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TBarCode OCX

Using TBarCode OCX in Navision

Version 11

Navision Tutorial

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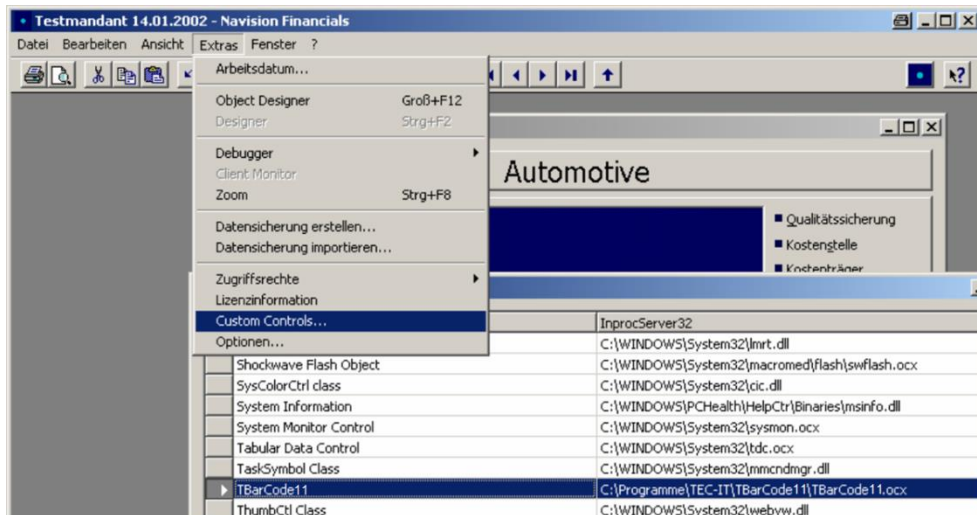
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2 Deploying TBarCode OCX into Navision Reports

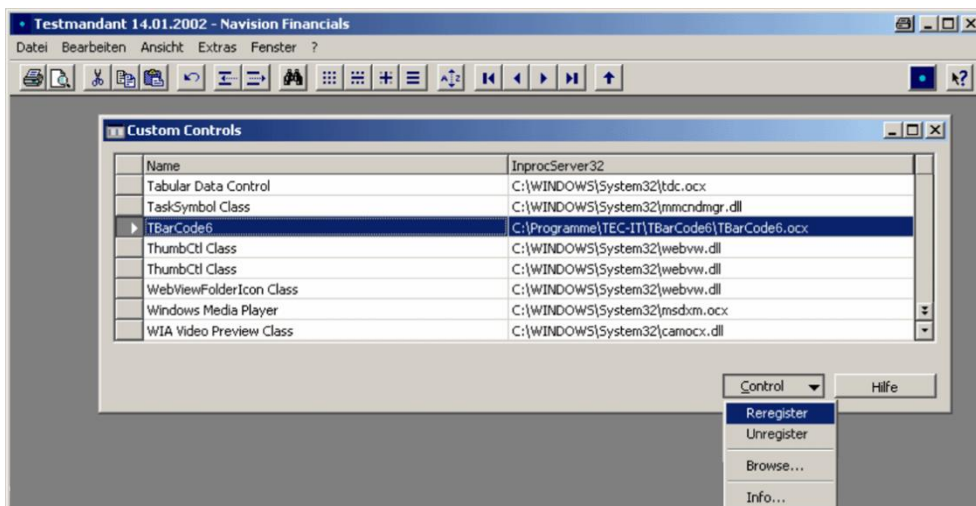
Note: the descriptive text in this documentation is in English but the field names are in German (due to the German source) – please contact our support@tec-it.com if you have questions...

2.1 Insert TBarCode

Within Navision use Custom Controls to insert **TBarCode OCX**:



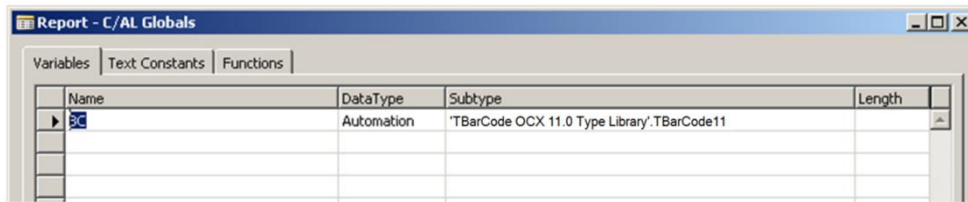
Search for **TBarCode11 OCX**¹ and Reregister (optional - but can help in case of troubles):



¹ The screen shot contains an earlier version of TBarCode (name should be TBarCode11)

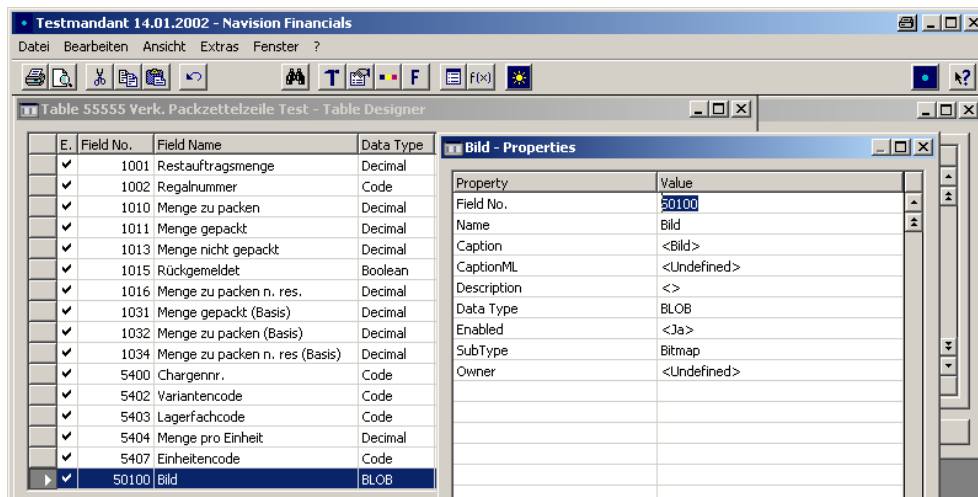
Add a global variable of data type *automation* with subtype '*TBarCode OCX 11 Type Library.TBarCode11*'.

Make sure that the sub class is *TBarCode11* as shown in the screen shot.

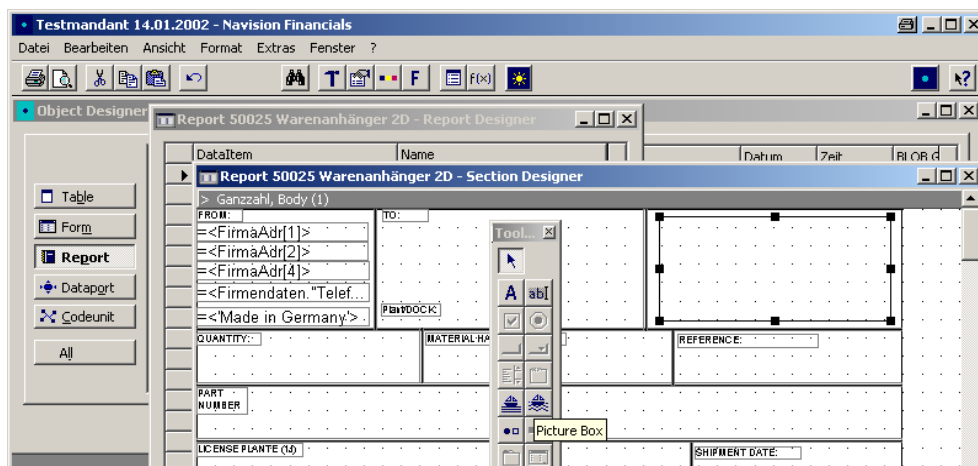


2.2 Table and Report Configuration

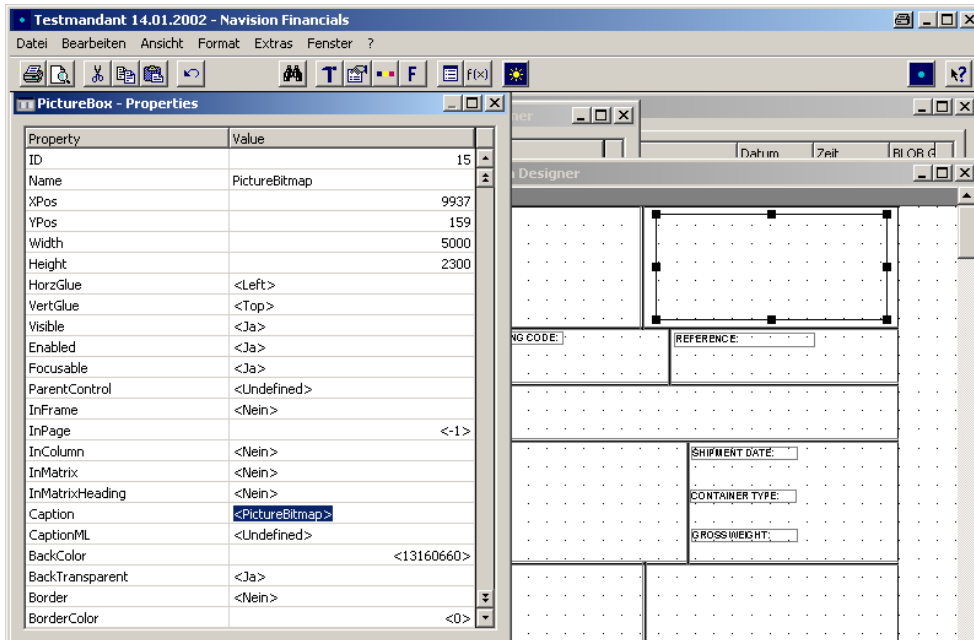
First we need a table field, which acts as source for the barcode image. Add a field of data type "*BLOB*" and subtype "*Bitmap*". The bitmap will be generated dynamically afterwards.



The barcode is inserted into the report through a Picture Box. Create a report and insert a field as Picture Box:



The properties of this field will be set as follows:



The source for the PictureBox must be the BLOB data field we have added above. For the property **"SourceExpr."** enter the source in the format *TableName.FieldName*

In our sample we use:

```
"Verk. Packzettelzeile".Bild

Tablename .... "Verk. Packzettelzeile"
Field name ... "Anzahl pro Paket"
Field name ... "Verk. Packzettelzeile"."Nr."
```

2.3 Program Code

The barcode is generated dynamically during runtime of the report in *OnAfterGetRecord()*

2.3.1 Create Barcode Object

```
OnInitReport()
CREATE (BC); // create TBarCode object instance
```

2.3.2 Generate Barcode, Update Picture Box

```
OnAfterGetRecord()

// generate bar code bitmap file (function definition see below)
Create2DBarcodePDF417Bitmap;

// CreateLinearBarcodeCode128Bitmap;
// Create2DBarcodeDataMatrixBitmap;

// load generated bar code image to the picture object in the report
// Syntax: TableName.ImageFieldName.IMPORT(BarcodeImageFilePath,FALSE);
// Syntax: TableName.CALCFIELDS(ImageFieldName);
// in our sample this would look as follows:
// (the path to the temporary bitmap file is stored in the global variable FileNameBmp)

"Verk. Packzettelzeile".Bild.IMPORT(FileNameBmp,FALSE);
"Verk. Packzettelzeile".CALCFIELDS(Bild);
```

2.3.3 Create2DBarcodePDF417Bitmap Function

```
Create2DBarcodePDF417Bitmap()

// set temp file name

FileNameBmp      := 'C:\Windows\Temp\TecItBitmap.bmp';
BC.Refresh;

// create 2D barcode of type PDF417

BC.BarCode        := 55;           // set bar code type to PDF417
BC.EscapeSequences := TRUE;        // decode Escape sequences in input data
BC.Text           := TA;           // set bar code data

// get optimum bar code width (Pixels) for PDF417 code types
pxWidth           := ROUND( ( BC.CountModules / BC.CountRows ),1,'<');
pxHeight          := ROUND( ( 3 * BC.CountRows ),1,'<');

// adjust horizontal, vertical resolution in DPI

nXRes              := 100;
nYRes              := 100;

// save bar code to bitmap file (BMP format)

BC.SaveImage(FileNameBmp, 0, pxWidth, pxHeight, nXRes, nYRes);
```

2.3.4 CreateLinearBarcodeCode128Bitmap Function

```
CreateLinearBarcodeCode128Bitmap()

// set temp file name

FileNameBmp      := 'C:\Windows\Temp\TecItBitmap.bmp';
BC.Refresh;

// create linear (1D) barcode of type Code 128

BC.BarCode        := 20;           // set bar code type to Code 128
BC.EscapeSequences := TRUE;        // decode Escape sequences in input data
BC.Text           := TA;           // set bar code data

// get bar code width (Pixels) for linear code types
pxWidth           := BC.CountModules;
pxHeight          := 100;          // height in Pixels (100 = 25.40 mm)

// adjust horizontal, vertical resolution in DPI

nXRes              := 100;
nYRes              := 100;

// save bar code to bitmap file (BMP format)

BC.SaveImage(FileNameBmp, 0, pxWidth, pxHeight, nXRes, nYRes);
```

2.3.5 Create2DBarcodeDataMatrixBitmap Function

```
Create2DBarcodeDataMatrixBitmap()

// set temp file name

FileNameBmp := 'C:\Windows\Temp\TecItBitmap.bmp';
BC.Refresh;

// create 2D Barcode Data Matrix or QR-Code

BC.BarCode := 71;           // 71 = Data Matrix ECC200
                          // 112 = QR-Code 2005

// optional
// BC.EscapeSequences := TRUE; // decode Escape sequences in input data

BC.Text      := TA;           // set bar code data

// get optimum bar code size (Pixels)
pxWidth      := 2 * Get2DXCols; // dot size will be 2 * 0.254 mm = 0.508mm
pxHeight     := 2 * Get2DXRows;

// adjust horizontal, vertical resolution in DPI

nXRes        := 100;          // 1 Pixel = 0.254 mm width/height
nYRes        := 100;

// save bar code to bitmap file (BMP format)

BC.SaveImage(FileNameBmp, 0, pxWidth, pxHeight, nXRes, nYRes);
```

2.3.6 Clear Blob field

```
OnPostDataItem()
CLEAR("Verk. Packzettelzeile".Bild);
```

2.3.7 Delete Barcode Object

```
OnPostReport()
CLEAR(BC); // delete TBarCode object instance
```

2.3.8 Format PDF417 Barcode Data (optional)

```
// pre format bar code data (optional)

FormatBarcodeData ()
CLEAR(TA);           // TA = the bar code data string (which is formatted)
TA := TA + '[]>';
TA := TA + '\x1E';    // 030 = RS
TA := TA + '06';
TA := TA + '\x1D';    // 029 = GS
TA := TA + 'P';
TA := TA + "Verk. Packzettelzeile"."Nr."; // article #
TA := TA + '\x1D';    // 029 = GS
TA := TA + 'Q';
TA := TA + FORMAT("Verk. Packzettelzeile"."Anzahl pro Paket"); // Menge
TA := TA + '\x1D';    // 029 = GS...
TA := TA + '10GT';    // Gross Weight
TA := TA + '\x1E';    // 030 = RS
TA := TA + '\x04';    // 004 = EOT
```

3 Contact and Support Information

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Many thanks to Mr. Klein / Wielpütz / <http://www.wielpuetz.de> for his source code and print screens.

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