



BIRT Toolbox

Manual - Barcode

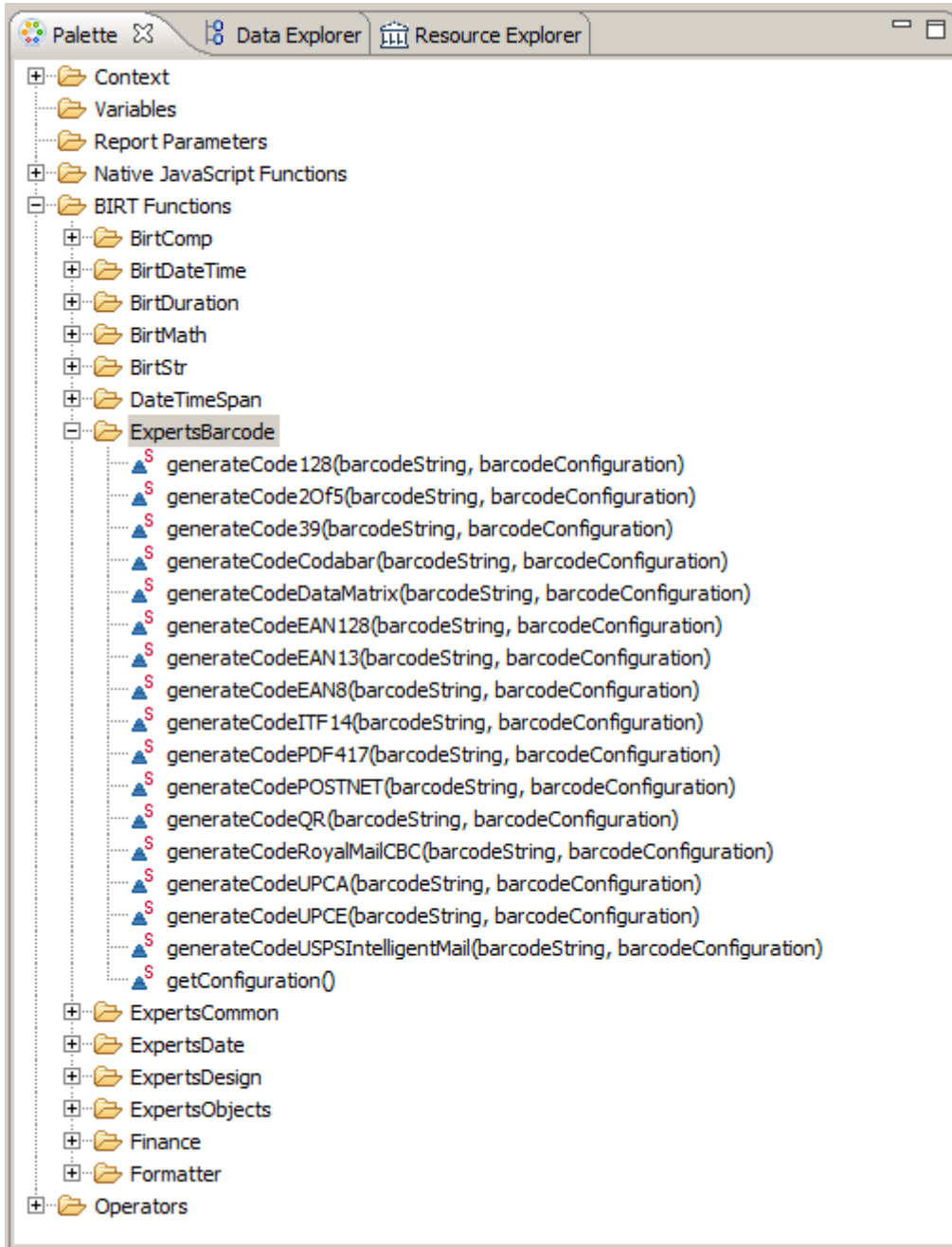
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The BIRT eXperts barcode extension for BIRT is available as a single plug'in or as part of the toolbox.

After installing the BIRT eXperts barcode extension, the new barcode functions are directly available in the BIRT function palette.



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1 Barcode - Introduction

Dynamic images are used to display barcodes in BIRT.

The BIRT eXperts barcode extension provides the necessary functions for generating the barcode images.

Without configuration, barcodes are generated with default settings.

If you want to create barcodes different from the default settings, you have to create a barcode configuration.

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2 Barcode - Basics

The Tradui Barcode Plugin has no special basics.

It runs under any BIRT version and can also be used without the tradui BIRT Toolbox.

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3 Barcode - Content

We will explain the functionality of Tradui Barcode Plugin on the following pages.

Create and configure a dynamic image, customize the font and alignment of the code.

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3.1 Barcode - Create Configuration

A barcode configuration should be created in the `initialize()` method of the report and stored in a global variable so that it can be used anywhere in the report.

To do this, one should insert the following code.

Method `initialize()`

```
glBarcodeConf = ExpertsBarcode.getConfiguration();
```

The generated barcode configuration can be changed via function calls.

Konfiguration anpassen

```
glBarcodeConf.setOrientation(0);  
glBarcodeConf.setHeight(4);  
glBarcodeConf.setFontsize("3.0");  
glBarcodeConf.setFont("San Serif");  
glBarcodeConf.setHumanReadablePlacement("BOTTOM");  
glBarcodeConf.setCodeSet("AUTO");  
glBarcodeConf.setMime("image/gif");
```

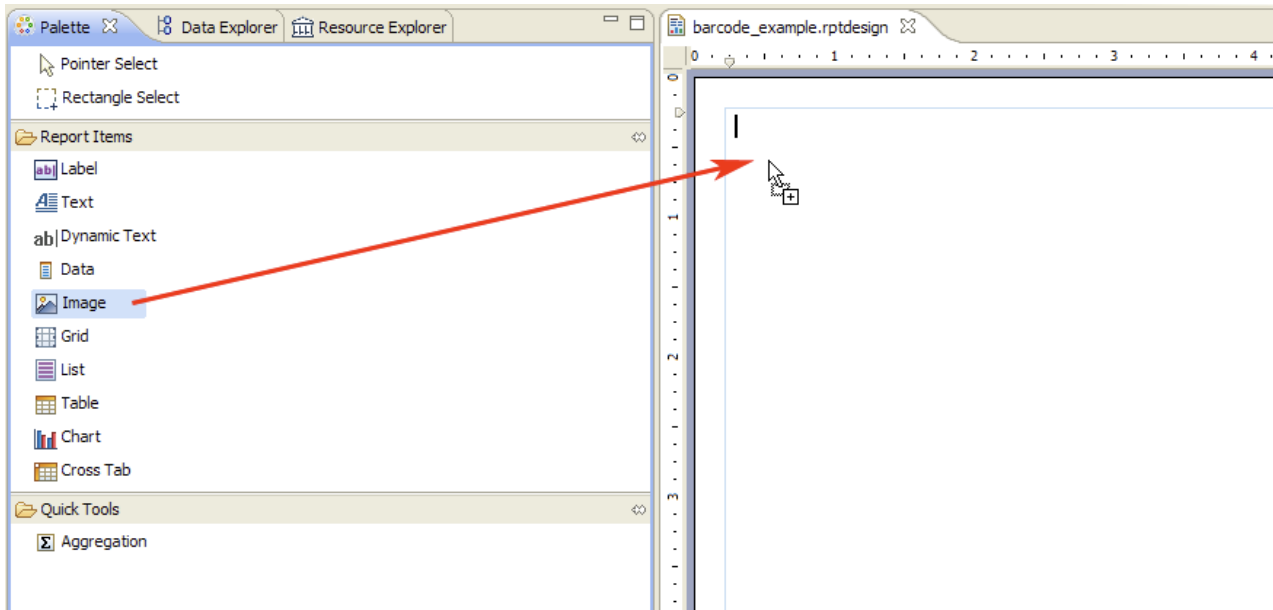
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3.2 Insert Barcode As Image

For the display of a barcode, an image is placed as a placeholder in the report. The barcode is configured via Javascript, generated and then replaces the existing image.

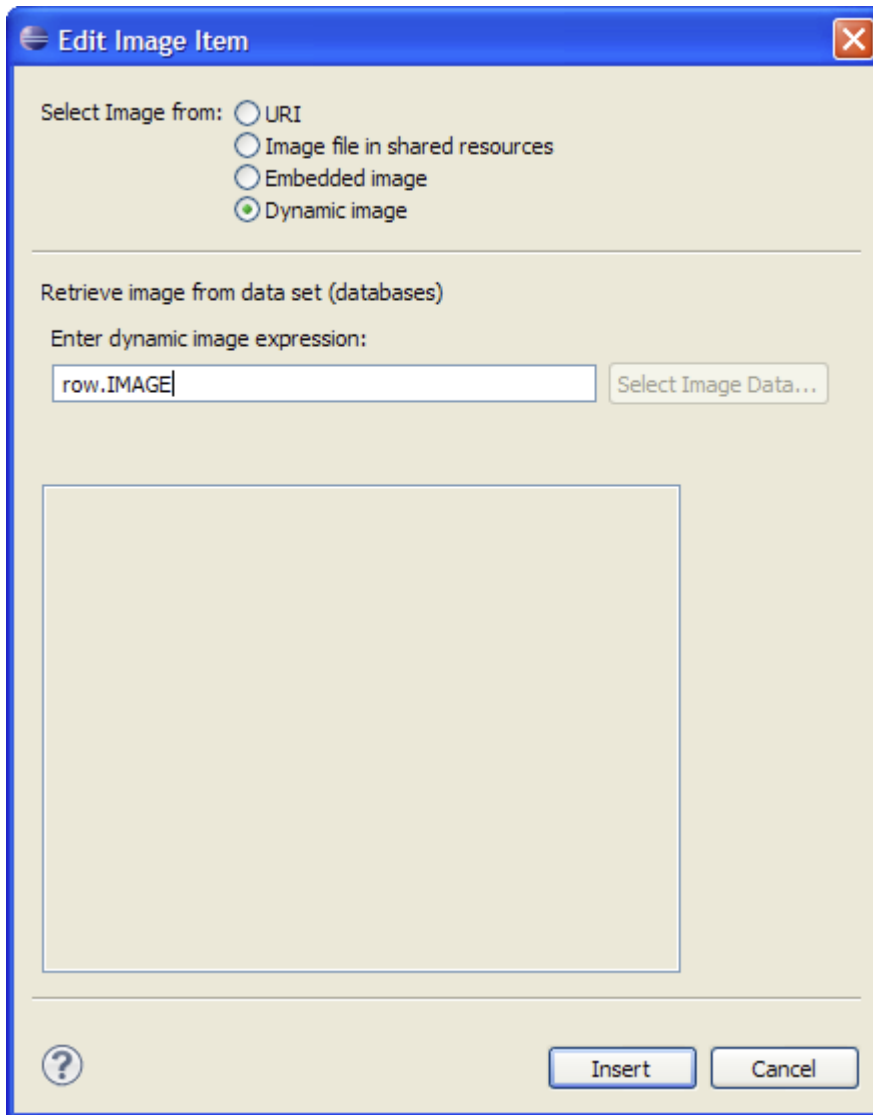
Insert image

An image from the palette is inserted into the layout to display the barcode.



Select "Dynamic Image" in the dialog box that opens.

At Dynamic Image enter the expression row.IMAGE.

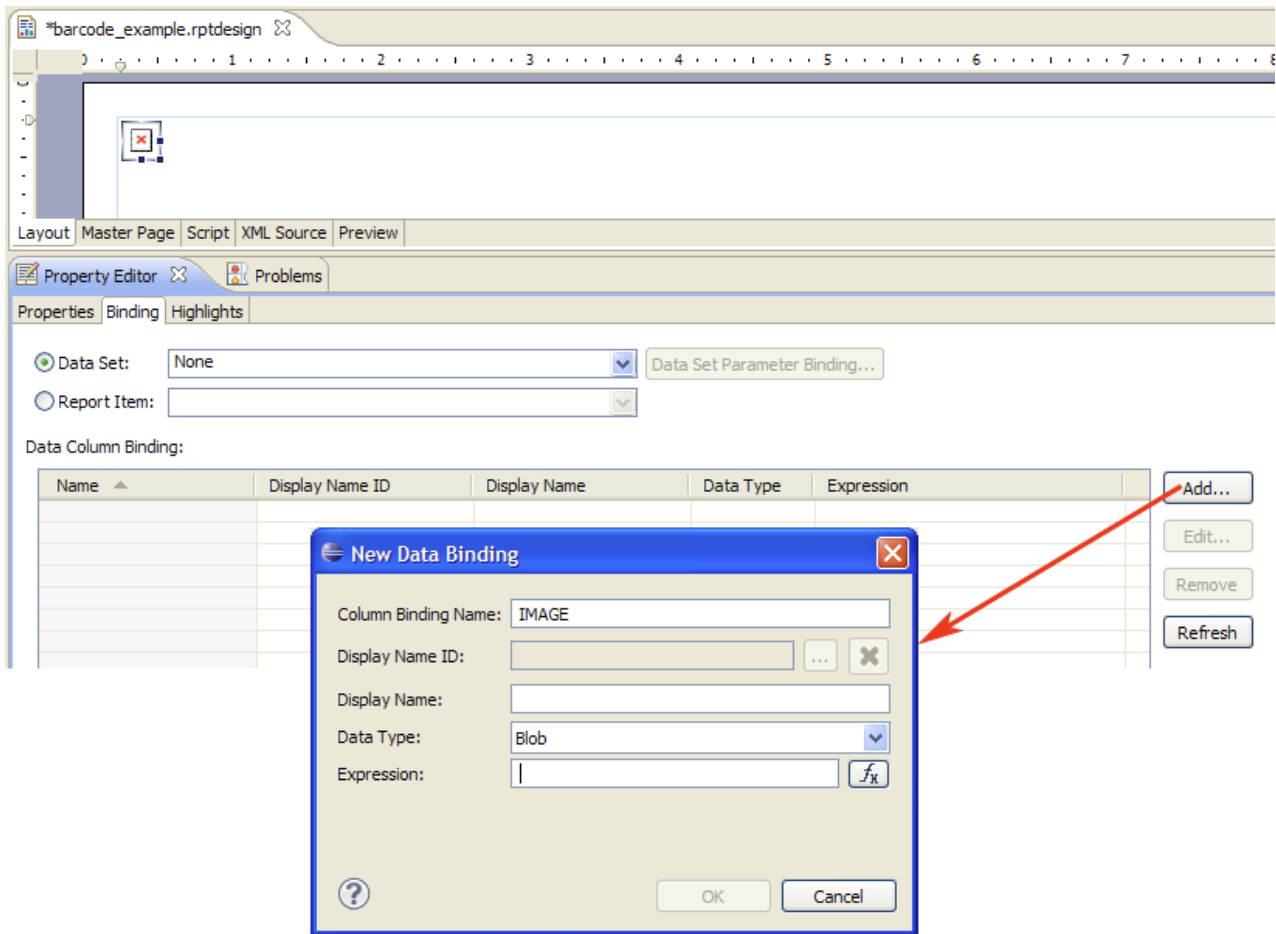


Define Binding

With the image selected, switch to the "Binding" tab and click the "Add" button.

Enter "IMAGE" as column name and select "BLOB" as data type.

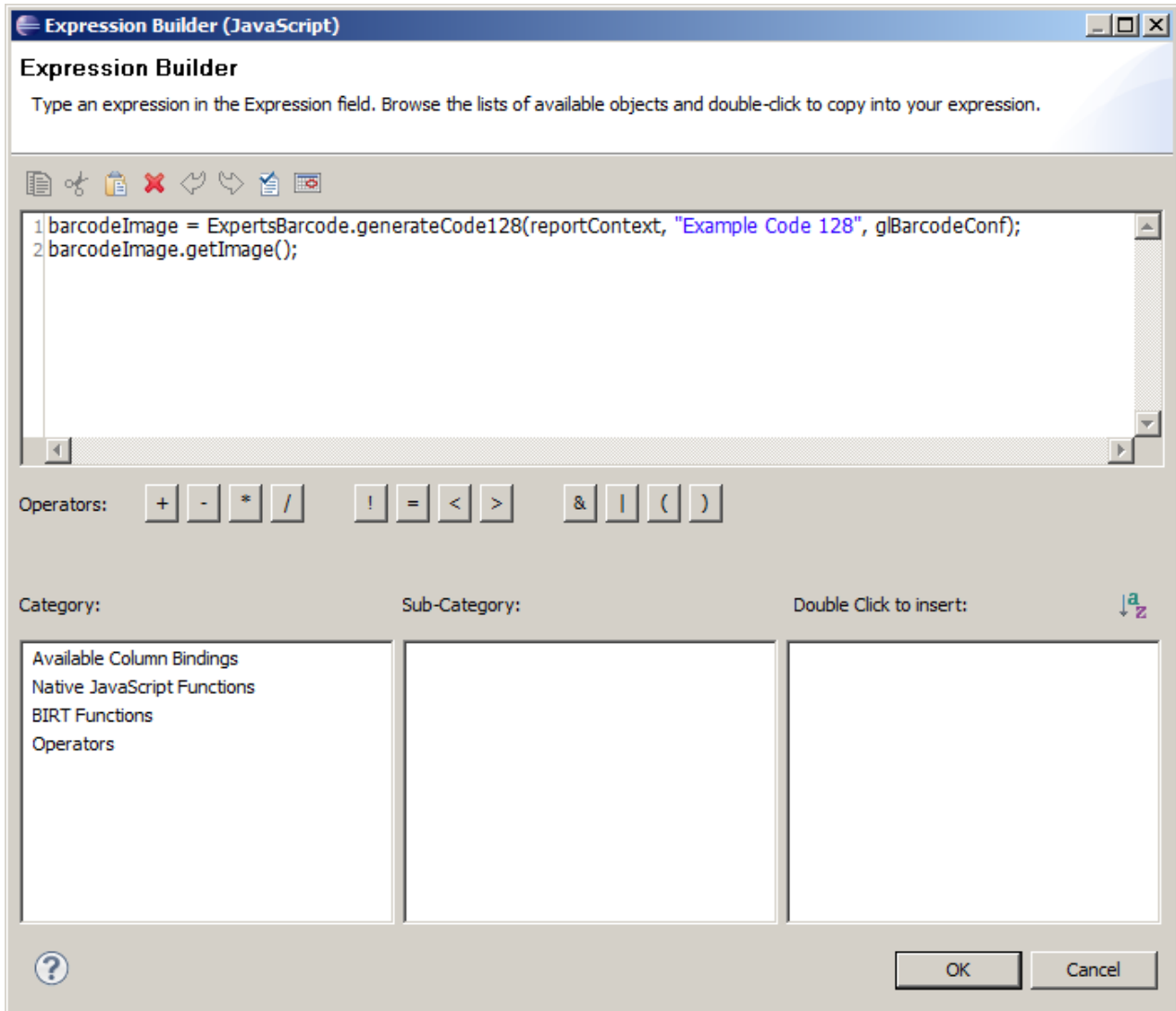
Then click on the function icon to open the expression editor.



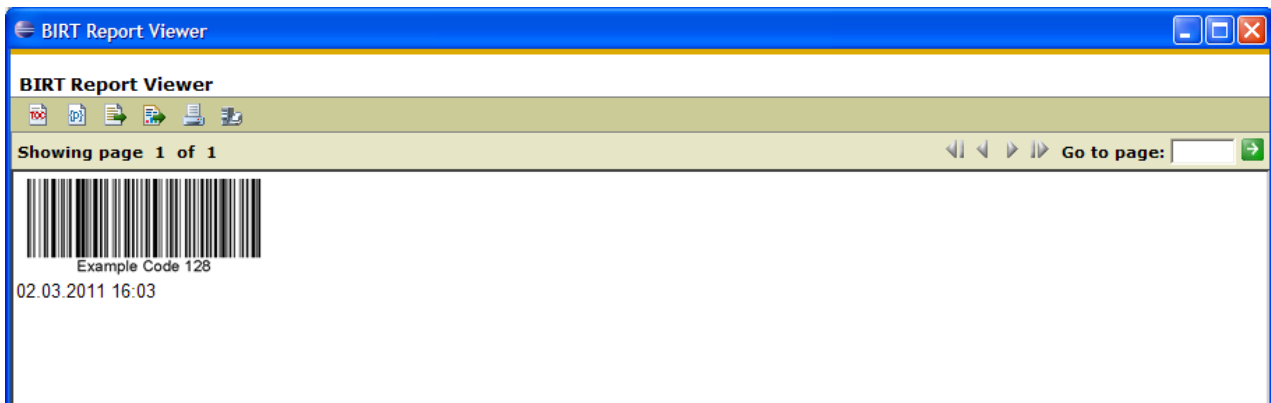
In the expression editor select the Samuraj barcode functions and create the following expression:

fx der Datenbindung des Bildes

```
barcodeImage = ExpertsBarcode.generateCode128(reportContext, "Example Code 128",
glBarcodeConf);
// der ReportContext ist nicht unbedingt notwendig:
// barcodeImage = ExpertsBarcode.generateCode128("Example Code 128", glBarcodeConf);
barcodeImage.getImage();
```



Now the report can be generated in the viewer or as a PDF.



Continue with the [Image Size Configuration](#).

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3.3 Image Size Configuration

Image size

For PDF output, the image size is automatically rendered correctly.

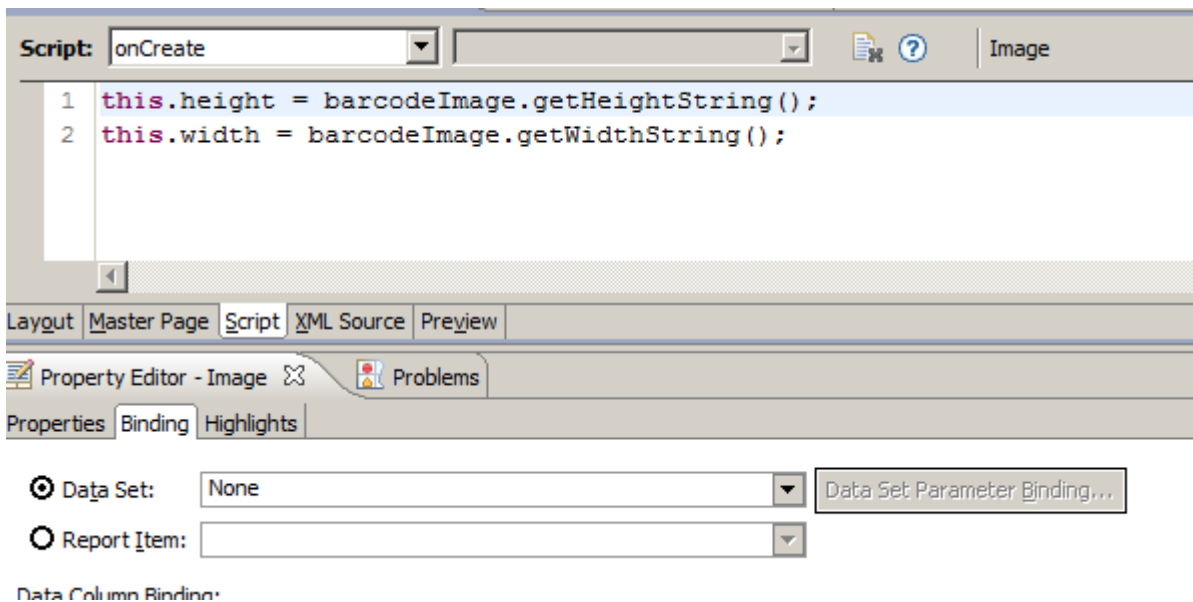
For the proportionally correct output in the web viewer (HTML) it is important that the image size is set correctly.

To do this, switch to the Script tab for the selected image.

There you select the function onCreate() and overwrite it with the following expression.

Größenanpassung eines Bildes

```
this.height = barcodeImage.getHeightString();
this.width = barcodeImage.getWidthString();
```



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3.4 Font And Lettering

Adjustments to the bars of the barcode are made to the BarcodeConfig before it is passed in the call to ExpertsBarcode.generateCode().

Font and size

The following functions can be used to adjust the settings of the font that appears below or above the barcode.

Schrifteinstellungen

```
// Schriftart
globalBarcodeConf.setFont("Comic Sans MS");
// Die Angabe der Schriftgröße erfolgt in PT.
globalBarcodeConf.setFontsize(5);
```



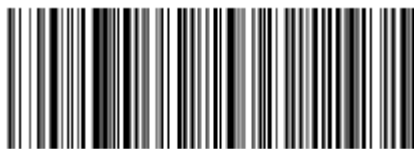
Example Code 128

Position of the label

The following functions can be used to adjust the labels of the barcode.

Position der Beschriftung

```
globalBarcodeConf.setHumanReadablePlacement("NONE");
globalBarcodeConf.setHumanReadablePlacement("TOP");
globalBarcodeConf.setHumanReadablePlacement("BOTTOM");
```



Example Code 128



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3.5 Alignment And Beam Height

Adjustments to the bars of the barcode are made to the BarcodeConfig before the barcode is passed in the call to ExpertsBarcode.generateCode().

Alignment

You can change the alignment with the following function:

Ausrichtung

```
glBarcodeConf.setOrientation(0);
```

Possible values for the function are 0; 90; 180; 270.



Bar height

The bar heights can be adjusted with the function setHeight(), the passing value is the future height in mm.

Balkengröße

```
glBarcodeConf.setHeight(4);
```



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3.6 DPI Resolution And mimeType

Adjustments to the bars of the barcode are made to the BarcodeConfig before the barcode is passed in the call to ExpertsBarcode.generateCode().

DPI resolution

DPI-Auflösung des Bildes

```
// Die Standard-Einstellung beträgt 300 dpi.  
globalBarcodeConf.setDpi(600.0);
```

mimeType

mimeType des Bildes

```
// Mögliche Formate sind PNG, JPEG oder GIF. Per Default werden PNG-Bilder erzeugt.  
globalBarcodeConf.setMime("image/png");  
globalBarcodeConf.setMime("image/jpeg");  
globalBarcodeConf.setMime("image/gif");
```

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3.7 Read Extended Barcode Message

Some barcodes extend the message with check digits or have a formatted display. If a separate display of the message in the report is necessary (outside the barcode), this must be switched on via the configuration. The barcode message can then be displayed via a text control.

Configuration

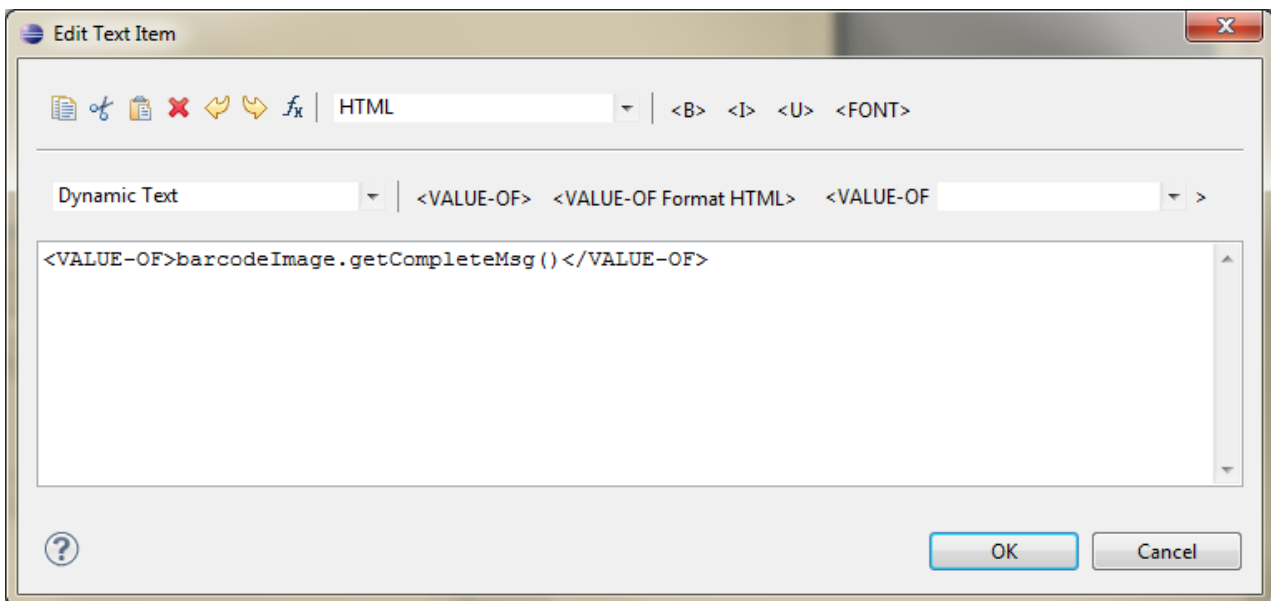
Adjust the configuration so that the extended barcode message can be read.

Erweiterte Barcode-Message einschalten

```
// Die Standard-Einstellung ist false.
globalBarcodeConf.setAdvancedMsg(true);
```

Display extended barcode message

The display can be done via a text control.



Barcode-Message anzeigen

```
barcodeImage.getMsg();
barcodeImage.getCompleteMsg();
barcodeImage.getHumanReadableMsg();
```

Example:



Function	Result
<code>barcodeImage.getMsg();</code>	0034046229000994665
<code>barcodeImage.getCompleteMsg();</code>	00340462290009946659
<code>barcodeImage.getHumanReadableMsg();</code>	(00)340462290009946659

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