Release Notes - EMDK for C v2.3

1   Important News

1. **End of Support for eMbedded Visual C++ 4.0** - Support for eMbedded Visual C++ 4.0 (eVC 4.0) will no longer be available in the future versions of EMDK for C. If you are still using eVC 4.0, please transition to Visual Studio 2005 or Visual Studio 2008. The support for this tool will be provided by the previous versions of this product which will continue to be available on the Support Central.

2. **End of Support for S24 functions** - S24 API functions are no longer available on devices starting with Fusion v3.20. Customers must use the Fusion API to access WLAN capabilities. .

2   Introduction

The EMDK for C provides developers with the tools necessary for creating applications that target the enterprise mobility 'C' libraries, such as scanning and printing. This developer kit is designed for use with Microsoft eMbedded Visual C++ 4.0, Visual Studio 2005 and Visual Studio 2008.

3   Description

1. New device support for ES400 WM6.5, MC65 WM6.5 including new Fusion 3.20 features such as WLAN Management and AllowMixedMode. Refer to the ES400 Programmer's Guide in the Help documentation for information on the Dual-boot mechanism available in Fusion 3.20.
2. New device support for MC959B WM6.1 with dual-WAN radio technology.

3. New magnetic stripe reader support for MSR7000 and debit card reader support for DCR7000-100 when used with MC75A.
4. The following sample applications were modified as described below:
   o New and simplified ScanSample to demonstrate the use of the Scanning APIs. This sample replaces the existing ScanSample1 and ScanSample2.
   o The About, Blt, InkWiz, MemTest, Msg, ScanParams, ScanSamp1, ScanSamp2, and Select samples are no longer distributed.
   o The SymDJpeg sample project is moved to the ImageViewer sample folder and it is now part of the ImageViewer solution.
5. The Samples page, accessible from the EMDK program group, now provides links to a help page. The help page provides information on APIs used in the sample.

Update1 provides the following new RFID features:
1. New Duty cycle APIs support for handheld RFID readers

   New RFID Tag Locationing feature for handheld RFID readers. UI based sample applications are modified to demonstrate the Tag Locationing feature.
2. New APIs RFID_PerformNXPEASScan and RFID_StopNXPEASScan
3. New handheld start/stop trigger type added and updated all the UI sample
4. Modified Firmware update functionality in the RFIDSample3 application. The Browse file dialog added to select the files. In the previous versions, the file was entered manually.
5. Updated BasicRFID1 sample app to fix the context menu issue.

Update2 provides the following new features:
1. New device support for MC9100 CE6.0 and WM6.5. New magnetic stripe reader support for MSR9001 when used with MC9100.
2. New device support for MC55A0 WM6.5. New magnetic stripe reader support for MSR55 when used with MC55A0.
3. New magnetic stripe reader support for MSR3000 when used with MC3100.
4. New debit card reader support for DCR7000-200 when used with MC70, MC75 and MC75A. Only the magnetic stripe reading and debit card PIN entry features of DCR7000-200 are supported. The smart card reading feature of this accessory is not supported in EMDK.
5. Added RS507 ring scanner support for MC3100, MC75A and MC9500.
6. Updated Scanning API with following new features:
   o Buffered Scanning - allows rapid scanning without waiting for each read to be processed. Buffered scanning is currently not supported on ES400 and MC65. Refer to the Programmer's Guide in the scanning section of the help documentation.
   o Support for Adaptive Scanning using the SE960 Laser engine. When adaptive scanning is enabled, the scan engine will automatically toggle between 2 scan angles, wide and narrow, allowing the scan engine to decode bar codes as close as 10 inches and as far as 100 inches. Refer to the Programmer's Guide in the scanning section of the help documentation.

- o   Support for Long Range Scanning using the SE4600 Imager engine. The long range imagers are designed to scan barcodes up to 30 feet. No programming modification is required to use this feature.
- o   Support for decoder MATRIX_2OF5. Matrix 2 of 5 decoder allows scanning high information density barcodes.

7. Includes Update1.

Update3 provides the following new features:
1. **Important Note:** EMDK for C currently does not support the features introduced in Fusion 3.30. These include WAPI security standard, WLAN credential overriding and Pre-Authentication configuration. While these features are fully documented in the help file, they should be avoided for now. Full support for Fusion 3.30 will be provided in a future version of EMDK for C.
2. New Audio Extension API support for ES400 and MC65 devices with BSP 26.03 or higher. Refer to the ES400 or MC65 Programmer's Guide provided in the help documentation for the list of AudioEx functions supported.
3. New Keyboard API support for the ES400 device with BSP 26.03 or higher. Refer to the ES400 Programmer's Guide provided in the help documentation for the list of Keyboard functions supported.
4. New RFID3 API support for Fujitsu's custom tag commands when using 64K and 8K tags. Fujitsu tag command support is available for MC9090Z and FX7400 readers only. Refer to the RFID3 Programmer's Guide provided in the help documentation for information on the Fujitsu tag commands.
5. New device support for MC3190Z WM6.5 RFID reader.
6. Includes Update1 and Update2.

4   Device Compatibility

This software release has been approved for use with the following devices.

Device	Win CE 5.0	Win CE 6.0	Win Mobile 5.0	Win Mobile 6.0/6.1	Win Mobile 6.5
ES400					*
FX7400	*				
MC1000	*				
MC17	*				
MC3000	*			*	
MC3090Z				*	
MC3100		*		*	*
MC3190Z					*
MC55				*	*

Device	Col1	Col2	Col3	Col4	Col5
MC55A					*
MC65					*
MC70			*	*	
MC75				*	*
MC75A					*
MC9000	*		*		
MC9090	*		*	*	
MC9090-RFID			*		
MC9090Z				*	
MC9100		*			*
MC9500				*	*
MK500	*				
MT2000	*				
RD5000	*				
VC5090	*				
VC6090				*	*
WT4000	*				
XR400 Series	*				

This software release has been approved for use with the following accessories.

Accessory	Devices
DCR7000-100	MC70, MC75, MC75A
DCR7000-200	MC70, MC75, MC75A
MSR3000	MC3000, MC3100
MSR55	MC55, MC55A
MSR7000	MC70, MC75, MC75A
MSR9001	MC9090, MC9100
MSR9500	MC9500
RS507	MC3000, MC3100, MC55, MC70, MC75, MC75A, MC9090, MC9100, MC9500, VC5090, VC6090, WT4000

5   Installation Requirements

The following software must be installed prior to using the EMDK for C.

- Microsoft® Windows XP (32-bit) or Microsoft® Windows Vista (32-bit) or Microsoft® Windows 7 (32-bit and 64-bit)

- One of the following device sync components:
    - Microsoft® ActiveSync 4.5 or higher for Windows XP
    - Microsoft® Mobile Device Center pre-installed with Windows Vista
    - Microsoft® Windows Mobile Device Center 6.1 or higher for Windows 7

- If developing applications for Windows CE 5.0
    - Microsoft® eMbedded Visual C++ 4.0 with Service Pack4

- If developing applications for Windows Mobile 6.X, Windows Mobile 5.0, Windows CE 6.0 or Windows CE 5.0, install one or more of the following:
    - Microsoft® Visual Studio 2005 with Service Pack1
    - Microsoft® Visual Studio 2008 with Service Pack1

- One or more of the following Platform SDK's:
    - Microsoft® Windows Mobile 5.0 SDK *
    - Microsoft® Windows Mobile 6.0 Professional SDK
    - Microsoft® Windows Mobile 6.5 Professional Developer Tool Kit
    - For Windows CE embedded development, use the Platform SDK's (PSDK's) available at http://support.symbol.com/support

* The Windows Mobile 5.0 SDK is required to build the EMDK sample applications. If you are using Visual Studio 2005, this SDK must be installed. Visual Studio 2008 includes this SDK pre-installed.

6   Installation Instructions

Please read these rules carefully. Failure to follow them could cause problems:
1. For Windows CE SDK's (PSDK's) to be recognized by Visual Studio, they must be installed after Visual Studio is installed.

2. If a Microsoft SDK for Windows Mobile is installed after EMDK for C, you will need to run EmdkIntegrator manually using the shortcut in the EMDK for C Start Menu program group. On Windows Vista and Windows 7, EmdkIntegrator must be run with administrative rights. This will ensure that EmdkIntegrator adds the EMDK Include and Library files to the Microsoft SDK.
3. If you need to install Visual Studio 2005 and Visual Studio 2008 on the same machine, make sure to install in the following order:
    - Microsoft® Visual Studio 2005 with Service Pack1
    - Microsoft® Windows Mobile 5.0 SDK
    - Microsoft® Visual Studio 2008 with Service Pack1

- EMDK for C
- One or more of the Platform SDKs

Failure to follow the above order may result in compilation errors. To correct this problem uninstall all software except Visual Studio 2005 and reinstall in the above order.

4. If you need to install the Windows Mobile 6.0 SDK and the Windows Mobile 5.0 SDK on the same machine, make sure to install in the Windows Mobile 5.0 SDK first.

7   Known Issues

1. The MSR may fail to open if the USB is configured to operate in the client mode. The USB configuration must be set to either the Host or OTG mode using the "USB config" tool under the Start, Settings and System option on the device.

2. The FusionSample displays an incorrect character at the end of the SSID field. This problem is caused while adding a null terminator to the string using double quote characters.

   Change the following code on line 1387 in FusionSample.c:
   ```
   szSSID[nDisSSID.SsidLength]="\0";
   ```

   To null terminate the string using single quotes:
   ```
   szSSID[nDisSSID.SsidLength]='\0';
   ```

   This issue will be fixed in a future version.

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