give distributed teams a useful substitute for the casual interactions of those in proximity. An additional benefit of these tools is that they provide a compelling alternative to e-mail and attachments for collaboration tasks like reviewing documents, aggregating feedback or collecting ideas.

Forms and workflow automation make repeated processes more efficient and reliable. These tools give managers the power to execute business processes in a consistent way, and use their intimate knowledge of these processes to automate

them more effectively than outside consultants ever could.

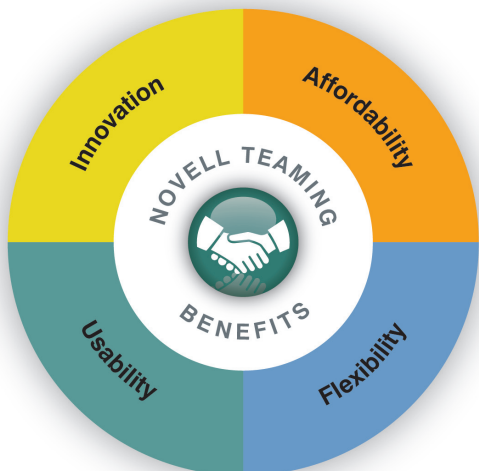
Web presentation systems bring all of the previous elements together in a useful arrangement for users. Functional elements are presented in a Web browser, and are often associated with a Web Portal system. In addition, next-generation collaboration systems have a set of Web services to enable integration with other applications.

Online Meetings. Although not a focus for this paper, it's important to point out that next-generation collaboration systems are often complemented by a real-time option for online meetings, where people share presentations and other documents live. These systems include capabilities for sharing data, supporting voice communications and allowing for Instant Messages. For customers interested in the full range of asynchronous and real-time next-generation collaboration, Novell offers Novell Teaming + Conferencing.

How to Choose a Next-generation Collaboration Solution

As you evaluate next-generation collaboration products, it's important to find the right fit for your organization. While Microsoft Office SharePoint Server is well known in the collaboration category, Novell provides an attractive alternative with Novell Teaming. If you're currently evaluating next-generation collaboration solutions, there's no better time to learn about the following benefits of Novell Teaming:

- *Flexibility is built in to Novell Teaming. You can use the Novell collaboration system with many different services and applications. Microsoft SharePoint requires a total commitment to Microsoft's offerings, with the added migration and contract costs that go along with that commitment.*



- *It costs less to acquire and own Novell Teaming than Microsoft SharePoint.*
- *Novell Teaming is designed to connect people and information. SharePoint is designed around building Web pages.*
- *Novell Teaming features an open development model that invites innovation from a broad community.*

Novell Teaming is More Flexible

Customers who choose Microsoft SharePoint must purchase all of their software from Microsoft: office productivity tools, servers, desktops, services, e-mail and calendaring environments, and development tools. What’s more, all these systems need to be upgraded to the latest versions. Because of its support for a number of different open standards, Novell Teaming gives IT teams a choice in their directories, databases, development environments, user operating environments, e-mail systems and more.

If your organization has significant investments in mixed environments, or if you are not ready to upgrade to all the latest versions of Microsoft systems, Novell Teaming is a great choice for you.

Following is a comparison table of supported software for the two systems:

System	Novell Teaming	Microsoft SharePoint
Server	SUSE® Linux Enterprise Server 10 Windows Server	Windows Server
Identity Management Integration	Novell eDirectory™ Active Directory	Active Directory
Development Environment	J2EE	.NET
Portal Environment	Liferay, an open, JSR-168 standards-based portal system	SharePoint Portal Server
Office Productivity Software	OpenOffice Microsoft Office WordPerfect*	Microsoft Office 2007
E-mail and Calendaring System	Novell GroupWise® Microsoft Exchange 2007 Lotus* Notes* Other standards-based systems	Microsoft Exchange 2007
Desktop	SUSE Linux Enterprise Desktop 10 Windows Vista Windows XP Mac* OS X	Windows Vista Windows XP
Database	MySQL* MS SQL Server Oracle*	MS SQL Server

As you evaluate whether Novell Teaming or Microsoft SharePoint is the right fit for you, take into account the cost of updating all of your desktop and laptop machines to Office 2007 and Windows Vista, as well as installing the latest versions of Active Directory and Windows Server. For most organizations, this also implies a three-year commitment to a service agreement. If you’re not ready to take these expensive and time-consuming steps just to get ready to deploy a collaboration system, Novell Teaming can be a good fit for your organization.

Novell Teaming gives IT teams a choice in their directories, databases, development environments, user operating environments, e-mail systems and more.

Practical Applications for Next-generation Collaboration Systems

Managing projects and project portfolios. Execute projects more efficiently with a single location for team members to access project content and colleagues.

Forming Communities of Practice. Pose questions and solicit answers from experts via threaded discussion folders.

Managing problem resolution. Use Incident folders to track status and quickly move issues to resolution with automated workflow.

3 The Forms Server, Search Server and SharePoint Designer were not covered by the Microsoft Licensing Assistant. List prices for these components are published at <http://office.microsoft.com/en-us/sharepointserver/FX102176831033.aspx>. These prices do not include Software Assurance.

Novell Teaming is More Affordable

With Microsoft SharePoint, there are several cost-related issues to consider:

- *Windows SharePoint Services 3.0 (also referred to as WSS) is included with Microsoft Windows Server. Windows SharePoint Services 3.0 is for small departmental use only, with limited search capabilities and limited support for forms and workflow.*
- *Microsoft Office SharePoint Server Standard (MOSS) is for larger groups. The list price is \$94 per Client Access License (CAL).*
- *Microsoft Office SharePoint Server Enterprise is an add-on, and requires another \$75 per CAL. The Enterprise version is required to develop and use custom forms.*
- *A server license is also required for each server deployed in the system. Each server costs \$4,424.*
- *Microsoft Office SharePoint Server Search Server is required to perform any searches in the system. The list price is \$8,213 per server.*
- *Office Forms Server 2007 is required for forms. The price is \$4,424, plus \$54 per CAL.*
- *SharePoint Designer is a desktop development tool needed to create forms and configure Web parts for custom pages. It costs \$187 per developer seat.*
- *A Microsoft SQL Server license adds \$730 to the price tag for a single-user system.*

Novell Teaming, by contrast, has a simple purchasing program and user-licensing model.

It's available as a stand-alone product or as part of the complete workforce productivity solution represented by the Novell Open Workgroup Suite. All of the core features needed to enable team collaboration are available in Novell Teaming, with only one additional module option: Advanced Workflow. What's more, with Novell Teaming, it's easy to build workspaces, define forms and create workflows with Web-based tools. No additional purchase of development tools is required. Novell Teaming is \$55 per user. You can deploy any number of Novell Teaming servers needed to support your users at no additional per-server charge.

For a concrete example of relative costs, assume the management team of a mid-sized company decides to provide next-generation collaboration software to all of their 5,500 employees. The following shows the anticipated software bill of materials for a Microsoft SharePoint solution and an alternative based on Novell Teaming. This comparison does not take into account the additional costs to upgrade Exchange, Office or Active Directory, which are also required to deploy Microsoft SharePoint 2007.

Using the Microsoft Licensing Assistant tool, and including Software Assurance, prices for **Microsoft Office SharePoint Server 2007 Enterprise** would be as follows:

Item	Quantity	Cost per Unit	Total
Microsoft Office SharePoint Server License	5	\$6,503	\$32,515
Microsoft Office SharePoint Server Standard CALs	5,500	\$137	\$753,500
Microsoft Office SharePoint Server Enterprise CALs	5,500	\$110	\$605,000
Windows Server 2008 Standard License	7	\$1,067	\$7,469
Windows Server 2008 Standard CALs	5,500	\$44	\$242,000
Microsoft Office SharePoint Server Search Server	1	\$8,213	\$8,213
Office Forms Server	1	\$4,424 ³	\$4,424
Office Forms Server CALs	5,500	\$54	\$297,000
SharePoint Designer	10	\$187	\$1,870
Microsoft SQL Server License	1	\$730	\$730
TOTAL			\$1,952,721

NOTE: All costs are in US dollars.

A cost breakdown for **Novell Teaming** for the same company would be as follows:

Item	Quantity	Cost per Unit	Total
Novell Teaming	5,500	\$55	\$302,500
Novell Teaming Maintenance	5,500	\$14	\$77,000
Novell SUSE Linux Enterprise Server 10 ⁴	3	\$1,499	\$4,497
MySQL ⁵	1	\$0	\$0
TOTAL			\$383,997

NOTE: All costs are in US dollars.

In this example, Novell Teaming is less than one-fifth the cost of Microsoft SharePoint. Barb Mosher and Brice Dunwoodie of *CMSWire* say of Microsoft SharePoint pricing that “the licensing model alone is enough to send most of them [prospects] running, with tails tucked tightly between their legs.”⁶

Novell Teaming costs less to own as well, with lower hardware requirements and the ability to virtualize services, which also lowers data center costs. In addition, since Novell Teaming requires fewer servers, power, cooling, maintenance and backup costs are reduced.

The cost comparison above also assumes a centralized SharePoint deployment. Since many corporate departments are rolling out their own Windows SharePoint Server 3.0 deployments, management costs can be even greater than our centralized example would indicate. The proliferation of uncontrolled Windows SharePoint Server deployments creates significant challenges for IT and increases labor costs dramatically.

Novell Teaming Offers a More Usable Design

One of the key differences between the traditional Web and next-generation collaboration is that in the latter, users are empowered to share information without needing a Webmaster to build their pages. Unfortunately, Microsoft SharePoint is designed with many Web 1.0 assumptions, including the notion that a platoon of Web designers need to be employed, and provisioned with SharePoint Designer, to build custom pages. This need to

hire additional personnel not only makes the solution much more expensive, it increases opportunity costs by complicating deployment.

With Novell Teaming, IT teams can deploy the system and let user departments quickly get to work creating workspaces, sharing information, coordinating their activities and moving the business forward. One of the pillars of Novell Teaming is the workspace, which brings together interested people and related information in a single place. SharePoint doesn’t have an equivalent to the workspace, relying on Web pages instead.

Though Novell Teaming is a Web application, the focus is on collaboration inside the workspace, not on deploying developers to build Web pages. After all, a collaboration system should help users get work done without imposing barriers. What’s more, with Novell Teaming, it’s easy to create forms and workflows using a Web interface instead of requiring extra design tools. In all respects, the design of Novell Teaming is centered on simplicity and empowering users themselves to enable collaboration.

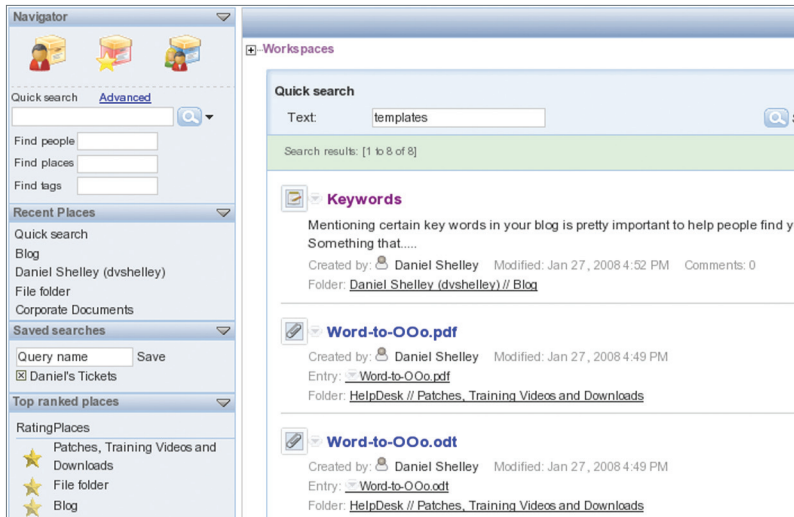
An additional benefit of the Novell Teaming design is that users can easily navigate the structure of workspaces and folders and learn the context of the information they’re using. With Microsoft SharePoint, once information is uploaded into the system, it’s hard to find again. This isn’t a problem with Novell Teaming. With its simple interface, users easily navigate through the system to see how projects and other collections of information relate to each other. When they

Practical Applications for Next-generation Collaboration Systems

Creating and managing documents. Edit, comment on and track versions of text documents, spreadsheets, presentations and more.

Automating work processes. Leverage forms and automated workflow to reduce errors and move critical business processes online.

4 SUSE Linux Enterprise Server 10 Priority with one year of updates and fixes and unlimited telephone and electronic support. This figure also assumes the smaller number of servers required by Novell Teaming, as well as the fact that separate forms and search servers are not needed.
 5 MySQL L2 support is included with SUSE Linux Enterprise Server 10.
 6 “SharePoint Web Content Management Licensing was Botched.” Barb Mosher, Brice Dunwoodie. *CMSWire*. Feb 2008. <http://www.cmswire.com/cms/web-cms/sharepoint-web-content-management-licensing-was-botched-002284.php>



- 7 The Wisdom of Crowds.
James Surowiecki.
- 8 Democratizing Innovation.
Eric von Hippel. MIT Press: 2005.

search, the context of that search is also just as easy to see.

In addition to its simple and powerful Web presentation, Novell Teaming provides a set of Web services that give developers a simple way to integrate Novell Teaming with other systems. This extensibility and ease of customization, the result open software and open standards support, is one of the product's most significant benefits.

Novell Teaming Offers a Broader Model of Innovation

The most powerful ideas come from a broad set of diverse minds, rather than from smaller teams of like-minded peers. Economist James Surowiecki says, "under the right circumstances, groups are remarkably intelligent, and are often smarter than the smartest people in them."⁷ At Novell, we believe that the larger and more diverse that group is, the better; which is why we leverage the Kablink open source project as the foundation for Novell Teaming innovation.

Customers or partners who make modifications to Novell Teaming code can submit

those changes to the Kablink community. The changes can then be included in a later release of the product, so that all customers benefit from the innovations driven by a lead group. Proprietary vendors, even large ones, can't match the level of innovation that comes from this sort of an open model.

A broad development process that involves software vendors, partners and customers will produce more breakout features than a vendor team working in isolation. Eric von Hippel, head of the Innovation and Entrepreneurship Group at the MIT Sloan School of Management, conducts research and publishes findings on what he describes as "user-centered" innovation. He points out that "a growing body of empirical work shows that users are the first to develop many and perhaps the most new consumer and industrial products."⁸ He adds that the majority of these innovations prove to be attractive to larger markets, and are often commercialized by manufacturers. We understand that for creating breakout solutions, the open model of software development is superior to the older, proprietary one. In the software industry, the Linux* operating environment, the Apache* Web server and the Java* 2 Execution Environment are three prime examples of how well this model works.

Another component of innovation is the ease with which users and developers can build value-added modules that extend a product's utility and functionality. As is the case with Microsoft SharePoint, Novell Teaming has a number of ways to extend or customize the product, including Web services interfaces using SOAP, system templates and portal configurations. Additionally, Novell Teaming offers something Microsoft SharePoint can't: a view into the code behind the interfaces, making it easier for developers to understand system behavior and how they can use it.

Feature Comparison: Novell Teaming vs. Microsoft SharePoint

Along with the four criteria for finding a next-generation collaboration system that meets your needs, the following feature comparison table can help you evaluate the merits of Novell Teaming vs. Microsoft SharePoint.

Features	Novell Teaming	Windows SharePoint Server 3.0	Microsoft Office SharePoint Server 2007
Enterprise Social Networking Tools			
Wikis, Blogs	Yes	Yes	Yes
User Workspaces	Yes	No	Yes
Expertise Location	Yes	No	Yes
Presence Integration	Yes	Yes	Yes
Dashboards (summaries, roll ups)	Yes	No	Yes
Link To, Find Users with Related Content	Yes	No	Yes
Tagging	Yes	No	No
Workspaces and Coordination			
Discussion Forums, Tasks	Yes	Yes	Yes
Wikis, Blogs, Surveys	Yes	Yes	Yes
Shared Documents	Yes	Yes	Yes
Calendars	Yes	Yes	Yes
Information Preparation, Sharing and Presentation			
Policies, Auditing and Compliance	Yes	Yes	Yes
Site Templates	Yes	Yes	Yes
Workflow-managed Content	Yes	Yes	Yes
Internet Web Content Management	No	Yes	Yes
Document Lifecycle Workflow (Draft > Pending > Published)	Yes	No	Yes
Rich Group Authoring (WYSIWYG formatting, image sizing, etc.)	Yes	Yes	Yes
Versioning on All Data, Metadata, Workflow, Journaling	Yes	Yes	Yes
Check-out/Check-in	Yes	Yes	Yes
Dynamic Folders (using search to customize folder "contents")	Yes	No	No
Search			
Search across Site Content	Yes	Yes	Yes
ACL-filtered Search across Site Content	Yes	No	Yes
Search within Documents	Yes	No	Yes
Federated Search (Web sites, file servers)	No	No	Yes
Forms and Workflow			
Browser-based Forms	Yes	Yes	Yes
Online Designer for Creating Custom Forms	Yes	No	No
Custom Forms Supported out of the Box	Yes	No	No
Form Export/Import	Yes	No	Yes
Form Reuse	Yes	No	Yes
Simple Workflow	Yes	Yes	Yes
Advanced Workflow	Yes	No	Yes

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Novell Teaming enables you to benefit from the innovation and ideas of a broad community of developers and users.

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Features	Novell Teaming	Windows SharePoint Server 3.0	Microsoft Office SharePoint Server 2007
Web Presentation and Services			
Single-department Solution	Yes	Yes	Yes
Multi-department Solution	Yes	No	Yes
Office Application Integration	Partial	Partial	Yes
AJAX UI	Yes	Partial	Partial
Contextual Help (editable)	Yes	No	No
Browser: Firefox, Opera, Internet Explorer	Yes	Partial	Partial
External Users as Team Members	Yes	Yes	Yes
Management and Security			
LDAP Authentication	Yes	No	Yes
Granular Access Control	Yes	No	Yes
Basic Role and Team Support	Yes	No	Yes
Integration			
RSS Support	Yes	Yes	Yes
Act as a File System (WebDav Server)	Yes	Yes	Yes
E-mail Content in/out	Yes	Yes	Yes
Mash-up Capability	Yes	Yes	Yes



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Conclusion

The right next-generation collaboration system can put your organization on track for increased productivity, better decisions, lower costs, more effective teams and much more. By rolling out the right system, you can give your organization a competitive edge and more effectively meet its goals. The good news is that the market for these systems has matured and offers some great choices. The opportunity for you is to find a collaboration system that meets your business, financial and organizational needs.

With Novell Teaming, Novell provides a feature-rich, affordable and flexible alternative

to Microsoft SharePoint. And, with its open development model, Novell Teaming enables you to benefit from the innovation and ideas of a broad community of developers and users. If your organization has investments or interest in a mixed IT environment (with both open and proprietary products and server operating environments), identity solutions, open development standards such as J2EE—not to mention lower costs and simplified deployment—Novell Teaming is an excellent choice. When it comes to taking advantage of the benefits of next-generation collaboration, Novell Teaming is the right fit.