

# Building a Better Infrastructure With IBM Middleware on System p

Simplify Collaboration Services  
with Lotus Domino

## Supporting Employee Collaboration

Our Data Centers are full of servers that process email. There must be a better way.

Let me show you how **Lotus Domino running on System p** can simplify your IT infrastructure – and give you more capabilities at the same time.



**Service Oriented Finance  
CIO**

**IBM**

## Lotus Notes and Lotus Domino

Domino Server Provides:

- Email, Calendar, Contacts
- Instant Messaging, Team Rooms
- Forms Application Platform

**Domino Server**



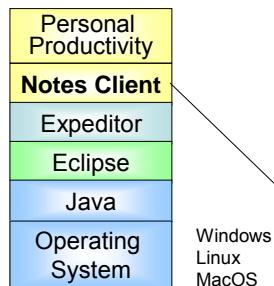
System p

*Domino is available for AIX, i5/OS, Linux, Solaris, z/OS, Windows*

## Lotus Notes and Lotus Domino

Notes Client Provides:

- An integrated user interface to Domino function
- Built on open standards
- Disconnected operation
- Free Personal Productivity Applications
  - ▶ Open Document Format (ODF) and
  - ▶ Microsoft Office formats



**Domino Server**

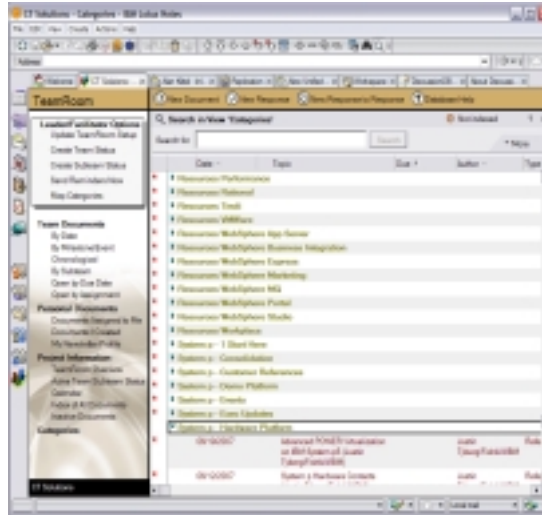


System p

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## Lotus Domino Team Rooms Enhance Team Productivity

- Provide centralized location to capture work and status of team
  - ▶ Project status
  - ▶ Document repository
  - ▶ Discussion database
  - ▶ Task assignments
  - ▶ Team calendar



## IBM's Productivity Editors – A Free Alternative to Microsoft Office

- Presentation Editor, Spreadsheet Editor, Document Editor
- Includes most common editing features to satisfy a majority of business users
- Natively supports the Open Document Format (ODF) standard
- Includes support for Office formats (97, 2000, XP, 2003) and PDF
- Implemented in Java, derived from OpenOffice
- Fully integrated into the Notes client
- Also available as standalone free download ([IBM Lotus Symphony](http://www.ibm.com/lotus/symphony))

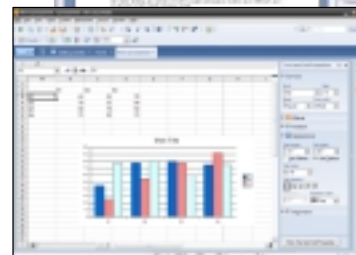
*Presentation Editor*



*Document Editor*

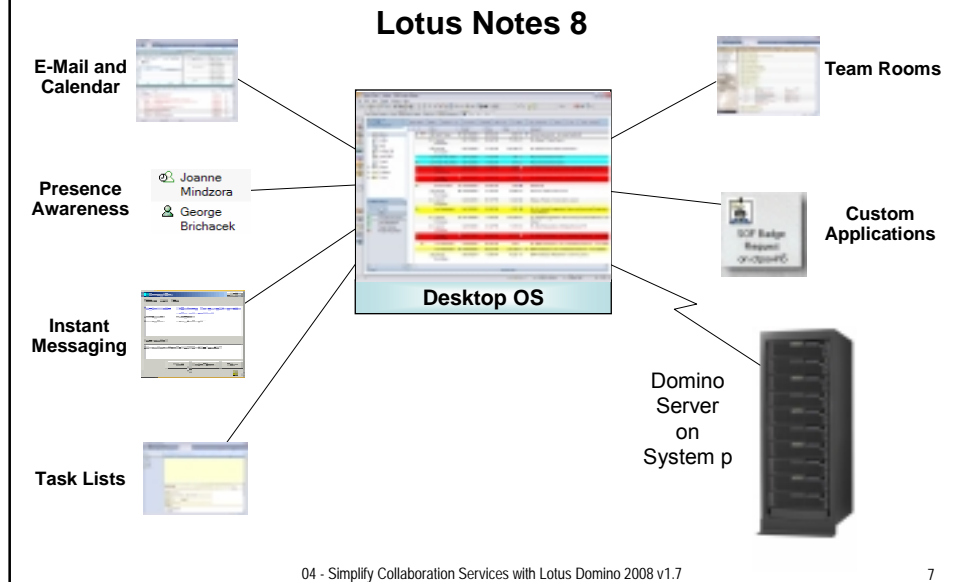


*Spreadsheet Editor*



<http://symphony.lotus.com/software/lotus/symphony/home.jspa>

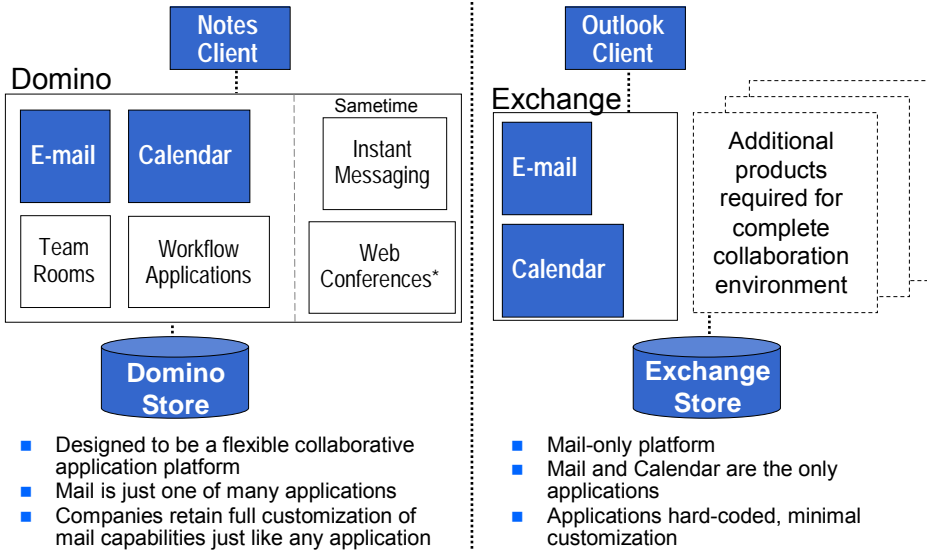
## DEMO: Notes Integrated User Experience



## Domino is architected as a distributed collaborative application platform

- Domino's workflow integrates the entire user experience
  - ▶ Built in forms routing, approval, digital signatures and data collection capabilities
  - ▶ Microsoft/Exchange solution requires numerous additional products and servers
    - Operations Manager, SQL Server, Communications Server, SharePoint etc...
- Underlying architecture designed for extensibility and Composite Application support
  - ▶ Notes applications can now be combined with Java applications (Web Services, other Eclipse components, portlets...)
  - ▶ Loose coupling between applications, components, & plug-ins allows exchange of data
- Applications are presented in *either* the Notes client or a web browser

## Domino Advantage: More Than Just Mail in a Single Package

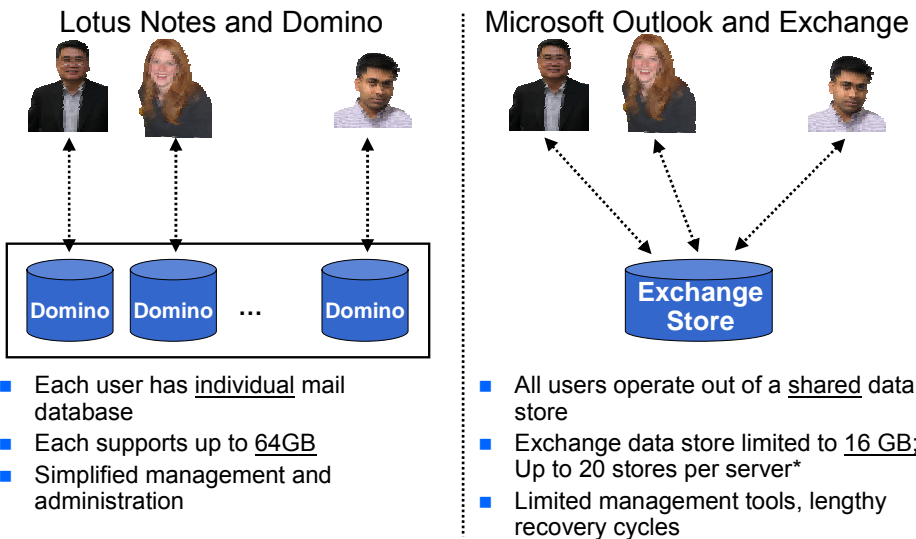


\* Optional, purchased separately

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9

## Key Domino Mail Advantage: Scalability



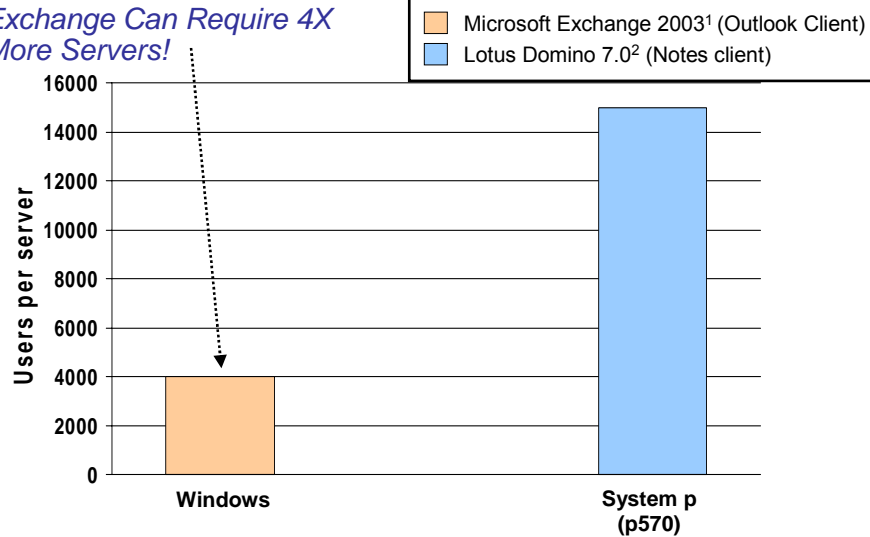
\* Microsoft Exchange Documentation

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10

## Lotus Domino is Designed to Run Efficiently on Powerful System p SMP Servers

*Exchange Can Require 4X More Servers!*



1: Exchange sizing estimate based off of Microsoft guidelines (Microsoft Exchange Server TechCenter website, "Scaling Exchange Server 2003")  
2: Domino sizing results based on NotesBench NRPC benchmark results. Full details available at <http://www.ibm.com/lotus/domino>

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11

## Collaboration at Service Oriented Finance

- Current Collaboration Environment
  - ▶ Microsoft Outlook and Exchange 2003
  - ▶ Uses Exchange public folders (shared documents, e-mails)
  - ▶ No real-time collaboration
  
- Considering migration to Microsoft's strategic collaboration offerings
  - ▶ Microsoft Outlook and Exchange 2007
  - ▶ Real-time collaboration

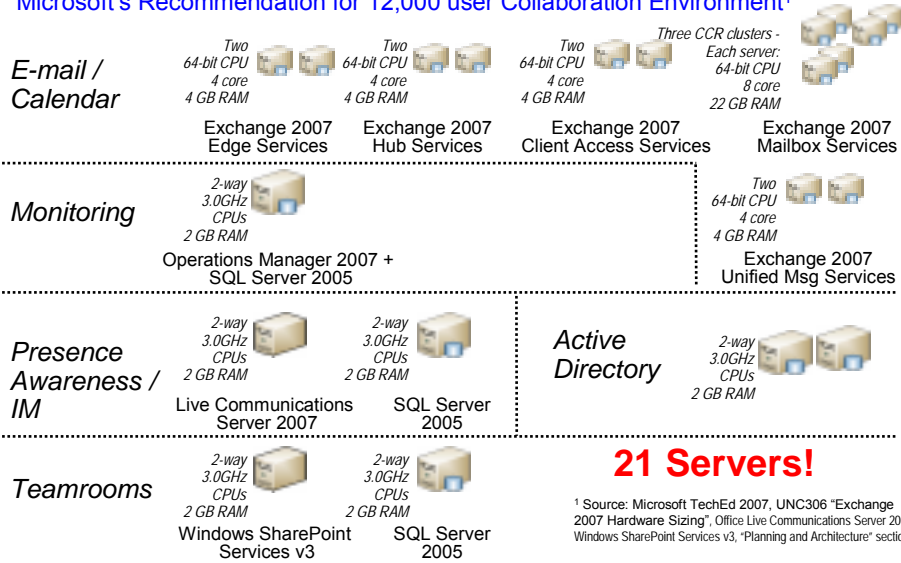
**Migrating to Domino instead of Exchange 2007 will simplify the environment and reduce overall costs**

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12

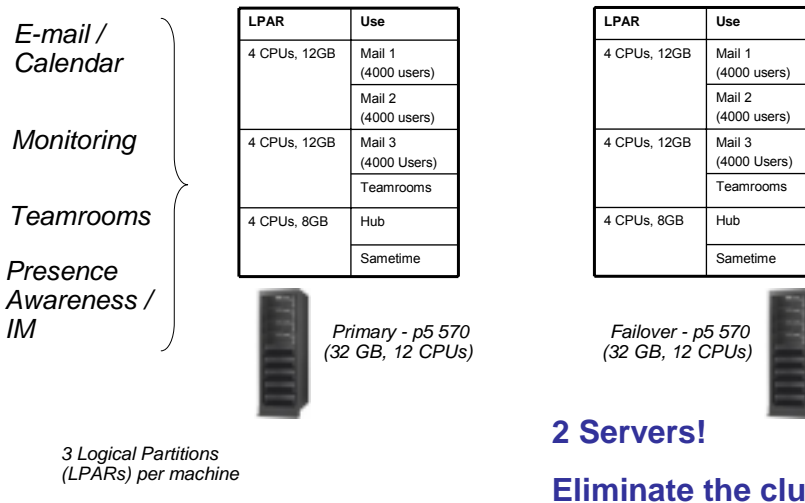
# Microsoft Clutters Your Infrastructure With Too Many Servers

Microsoft's Recommendation for 12,000 user Collaboration Environment<sup>1</sup>



# Scale Up With Domino and System p

Domino v8 and Sametime 7.5



## Three Year TCO Comparison (12,000 Users)

	Domino Collaboration Solution	Microsoft Collaboration Solution
<b>Server Hardware</b>	\$535,300 2 servers	\$502,000 21 servers
<b>Server Software</b>		
<i>E-mail / calendar</i>	\$98,800	\$27,900
<i>Presence aware. / IM</i>	Included	\$400
<i>Teamrooms</i>	Included	Included
<i>Monitoring, database, hub</i>	Included	\$9,7000
<b>Client Access Software</b>		
<i>Server CAL</i>	\$0	\$1,235,500
<i>E-mail / calendar</i>	\$1,866,700	\$946,300
<i>Presence aware. / IM</i>	Included	\$190,000
<i>Teamrooms</i>	Included	\$288,000
<b>Server Support and Environmentals</b>	\$68,800	\$722,400
<b>TOTAL</b>	<b>\$2,569,600</b>	<b>\$3,922,200</b>

53% more expensive

Source: Server costs for MS software based on Dell PowerEdge Servers and sizing from Dell Exchange Advisor; Server costs for IBM Lotus software based on IBM TechLine experts  
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15

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<b>+ Personal Productivity</b>	<b>\$0</b>	<b>\$450 x 12,000 = \$5,400,000</b>
<b>TOTAL</b>	<b>\$2,569,600</b>	<b>\$9,322,200</b>

53% more expensive

>3.5x more expensive

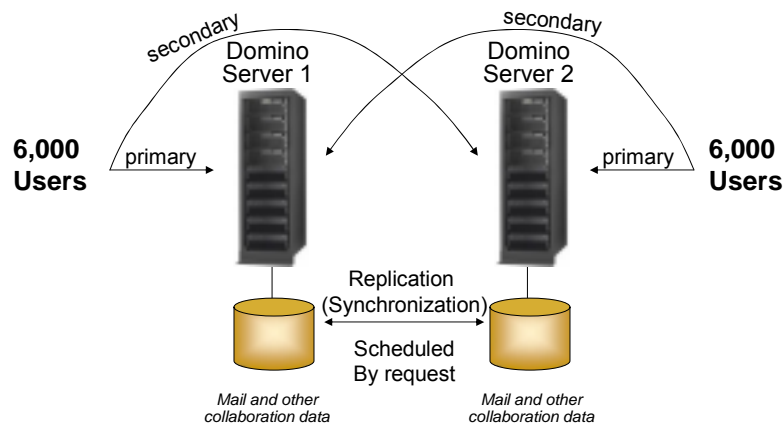
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16



## Domino Clustering for Failover

- Domino clusters share workload (not a cold standby)



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17

## Domino Lowers Administrative Costs

- Lower administrator cost due to fewer servers
  - ▶ Domain monitoring, policy-based administration, network bandwidth, SPAM and regulatory compliance, Smart Upgrade
- Quality of Service features reduce administrative tasks
  - ▶ Domino clustering provides automatic failover and load-balancing
  - ▶ Transaction-logging, automated server restarts, and diagnostic data collection help diagnose problems
  - ▶ Advanced administration tools automate repetitive tasks
- Unmatched security features are built-in
  - ▶ Granular levels: server, database, view, field
  - ▶ Integrated, seamless PKI encryption, digital signatures, Execution Control Lists (ECL)

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18

## Collaboration Platform for IBM

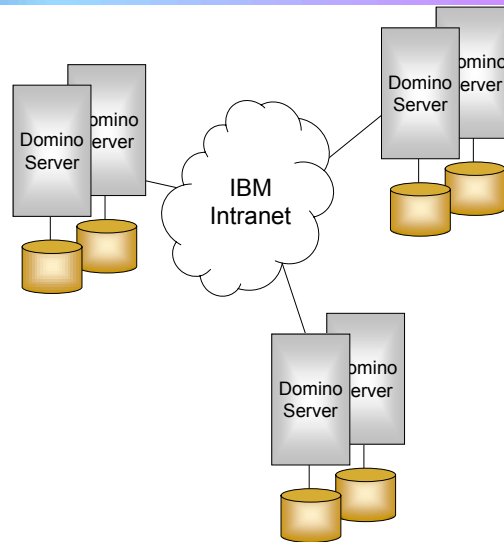
Let me show you how IBM has implemented Lotus Domino internally to support its own users.



IBM

## Lotus Domino Infrastructure for IBM North America

- 140K users
  - ▶ 52 Domino servers in 2 data centers run on various System p hardware with AIX 5.3
    - 2700 mail users per server
    - Boulder, CO and Poughkeepsie, NY
    - Includes cluster/failover servers
  - ▶ Supports many forms/workflow applications in addition to email

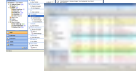


## Another Domino Advantage: Freedom-of-Choice

### Lotus software

Notes, Domino Web Access  
POP/IMAP clients, MS Outlook

### Mail Clients



### Microsoft

Outlook, Outlook Express,  
POP/IMAP clients, Outlook  
Web Access

### Client OS

Linux, Mac OS, Palm, Java  
MIDP, Windows, Windows  
Mobile, Blackberry OS



Windows, Windows Mobile,  
Blackberry OS

### Server OS

Linux, AIX, Solaris, i5/OS,  
zOS, Windows



Windows

Domino, LDAP, Active Directory



Active Directory

*Provides flexibility and preserves investments in infrastructure*

## Domino Has a History of Easier Upgrades

	Domino	Exchange
Multiple versions of software on same server	Yes	No
Operating System changes required for upgrade?	No requirement	Upgrades to Exchange have prerequisites for Windows upgrades For example, Exchange 2003 required Windows 2000 systems to upgrade to Windows 2003 first.
Migration of users to new version	No user outage, steps for migration <ol style="list-style-type: none"> <li>1. Replicate mail file from old server to the new server</li> <li>2. Run in parallel to verify new environment. When ready...</li> <li>3. Redirect client to new server via address book change</li> </ol>	Multiple, different options, all with user outages <ul style="list-style-type: none"> <li>■ Move mailboxes</li> <li>■ Update in place</li> <li>■ Export / Import mail</li> </ul>

## Migrating from Exchange to Domino

Two System p servers can replace 21 Exchange servers!

Let's simplify my infrastructure!



**Service Oriented Finance**  
**CIO**

It's very straightforward to migrate from Exchange to Domino and System p.

Let me show you.

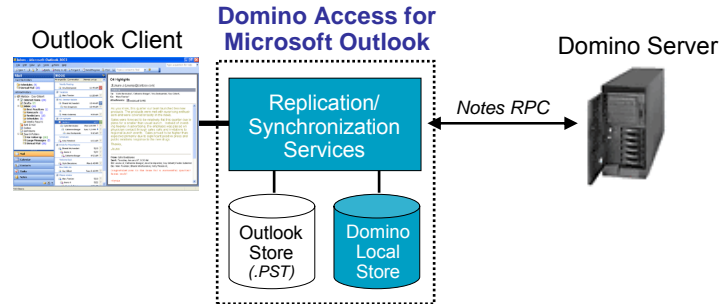


**IBM**

## Domino Migration Tool

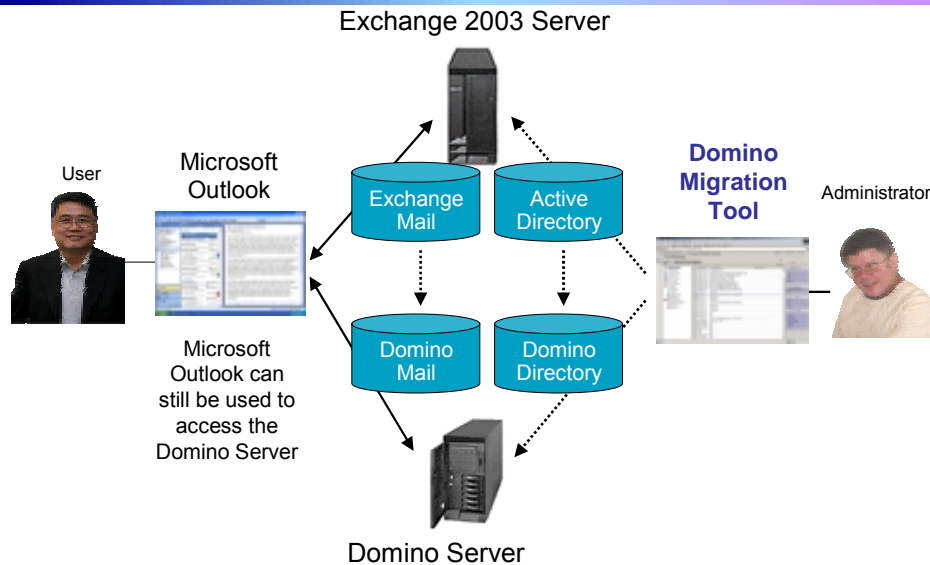
- Integrated into the Domino Administrator client
- The migration process
  1. Imports users and groups from Exchange and creates entries for them in the Domino Directory
  2. Creates an ID and mail file for every imported user
  3. Migrates the contents of mailboxes from the Exchange server into Domino
- Can be used for MS Exchange versions 5.0, 5.5, 2000, 2003

## How Domino Access for Microsoft Outlook Adds Value



Allows users to continue using their Outlook client (2000/XP/2003)

## DEMO: Exchange 2003 to Domino 8 Migration



## Migration Business Partners

- Automated Deployment Tool (Wolcott Systems Group)
  - ▶ Specifically designed to migrate and deploy the messaging client through automation and process management
  - ▶ Can reduce the time and cost of labor-intensive manual deployments, by as much as 80%
  - ▶ Integrates with standard migration tools from Lotus and Binary Tree
- Common Migration Tool (Binary Tree)
  - ▶ Automates mass migration of server side mail data
  - ▶ Requires no manual intervention
  - ▶ Provides user triggered migration with a single touch button

## Metropolitan Life Insurance Simplified I/T

MetLife®



*By migrating all of MetLife's Domino and Exchange users to a consolidated e-mail infrastructure, they **reduced the number of servers by over 50%**. The time and expense required to manage the new, environment is expected to decrease substantially.*

MetLife is one of the largest insurance and financial services providers in the U.S.

### Challenge:

- Multiple e-mail infrastructures meant costs were spiralling out of control

### Solution:

- Merged and simplified its messaging architecture on Notes and Domino
- Standardized its messaging infrastructure with a scalable, easy-to-manage server platform - IBM® System p5™ and IBM eServer™ pSeries® servers running AIX

# Reduce Costs with Domino and System p

