1. Customization Technology

The customization process for the Produmex mobile applications consists of the following steps:

- Enable the Customization Assist mode and run the client application. Check the customization information of the screen.
- Create the custom field and/or the SAP user query.
- Restart the client application and check the results of the customization.

Many screens of Produmex mobile applications are customizable with SAP Business One's queries. The used query have to be named specifically based on the screen it is used on. The query names, and parameters can be found with the help of the 'Customization Assist'. The query result column names indicate which fields to set.

Supported customization types:

- Preset field data
- Validation: The system checks if the entered values are correct during a 'validate' or a 'button' event.
- Add new fields/Hide existing fields

Helpful Tips and Resources

Click the link below to visit our Article site, where you will find examples and useful information. We are continuously adding new articles featuring the most common customizations.

Produmex Scan Articles: Customization (more subsections are available)

Functional changes introduced in new software releases can impact the behavior of customizations. Customizations are not part of the standard software, and are therefore not tested against new software releases. If you have any customizations, please make sure that appropriate testing protocols are applied to validate the customizations against the new software release.
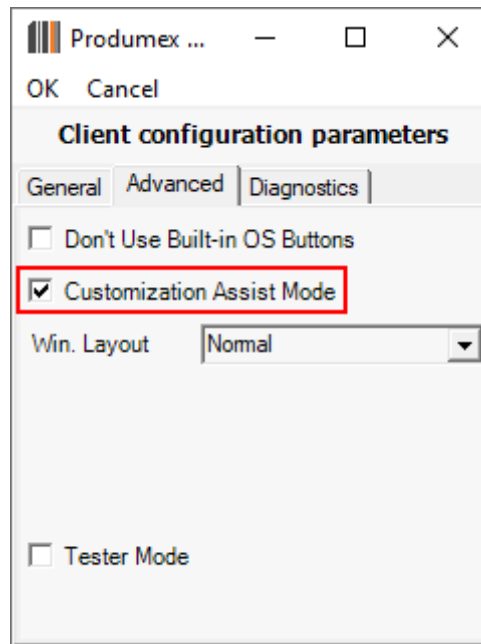
1.1. Enable the Customization Assist

To see information regarding the customization possibilities enable the Customization Assist mode.

Note: The Customization Assist mode is only needed to see customization possibilities. It is not required to be enabled during normal operations.

1. Start the Produmex Scan Configuration application.

2. Enable the Customization Assist Mode setting on the Advanced tab, then press OK to save the setting.

3. Run Produmex Scan and go to the screen that needs to be customized.

4. Tap the **C** button on the top of the screen.

The Customization screen opens up and it lists the possible parameters for customization with their current value and the customizable events.

1.2. Create custom fields

Open the Customization Fields table in SAP Business One via Tools > User-Defined Windows > Customization Fields (BXCUSTFD).

1.2.1. Field Name

The field name will be used to identify the field on the Customization window and in user queries. It is possible to create a new field or to add an existing Produmex Scan field. If the name of an existing field is added, the other properties can be changed.

Example:
In the example we add a custom delivery date field to the Goods Receipt PO screen and we hide the UoM field.

Field Name	Field Type	Label	Module	Screen	Visible	Ready Only
DELDATE	String	Del.Date	BXMobileWH9	GoodsReceiptPOLinesScreen	Yes	Yes
TextUoM	String		BXMobileWH9	GoodsReceiptPOLinesScreen	No	

To add data to the fields defined in the Customization Fields user table, use user queries.

It is also possible to add fields that already exist in SAP Business One as a user defined field. In this case no user query is required to copy the values added on the scanner to the database, but additional user queries are needed to populate the fields on the device with the database values.

1.2.1.1. Add SBO Header Field

Note: This function does not exist on line level.

In order to add an SBO header field, add the DI API field name and the BO_ prefix as the field name on the Customization Fields user table.

Hereinafter you can also change the other properties. When providing the value for Screen, make sure that you indicate the screen from where the final posting process will begin.

Example:
Add the Description field from the SBO Bin Location Master Data form to the Bin Attributes Produmex Scan screen.

Field Name	Field Type	Label	Module	Screen	Read Only
BO_Description	String	Description	BXMobileWH9	BinAttributesScreen	No

Exception: Field Ref2 must be referenced as BO_Reference2 in the Field Name column.

1.2.1.2. Add SBO User Defined Field for document header

Note: This function does not exist on line level.

In order to add an SBO user defined field, add the field title with the BO_U_ prefix as the field name on the Customization Fields user table.

Hereinafter you can also change the other properties. When providing the value for Screen, make sure that you indicate the screen from where the final posting process will begin.

Example:
Add the 'Customer' user defined field from the SBO Bin Location Master Data form to the Bin Attributes Produmex Scan screen.

Field Name	Field Type	Label	Module	Screen	Read Only
BO_U_PMXCUS	String	Customer	BXMobileWH9	BinAttributesScreen	No

1.2.1.3. Add Batch/Serial Number Details

Batch and Serial Number Details has to be added with the following format: #FieldName.

Title on Batch Details	DB field name	Field Name (CustomizationFields user table)
Expiration Date	ExpDate	#ExpirationDate
Manufacturing Date	MnfDate	#ManufacturingDate
Batch Attribute 1	MnfSerial	#Attribute1
Batch Attribute 2	LotNumber	#Attribute2
Details	Notes	#Details

Title on Serial Number Details	DB field name	Field Name (CustomizationFields user table)
Expiration Date	ExpDate	#SerialExpirationDate
Manufacturing Date	MnfDate	#SerialManufacturingDate
Mfr Serial No.	MnfSerial	#SerialAttribute1
Lot Number	LotNumber	#SerialAttribute2
Details	Notes	#SerialDetails

The default Serial number input field should be the last input field during the data entering process. It is because the Serial number will be added to the list in its validation event.

NOTE: Batch and serial number details are not supported on material return documents and A/R Credit Memos.

1.2.2. Field Type

Type of the field.Supported field types:

- *Button(13)*: Creates a new button. It will have a 'click' and 'click after' event.
- *String(0)*: Creates a new input field for alphanumeric values. It will have a 'validate' and 'validate after' event.
- *Quantity(5)*: Creates a new input field. The user can add a number with decimals as the value. It will have a 'validate' and 'validate after' event.
- *Percent(6)*: Creates a new input field. The user can add a percentage as the value. It will have a 'validate' and 'validate after' event.
- *Integer(8)*: Creates a new input field. The user can add a whole number as the value. It will have a 'validate' and 'validate after' event.

1.2.3. Label

The displayed text. It is also possible the change the label of an existing field.

1.2.4. Module

The name of the mobile solution. Add **BXMobileWH9**.

1.2.5. On External Form

Defines whether the new field is added to an external screen or not. If you select Yes in the column, a new button (E) is displayed to open the external screen.

1.2.6. Position Data

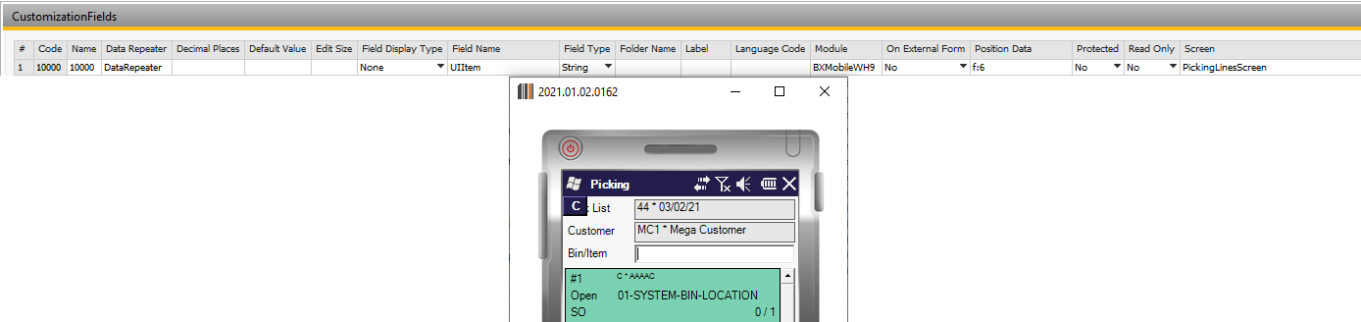The position of an object can be changed in this field. Possible values:

- x: - horizontal position (% of screen width from left)
- y: - vertical position (% of screen height from top)
- w: - width (% of screen width)
- h: - height (% of screen height)
- f: - font size (pixel) only on 'Button' and for DataRepeater
- lines: - the number of extra lines to be added to the screen, only for DataRepeater

(see section 7. Manipulating DataRepeater / 7.3. Adding extra lines to screens)

Please note that only integer values are allowed. Separate the different parameters with the ';' character.
E.g.: x:1;y:50;w:50;h:80;lines:3

Font size example:

1.2.7. Protected

If it is set to yes, the field is displayed on the next screen as well and the entered value is in read-only mode on this second screen.

Note:

- If a field is customized on a given screen, it cannot be added to the same screen again as a protected field.
- It is recommended to convert the value of the protected field on the second screen in your query because if the field does not contain any value, it can cause any error.

1.2.8. Read Only

Defines whether the field will be read only or not.

1.2.9. Screen

The screen name. The screen name can be found in the first line on the Customization window.

1.2.10. Visible

Defines whether the field is displayed on the screen or not.

1.3. Create an SAP user query

Open the Query Manager in SAP Business One via: Tools > Queries > Query Manager

Create the user query.
The name of the query defines when it will be executed, therefore save it as the name of the event when you would like to run the user query.

> EXAMPLE: The user query that runs when the 'GR PO' screen is loaded in Produmex Scan is 'BXMobileWH9_GoodsReceiptPOScreen_Load'

1.3.1. Supported message types

The following message types can be used in user queries for Produmex Scan:

- **I: Information**
  A pop up information message will be prompted, that needs user confirmation (OK). The event will execute.
- **E: Error**
  A pop up error message will be prompted, that needs user confirmation (OK). The event will not execute.
- **YM: Yes/No with message box**
  A pop up confirmation message will be prompted, that can be answered with yes or no. The event will execute depending on user choice.

1.4. Restart the application

To apply the customization restart the mobile application.

> You must restart the application every time a new user query is created but it is not necessary to restart the application when modifying an existing query.

From:
https://wiki.produmex.name/ - **Produmex**

Permanent link:
https://wiki.produmex.name/doku.php?id=implementation:scan:customizationtechnology

Last update: **2025/01/20 10:32**