

How-To Guide

CUSTOMER

SAP Business One 9.1 and SAP Business One 9.1, version for
SAP HANA

Document Version: 4.0 – 07-30-2015

How to Set Up and Use Serial/Batch Valuation Method

Typographic Conventions

Type Style	Description
<i>Example</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.
Example	Emphasized words or expressions.
EXAMPLE	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
Example	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
Example	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE	Keys on the keyboard, for example, F2 or ENTER.

Document History

Version	Date	Change						
1.0	2015-07-25	First version						
2.0, 3.0	2015-03-26	<ol style="list-style-type: none"> In chapter 2 Prerequisites, the following information has been removed: <ul style="list-style-type: none"> You are not using the purchase accounts posting system. In the <i>Company Details</i> window, the <i>Use Purchase Accounts Posting System</i> checkbox is deselected. In chapter 3.2 Defining Serial/Batch Valuation Method at Company Level, step 2 of the procedure has been updated as displayed below. <table border="1"> <thead> <tr> <th>Version</th> <th></th> </tr> </thead> <tbody> <tr> <td>1.0</td> <td>The system manages the serial/batch valuation method at the company level, not per warehouse, therefore the <i>Manage Item Cost per Warehouse</i> checkbox on the <i>Basic Initialization</i> tab is disabled when you choose this method</td> </tr> <tr> <td>2.0</td> <td>The system manages the serial/batch valuation method at the company level, not per warehouse. Therefore, the <i>Manage Item Cost per Warehouse</i> checkbox on the <i>Basic Initialization</i> tab is irrelevant for the items with the serial/batch valuation method</td> </tr> </tbody> </table> In chapter 3.4 Blocking Multiple Receipts for Same Batch When Valuation Method Is Serial/Batch, an additional note has been added: <p style="text-align: center;">i Note</p> <p>When using the multi-branch feature, it is strongly recommended that you block multiple receipts of the same batch due to the possibility that a batch which might be received with a different cost into another branch impacts the cost on both branches.</p> <p>Examples are provided as well.</p> In chapter 7 Updating Valuation Method to Serial/Batch for Selection of Items, in the Prerequisites section, the following information has been added: For more information, see SAP Note 869071. Added: Chapter Determining Item Cost of By-Products with Serial/Batch Valuation Method. 	Version		1.0	The system manages the serial/batch valuation method at the company level, not per warehouse, therefore the <i>Manage Item Cost per Warehouse</i> checkbox on the <i>Basic Initialization</i> tab is disabled when you choose this method	2.0	The system manages the serial/batch valuation method at the company level, not per warehouse. Therefore, the <i>Manage Item Cost per Warehouse</i> checkbox on the <i>Basic Initialization</i> tab is irrelevant for the items with the serial/batch valuation method
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Version	Date	Change
4.0	2015-07-30	<p>1. In chapter Determining Serial and Batch Item Cost, the following information has been added:</p> <p> Note</p> <ul style="list-style-type: none"> ○ When the system calculates the serial or batch item cost by the serial/batch valuation method, it considers only those transactions that were posted at the time when the item was managed by the serial/batch valuation method. ○ You can receive old batches back after their valuation method has been changed to the serial/batch valuation method. <p> Example</p> <ul style="list-style-type: none"> ○ If an item had serial/batch valuation method for some time, then you changed it to MAP, and after some time you change it back to serial/batch, the system takes into account only transactions that were posted at the time when the item had serial/batch valuation method. It ignores the transactions posted at the time it had MAP valuation method. ○ You can issue a batch item with MAP, change the item's valuation method to serial/batch, and receive the same batch again. When calculating the cost, the system ignores the transactions posted at the time the item had MAP valuation method, and takes into consideration the transactions posted from the time the item has the serial/batch valuation method. <p>2. In chapter Generating Batches and Serials Inventory Audit Report, the following information has been added:</p> <p> Note</p> <p>If the valuation method of an item has been changed in the past, this report will show only those transactions created at the time when the item was managed by the serial/batch valuation method.</p>

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1 Introduction

In SAP Business One Release 9.1, when running perpetual inventory, you can use four valuation methods:

Moving Average Price (MAP) - Calculates the average cost for the item in each sales, purchasing, inventory, and production transaction.

Standard Price - Calculates value by a fixed price, which is then used for all transactions.

First In First Out (FIFO) - With this method, goods purchased or produced first are sold first, regardless of the actual goods flow.

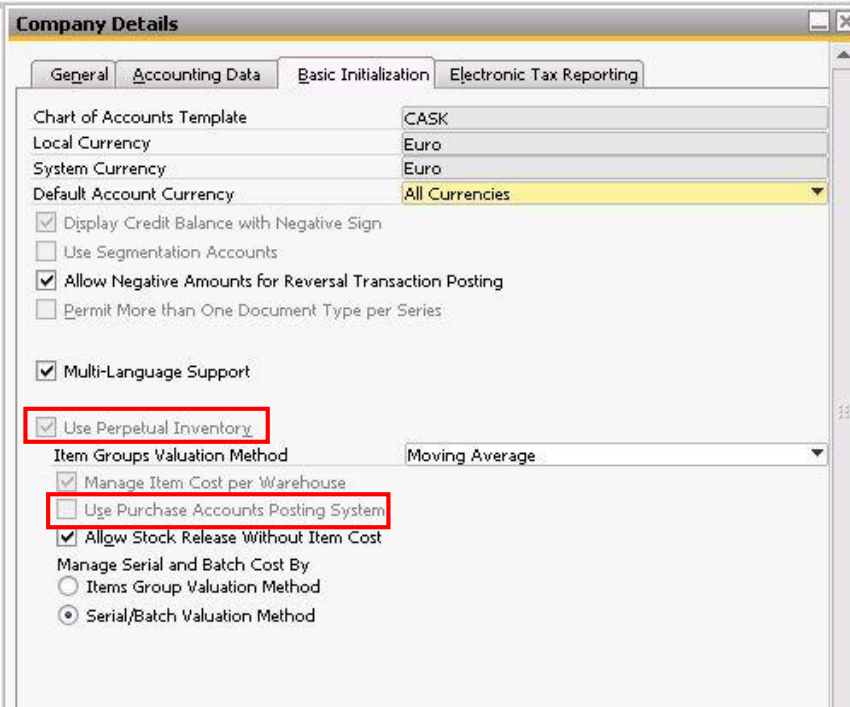
- Each inventory receipt transaction creates a layer of quantities linked to costs. A FIFO layer is defined as the quantity of an item in a warehouse with a particular cost value.
- Each inventory release transaction uses quantities and their corresponding costs from the first open layer or layers.

Serial/Batch - This valuation method is associated with serial and batch managed items. The cost used in outbound transactions is the actual inbound cost of a specific item determined by its serial or batch number; the cost of the item is managed on the serial or batch number level.

This document describes how to set up and manage the serial/batch valuation method in SAP Business One Release 9.1.

2 Prerequisites

- You have initialized the perpetual inventory system on the *Basic Initialization* tab of the *Company Details* window.



The screenshot shows the 'Company Details' window with the 'Basic Initialization' tab selected. The following settings are visible:

- Chart of Accounts Template: CASK
- Local Currency: Euro
- System Currency: Euro
- Default Account Currency: All Currencies
- Display Credit Balance with Negative Sign
- Use Segmentation Accounts
- Allow Negative Amounts for Reversal Transaction Posting
- Permit More than One Document Type per Series
- Multi-Language Support
- Use Perpetual Inventory
- Item Groups Valuation Method: Moving Average
- Manage Item Cost per Warehouse
- Use Purchase Accounts Posting System
- Allow Stock Release Without Item Cost
- Manage Serial and Batch Cost By:
 - Items Group Valuation Method
 - Serial/Batch Valuation Method

3 Initial Settings

The serial/batch valuation method is applicable only to items managed by serial numbers or batches. You can define this valuation method for the mentioned items at the company level and at the item level.

3.1 Defining Items Managed by Serial Numbers or Batches

Procedure

i Note

Only the steps relevant to the serial/batch valuation method are described below. For a detailed description of creating new items, see the online help.

- From the SAP Business One *Main Menu*, choose *Inventory* → *Item Master Data*.
The window opens in *Find* mode. Switch to *Add* mode.
- On the *General* tab, under the *Serial and Batch Numbers* section, in the *Manage Item By* field, select one of the options:
 - Serial Numbers* - the item is managed by serial numbers.
 - Batches* - the item is managed by batches. This type of management tracks items that have unique numbers and characteristics but have been combined in a single group.

The screenshot shows the 'Item Master Data' window in SAP. The 'General' tab is active. In the 'Serial and Batch Numbers' section, the 'Manage Item by' dropdown menu is open, showing three options: 'None', 'Serial Numbers', and 'Batches'. The 'Batches' option is highlighted with a yellow background and a red rectangular box. Below this, the 'Issue Primarily By' dropdown is set to 'Serial and Batch Numbers'. Other fields in the window include 'Item No.' (Manuálne), 'Description', 'Foreign Name', 'Item Type' (Items), 'Item Group' (Tovar), 'UoM Group' (Manuálne), 'Price List' (Základný cenník), 'Bar Code', 'Unit Price', 'Primary Curre', 'Inventory Item', 'Sales Item', 'Purchase Item', 'Production Data' (Phantom Item, Issue Method: Manual), 'Manufacturer' (ek), 'Additional Identifier', 'Shipping Type' (Fedex), 'Do Not Apply Discount Groups', 'Block Multiple Receipts', 'Active' (selected), 'Inactive', 'Advanced', 'From', 'To', and 'Remarks'.

i Note

You can change the way the item is managed by, for example, from *Serial Numbers* to *Batches* only if the quantity of the item in stock is zero and the item is not included in any open document.

3.2 Defining Serial/Batch Valuation Method at Company Level

You can manage serial and batch items by the serial/batch valuation method or by the same method defined for item groups. To initialize the serial/batch valuation method for the serial and batch managed items at the company level, follow the procedure below.

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *System Initialization* → *Company Details* → *Basic Initialization* tab.
2. In the *Manage Serial and Batch Cost By* section, select the *Serial/Batch Valuation Method* radio button.

The system manages the serial/batch valuation method at the company level, not per warehouse. Therefore, the *Manage Item Cost per Warehouse* checkbox on the *Basic Initialization* tab is irrelevant for the items with the serial/batch valuation method.

The screenshot shows the 'Company Details' dialog box with the 'Basic Initialization' tab selected. The 'Manage Serial and Batch Cost By' section is highlighted with a red box, showing two radio buttons: 'Items Group Valuation Method' (unselected) and 'Serial/Batch Valuation Method' (selected). Other settings include 'Chart of Accounts Template' (CASK), 'Local Currency' (Euro), 'System Currency' (Euro), 'Default Account Currency' (All Currencies), 'Use Perpetual Inventory' (checked), and 'Item Groups Valuation Method' (Moving Average).

i Note

You can change the valuation method by which you manage serial and batch cost at any time, however, the change always applies to new items which you create after the change.

3. Choose *Update*.

3.3 Defining Serial/Batch Valuation Method at Item Level

If you have defined the serial/batch valuation method at the company level as described in *Defining Serial/Batch Valuation Method at Company Level*, any new item you create and define as managed by serials or batches automatically has the serial/batch valuation method.

If you have chosen a different valuation method for serial or batch managed items at the company level, you can define the serial/batch valuation method for a specific item.

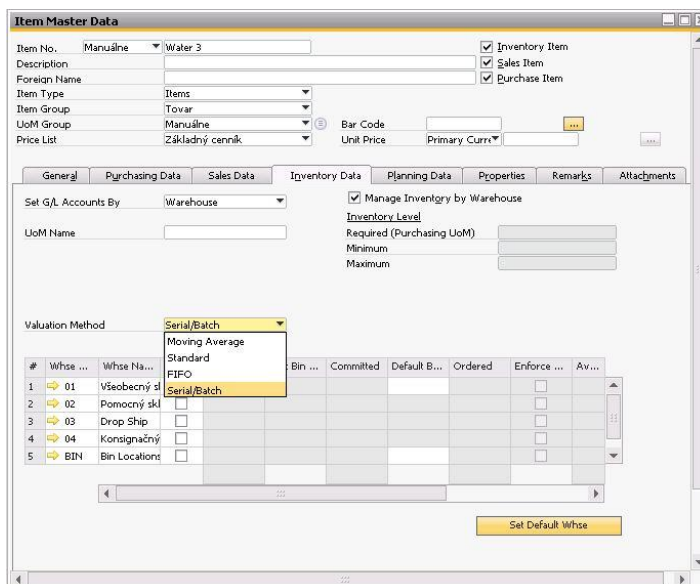
Procedure

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Item Master Data*.
In the *Item No.* field enter the desired item.

Note

The item must be managed by serials or batches.

2. On the *Inventory* tab, from the dropdown menu in the *Valuation Method* field, select *Serial/Batch*.



#	Whse ...	Whse Na...	Bin ...	Committed	Default B...	Ordered	Enforce ...	Av...
1	01	Všeobecný skl					<input type="checkbox"/>	
2	02	Pomocný skl					<input type="checkbox"/>	
3	03	Drop Ship					<input type="checkbox"/>	
4	04	Konsignační					<input type="checkbox"/>	
5	BIN	Bin Locations					<input type="checkbox"/>	

Note

You can change the valuation method at any time, as long as the item is not linked to any open documents and its in-stock quantity is zero.

3. Choose *Update*.

3.4 Blocking Multiple Receipts for Same Batch When Valuation Method Is Serial/Batch

Receiving the same batch into stock more than once may increase the chance that the same batch will be received each time with a different price, which complicates the tracking of the actual cost of the batch. To prevent this, you can block multiple receipts for the same batch at the company level or at the item level.

If multiple receipts for the same batch are blocked, you cannot draw an A/P reserve invoice for a batch into a goods receipt PO more than once.

Note

When you draw an A/P reserve invoice into a goods receipt PO, the batch price is based on the A/P reserve invoice. However, due to header freights in a goods receipt PO, which are updatable in SAP Business One 9.1, the price can be changed due to the amount applied on each batch entry.

Note

When using the multi-branch feature, it is strongly recommended that you block multiple receipts of the same batch due to the possibility that a batch which might be received with a different cost into another branch impacts the cost on both branches.

For example, Batch No. B1_1200 is received to inventory through GRPO1 with the following data:

- Branch 1
- Warehouse 1
- Quantity 10
- Cost 10

Batch No. B1_2300 is received again through GRPO1 with the following data:

- Branch 2
- Warehouse 2
- Quantity 10
- Cost 12

Since the system does not manage batch cost on the warehouse level, the cost of B1_1200 is calculated as follows: $(10 \times 10 + 10 \times 12) / 20 = 11$. That is, the outbound cost from Branch 1 is impacted by the inbound cost to Branch 1. With such scenario, the inventory audit report and the batch and serial audit report cannot differentiate between the inventory value of postings to Branch 1 and the inventory value of postings to Branch 2.

Workaround

When you receive the same batch more than once, add a prefix or a suffix to Batch No.. For example, for GRPO2, set *Batch No.* to B1_1200_1.

3.4.1 Blocking Multiple Receipts for Same Batch at Company Level

If you block multiple receipts for the same batch at the company level, the setting automatically applies to any new batch items that you create and to any batch item for which you change the valuation method to serial/batch. You can change the settings at any time; if you select this checkbox after you have received the same batch more than once, it has no influence on the existing items, but it blocks any new multiple receipts for the same batch for the existing items as well.

Note

This checkbox is selected by default.

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *System Initialization* → *General Settings* → *Inventory* tab → *Items* subtab.
2. Select the checkbox *Block Multiple Receipts for Same Batch with Serial/Batch Valuation Method*.
The following system message appears: "Multiple receipts for the same batch are blocked for new batch items with serial/batch valuation method. Do you want to block multiple receipts for existing items?"
Choose *Yes*.
3. Choose *Update*.

3.4.2 Blocking Multiple Receipts for Same Batch at Item Level

You can block multiple receipts for the same batch at the item level regardless of whether multiple receipts for the same batch are blocked at the company level.

Note

You can change this setting at any time, even if a batch item already had multiple receipts for the same batch.

Procedure

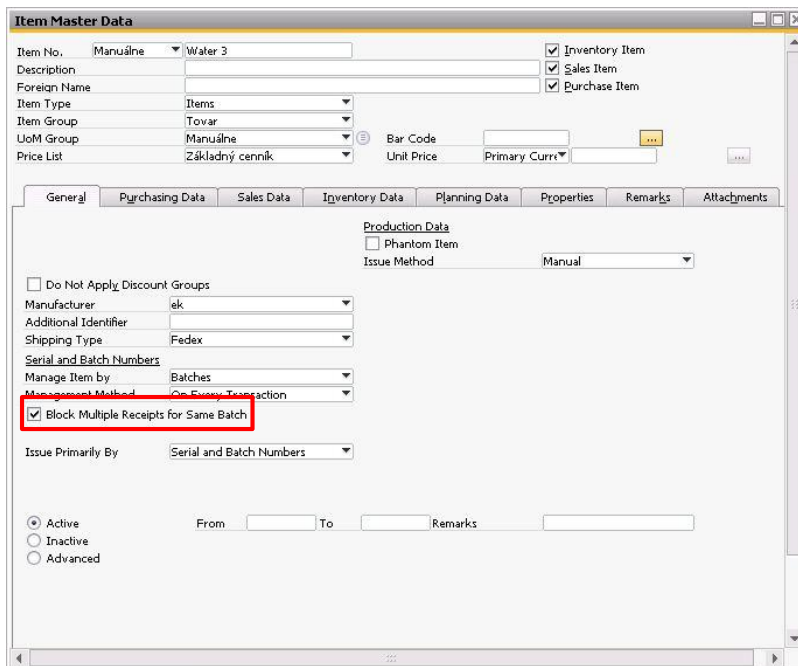
1. From the SAP Business One *Main Menu*, choose *Inventory* → *Item Master Data*.
In the *Item No.* field, enter the desired item.

Note

The item must be managed by batches.

2. On the *General* tab, select the checkbox *Block Multiple Receipts for Same Batch*.

When you change the item's valuation method to one other than serial/batch, this checkbox is deselected and not visible.



The screenshot shows the 'Item Master Data' dialog box in SAP Business One. The 'General' tab is selected. The 'Block Multiple Receipts for Same Batch' checkbox is checked and highlighted with a red box. Other visible fields include 'Item No.' (Manualne), 'Water 3', 'Inventory Item', 'Sales Item', 'Purchase Item', 'Item Type' (Items), 'Item Group' (Tovar), 'UoM Group' (Manualne), 'Price List' (Základný cenník), 'Bar Code', 'Unit Price', 'Primary Curre', 'Production Data', 'Phantom Item', 'Issue Method' (Manual), 'Do Not Apply Discount Groups', 'Manufacturer' (lek), 'Additional Identifier', 'Shipping Type' (Fedex), 'Serial and Batch Numbers', 'Manage Item by' (Batches), 'Management Method' (On Every Transaction), 'Issue Primarily By' (Serial and Batch Numbers), and 'Active' radio button selected.

3. Choose *Update*.

4 Enhancements to Item Management

A new field *Cost* displaying the current cost of a selected batch item or serial number item has been added to the following windows:

- *Serial Number Details and Batch Details*
- *Serial Number Management - Update and Batch Management - Update*

4.1 Serial Number Details Window

To access the *Serial Number Details* window, do the following:

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Item Management* → *Item Serial Numbers* → *Serial Number Details*. The window opens in *Find* mode.
2. In the *Item Number* field, enter the item number or use (*Previous Record*) (*Next Record*) in the toolbar to browse through the serial number items.

The current cost of the serial number item is displayed in the *Cost* field.

4.2 Batch Details Window

To access the *Batch Number Details* window, do the following:

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Item Management* → *Batches* → *Batch Details*. The window opens in *Find* mode.
2. In the *Item Number* field, enter the item number or use (*Previous Record*) (*Next Record*) in the toolbar to browse through the batch items.

The current batch cost of the item is displayed in the *Cost* field.

4.3 Serial Number Management - Update Window

To access the *Serial Number Management - Update* window, proceed as follows:

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Item Management* → *Item Serial Numbers* → *Serial Number Management*. The window *Serial Numbers Management - Selection Criteria* appears.
2. In the *Operation* field, select *Update*.
3. Define the remaining selection criteria for the range of the items for which you want to update the serial numbers and choose *OK*. The *Serial Number Management - Update* window appears.

In the *Cost* column, you can view the current cost of the item serial numbers displayed.

4.4 Batch Management - Update Window

To access the *Batch Management - Update* window, proceed as follows:

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Item Management* → *Batches* → *Batch Management*. The *Batch Management - Selection Criteria* window appears.
2. In the *Operation* field, select *Update*.
3. Define the remaining selection criteria for the range of batches you want to update and choose *OK*. The *Batch Management - Update* window appears.

In the *Cost* column, you can view the current cost of the item serial numbers displayed.

5 Determining Serial and Batch Item Cost

The cost of a serial or batch item is determined by the following documents:

- Receipts to stock
 - A/P documents
 - Goods receipt PO
 - A/P invoice
 - Inventory Transactions
 - Goods receipt
 - Entry from the inventory opening balance
 - Entry from the inventory posting/opening balance
 - Receipt from production
 - Non-based A/R return, non-based A/R credit memo, non-based A/R correction invoice

Note

If the return cost is not set in the document, the serial/batch cost is calculated by the current cost. If the return cost is set in the document, the serial/batch cost is calculated by the return cost.

- Purchase returns - the cost is calculated by the current serial/batch cost.
- Revaluation postings
 - A/P invoice based on goods receipt PO with price change
 - Landed costs
 - Material revaluation
 - A/P correction invoice with price change
 - A/P correction reversal with price change
 - A/P credit memo without quantity posting

The following documents are posted by the current serial/batch cost:

- Issues from stock (all types of documents)
- A/R delivery, A/R return with negative quantity
- Goods receipt, A/P cancelation, A/P documents with negative quantity
- A/R correction, reversal with entry to stock
- Return components
- Disassembly in issue for production
- Inventory posting (exit: counted quantity is smaller than the quantity in warehouse)
- Negative inventory opening balance

Note

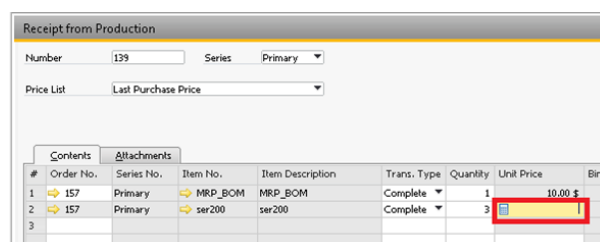
- When the system calculates the serial or batch item cost by the serial/batch valuation method, it considers only those transactions that were posted at the time when the item was managed by the serial/batch valuation method.
- You can receive old batches back after their valuation method has been changed to the serial/batch valuation method.

Example

- If an item had serial/batch valuation method for some time, then you changed it to MAP, and after some time you change it back to serial/batch, the system takes into account only transactions that were posted at the time when the item had serial/batch valuation method. It ignores the transactions posted at the time it had MAP valuation method.
- You can issue a batch item with MAP, change the item's valuation method to serial/batch, and receive the same batch again. When calculating the cost, the system ignores the transactions posted at the time the item had MAP valuation method, and takes into consideration the transactions posted from the time the item has the serial/batch valuation method.

5.1 Determining Item Cost of By-Products with Serial/Batch Valuation Method

As of SAP Business One 9.1, the *Issue Method* of a by-product item can be set to *Manual*. As a result, a by-product item can use the serial/batch valuation method. The cost of such item is determined by the value that you enter in the *Unit Price* field in the receipt from production document as displayed below.



#	Order No.	Series No.	Item No.	Item Description	Trans. Type	Quantity	Unit Price	Bin I
1	157	Primary	MRP_BOM	MRP_BOM	Complete	1	10.00 \$	
2	157	Primary	ser200	ser200	Complete	3		
3								

6 Revaluating the Inventory with Serial/Batch Valuation Method

Items with serial/batch valuation method can be revaluated using the inventory revaluation functionality. Inventory revaluation for serial/batch items is similar to that of the FIFO items.

You can reevaluate the item values by:

- *Price Change* - Changes the item price for a specific serial number or batch. The inventory price is changed and the inventory value is recalculated according to the new price.
- *Inventory Debit/Credit* - Changes the value of a specific serial number or batch and the system recalculates the new price according to the value debited or credited.

Note

You cannot perform inventory revaluation if any item involved has a negative value.

6.1 Revaluating the Inventory by Price Change

Note

The following procedure shows how to reevaluate the items managed by serial numbers as well as those managed by batches.

Procedure

1. From the SAP Business One *Main Menu* → *Inventory* → *Inventory Transactions* → *Inventory Revaluation*. The *Inventory Revaluation* window appears.

The screenshot shows the SAP Inventory Revaluation window. The 'Revaluation Type' dropdown is set to 'Price Change'. The 'Serial/Batch Number Filter' section is visible, showing 'Filtered By' set to 'Serial Number'. The 'Serials/Batches' table is empty. The 'Journal Remark' field contains the text 'Inventory Revaluation'.

2. In the *Revaluation Type* field, select *Price Change*.
3. In the *Item No.* column, select one or more desired items. All available batches or serial numbers are listed in the lower table.
4. Select the item row in the upper table for which you want to update the prices. In the lower table, enter the new cost for the desired batch or serial number.

Example

In the figure below, the first item selected is managed by batches and the second item is managed by serial numbers.

1 Note

You can press **CTRL** to select desired items in the lower table, and update the price in the *Set Value for Selection* field located between the two tables.

5. Choose *Add*.

6.2 Revaluating the Inventory by Debit/Credit

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Inventory Transactions* → *Inventory Revaluation*. The *Inventory Revaluation* window appears.
2. In the *Revaluation Type* field, select *Inventory Debit/Credit*.
3. In the *Item No.* column, select one or more desired items. All available batches or serial numbers are listed in the lower table.
4. In the upper table, select the item row for which you want to debit or credit the inventory value. In the lower table, enter the amounts you want to debit or credit for the desired batch or serial number.

1 Note

You can press **CTRL** and select desired items in the lower table, and enter the debit or credit amount in the *Debit/Credit Amount* field located between the two tables.

5. Choose *Add*.

7 Updating Valuation Method to Serial/Batch for Selection of Items

You can now update the valuation method to serial/batch for a range of items managed by serial numbers or batches.

Prerequisites

- The quantity of the items whose valuation method is to be changed is zero in all warehouses.
- The item is not drawn into any open document.

For more information, see SAP Note [869071](#).

Procedure

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Item Management* → *Inventory Valuation Method*.
2. In the *Item No. From... To* fields, define the range of items for which you want to update the valuation method to Serial/Batch.
3. In the *Default Valuation Method* field, select *Serial/Batch*.
4. Choose *OK*.
The *Update Valuation Method* window appears.
5. In the *Approved* column, all checkboxes are selected. If you want to exclude any of the items from the update, deselect the appropriate checkbox.
6. In the *New Method* column, select *Serial/Batch* for those items for which you want to update the valuation method.
7. Choose the *Update* button.

8 Examples of Cost Calculation and Postings for Items with Serial/Batch Valuation Method

8.1 Purchasing Documents

Goods Receipt PO (GRPO)

Example 1 - A new received quantity for the same batch number with a price that is different from the current cost triggers the cost recalculation.

Batch1 (B1)	Qty	Price	Total	Cost Price per Unit	JE Debit	JE Credit	Batch Value Balance
GRPO1 -B1	10	10	100	10	Inventory 100	Allocation 100	100
GRPO2-B1	10	30	300	20*	Inventory 300	Allocation 300	400
Delivery1-B1	-5	Not relevant		20	COGS 100	Inventory 100	300
GRPO3- B1	5	50	250	26**	Inventory 250 Price Diff. 30	Allocation 250 Inventory 30	520

* Total receipts value (100+300) / Total receipts qty (10+10) = **20**

** Total receipts value (100+300+250) / Total receipts qty (10+10+5) = **26**

Example 2 - The cost of a serial number item is set by the price in the receipt to stock.

Serial S100	Qty	Price	Qty Balance	Cost	JE Debit	JE Credit
GRPO1	1	10	1	10	Inventory 10	Allocation 10
Delivery1	-1	-	0	10	COGS 10	Inventory 10
GRPO2	1	13	1	13	Inventory 13	Allocation 13
Delivery2	-1	-	0	13	COGS 13	Inventory 13

Goods Return or Cancellation of GRPO

Example 1 - After issuing a goods return or a cancellation of a GRPO, the current cost is recalculated. If the system identifies that all purchased quantity has been returned, the batch cost is set to zero.

Scenario 1 - Some batch items have been returned

Batch1	Qty	Price	Total	Cost per Unit	JE Debit	JE Credit	Batch Value Balance
GRPO1	10	10	10	10 (100/10)	Inventory 100	Allocation 100	100
A/R Delivery1	-4			10	COSG 40	Inventory 40	60
A/R Return Based on Delivery1	1			10	Inventory 10	COGS 10	70
Goods Return	-2			10	Allocation 20	Inventory 20	50

Scenario 2 - All batch items have been returned and the current cost is set to zero

Batch1	Qty	Price	Total	Cost per Unit	JE Debit	JE Credit	Batch Value Balance
GRPO1	10	10	100	10 (100/10)	Inventory 100	Allocation 100	100
A/R Delivery1	-4			10	COSG 40	Inventory 40	60
A/R Return1 Based on Delivery1	4			10	Inventory 40	COGS 40	100
Goods Return or Cancellation of GRPO1	-10			10	Allocation 100	Inventory 100	0*
A/R Return	10	Return price not set		0	0	0	0

* The current cost is set to zero because all the purchased quantity has been returned. The next A/R return is posted with zero cost because it does not have a set return price and the system uses the current cost.

Example 2 - Based goods return when the current cost is different from the one in the base document.

Batch1	Qty	Price	Total	Cost per Unit	JE Debit	JE Credit	Batch Value Balance
GRPO1	10	10	100	10 (100/10)	Inventory 100	Allocation 100	100
A/R Delivery	-4			10	COGS 40	Inventory 40	60
Non-Based A/R Return	4	Return cost set to 13.5		11 (100+13.5*4)/14	Inventory 50 Price Diff. 4	COGS 54	110
Goods Return Based on GRPO1	-2		20	11 (100+54-2*11)/(10+4-2)	Allocation 20 Price Diff. 2	Inventory 22	88

Due to the need to balance the allocation amount (20) and the inventory amount (22), the amount 2 is posted to the price difference account.

Example 3 - Non-based goods return when the current cost is different from the one in the base document

Batch1	Qty	Price	Total	Cost per Unit	JE Debit	JE Credit	Batch Value Balance
GRPO1	10	10	100	10 (100/10)	Inventory 100	Allocation 100	100
A/R Delivery	-4			10	COGS 40	Inventory 40	60
Non-Based A/R Return	4	Return cost set to 13.5		11 (100+13.5*4)/14	Inventory 50 Price Diff. 4	COGS 54	110
Non-Based Goods Return	-2		20	11 (100+54-2*11)/(10+4-2)	Allocation 22	Inventory 22	88

The price in the goods return is ignored and there is **no posting to the price difference account.**

8.2 Sales Documents

A/R Return and A/R Credit Memo

Example 1 - Non-based A/R return without a set return cost does not influence the current cost calculation.

Batch1	Qty	Price	Total	Cost per Unit	JE Debit	JE Credit	Batch Value Balance
GRPO1	10	10	100	10 (100/10)	Inventory 100	Allocation 100	100
A/R Delivery	-4			10	COSG 40	Inventory 40	60
A/R Delivery Cancellation	4			10	Inventory 40	COGS 40	100
Goods Return	-10	10		10	Allocation 100	Inventory 100	0*
A/R Return	1	Return cost not set		0**	Inventory 0	COGS 0	0

*The batch has been returned, the current cost is set to zero.

**The system uses the current cost which in this case is zero.

Example 2 - Non-based A/R return with a set return cost influences cost calculation.

Batch1	Qty	Price	Total	Cost per Unit	JE Debit	JE Credit	Batch Value Balance
GRPO1	10	10	100	10 (100/10)	Inventory 100	Allocation 100	100
A/R Delivery	-4			10	COSG 40	Inventory 40	60
A/R Delivery Cancellation	4			10	Inventory 40	COGS 40	100
Goods Return	-10	10		10	Allocation 100	Inventory 100	0
A/R Return	1	Return cost not set		0	Inventory 0	COGS 0	0
Non-Based A/R Return or A/R Credit Memo or A/R Correction Invoice	1	15 Return cost set		7.5	Inventory 15	COGS 15	15

Example 4 - A cancellation of a non-based A/R return is considered as a purchasing cancellation or purchase return.

Batch1	Qty	Price	Unit Cost (Accum. Value / Accum. Qty)	Accum. Qty*	Accum. Value **	Accum. Out Qty ***	Price Diff - Amt ****	JE Debit	JE Credit	Qty Bal.	Batch Value Bal.
GRPO1	10	10	10	10	100	0	-	Inventory 100	Allocation 100	10	100
A/R Delivery 1	- 10		10	10	100	10	-	COGS 100	Inventory 100	0	0
Non- Based A/R Return1	3		10 (10*10+3*10)/(10+3)	13	130	10		Inventory 30	COGS 30	3	30
GRPO2	2	25	12 (10*10+3*10+2*25)/ (10+3+2)	15	180	10	20	Inventory 30 Price Diff. 20	Allocation 50	5	60
Cancellation of A/R Return1	-3		12	12	144 (100+30 +50-36)	10		COGS 30 Price Diff. 6	Inventory 36	2	24

*Purchased quantity

**Based on purchases and purchase cancellations

***Based on sold quantity and based returns

**** Accumulated Out Qty * Delta Unit Cost

Example 6 - A/R credit memo or A/R return (based or non-based) after a serial number item has been issued uses the current cost of the serial number item.

Serial S100	Qty	Price	Qty Balance	Cost	JE Debit	JE Credit
GRPO1	1	10	1	10	Inventory 10	Allocation 10
Delivery1	-1	-	0	10	COGS 10	Inventory 10

Serial S100	Qty	Price	Qty Balance	Cost	JE Debit	JE Credit
A/R Credit Memo or A/R Return (Based on Delivery1 or Non-based and the Return Cost Not Set in A/R Return)	1	-	1	10	Inventory 10	Allocation 10

A/P Invoice

Example 1 - A based A/P invoice with a price change influences the current cost calculation.

Batch1	Qty	Price	Total	Cost per Unit	JE Debit	JE Credit	Batch Value Balance
GRPO1	10	10	100	10 (100/10)	Inventory 100	Allocation 100	100
A/R Delivery1	-3	10	-30	10	COGS 30	Inventory 30	70
A/P Invoice Based on GRPO1	8	15	40	14 ((100+40)/10)	Allocation 80 Inventory 28 Price Diff. 12	BP 120	98

Example 2 - Price change in A/P invoice when there is zero batch quantity

Batch1	Qty	Price	Total	Cost per Unit	JE Debit	JE Credit	Batch Value Balance
GRPO1-B1	1	10	10	10	Inventory 10	Allocation 10	10
Delivery-B1	-1	-	-10	10	COGS 10	Inventory 10	0
A/P Invoice Based on GRPO1-B1	-	-	2	12	Allocation 10 Inventory 0 Price Diff. 2	BP 12	0

Landed Costs

Example 1 - Landed costs value influences the current cost calculation.

Batch1	Qty	Price	Total	Cost per Unit	JE Debit	JE Credit	Batch Value Balance
GRPO1	10	10	100	10 (100/10)	Inventory 100	Allocation 100	100
A/R Delivery1	-3	10	-30	10	COGS 30	Inventory 30	70
A/P Invoice Based on GRPO1	8	15	40	14 ((100+40)/10)	Allocation 80 Inventory 28 Price Diff. 12	BP 120	98
Delivery2	-3	Not relevant		14	COGS 42	Inventory 42	56
Landed Costs for GRPO1		-	20	16 (100+40+20)/10	Inventory 8 Price Diff. 12	Allocation 20	64

8.3 Production Documents

Issue from Production

Example 1 - An issue from production based on a disassembly order is considered as purchase cancellation.

Batch1	Qty	Price	Unit Cost (Accum. Value / Accum. Qty)	Accum. Qty *	Accum. Value **	Accum. Out Qty ***	Price Diff. ****	JE Debit	JE Credit	Qty Bal.	Batch Value Bal.
Production Order of Standard or Special Type	2		0	0	0	0	-	0	0	0	0
Components are issued for production			Total components cost is 1000								
Receipt from Production No. 1	2		500	2	1000	0	-	Inventory 1000	COGS 1000	2	1000
A/R Delivery1	-2		500	2	1000	2	-	COGS 1000	Inventory 1000	0	0

Batch1	Qty	Price	Unit Cost (Accum. Value / Accum. Qty)	Accum. Qty *	Accum. Value **	Accum. Out Qty ***	Price Diff. Amt ****	JE Debit	JE Credit	Qty Bal.	Batch Value Bal.
A/R Return1 Based on Delivery1	2		500	2	1000	0	-	Inventory 1000	COGS 1000	2	1000
Production Order No. 2 of Disassembly Type	2		500	2	1000	0	-	0	0	0	1000
Issue from Production No. 4 (Disassembly Order No. 2)	-2		500	0	0	0	-	Inventory WIP Account 1000	Inventory 1000	2	0
Non-Based A/R Return	1		0	1	0	0	-	Inventory 0	COGS 0	1	0

*Purchased quantity

**Based on purchases and purchase cancellations

***Based on sold quantity and based returns

**** Accumulated Out Qty * Delta Unit Cost

Example 2 - An issue from production based on a disassembly order is considered as purchase cancellation even if the production BOM was not received from a receipt from production (for example, the product BOM was received from A/R / A/P / Inventory).

The system uses the current cost, which in this case is zero.

Batch1	Qty	Price	Unit Cost (Accum. Value / Accum. Qty)	Accum. Qty *	Accum. Value **	Accum. Out Qty ***	Price Diff. Amt ****	JE Debit	JE Credit	Qty Bal.	Batch Value Bal.
GRPO1	2	500	500	2	1000	0	-	Inventory 1000	Allocation 1000	2	1000
A/R Delivery1	-2		500	2	1000	2	-	COGS 1000	Inventory 1000	0	0
A/R Return1 Based on Delivery1	2		500	2	1000	0	-	Inventory 1000	COGS 1000	2	1000

Production Order No. 2 of Disassembly Type	2		500	2	1000	0	-	0	0	0	1000
Issue from Production No. 4 (Disassembly Order No. 2)	-2		500	0	0	0	-	Inventory WIP Account 1000	Inventory 1000	2	0
Non-Based A/R Return	1		0	1	0	0	-	Inventory 0	COGS 0	1	0
Issue from Production No. 4 (Disassembly Order No. 2)	-2		500	0	0	0	-	Inventory WIP Account 1000	Inventory 1000	2	0
Non-Based A/R Return	1		0	1	0	0	-	Inventory 0	COGS 0	1	0

*Purchased quantity

**Based on purchases and purchase cancellations

***Based on sold quantity and based returns

****Accumulated Out Qty * Delta Unit Cost

Example 3 - Batch1 is received back to stock after it was issued in an issue for production based on a disassembly order.

Batch1	Qty	Price	Unit Cost	Accum . Qty *	Accum . Value **	Accum . Out Qty ***	Price Diff. Amt ****	JE Debit	JE Credit	Qty Bal.	Batch Value Bal.
Production Order of Standard or Special Type	2		0	0	0	0	-	-	-	-	0
Components are issued for production				Total components cost is 1000.							
Receipt from Production No.1	2		500	2	1000	0		Inventory 1000	Inventory WIP Acc. 1000	2	1000

A/R Delivery1	-2		500	2	1000	2	-	COGS 1000	Inventory 1000	0	0
A/R Return1 Based on Delivery1	2		500	2	1000	0	-	Inventory 1000	COGS 1000	2	1000
Production Order No.2 of Disassembly Type	2		500	2	1000	0	-	-	-	0	0
Issue from Production No. 4 (Disassembly Order No. 2)	-2		500	0	0	0	-	Inventory WIP Account 1000	Inventory 1000	2	0
Production Order of Standard / Special Type	2		0	0	0	0	-	0	0	0	0
Components are issued for production			Total components cost is 1200								
Receipt from Production No.5 Receives Batch1	2		600	2	1200	2	-	Inventory 1200	Inventory WIP Acc. 1200	2	1200
A/R Delivery1	-2		600	2	1200	2	-	COGS 1200	Inventory 1200	0	0

*Purchased quantity

**Based on purchases and purchase cancellations

***Based on sold quantity and based returns

**** Accumulated Out Qty * Delta Unit Cost

9 Generating Batches and Serials Inventory Audit Report

The inventory audit report displays results pre item only, it does not display results per serial numbers or batches. Therefore, users can use the batches and serials inventory audit report for items with serial/batch valuation method.

Procedure

Note

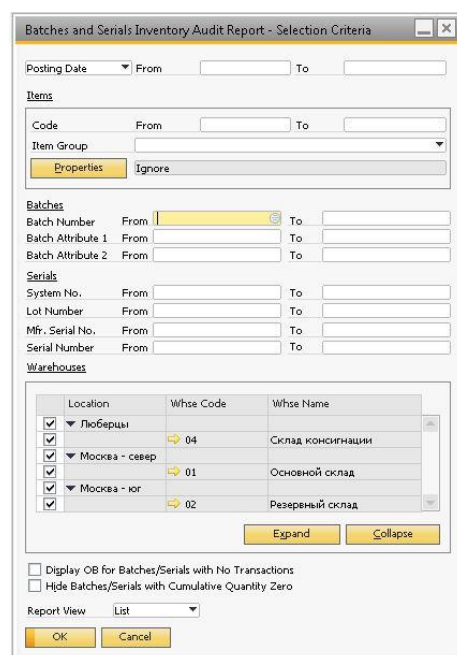
The procedure is the same as with generating the inventory audit report, a few differences. In the procedure below, only the steps relevant to the batches and serials inventory audit report are described in more detail.

Note

If the valuation method of an item has been changed in the past, this report will show only those transactions created at the time when the item was managed by the serial/batch valuation method.

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Inventory Reports* → *Batches and Serials Inventory Audit Report*.

The *Batches and Serials Inventory Audit Report - Selection Criteria* window appears.



Location	Whse Code	Whse Name
<input checked="" type="checkbox"/> Люберцы		
<input checked="" type="checkbox"/> Москва - север	04	Склад консигнации
<input checked="" type="checkbox"/> Москва - юг	01	Основной склад
<input checked="" type="checkbox"/>	02	Резервный склад

2. From the drop down list of the *From... To* field, define the date which you want to be taken into account:
 - o *Posting Date*
 - o *System Date*

In the *Items* section, define the criteria pertaining to the selection of items.

3. In the *Batches* section, in the *Batch Number From... To* fields, define the range of the batch numbers which you want to include in the report.

Define further criteria for batches, through the *Batch Attribute 1 From... To* and *Batch Attribute 2 From... To* fields.

4. In the *Serials* section, define the range of the serial numbers you want to include in the report through the following fields:
 - o *System No.*
 - o *Lot Number*
 - o *Mft. Serial No.*
 - o *Serial Number*

5. In the *Warehouses* table, select the line checkbox of the warehouse you want to include in the report.

6. To display open balances for batches or serial numbers with no transaction, select the *Display OB for Batches/Serials with No Transactions* checkbox.

If an item has no transactions within the selected date range but has open transactions from previous periods, the total of these transactions is presented as an open balance for this item.

To hide batches and serial numbers with zero cumulative quantity, select the *Hide Batches/Serials with Cumulative Quantity Zero* checkbox.

7. In the *Report View* field, from the drop down list, select one of the following options:
 - o *List*
 - o *Hierarchical*

8. Choose *OK*.

The *Batches and Serials Inventory Audit Report* window appears. Use the *Expand* button for a detailed view of the report.

#	Whse	Item No.	Description	Serial/Batch	Current Serial...	Serial/Batch Attribute 1	System Date	Expiry Date	Document	Quantity	Cost	Trans. Value	Cumulative Qty	Cumulative Value
01	01	zb01	b1	b1	10.00		24.04.14		PD 268	5.000	10.00	50.00	5.000	50.00
01	01	zb01	b2	b2	10.00		24.04.14		PD 268	5.000	10.00	50.00	5.000	50.00

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