

Business One in Action – How To Create the Item Number Automatically?



Applies to:

SAP Business One, [Logistics](#), [Customization](#)

Summary:

This article describes how to create automatic items codes creation based on the item group.

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How to create the Item Number automatically?

To ensure continuity in their *Item Master Data*, many companies require a tightly controlled sequential item code generation. In SAP Business One auto-generated sequential item codes are easy to set up.

Dr Computer Repairs (DCR) is a company that repairs laptops and sells rebuilt second hand laptops; user laptops, bus and trucks laptops. The *Item Number* for the laptops/parts is specific to the type of article rather than per article and brand. In other words, the company has one *Item Master Data* record for all DVD-ROM Drives, regardless of the brand, one *Item Master Data* for batteries and so on.

The *Item Number* depends on the *Item Group* because the *Description* changes constantly. They therefore need to have a sequential alphanumeric *Item Number*. In this alphanumeric numbering, the alpha part is static according to the type of goods. Because the *Item Number* is unique, a numeric counter is added after the alpha part of the code. To ensure consistency of this numbering system, a *Formatted Search* is setup to automatically create the *Item Number* once the *Item Group* has been selected.

To achieve this automatic creation, a *Formatted Search* is set up in the *Item Master Data (Stock Management (Inventory)-> Item Master Data)* in the *Item Number* field (OITM, ItemCode).

The first *Item Number* of each group has to be manually created (or imported via DTW) in order for the query to retrieve the different parts of the code and increase the numbering for all subsequent new items. In the following screenshot the Item 'NP_1' is the first item in the *Item Group* 'Part New'. This *Item Number* was manually entered by the user when creating the item.

Item Number	NP_1	Bar Code		<input checked="" type="checkbox"/> Stock Item
Description	CPU_			<input checked="" type="checkbox"/> Sales Item
Desc. in Foreign Lang.				<input checked="" type="checkbox"/> Purchased Item
Item Type	Items			<input type="checkbox"/> Fixed Assets
Item Group	Part New			
Price List	Price List 01	Unit Price	GBP 5.15	

The following sample query will update the *Item Number* field according to the specifications:

```
/* Call the last Item number and keep only the alpha part at the beginning of the
code. The length expression (4 in the below) has to be modified according to the
length of the alpha part of the code.
Concatenate the alpha and the numeric value (+).
Call the numeric part of the last code. Increase it by one(1). The result is
then converted in alphanumeric type.*/
```

```
SELECT
    substring ((MAX(T0.ItemCode)), 0, 4)
+
    cast ((Substring ((MAX(T0.ItemCode)), 4, 4)+1) AS varchar(20))
FROM
    OITM T0
WHERE
    T0.ItmsGrpCod = ${OITM.ItmsGrpCod}
```

To save this query in SAP Business One and activate the *Formatted Search*:

1. Go to *Tools -> Queries-> Query Generator -> Execute*.
2. Copy and paste the above query and amend the substring start and length expression according to the desired code definition.
3. Save the query in the relevant category in the *Query Manager*.
4. Open the *Item Master Data (Stock Management (Inventory)-> Item Master Data)* and change it to the *Add mode*.
5. Standing in the *Item Number* field, press *Shift+ALT+F2* or go to *Tools -> Customization Tools->User Defined Value Setup* and complete the *Formatted Search* set up. For more information on setting up *Formatted Searches*, please refer to the document *How To Define and Use User-Defined Values in 8.8* on the [Documentation Resource Centre](#).

The screenshot shows the 'Item Master Data' dialog box with the 'User-Defined Values - Setup' sub-dialog open. In the 'User-Defined Values - Setup' dialog, the following options are visible:

- Without Search in User-Defined Values
- Search in Existing User-Defined Values
- Search in Existing User-Defined Values According to Saved Query

The 'Open Saved Query' button is highlighted, and the text '2010.08_AutomaticItemCode' is entered in the search field. The 'Auto Refresh When Field Changes' checkbox is checked. The 'Item Group' dropdown is set to 'Items'. The 'Refresh Regularly' and 'Display Saved User-Defined Values' options are also visible.

Once the formatted search is created, each time the *Item Group* is modified, the new *Item Number* is created. In the following example, a new item has been added to the Item Group 'Part new'. The *Item Number* has been automatically generated with the code 'NP_2' by the formatted search in this field.

The screenshot shows the 'Item Master Data' dialog box with the 'Item Number' field populated with 'NP_2'. The 'Item Group' is set to 'Part New'. The 'Auto Refresh When Field Changes' checkbox is checked.

Note: In this example the *Formatted Search* was set to activate when the *Item Group* field changes. If adding a new item, the default *Item Group* is automatically selected. If you need to use this default *Item Group* then you will need to manually trigger the *Formatted Search* by resetting the default *Item Group*.

If in the company business process the group of an item can be updated/ changed, the formatted search should not use *Auto Refresh*. The *Item Number* in the *Item Master Data* cannot be changed once transactions exist. As a consequence, there may be no need to use *Auto Refresh*.

The screenshot shows the 'User-Defined Values - Setup' dialog box. The 'Auto Refresh When Field Changes' checkbox is unchecked. The search field contains '2010.08_AutomaticItemCode' and the 'Open Saved Query' button is highlighted.

The user will then have to manually update the *Item Number*. This can be done by using *Shift+F2* or *Tools -> User Defined Values* or clicking on the magnifier in the field when activated (*View -> Pickers Display -> User Defined Values*). Again, the *Item Number* can only be changed if no transactions exist for that item.

Related Contents

- [SAP Business One in Action Catalog Page](#)
- [Link to DRC](#) documentation
- Note [1378434](#)
- For more information, visit the [Business One homepage](#).

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