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TBarCode OCX

Using TBarCode OCX in Navision

Version 10

Navision Tutorial

25 October 2010

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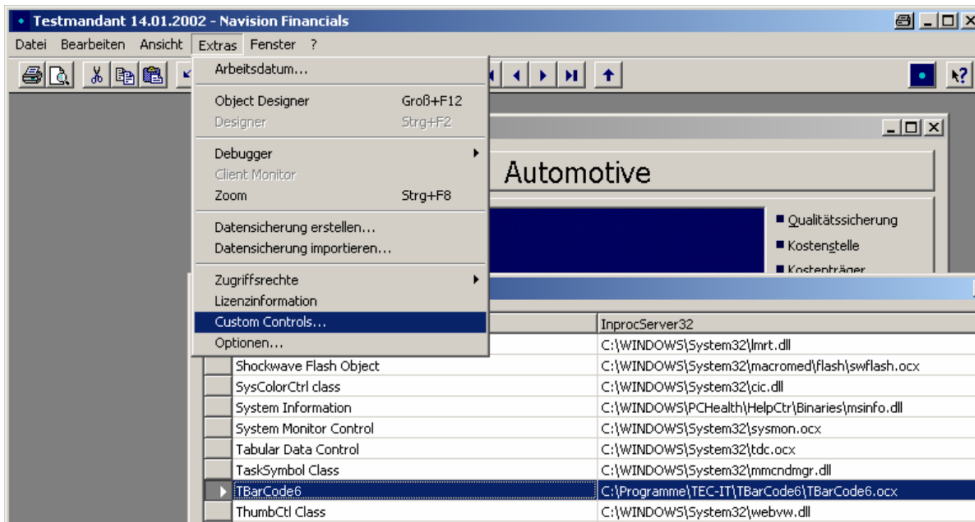
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2 Deploying TBarCode OCX into Navision Reports

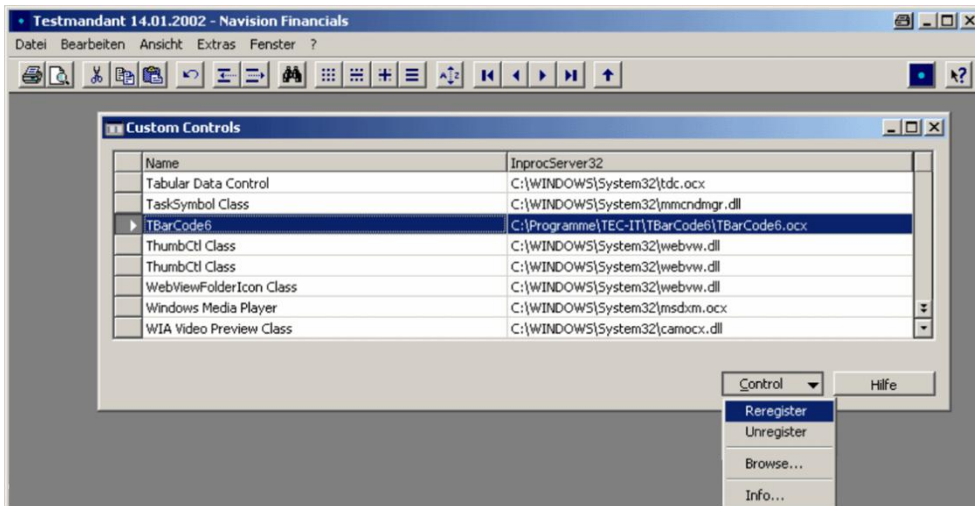
Note: the descriptive text in this documentation is in English but the field names are in German (due to the German source) – please contact our support@tec-it.com if you have questions...

2.1 Insert TBarCode

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



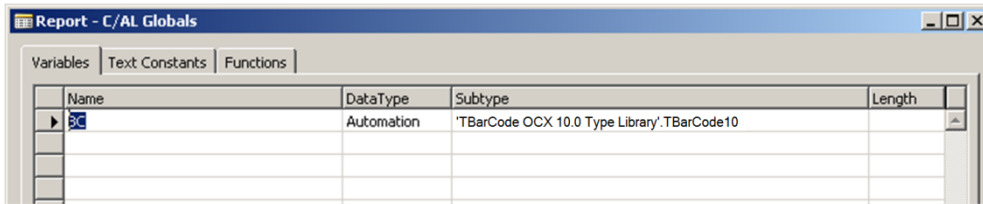
Search for **TBarCode10 OCX**¹ and Reregister (optional - but can help in case of troubles):



¹ The screen shot contains an earlier version of TBarCode (name should be TBarCode10, file name should be TBarCode10.ocx)

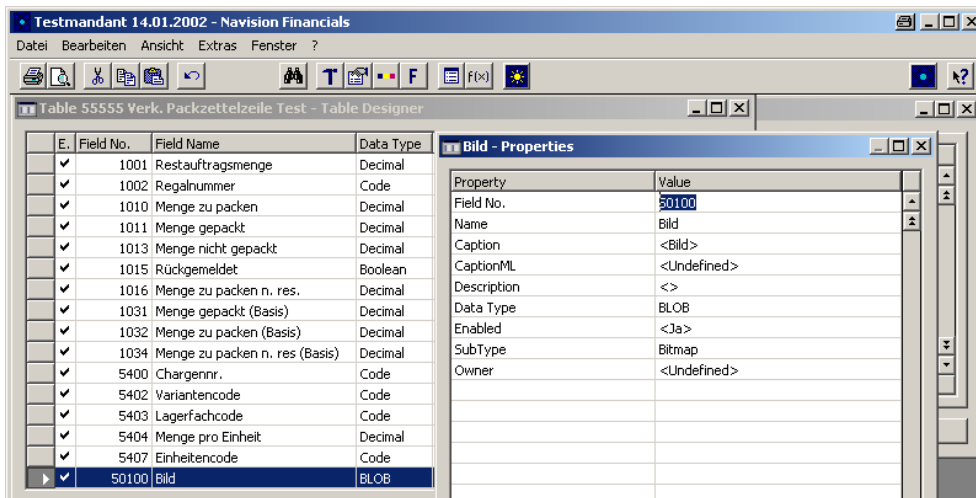
Add a global variable of data type *automation* with subtype *'TBarcode OCX 10 Type Library'.TBarcode10*.

Make sure that the sub class is *TBarcode10* as shown in the screen shot.

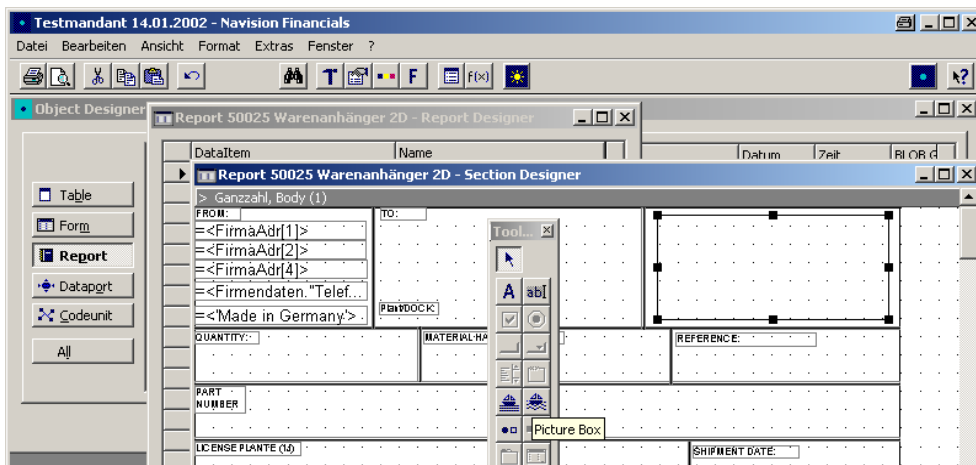


2.2 Table and Report Configuration

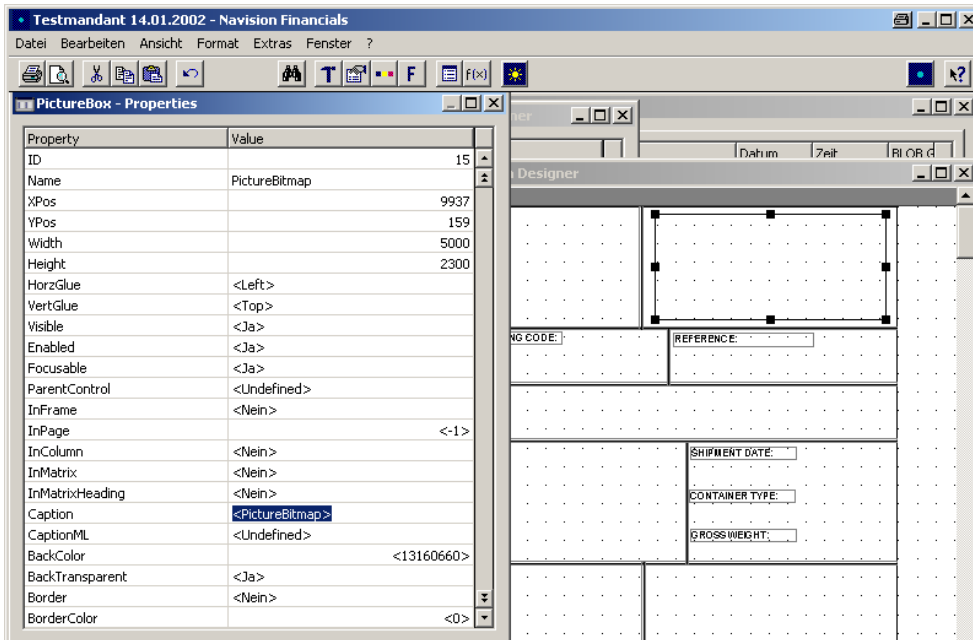
First we need a table field, which acts as source for the barcode image. Add a field of data type *"BLOB"* and subtype *"Bitmap"*. The bitmap will be generated dynamically afterwards.



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(BarcodeImagePath,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 := 72;           // 72 = 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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