

HOL210: Mobile Messaging with Windows Mobile 5.0 and Exchange Server 2003 SP2

Objectives

After completing this lab, you will be able to:

- Use the messaging features of Microsoft® Windows Mobile® 5.0.
- Configure a Microsoft Exchange Server 2003 server for Direct Push.
- Troubleshoot a Microsoft Exchange ActiveSync® connection to Exchange.
- Configure password policies for Windows Mobile devices.
- Test a local wipe of data from a Windows Mobile 5.0 device.
- Install the Mobile Administration program and perform a remote wipe of data from a Windows Mobile 5.0 device.

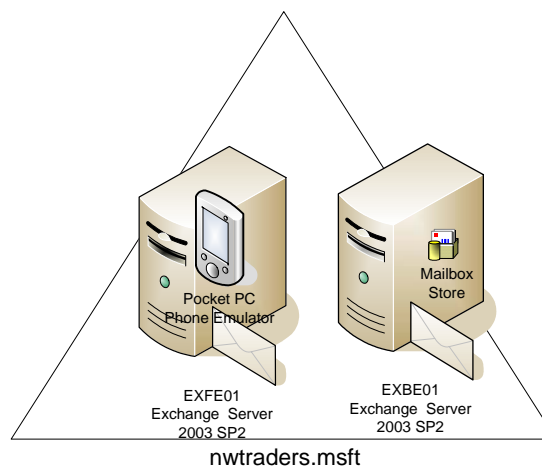
Note This lab focuses on the concepts in this module and as a result may not comply with Microsoft security recommendations.

Scenario

Northwind Traders has installed Exchange Server 2003 Service Pack 2 (SP2) on its back-end and front-end Exchange servers. The company's IT team must now configure features of Exchange ActiveSync, including password policies to protect Windows Mobile 5.0 devices. The Northwind Traders staff would also like to validate the password policies as they are applied to local and remote wipe of devices.

Lab environment

The following graphic illustrates the virtual servers that are used in this lab exercise.



Exercise 1


Using the Messaging Features of Windows Mobile 5.0 and MSFP

In this exercise, you will explore the new messaging features of Windows Mobile 5.0 and MSFP. You will test the functionality of the Exchange Direct Push feature by sending an e-mail message to James Fine and watching the message synchronize immediately on the mobile device.

► **Start the Pocket PC Emulator running Windows Mobile 5.0**

1. On EXFE01, log on as **nwtraders\administrator** with a password of **P@ssw0rd**
2. Click **Start**, click **All Programs**, click **Microsoft Device Emulator Preview**, and then click **Device Emulator Manager**.
3. In Device Emulator Manager, click **File** and then click **Restore Image**.
4. In the **Select Image to Restore** box, browse to **C:\Program Files\Microsoft\Device Emulator Preview** and double-click the file **PocketPC.dess**.
5. When prompted to enable emulation of the network card, click **Yes**.
This will open the Windows Mobile 5.0 Pocket PC Emulator.

► **Open James Fine's mailbox on the Windows Mobile device**

1. On the Windows Mobile Emulator, click **Start** , and then click **Messaging**.

Note James' ActiveSync profile is already configured for this lab.

2. Click the message from the administrator with the subject line **Welcome** and then read the message.
3. Click **OK** to close the message.
4. Click the **X** in the upper-right corner to close Microsoft Office Outlook® E-Mail.
5. Click **Start** and then click **Today** to return to the Today screen.
Notice that the Today screen shows you any upcoming appointments and a number of unread e-mail items.

► **Send an e-mail message from Spencer Low to James Fine by using Microsoft Outlook Web Access**

1. On EXFE01, start Microsoft Internet Explorer and then in the **Address** field, type **https://exfe01.nwtraders.msft/exchange/spencer** and click **Go**.
2. In the **User name** box, type **nwtraders\spencer** and then in the **Password** box, type **P@ssw0rd** and click **OK**.
3. Click **New**, and then in the **To** field, type **James** and then press CTRL+K to resolve the name.
4. In the **Subject** line, type **IMPORTANT: Have you completed the 3 year sales report yet?**

5. In the message body, type **Hi James, have you completed the sales report for me? Please ensure that you send me the figures in a chart, I need this urgently.**
6. Click the Importance: High button (the red exclamation mark) and then click **Send**.

► **View your messages on the Windows Mobile Emulator**

1. On EXFE01, quickly switch to the Windows Mobile Emulator.
Note the animated Synchronization arrows indicating that the device is automatically synchronizing, triggered by the arrival of a message in James' mailbox. Wait for the Windows Mobile device to complete synchronization.
2. At the bottom of the Today screen, view the notification stating that a new message has arrived from Spencer. Click **View** and read the message.
3. You want to add Spencer to your contacts. Click **Spencer Low** in the mail item, and then in the messaging dialog box, click **Yes** to add Spencer to your contacts. Click **OK** to close the Contacts window and return to the e-mail message.
4. Click **Reply** at the bottom of the message window.
5. In the message body, type **Hi Spencer, I'm working on the sales chart later today and will send it from my new device. Also, can you please identify the Chai Tea machine model our new customer owns? I've attached a quick sketch I made with them. Regards James**
6. To attach the customer notes file, click **Menu**, click **Insert**, and then click **File**.
7. In the **Open** dialog box, scroll down to the **Customer Notes** note and then click the file to attach it to the mail item.
8. Click **Send**.

Note the animated Synchronization arrows again indicating that the device is automatically synchronizing to send the message.

► **View the reply to Spencer in Outlook Web Access**

1. On EXFE01, switch to Microsoft Outlook Web Access.
2. In Outlook Web Access, click **Check for New Messages** or press F5 to refresh the screen, and then confirm that the message from James was received along with the note attachment.
3. Open the message, right-click the attached **Customer Notes** note, and then select **Save Target As**.
4. Browse to My Documents and click **Save**.
5. In the **File Download** dialog box, click **Open** and then click **Yes** to confirm that the attached file is trusted.

Microsoft Office Word will now open and display the note created by James on the Windows Mobile 5.0 device.

6. Close the message.

► **Accept a meeting request by using the Windows Mobile Emulator**

1. In Outlook Web Access logged in as Spencer, click **Calendar** and then click **New**.

2. Click **Invite Attendees**, and then in the **Required** field, type **James** and then press CTRL+K to resolve the name.
3. Change the start time of the appointment to be 6 hours from now.
4. In the **Subject** line, type **Meeting at airport** and then in the message body, type **Meet me at the airport to discuss the big sales you've secured this week.**
5. Click **Send**.
6. Switch to the Windows Mobile Emulator on EXFE01 and wait for the device to synchronize.
7. If it is not already open, open the device's Inbox. After the Inbox is in sync, click the meeting request at the top of the message list.
8. At the bottom of the Messaging window, click **Accept**, click **Edit the response before sending**, and then click **OK**.
9. In the response, type **Yes I'll be there. Please send me a photo so I can recognize you. Thanks, James.**
10. Click **Send**.
11. Click the **X** in the upper-right corner to close the Inbox. The meeting should now appear on the Today screen.
12. Wait for synchronization to complete and then switch to Spencer's Outlook Web Access session on EXFE01. Click the Inbox in the left pane, click **Check for New Messages**, and then open the meeting acceptance from James. Click **Reply**.
13. Click the attachments button (the paper clip symbol) and then click **Browse**.
14. Browse to **C:\Labs\Pictures** and select **Spencer Low.jpg**.
15. In the **Attachments** dialog box, click **Attach** and then click **Close**.
16. Click **Send** to send the message.

► **Assign a picture to a contact on the mobile device**

1. On the Device Emulator, notice the animated Synchronization arrows in the status bar.
2. Click **Start** and then click **Messaging**.
3. Click to open the message from Spencer Low titled **RE: Accepted: Meeting at airport**.
4. Click the **Spencer Low.jpg** attachment and read the message stating that the file will be downloaded on the next synchronization.
5. Wait for synchronization to complete, click and hold down the mouse button on the **Spencer Low.jpg** attachment, and then click **Save As**.
6. In the **Folder** list, click to select **My Pictures**, and then click **Save**.
7. Click **OK** to close the e-mail message, and then click **X** to close Outlook E-Mail.
8. Click **Start**, click **Contacts**, and then click **Spencer Low**.
9. Click **Menu** and then click **Edit**.
10. In the Spencer Low contact details, click the **Picture** line, and then in **My Pictures**, click the photo of **Spencer Low**.

11. Click **OK** to save the contact.

12. Click **Low, Spencer** to open the contact Spencer Low.

Notice the picture of Spencer in his contact item. Note that the contact with which the picture is associated is synchronizing with the server.

13. In **Contacts**, click the **Spencer Low** contact to open it.

Notice how the picture is now stored in the contact details. You will now be able to recognize Spencer at the airport.

14. Click **OK** to close Spencer Low's contact details.

15. Click **X** to close Contacts.

Exercise 2

Configuring the Exchange Server for Direct Push

In this exercise, you will enable the Direct Push feature available in Exchange Server 2003 SP2. You will then adjust Internet Information Server (IIS) settings to support Direct Push functionality.

Important Ensure that the EXBE01 and EXFE01 virtual servers have been started prior to beginning this exercise.

Scenario

You need to configure the Exchange environment with the optimal settings for Exchange Direct Push e-mail.

► Configure the server for Direct Push

1. Switch to EXBE01 and log on as **nwtraders\administrator** with a password of **P@ssw0rd**
2. Click **Start**, click **All Programs**, click **Microsoft Exchange**, and then click **System Manager**.
3. In Exchange System Manager, expand **Global Settings**, right-click **Mobile Services**, and then click **Properties**.
4. Confirm that the **Enable Direct Push over HTTP(s)** option is enabled.
5. In **Mobile Services Properties**, click **OK**.
6. Click **Start**, click **All Programs**, click **Administrative Tools**, and then click **Internet Information Services (IIS) Manager**.
7. In IIS Manager, expand **EXBE01** and then expand **Web Sites**.
8. Right-click **Default Web Site** and then click **Properties**.
9. In the **Connection Timeout** box, type **900** and then click **OK**.
10. Close IIS Manager.
11. Switch to EXFE01 and if you are not already logged on, log on as **NWTRADERS\administrator** with a password of **P@ssw0rd**
12. Click **Start**, click **All Programs**, click **Administrative Tools**, and then click **Internet Information Services (IIS) Manager**.
13. In IIS Manager, expand **EXFE01** and then expand **Web Sites**.
14. Right-click **Default Web Site** and then click **Properties**.
15. In the **Connection Timeout** box, type **900** and then click **OK**.
16. Close IIS Manager.

Exercise 3

Troubleshooting ActiveSync and the Exchange Server

In this exercise, you will run a script that will break the ActiveSync connection to the Windows Mobile 5.0 device. You will then work through troubleshooting steps to determine the cause of the problem and finally resolve it.

► **Break ActiveSync and confirm that James can no longer perform ActiveSync with his Windows Mobile 5.0 device**

1. Switch to EXBE01.
2. Open Windows Explorer and navigate to the folder **C:\labs**. Double-click the file **BREAKEAS.BAT** to run a batch file that will break the Exchange ActiveSync connection between the Windows Mobile 5.0 device and the Exchange server.
3. Switch to EXFE01.
4. In the Windows Mobile 5.0 Device Emulator, click **Start**, and then click **ActiveSync**.
5. In ActiveSync, click **Sync**.
6. Confirm that ActiveSync is broken by clicking **View Status** and viewing the message on the device's screen.

► **Verify that Outlook Web Access is working for James**

1. Switch to EXFE01.
2. Click **Start**, and then click **Internet Explorer**.
3. In the **Address** field, type the URL **http://exbe01.nwtraders.msft/exchange/james**
4. In the **Connect to exfe01** dialog box, enter the User name **nwtraders\james** and the password **P@ssw0rd**
5. Confirm that you can access James' mailbox by using Outlook Web Access.

► **Verify the Web Services Extensions on the Exchange server**

1. Switch to EXBE01.
2. Click **Start**, click **All Programs**, click **Administrative Tools**, and then click **Internet Information Services (IIS) Manager**.
3. In IIS Manager, expand **EXBE01 (local computer)**.
4. Click **Web Services Extensions**.
5. In the right pane, confirm that the entry **Microsoft Exchange Server** exists and that the Status is **Allowed**.
6. Right-click **Microsoft Exchange Server** and then click **Properties**.
7. In the **Web Service Extension Properties** dialog box, click the **Required Files** tab.
8. Confirm that there is an entry for the file **C:\Program Files\Exchsrvr\Bin\MasSync.dll** and that the file status is set to **Allowed**.
9. Close the Properties dialog box. Leave IIS Manager open.

► **Verify that ActiveSync is enabled for the organization and for the user James**

1. On EXBE01, switch to Exchange System Manager.
2. In Exchange System Manager, under **Global Settings**, right-click **Mobile Services** and then click **Properties**.
3. Confirm that the **Enable user initiated synchronization** check box is selected.
4. Click **OK** to close the dialog box. Leave Exchange System Manager open.
5. Click **Start**, point to **All Programs**, point to **Administrative Tools**, and then click **Active Directory Users and Computers**.
6. In **Active Directory Users and Computers**, expand **nwtraders.msft**.
7. Click the **IT Staff** organizational unit.
8. In the right pane, right-click the user **James Fine** and then click **Properties**.
9. Click the **Exchange Features** tab and verify that the feature **User Initiated Synchronization** is enabled.
10. Click **OK** to close James Fine Properties and then close Active Directory Users and Computers.

► **Verify that the authentication settings on the Exchange virtual directory include Integrated Windows Authentication**

1. On EXBE01, switch to IIS Manager.
2. Expand **Web Sites**, and then expand **Default Web Site**.
3. Right-click the **Exchange** virtual directory and then click **Properties**.
4. Click the **Directory Security** tab.
5. In **Authentication and Access Control**, click **Edit**.
6. Verify that the **Integrated Windows authentication** check box is selected.

Note If it is not checked, the script you ran previously turned off Integrated Windows Authentication.

7. Select the **Integrated Windows authentication** check box and then click **OK** twice to close the dialog boxes.

► **Confirm that ActiveSync is now working**

1. Switch to the device emulator on EXFE01.
2. In the **ActiveSync** dialog box, click **Sync**.
3. Confirm that ActiveSync is now working.

Exercise 4

Configuring Password Policies for Mobile Devices

In this exercise, you will configure password policies to secure a Windows Mobile device.

► **Configure password policies to apply to all mobile devices**

1. Switch to EXBE01.
2. In Exchange System Manager, under **Global Settings**, right-click **Mobile Services**, and then click **Properties**.
3. Click **Device Security** and view the available security options.
4. Select the **Enforce password on device** check box.
5. Select the **Minimum password length (characters)** check box, and then in the **minimum length** box, type **5**
6. Select the **Require Both Letters and Numbers** check box.
7. Select the **Wipe device after failed (attempts)** check box, and then in the **failed attempts** box, type **4**
8. Click **OK** twice.

► **Test the password policy enforcement on the Pocket PC device**

1. Switch to EXFE01.
2. In the Pocket PC Emulator, click **Start**, and then click **ActiveSync**.
3. In the ActiveSync window, click **Sync**.

Notice the Policy Message dialog box informing you that a new policy must be applied to the device before you can synchronize. If the policy is not applied, wait for approximately one minute and then sync again.

4. Click **OK** to apply the policy, and then click **OK** to make policy updates to the device password.
5. In both the **Password** box and the **Confirm** box, type **123** and then click **OK**.

Note Notice how the device prompts you that the password is not strong enough and that it must contain at least five digits and include letters and numbers. Also notice how you cannot change the strength of the password.

6. Click **OK**.
7. In both the **Password** box and the **Confirm** box, type **P@ssw0rd** and then click **OK**.
8. Wait for the device to synchronize.

Exercise 5

Testing Local Wipe

In this exercise, you will verify that the local wipe policy is working correctly by simulating unsuccessful logins.

► **Back up the device emulator image**

Note These steps are provided in case of accidental saving of a wiped device during these labs. This backup is not necessary to complete the labs; however, if you do save the state of the device after it has been wiped, this backup is a useful way to roll back to the point before the device was wiped.

1. On EXFE01, in the Device Emulator, click **File**, and then click **Save State and Exit**.
2. Open Windows Explorer and navigate to the folder **C:\Program Files\Microsoft\Device Emulator Preview**.
3. Right click the file **PocketPC.Dess** and then click **Copy**.
4. Make a backup copy of the file by right-clicking anywhere in the window and then clicking **Paste**.

Note This will create a backup copy of the file named “Copy of PocketPC.Dess for you to restore after wiping the device in the next steps.”

5. Switch to the Device Emulator Manager, click **File**, and then click **Restore Image**.
6. In the **Select Image to Restore** box, browse to **C:\Program Files\Microsoft\Device Emulator Preview** and double-click the file **PocketPC.dess**.
7. When prompted to enable emulation of the network card, click **Yes**.
8. If prompted to allow folder sharing, click **Yes**.
The Windows Mobile 5.0 Pocket PC Emulator opens.
9. Minimize the Device Emulator Manager.

► **Test the local wipe policy by simulating unsuccessful logins**

Note Note that the device is now in a locked state on startup.

1. In the **Enter Your Password** box, type an incorrect password (for example, 123) and then press **OK**.
2. At the **Password Incorrect** prompt, click **OK**.
Note that you are advised about the remaining login attempts.
3. In the **Enter Your Password** box, type an incorrect password again and click **OK**.
Note that you are again advised about the remaining login attempts.
4. At the **Password Incorrect** prompt, click **OK**.

5. Type the word **Microsoft** to confirm that the device is functioning properly and that these are not accidental button presses, and then click **OK**.
6. In the **Enter Your Password** box, type an incorrect password again and click **OK**.
7. At the **Password Incorrect** prompt, click **OK**.
8. Click **OK** to the warning that the device will be erased after the next unsuccessful password attempt.
9. In the **Enter Your Password** box, type an incorrect password again and click **OK**.
10. At the **Password Incorrect** prompt, click **OK**.

Note that the device has initiated a local wipe, which will perform a hard reset and erase all data and settings.

11. After the device has restarted, open the **Messaging**, **Tasks**, and **ActiveSync** applications to ensure that all files and settings have been lost.
12. Close the Device Emulator window.
13. When prompted to save the emulator state, click **No**.

Exercise 6

Performing a Remote Wipe

In this exercise, you will remotely wipe data from a Windows Mobile 5.0 device.

► Configure the Pocket PC Emulator

1. On EXFE01, switch to the Device Emulator Manager, click **File**, and then click **Restore Image**.
2. In the **Select Image to Restore** box, browse to **C:\Program Files\Microsoft\Device Emulator Preview** and then double-click the file **PocketPC.dess**.
3. When prompted to enable emulation of the network card, click **Yes**.
4. If prompted to allow folder sharing, click **Yes**.
The Windows Mobile 5.0 Pocket PC Emulator opens.
5. When prompted to enter a password on the device, type **P@ssw0rd** and then click **OK** in the upper-right corner.
6. Minimize the Device Emulator Manager.

► Installing the Remote Admin application

1. Switch to EXBE01.
2. Open Windows Explorer and navigate to the **C:\Labs\MobileAdmin** folder.
3. Double-click the **MobileAdmin.msi** file.
4. On the Welcome page, click **Next**.
5. On the End User License Agreement page, select **I Agree**, and then click **Next**.
6. Wait for the application to install and then click **Finish**.
7. Open Internet Explorer, and then in the **Address** field, type the URL **https://exbe01/mobileadmin** and then click **Go**.
8. Log in as **nwtraders\administrator** with a password of **P@ssw0rd**.
9. On the Exchange Mobile Sync Settings Web page, under Manage Device Settings, click **Remote Wipe**.
10. In the **Mailbox name** box, type **James** and then click the arrow button.
11. In the **Action** column, click **Wipe** for the Pocket PC used by James Fine.
This will configure the server to initiate the remote wipe process the next time the device synchronizes.

► Confirm the device wipe

1. On EXFE01, quickly switch to the Device Emulator.
2. Watch the Device Emulator synchronize.
Note that the Pocket PC has been wiped.
3. When the device restarts, click **Start** and then click **Messaging** to confirm that all mail has been wiped from the device.
4. Close the Device Emulator.

5. Click **No** to the Save State message.
6. Switch to EXBE01.
7. Refresh the Remote Device Wipe page and note that the wipe has been acknowledged by the device.
8. Click the **Delete** link and click **OK** to remove the device for this user.
9. Close Internet Explorer.