

---

# Release Notes - EMDK for .NET v2.4

---

[Important News](#)

[Introduction](#)

[Description](#)

[Device Compatibility](#)

[Installation Requirements](#)

[Known Issues](#)

---

## 1 Important News

1. **End of Support for Compact Framework 1.0 and Visual Studio .NET 2003** - Beginning with EMDK for .NET v2.4, Compact Framework 1.0 and Visual Studio .NET 2003 are not supported. The support for these tools is provided by the previous versions of this product which will continue to be available on the Support Central.
2. **End of Support for Windows CE 4.2 and PocketPC 2003** - Beginning with EMDK for .NET v2.1, the devices running Windows CE 4.2 or Pocket PC 2003 are not supported. The support for these older devices is provided by the previous versions of this product which will continue to be available on the Support Central. Those devices affected include: MK1100, MK2000, MK2200, PDT8100, PDT8100X, PPT2800, PPT8000, PPT8800, MC50, MC1000, MC3000 and MC9060.
3. **End of Support for WirelessLAN Assembly** - The WirelessLAN assembly will no longer be supported on devices starting with Fusion v3.20. Customers are expected to use the Fusion class library to access WLAN capabilities. Fusion v3.20 is expected to release on devices sometime in 2010. If you are still using the WirelessLAN class library in your applications, please transition to the Fusion class library as soon as possible.
4. **SMDK renamed to EMDK** - The SMDK (Symbol Mobility Developer Kit) product line has been re-branded to EMDK (Enterprise Mobility Developer Kit). This is a name change only, maintaining full functionality and backward compatibility. This change should have no impact on customer applications. Previous versions of SMDK for .NET must be removed before installing this EMDK.

## 2 Introduction

The EMDK for .NET provides developers with the tools necessary to create C# and VB.NET managed applications for enterprise mobility devices from Zebra. These tools include class

libraries, sample applications, and associated documentation. EMDK for .NET allows Microsoft® .NET Compact Framework developers to programmatically access the enterprise mobility features on the devices. This developer kit is designed for use with 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 Fusion.WLAN.Adapter.WLANManagement and Fusion.WLAN.Encryption.AllowMixedMode properties. 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.
3. New magnetic stripe reader support for MSR7000 and debit card reader support for DCR7000-100, when used with MC75A.
4. New magnetic stripe reader support for MSR55 when used with MC65.
5. New Symbol.PowerTools assembly to provide tools that combine one or more complicated features into a simple and easy to use API. Currently the "ScanAndPair" tool is available in this assembly. The ScanAndPair tool provides an option to scan a Bluetooth address/name barcode and pair with that remote device in one simple call. Refer to the "PowerTools" section of the Programmer's Guide in the Help documentation.
6. New and simplified BarcodeSample1 to demonstrate the use of the Barcode class library. This sample replaces the existing ScanSample1 and ScanSample2.
7. Updated WPAN (Bluetooth) class library to include the following new features:
  - Discovering remote devices asynchronously. Earlier versions supported only the synchronous discovery. Refer to the section "Discovering Remote Devices" in the WPAN Programmer's Guide in the Help documentation for more information.
  - The Bluetooth.LocalComPorts property is updated to provide only the ports that are not occupied and ready to be used. Earlier versions provided all the com ports that are supported by Bluetooth but not necessarily unused.
8. Updated BluetoothSample1 application to discover remote devices asynchronously. Earlier versions of this sample used the synchronous method.
9. Updated Barcode class library to provide support for the MATRIX2OF5 decoder.
10. Updated Imaging class library to support new error codes E\_IMG\_DEVICEDISABLED, E\_IMG\_CANTLOADHALDLL, E\_IMG\_INVALIDHALDLL and E\_IMG\_RUNNING.
11. Rollup of previously released v2.3 updates.

12. Beginning with this version, Compact Framework 1.0 and Visual Studio .NET 2003 are not supported. The support for these tools is provided by the previous versions of this product which will continue to be available on the Support Central.
13. New device support for MC9100 CE6.0 and WM6.5. **(added January 2011)** \*
14. New device support for MC55A0 WM6.5. **(added January 2011)** \*
15. 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. **(added January 2011)** \*

\* New device approval has been received for this package. The approval did not require any software changes. If you have already installed the package, there is no need to download and install it again.

**Update1** provides the following new RFID features:

1. New Duty cycle APIs support for Handheld RFID Readers
2. New RFID Tag Locationing functionality added for handheld RFID readers. UI based sample applications are modified to demonstrate the Tag Locationing feature.
3. New handheld start/stop trigger type added and updated all the UI samples to demonstrate this feature
4. New methods PerformEASScan and StopEASScan added in the Symbol.RFID2.NXP class
5. Updated all UI samples to initialize the lock privilege during lock button click event. In the previous versions, the lock privilege was initialized only in the constructor which broke the lock functionality for consecutive lock operations.
6. Modified Firmware update functionality in CS\_RFID3Sample6 and VB\_RFID3Sample6 applications. The Browse file dialog added to select the files. In the previous versions, the file will be entered manually.

## 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		*		*	*
MC55				*	*
MC55A					*
MC65					*
MC70			*	*	
MC75				*	*
MC75A					*
MC9000	*		*		
MC9090	*		*	*	
MC9090 RFID			*		
MC9090-Z				*	
MC9100		*			*
MC9500				*	*
MK500	*				
MK4000	*				
MT2000	*				
RD5000	*				
VC5090	*				
VC6090				*	*
WT4000	*				
XR400 Series	*				

\* Supported device

## 5 Installation Requirements

### Development PC

Install Requirements for Visual Studio 2005:

- Microsoft® Windows XP (32-bit) or Microsoft® Windows Vista (32-bit) or Microsoft® Windows 7 (32-bit and 64-bit)
- Microsoft® Visual Studio 2005 \*
- Microsoft ActiveSync 4.2 or higher (only for Windows XP, Vista has its own Mobile Device Center)

- Microsoft® Windows Mobile Device Center 6.1 or higher. (only for Windows 7)
- One of more of the following SDKs for the Windows Mobile development:
  - [Microsoft® Windows Mobile 5.0 SDK for PocketPC](#)
  - [Microsoft® Windows Mobile 6.0 Professional SDK for Pocket PC](#)
  - [Microsoft® Windows Mobile 6.5 Professional Developer Tool Kit](#)

Install Requirements for Visual Studio 2008:

- Microsoft® Windows XP (32-bit) or Microsoft® Windows Vista (32-bit) or Microsoft® Windows 7 (32-bit and 64-bit)
- Microsoft® Visual Studio 2008 \*
- Microsoft ActiveSync 4.5 or higher (only for Windows XP, Vista has its own Mobile Device Center)
- Microsoft® Windows Mobile Device Center 6.1 or higher. (only for Windows 7)
- One of more of the following SDKs for the Windows Mobile development:
  - [Microsoft® Windows Mobile 6.0 Professional SDK for Pocket PC](#)
  - [Microsoft® Windows Mobile 6.5 Professional Developer Tool Kit](#)

\* The edition of Visual Studio installed must support mobile device development. Express editions of Visual Studio do not support mobile device development. Visual Studio 2008 Standard Edition does not support mobile device development.

## **Device Runtimes**

To run device applications that utilize EMDK for .NET libraries, the following device runtimes must be installed:

- Microsoft .NET Compact Framework. The following table specifies the combinations of Visual Studio and .NET Compact Frameworks supported by EMDK:

	CF 2.0 SP2	CF 3.5
Visual Studio 2005	Supported	
Visual Studio 2008	Supported	Supported

- EMDK for .NET runtime environment (symbol.all.arm.cab).

## **Host Runtimes**

To run PC applications that utilize the RFID class libraries, the following Host runtimes must be installed:

- .NET Framework 2.0 or higher
- Symbol.RFID2.Host.dll
- RFIDControl.zip (required by RD50000. Refer to the section "Using Symbol.RFID2 Host Assembly with RD5000 Device Reader" in the ReadMe)

## **6 Known Issues**

1. Changing the minimum or maximum length of the US4STATE\_FICS symbology in the Barcode class library can cause an exception. The underlying issue will be resolved in the future.
2. The RFID2\_HostSetup\_Sample will not be supported in next release. Please avoid using these samples distributed in this release.
3. On MC65, an attempt to display the ViewFinder using the VFMode property may fail when using the BlockBuster Imager for scanning. The underlying issue will be resolved in the future.
4. On ES400, the ScanAndPair and ScanAndUnPair methods in the PowerTools class library will not enable the scanner even after pressing the scan button and the calls will return with a timeout error. The underlying issue will be resolved in the future. As a workaround, set the ScanInfo.TriggerType property to "Auto" before calling these methods. The "Auto" property will automatically enable the scanner without having to press the scan button.
5. The sample MagStripeControlSample1 which makes use of the DTC Symbol.MagStripe.Design, would fail on the devices MC55 & MC65. This is due to an issue in the lower layer which is beyond EMDK for .NET.
6. An error message appears for a very short period of time and sometimes the device becomes irresponsive upon exiting VS2008/CF3.5 BarcodeSample1 applications. This issue with VS2008/CF3.5 applications can be seen only on CE6.0. If listview.Font property is set to a new Font object, the application throws an error message when it exits. This error message is coming from the compact framework 3.5. If the listview.Font.Size property is accessed at least once before setting the listview.Font property, this issue is not seen. The user may try this workaround until a proper fix is made available in the compact framework 3.5.
7. The method Actions.NewReaderData() internally creates an ReaderData object with the type as ReaderDataTypes.Text and the size as ReaderDataLengths.DefaultText which is 55. If it's required to get barcodes having higher lengths decoded, then the user is supposed to create a

ReaderData object by passing the required length (or use ReaderDataLengths.MaximumLabel).

8. Changing the folder location at the installation time of Samples.Net.CAB won't change where the samples would be installed on the device. The samples would always be installed under the folder \Program Files\ regardless of the folder location chosen by the user. This is by design.

*Last Revised: January 25, 2011*