COSQRDLL

Notes to version 1.0

Index

[NTUTCOSQRDLLen]

1. Introduction

This DLL allows to create a image file with a QR code.

2. Functions

These are the steps to follow to generate a QR code:

1. Execute the CosQRNewCode function to obtain a handler that allows us to execute the necessary functions to carry out the QR code generation process.
2. Assignment of properties (output file, image format of the output file, data to be stored, dots per inch, size in pixels of each of the points that make up the QR code, number of dots in the left and right margins , top and bottom, version of the QR code implementation and level of error correction). This assignment will be made by calling the CosQRSetPropertyChar and CosQRSetPropertyInt functions depending on the type (alphanumeric or numeric).
3. Generate the QR code with the call to the CosQRGenerateCode function.
4. Freeing the resources with the execution of the CosQRFreeCode function.

2.1 CosQRNewCode function

This function returns the identifier of the QR code that you want to create. This identifier must be used in the rest of the functions.

Function declaration:

```
Public dll "cosqrdll" CosQRNewCode() return integer
```

Returns:

>0	Number greater than 0 if there has been no error.
-2	The identifier could not be created because the Cosmos license is not registered.

2.2 CosQRSetPropertyChar function

This function assigns a value to an alphanumeric property.

Function declaration:

```
Public dll "cosqrdll" CosQRSetPropertyChar(qrcodeId as integer, propertyName
as char, propertyValue as char) return integer
```

Parameters:

grcodeId   QR code identifier.

PropertyName   Property name.

propertyValue   Value assigned to the property.

Returns:

0	The value has been correctly assigned to the property.
-3	The value indicated as an identifier in the qrcodeId parameter is not correct.
-4	Unknown property.
-5	An attempt was made to assign a numeric value to an alphanumeric property, or an attempt was made to assign an alphanumeric value to a numeric property. That is, the CosQRSetPropertyChar method has been executed to assign a value to a numeric property, or the CosQRSetPropertyInt method has been executed to assign a value to an alphanumeric property.
-6	An attempt was made to assign an illegal value to the property.

2.3   CosQRSetPropertyInt function

This function assigns a value to a numeric property.

Function declaration:

```
Public dll "cosqrdll" CosQRSetPropertyInt (qrcodeId as integer, propertyName
as char, propertyValue as integer) return integer
```

Parameters:

> grcodeId   QR code identifier.
>
> PropertyName   Property name.
>
> propertyValue   Value assigned to the property.

Returns:

0	The value has been correctly assigned to the property.
-3	The value indicated as an identifier in the qrcodeId parameter is not correct.
-4	Unknown property.
-5	An attempt was made to assign a numeric value to an alphanumeric property, or an attempt was made to assign an alphanumeric value to a numeric property. That is, the CosQRSetPropertyChar method has been executed to assign a value to a numeric property, or the CosQRSetPropertyInt method has been executed to assign a value to an alphanumeric property.
-6	An attempt was made to assign an illegal value to the property.

2.4   CosQRGenerateCode function

This function generates the QR code from the properties indicated with the CosQRSetPropertyChar and CosQRSetPropertyInt functions.

Function declaration:

```
Public dll "cosqrdll" CosQRGenerateCode (qrcodeId as integer) return integer
```

Parameter:

    grcodeId   QR code identifier.

Returns:

0	The QR code has been successfully generated.
-3	The value indicated as an identifier in the qrcodeId parameter is not correct.
-8	A value has not been assigned to the "OUTPUTFILE" property.
-9	Unknown error in the encoding process.
-10	The output file could not be created.

2.5   CosQRFreeCode fucntion

This function frees the QR object passed as a parameter.

Function declaration:

```
Public dll "cosqrdll" CosQRFreeCode (qrcodeId as integer) return integer
```

Parameter:

    grcodeId   QR code identifier.

Returns:

0	The execution of the function has been successful.
-3	The value indicated as the identifier in the qrcodeId parameter is not correct.

ANNEX. List of properties

Name	Description	Values	Type
OUTPUTFILE	Output file.	Required property.	Alphanumeric
IMAGETYPE	Output file image format.	This property is not required. Allowed values: "PNG", "SVG", "JPG" and "BMP". Default value: "PNG".	Alphanumeric
TEXT	Data to be stored.	Required property.	Alphanumeric
DPI	Dots per inch.	This property is not required. Default value: 72.	Numeric
DOTSIZE	Size in pixels of each of the points that make up the QR code.	This property is not required. Default value: 3.	Numeric
MARGIN	Number of points in the left, right, top and bottom margins.	This property is not required. Default value: 4.	Numeric
VERSION	Version of the implementation of the QR code.	This property is not required. Default value: 1. Allowed values: 1 to 40.	Numeric
ERRORLEVEL	Error correction level.	This property is not required. Default value: "L". Allowed values: ("L", "M", "Q" and "H").	Alphanumeric