
Release Notes - EMDK for .NET v2.5

[Important News](#)

[Introduction](#)

[Description](#)

[Device Compatibility](#)

[Installation Requirements](#)

[Known Issues](#)

1 Important News

1. **End of Support for WirelessLAN Assembly** - Beginning with EMDK for .NET v2.5, the WirelessLAN assembly is no longer supported. If you are still using the WirelessLAN class library in your applications, please transition to the Fusion class library.
2. **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 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 class libraries Barcode2, Imaging2 and MagStripe2 are provided for data collection operations. These class libraries are recommended for use in place of the existing Barcode, Imaging and MagStripe class libraries. Some of the highlights of these class libraries are:

- Provide easy to use and easy to understand interface to the data collection operations.
- Requires fewer lines of code for targeting Zebra value add features
- Created using Compact Framework 2.0 (CF2.0) for performance gains. Compatible with Compact Framework 3.5 (CF3.5).
- New sample applications: Barcode2Sample1, Imager2Sample1 and MagStripe2Sample1, for illustrating the use of the new classes
- The Barcode2 class library includes a buffered scanning feature for creating scan-intensive applications.
- The Imaging2 class library includes an activators feature to capture and display images in one function call. Refer to the "Using Activators" section of the Imaging2 programmer's guide. The activators feature is supported only on the latest devices including MC75A, MC55A, MC9190, MC3100, and MC9500.
- The MagStripe2 class library includes the capability of parsing track data based on sentinels specified by the application.
- These 3 new class libraries are supported on devices starting with CE6.0, WM6.X.
- Refer to the programmer's guide in the Help file for detailed documentation

2. New Design Time Components (DTC):

- Available for scanning (Barcode2) and magnetic stripe reading (MagStripe2).
- Compatible with CF2.0 in VS2005 and CF2.0/CF3.5 in VS2008
- New samples Barcode2ControlSample1 and MagStripe2ControlSample1 provided for illustrating the use of the new DTCs
- **Important Note:** EMDK for .NET currently does not support the new image capture (Imaging2) DTC. While this DTC is distributed with this release, it should be avoided for now. Support for the Imaging2 DTC will be provided in a future version.

3. New feature LocateAndLaunch:

- Allows a pre-defined set of actions to be executed when the device reaches a specified GPS location. Some of the actions that can be performed include enable/disable radios (Bluetooth, WiFi or WWAN), launch an application or log the movements of the device to a file.
- The LocateAndLaunchTool class in the PowerTools class library provides programmatic access to the feature

- The LocateAndLaunch application running on the device provides a GUI to access the feature without having to write code. This application is installed with the .NET runtime environment (Symbol.all.arm.cab).
 - Refer to the API reference and programmer's guide in the Help file for detailed documentation.
4. Updated the following components to CF2.0 for performance gains:
 - Class libraries: Symbol, Audio, Barcode, BarcodeForms, Display, Fusion, Imaging, Keyboard, MagStripe, Notification, Printing, ResourceCoordination and StandardForms.
 - Design Time Components: Barcode, Imaging and MagStripe
 5. The DTCs are now available in Visual Studio 2008 when targeting CF3.5.
 6. Fixed the following issues:
 - ScanAndPair PowerTool - Fixed the issue causing the ScanAndPair() method to fail, after the use of ScanAndPair(pin) overloaded method.
 - Bluetooth - Fixed the issue causing the Bluetooth.LocalComPorts property to fail when accessed.
 7. Added support for the following features in the Barcode and Barcode2 class libraries:
 - AdaptiveScanning - Improved scanning for applications that use both high and low density barcodes (SE960 laser engine only).
 - BeamWidth - For querying and configuring the beam width of the laser scanner to narrow, wide or normal settings.
 - New SecurityLevel parameter for Code39 and Code128 decoders
 8. Updated the RFID3 class library to provide 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.
 9. New device support for MC3190Z WM6.5 RFID reader.
 10. Updated the existing ResourceCoordination class library with the following new features:
 - New ConfigData.FLASHVENDOR property added.
 - New terminal config types for MC55A.

11. Removed the WirelessLAN and RFID class libraries.
12. Removed the GenericReaderSample1 and GenericReaderSample2 applications.
13. **Important Note:** EMDK for .NET 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.

Update1 provides support for the following:

1. New device support for MC55N0 WM6.5 including new Fusion X 1.00 features. Fusion X 1.00 supports the IEEE 802.11n standard.
2. New Design Time Component (DTC) for Imaging2 found in the Visual Studio toolbox:
 - The Imaging2 DTC distributed with this package replaces the one distributed with an earlier version of this product. The earlier version of this DTC is not supported.
 - Compatible with CF2.0 and CF3.5
 - Applications created using the existing Imaging DTC cannot be upgraded to use the new DTC. You must create a new application to use these components.
 - New sample application: Imaging2ControlSample1 for illustrating the use of the new DTCs
3. Added support for the following features in the Barcode and Barcode2 class libraries:
 - Support for the new "LCDMode" reader parameter in the ImagerSpecific class. Enabling this parameter will enhance the ability of the Blockbuster imager to read barcodes from LCD displays such as cell phone screens.
 - Support for the new "CouponReportMode" decoder parameter in the UPCEAN class. This parameter enables or disables the scanner capability to read old (UPC/EAN and Code 128) and new GS1 DataBar coupon barcodes.
4. Updated the Imaging2 class library to provide a solution for issues related to the activators feature. In the previous version, the trigger press events were not always captured when using this feature. Refer to the "Using Activators" section of the Imaging2 programmer's guide. The activators feature is

supported only on the latest devices including MC75A, MC55A, MC9190, MC3100, and MC9500.

5. Updated the Barcode class library to provide a solution for the issue related to rapid barcode scanning. In previous version, rapidly scanning barcode may lead to disappearance of the scanner beam light.
6. Updated the Telemetry class library to accept the ECU source address value in the eParamInfo.J1939Info.SourceAddress2 field. In the previous versions, modifying the source address required setting both the SourceAddress and SourceAddress2 fields with the same value.

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					*
MC55N0					*
MC65					*
MC70			*	*	
MC75				*	*
MC75A					*
MC9000	*		*		
MC9090	*		*	*	
MC9090 RFID			*		
MC9090-Z				*	
MC9100		*			*

MC9500				*	*
MK500	*				
MK4000	*				
MT2000	*				
RD5000	*				
VC5090	*				
VC6090				*	*
WT4000	*				
XR400 Series	*				

* Supported device

NOTE: Support for the older devices is provided by previous versions of this product.

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. When using the Imaging2 class library to capture images in the TIFF format on CE6 devices, the freezing feature will display a blank screen as the frozen image. This issue will be fixed in the next release.

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