MICROS Materials Control

Mobile Solutions 2010
Installation

Product Version 8.7.20.36.1421

Document Title:	Mobile Solutions 2010 Install
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Introduction

This document describes the installation procedures for the MICROS Materials Control Mobile Solutions 2010.
This is **not** the User Manual for the Mobile Solutions application!

This Mobile Solutions 2010 can be used with Materials Control version 8.6.6.10.81.1296 and higher. Each version of Materials Control is delivered with a matching version of Mobile Solutions!
In order to use the Mobile Solutions the required license for this module must be ordered.

The current application requires Windows Mobile 5.0 or higher as operating system on the mobile device.

Terminology:

As first part the used terms and namings must be explained.

Materials Control:
- This is the Materials Control main application, also known as thick client.

MCweb:
- This is the Materials Control Web Client application.

MICROSOFT Active Sync:
- This program allows to communicate with mobile terminals. This is not developed by MICROS-FIDELIO, but by MICROSOFT.

Windows Mobile Device Center:
- This is the successor of MS Active Sync (allows to communicate with mobile terminals). This is not developed by MICROS-FIDELIO, but by MICROSOFT.

MICROSOFT .NET Framework:
- This is a software platform developed by MICROSOFT, containing runtimes environments, classes, libraries, services and interfaces.

MyMobiler:
- This is a freeware tool to show the mobile device screen on the connected PC.

SQL Server Compact:
- This is a compact database system to be used on e.g. mobile devices.

Mobile Webservice:
- This is a service running on a MICROSOFT IIS webserver. The service is developed by MICROS-FIDELIO.

Device / HHT:
- This term describes the Mobile Device (Hardware, e.g. Symbol MC 50). (Also known as Handheld)

Mobile Solutions (application):
- This is the application running on the HHT

Mobile Solutions Client:
- This is the module to communicate with the device called in Materials Control.

Required Versions & Files:

The following applications must be installed on the PC which should communicate with the Mobile Solutions Terminal:

- Materials Control version 8.6.6.10.81.1296 or higher
- Materials Control MCweb 6.10.99.1296 or higher
- MICROSOFT Active Sync 4.5 (XP) or Mobile Device Center (Vista, W7)
- MICROSOFT .NET Framework 3.5 or higher

The following files are required to install Materials Control Mobile Solutions 2010:

- MyMobiler125_02072010.exe
  - This is a remote control tool for the mobile device

- MobileWebService
  - This is the Web Service for the Mobile Solutions

- DGMIMS
  - **Not required anymore for Materials Control 8.7.20.xx and higher!**

- MobileSolutionSetup
  - This is the application for the mobile device

NOTE: Each version of Materials Control (e.g. 8.6.6.10, 8.6.6.30, 8.7.10, etc.) will be delivered with a matching version of …

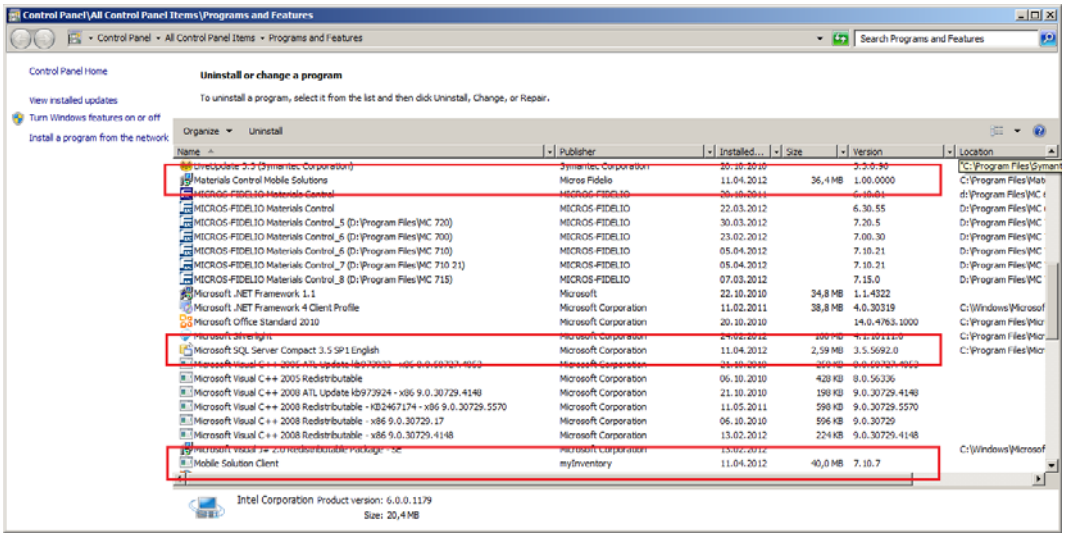
- MobileWebService
  - 8.6.6.10: MobileWebService 6.10.21.1296
  - 8.6.6.30: MobileWebService 6.30.12.1341
  - 8.7.10: MobileWebService 7.10.10.1381
  - 8.7.20: MobileWebService 7.20.22.1421

- DGMIMS
  - 8.7.20: not required anymore. Included in main Materials Control Client Installation

- MobileSolutionSetup for Materials Control
  - 8.6.6.10: MobileSolutionSetup 6.10.11
  - 8.6.6.30: MobileSolutionSetup 6.30.1
MobileSolutionSetup 6.30.3 (WM6.5x)
  - 8.7.10: MobileSolutionSetup 7.10.4
  - 8.7.20: MobileSolutionSetup 7.20.7

When updating from e.g. Materials Control 8.6.6.30 to 8.7.10.20.1381 the old versions of the mobile components on the Materials Control client PC and on the mobile device must be removed and re-installed in the new version!

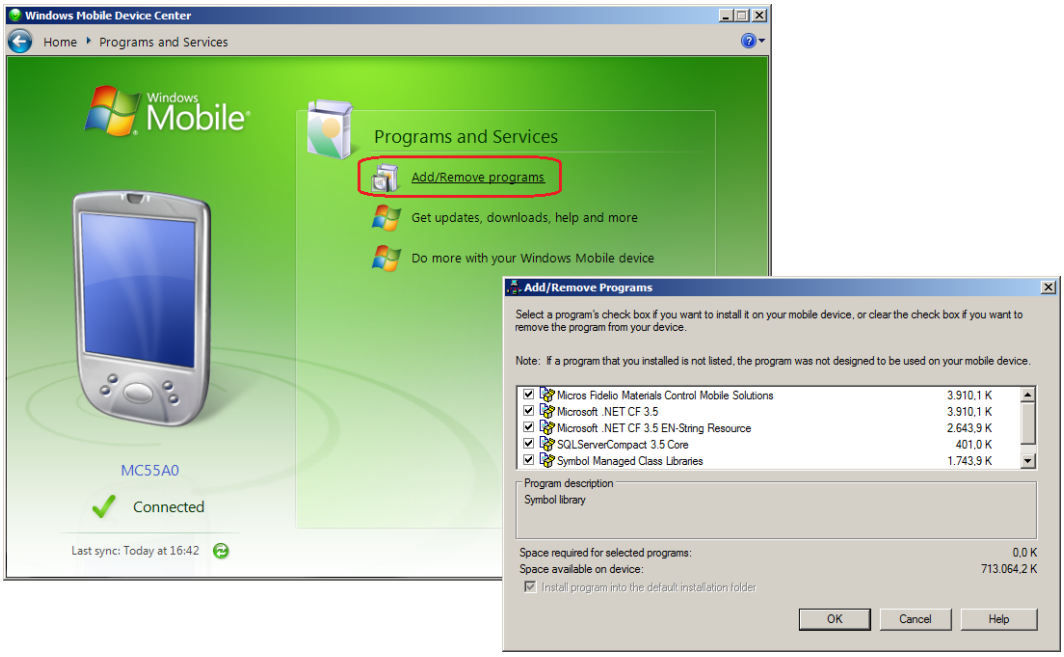
De-Install on the Client PC:



The following applications must be uninstalled:

- Materials Control Mobile Solution
- Microsoft SQL Server Compact 3.5
- Mobile Solution Client

De-Install on the Mobile Device:



Supported Hardware:

The following list shows the supported hardware devices and their operating systems:

Released platforms:

- PPT 88xx
  - OS: Microsoft® Pocket PC 2003
  - Discontinued by Motorola, but widely used by our customer base

- Symbol MC 50
  - OS: Microsoft® Pocket PC 2003
  - Discontinued by Motorola, but widely used

- Symbol MC 55
  - OS: Microsoft® Windows® Mobile 6.1

- Symbol MC 55A
  - OS: Microsoft® Windows® Mobile 6.5 Classic
  - Currently no EOL defined by Motorola, current preferred device

- Symbol MC 70
  - OS: Microsoft® Windows® Mobile 5.0
  - OS: Microsoft® Windows® Mobile 6.1
  - Discontinued by Motorola

Not released platforms:

- DT Research WebDT-430
  - OS: Microsoft® Windows® Mobile 6.5
  - planned

- DT Research WebDT-430
  - OS: Microsoft® Windows® CE 6.0
  - planned

Installation:

The following chapters will describe the installation of the required modules:

As main pre-requisite the mobile device should be connected via cable with the PC and Active Sync should have the connection between PC and device established.

Hardware Communication:

Before starting the installation of any application it needs to be checked that the communication between the PC executing the installation and the mobile device is working.

On Windows XP the communication is handled via Active Sync:

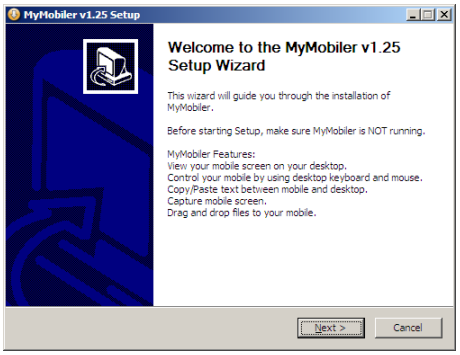
On Windows 7 the communication is handled via the Windows Mobile Device Center:

MyMobiler:

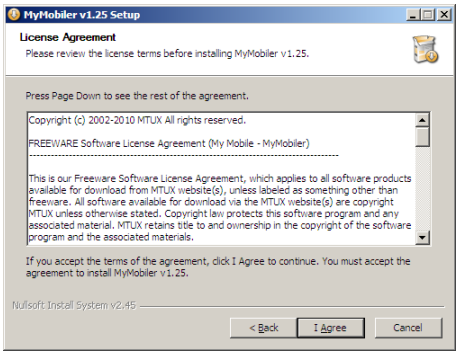
MyMobiler is a freeware application to show the screen of the mobile device on the desktop.
This application should be installed on the PC where the mobile devices are connected.

This application will be installed on the local PC **and** on the mobile device.

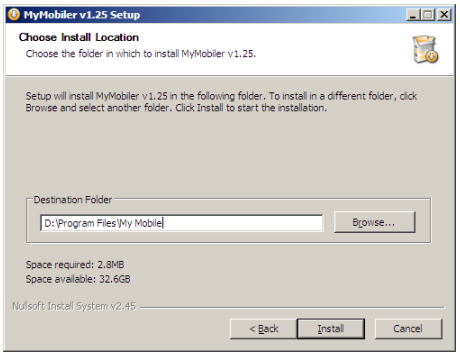
Doubleclick the file “MyMobiler125_02072010.exe” to start the installation process.



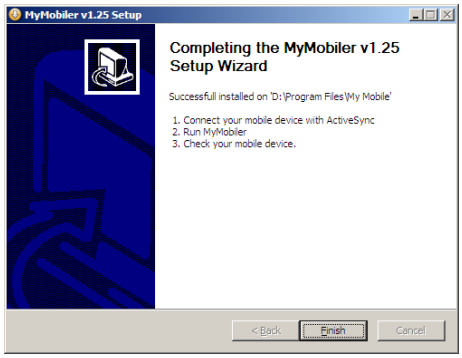
Click “Next” to continue.



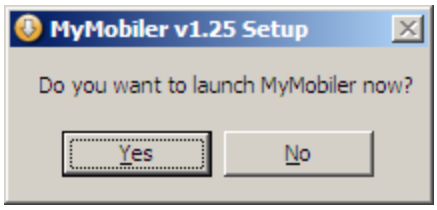
Click “I agree” to continue:



Select the location for the installation and click “Install” to continue.



Click “Finish” to finalize the installation process.

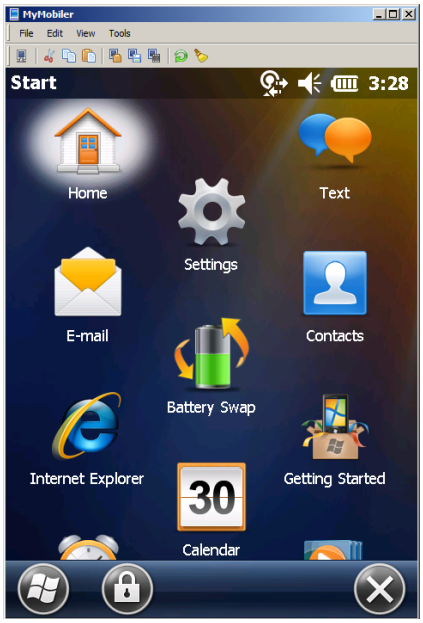


Click “Yes” to start the MyMobiler application.

In the system tray of the PC you can find now a new icon for MyMobiler.

Right-click this icon and select “Connect”. Once the connection is established, right-click again and select “Open Mobiler”:

Windows Mobile 6.1



Windows Mobile 6.5

Using mouse & keyboard the user now could work on the mobile device

Mobile Solutions Client:

In order to run the new module in Materials Control the client application must be installed on the PC.

With Materials Control 8.7.20.36.1421 and higher this installation is already included in the main client setup.

Mobile Web Service:

Usually the communication between the Materials Control Mobile Solutions and the Materials Control database is done via MICROSOFT Active Sync / Windows Mobile Device Center using a cable connection.

One of the advantages of the new Mobile Solution 2010 is the optional wireless communication. In order to use this feature a web service must be installed on the PC for this.

The setup of the WebService is mainly the same as for a usual MCweb instance.

All required files for the WebService can be found in the Setup zip file.
Current version: MobileWebService_7_20_22_1421.zip

Extract the above mentioned zip into a temporary folder.
Two new subfolders will be created:
- MobileWebService.Application
- MobileWebService.Config

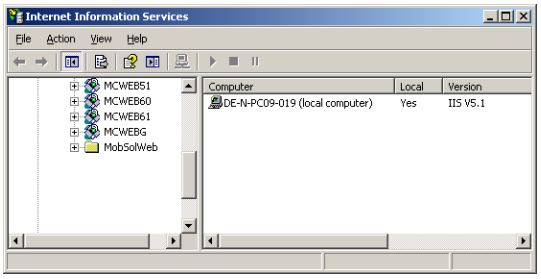
Go to c:\inetpub\wwwroot and create a new folder for the webservice (e.g. MobSolWeb)

- c:\inetpub\wwwroot\MobSolWeb

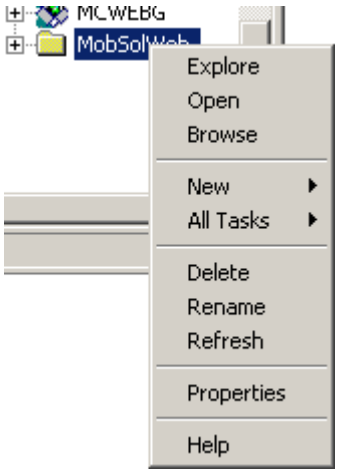
Copy contents of MobileWebService.Application to c:\inetpub\wwwroot\ MobSolWeb
Copy contents of MobileWebService.Config to c:\inetpub\wwwroot\ MobSolWeb

The content of both folders should be copied into the same folder.
- “MobileWebService.Application” contains the non-static files.
- “MobileWebService.Config” contains the static files for the installation.

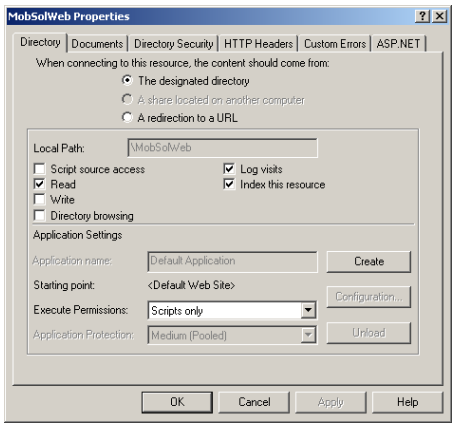
Now open the Microsoft IIS Administration:



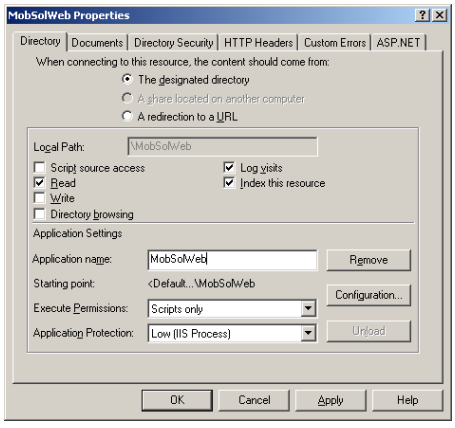
Here you can see the new fodler created for the webservice.



Right-click on the new folder and select “Properties”:

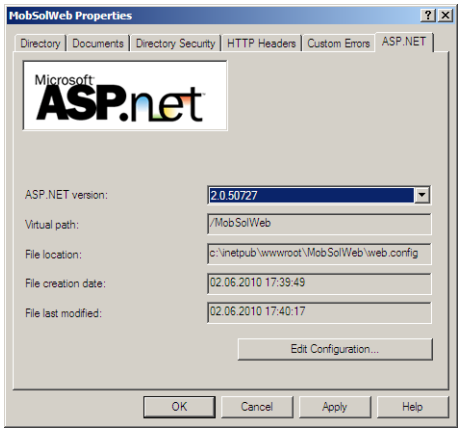


Click on the button “Create”.



Now change the application protection to “Low (IIS Process)”.

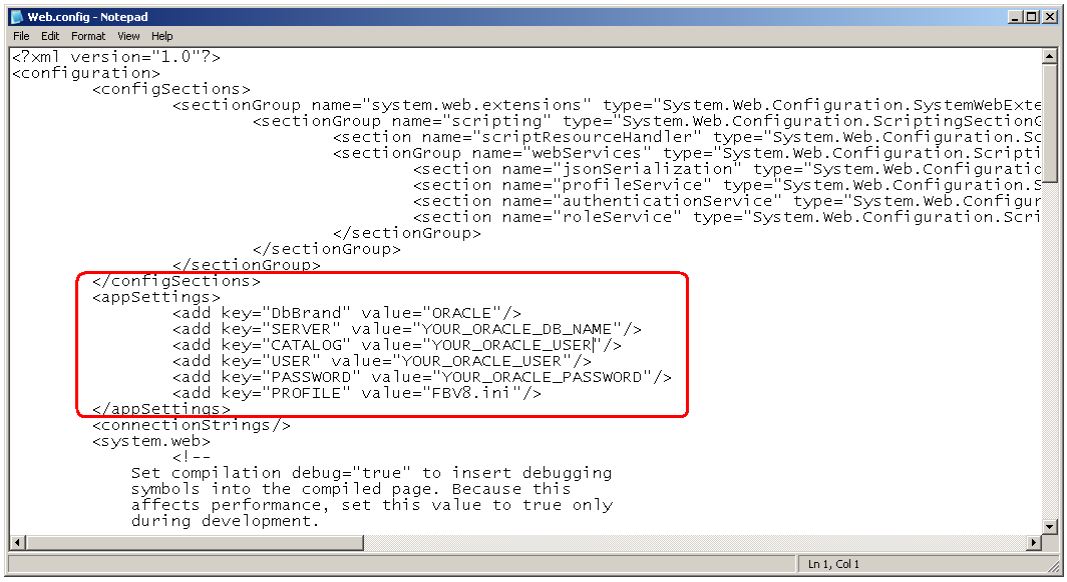
Check the ASP.NET configuration. Here at least version 2.0.50727 must be shown.



Click “Apply” and “Close”.

Assign the users ASPNET IUSR, IWAM to the windows user group “administrators”.

As final step the connection parameters for the webservice must be defined.
Go to C:\inetpub\wwwroot\MobSolWeb\ and open the file Web.config:



In the section “”<appSettings>” the database connection must be entered.

<add key="DbBrand" value="ORACLE"/>
<add key="SERVER" value="YOUR_ORACLE_DB_NAME"/>
<add key="CATALOG" value="YOUR_ORACLE_USER"/>
<add key="USER" value="YOUR_ORACLE_USER"/>
<add key="PASSWORD" value="YOUR_ORACLE_PASSWORD"/>
<add key="PROFILE" value="FBV8.ini"/>

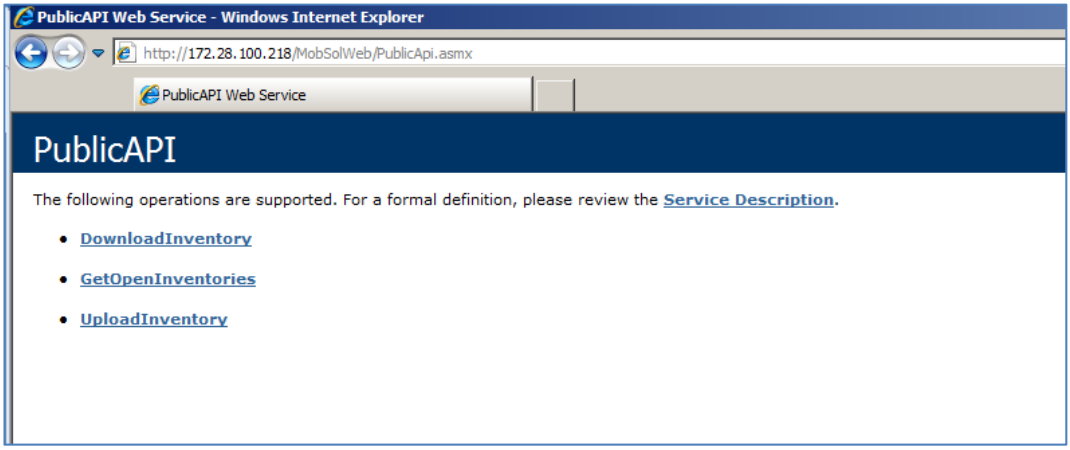
Save and close the file. Now execute IISReset to restart the MICROSOFT IIS Webserver.

Save and close the file. Now open the command line and execute IISReset to restart the Microsoft IIS Webserver.

To check if the installation was successful please go to:

http://{your IP address}/{your folder Name}/PublicApi.asmx

Following window should appear:



This is no function to use, but to confirm that the web service is working and can be reached.

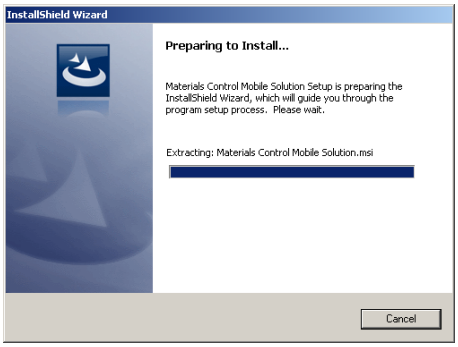
Mobile Solutions Setup:

As next step the Mobile Solutions application must be installed on the mobile device.

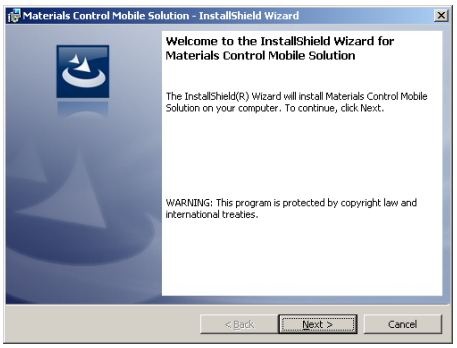
All required files for the application can be found in the Setup zip file.
Current version: MobileSolutionSetup_7_20_7

Extract the above mentioned zip into a temporary folder.
It contains:
instmsia.exe
instmsiw.exe
setup.exe

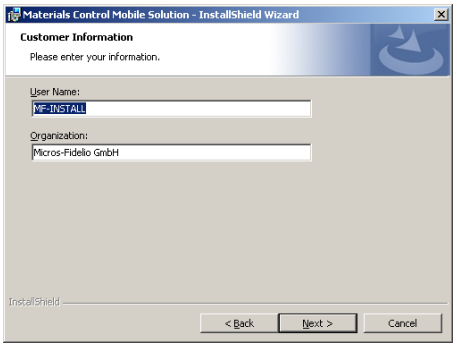
Start “setup.exe” to begin the installation process:



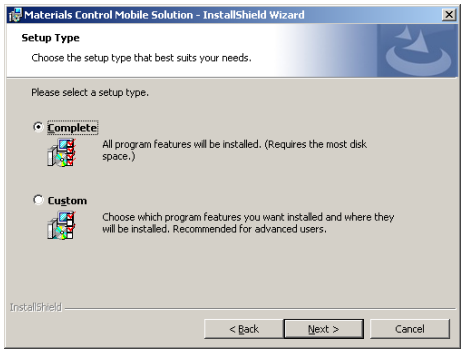
The install shield will now prepare the process.



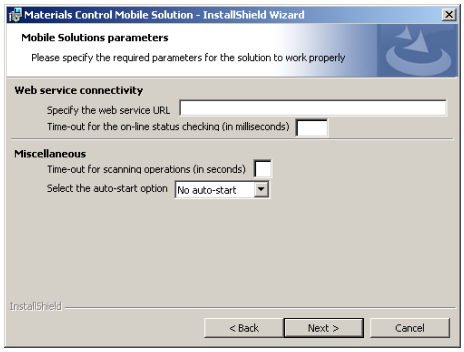
Click “Next” to continue.



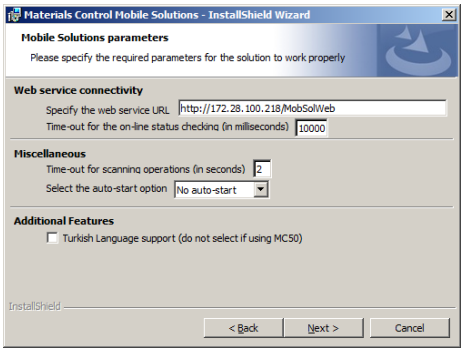
Enter the required information and click “Next” to continue.



Select “Complete” and click “Next” to continue.



Here now the address of the webservice must be defined.

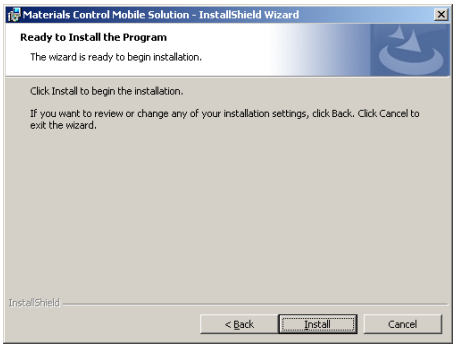


Web Service URL:	enter the complete URL (e. g. http://{IP address}/MobSolWeb)
Time-out for on-line status:	define a (good) time-out. Keep in mind that the request could take longer!
Time-out for Scanning:	Define the scanning time-out
Auto-start:	Select “No auto-start”

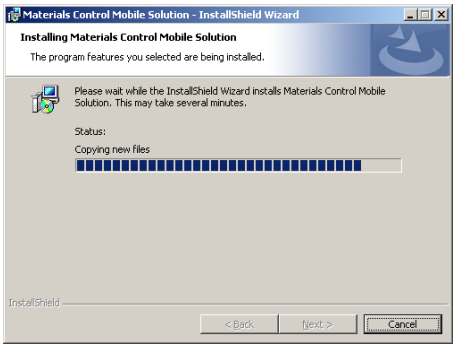
In case no web service is used, also a dummy URL could be entered (e.g. http://{IP address}/dummy). All other parameters must be defined.

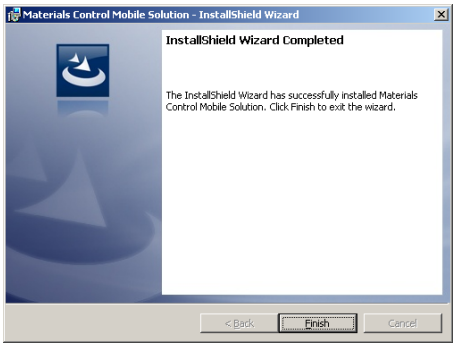
Additional Features:
- Turkish Language Support Specific enhancements for Turkey & WM 6.5

Click “Next” when finished with all definitions.

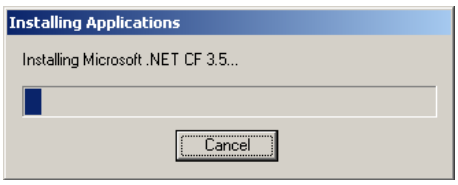


Click “Install” to start the main installation process. The system will now install several files on the mobile device. Do not interrupt the process or remove the device from the cradle!

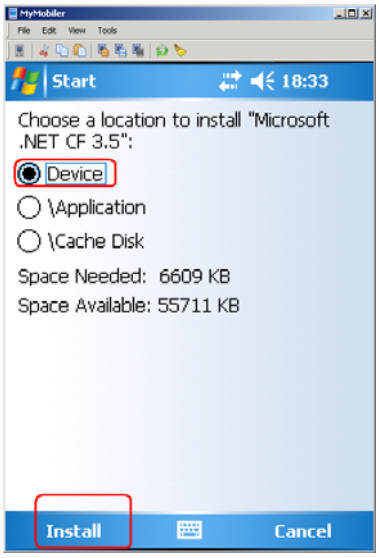


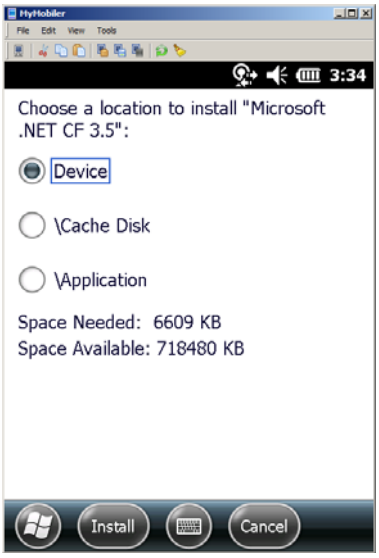


Click “Finish” to finalize the copy process. Now the install process will begin. Please follow exactly the steps described here!



Do not click OK now! Keep message open! Check the screen of the mobile device.

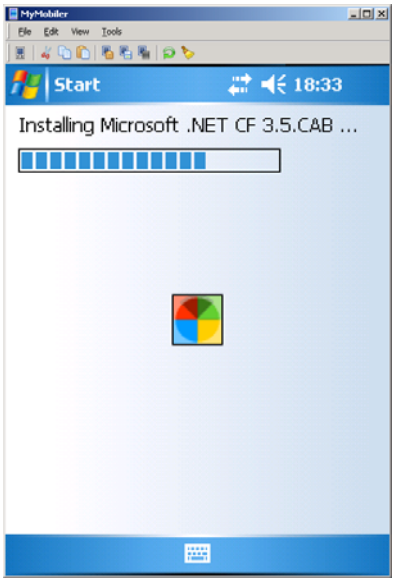


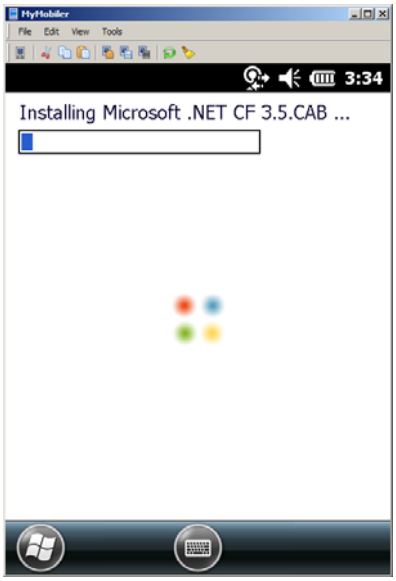


Windows Mobile 6.1 Windows Mobile 6.5

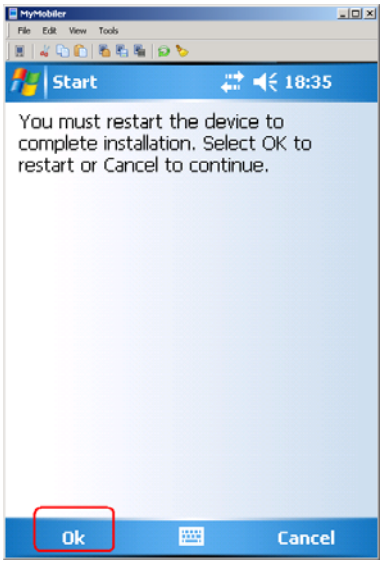
First .NET Compact Framework will be installed on the device.

Click on “Install” to continue.

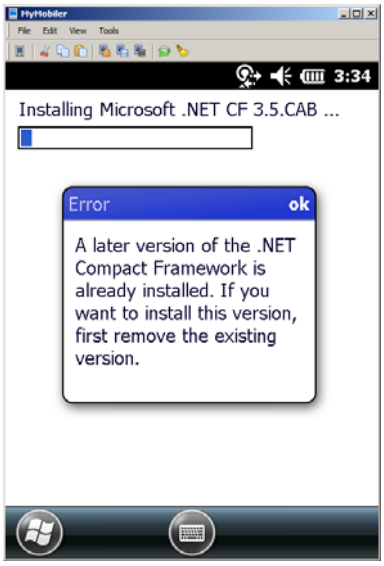


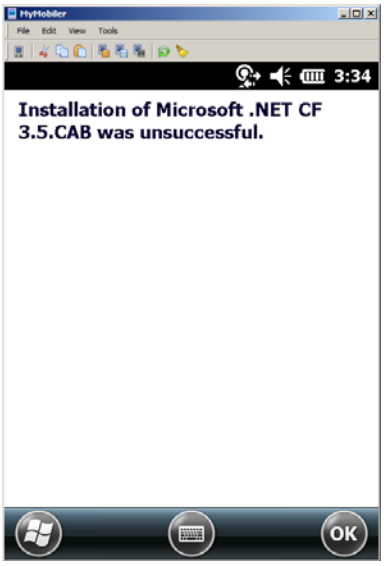


Windows Mobile 6.1 Windows Mobile 6.5



For Windows Mobile 6.1: The mobile device needs to reboot after the installation is finished. Click “OK” and the device will re-start.





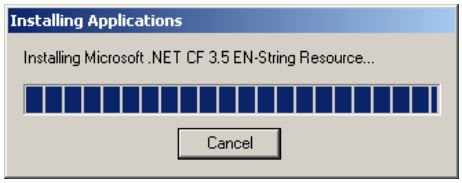
For Windows Mobile 6.5: On such devices usually an error will be shown since this device is using a higher version of .NET framework already. Confirm the screen with “OK”

For Windows Mobile 6.1: After the reboot make sure that the Active Sync connection is established again. (re-connect MyMobiler!)

Once the mobile device is restarted completely, go back to the message on the PC:

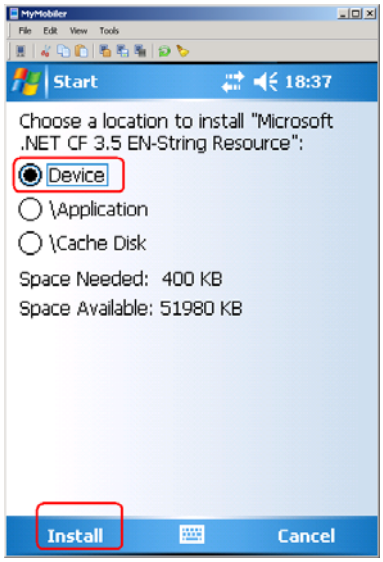
Confirm with “OK” to continue.

The install shield will now start the next step automatically.
“.NET CF 3.5 EN-String Resource” will now be installed. This is a required component for the Framework.

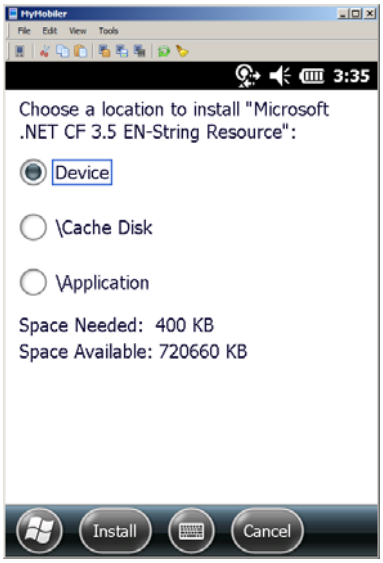


The install shield will now initialize the process. Once ready the following message will be shown:

Do not click OK now! Keep message open! Check the screen of the mobile device.



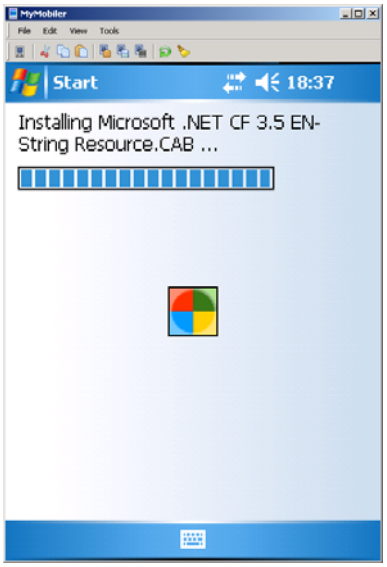
Windows Mobile 6.1



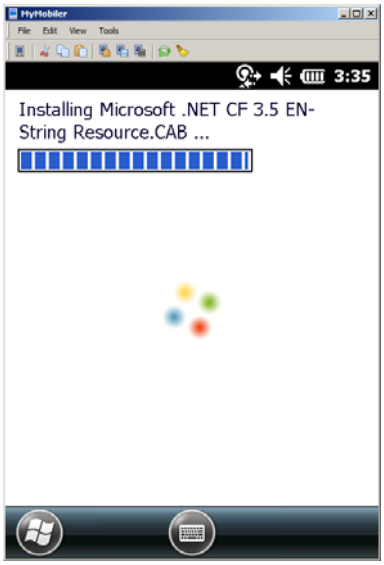
Windows Mobile 6.5

.NET CF EN-String Resource will be installed on the device.

Click on “Install” to continue.

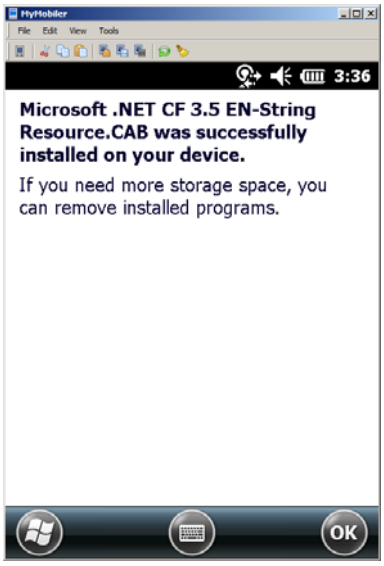


Windows Mobile 6.1



Windows Mobile 6.5

Windows Mobile 6.1



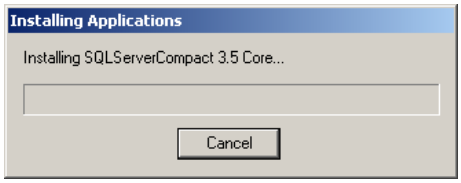
Windows Mobile 6.5

Click “OK” to finalize this step.

Now you can confirm the message on the PC:

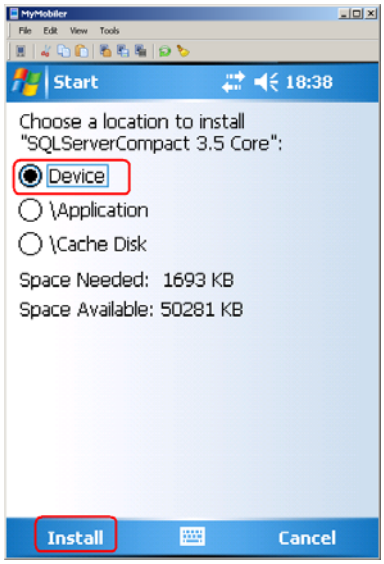
Confirm with “OK” to continue.

The install shield will now start the next step automatically.
“SQL ServerCompact 3.5 Core” will now be installed.

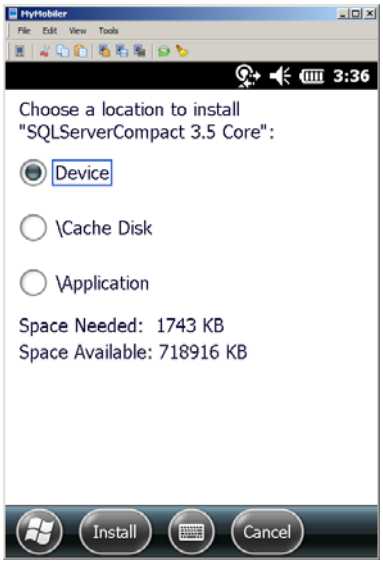


The install shield will now initialize the process. Once ready the following message will be shown:

Do not click OK now! Keep message open! Check the screen of the mobile device.

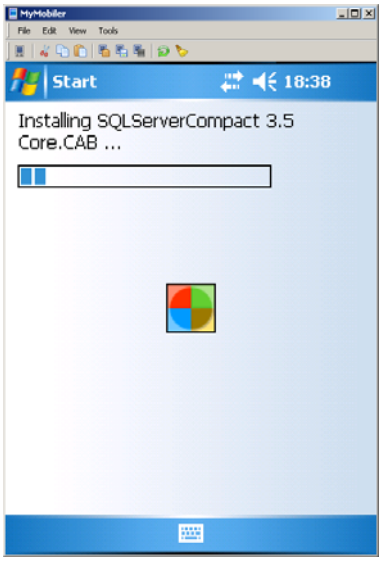


Windows Mobile 6.1

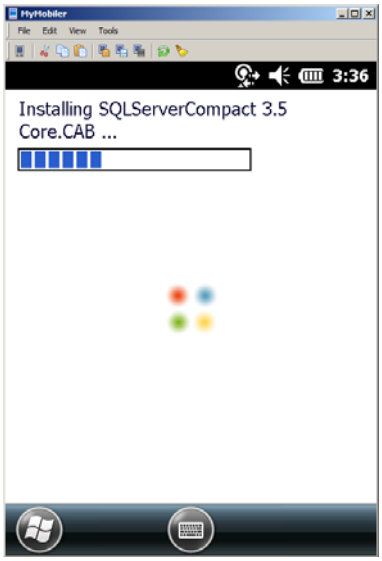


Windows Mobile 6.5

Click “Install to continue.



Windows Mobile 6.1



Windows Mobile 6.5

Windows Mobile 6.1

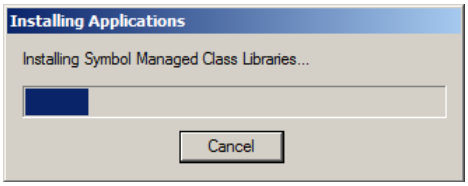
Windows Mobile 6.5

Click “OK” to finalize this step.

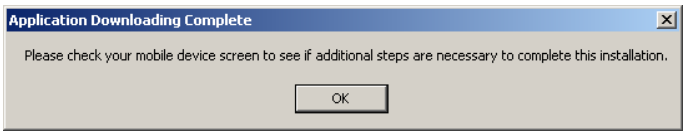
Now you can confirm the message on the PC:

Confirm with “OK” to continue.

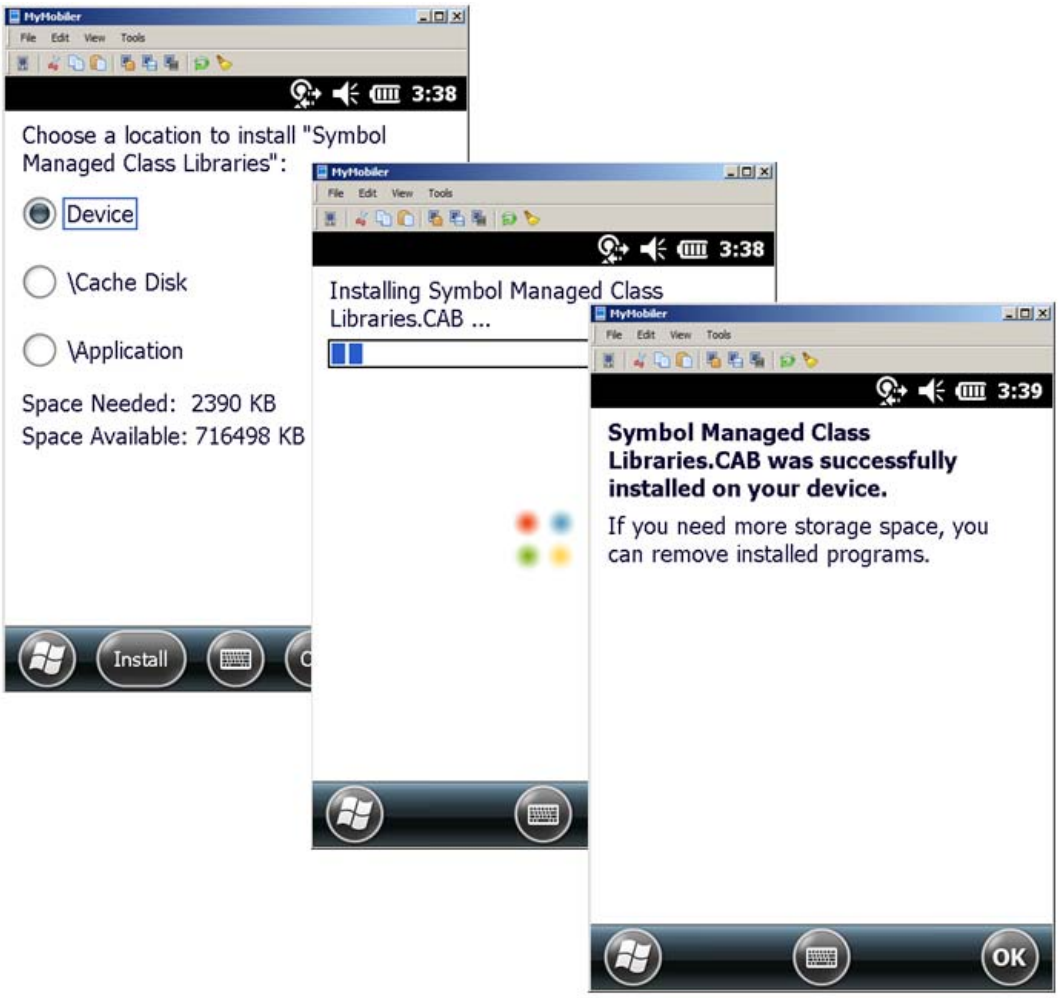
For Windows Mobile 6.5: The install shield will now install the Symbol Managed Class Libraries:



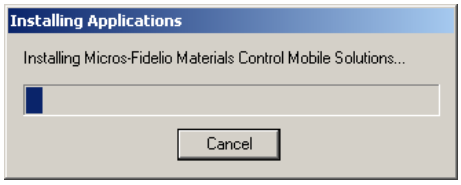
The install shield will initialize the process. Once ready the following message will be shown:



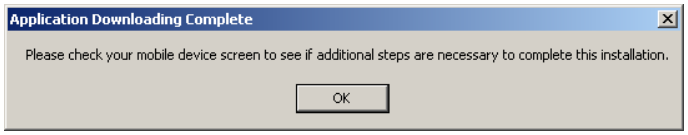
Do not click OK now! Keep message open! Check the screen of the mobile device.



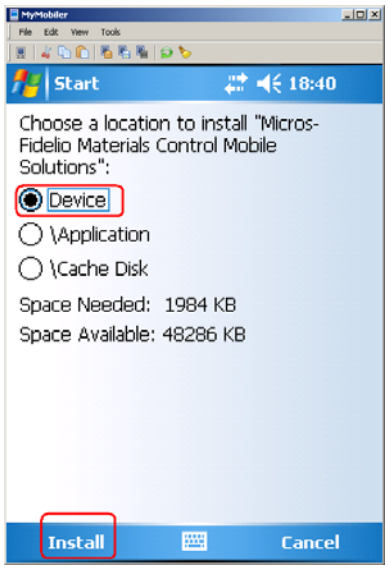
The install shield will now install the main Mobile Solutions application:



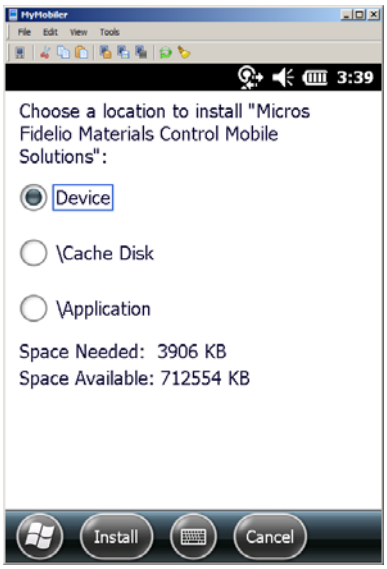
The install shield will initialize the process. Once ready the following message will be shown:



Do not click OK now! Keep message open! Check the screen of the mobile device.

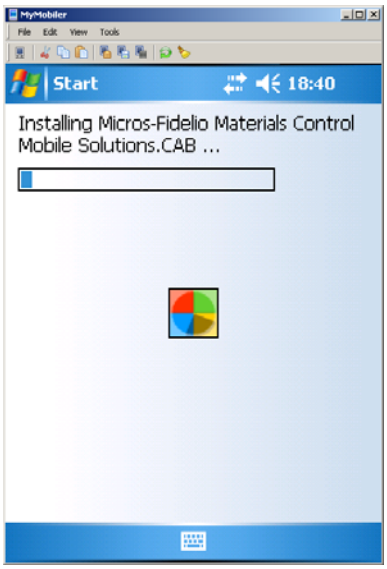


Windows Mobile 6.1

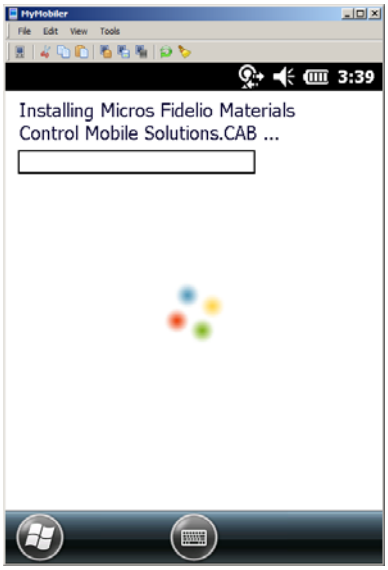


Windows Mobile 6.5

Click “Install to continue.

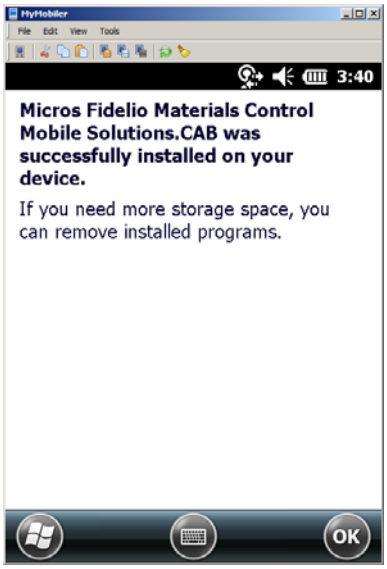


Windows Mobile 6.1



Windows Mobile 6.5

Windows Mobile 6.1



Windows Mobile 6.5

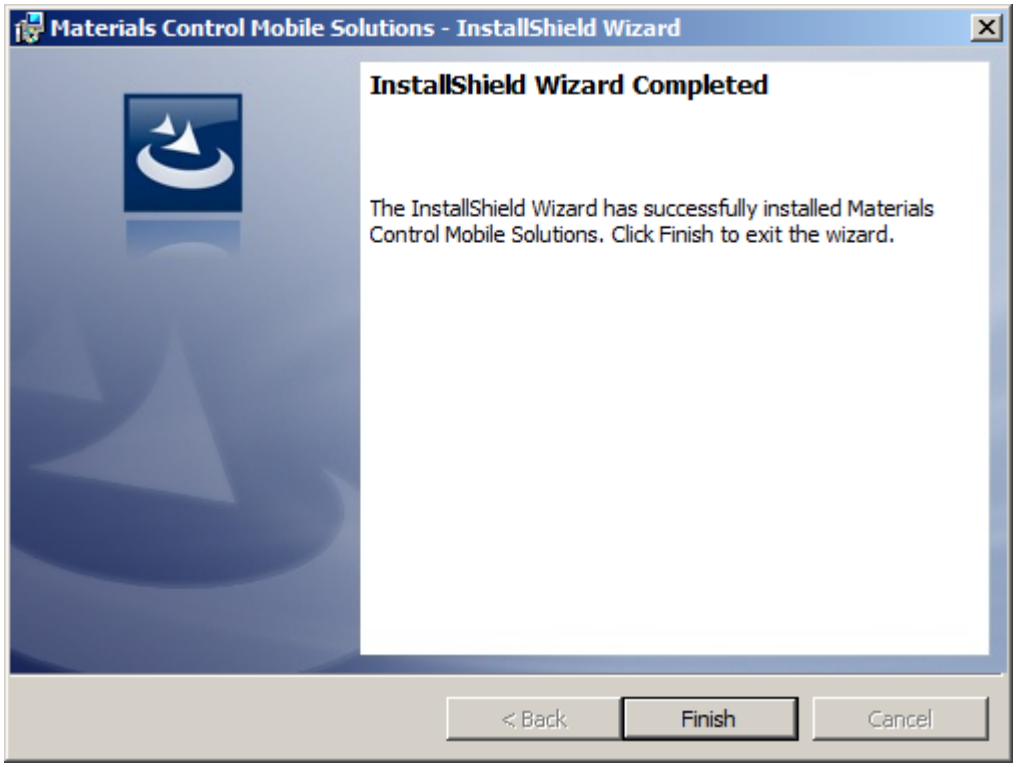
Click “OK” to finalize this step.

Now you can confirm the message on the PC:

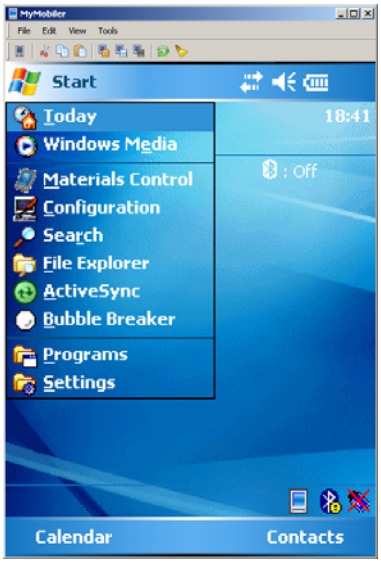
Confirm with “OK” to continue.

In some cases the installation of an update for the Materials Control Mobile Solutions will follow now.

The setup of the required components and applications on the mobile device is now completed.



As next step the mobile device must be configured.



For Windows Mobile 6.1: In the Start menu of the device you can find now two new applications:

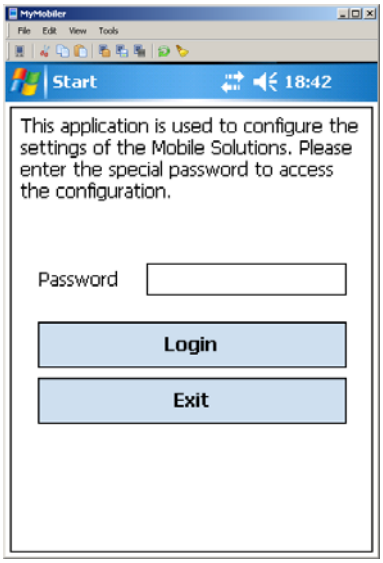
- Materials Control
- Configuration

For Windows Mobile 6.5: On the Desktop of the device you can find now a new folder “Materials Control” containing applications:

- Materials Control

Configuration

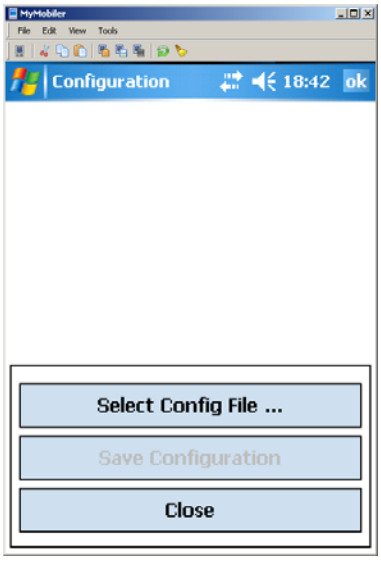
Start the Configuration application.



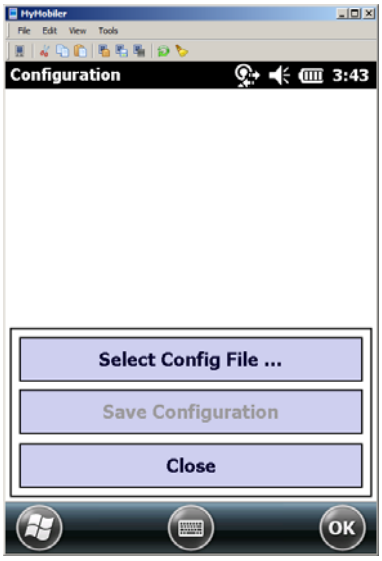
Windows Mobile 6.1

Windows Mobile 6.5

Since this is a critical module it requires a Password. Please contact your local support team to get it.



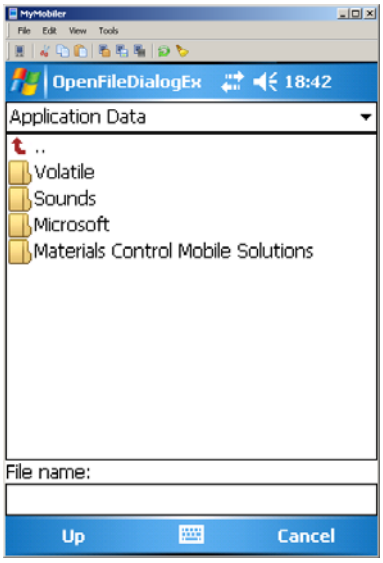
Windows Mobile 6.1



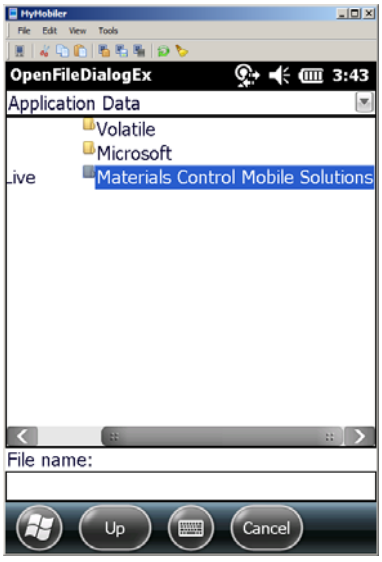
Windows Mobile 6.5

In the menu please click on “Select Config File…”

The system will now open a browser on the device. Please click on the folder “Application Data”.



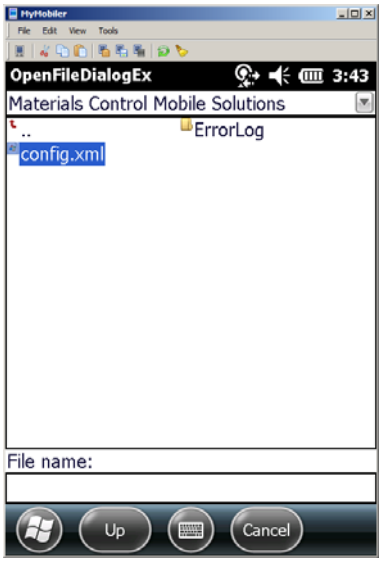
Windows Mobile 6.1



Windows Mobile 6.5

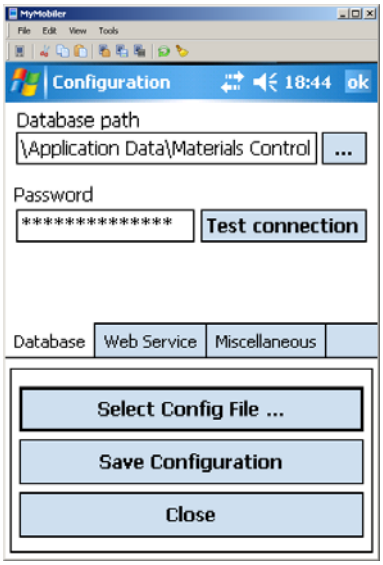
Here please select the folder “Materials Control Mobile Solutions”

Windows Mobile 6.1

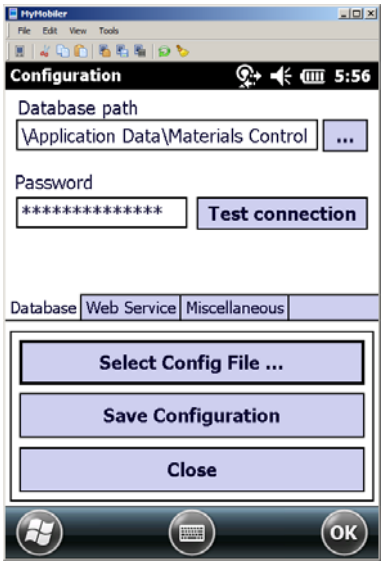


Windows Mobile 6.5

Here you can find a file called “config.xml”. Doubleclick this file to access the configuration of the device.

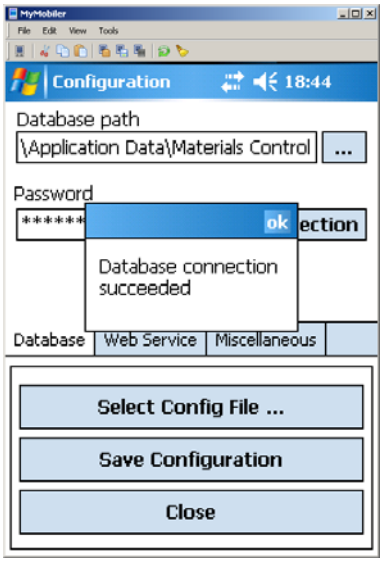


Windows Mobile 6.1

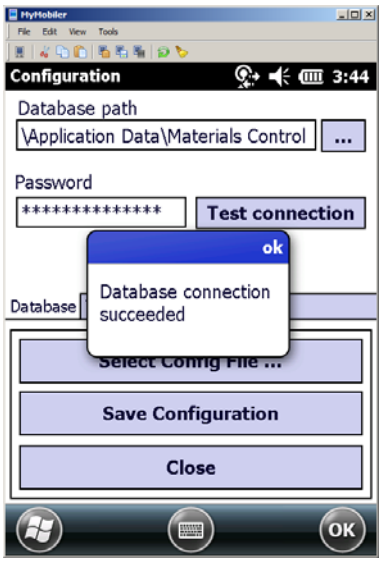


Windows Mobile 6.5

After opening the file, the system will offer several test- and setting functions. On the first tab “Database” the user can test the connection to the local database. Click on the button “Test Connection”.

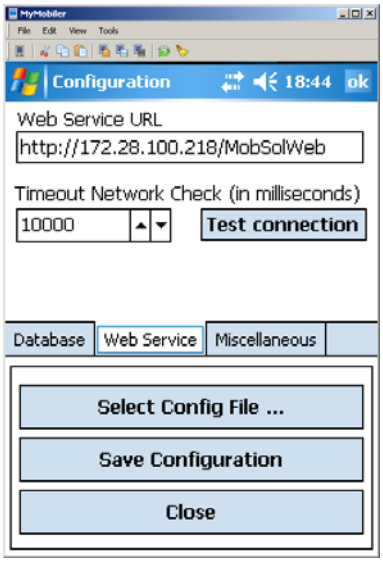


Windows Mobile 6.1

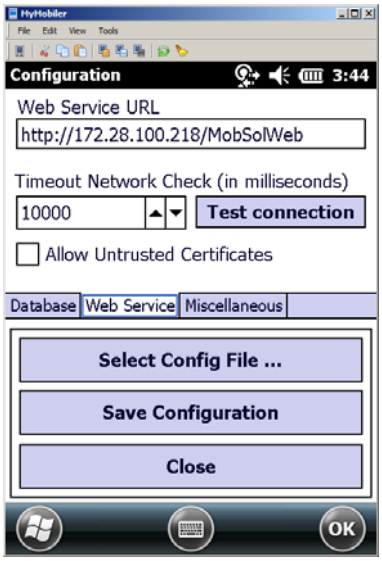


Windows Mobile 6.5

The system will return the message “Database Connection succeeded” if the test was successful.

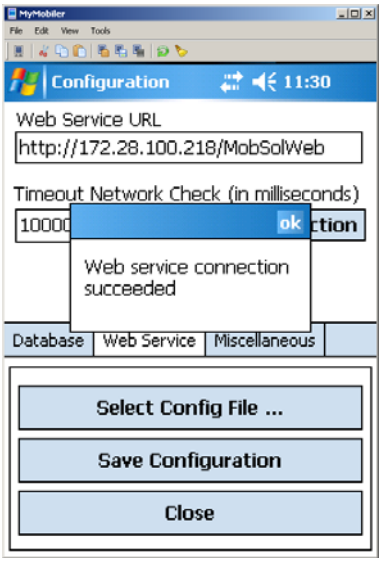


Windows Mobile 6.1

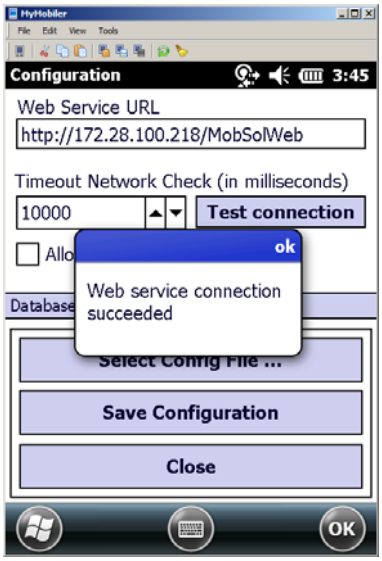


Windows Mobile 6.5

Switch to the second tab “Web Service” to test the web service connection (if installed). Click on “Test connection”.

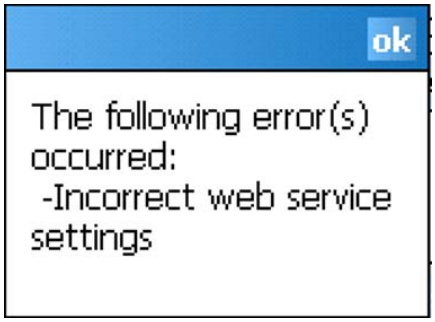


Windows Mobile 6.1



Windows Mobile 6.5

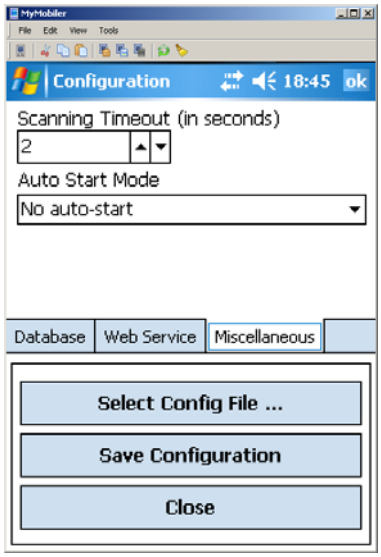
The system will return the message “Web service connection succeeded” if the test was successful.



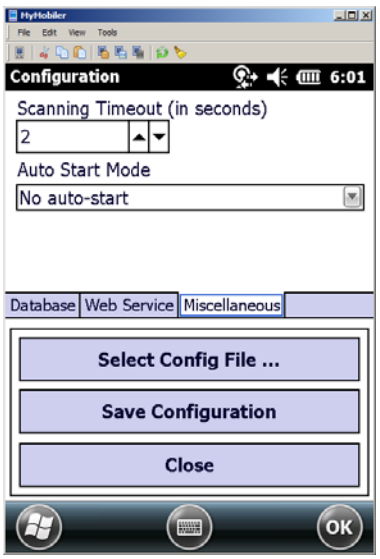
See here an example where the connection could not be established.
Possible reasons:

- The entered address is invalid (real IP address, not “localhost”).
- The web service is not running.
- The web service could not be accessed.

On the third tab the scan settings could be defined.

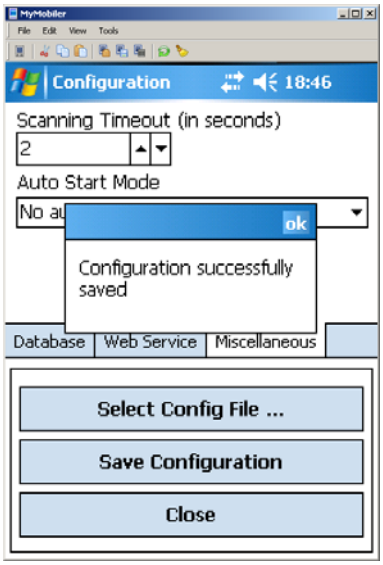


Windows Mobile 6.1

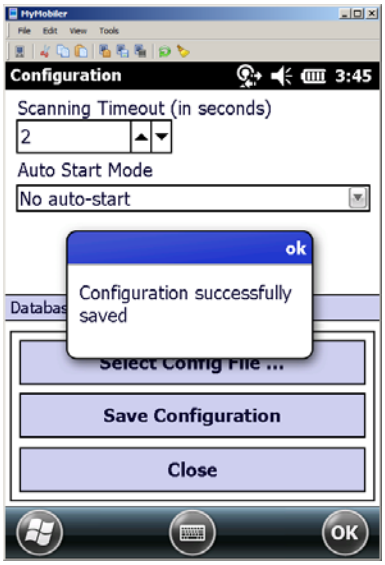


Windows Mobile 6.5

Once finished please click on “Save Configuration”.

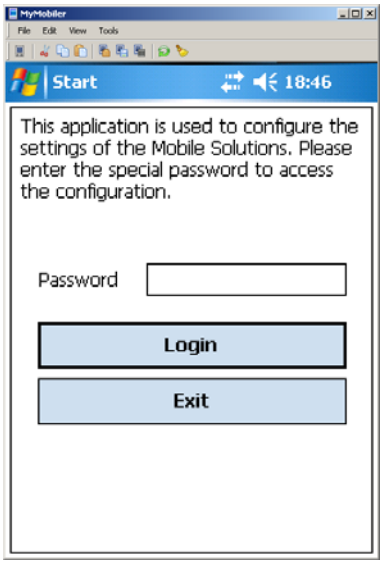


Windows Mobile 6.1

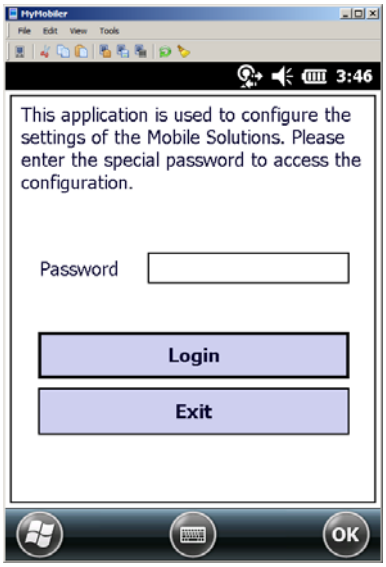


Windows Mobile 6.5

Confirm the message and close the module.



Windows Mobile 6.1



Windows Mobile 6.5

Click on “Exit” to close the Configuration module.

Back in the Windows Mobile Start Menu now the user theoretically could select “Materials Control” to start the application. But **before** the device now has to be registered!

Mobile Device Configuration:

Depending on the setup the default configuration of the mobile device could cause issues.

Advanced Network Functionality

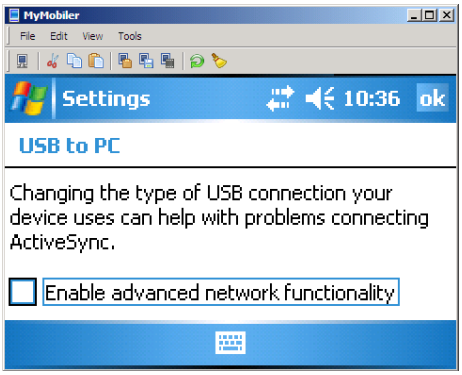
With the release of Windows Mobile 5.0, Microsoft changed the protocol used to sync via USB from PPP to RNDIS. This has caused some problems with VPNs and other networking software installed on the PC you sync with. So with AKU 2.3, Microsoft added back the ability to revert back to PPP. You can use this option to change the USB functionality for ActiveSync 4.x as well as Windows Mobile Device Center (WMDC) to improve network compatibility. The USB Advanced Network functionality is available in Windows Mobile 6 and higher only.

Revert Back to PPP
On your Windows Mobile Pocket PC, click on Start > Settings > Connections and you will see the following screen:

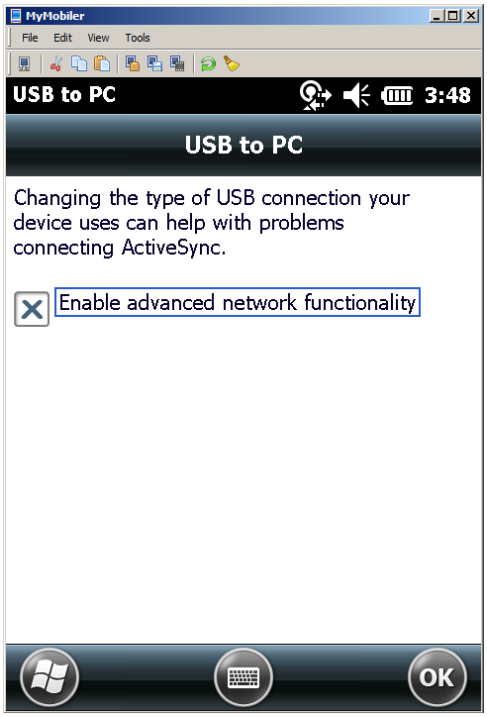
Windows Mobile 6.1

Windows Mobile 6.5

Select “USB to PC” and see:



Windows Mobile 5.x

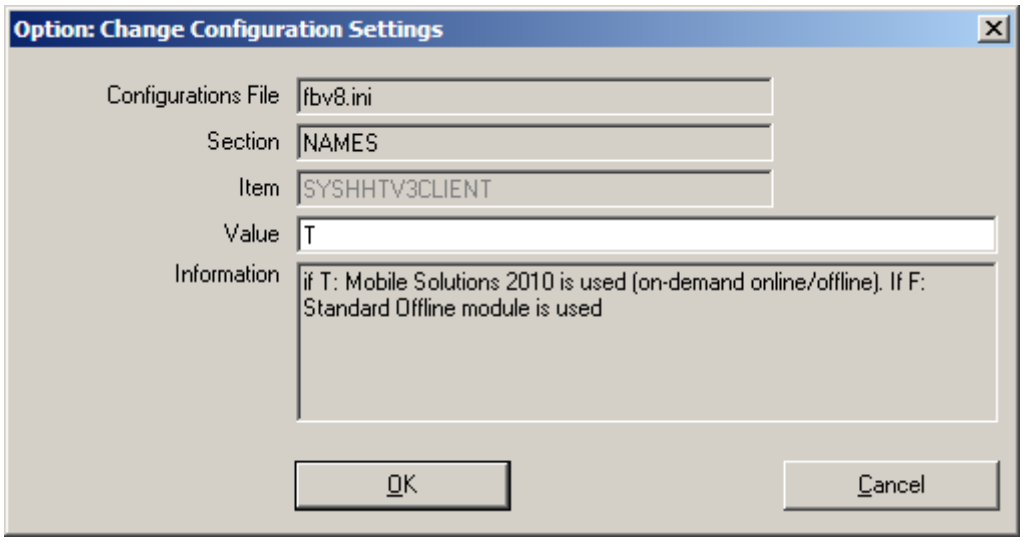


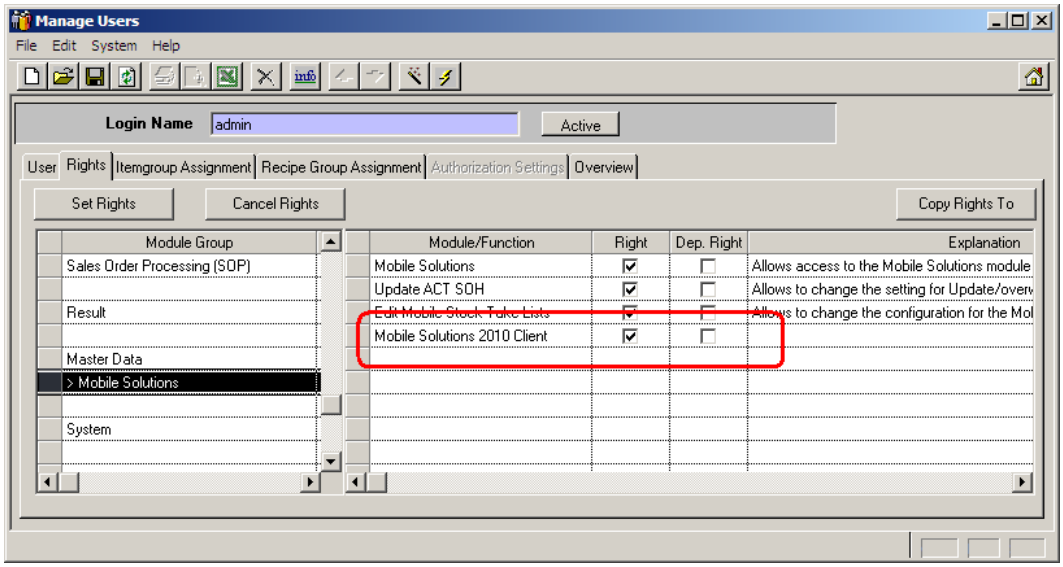
Windows Mobile 6.5

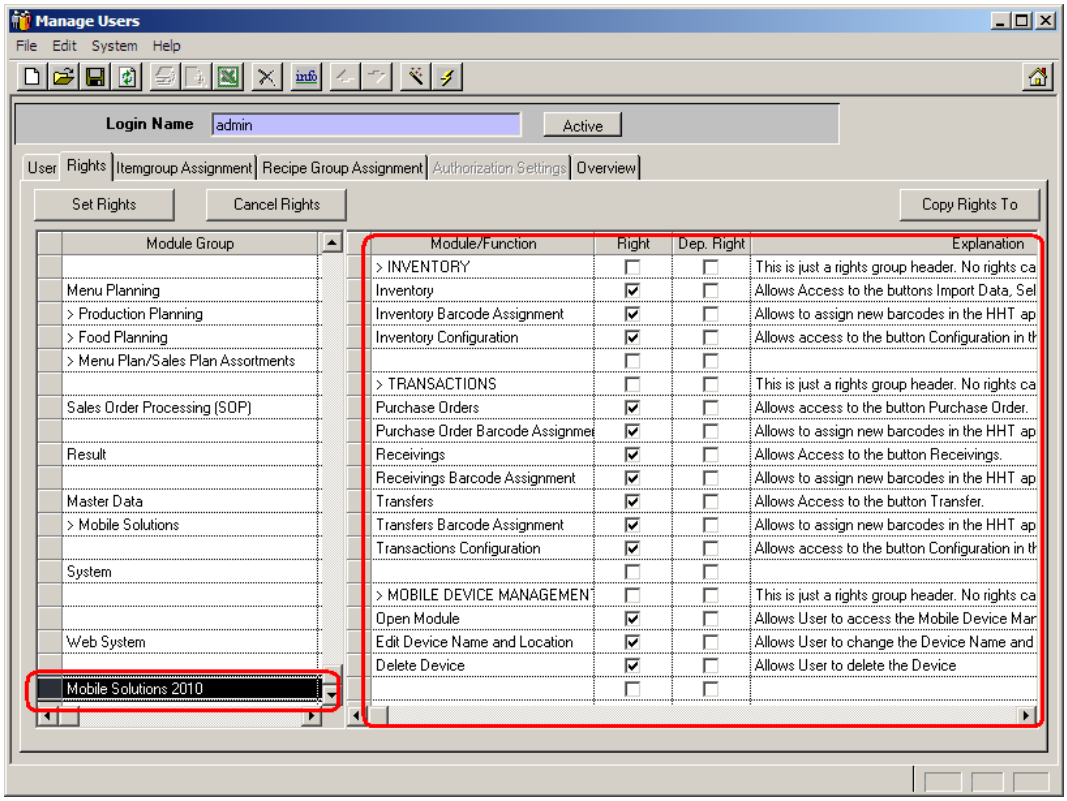
Uncheck the **Enable advanced network functionality** to disable RNDIS and enable PPP only for Windows Mobile 5.0. For Windows Mobile 6 and higher it must be enabled.

Thick Client Preparation:

On order to access the new module the activation parameter and the user rights must be set.



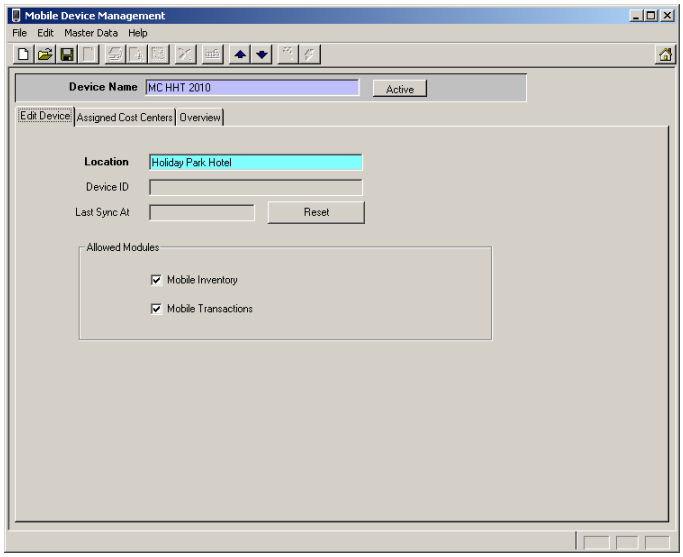



Manage Users
File Edit System Help
Login Name admin
Active
User Rights Itemgroup Assignment Recipe Group Assignment Authorization Settings Overview
Set Rights
Cancel Rights
Copy Rights To
Module Group
Menu Planning
> Production Planning
> Food Planning
> Menu Plan/Sales Plan Assortments
Sales Order Processing (SOP)
Result
Master Data
> Mobile Solutions
System
Web System
Mobile Solutions 2010
Module/Function
Right
Dep. Right
Explanation
> INVENTORY
Inventory
Inventory Barcode Assignment
Inventory Configuration
> TRANSACTIONS
Purchase Orders
Purchase Order Barcode Assignmer
Receivings
Receivings Barcode Assignment
Transfers
Transfers Barcode Assignment
Transactions Configuration
> MOBILE DEVICE MANAGEMEN
Open Module
Edit Device Name and Location
Delete Device
This is just a rights group header. No rights ca
Allows Access to the buttons Import Data, Sel
Allows to assign new barcodes in the HHT ap
Allows access to the button Configuration in th
Allows Access to the button Purchase Order.
Allows Access to the button Receivings.
Allows Access to the button Transfer.
Allows User to access the Mobile Device Mar
Allows User to change the Device Name and
Allows User to delete the Device

Mobile Device Management:

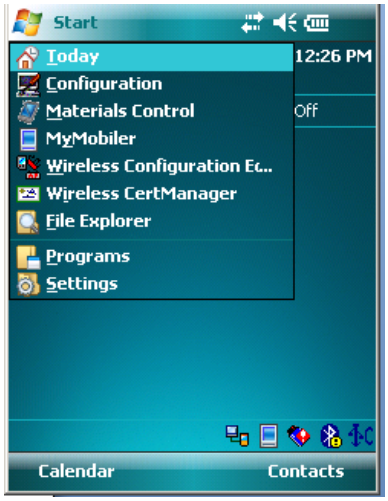
In order to use the devices with the new Mobile Solutions 2010 module, each device needs to be registered.

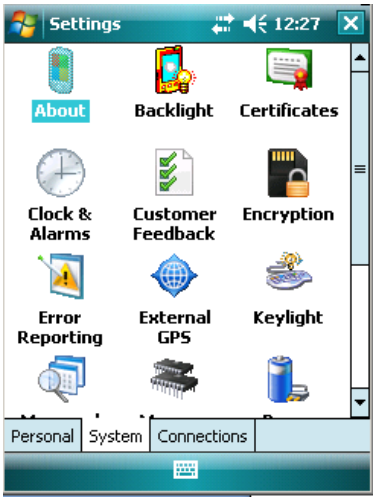
For this a new application was added, called “**Mobile Device Management**”. Regularly it is available in Master Data Menu.



- Define the name of the device. This is the name stored on the device itself. Therefore go to Device – Settings

For Windows Mobile 6.1: select Settings in the Start Menu.



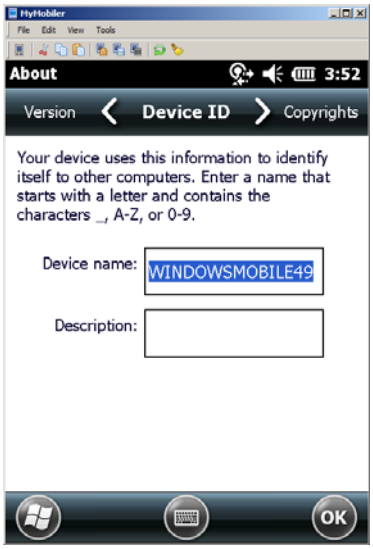


- TAB “System” and “About”

For Windows Mobile 6.5

- TAB “Device ID”

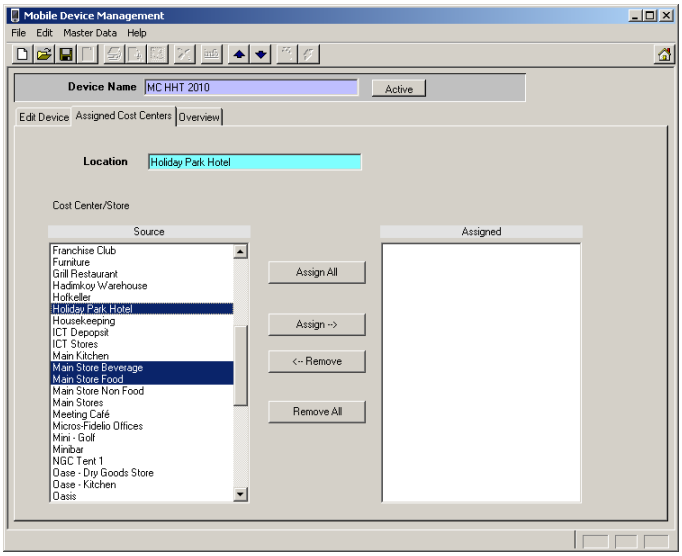
Windows Mobile 5.x

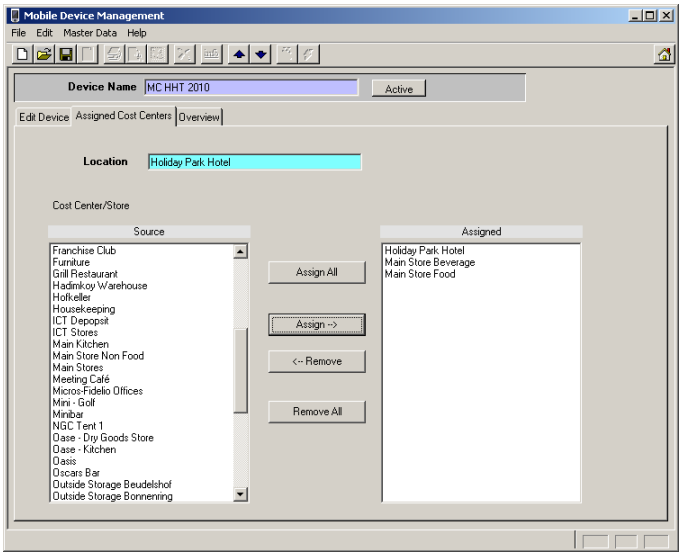


Windows Mobile 6.5

- Enter this description into the field “Device Name”
- Define the root location / cost center (e.g. Hotel name root cost center)
- **Do not use the button “Reset” at this point of time!**
- Activate the applications to be used on that terminal
    - Mobile Inventory
        - … to do stock counts
    - Mobile Transactions
        - … to do Purchase Orders, Receivings, Transfers and Issue Requests

Now switch to the second tab and assign the cost centers allowed on this terminal.
NOTE: The assignment follows the company structure of the selected root location.





Once done save the definitions and close the module.

Mobile Solutions Client:

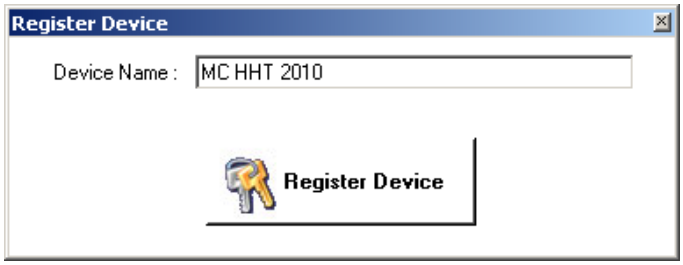
Now the new Mobile Solutions Client application could be used.
In order to communicate with the HHT some rules must be considered:

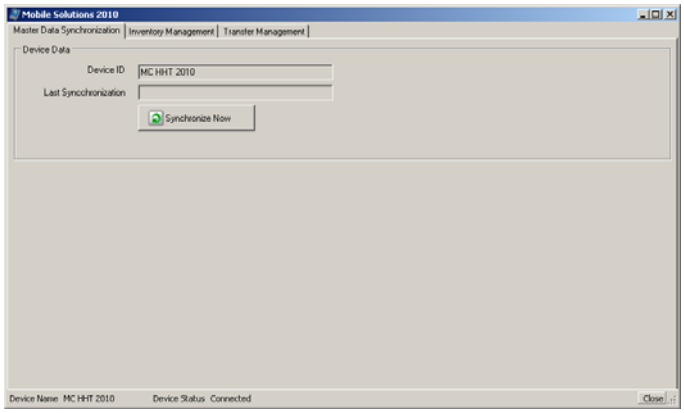
- The device must be connected via Active Sync.
- The application on the device **must not** be open!
- While the Mobile Solutions Client in Materials Control is open, the device must remain connected!

In the Materials Control menu select “Master Data” > “Mobile Solutions”

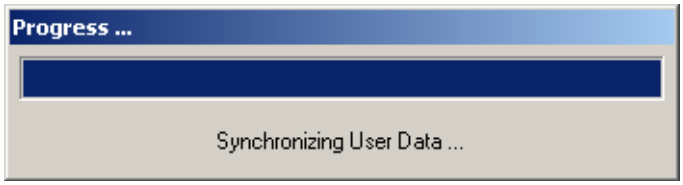
At first start the system needs to know which device should be connected now.

Enter the device name created in the Mobile Device Management module.

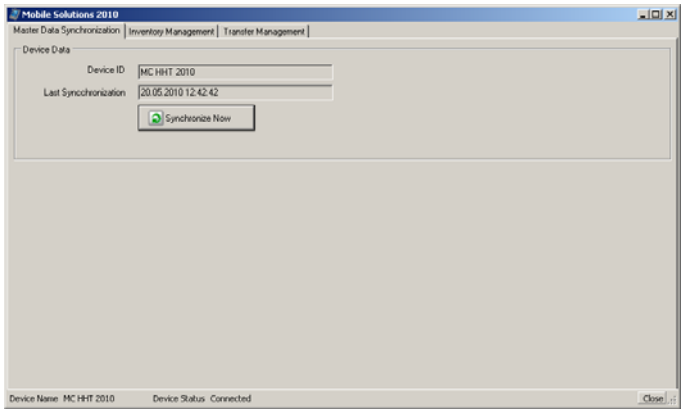




Click button “Synchronize Now”



Screen now shows date and time of last synchronization.



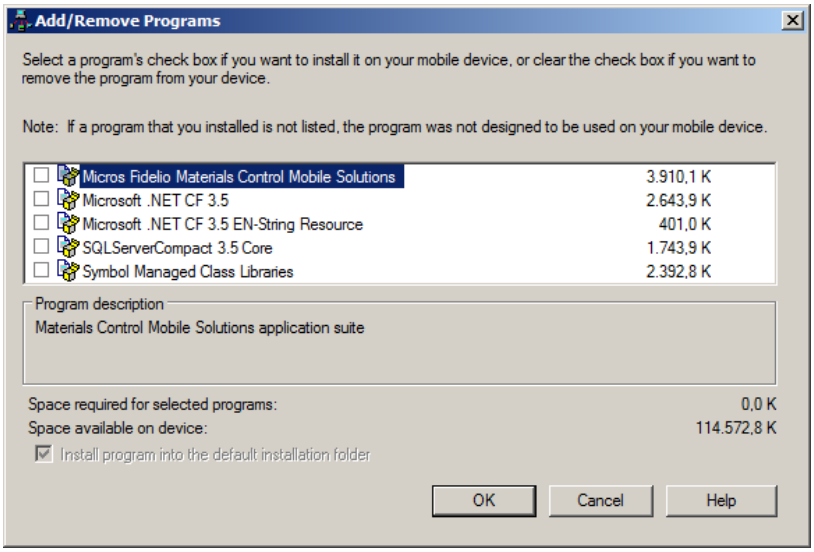
If the following message comes up, re-connect to ActiveSync.

Installing additional Devices:

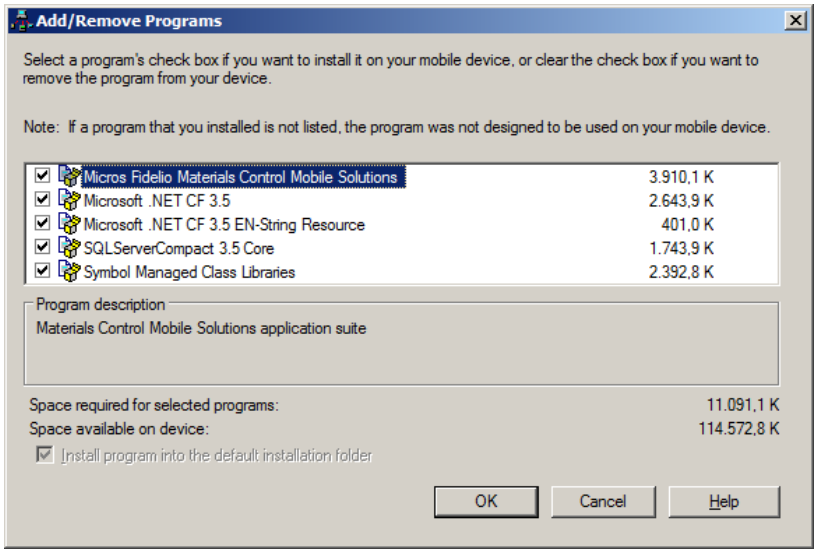
Once all components are installed completely, the installation of additional handhelds is very easy.

Connect the HHT device with a cable connection to the PC which was used for the previous HHT installation.
Now open the Windows Mobile Device Center and select “Programs and Services”:

Here select the function “Add/Remove Programs”:



The system now shows all applications available for mobile devices.

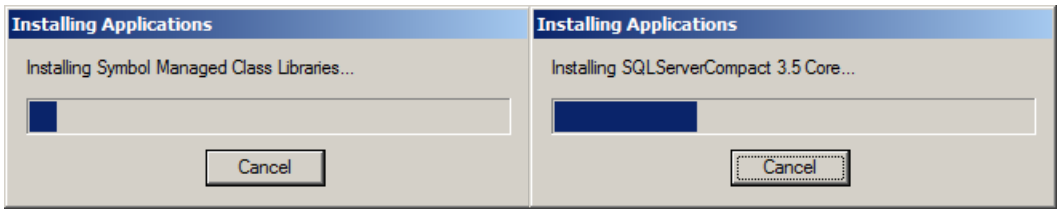


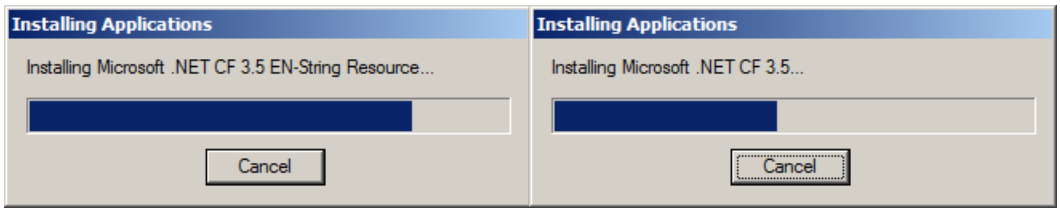
Mark the following applications….

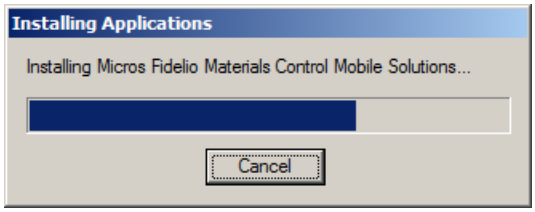
- Micros Fidelio Materials Control Mobile Solutions
- Microsoft .NET CF 3.5
- Microsoft .NET CF 3.5 EN-String Resource
- SQLServerCompact 3.5 Core
- Symbol Managed Class Libraries

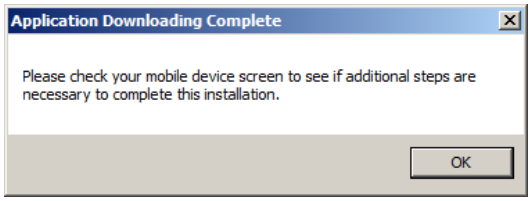
… and click “OK”.

The system will now install all marked components.



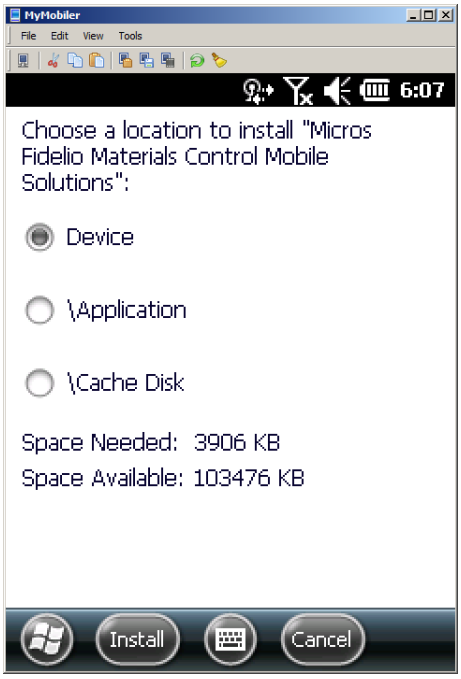


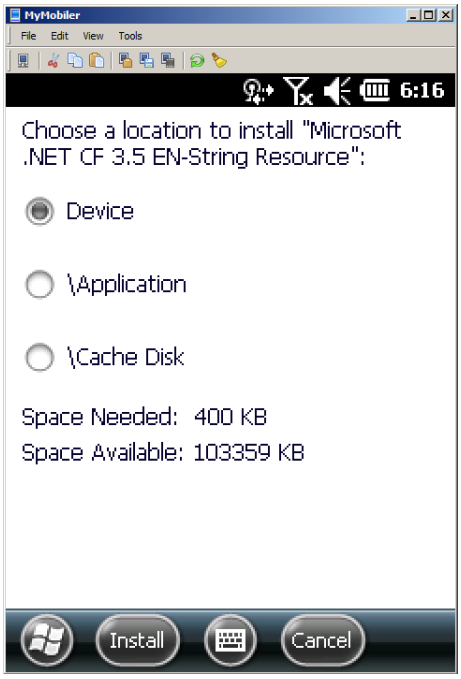


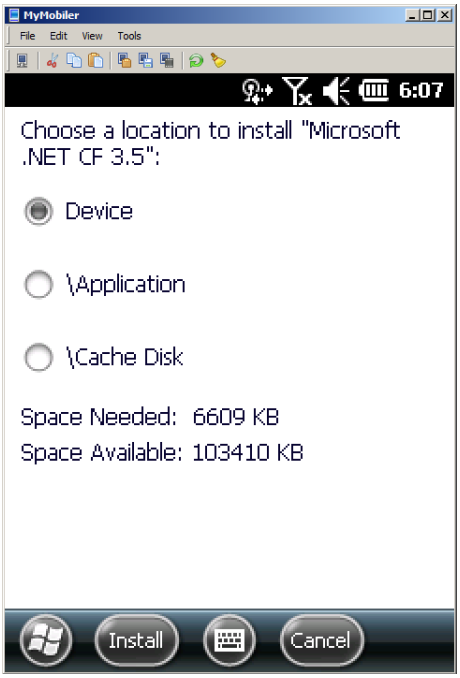


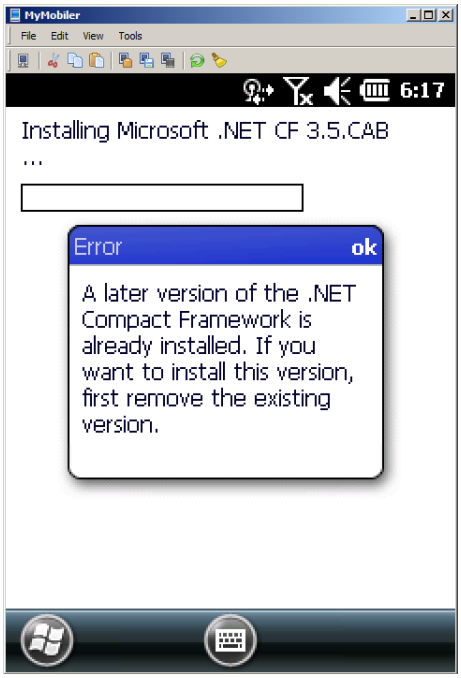
Keep this message open and check the mobile device.

Here the application installation needs to be confirmed:

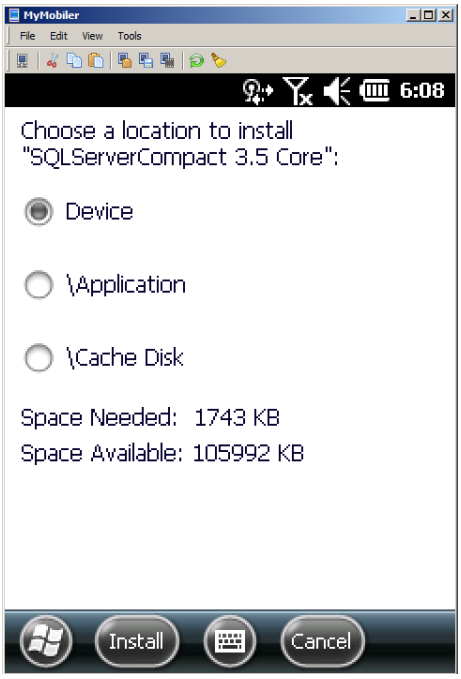


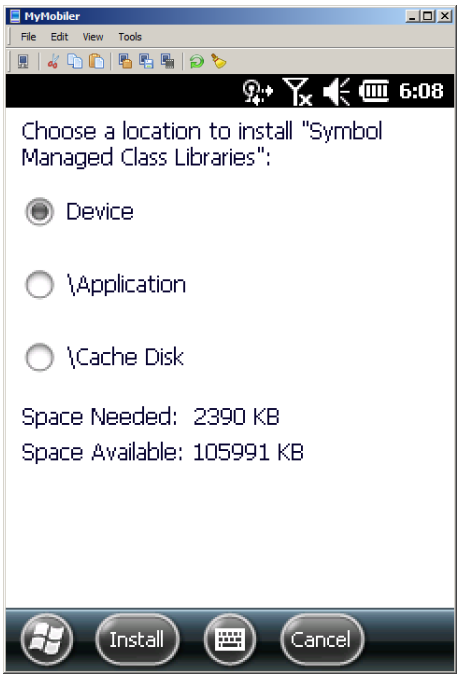


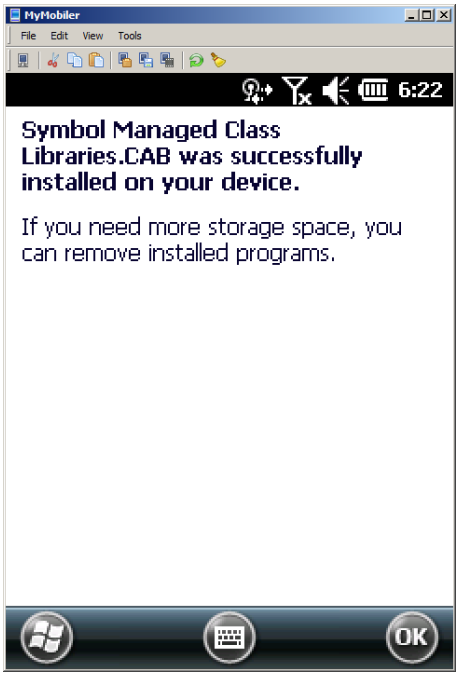




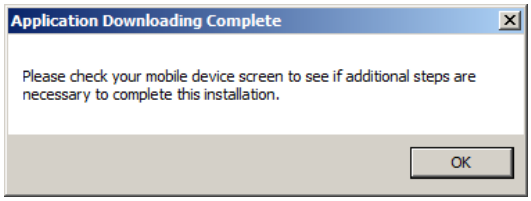
The screens & messages will be the same as during the first installation.







Once all installations are completed, please close the remaining message in the Windows Mobile Device Center:



Now the new device needs to be registered only before it can be used.

Using the Mobile Solutions:

The Mobile Solutions can be used …

- … online:
  The devices will communicate via WLAN with the installed web service. This web service will handle the communication with the database.
- … offline:
  The devices will communicate with the database via ActiveSync/Mobile Device Center directly. As a result of this data can be exchanged only if the device is connected via cable with a PC.

Since the handling offers lots of features a separate manual is required for this.
For using the Mobile Solution 2010 please refer to the related manual.

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