



Exchange 2007

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Microsoft Unified Communications



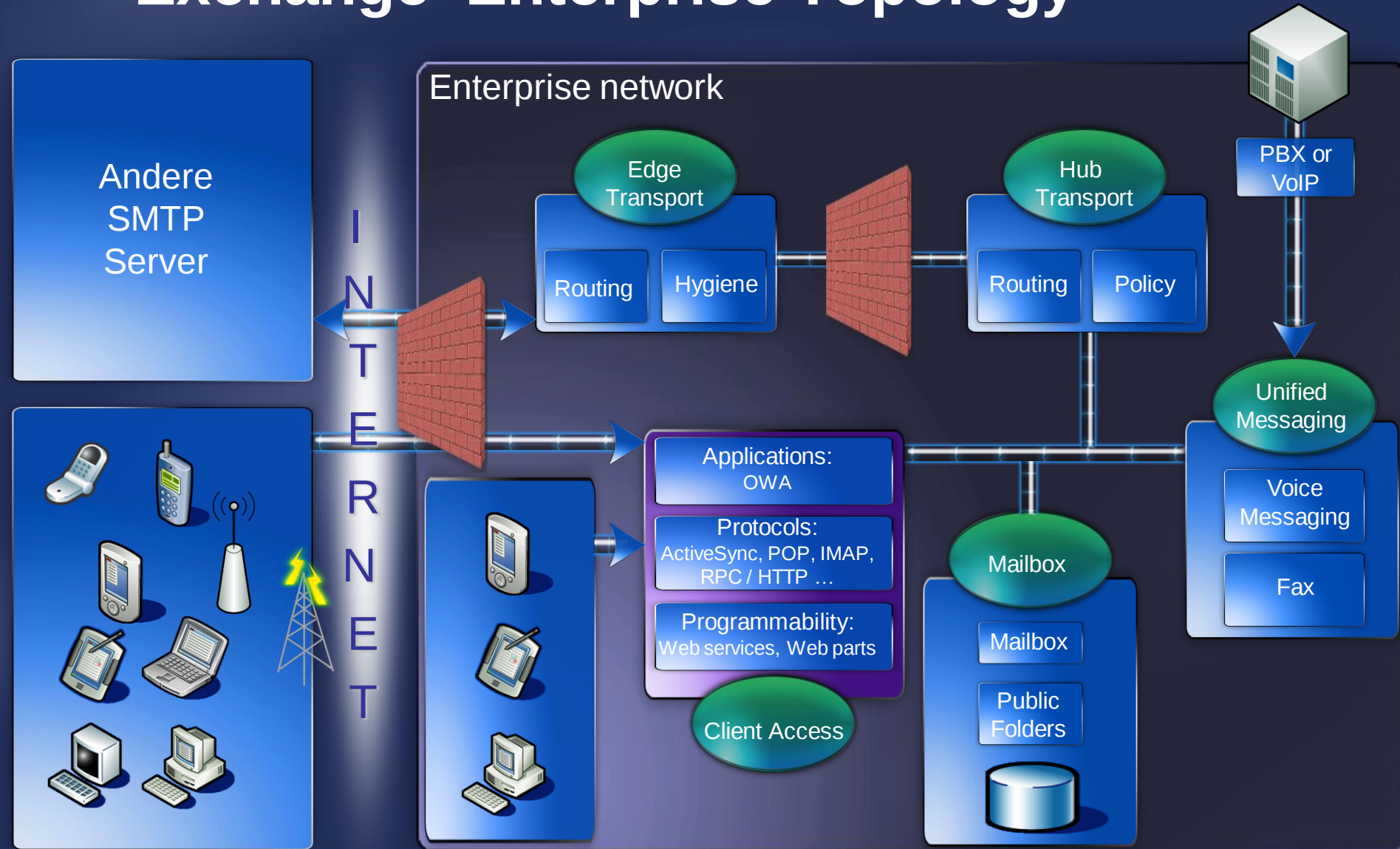
E-Mail und Termine
Präsenz und Verfügbarkeit
Instant Messaging

people i ready

Audio / Video / Webkonferenzen

Telefonie
Entwickler Plattform
Unified Messaging

Exchange Enterprise Topology



Produktstrategie (Versionen)

Exchange 2007 Standard

- ▶ Kein Datenbank Limit
- ▶ Fünf Datenbanken
- ▶ Suche
- ▶ Unified Messaging
- ▶ Compliance (Regeln)
- ▶ Web Storage System
- ▶ Windows Workflow Foundation Services
- ▶ Database snapshot (LCR)
- ▶ ActiveSync
- ▶ HTTPS/RPC
- ▶ Recovery Storage Group
- ▶ Exchange Management Pack for MOM

Exchange 2007 Enterprise

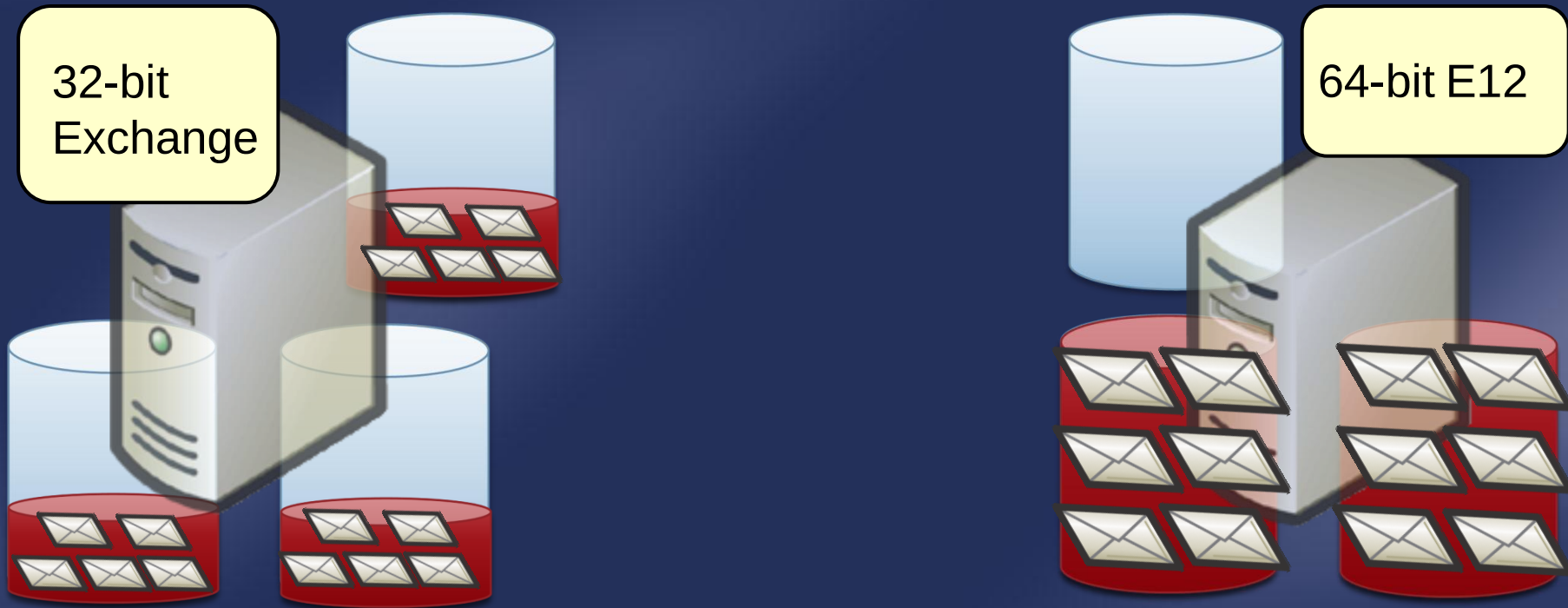
- ▶ Alles in Exchange 2007 Server plus
- ▶ 50 Datenbanken
- ▶ 50 Speichergruppen
- ▶ HA (LCR & CCR)
- ▶ Active/Passiv Clustering

Exchange (R)Evolution

	Exchange 2000	Exchange 2003	Exchange 2007
Information Worker	Outlook 2000/2002 OWA IM	Outlook 2003 OWA2003 Mobility	Outlook 2007 / Kalender OWA2007 / Suche Mobility / Unified Messaging
IT	Windows 2000 AD Server Consolidation Clustering Mehrere Datenbanken	Windows 2000 oder Windows 2003 Server AD Site Consolidation Fokus auf Sicherheit Clustering Backup & Restore End-to-end monitoring	Windows 2003 Server AD Reduzierung der IOPS Fokus auf Sicherheit Compliance Backup & Restore (LCR-CCR) End-to-end monitoring
Entwickler	CDO 1.x/MAPI WebDAV		Webparts Web-API

64 Bit

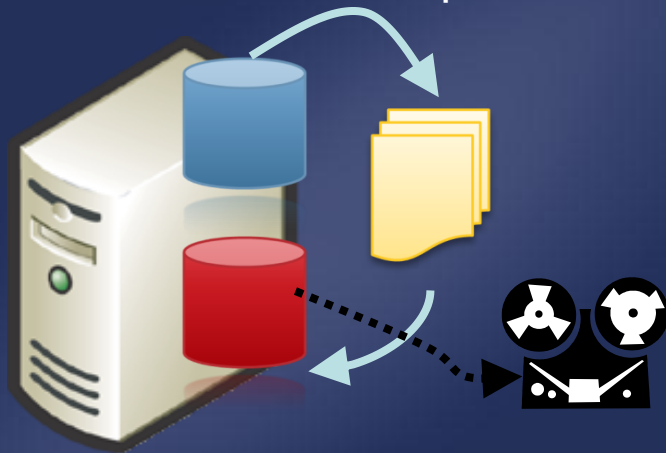
Large, Low-cost Mailboxes with 64-bit



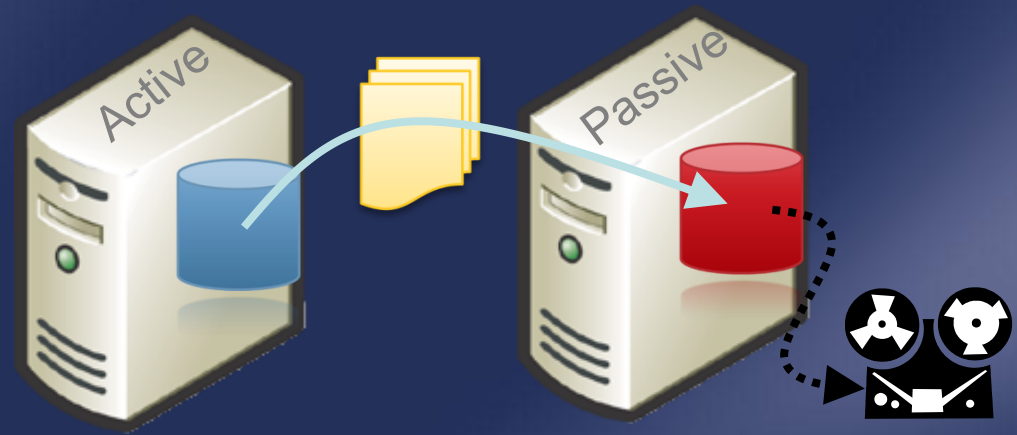
- Reduzierung der IOPS um 70%
- Einsparungen bei Speichermedien
- Größere Postfächer

Hochverfügbarkeit

Local Continuous Replication



Clustered Continuous Replication



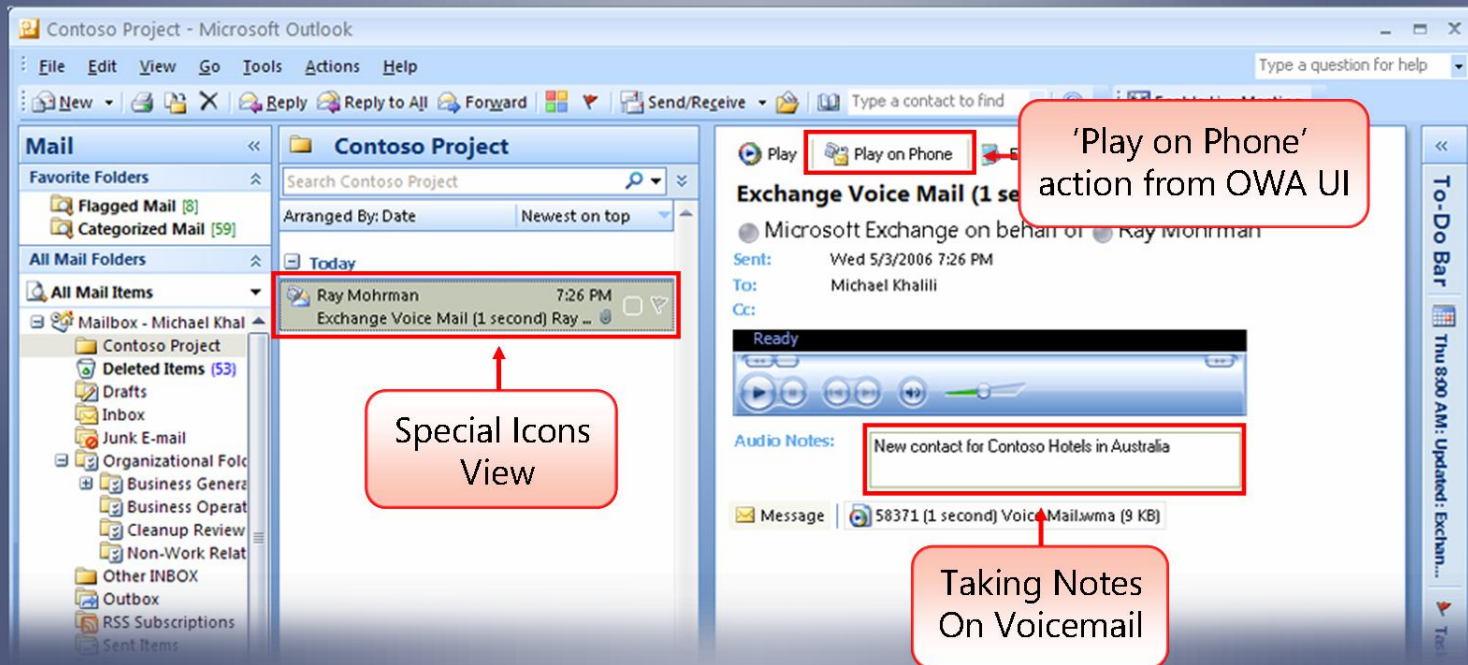
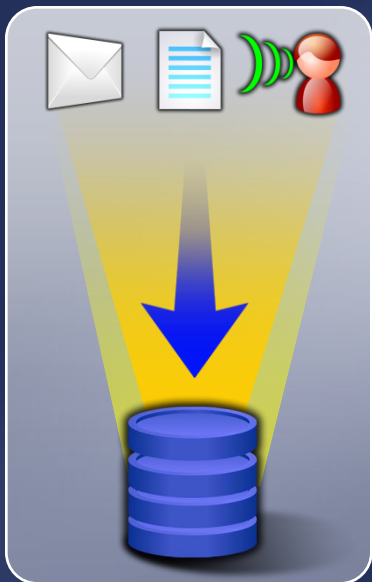
■ Backups für die Wiederherstellung

- Volle und incrementale Sicherung vom Replica ohne Einfluß auf die Produktivumgebung
- Reduzierung der kompletten Sicherung von täglich auf wöchentlich

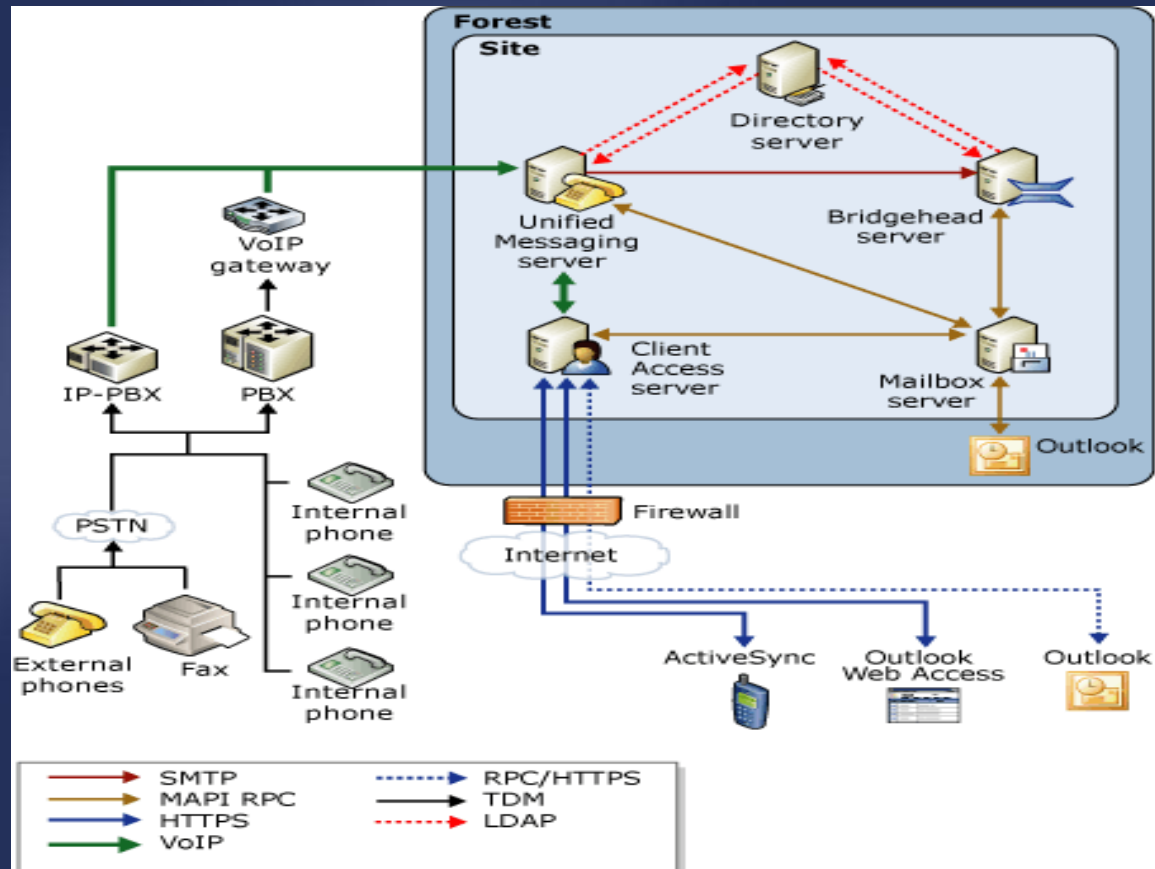
Zentraler Posteingang

Unified Messaging

- Ein Posteingang für E-Mail, Anrufbeantworter, und Fax
- Zugang zu den Daten über Telefon
- Sprachsteuerung



UM Architektur



Calendar Concierge

Calendar Concierge

File | Appointment | Write | Insert

Send | Show | Calendar | Invitation | Options | Save

Send | Appointment | Scheduling | Open Calendar | Cancel Invitation | Address Book | Check Names | Forward | Show As: Busy | Reminder: 15 minutes | Recurrence | Meeting Workspace | Attach | Categorize | Options | Save & Close

Zoom: 100% (Day View)

Friday, October 28, 2005

3:00 4:00 8:00 9:00 10:00 11:00 12:00 1:00 2:00 3:00 4:00

All Attendees

- ✓ Paul Tischhauser
- ✓ Jason Mayans
- ✓ Michael Fagor
- ✓ Ladislau Conceicao
- ✓ Eric Hartmann
- ✓ Conf Room 34/4347 (10) AV
- ✓ Conf Room 34/4561 (16) AV
- ✓ Conf Room 34/4563 (16) AV
- ✓ Conf Room 34/4601 (8) AV
- ✓ Conf Room 34/4639 (8) AV
- ✓ Conf Room 34/4687 (8) AV

Select Rooms

Search: ☒ Name ☐ All Fields **Address Book**

Name	Capacity	Approval Required	Equipment
34/1139	8	Yes	TV, telephone, LAN
34/1146	8	No	TV, telephone, LAN
34/2147	8	No	TV, telephone, LAN
34/2681	8	No	TV, telephone, LAN
34/3687	8	No	TV, telephone, LAN
34/4139	8	No	TV, telephone, LAN
34/4146	8	No	TV, telephone, LAN
34/4147	8	No	TV, telephone, LAN
34/4681	8	No	TV, telephone, LAN
34/4687	8	No	TV, telephone, LAN
34/4688	8	No	TV, telephone, LAN

Suggested Times:

October 2005

S M T W T F S

25 26 27 28 29 30 1

2 3 4 5 6 7 8

9 10 11 12 13 14 15

16 17 18 19 20 21 22

23 24 25 26 27 28 29

30 31 1 2 3 4 5

Duration: 30 minutes

8:00 AM
3 of 3 free 1 of 2 free
6 rooms - Conf Room 34/...

8:30 AM
3 of 3 free 1 of 2 free
5 rooms - Conf Room 34/...

11:00 AM
2 of 3 free 2 of 2 free
1 room - Conf Room 34/...

11:30 AM
2 of 3 free 2 of 2 free
1 room - Conf Room 34/...

12:00 PM
2 of 3 free 2 of 2 free
2 rooms - Conf Room 34/...

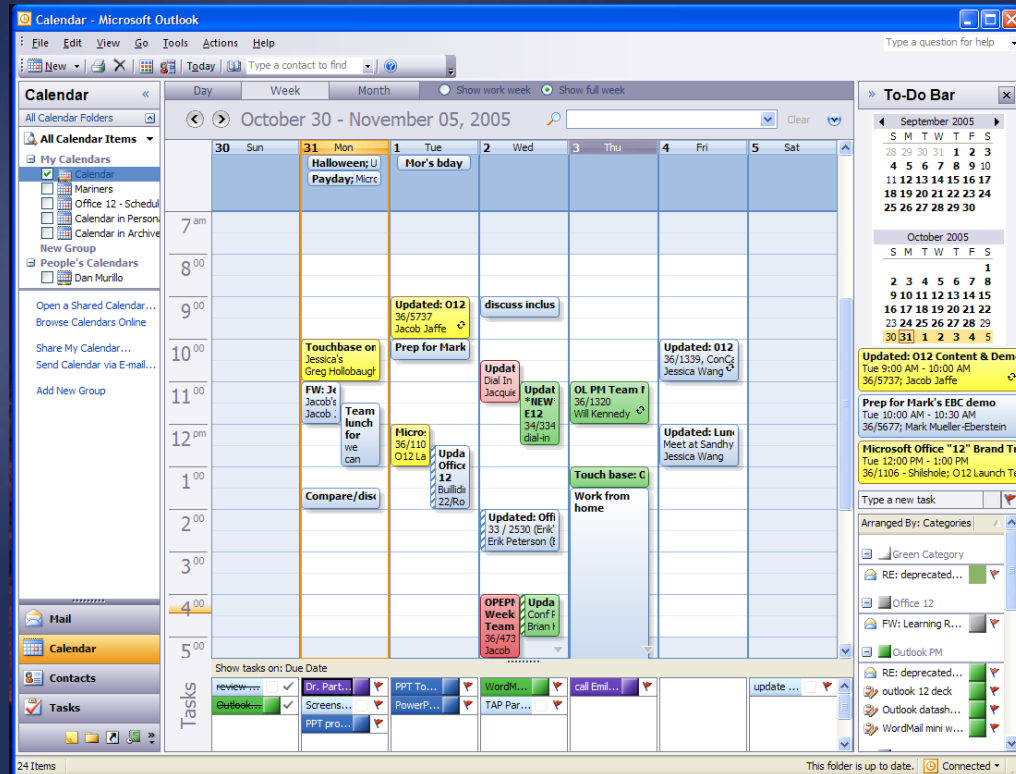
9:00 AM
2 of 3 free 1 of 2 free
3 rooms - Conf Room 34/...

9:30 AM
2 of 3 free 1 of 2 free
4 rooms - Conf Room 34/...

2:00 PM
2 of 3 free 2 of 2 free
2 rooms - Conf Room 34/...

Suggestion Quality:
☐ Good ☐ Fair ☐ Poor

Aufgaben



Outlook Web Access Erweiterung

The screenshot shows the Outlook Web Access interface for Paula Bento. The browser address bar displays `http://umdemo.dnsalias.com/owa/`. The interface includes a menu bar (File, Edit, View, Favorites, Tools, Help), a toolbar (New, Reply, Reply to All, Forward), and a left sidebar with folders like Mail, Calendar, Contacts, Deleted Items, Drafts, Inbox, Junk E-mail, Notes, Outbox, Sent Items, Tasks, and Search Folders. The main content area shows the 'Inbox' with 11 items, 1 unread. A search bar labeled 'Search Inbox' is present. The email list shows several messages from Erik Ryan and Paula Bento. The selected email is 'FW: Welcome to the team!' from Erik Ryan, dated Thursday, June 08, 2006 14:39. The email body contains a welcome message from Jeff Ressler to the UM Team, dated Monday, June 05, 2006 3:11 PM. The email is categorized with 'Red' and 'Blue' tags. Annotations with arrows point to various features: 'Suche in der Globalen Adressen Liste' points to the 'Find Someone' button; 'Sucheingabe' points to the 'Search Inbox' bar; 'Erinnerungen' points to the '3 Reminders' button; 'Kategorisierung' points to the 'Categories' section; and 'Lesebereich' points to the email body content.

Suche in der Globalen Adressen Liste

Sucheingabe

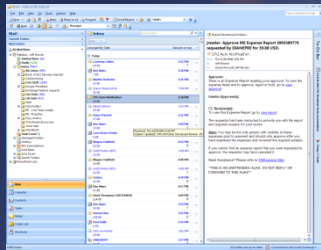
Erinnerungen

Kategorisierung

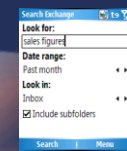
Lesebereich

.NET

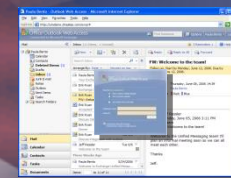
Microsoft®
Office Outlook®



Microsoft®
**Office Outlook®
Mobile**



Microsoft
Exchange Server 2007

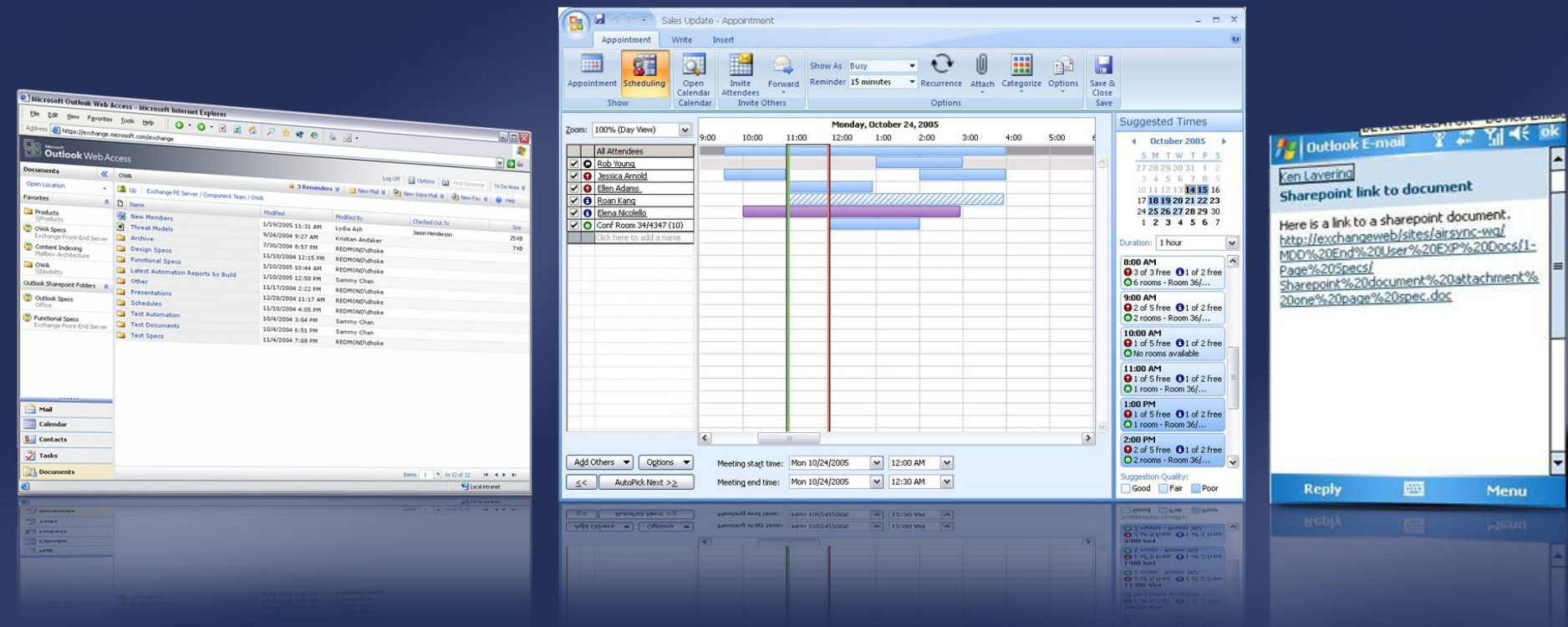


Microsoft®
**Office Outlook®
Voice Access**



Microsoft®
**Office Outlook®
Web Access**

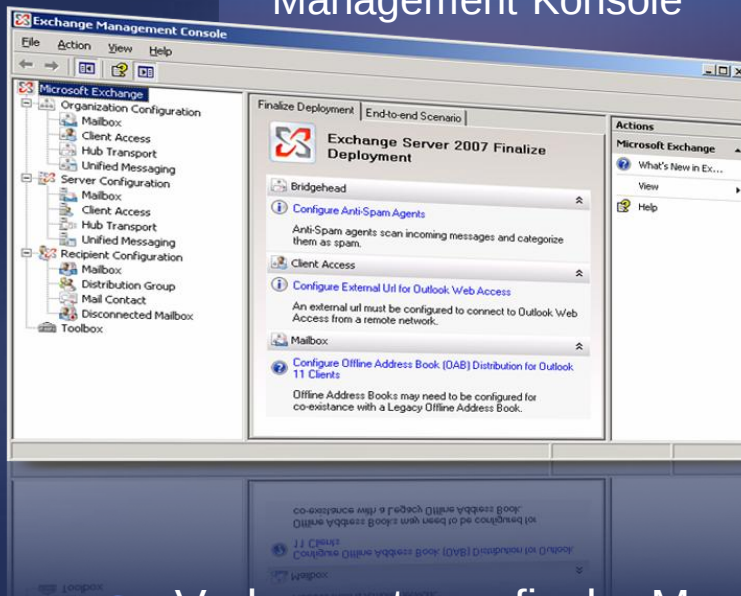
Produktivitätssteigerung



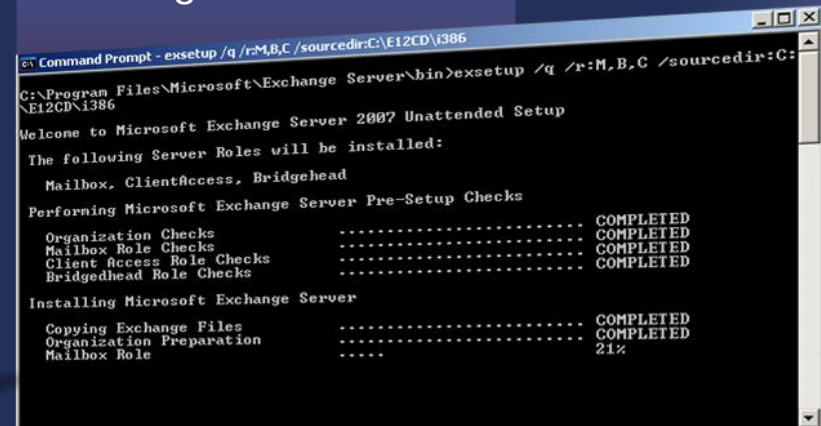
- Externer Zugang zu Daten auf dem File Server & SharePpoint Server ohne VPN
- Schnelle Suche nach Kontakten, Ressourcen und Terminvorschlägen
- Quickly find people, resources and best times for meetings
- Dokumentenansicht ohne installierte Applikation innerhalb Outlook und OWA

Steigerung der administrativen Effizienz

Exchange Management Konsole



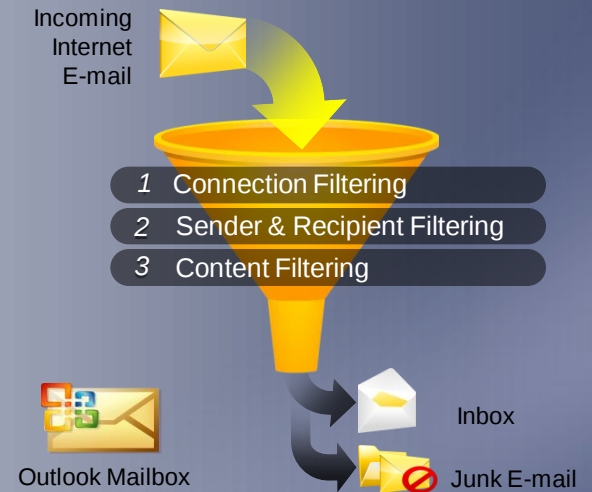
Exchange Management Shell



- Verbesserte grafische Management Konsole
- Command line shell unterstützt Automation und Batching

Integrierter Schutz

- Antivirus und Anti-spam Schutz
 - DMZ
 - Hosted
 - Intranet
- Automatische Verschlüsselung
 - Vom Client zum server
 - Server zu server
 - Internet e-mail
- SSL web access out-of-the-box

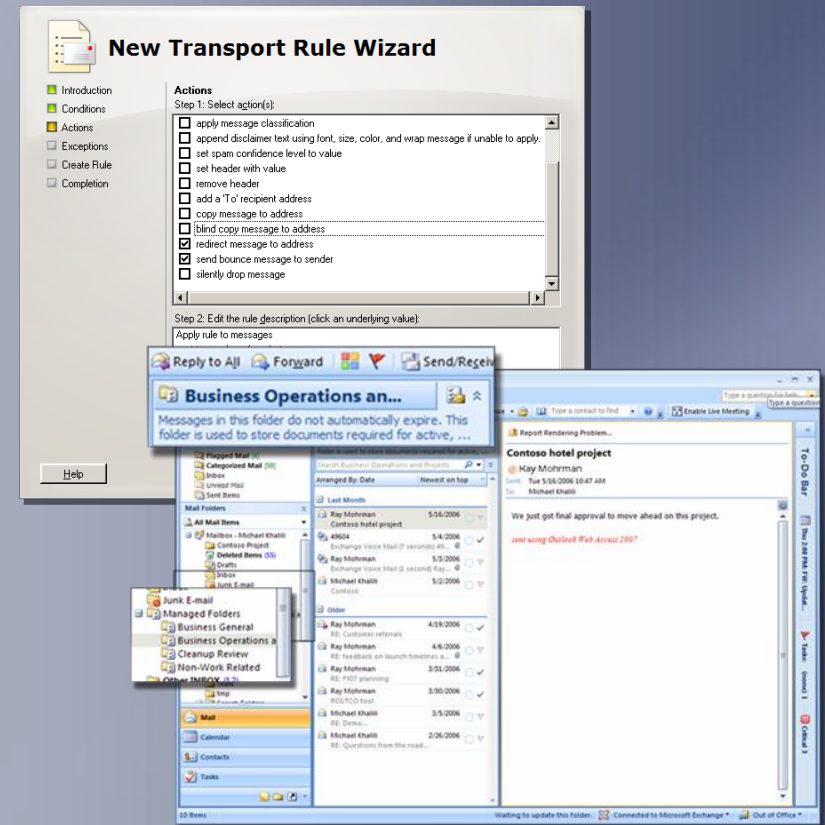


Microsoft®
Exchange
Hosted Filtering

Microsoft®
Forefront™
Security for Exchange Server

Compliance

- Kontrollierter Mailfluß über den Server
 - Überwachung des Headers und des Inhaltes
 - Aktionen (Hinzufügen einer Klassifizierung, einer Verschlüsselung, einer Erklärung)
- Kontrollierter E-Mail Lebenszyklus
- Parallele Suche über mehrere Postfächer hinweg



Microsoft IT

Microsoft®

June 2000 - March 2001



10 Million+ spam
Messages Stopped
At Gateway



106,000+ Exchange
Server Mailboxes

Redmond

Dublin

Singapore



75K+ Employees
180K+ PCs

Sao Paulo

99.99%
Availability



3M+ internal e-mail
10M+ external e-mail
messages per day

92 Exchange Servers
32 Mailbox Servers

Executive Briefing Center

Entwicklungsstop in Exchange 2007

Diese Punkte werden in Exchange 2007 bis 2016 supportet
Eine Integration in E14 ist aktuell nicht geplant

- **Public Folders**
- **CDOEx**
- **WebDAV**
- **ExOLEDB**
- **Store events**
- **Streaming backup**

Nicht mehr inExchange 2007 vorhanden

IT Pro

- Co-existence with E5.5
- GroupWise connector and migration tools
- Admin groups
- Routing groups
- Active-active clustering
- X.400

End-User

- OWA access to Public Folders
- IMAP access to Public Folders
- NNTP access to Public Folders
- Outlook Mobile Access (WAP)
- OWA rule creation/editing
- S/MIME support in OWA

Developer

- Transport Event Sinks
- CDO 1.2
- CDO for Workflow
- CDOExm
- Exchange WMI classes
- IFS (M:)
- Event Service
- Exchange Web Forms
- Workflow Designer

Exchange 2007 Lizenzierung

Servers

Exchange 2003

Enterprise Edition Server

Standard Edition Server

Exchange 2007

Enterprise Edition Server

Standard Edition Server

CALs

Exchange CAL

Exchange **NEW** *Enterprise* CAL

Exchange *Standard* CAL

Exchange 2007 CALs

Exchange 2003 CAL

Exchange CAL

- Outlook
- Mobiler Zugriff (Mobile Endgeräte, OWA und HTTPS/RPC)
- Anti-spam



Exchange 2007 CAL

Exchange Standard CAL

Erweiterungen zu Exchange 2003

- Verbessertes Anti-spam
- Verbesserte Administrierbarkeit
- Erweiterte mobile Sicherheit

Neu

- Mobiler Zugriff auf Dokumente im Intranet
- Compliance Integration
- Suche
- Server Regeln

Exchange Enterprise CAL

Zusätzlich

- Unified Messaging
- Per-user journaling
- Managed email folders
- AV/AS (Services offering)
 - Exchange Hosted Filtering
 - Forefront Security für Exchange Server 2007

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Schutz über Hosted Services

Microsoft Exchange Hosted Filtering

- Real-time threat prevention features
- Multi-layer anti-spam and antivirus
- Customized content and policy enforcement

Microsoft Exchange Hosted Archive

- E-mail retention for help with compliance and e-discovery
- Customized report generation for help demonstrating compliance
- Fully indexed, searchable archive

Microsoft Exchange Hosted Continuity

- Uninterrupted e-mail accessibility
- Rapid recovery from unplanned disasters and network outages
- Thirty-day rolling historical e-mail store

Microsoft Exchange Hosted Encryption

- Full e-mail encryption
- No public and private key management
- Gateway, policy-based e-mail encryption

Verbesserte Suche

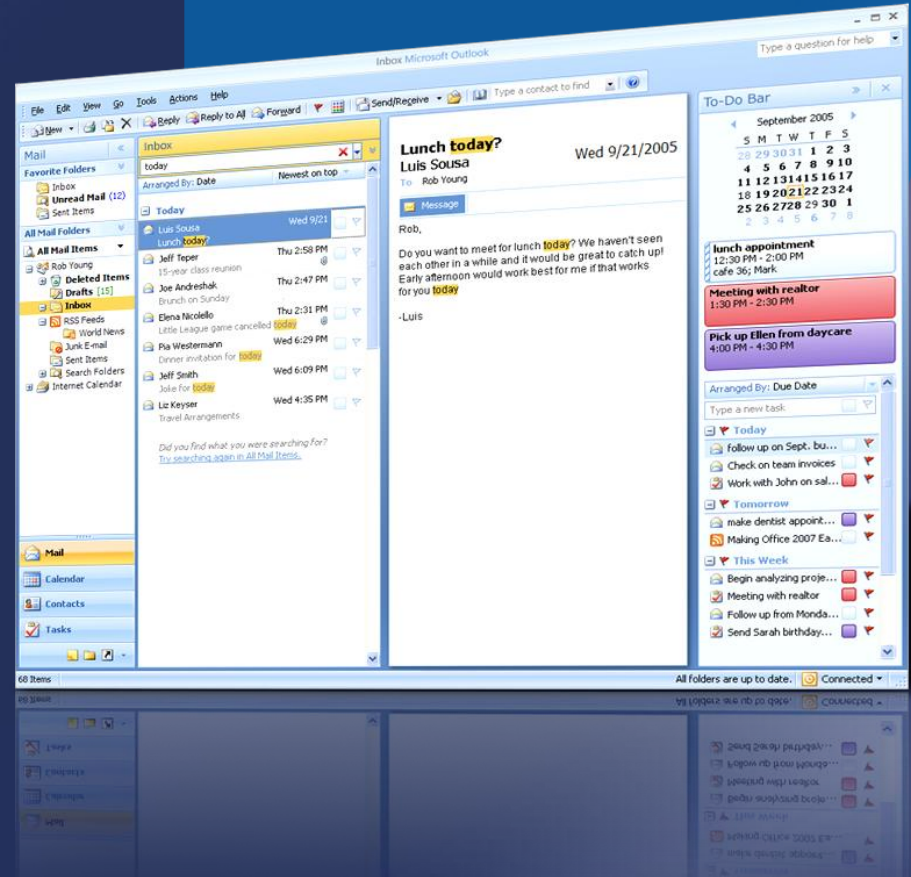
- **Cached Mode**

- Based on Outlook's new instant search
- On Windows Vista, takes advantage of Vista's indexer

- **Online Mode**

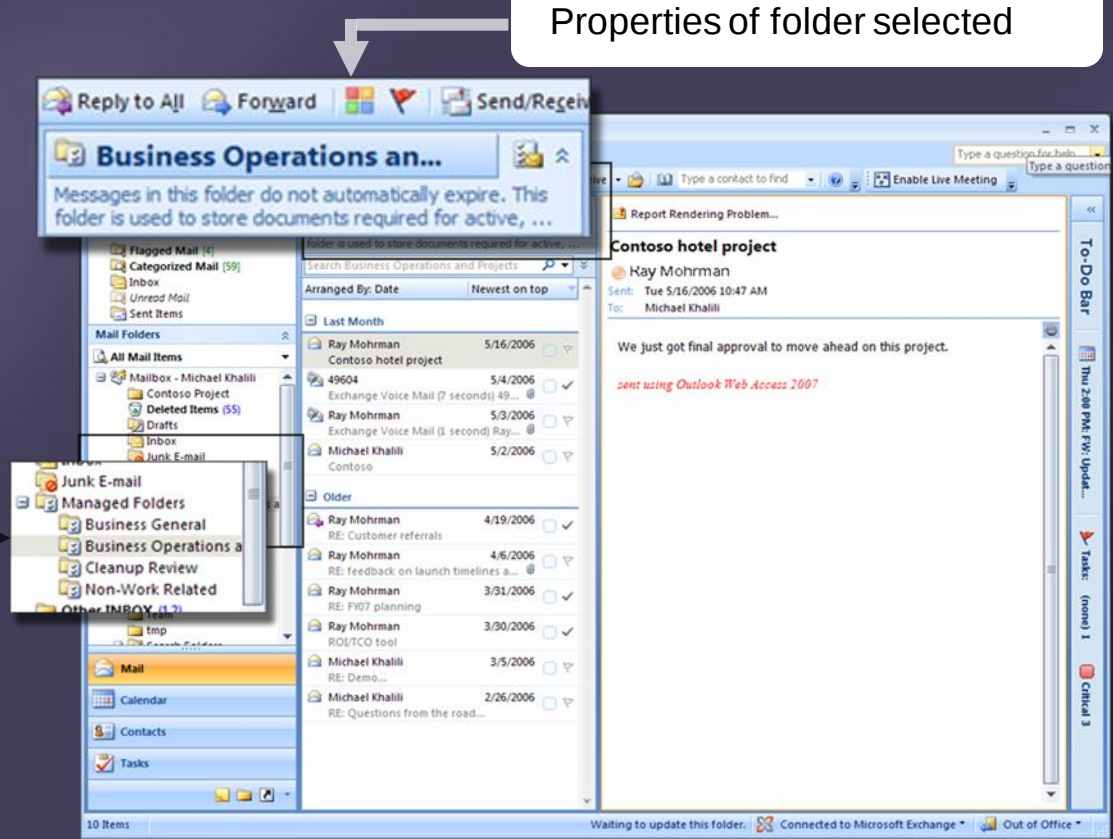
- Based on Exchange Server 2007's new content indexer
- Dramatically faster than in Exchange 2003 with little load on server

Search in Outlook 2007



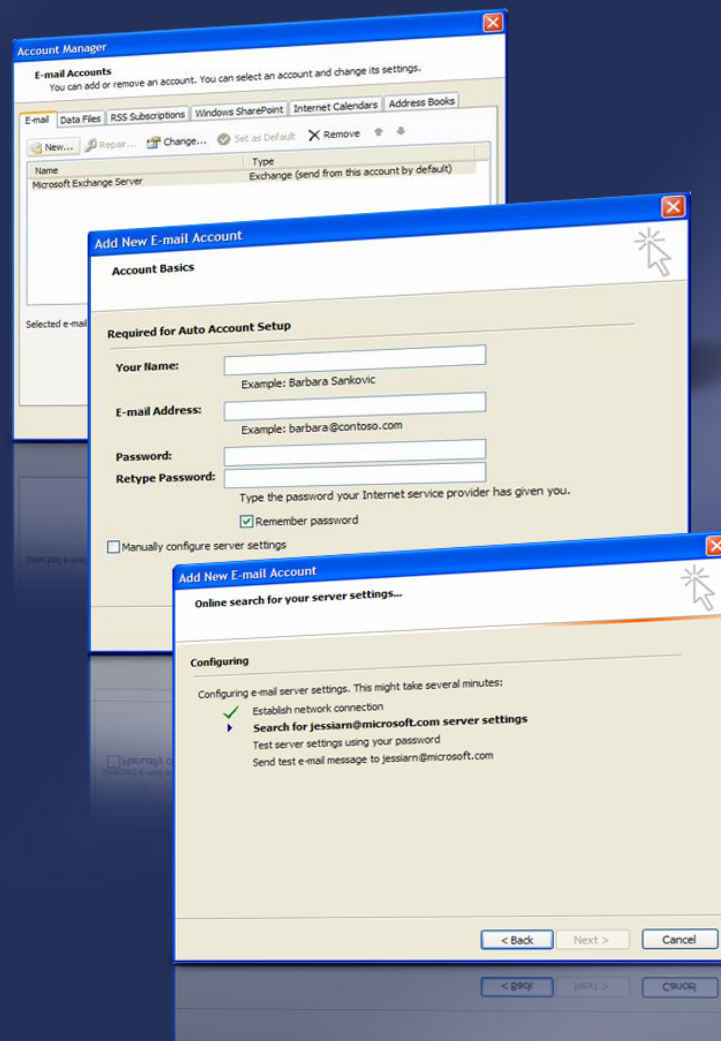
Compliance via Managed Folders

- Folders created by administrator
- Appear among mailbox folders
- E-mail is deleted based on expiration policies unless under retention
- Messages under retention filed by users into folders
- Granular journaling keeps audit trail of messages
- Messages in folders can be archived



Autodiscover and Go

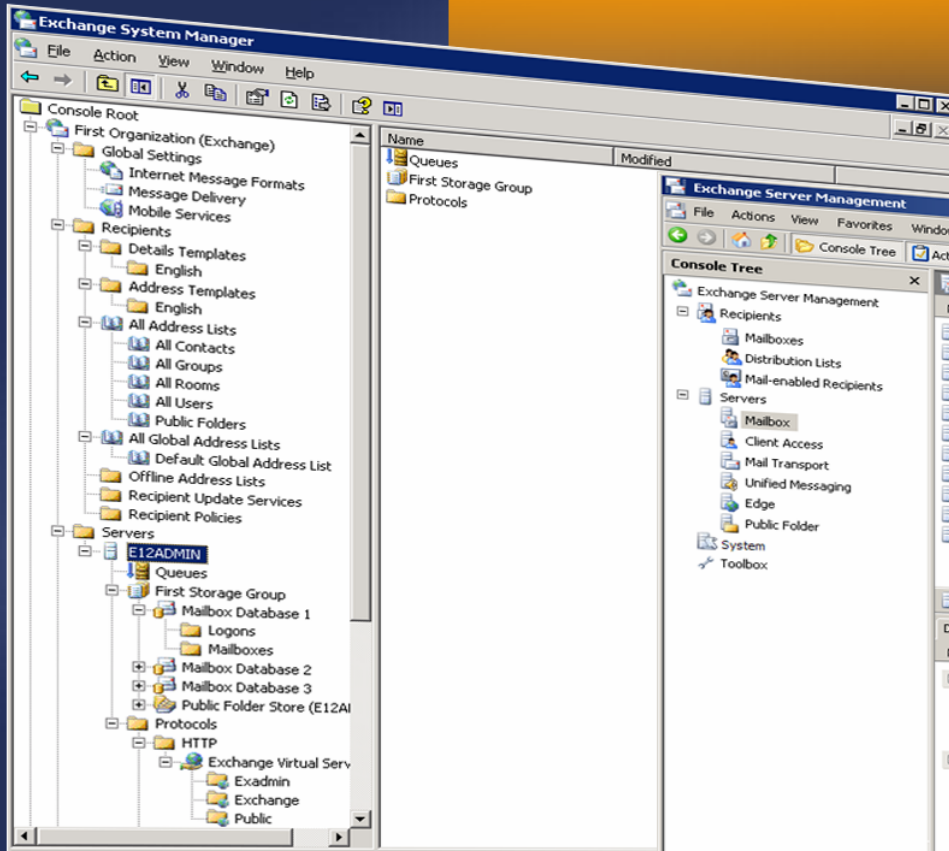
- Only need to know e-mail address and password
- Exchange and Outlook then automatically connect and setup profile
- Mailbox moves and backend failovers transparent to end user, even cross-forest
- Reduces help desk calls
- Eliminates needs for deployment scripts



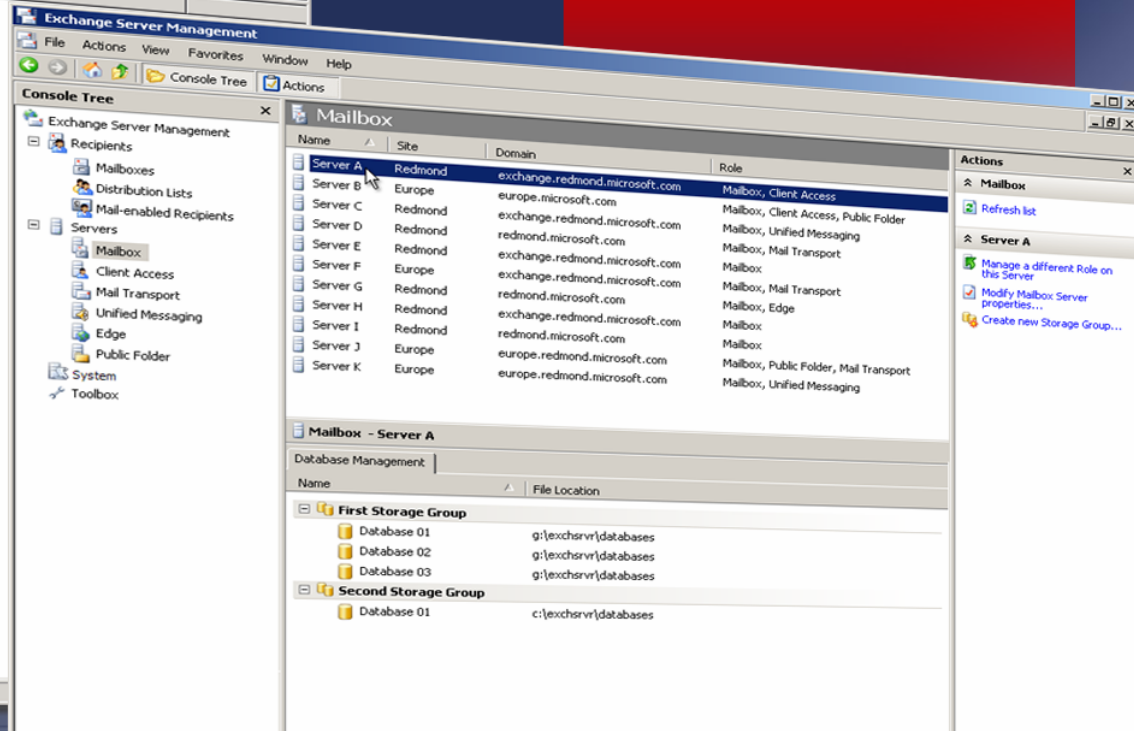
Exchange Management Console

Exchange 2003 versus Exchange 2007

Exchange 2003



Exchange 2007



Built-in Protection

Exchange 2000 versus Exchange 2007

	Exchange 2000	Exchange 2007
Compliance	• Journaling per database • Archiving available through 3rd parties	• Flexible transport rules available for compliance; scan message content and modify, encrypt, journal, bounce etc • Journal to archive per database, per distribution list or per user. Also journal to any SMTP address for archive. • Archiving and filtering available on-premise or through hosted service • Fully-indexed mailboxes with cross-mailbox, granular search
AV/AS protection	• AV/AS through 3rd party products	• Anti-spam, anti-virus and anti-phishing capabilities on server (outside corporate network with Edge) and Outlook client • Multiple layers of anti-spam with frequent updates • Outlook Safe Sender Lists respected on Edge • Extensibility for virus scanning in transport • Embedded SenderID support
Confidential Messaging	• Encryption through Key Management Services/PKI	• Exchange 2007 internal encryption <u>in transport</u> by default and opportunistic TLS • IPSec support
Business Continuity	• No continuous backup • 2 and 4-node clustering	• Continuous replication of data to provide hot replica for availability • Configure local, clustered or geographically dispersed clusters. • Automated updates and patching of servers using either Windows Update on the web, Windows Update server on-site, or Microsoft Systems Management Server (SMS) • Flexibility of choice: on-premise or hosted multi-layer protection • Up to 8 node clustering • Replication drives fewer back-ups to tape • Back-ups can be taken from replica server, avoiding impact to primary server

Anywhere Access

Exchange 2000 versus Exchange 2007

	Exchange 2000	Exchange 2007
Unified Messaging	Unified messaging available through 3rd parties	- Unified Messaging built into Exchange infrastructure; provides unified Inbox and mgmt for e-mail, voicemail, fax - Calendar and e-mail management on-the-go with Outlook Voice Access - Automated Attendant provides call in access to corporate directory with customizable menus
Mobile Access	- No central management of device policy and security - Mobile Information Server with Outlook Mobile Access required to support mobile email	- Exchange ActiveSync integrated into Exchange infrastructure - DirectPush enables up-to-date email - Device security and policies managed from Exchange infrastructure - Search from device to remote Exchange mailbox - Software and updates deployed using system management tools - Robust experience with Outlook Mobile and Office Mobile
Remote Access	- VPN required to access e-mail remotely through Outlook client - VPN required to access internal SharePoint or UNC documents remotely, or documents can be stored on the Web Storage System - Outlook Web Access experience limited	- RPC/HTTP enables remote access through Outlook client without requiring a VPN connection - LinkAccess enables users to access SharePoint and UNC files via OWA – no need for VPN - Outlook Web Access provides more robust Outlook 2007-like experience - WebReady Document Viewing converts attachments attachments to HTML and enables protection from information leakage
Collaboration & Productivity	Basic calendaring with limited OWA interface and free/busy information	- Scheduling Assistant, Calendar Attendant and Resource Booking Attendant make calendaring easier - Outlook performance improved with cache mode and automatic file compressions - Granular permissions with Outlook 2007 for sharing calendar details - Schedule Out of Office messages to turn on and off automatically

Operational Efficiency

Exchange 2000 versus Exchange 2007

	Exchange 2000	Exchange 2007
Deployment	- Configuring Outlook client requires end-users to know server information - Deploying server roles complex	- Auto-discovery of Outlook clients makes end-user set up easy - Server role architecture makes Exchange deployment easier - Exchange Business Process Analyzer (ExBPA), integrated with Exchange 2007, checks for configuration errors before installation
Scalability	- Limited to 4 MB memory allocation 4 Storage Groups, 20 Databases total across SG (Enterprise Edition)	- Exchange on x64-bit technology can deliver up to a 75% reduction in required IOPS - X64 supports larger mailbox size for server or more mailboxes per server - X64-bit increases addressable memory above 4 GB limit - Maximum of 50 Storage Groups, Max 50 Databases (Enterprise Edition)
Administrative Productivity	- Scripting of management tasks unavailable - Basic GUI	- Exchange Management Shell provides a scripting command line shell for automating, batching and reporting - Improvements in GUI and navigation in Exchange Management Console
Extensibility	Limited API set	- Web Services (XML and SOAP) API for LOB integration on any platform, any language - Broad Standards support: SMTP, IMAP, POP, MIME, SIDS - API unification (Outlook Object Model) .NET Framework support

Exchange Enterprise CAL Eigenschaften

Feature	Description
Unified Messaging	Users can access and manage their voice, email, calendar and fax messages through a single inbox • Listen to email and appointments via the phone • Receive voicemail in email inbox • Receive faxes in email inbox
Compliance	Per-user Journaling: Administrator can create journaling rules for individual employees or groups • Journal all mail sent to or from an internal user • Journal all mail sent to or from a distribution list Managed Email Folders: Administrator can create managed email folders with rules associated with them • Create push or opt-in folders • Set expiration, journaling, and quota rules on folders
Anti-virus/Anti-spam	Customers get onsite <u>and</u> hosted anti-virus/anti-spam protection. • Choose Onsite (Forefront Security for Exchange Server 2007) and/or Hosted (Exchange Hosted Filtering)