

# Morovia QRCode Fonts & Encoder 5.1 : Release Notes

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## 1. New Features in 5.1

### **1.1. Unicode String Encode**

QR code 2005 standard support encoding in ISO8859-1 and shift-JIS only, with other language support under ECI. However, there is no ECI support for Unicode encodings, and lack the reader support. This release added support for Unicode string in a way that is compatible with major smart phones running Android and IOS. Refer to the manual for the details.

This change does not affect existing applications if characters are intended to be interpreted as ASCII or ISO8859-1. This change may affect if strings of other character set are passed as Unicode parameter (such as QRcode ActiveX and Word AddIn).

### **1.2. Visual C++ header/lib and example**

The last release (5.0.0) failed to include necessary .h and .lib files for C/C++ projects to use the DLL. These files are subsequently released as addendum on our web site. In this release, they are included in the installer. Moreover, a Visual C++ example project that demonstrates calling the encoder DLL is included.

### **1.3. InfoPath support**

QRcode ActiveX control is enhanced to support insertion to an InfoPath form. InfoPath requires additional interfaces that are not present in the previous release.

## 2. Backward Compatibility

In 5.0 release, several changes were made to accommodate new features and 64-bit support. All executables have both 32-bit and 64-bit version in this release. Unfortunately to make those changes, we have to break the backward compatibility. The following lists the changes that break backward compatibility.

### 2.1. Font Encoder DLL

The DLL interface has changed in this version. In this version you call encode function to create a result object, and create image files or barcode string through this result object.

If your program calls the DLL API, you must change the code accordingly.

### 2.2. Crystal Reports

In order to have the single source code for both 32-bit and 64-bit UFLs, the UFL interface is changed. Reports authored in previous 1.x version require update in order to use the new version.

## 3. New Features in 5.0

### 3.1. Micro QR

The Micro QR Code format (also specified in this International Standard), is a variant of QR Code 2005 with a reduced number of overhead modules and a restricted range of sizes, which enables small to moderate amounts of data to be represented in a small symbol, particularly suited to direct marking on parts and components, and to applications where the space available for the symbol is severely restricted.

In QRCode Fonts & Encoder 5, Micro QR is fully supported in all kinds of API - encoder DLL, ActiveX, GUI encoder and Crystal Reports.

### 3.2. Scalable PCL Font

A scalable PCL font, documentation and test sample is included in this release so that application can send commands to a PCL printer that print QR code and Micro QR code.

### 3.3. Structural Append

Structural append feature is enhanced to include parity value calculation and input by the user. The new SA block allows parity value to be specified, such as [1][2,98] where 98 is the parity value.

### 3.4. Native 64-bit Support

All encoder interfaces, including encoder DLL, ActiveX, GUI encoder, Crystal Reports UFL and Reporting Service Plug-in now have native 64-bit version. You can author reports in Crystal reports and deploy to both 32-bit and 64-bit Crystal runtime.

In order to provide seamless experience to end users, the installer is revamped to provide both 32-bit and 64-bit installers. The new installer automatically selects the one that fits the Windows version.

## 4. Backward Compatibility

In 5.0 release, several changes were made to accommodate new features and 64-bit support. All executables have both 32-bit and 64-bit version in this release. Unfortunately to make those changes, we have to break the backward compatibility. The following lists the changes that break backward compatibility.

## 4.1. Font Encoder DLL

The DLL interface has changed in this version. In this version you call encode function to create a result object, and create image files or barcode string through this result object.

If your program calls the DLL API, you must change the code accordingly.

## 4.2. Crystal Reports

In order to have the single source code for both 32-bit and 64-bit UFLs, the UFL interface is changed. Reports authored in previous 1.x version require update in order to use the new version.

# 5. Description to Updates

After the major release is published, Morovia may publish updates to address specific issues discovered after the major release. Each maintenance release contains all files; you only need the current release for new and update installations.

Tracking Number	Description	Fixed in
813	Version 5.0.0 lacks of the .h and .lib files necessary for building Visual C/C++ projects. Those files are later published as an addendum on our web site. In 5.1.0 release, header file and import libraries for both 32-bit and 64-bit Windows are included. Moreover, a Visual C++ example which calls the font encoder DLL is included in this release.	5.1.0
820	Automation Error when running VBA code in Excel spreadsheet with QRCode ActiveX controls.  When running some basic VBA code in Excel spreadsheet with QRCode ActiveX controls, Excel pops up error message - Run-time error '-2147319765 (8002802b)': Automation error Element not found.  The reason for this error is that Excel expects an undocumented interface from ActiveX controls that it hosts. Previous QRCode ActiveX implement did not implement this interface. Version 5.0.1 contains the fix.	5.0.1 (limited release)
826	Some customers want to have an API that produce QR Codes with Unicode string encoded in a way compatible with Android barcode reader.  Addressed this requirement by converting Unicode string into UTF-8 if the string contains characters outside ISO8859-1.	5.1.0
828	QRCode ActiveX control can't be used in InfoPath form design. InfoPath displays error message "QRCodeActiveX Control is not declared safe for initializing".  Added necessary interface to QRCode ActiveX control to satisfy additional requirements by InfoPath. Moreover, added property page support to ActiveX control so that user can modify properties in the form designer.	5.1.0

