Release Notes - EMDK for .NET v2.6

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, you must 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 device support for MC21XX CE6.0 Core and MK3000 CE5.0.

2. New status notification AccesspointChanged in the Symbol.Fusion class library.

3. Updated Imager2Sample1 application to illustrate Resolution and JPEGQuality capabilities. The sample will also list supported resolutions of the imaging device.

4. Updated the Symbol.Barcode2 class library to add a new RestoreAllDefaultParameters() method under Barcode2.Config class. This function restores Interface, Scanner, Reader and Decoders parameters to the default settings.

5. Fixed an issue in Symbol.Barcode2 class library that was causing the Barcode2.Disable() and Barcode2.ScanCancel() methods to be non-responsive when used under certain scenarios.

6. Fixed an issue in Symbol.Imaging2 class library that was causing Imaging2.Disable() method to fail when the viewfinder control's type is not System.Windows.Forms.PictureBox.

7. The following RFID3 related updates have been done:
    - 64-bit support added and validated only in Windows 7 Operating System
    - Reader Serial Number get property added as part of SystemInfo class
    - Statistics fields for Fujitsu, Impinj QT Tag Operations added in ReaderStatistics class
    - TagLocationing class added in Actions class
    - Impinj & NXP Custom tag functionality added
        - Impinj QT Write
        - Impinj QT Read
        - NXP Change Config Params (NXP-G2iL tags)
    - Block Perma Lock, NXP Change Config, QT Write/Read Params, Recommission are added in Operation Sequence
    - In ReaderCapabilities class,
        - Reader Module Version added which contains the module and version of the reader
        - IsFujitsuCommandSupported, IsImpinjCommandSupported get property added
    - New class AccessOperationResult is added to TagData class and this contains access operation results for Fujitsu Read Block Lock, Fujist Burst Write, Fujitsu Burst Erase, Impinj QT Data, NXP Change Config
    - In RFIDResults enum, the status code for NXP, Fujistu and Impinj QT commands added
    - ReaderInfoForm added in CS_RFID3_Host_Sample2 to display the reader details (Serial number, Flash available, RAM available, Radio Firmware version and reader name)

8. **Important Note:** EMDK for .NET currently does not support the Document Capture (DocCap) feature introduced in Barcode2 class library. While this feature is fully documented in the help file and the DocCapSample applications are distributed, they should be avoided for now. Full support for DocCap will be provided in a future version.

Update1 provides support for the followings:

1. Updates in Barcode2 class library

- Fixed an issue which was causing the application to be non-responsive when Barcode2.ScanCancel() and Barcode2.Disable() methods are called one after the other.
- Fixed an issue which was throwing OperationFailureException when ScanCancel() is called immediately after Scan() method is called.
- The Results.PENDING enum member is being deprecated. It will be removed in a future release. Use the Results.E_SCN_READPENDING member instead.

2. Included native libraries which are used by the managed class libraries as part of the SDK installation. These native libraries are located in <EMDK for .NET Installation Folder>\v2.6\SDK\Smart Devices. Refer to the Usage Notes section in the Readme file for more information.

Update2 provides support for the followings:

1. Updated the Barcode2 class library with the new Document Capture (DocCap) feature:
   - Provides the ability to capture an image of a printed page or label.
   - If the captured image contains a barcode, the barcode data can also be decoded.
   - New DocCapSample1 applications for illustrating the use of the DocCap APIs.
   - Refer to the section "Document Capture Programming" in the Barcode2 Programmer's Guide provided in the help documentation for more information on the DocCap feature.
   - Currently supported on MC3100 CE6.0, MC9100 CE6.0, MC3100 WM6.5, MC55A WM6.5, MC75A WM6.5, MC9100 WM6.5 and MC9500 WM6.5.
   - This may require installing Document Capture driver which can be download from Document Capture v1.0

2. Updated the Fusion class library with the following new features:
   - New Fusion H3.40 support for ES400 and MC65 devices. Fusion H_3.40 supports the FastRoaming, OptimizeRadio and FipsMode options.
   - **Important Note**: EMDK for .NET currently does not support the features such as RFBandChannels, RFBandChannelsSettings and PerformanceSetting, While these features are fully documented in the help file, they should be avoided for now. Full support for these features will be provided in a future version.

3. Updated the Keyboard class library with the following new features:
   - New GetKeyStateEx() method under the KeyPad class. This method is supported only on ES400 and MC65.
   - Support for additional key states under the KeyStates structure: SHIFT_LOCK, NUMERIC_LOCK, FUNCTION_LOCK, ORANGE_TEMP, ORANGE_LOCK, ORANGE_SHIFT_LOCK

4. Fixed the following issues:
    - Fixed the rare issue of ObjectDisposedException raised in the event notifications of the class libraries such as Symbol.Barcode and Symbol.Barcode2.
    - Fixed Barcode2.IsScanPending property to provide accurate information on the pending status of the previous scan call.
    - Fixed the issue that was causing the MagStripe2.Disable() and MagStripe2.SwipeCancel() methods to be non-responsive when used under certain scenarios.
    - Fixed the Symbol.Imaging2 class library:
        - Fixed the issue where OutOfMemoryException was thrown when setting Imaging2.Config.ImageCapability.FileFormat.Value to FileFormats.TWFF_BMP and Imaging2.Config.DeviceCapability.Resolution.Value to higher resolutions. Under this scenario, the ImageData.GetBitmap() method will return null and no exception is raised. As a work around, ImageData.MemoryStream can be used to access the image data.
        - Fixed the issue that was causing the Imaging2.Disable() and Imaging2.CaptureCancel() methods to be non-responsive when used under certain scenarios.

5. Rollup of previously released v2.6 Update1.

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	Custom Linux
ES400					*	
FX7400	*					
FX9500						*
MC1000	*					
MC17	*					
MC2100		*				
MC3000	*			*		

MC3190Z					*	
MC3100		*		*	*	
MC55				*	*	
MC55A					*	
MC55N0					*	
MC65					*	
MC70			*	*		
MC75				*	*	
MC75A					*	
MC9000	*		*			
MC9090	*		*	*		
MC9090-Z				*		
MC9100		*			*	
MC9500				*	*	
MK500	*					
MK3000	*					
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)

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