

Business White Paper

END-USER COMPUTING

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Novell® GroupWise® vs. Microsoft* Exchange:

A Cost-of-Acquisition Business Case

Novell.

Novell® GroupWise® or Microsoft* Exchange?

With Novell GroupWise 8, customers have a wide choice of operating systems on which to run their infrastructures, and are even able to mix operating systems within a single GroupWise system. On the server side, GroupWise supports:

- Novell Open Enterprise Server 2
- Novell Open Enterprise Server 1
- SUSE Linux Enterprise Server 10
- NetWare 6.5
- Windows Server 2008
- Windows Server 2003 R2
- Windows Server 2003

Novell® GroupWise® has a large and loyal customer base and is currently seeing healthy growth. And the highly anticipated GroupWise 8 takes productivity to a whole new level with a fully connected collaborative workspace leveraging the latest Web 2.0 technologies. With GroupWise 8, users can add wikis and blogs, RSS feeds and Web pages to their Home Views. They can publish their calendars to the outside world and busy search across e-mail systems. They can manage contacts more effectively than ever before. And with more robust Linux*, Mac* and WebAccess* clients, they can work in the way that suits them best.

But, as every administrator knows, a purchase decision rests on more than features and functionality; it demands a solid business case and the assurance of return on investment. If you're evaluating collaboration solutions—or if you've felt pressured to migrate to Microsoft* Exchange—you need to know you've made the right decision by investing in Novell GroupWise, and that continued investment is the best use of your valuable resources. The following information—outlining GroupWise advantages in the areas of supporting infrastructure, hardware, operating systems, licensing, acquisition costs and migration requirements—was produced by an independent consultant who deploys both Novell GroupWise and Microsoft Exchange.

Supporting Infrastructure

GroupWise 8 requires Novell eDirectory™ only for management and not for user provisioning. To use Microsoft Exchange 2007, by contrast, you must first have Active Directory*. All users must be added as objects in Active Directory before they can be Exchange users. Therefore, if you do not have Active Directory fully deployed with all users in it, you will need to

build a new Active Directory infrastructure. This will require servers, the number of which depends upon the size of your organization. Additionally, unlike eDirectory, an Active Directory infrastructure requires these servers to be dedicated.

Hardware

CPU

Novell GroupWise can make the most of your current hardware investment. There are no requirements for 64-bit hardware, so customers upgrading from older versions of GroupWise—or migrating from Exchange 5.5, 2000 or 2003—are not forced to purchase the latest hardware first. If a customer does have 64-bit hardware, GroupWise will still run with no difficulty.

Compare this to Microsoft Exchange 2007, where 64-bit hardware is required. Customers who have deployed earlier versions of Exchange are forced to migrate from their previous hardware platform to the new platform, which can be an expensive and time-consuming operation. This is true even for customers whose current Exchange system is running on a 64-bit server, as in-place upgrades are not supported.

Memory

Novell GroupWise is not a memory-intensive application, so it has no need to address memory above the 32-bit 4 GB limit. There is a certain misconception that 64-bit hardware performs better than 32-bit. This is not true, so customers may be investing in 64-bit hardware for the wrong reasons.

Conversely, Microsoft Exchange has every need to address memory above the 32-bit 4 GB limit. Microsoft's memory requirements

for an Exchange server in the mailbox server role are 2 GB + 2-5 MB/user, depending on usage. For an organization with 1500 users per mailbox server, this means each server will need between 5 GB and 9.5 GB of RAM.

Storage

Both Novell GroupWise and Microsoft Exchange have a single copy message store, meaning that they only store a single copy of a message addressed to multiple recipients on the server. However, while GroupWise also stores attachments only once, Exchange will store attachments once for every recipient. This vastly increases the amount of storage required for a Microsoft Exchange implementation, as well as backup and restoration times when compared to a Novell GroupWise installation.

Operating Systems

Microsoft Exchange 2007 requires Windows* Server 2003 R2 64-bit (or later) for each server role. There are two versions of Windows Server 2003 R2: Standard and Enterprise. The Standard Edition supports 4-way symmetrical multiprocessing, while the Enterprise Edition supports 8-way symmetrical multiprocessing. In addition, the Standard Edition supports up to 4 GB of RAM, while the Enterprise Edition supports up to 64 GB of RAM. This means you will have to purchase the Windows Server 2003 R2 Enterprise Edition for mailbox servers in all but small environments. Finally, while other server roles can work well with the Windows Server 2003 R2 Standard Edition, if you want to cluster any server role, the Enterprise Edition is a must.

With Novell GroupWise 8, customers have a wide choice of operating systems on which to run their infrastructures, and are even able to mix operating systems within a single GroupWise system. On the server side, GroupWise supports:

- *Novell Open Enterprise Server 2*
- *Novell Open Enterprise Server 1*

- *SUSE® Linux Enterprise Server 10*
- *NetWare® 6.5*
- *Windows Server 2008*
- *Windows Server 2003 R2*
- *Windows Server 2003*

Novell GroupWise also includes an entitlement to as many SUSE Linux Enterprise Server 10 licenses as customers need to run GroupWise in their environments. This represents an enormous cost savings for most organizations.

Licensing

Licensing for an Exchange system can be quite complex, as many different licenses are required, and choices about each type of license need to be made.

Windows Server Licenses and CALs

Each server running Windows Server requires its own license based on its role. Some servers will be Standard Edition, and some will be Enterprise Edition. In addition to the server licenses for all of the Active Directory servers, a Client Access License (CAL) is required for every Active Directory user. To support 5000 Exchange users, 5000 Windows CALs are needed.

Exchange 2007 Licenses

There are two kinds of Exchange Server licenses: Standard and Enterprise. The Exchange 2007 Server Standard Edition is designed for small to medium-sized organizations, whereas the Exchange 2007 Server Enterprise Edition is designed for large organizations. Exchange 2007 Standard allows up to five storage groups and five databases per server, while Exchange 2007 Enterprise allows up to 50 storage groups and 50 databases per server. An organization with 1,000 or more users—and planning for individual mailboxes to grow to 1 GB or larger in size—should deploy the Enterprise Edition. Though not all Exchange servers need to be Enterprise Edition, larger organizations—

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those that require clustering, for example—will be more likely to require the Enterprise Edition.

Exchange 2007 CALs

In addition to the Windows Server licenses, Active Directory CALs and Exchange Server licenses, every Exchange user requires an Exchange CAL. Depending on feature requirements, some users may also require the more expensive Enterprise CAL.

Outlook 2007 Client

Finally, an organization that has installed Exchange and wants to use all the Exchange features will need to purchase the Outlook CAL for all of its users.

GroupWise

With GroupWise there is a single cost: the cost of the GroupWise license itself. This license includes all of the server roles (in GroupWise these are domains, post offices and gateways), the client license and the ability to cluster GroupWise services. In addition, as mentioned earlier, GroupWise 8 customers are entitled to as many SUSE Linux Enterprise Server 10 licenses as they need to run GroupWise. If a customer is running GroupWise on Open Enterprise Server 2, they are also entitled to run any number of two-node clusters at no additional charge.

Counting the Costs

The tables below compare baseline costs for deploying Microsoft Exchange 2007 and Novell GroupWise 8. This comparison, based on the costs associated with 5,000 users, was prepared by Hinchman Consulting (www.hinchmanconsulting.com). Figures reflect suggested retail prices for both Novell and Microsoft products and do not take into account any discounts or enterprise licensing programs that may apply. Note that all costs are in U.S. dollars.

Table 1: Exchange 2007 Hardware Costs

Server Function	Number Needed	Hardware Unit Price	Total Hardware Cost
Active Directory Server	2	\$8,712	\$17,424
Exchange Client Access Server	1	\$8,712	\$8,712
Exchange Hub Transport Server	1	\$8,712	\$8,712
Exchange Mailbox Server	3	\$14,056	\$42,168
Total Hardware Costs			\$77,016

Table 2: Exchange 2007 Licensing Costs

Product	Number of Licenses Required	MSRP Unit Cost	Total Licensing Cost
Exchange 2007 Server Enterprise Edition License	5	\$3,999	\$19,995
Exchange 2007 Standard CAL	5,000	\$67	\$335,000
Outlook 2007 CAL	5,000	\$109.95	\$549,750
Windows Server 2008 Standard (x64) Edition License (5 CALs)	4 (20 CALs total)	\$999	\$3,996
Windows Server 2008 Enterprise (x64) Edition License (25 CALs)	3 (75 CALs total)	\$3,999	\$11,997
Windows Server 2008 CALs	4,905 (95 acquired through server licenses)	\$39.95	\$195,954.75
Exchange Mailbox Server	3	\$14,056	\$42,168
Total Licensing Costs			\$1,116,692.75

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Table 3: GroupWise 8 Hardware Costs

Server Function	Number Needed	Hardware Unit Price	Total Hardware Cost
Primary Domain and One Post Office (eDirectory for Management of GroupWise 8)	1	\$8,363	\$8,363
Post Office Domain and One Post Office	1	\$8,363	\$8,363
Additional Post Offices	2	\$8,363	\$16,726
Gateway Server (GWIA, WebAccess and One Domain)	1	\$8,363	\$8,363
Total Hardware Costs			\$41,815

Table 4: GroupWise 8 on Windows 2008 Server Licensing Costs

Product	Number of Licenses Required	MSRP Unit Cost	Total Licensing Cost
GroupWise 8 Full License	5,000	\$143	\$715,000
Windows Server 2008 Standard Edition License (5 CALs)	5 (25 CALs total)	\$999	\$4,995
Total Licensing Costs			\$719,995

This offers a direct saving of over \$430,000 compared to Exchange 2007, even when running on Windows servers. As demonstrated in the table below, the cost savings are even greater when you compare Exchange 2007 with Novell GroupWise running on Linux.

The GroupWise Migration Utility for Exchange is free. Simply build the new GroupWise 8 system and migrate the users. You can also run multiple instances of the GroupWise Migration Utility for Exchange in order to speed up the migration process.

Table 5: GroupWise 8 on Linux Licensing Costs

Product	Number of Licenses Required	MSRP Unit Cost	Total Cost
GroupWise 8 Full License	5,000	\$143	\$715,000
One SUSE Linux Enterprise Server 10 Server License	5	\$0 (entitled)	\$0
Total Licensing Costs			\$715,000

For even greater savings, consider Linux as the server operating system, which adds almost \$5,000 to the cost savings of running GroupWise on Windows.

Migrations

Since Microsoft discontinued support for Exchange 5.5, many customers have also wrestled with the decision to migrate from Exchange 5.5 to Exchange 2007. If you're in this situation, you may be wondering what such a move will cost. One thing is certain: It will exceed the figures reflected above, which represent the costs involved in deploying Exchange 2007 from the ground up.

This is because in order to migrate from Exchange 5.5 to Exchange 2007, you must first migrate to Exchange 2003. Yes, that's right. There is no "in-place" upgrade. Because of changes in the databases and infrastructure of Exchange 2007, there is also no "in-place" upgrade from Exchange 2003 to Exchange 2007. In order to migrate from Exchange 5.5 to Exchange 2003 (your first step to get to Exchange 2007), you must build an Exchange 2003 system and migrate all of your users to it as an interim step. This also means more hardware requirements.

Once you've moved to Exchange 2003, you can complete the second step: moving the users to the Exchange 2007 system. This process is similar to moving mailboxes from post office to post office in GroupWise. It requires that each user's account be moved. The good news is that a third-party

provider, Quest, has a utility that will aid in the migration, at a cost.

This Quest utility will migrate directly from Exchange 5.5 to Exchange 2007. Quest Exchange Migration Wizard costs \$23.67 per mailbox, according to CDW, a U.S. distributor of IT products and services. If you had to move 5,000 mailboxes, this would add \$118,350 to the migration costs for Exchange 2007 itself. And while there are certainly discounts to be realized for this and other software, you'll also need to pay consulting fees for the migration—unless your IT team is skilled in migrations and has the time to execute them.

And what if you wanted to migrate from Exchange 5.5/2000/2003 to GroupWise 8? It would cost you nothing but consulting fees, if you choose to hire a consultant. The GroupWise Migration Utility for Exchange is free. Simply build the new GroupWise 8 system and migrate the users. You can also run multiple instances of the GroupWise Migration Utility for Exchange in order to speed up the migration process. For example, you could have 10 migration utilities migrating 500 user mailboxes each. In this way, you could potentially complete the migration in one week—depending on the size of user mailboxes, of course.

Conclusion

As organizations realize the tremendous power of collaboration to boost productivity and fuel business success, choosing the right solution becomes more important than ever. If you're evaluating a collaboration solution deployment or upgrade—and particularly if you're feeling pressure to migrate from Novell GroupWise to Exchange—it's critical to understand the fiscal facts.

While Microsoft Exchange requires significant investments in hardware, infrastructure and licenses, GroupWise offers a compelling combination of operating system flexibility, simplified licensing options, and low hardware and infrastructure requirements. With GroupWise, you can leverage the server and client operating systems that make sense for your organization and open the door to the

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many cost advantages of Linux. You can also take advantage of the product's legendary security, reliability and administrative simplicity to realize immediate return on your investment. Whether you're a seasoned organization considering a collaboration upgrade or an up-and-coming business deploying a collaboration solution for the first time, GroupWise makes good financial sense.

For more information on Novell GroupWise 8, visit: www.novell.com/products/groupwise/

Take advantage of the legendary security, reliability and administrative simplicity in Novell GroupWise to realize immediate return on your investment.

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