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SAP Business One 10.0
Generate barcodes with Excel and
output them in Word as labels in a mail merge

SBO3501-EN

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Contents

- Background information on barcode 128
- Requirements
- Create Excel template with VBA function Code128()
- Apply function Code128() and test online
- Output labels in Microsoft Word as a mail merge

Appendix

- Appendix 1: SAP Business One item master as data source
- Appendix 2: SAP Business One bin locations as data source

Background information on barcode 128

Definition

Code128 is an alphanumeric barcode with a high information density. The basic structure of a Code128 symbol consists of a start character, the user information, the check digit and the stop character.

Source: [Wikipedia](#)

Due to the additional information such as start characters and check digits, a font cannot be used directly. The information to be encoded must first be prepared. In this document, we use a Microsoft Excel function in Visual Basic for Applications (VBA) for this purpose.

Examples



ABC123



Barcode 128



[SAP Business One Cloud](#)

Requirements

Step 1: Install Code 128 font

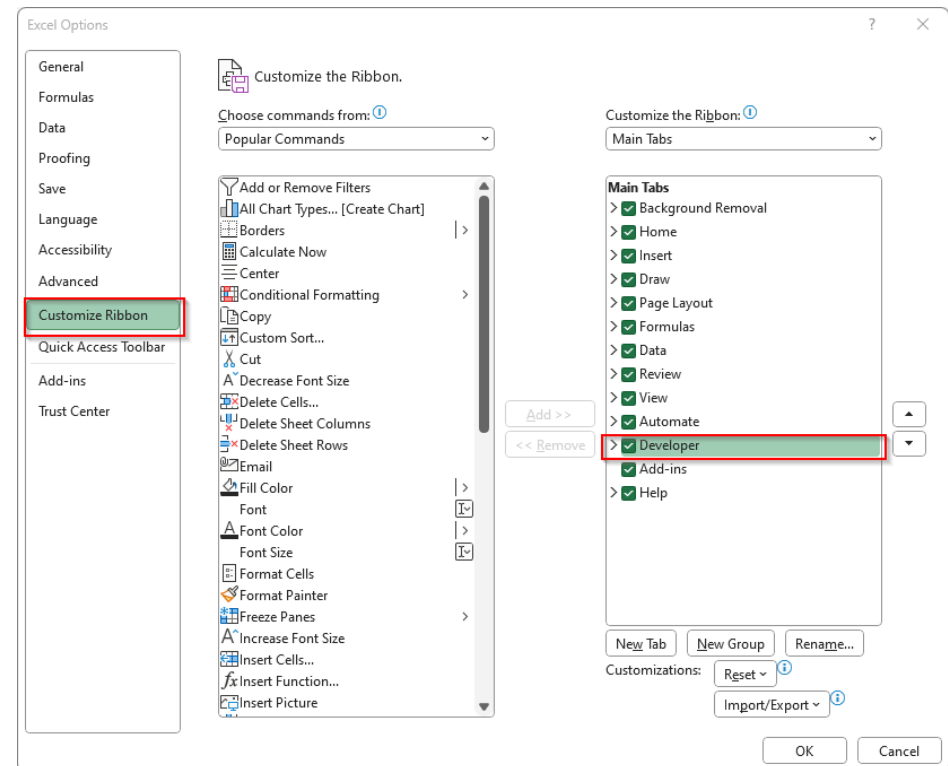
- Download the Code 128 font either directly via [code_128.zip](#) or from the [dafont.com](#) website
- Extract the ZIP file and install the font it contains by double-clicking on code128.ttf
You may need to be logged on to your PC as an administrator

Step 2: Download the Excel macro template

- Download the [VBA_Code128.txt](#) file. This file contains the template for an Excel macro.
The Excel macro is based on the work of [GRAND ZEBU](#) under the GNU LGPL license.
- Open text file e.g. with application editor

Step 3: Enable Developer ribbon in Excel

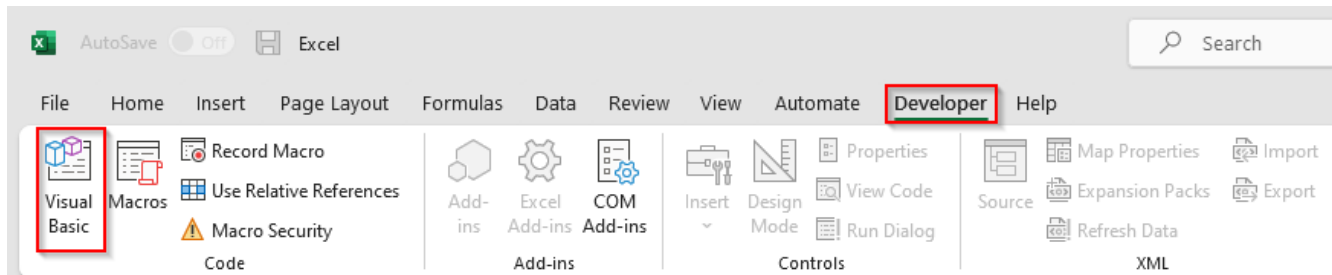
- Open Excel
- Make sure that the "Developer" ribbon is active or activate it:
File > Options > Customize Ribbon
Check Developer and confirm with "Ok".
You may need to be logged on to your PC as an administrator



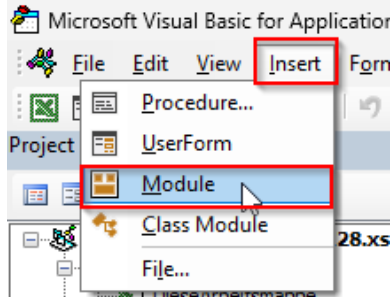
Create Excel template with VBA function Code128() (1/2)

Step 4: Paste the Visual Basic function Code128() into the Visual Basic Editor

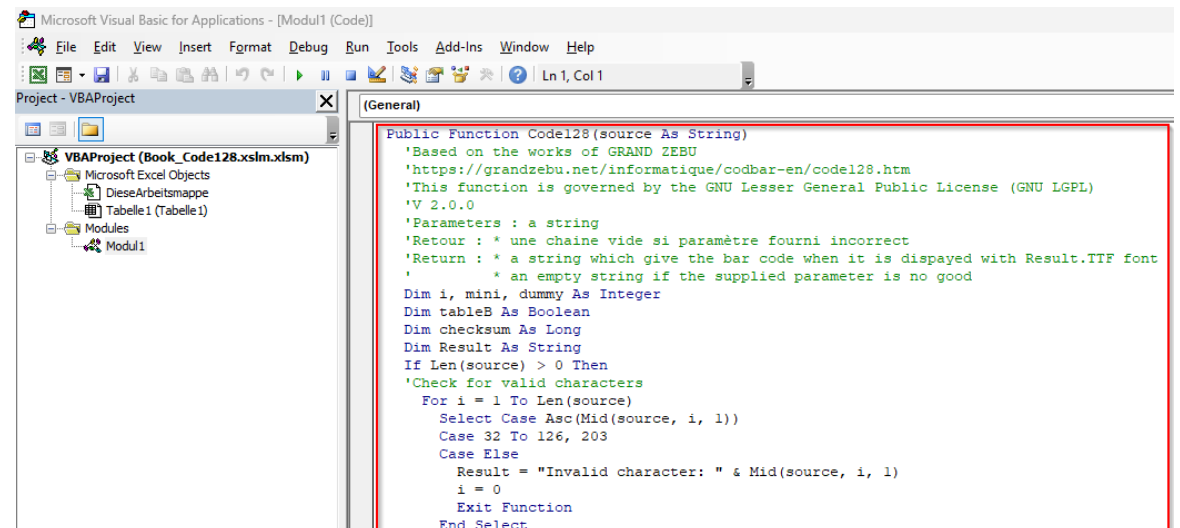
- Open the Visual Basic Editor
Entwicklertools > Visual Basic



- Insert new module
Insert > Module



- Copy and paste the Visual Basic code from the Code128.txt file into Module1



Create Excel template with VBA function Code128() (2/2)

Step 4: Continuation

- Close the Visual Basic Editor
- Save the Excel file as a template, e.g. with the name Book_Code128.xlsm
Note: The file extension xlsx stands for Excel with macro
- Alternatively, you can also download this Excel template directly as a zip file : [Book_Code128.zip](#).

Apply function Code128()

Step 5: Apply function Code128()

- Set up an example for item codes or bin locations
- Insert the Code128() function into the Barcode cell:

	A	B	C	D
1				
2		Item Code	Barcode	
3		A00001	=Code128(B3)	
4		A00002		
5		A00003		
6		A00004		
7		A00005		
8		A00006		
9				
10		Lagerplatz	Barcode	
11		05-G01-R01-P01		

- Intermediate result:

	A	B	C	D
1				
2		Item Code	Barcode	
3		A00001	ïA0Ç ![ÿ	
4		A00002		

- Use Code128 font and set font size to 48, for example
- End result:

	A	B	C	D
1				
2		Item Code	Barcode	
3		A00001		

Test Code128() function online

Step 6: Test Code128() function online

- Save the previously created barcode as a screenshot, e.g. with the Microsoft Sniping Tool

	A	B	C	D
1				
2		Item Code	Barcode	
3		A00001		

- Screenshot









- Open web site <https://products.aspose.app/barcode/en/recognize>
Upload previously saved screenshot
- Compare result:



Output labels in Microsoft Word as a mail merge (1/5)

Step 1: Preparations

- In this example, we also generate barcodes in Excel for the other items A00002 to A00006 and delete the bin locations.

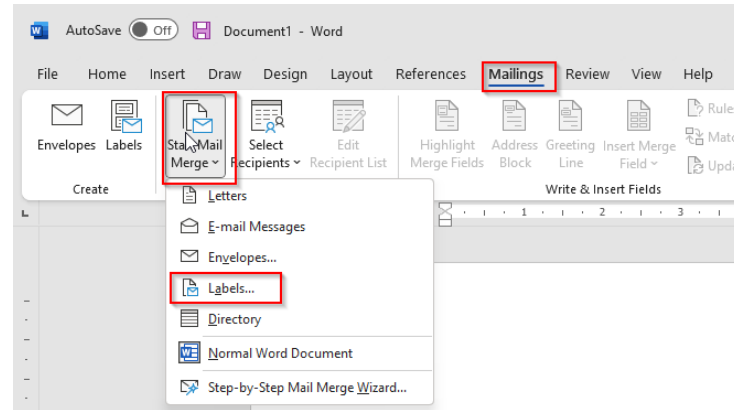
	A	B	C	D
1				
2		Item Code	Barcode	
3		A00001		
4		A00002		
5		A00003		
6		A00004		
7		A00005		
8		A00006		

- We save this file as e.g. mail_merge.xlsx
This file no longer needs to contain macros.
- Open Microsoft Word

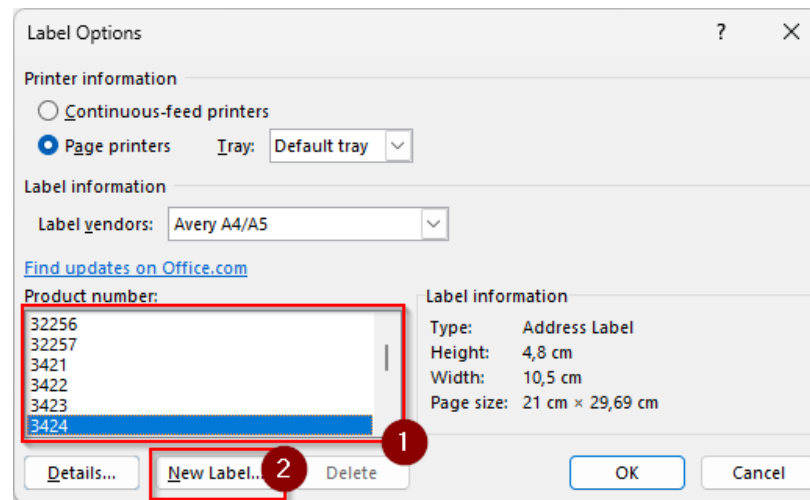
Output labels in Microsoft Word as a mail merge (2/5)

Step 2: Set up serial letter

- Mailings > Start Mail Merge > Labels ...



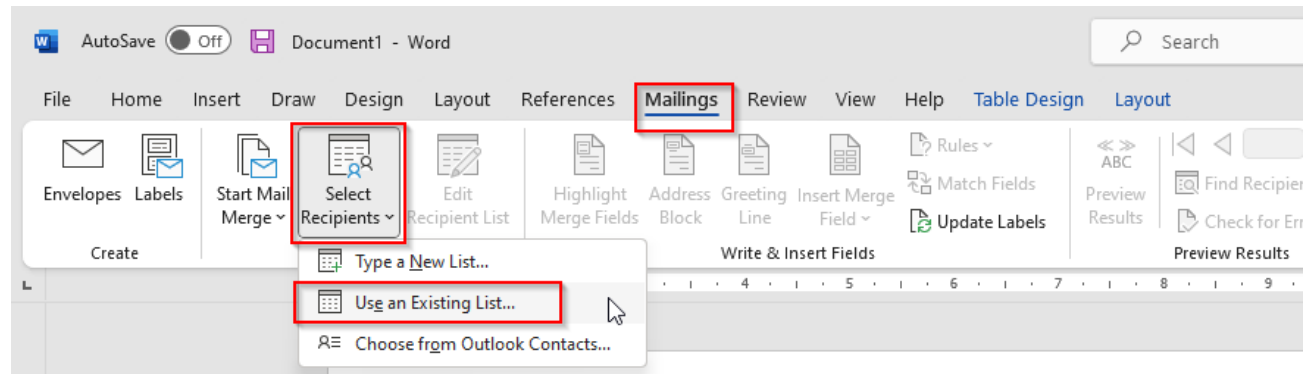
- Either select a specific label from the list (1) or create a New Label ... (2)



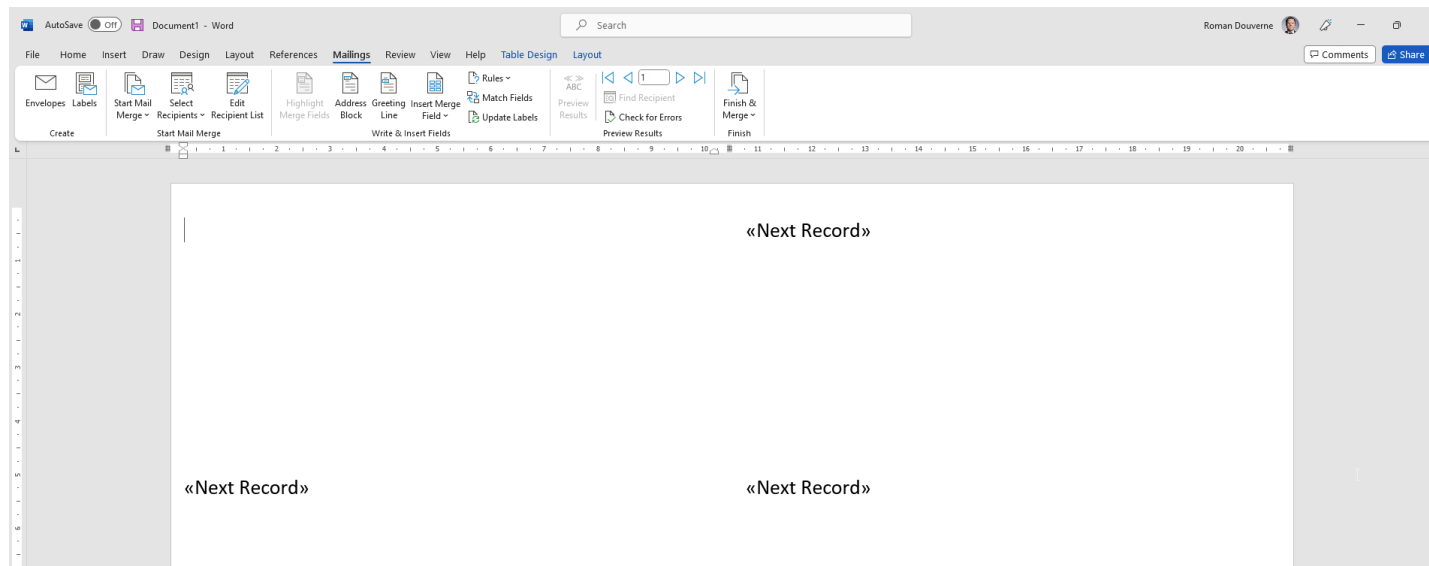
Output labels in Microsoft Word as a mail merge (3/5)

Step 3: Read data source

- Mailings > Select Recipients > Use an Existing List ...



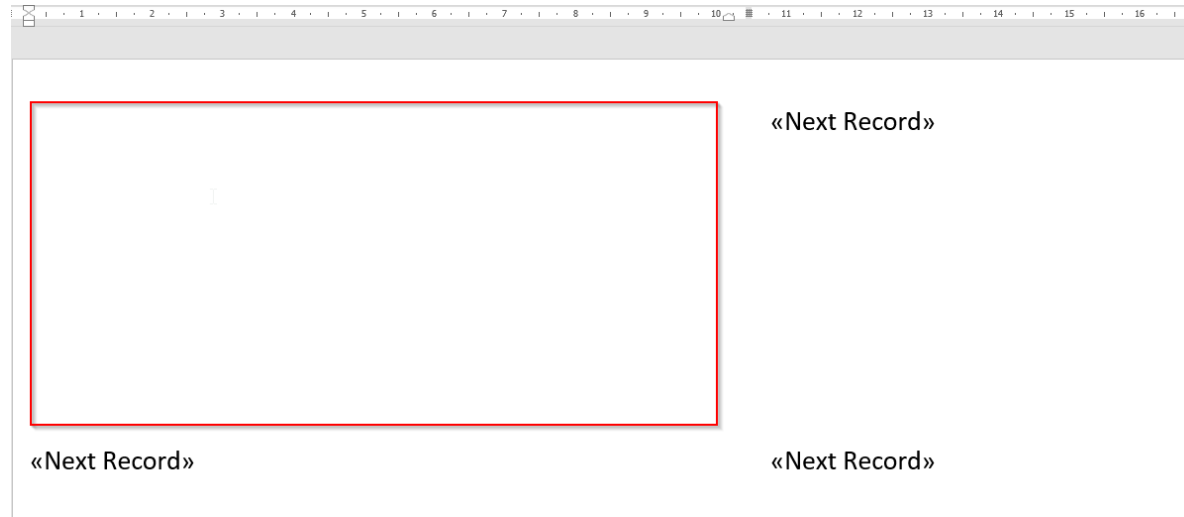
- In the "Select data source" dialog, select the file previously saved in Excel and then, for example, confirm the first spreadsheet with "Ok" as the data source.
- Result:



Output labels in Microsoft Word as a mail merge (4/5)

Step 4: Design reference label

- The label on the top left is the reference label



- Insert into reference label barcode and item code using Mailings > Insert Merge Field
- Design the reference label: For example, center both fields, set the font Code128 for the barcode and the font size to 48.
- Intermediate result:



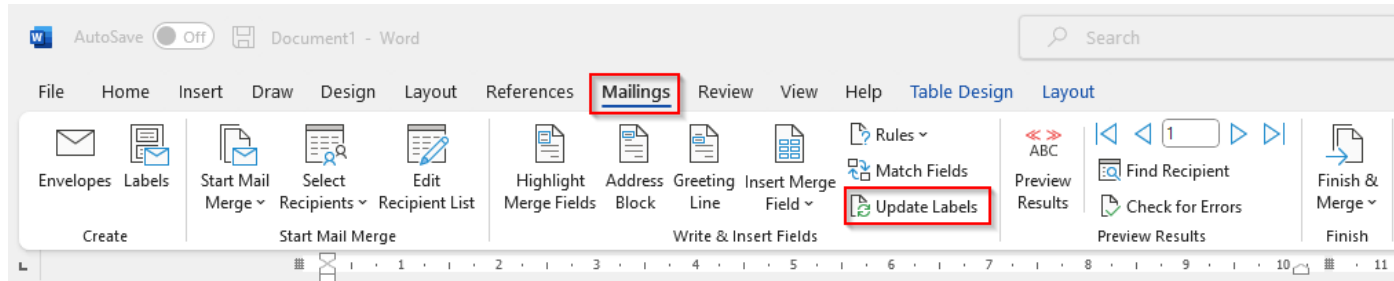
«Item_Code»

If there are problems with characters to the right of the barcode, then mark them and select the default font

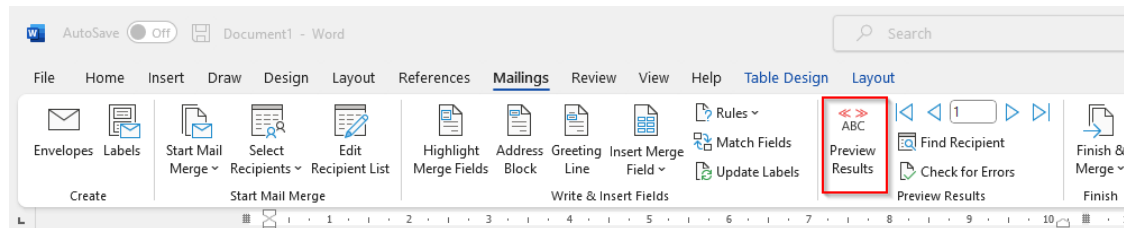
Output labels in Microsoft Word as a mail merge (5/5)

Step 5: Transfer the design of the reference label to the other labels

- Mailings > Update Labels



- Preview Results



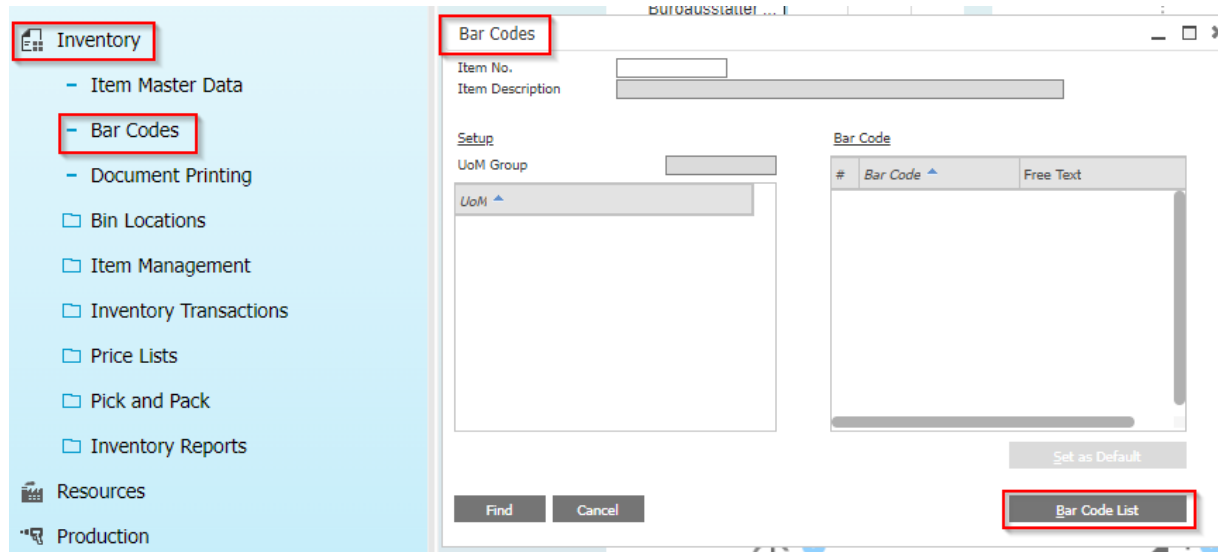
- Result



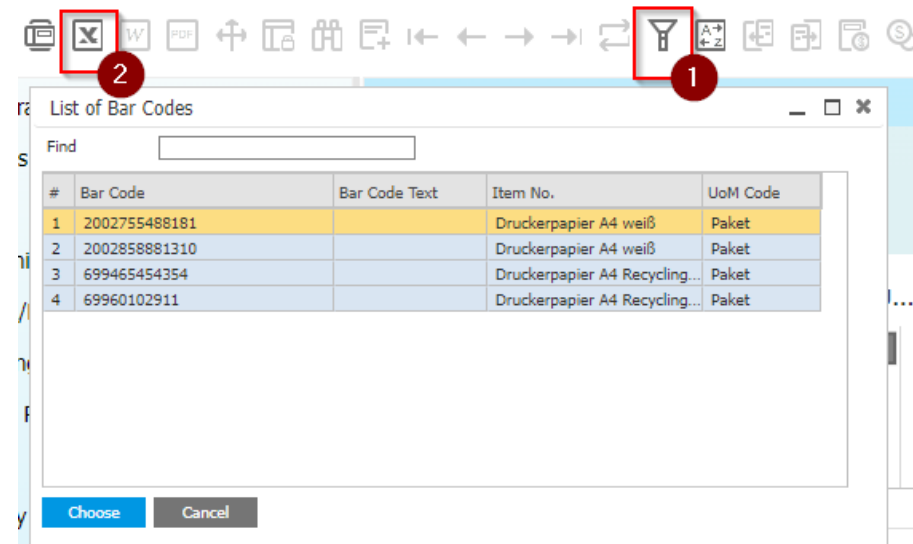
- Labels can now be printed
e.g. using Finish & Merge > Print Documents ...

Appendix 1: SAP Business One item master as data source

- Inventory > Bar Codes > Barcode Liste



- In dialog List of Bar Codes consider to set filter (1) and export list to Excel (2)
- Continue to work with Excel using function Code128()



Appendix 2: SAP Business One bin locations as data source

- Inventory > Bin Locations > Bin Location Master Data
Switch to search (1), insert „*“ (star) for Bin Location Code (2) and click on „Find“ (3)

Bin Location Master Data

Warehouse: Gang: Regal: Platz:

Bin Location Code:

Bin Location Properties

Inactive: Exclude from Auto. Alloc. on Issue:

Receiving Bin Location:

Description:

Item Weight: Item Qty:

No. of Items: No. of Batches/Serials:

Alternative Sort Code: Bar Code:

Minimum Qty: Maximum Qty:

Maximum Weight:

Item Restrictions:

UoM Restrictions:

Batch Restrictions:

Transaction Restrictions:

Last Updated On:

Reason:

Gefahren: Gefahrgut:

Sperrgüter: Gefahrstoffe:

Find Cancel

- In dialog List of Bin Locations insert column „Bar Code“ (1) if needed (reopen of dialog required afterwards), consider to set filter (2) and export to Excel (3)
- Continue to work with Excel using function Code128()

List of Bin Locations

Find:

Keep Visible

#	Bin Location	Alternative Sort Code	Bin Code
1	05-G01-R01-P01		
2	05-G01-R01-P02		
3	05-G01-R01-P03		05-G01-R01-P03
4	05-G01-R02-P01		
5	05-G01-R02-P02		
6	05-G01-R02-P03		
7	05-G01-R03-P01		
8	05-G01-R03-P02		
9	05-G01-R03-P03		
10	05-G01-R04-P01		
11	05-G01-R04-P02		

Choose Cancel



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