



Welcome



NOTIFY
TECHNOLOGY

*A Leader in Enterprise
Multi-Device Mobility Solutions for
Novell GroupWise*



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President and CEO



Presentation Topics

- Background on Notify
- GroupWise Mobility Challenge
- Possible Solutions
- NotifyLink Mobility Solution
 - Components
 - Palm Setup
 - Pocket PC Setup
 - Server Requirements
- Q & A



Company Background



- Founded in 1994
- Headquarters: San Jose, CA
- Development and Technical Support: Canfield, OH
- **Main Products:**
NotifyLink Enterprise Edition and NotifyLink Hosted Edition
- Over 500 GroupWise customers using NotifyLink Enterprise Edition for wireless synchronization
- **Product Vision:**
Provide Novell GroupWise organizations with a **single** Mobility solution for Secure, Synchronized, Access, and Management of Email and PIM using any wired or wireless Palm, Pocket PC, or Blackberry Device.



Definitions

- Mobility
 - Includes both “wired” and “wireless devices”.
- PIM - Calendar, Contact, and Task Information
- Sync - Synchronization
- E-mail and PIM Sync
 - Includes email, calendar, address book, and task information synchronized in both directions from desktop to device and from device to desktop
- 3rd Party
 - Any software vendor other than Novell
- Security
 - Includes encryption and authentication when appropriate



GroupWise Mobility Challenges



- For the past years any products providing “wired synchronization” involving Palm and Pocket PC devices with Novell GroupWise have been offered by 3rd party developers.
- Over the past 2-3 years wireless synchronization has become a necessity for many organizations
- The move to wireless synchronization has not obviated the need for a better solution for “wired synchronization”
- Today many GroupWise organizations still feel that present day 3rd party “wired” synchronization solutions are inadequate for most organizations
- GroupWise Organizations are faced with implementing both a “wired” and a “wireless” 3rd party solution.



3rd Party “Wired” Sync Solutions



- Intellisync
 - Desktop based for Palm and Pocket PC
- Nexic
 - Desktop based for Palm and Pocket PC
- Quartz
 - Desktop based for Palm and Pocket PC
- Toffa
 - Server based using SyncML
 - Desktop Based for Palm Only



Performed Survey in August / September '04



- Wanted to make sure that we had a good sample of current GroupWise user data
- Utilized Cool Solutions Web Site for Survey
- Asked 10 questions during Aug/Sep 2004
- Received 443 responses
- Results seemed to be in line with our earlier customer data



August / September 2004 Survey



- Key Question #1:
 - How satisfied are you with the current wired sync solution in your organization?
- Key Question #2:
 - Would your organization prefer a server based synchronization solution instead of a desktop solution?
- Key Question #3:
 - Would your organization be interested in a single enterprise solution to handle both wired and wireless synchronization?



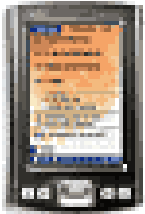
August / September 2004 Survey Results



- Key Question #1:
 - How satisfied are you with the current wired sync solution in your organization?
 - RESPONSE: ONLY 7% were satisfied
- Key Question #2:
 - Would your organization prefer a server based synchronization solution instead of a desktop solution?
 - RESPONSE: 60% YES 40% NO
- Key Question #3:
 - Would your organization be interested in a single enterprise solution to handle both wired and wireless synchronization?
 - RESPONSE: 71% YES 29% NO

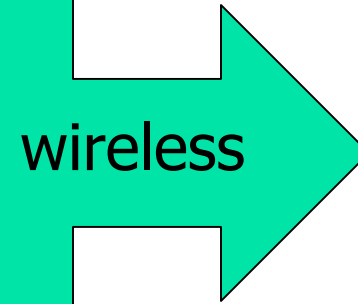
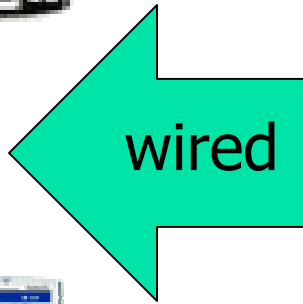


Notify's Mobility Vision





Notify's Mobility Solution





What Are The Components?

- NotifyLink Mobility Server
- NotifyLink Wired Device Clients
 - Support Palm OS devices using Palm OS >4.x
 - Support Pocket PC devices using 2002 and 2003 Versions of OS
- NotifyLink Wireless Device Clients
 - Support Palm devices using Palm OS >4.x
 - Support Pocket PC devices using 2002 and 2003 Versions of OS
 - Support Blackberry devices with Java OS

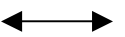
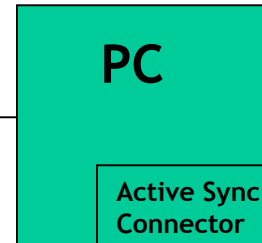
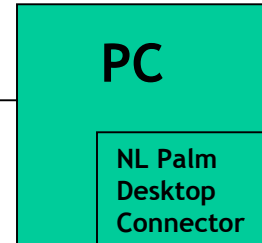


Simplified Architecture For Server Based "Wired" Synchronization

NotifyLink
Mobility Server



Novell.
GroupWise.





NotifyLink Palm “wired” Functionality



- Palm synchronization through a network connection to the NotifyLink Mobility Server not the Desktop.
- Palm can be synchronized anywhere there is a PC w/Palm connector connected to the organization’s network!
- Synchronization can be done “on demand” or set to occur at periodic intervals.
- User selects what data to synchronize. Synchronization of email, calendar, address book, and task information can individually be turned “on” or “off”.
- User selects conflict resolution preferences.
- Selected Address Books Will Map to Palm Address Book Categories



Palm PDA - 10 Steps To Setup



1. Install NotifyLink Palm Client and Desktop Connector
2. Set NotifyLink Service in Palm Network Network Preferences Screen
3. Register Device
4. Authenticate Password if required
5. Check/Set Sync Times - Default Set to 30 minutes
6. Select PIM Items - Default Calendar, Contacts, Tasks
7. Set any additional preferences i.e. clean up times, mark as read, delete on server, sync reminder, and possibly email “on” or “off”
8. Log onto Web Client to change Conflict resolution setting if necessary and turn email sync “on” or “off”, select address books to sync.
9. Reply to prompt for Initial PIM SYNC
10. All Done



Step 1- NotifyLink Palm Client Setup

NotifyLink Palm OS Client Setup

Install Device Application

Select User:

Select Device Type:

Push

Poll

Install Desktop Connector



Step 2 - Set up Palm Network Preference for NotifyLink Service



Preferences ▼ Network

▼ **Service:** NotifyLink.....

User Name: L.....

Password: [-Prompt-]

Connection: ▼ Cradle/Cable



Step 3 - Register The Palm Device With the NotifyLink Server



NotifyLink

Palm Client Registration

Registration Key:
the registration key
.....

Full Name Without Spaces:
ex: "johndoe"
fullname
.....

Override Server Address:
NLES IP Address
.....

Use SSL



Step 4- Authenticate Palm User If Required

If authentication is enabled at the server then NL will detect and prompt user for authentication Password.

Authentication Required

NotifyLink could not authenticate.
Please enter your password.

Host:
192.168.1.99

Password: |.....

OK Cancel



Step 5 - Set Sync Intervals

Sync Settings

Weekday

All Day Interval Off

Frequency (minutes): 5

Time: 7:00 am - 7:00 pm

Weekend

All Day Interval Off

Frequency (minutes): 5

Time: 7:00 am - 7:00 pm



Step 6 - Set Palm “wired” PIM Preferences

PIM Preferences

PIM Account: ▼ mzimmerm

- PIM Change Summary
- Synchronize Calendar
- Synchronize Tasks
- Synchronize Contacts
- Auto Contact Sync

Frequency (hours): 2

Next: Oct 20, 2004 12:22 pm

- Log Conflicts

PIM Preferences

PIM Account: ▼ mzimmerm

- PIM Change Summary
- Synchronize Calendar
- Synchronize Tasks
- Synchronize Contacts
- Auto Contact Sync

Sync Contacts on each sync cycle:

- Log Conflicts



Step 7 - Set Palm “wired” Sync Preferences and Security Preference



Sync Preferences

Delete Message On Server:
 Yes No Prompt

Sync Read Status On Server:
 Yes No Prompt

Sync Reminder
Remind every (hours): 2

Security

Account Settings
▼ mzimmerm NONE

Encryption Key
S3LR350rTMn186X75y
867R8l

Remove data if not synced
Remove after 3 days




Step 8 - Use Web Client to Set Palm “wired” Conflict Resolution preferences and Turn “ON” or “Off” Email


NotifyLink Configuration ● Notification ON

Mailbox Properties | General | PIM


Accounts

 View or edit your email account properties. Accounts


Folders

 Select which folders to monitor. Folders

Filters

 Create and manage your message notification filters. Filters

Block List

 View or delete your mobile blocked email list. Blocks

Signature

 Change your signature for outgoing mail. Signature

Logout

[View Online UserGuide](#)



Step 8 - Cont'd Turn Email Sync “On” or “Off”

Control Options

Notification ON OFF

Synchronize All Mail

All messages, read and unread, will be sent to your device. When this is not checked, only new unread mail will be sent to your device.

Synchronize Message Changes

When a message is marked as read or unread, or when a message is deleted, this change will be synchronized with your device.

Track Notifications

You may select this box to track notifications to your device.

Send Error Messages

If any errors are encountered, the error messages will be sent back to your wireless device.

Include Response History

Replies to your messages will contain the original message body in your notifications.

Smart Retrieval

When this value is off, each new mail message will be pulled from the server in its entirety. When the value is turned on, you may limit the amount of message body that is read from the server.

Enable PIM Processing

Use this checkbox to turn PIM processing on or completely shut it off.

Apply Changes

Close

Logout




Step 8 Cont'd - Go To PIM Section




NotifyLink Configuration Notification ON

Mailbox Properties General **PIM**


Calendar

 Control your calendar message format.

Contacts

 Control your contacts message format.

Tasks

 Control your tasks message format.

[View Online UserGuide](#)



Step 8 Cont'd - Conflict Resolution

Calendar Format

Calendar Notification Format

Event Name Start Time
 Event Location End Time
 Notes

Calendar Control Options

Send a daily summary of appointments.
7:00:00 AM ▾

Send a reminder prior to my appointments.
 Send a notification when my calendar is changed.
Look at the next 1 ▾ week(s).
 Acknowledge appointments added from my device.
 Send meeting invitation messages to device.
Look at the next 52 ▾ week(s) from the start date sent from the device for OTA Loads.
Conflict Resolution: Device Wins ▾

Apply Changes Close

Logout

Task Format

Task Notification Format

Task Name Priority
 Due Date Percent Complete
 Start Date Notes
 Status

Task Summary

Send a daily summary of tasks.
7:00:00 AM ▾
Send overdue tasks only.
Send due and overdue tasks.

Send task changes.
Look at the next 52 ▾ week(s).
Look at the next 52 ▾ week(s) from the start date sent from the device for OTA Loads.
Conflict Resolution: Device Wins ▾

Apply Changes Close


Logout



Step 8 Cont'd- Conflict Resolution Example

NotifyLink Mailbox1
Inbox 18 Msgs (0 Unrd)

Pim Conflict Detected:

 **Calendar**
Device:
Event 1 - Device Change
10/22/04 2:00 pm
Server:
Event 1 - Server Change
10/22/04 2:00 pm

NotifyLink Mailbox1
Inbox 18 Msgs (0 Unrd)

Pim Conflict Detected:

 **Tasks**
Device:
Task1 - Device Change
Due: 10/22/04
Server:
Task1 - Server Change
Due: 10/22/04



Step 8 Cont'd - Select Address Books

Address Book Selection For: ybeck

Available Address Books

Choose the address book(s) that you would like to use when doing contact synchronization.

- Beck
- Support
- Unfiled
- Wireless
- YvetteTest (TechSupport Notify Technical Support)
- Novell GroupWise Address Book

Choose your default address book. This address book will receive new and changed contacts from your device.

Beck

NOTE: Address book changes via Groupwise may take a moment to be updated here.

Apply Changes Close




Step 9 - Reply to Initial Sync Prompt

NotifyLink ▼ network1

▼ Inbox 15 Msgs (14 Unrd)

✓	☐	From	Subject	☒ Rec ▼
-	☐	TASKS	22 Task(s)	03/0
-	☐	CONTR	3 Contact	03/0
-	☐	CALEND	5 Event(s)	03/0

Confirm:


 Would you like to perform the initial PIM sync now? All PIM items on the device will be removed.

NotifyLink ▼ network1

▼ Inbox 15 Msgs (14 Unrd)

✓	☐	From	Subject	☒ Rec ▼
-	☐	TASKS	22 Task(s)	03/0
-	☐	CONTR	3 Contact	03/0
-	☐	CALEND	5 Event(s)	03/0

Confirm:

 The initial PIM sync was not completed. Would you like to be prompted during the next sync?



Pocket PC “wired” Functionality



- Pocket PC synchronization through a network connection to the NotifyLink Mobility Server not the Desktop.
- Pocket PC can be synchronized anywhere there is a PC and appropriate Pocket PC cradle connected to the organization’s network!
- Synchronization can be done “on demand” or set to occur at periodic intervals.
- User selects what data to synchronize. Synchronization of email, calendar, address book, and task information can individually be turned “on” or “off”.
- User selects conflict resolution preferences.
- Selected Address Books Will Map to Pocket PC Address Book Categories



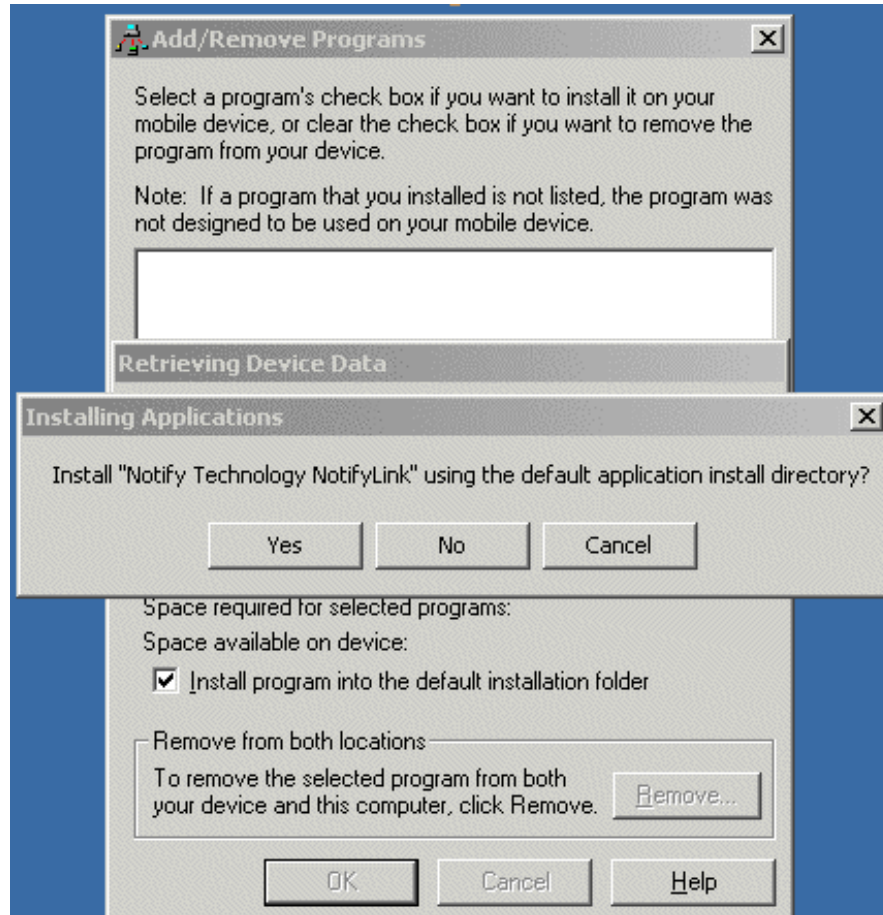
Pocket PC PDA - 9 Steps To Setup



1. Install NotifyLink Pocket PC Client (Active Sync must be loaded prior)
2. Register Device
3. Authenticate Password if required
4. Check/Set Sync Times - Default Set to 30 minutes
5. Select PIM Items - Default Calendar, Contacts, Tasks
6. Set any additional preferences i.e. clean up times, mark as read, delete on server, sync reminder, and possibly email “on” or “off”
7. Log onto Web Client to change Conflict resolution setting if necessary and turn email sync “on” or “off”
8. Reply to prompt for Initial PIM SYNC
9. All Done






Step 1- NotifyLink Pocket PC Client Setup





Step 2 - Register The Pocket PC Device With the NotifyLink Server



 **NotifyLink**  7:42 

Registration Key:

Full Name Without Spaces:
ex: "johndoe"

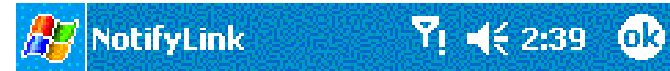
Override Server Address
* Override only as instructed.

Register



Step 3- Authenticate Palm User If Required

If authentication is enabled at the server then NL will detect and prompt user for authentication Password.

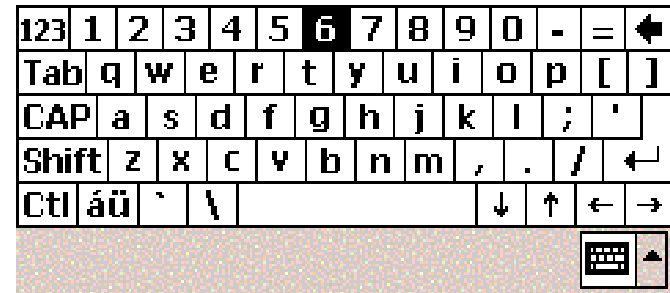


NotifyLink Authentication

NotifyLink could not authenticate. Please enter your password.





Server: 192.168.1.99

Password:









Step 4 - Set Sync Intervals

 NotifyLink   10:57 

Weekday:



Frequency (mins):



Start:  

Stop:  



Weekend:



Frequency (mins):

Start:  

Stop:  

Ignore old messages (days):

Commands Sync Settings Security PIM  

About  



Step 5 - Set Pocket PC "wired" PIM Preferences

 NotifyLink 🔊 3:36 ok

PIM Account:

- Save PIM Change Summary
- Synchronize Calendar Changes
- Synchronize Tasks Changes
- Synchronize Contacts Changes
- Auto Sync Contacts

Frequency (hours):

Next Auto Sync time: **4:18 PM**

- Log Conflict

Sync Settings | Security | PIM | Preference ◀ ▶

About ⌨



Step 6 - Set Palm "wired" Sync Preferences and Security Preference



NotifyLink 5:32 OK

Mark Messages as Read on Server: Yes

Delete Messages on Server: Yes

Display New Message Notification

Security PIM Preferences Clean-up

About

NotifyLink 4:00 OK

Account: gw65

Encryption Type: NONE

Encryption Key:
dD65L1NXc0lyY337k4X246Tw

Remove all Emails and PIM items if not synced in (days): 4

Commands Sync Settings Security PIM

About




Step 7 - Use Web Client to Set Pocket PC “wired” Conflict Resolution preferences and Turn “ON” or “Off” Email


NotifyLink Configuration ● Notification ON

Mailbox Properties | General | PIM


Accounts

 View or edit your email account properties. Accounts


Folders

 Select which folders to monitor. Folders


Filters

 Create and manage your message notification filters. Filters

Block List

 View or delete your mobile blocked email list. Blocks

Signature

 Change your signature for outgoing mail. Signature

Logout

[View Online UserGuide](#)



Step 7 - Cont'd - Turn Email Sync "on" or "Off"

Control Options

Notification ON OFF

Synchronize All Mail
All messages, read and unread, will be sent to your device. When this is not checked, only new unread mail will be sent to your device.

Synchronize Message Changes
When a message is marked as read or unread, or when a message is deleted, this change will be synchronized with your device.

Track Notifications
You may select this box to track notifications to your device.

Send Error Messages
If any errors are encountered, the error messages will be sent back to your wireless device.

Include Response History
Replies to your messages will contain the original message body in your notifications.

Smart Retrieval
When this value is off, each new mail message will be pulled from the server in its entirety. When the value is turned on, you may limit the amount of message body that is read from the server.

Enable PIM Processing
Use this checkbox to turn PIM processing on or completely shut it off.




Step 7 Cont'd - Go To PIM Section


NotifyLink Configuration Notification ON

Mailbox Properties General **PIM**


Calendar

 Control your calendar message format.

Contacts

 Control your contacts message format.

Tasks

 Control your tasks message format.

[View Online UserGuide](#)



Step 7 Cont'd - Conflict Resolution

Calendar Format

Calendar Notification Format

Event Name Start Time
 Event Location End Time
 Notes

Calendar Control Options

Send a daily summary of appointments.
7:00:00 AM ▾

Send a reminder prior to my appointments.
 Send a notification when my calendar is changed.
Look at the next 1 ▾ week(s).
 Acknowledge appointments added from my device.
 Send meeting invitation messages to device.
Look at the next 52 ▾ week(s) from the start date sent from the device for OTA Loads.
Conflict Resolution: Device Wins ▾

Task Format

Task Notification Format

Task Name Priority
 Due Date Percent Complete
 Start Date Notes
 Status

Task Summary

Send a daily summary of tasks.
7:00:00 AM ▾
Send overdue tasks only.
Send due and overdue tasks.
 Send task changes.
Look at the next 52 ▾ week(s).
Look at the next 52 ▾ week(s) from the start date sent from the device for OTA Loads.
Conflict Resolution: Device Wins ▾



Step 7 - Conflict Resolution Example

 Attention   11:42 

A the Calendar items has been changed on both the server and the device:

Server: 21
10/01/2004-12:00:00
Changed

Device: 21
10/01/2004-11:30:00
Changed

Which would you like to keep?

Keep Server Item

Keep Device Item



Step 7 - Select Address Books

Address Book Selection For: ybeck

Available Address Books
Choose the address book(s) that you would like to use when doing contact synchronization.

- Beck
- Support
- Unfiled
- Wireless
- YvetteTest (TechSupport Notify Technical Support)
- Novell GroupWise Address Book

Choose your default address book. This address book will receive new and changed contacts from your device.

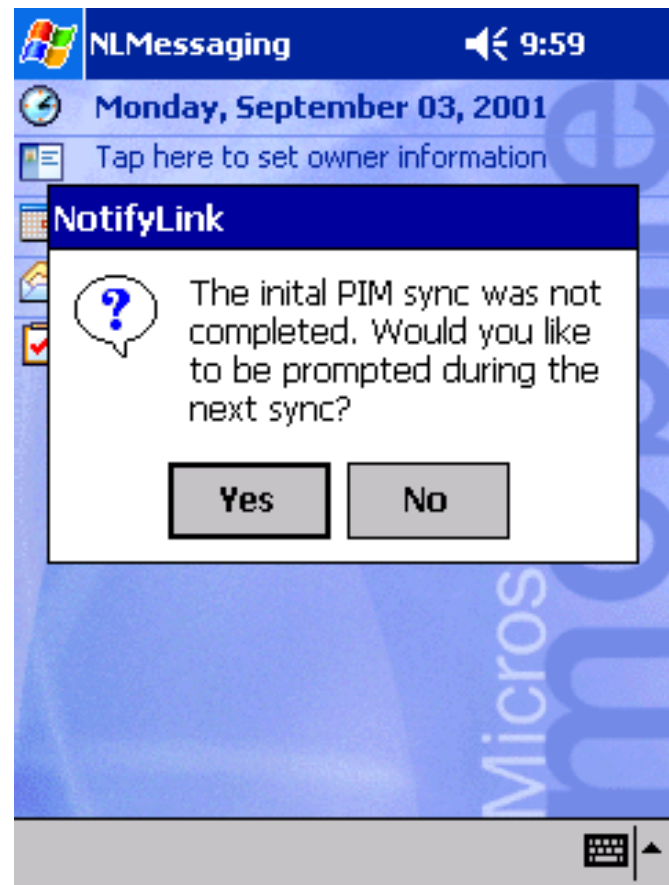
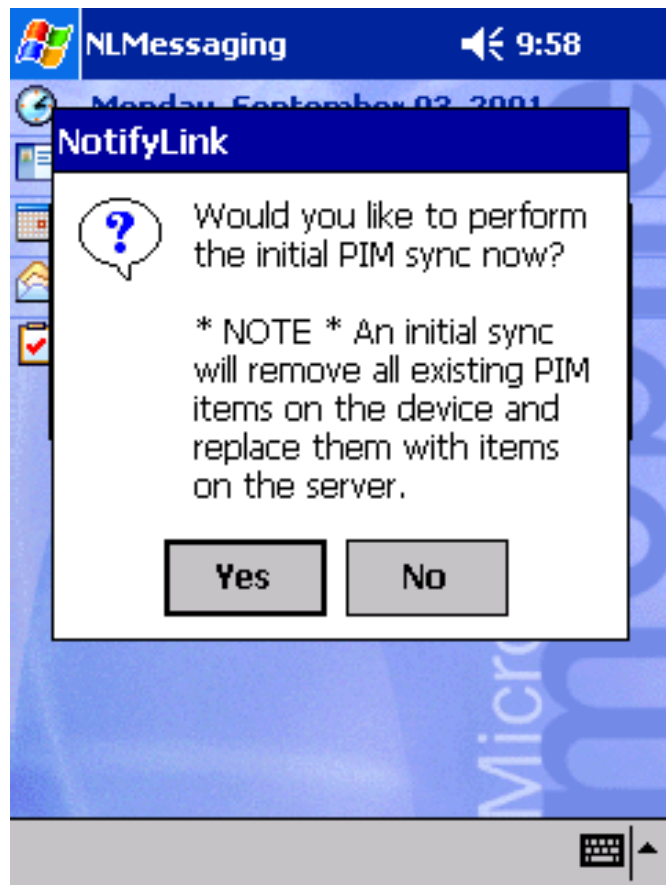
Beck

NOTE: Address book changes via Groupwise may take a moment to be updated here.

Apply Changes Close



Step 8 - Reply to Initial Sync Prompt





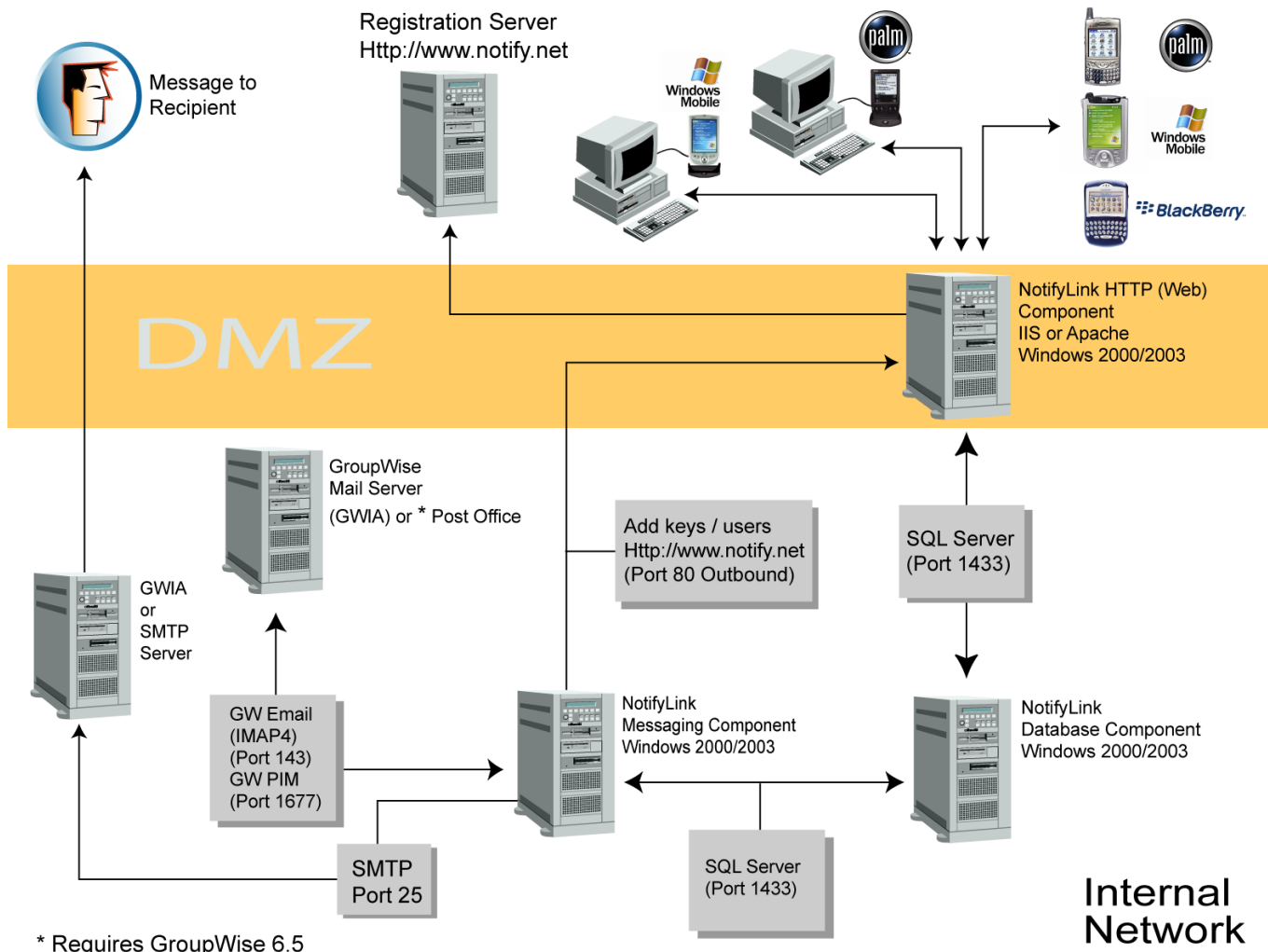
Review Message Security



- The NotifyLink to GroupWise interface leverages “Trusted Application” service vendor specific for email and PIM
- All sensitive information in the database is encrypted with AES
- Message content from server to device is encrypted with AES or TDES
- Messaging content from device to server is encrypted with AES or TDES
- Keys are 24 bytes in length
- Key management handled by the NotifyLink Server
- Keys may be sent transposed to the device or entered at device



NotifyLink Mobility Server - A Single Solution For Your Mobile Users

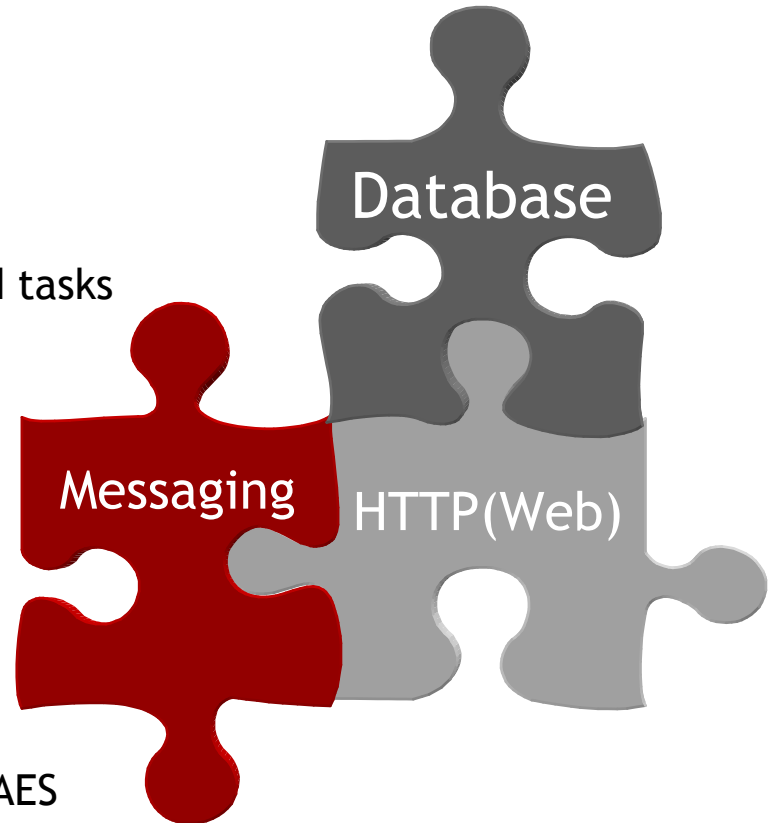




NotifyLink Mobility Server Architecture

The NotifyLink Mobility Server is comprised of 3 components:

- NotifyLink Messaging Engine
 - Interface to email, calendar, contacts and tasks
- NotifyLink HTTP(Web) Component
 - Key Registration
 - Administrator/User Interface
 - Leasing Monitor
- NotifyLink Database Component
 - Data store for administration information
 - Data Store for user information i.e.
 - filters, settings, message formats
 - All sensitive information encrypted using AES





Minimum Hardware & Software Requirements



Database Component Requirements

- Windows 2000 and 2003 Server
- Intel Pentium III processor or better
- 512MB RAM
- 100MB free hard drive space
- Microsoft SQL Server 7.0 or greater
- Microsoft Data Access Engine (MSDE) 7.0 and greater

Messaging Component Requirements

- Windows 2000 and 2003 Server
- Intel Pentium III processor or better
- 512MB RAM
- 50MB free hard drive space
- Microsoft Internet Explorer 4 or later.

HTTP (Web) Component Requirements

- Windows 2000 and 2003 Server
- Intel Pentium III processor or better
- 512MB RAM
- 50MB free hard drive space
- Microsoft Internet Explorer 5.01 or later
- Microsoft IIS 5 or later



NotifyLink “wired” Software Availability?



- If you are a current NotifyLink customer you will be able to upgrade to NotifyLink V3.2 in February and can request the appropriate licenses for either a “wired” Palm or Pocket PC device.
- If you are a new customer, then just fill out an Evaluation Form and we will help you get started with your initial install in February.
- Web-Based/Electronic Distribution at <http://notifylink.notify.net/gw.asp>
- Software Continually maintained and updated by Notify
 - Server Software (notifylink.zip file)
 - Device Clients
 - Updates/Hot Fixes
- Documentation Continually maintained and updated by Notify
 - Checklists
 - User Guides
 - Release Notices



Some Early Feedback



Current NotifyLink Wireless Customer
Conducting Beta Trial of Wired Functionality

“I'm happy to say - I've "set it and forget it" for my test users. They happily sync all day long and report no problems at all. ”

- Alan Wright - IT Manager - Michigan State Senate Dec 2004



THANK YOU