

# Microsoft Windows Mobile Platform

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# Agenda

- Windows Mobile Strategy and Platform
- Exchange Mobility Strategy
  - Exchange Scenarios
  - ActiveSync Enhancements with SP2
- Demo
  - Deploy OWA with ISA Server 2004

### Developer Tools

- 7 Million Visual Studio Developers
- .NET Compact Framework

### Windows Client

- 500M users
- Center for PIM, Media, Imaging, Web

### Speech

- Voice Command

### Location

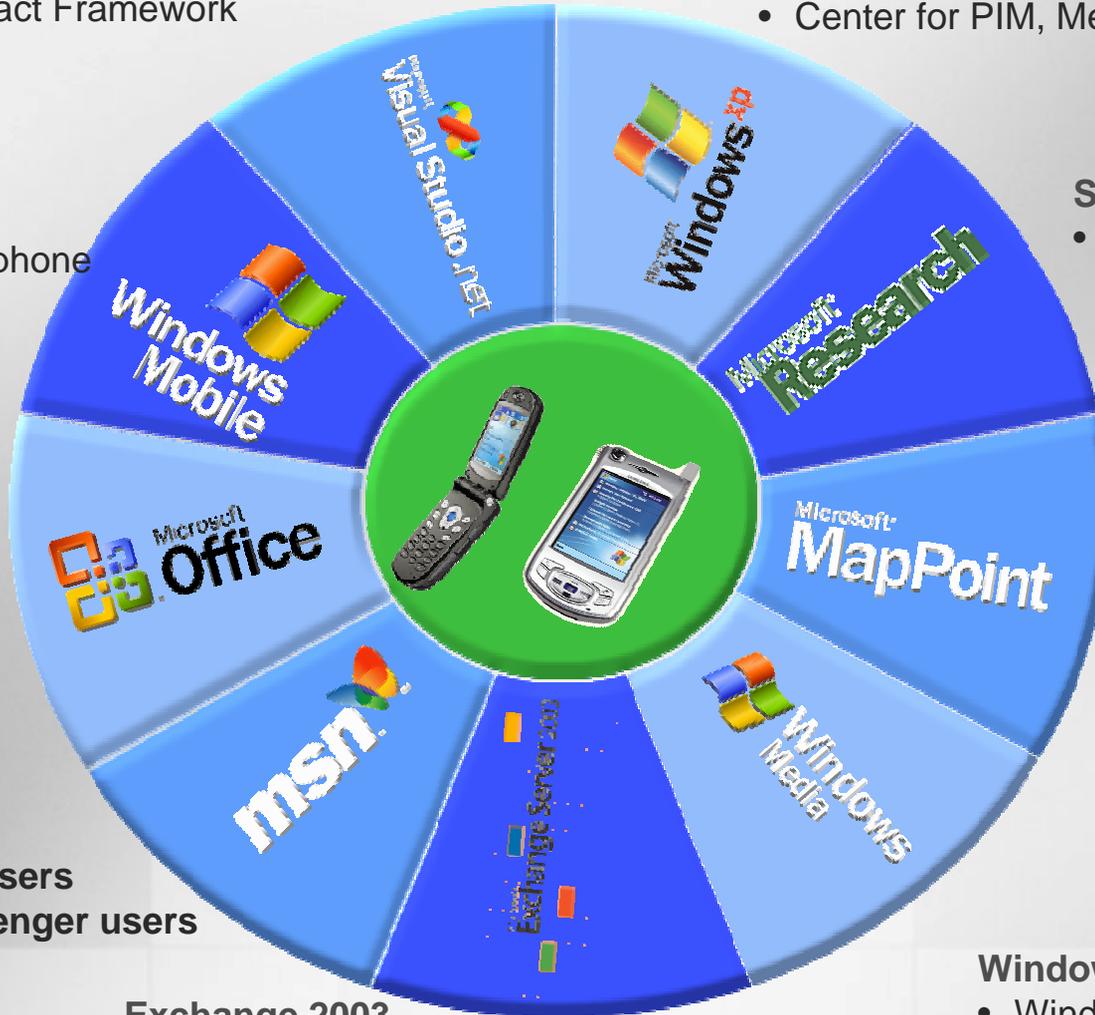
- Streets & Trips
- MapPoint Web Services

### Windows Media

- Windows Media Player
- World Class formats

### Exchange 2003

- 60MM Exchange Seats
- ActiveSync Server Sync



### Windows Mobile

- Pocket PC and Smartphone
- Pocket Applications

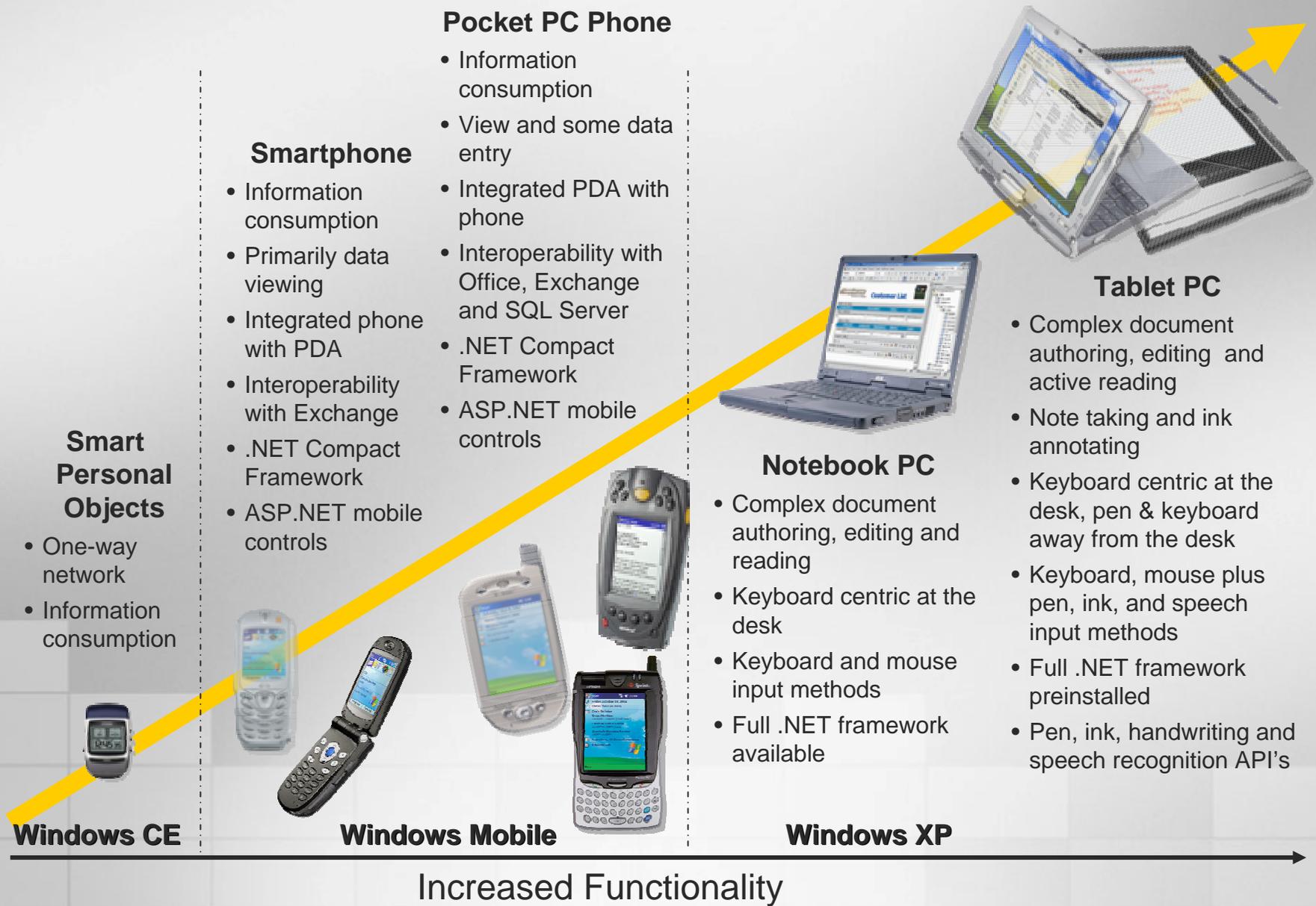
### Office

- 250MM users
- Outlook 2003

### MSN/Hotmail

- 150MM+ Hotmail Users
- 109MM MSN Messenger users

# Microsoft Mobile Platform



# Windows Mobile Devices



Pocket PC

## Data Centric

- Touch Screen and stylus
- Integrated QWERTY

## Primary User Scenarios

- Mobile Outlook
- Voice and text communication
- Media

## Extensible platform

- LOB applications, etc

## Hardware

- WAN and WiFi
- Square, VGA, qVGA
- Portrait and landscape
- >100cc but decreasing



Smartphone

## Phone First with Data

- One handed navigation
- Keypad and joystick

## Primary User Scenarios

- Voice and text communication
- Mobile Outlook
- Media

## Extensible platform

- Games, etc.

## Hardware

- WAN
- 176x220, qVGA
- <100cc



Portable Media Center

## Dedicated Media Device

- Highly optimized UI
- Non touch, dedicated button navigation
- Easy, fast, and automatic media sync

## Primary User Scenarios

- Play/view audio, video, photos, AND recorded TV
- Store and play large content libraries
- Project to TV/Stereo

## Dedicated platform

## Hardware

- qVGA, 320x240
- Large user store (20-40GB)
- TV/Stereo Out

# Windows Mobile Momentum

## Pocket PC

- Growing Market Share – 40% WW
  - US 40%, EMEA 57%, Asia 33%, Japan 28%

## Pocket PC Phone Edition

- 10+ distinct designs shipped
- 2<sup>nd</sup> and 3<sup>rd</sup> generations shipping

## Smartphone

- 2 of the top 3 handset vendors shipping
- 9 distinct designs shipped
- Demand in Asia, specifically China, strong

## Partners and Developers

- 40+ Hardware Partners
- 50+ Mobile Operators
- 380,000+ Professional WM Developers
- 7,000+ MSPP members, 60+ MPAC members



# Exchange ActiveSync Licensing



**Microsoft Exchange  
ActiveSync**  
Secure, direct access to  
corporate email and  
calendar info.<sup>1,2</sup>

Microsoft and palmOne have teamed up to provide wireless over-the-air synchronization of email and calendar data between Exchange Server 2003 and the Treo™ smartphone without the middleman – with Microsoft Exchange ActiveSync.<sup>2</sup> Built right in to the new Treo 650 smartphone, Exchange ActiveSync enables these two industry products to work together without any connecting

## Nokia licenses ActiveSync protocol from Microsoft

Posted Feb 14, 2005, 6:10 AM ET by Jesse D. Lewin

Related entries: [Cellphones](#)

Nokia announced they've licensed the ActiveSync protocol for synchronization from Microsoft. This move will put future Nokia devices right next to the most popular business application on the planet, as ActiveSync is an integral component of Microsoft's Exchange Server. While the Nokia PC Suite will continue to support the open OMA standard for data synchronization, the addition of ActiveSync will certainly put Nokia's Series 60 and Series 80 handsets at the top of corporate IT recommended device lists.

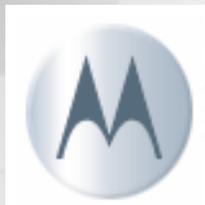


## Symbian licenses Microsoft Exchange Server ActiveSync Protocol for Symbian OS

**London, UK – March 22, 2005** – Symbian Limited today announced that it has licensed the Microsoft Exchange Server ActiveSync protocol for use in Symbian OS™, the leading open standard operating system for advanced mobile phones.

Under the terms of the agreement, Symbian will develop an Exchange Server ActiveSync protocol – plug-in – for the Symbian OS messaging architecture to enable Symbian OS licensees – the world's leading mobile phone manufacturers – to include in their Symbian OS-based phones direct over-the-air (OTA) synchronization capabilities for email, calendar, contacts and other personal information management (PIM) data supported by Microsoft Exchange Server 2003.

Symbian will make the Exchange Server ActiveSync protocol plug-in available to all Symbian OS licensees which, when coupled with a separate standard distribution agreement with Microsoft, enables the licensees, at their discretion, to implement direct synchronization capabilities with Microsoft Exchange Server 2003 in their selected Symbian OS products with reduced time to market, improved interoperability and lower development costs.



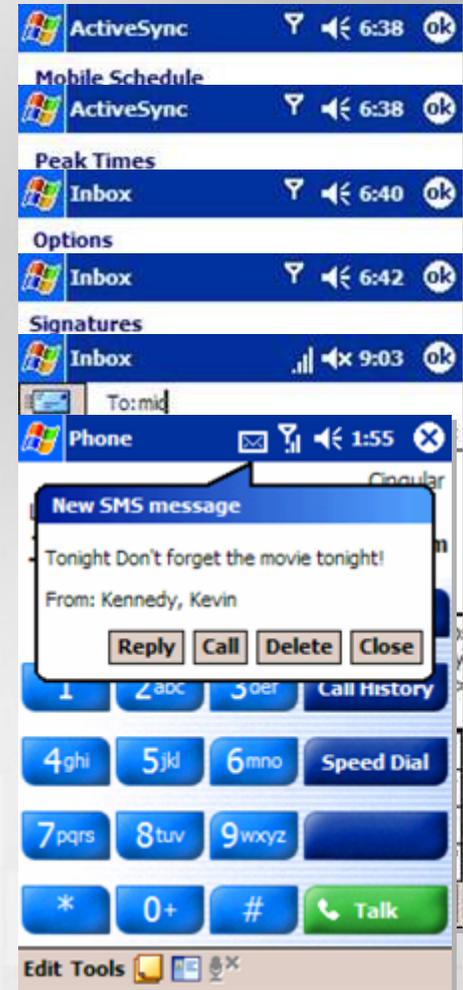
# Integrated Wireless E-mail

## Cost effective using Exchange 2003

- Exchange 2003 integrates server synchronization of e-mail, calendar, and contacts
  - Removes add-on cost of server sync software
  - Removes need for separate monitoring, directory
  - Provides push and pull sync options
- ActiveSync integrated on Windows Mobile devices
  - No client software to load reduces set-up time – key for large scale deployments
  - Familiar Outlook experience

# Enhance Messaging

- “Push and pull” e-mail, calendar, & contacts
  - Sync schedule options
  - E-mail signatures, auto-correct, and suggest addresses
  - Read clear, signed S/MIME messages
- Text messaging
  - SMS: Contact mapping and direct callback
- Improved keyboard support



# Systems Management

## Multi-Function Offerings

- **Key third party offerings**
  - **Dedicated systems management**  
Mobile Automation, XcelleNet Afaria
  - **Server sync plus systems management**  
Synchrologic, Visto, Intellisync, Actionengine
  - **Extend existing desktop management**  
Computer Associates Unicenter, IBM Tivoli
- **Microsoft Systems Management Server**
  - **Supporting Pocket PCs**
- **Exchange Server 2003 SP2 ActiveSync Enhancements**
  - **Security Policy, Local / Remote Wipe, Pin Code, Device Lock**

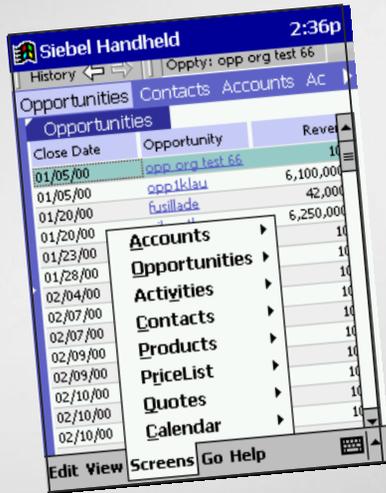
# Windows Mobile Roadmap



- Windows Mobile 2003 Second Edition
  - Enabling hardware innovation
  - Targeted usability improvements
  - New device maker and operator customization opportunities
- AKU Updates
  - Regular updates every three months
  - AKU1: Hands free and headset Bluetooth profiles, WPA\SMS fixes
  - AKU2: OMA DRM, Next Gen of WMP
- “Magneto”
  - Progressing as planned, moving into M4 adds\cuts in April
  - Vision Pillars
    - ▶ Platform Enhancements
    - ▶ Powerful communication
    - ▶ Immediate connectivity
    - ▶ Evolving user experiences

# Windows Mobile in the Enterprise

## Pocket PC Application Samples



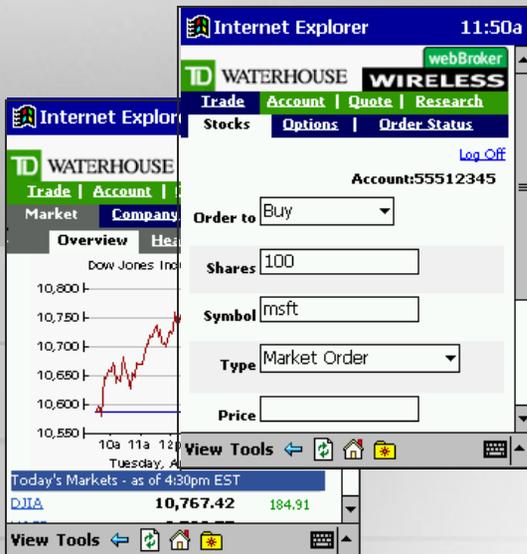
Sales Force Automation



Field Service



Real Estate



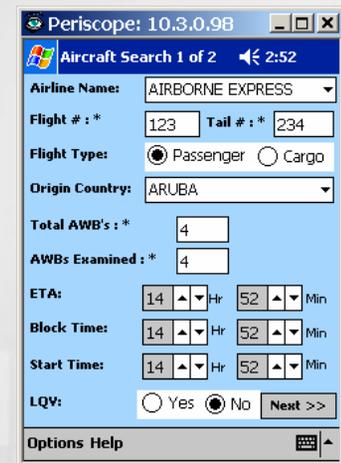
Financial Services



Healthcare



Public Safety



Inspections

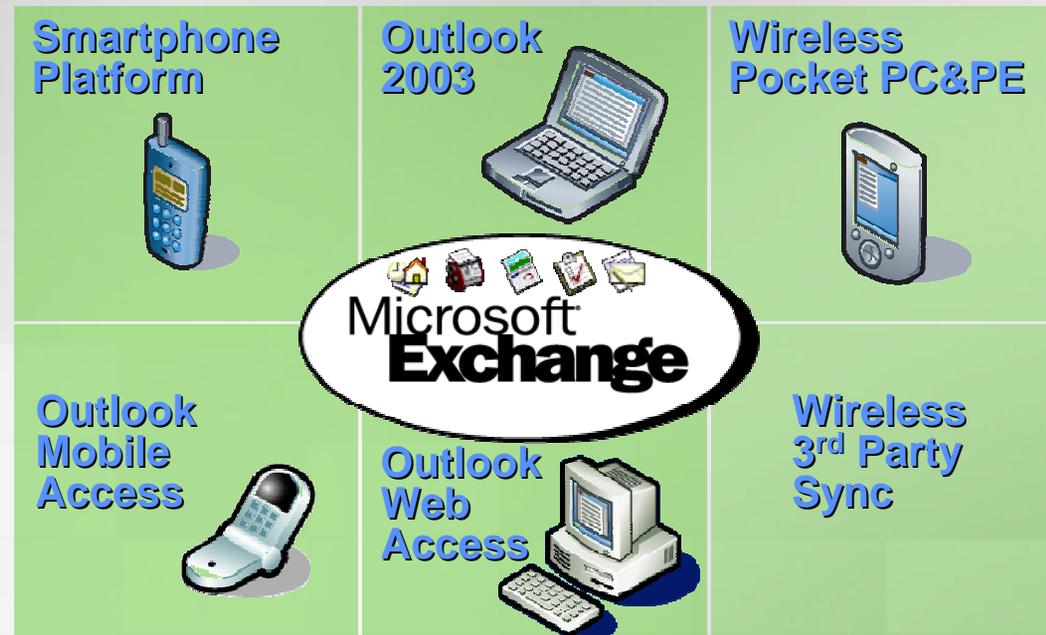
# Exchange Mobile Strategy

## *Mobile access to Exchange “that just works”*

- Enable a greater number of customers, out-of-the-box
- User experience optimized for mobile device scenario

### Core Tenets

- Integrated deployment, topologies and management
- Focus on browse, synchronization and always-up-to-date
- Build a strong MS and 3<sup>rd</sup> party end-to-end solution



# Remote and Mobile Access to Exchange Scenarios

- Mobile Access Choices
  - Laptops – Outlook over dialup or wireless
  - Windows Powered Mobile Devices
  - Browser based Mobile Devices
  - Web Access from kiosk, home/public computer
- Mobile Workers: sales, field service and support, adjusters, home health care
- Remote workers: from home, remote office, customer site, Starbucks
- Traveling Executives: hotel dial-up, wireless cards

# Exchange Server 2003 Mobility Functionality

## Best roaming server for Outlook

### Outlook and Exchange

- Reduced roundtrips, Data compression
- Cached Exchange Mode of mailbox
- Link speed detection with high and low bandwidth profiles
- Checkpointing for dropped connections
- VPN'Less deployment with SSL

Hotel Dial-Up, Hotspot, WWAN

### Exchange ActiveSync (EAS)

- Native support on Windows Mobile
- Rich Pocket Outlook data sets
- Smart Reply and Forward
- Manual, or scheduled Up-To-Date sync
- Desktop or device side configuration

Highly Mobile IW, Hotspot, WWAN

### Outlook Web Access

- Everything you love in Outlook 2003
- Round out features (e.g. Spellcheck)
- 80% performance improvement
- S/MIME support

- Attachment blocking
- Timed log off

Home Office, Airport, Factory Floor

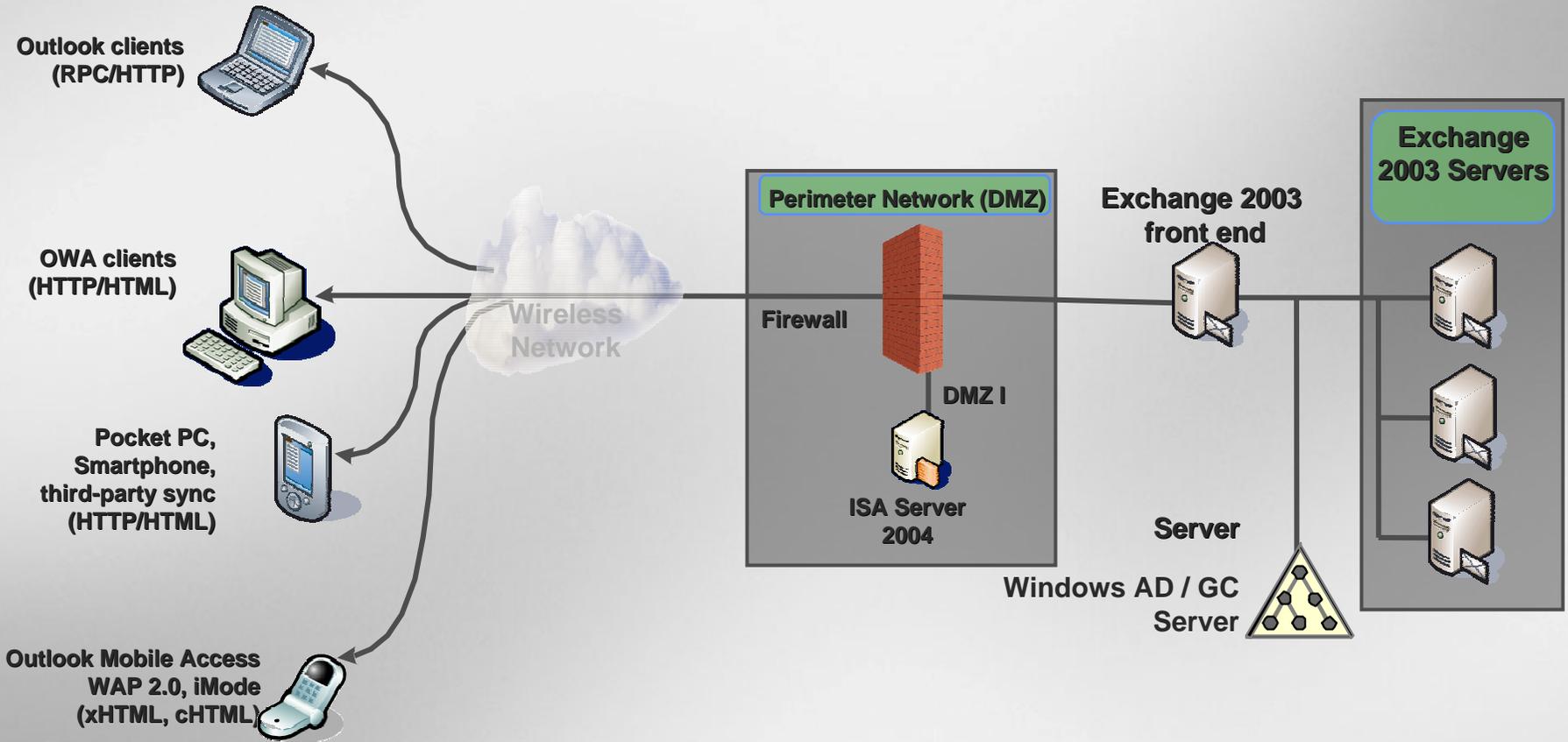
### Outlook Mobile Access

- Device reach with browse
- Familiar commands
- On-line GAL lookup and contacts with push to dial
- Calendar and task management
- SSL support with WAP 2.x

E-mail triage, GAL and contacts access, manage calendar and tasks



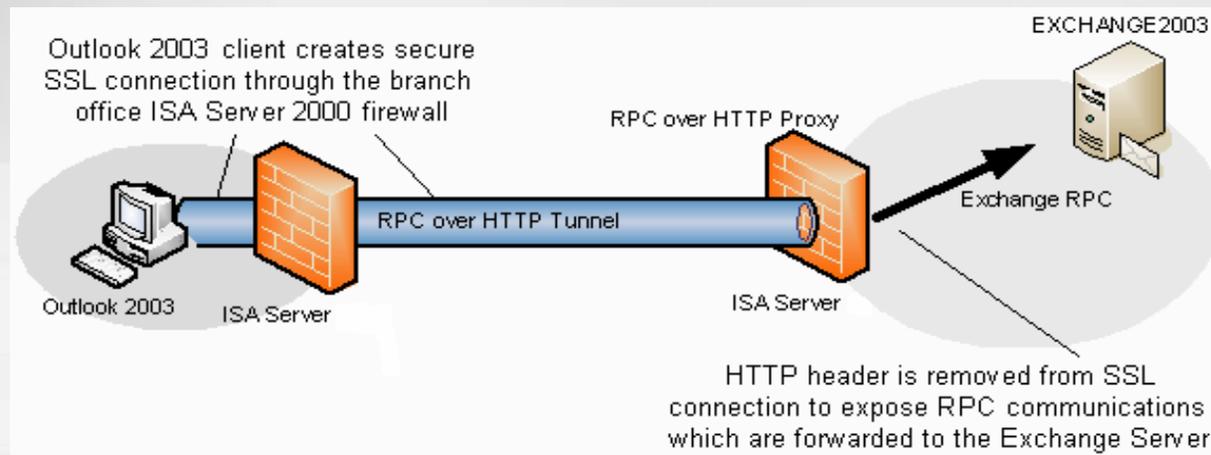
# Exchange 2003 Mobile Capabilities



- Invest in mobile device scenarios over wireless networks
  - Mobile laptop synchronization
  - Mobile internet browser (standard and micro-browser)
  - Smart device synchronization (preferably always up-to-date)

# Outlook 2003 RPC over HTTPS

- Access Exchange over the Internet without VPN
- Install RPC Proxy Service on Front-End-Server
  - Exchange Server 2003 SP1 Configuration Enhancements
- Client Requires Windows XP+SP1+QFE's
- Server Requires Windows Server 2003
  - ▶ Mailbox, Global Catalog, Public Folder and Front End Server
- Add Virtual Directory /rpc/\* to ISA Firewall Policy
- Enable Basic Authentication
- Customize Outlook 2003 Profile



# New Outlook Web Access (OWA)

- Anywhere Access - improved Outlook Web Access Experience
  - New User Interface like Outlook 2003
  - Faster Performance (about 80% faster than OWA 2000): gZip compression, use idle time for downloading controls, Intelligent Synch
  - Secure: Public/Private options, S/MIME, Timed Log-off, Attachment blocking, external HTML blocking
- Tons of New Features – Everything you love about Outlook
  - Spell Check , Tasks, Server Side Rules, Mark read/unread
  - Sort and 'type down', Up to 100 messages listed in view
  - Multi-Colored Quick flag support, View Search Folders
  - Preview pane on right side and two line view
  - HTML Frame resizing

# Exchange 2003 OWA

Microsoft Outlook Web Access - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://df-mail/exchange/mikega/>

Microsoft® Outlook Web Access Demo Content (Two Line) Items 1 to 23 of 23

**Inbox**

- Calendar
- Contacts
- Tasks
- Folders
  - Mike Gahrns
    - ARoot
      - Betas
      - Conferences
      - DAV
      - Demo Content (18)**
      - Diary
      - Exchange
      - exinet
      - EXOLEDB
      - Hosting
      - IIS
      - IMAP4
      - Information
      - Internet Protocols
- Public Folders
- Rules
- Options
- Log Off

You have new mail in your Inbox.

RE: smart folders on server

- Mark Crispin Thu 9/26/2002 9...  
RE: Empty mailbox & Fetch, Was: possi...
- David Siroky Thu 9/26/2002 9...  
FW: changes in posters 2 of 2
- Will Kennedy Thu 9/26/2002 9...  
Reminders in OWA
- Dylan Vance Thu 9/26/2002 9...  
Looking for owner of http://go.microsof...
- Mark Crispin Thu 9/26/2002 9...  
Re: Empty mailbox & Fetch, Was: possi...
- Library News Service Thu 9/26/2002 9...  
Daily Newswire - September 26, 2002
- Karim Batthish Thu 9/26/2002 8...  
RE: HTTPS
- Shawn Bracewell Thu 9/26/2002 8...  
RE: HTTPS
- Shawn Bracewell Thu 9/26/2002 8...  
RE: Exchange Naming Conventions
- Eric Deily Thu 9/26/2002 7...  
RE: GZip on IIS questions
- Eric R. Hanson (OLE) Thu 9/26/2002 7...  
RE: Nodal stress: build blocks coming up
- Mike Gahrns Sat 9/21/2002 9:1...  
Attachment Blocking
- The Economist Fri 9/20/2002 6:00 ...  
The world this week: Politics 10th - 16th...
- newsletter@dw.com Fri 9/20/2002 6:00 ...  
Skylines and Toothpicks for \$24
- Dream Mates Fri 9/20/2002 6:00 ...  
Are you single?

**The world this week: Politics 10th - 16th August 2002**  
The Economist  
To: Karim Batthish  
Cc:

"The defence industry, in my view, begins and ends with America's role in the world, and because of America's role, if you want to get along in this industry, you've got to be a politician."

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**Politics this week**  
Aug 15th 2002  
From The Economist print edition

**After Saddam**  
Saddam Hussein is still in office, but it is clear that America's State Department is already identifying organisations that could provide humanitarian aid to him if he is ousted.

President George Bush took a break from work to watch the World Series.

Local intranet

start 3 Internet... Microsoft R... PowerPoint Microsoft P... 4:24 PM

# Exchange Server ActiveSync

- Sync Mail, Calendar, Contacts over the Internet / GPRS
- Encrypted Channel on SSL Communication
- Authentication based on Active Directory
- E-mail:
  - Synchronize subfolders on demand
  - Rich filtering and truncation settings
  - Device side deletions
- User's choice to sync attachments
- Smart Reply and Smart Forward
  - Delivers attachments and full message without downloading to device



# Exchange Server 2003 Service Pack 2

# Improved Pocket-Outlook Experience

## Next Release Windows Mobile + EFP

- Goal: cradle for initial configuration, but never again
- Seamless “Push” always-up-to-date (AUTD) Solution
- Wireless Task Synchronization
- Pictures in Contacts
- S/MIME E-mail Support
  - Verify incoming SMIME messages
  - Decrypt/Encrypt messages
  - Resolve recipient to get certificates
  - SD smartcard reader
- Reduced bandwidth, latency and cost
  - Data Compression with GZIP support
  - Quicker synchronization through connection caching
  - Testing shows ~50% byte saving
- Persistent store of remote settings

# Always-Up-To-Date v2

- Seamless “Push” AUTD solution
  - Works for all PIM data: *Inbox, Calendar, Contacts* and *Tasks*
- No reliance on SMS for notifications
- World-wide capable
- Under the covers
  - No user configuration or settings required
  - Admin controls whether to enable/disable the feature, similar to SMS notifications
  - Server pushes notifications over an HTTPS connection opened and maintained by client
  - “Heartbeat” used to keep the connection alive and healthy
  - Client automatically switches from SMS to AUTD v2 with upgraded server

# IT Pro Synchronization Features

## Remove Security Deployment Blockers

- Policy Configuration/Enforcement
  - Require PIN device lock
  - Set PIN restrictions: length, alphanumeric
  - Device wipes local store after X incorrect tries
  - Administrator options
    - ▶ Policies are recommended but not enforced
    - ▶ Client cannot sync unless policies are enforced
- Optional Certificate-based authentication
  - Corporate credentials not stored on device
  - Provisioned through Desktop ActiveSync
- Admin UI Built-in to Exchange System Manager
  - Admin can force devices to refresh policies every X hours
  - Exception list for specific users or groups
- Remote wipe capability if device is lost

***Microsoft***<sup>®</sup>