Exchange Server 2003 and the Device Emulator 1.0 with MSFP

Written by Marc Grote - mailto:grotem@it-training-grote.de

Abstract

In this article I will show you how to simulate a Smartphone or another mobile device with MSFP (Microsoft Security Feature Pack) with the help of the Device Emulator 1.0 with MSFP to test and simulate the new Direct Push and Security features of Microsoft Exchange Server 2003 Service Pack 2.

Let's begin

A long time ago Microsoft published the Standalone Version of the Device Emulator 1.0 to simulate some Mobile Features for Exchange Server 2003 without having a Mobile Phone or Smartphone. The Standalone Version was very nice for demonstration purposes and in Training situations or for a simply presentation of Exchange Servers mobile power. Beginning with Exchange Server 2003 SP2 Microsoft enhanced the Mobile features with Direct Push Technology, Windows Mobile 5.0 and MSFP (Microsoft Security Feature Pack). MSFP is only available from the Mobile Manufacture. Now a few days ago Microsoft had published an updated Version of the Standalone Device Emulator 1.0 with MSFP.

Enabling Direct Push and other Mobile Features

After installing Exchange Server 2003 with Service Pack 2 start the Microsoft Exchange System Manager and navigate to *Global Settings – Mobile Services* and configure Exchange Active Sync and *Enable Direct Push over HTTP(s)* if it isn't enabled.
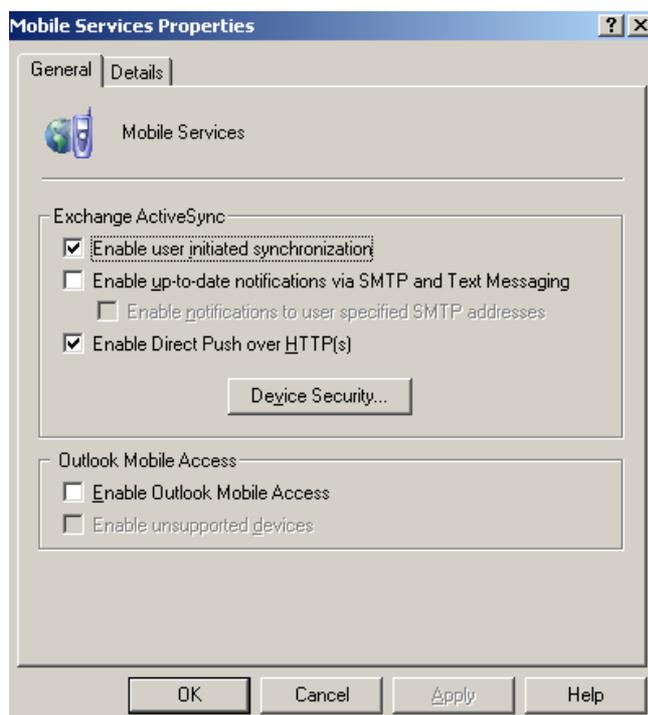
Figure 1: Configure Exchange Active Sync

Installing the VPC Network Driver

You must install a VPC Network Adapter for the Device Emulator 1.0 before you install the Standalone Device Emulator. The VPC Network Adapter is available here.
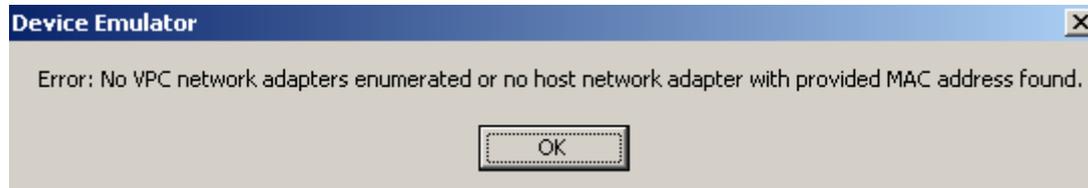
Figure 2: VPC Network Adapter required

Download and Installing the Device Emulator

The new package contains the Device Emulator Images for Windows Mobile 5.0 with MSFP and the Standalone Device Emulator 1.0. It is possible to install the new Device Emulator version over an existing Standalone Device Emulator 1.0 without Windows Mobile 5 Support.

If you had a previously version of the Device Emulator 1.0 installed, you can continue installing the updated Device Emulator Version. If it is a clean installation, first extract the V1Emulator.Zip file and then "install" the Device Emulator 1.0. This procedure is required to install the updated version.

You can download the MSFP version of the Device Emulator from here. After downloading the package simply following the installation instructions.

If you are interesting in getting the Device Emulator 2.0, you can download the Beta version from here.

Device Emulator Limitations

Posted the Original Message from Vlad Mazek an Exchange Server MVP regarding Push Mail and the Device Emulator:

"Questions regarding the emulator and testing push mail... You need to have a live cell data connection to do push mail, since the emulator can't pull one off you cannot test push-mail using it."

This was true to 14. June 2006. At 14. June 2006 Microsoft has published an update to the Device Emulator with MSFP regarding too many customers who don't understand why no direct push capabilities are built into the Device Emulator with MSFP.

Figure 3: Device Emulator Error Message

Read and accept the License Agreement and click *Install*.

Figure 4: Installing the Emulator Images for Windows Mobile with MSFP

The installation takes a while.
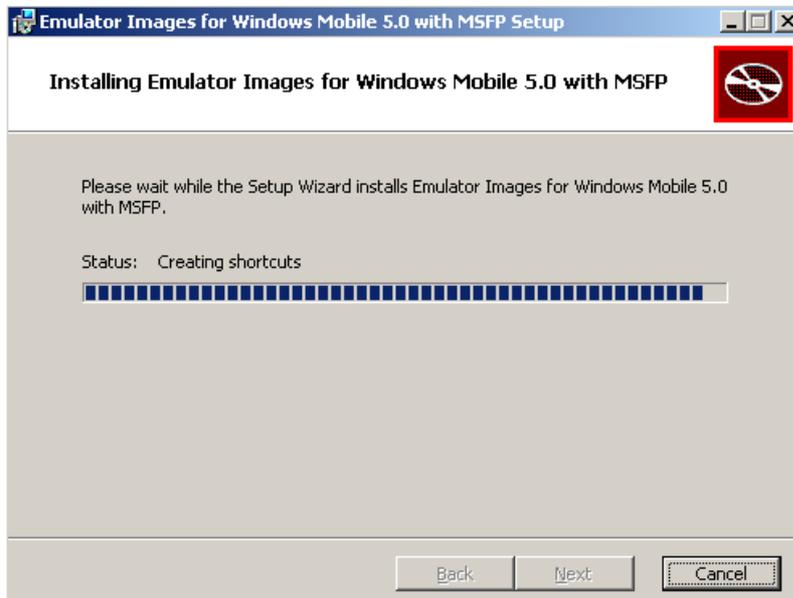
Figure 5: The installation takes a while

Using the Device Emulator

After installation you can open a Device Emulator Image.

Figure 6: Select a Device Emulator Manager Image

After that you can use the Device Emulator. The following picture shows the Pocket PC Phone Emulator with Windows Mobile 5.0 and MSFP.

Figure 7: Pocket PC Phone with Windows Mobile 5.0 and MSFP

After a Device Emulator Image was opened it is now possible to manage the Emulators with the Device Emulator Manager.
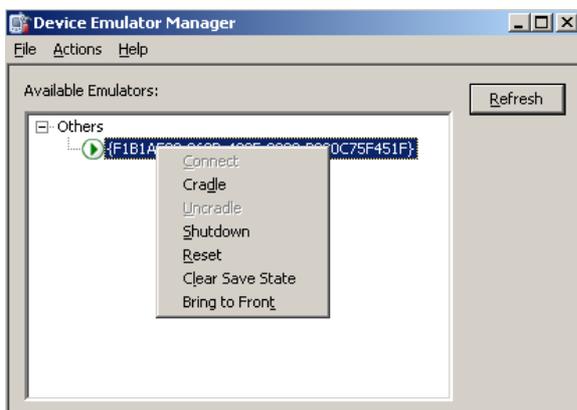
Figure 8: Device Emulator Manager

ActiveSync

The next step is to configure Microsoft Active Sync to sync the Mobile Phone with Microsoft Exchange.

First time contact of the Mobile Device with Exchange

If you use the Mobile Security Settings in the Exchange System Manager from SP2, at the first contact of your mobile device, it must enforce Security settings to the mobile device.

Figure 9: First contact of the mobile device

Configuring Active Sync

You must configure Active Sync to synchronize with Microsoft Exchange Server 2003.
Navigate to *Programs – ActiveSync* and create a connection with the Exchange Server.

Enter the DNS Name of the Exchange Server. It is highly recommended using a SSL connection between the Mobile Device and the Exchange Server but I only wanted to demonstrate you the new Device Emulator Functionality so I created a non SSL session.

Figure 10: Configure a ActiveSync connection

Enter the User Name and the Domain Name of the Mobile User. If you want an automatic synchronization, you must enter the Password and enable the Save *Password* option.

Figure 11: Enter user credentials

The Last step is to select the data that you want to synchronize between the Mobile Device and the Exchange Server 2003.

This was only a high level overview how to configure a Mobile Device with Exchange Server 2003 to synchronize data, so I recommend some additional reading how to implement Mobil Device Synchronization with Exchange Server 2003 SP2. Microsoft created some exclusive websites for this topic.

Mobile Administration

The Microsoft Exchange ActiveSync Mobile Administration Web tool allows administrators to remotely erasing lost, stolen or otherwise compromised mobile devices with Windows Mobile 5.0 and the Messaging & Security Feature Pack for Windows Mobile 5.0.

The Microsoft Exchange ActiveSync Mobile Administration Web tool is free of charge. You can download the ActiveSnyc Mobile Administration Web Tool from the following website. After downloading the package double click the package and follow the installation instructions.

Figure 12: Remote Device Wipe

Conclusion

The Standalone Device Emulator 1.0 with MSFP is the ideal solution to test and simulate a Mobile Phone or Smartphone to test the new features of Exchange Server 2003 SP2 and Windows Mobile 5.0 with the Microsoft Security and Feature Pack.

Related Links

Device Emulator 1.0 with MSFP download

http://www.microsoft.com/downloads/details.aspx?FamilyID=c62d54a5-183a-4a1e-a7e2-cc500ed1f19a&displaylang=en

VPC Network Adapter Download

http://www.microsoft.com/downloads/details.aspx?familyid=DC8332D6-565F-4A57-BE8C-1D4718D3AF65&displaylang=en

Microsoft Exchange Server ActiveSync Web Administration Tool

http://www.microsoft.com/downloads/details.aspx?FamilyID=e6851d23-d145-4dbf-a2cc-e0b4c6301453&DisplayLang=en

Windows Mobile 5.0

http://www.microsoft.com/windowsmobile/business/5/default.mspx

Exchange 2003 SP2 Download

http://www.microsoft.com/technet/prodtechnol/exchange/downloads/2003/sp2/download.mspx

New Mobility Features in Exchange Server 2003 SP2

http://www.microsoft.com/technet/prodtechnol/exchange/2003/sp2mobility.mspx

Mobility in Exchange Server 2003

http://www.microsoft.com/exchange/evaluation/features/mobility/default.mspx