How to Set Up and Manage a Nonperpetual Inventory System
All Countries
### Typographic Conventions

<table>
<thead>
<tr>
<th>Type Style</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Example</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Example</strong></td>
<td>Emphasized words or expressions.</td>
</tr>
<tr>
<td><strong>EXAMPLE</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Example</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Example</strong></td>
<td>Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.</td>
</tr>
<tr>
<td><code>&lt;Example&gt;</code></td>
<td>Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.</td>
</tr>
<tr>
<td><strong>EXAMPLE</strong></td>
<td>Keys on the keyboard, for example, <code>F2</code> or <code>ENTER</code>.</td>
</tr>
</tbody>
</table>
# Table of Contents

**Introduction**........................................................................................................................................... 4  
Calculation Methods in a Nonperpetual Inventory System ........................................................................ 4

**Setting Up a Nonperpetual Inventory** ...................................................................................................... 6

**Working with Sales and Purchasing Documents in a Nonperpetual Inventory System** .................. 8
Updating Prices in Open Documents ...................................................................................................... 8
Working with Landed Costs Documents ................................................................................................ 8
Splitting Landed Costs Quantities .......................................................................................................... 9

**Working with the Inventory Valuation Report** .................................................................................... 11  
Generating Inventory Valuation Reports .................................................................................................. 12
Printing Inventory Valuation Reports ....................................................................................................... 19
Examples of Inventory Valuation Reports for Different Calculation Methods ............................................. 19
  Moving Average .................................................................................................................................... 20
  FIFO ........................................................................................................................................................ 20
  By Price List ......................................................................................................................................... 21
  Last Evaluated Price .............................................................................................................................. 22
Allowing Negative Inventory in Inventory Valuation Reports ..................................................................... 23
Inventory Valuation Report Special Cases ............................................................................................... 26
  A/P Invoice Based on a Goods Receipt PO ......................................................................................... 26
  Landed Costs ....................................................................................................................................... 27
  Inventory Transfer ............................................................................................................................... 28
  Inventory Revaluation ......................................................................................................................... 30
  A/P Credit Memo ............................................................................................................................... 32

**Italy: Working with a Purchase Accounts Posting System** ................................................................ 35
Defining Purchase Accounts .................................................................................................................... 35
Examples for Journal Entry Structures Used When Working with a Purchase Accounts Posting System ........................................................................................................ 36
  Goods Receipt PO and A/P Invoice .................................................................................................... 36
  Goods Return ..................................................................................................................................... 37
  Closing Goods Receipt PO and Goods Return .................................................................................... 37
  A/P Credit Memo ............................................................................................................................... 38
  A/P Credit Memo Based on a Goods Return ..................................................................................... 38

**Authorizations** ..................................................................................................................................... 39

**Database Tables Reference** .................................................................................................................. 40

**Appendix: Sorting Inventory Valuation Report Results** ...................................................................... 41
Introduction

A nonperpetual inventory system is an inventory management system in which costs of inventories are not maintained on a constant basis. In a nonperpetual inventory system, sales, purchasing, inventory, and production transactions, which reflect the inventory value, do not generate inventory related monetary entries directly into the general ledger. Therefore, the inventory value of a company is not revalued on every inventory release or receipt. Instead, the inventory balance is updated once every accounting period or after a physical inventory count.

You must set up a nonperpetual inventory system during the basic initialization of the company, before any transactions have been posted. Once transactions have been posted, you cannot change the inventory system used for that company.

In SAP Business One, the Inventory valuation report is central to the nonperpetual inventory system. In a nonperpetual inventory system, the value of inventory postings is not reflected by monetary transactions in the accounting system. To calculate the value of inventory at any given time, you need to run the Inventory valuation report. This report lets you obtain an up-to-date valuation of the existing inventory and to create what-if scenarios.

Note

The following countries have a nonperpetual inventory system as their default inventory management system: Germany, Israel, Italy, Panama, South Africa, and Switzerland. In the Italy localization, while working with a nonperpetual inventory system, you can also work with purchase accounts posting system.

Calculation Methods in Nonperpetual Inventory System

The following table describes the different calculation methods for inventory valuation that can be used in a nonperpetual inventory system:

Note

The examples in the tables refer to a case in which a clothing store purchases 200 shirts on Monday at a cost of 1 per shirt, and 200 more shirts on Tuesday at a cost of 1.5 per shirt.

<table>
<thead>
<tr>
<th>Calculation Method</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving Average</td>
<td>This method takes the weighted average of all units available for sale during the accounting period and then uses that average cost to determine the value of the cost of goods sold and the ending inventory. Assuming prices increase over time, the items in stock are</td>
<td>The average cost for inventory is 1.25 per unit, as a result of the following calculation: 1.25 = [(200 x 1) + (200 x 1.5)]/400.</td>
</tr>
<tr>
<td>Calculation Method</td>
<td>Description</td>
<td>Example</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>overvalued.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIFO (First In First Out)</td>
<td>According to this method, the first unit added to the inventory is the first to be sold. The newer inventory, therefore, is left over at the end of the accounting period. Assuming prices increase over time, the items in stock are valued using the higher prices from the later purchase documents.</td>
<td>If the clothing store sold 200 shirts on Wednesday, the Cost of Goods Sold is 1 per shirt because that was the cost of each of the first shirts in inventory. The shirts which cost 1.5 are allocated to the ending inventory.</td>
</tr>
<tr>
<td>By Price List</td>
<td>This method uses a fixed price based on one of the price lists defined in your company to valuate the warehouse inventories.</td>
<td>If the price of a shirt in Price List 1 is 1.5, any ending inventory is allocated this price.</td>
</tr>
<tr>
<td>Last Evaluated Price</td>
<td>This method uses the last valued prices. SAP Business One valuates the items using the value that was determined for an item under the last valuation. The last evaluated price is not maintained at warehouse level but at item level only. For more information, see Generating Inventory Valuation Reports and the example for Last Evaluated Price.</td>
<td>In the last valuation that was made under any of the methods, the evaluated item price was 1. Therefore, the value of the last evaluated price is 1.</td>
</tr>
</tbody>
</table>
Setting Up a Nonperpetual Inventory

The settings for a nonperpetual inventory are entered during system initialization and affect fields and features that are used throughout SAP Business One. Once a transaction has been posted, you cannot change the company’s inventory system from a nonperpetual inventory system to a perpetual inventory system.

Procedure

1. From the SAP Business One Main Menu, choose Administration → System Initialization → Company Details → Basic Initialization tab.

2. To initialize the nonperpetual inventory system, deselect the Use Perpetual Inventory checkbox. You cannot modify the checkbox selection once inventory postings have been recorded.

As a result, the following features are irrelevant, and, therefore, are disabled:
How to Set Up and Manage a Nonperpetual Inventory System

Setting Up a Nonperpetual Inventory

For the Italy localization only, you can work with both a nonperpetual inventory system and with a purchase accounts posting system. Although the Use Perpetual Inventory checkbox is deselected, the Use Purchase Accounts Posting System checkbox is enabled. To activate the purchase accounts posting system, select this checkbox.

3. To save your changes, choose the Update button.

Results

A nonperpetual inventory system is now defined for the company with the following limitations:

- The Inventory tab of the G/L Account Determination window is disabled due to the following reasons:
  - Inventory related accounts are used for perpetual inventory systems only.
  - Inventory transactions in a nonperpetual inventory system are not reflected in the general ledger.

Therefore, the inventory accounts do not exist in the list of accounts in the Warehouses - Setup window and in the Item Groups - Setup window.

- Loading freight amounts on item cost are irrelevant and they are not considered in the inventory valuation report.
- The following documents do not create journal entries in the general ledger:
  - Deliveries
  - Goods receipt POs
  - Goods returns
Working with Sales and Purchasing Documents in a Nonperpetual Inventory System

Updating Prices in Open Documents

When you work with a nonperpetual inventory system, SAP Business One lets you update the prices in the following existing documents:

- Deliveries
- Returns
- Goods Receipt PO’s
- Goods Returns

Note

Only a price change in a goods receipt PO affects the inventory valuation report.

For those documents, you can update any field that affects the price of the items:

- Unit price
- Row and document discount
- Row and document total

Note

You can update the price in the document rows as long as a row was not drawn into a target document. You cannot update the prices in a goods return based on a goods receipt PO or in a return based on a delivery.

Working with Landed Costs Documents

When you work with a nonperpetual inventory system, landed costs documents do not create journal entries in the general ledger. When you work with landed costs documents, SAP Business One lets you do the following:

- Create a landed costs based on another landed costs document. This way, you can change the values of expenditures, customs, tax, prices, and any other amount fields, at any time.

Note

In past releases, you could update said values directly in the landed costs document at any time, however, in SAP Business One 9.1, this is no longer possible; you can update these values by creating a landed costs based on another landed costs only.

- Transfer landed costs quantities from the document warehouse to another warehouse. For more information, see Splitting Landed Costs Quantities.
- Close and then reopen landed costs documents.
If you close a landed costs document, you can no longer use it as a base document for another landed costs document. To close a document in the Landed Costs window, choose one of the following methods:

- From the Data menu, choose Close.
- Right-click the window and choose Close.
- Select the Closed Document checkbox, and then choose the Update button.

To reopen a closed landed costs document, deselect the Closed Document checkbox, and then choose the Update button.

- Cancel landed cost documents.
  Once they are canceled, you cannot reopen or update these documents. To cancel a document, in the Landed Costs window, choose one of the following methods:
  - From the Data menu, choose Cancel.
  - Right-click the window and choose Cancel.

Note

For information about landed costs, see the online help for SAP Business One.

Splitting Landed Costs Quantities

SAP Business One lets you split the quantities in landed costs documents. This functionality is used by companies that hold their imported goods in a bonded warehouse.

A bonded warehouse is a warehouse in which the duties are unpaid and the goods are stored under bond in the joint custody of the importer or his or her agent, and the customs officers. The bonded warehouse is managed by the state or by a private enterprise.

The purpose of storing imported goods in a bonded warehouse is to avoid paying duties for all the imported goods. The company can release the necessary quantity according to customer demand. As a result, the
company pays duties to authorities against the released quantity only and not for the full quantity in the bonded warehouse.

**Prerequisites**
- You have assigned customs and a tax group to an item.
- You have created a goods receipt PO for the item.

> **Note**
> For more information, see the online help for SAP Business One.

**Procedure**
1. From the SAP Business One *Main Menu*, choose *Purchasing – A/P ➔ Landed Costs*.
2. Select a vendor.
3. To draw the landed costs document based on a goods receipt PO, choose the *Copy From* button and select the relevant base document.
4. Select the row to be split in the table area by clicking its number. Then, choose the *Split* button. The *Landed Costs – Split* window opens.

![Landed Costs – Split](image)

5. Specify the quantity and the warehouse to which you want to transfer the inventory. To confirm the split, choose the *OK* button.
   SAP Business One splits the original row quantity into 2 rows: a new row is added with the specified quantity and warehouse, while the original row contains the remainder quantity.

   **Example**
   A document row contains 10 items, and you specified a quantity of 3 to be split. After you confirm the split, a new row is added in the table area with a quantity of 3, and the original row contains a quantity of 7.

6. To save the document and to apply the split, choose the *Add* button.
   As a result, SAP Business One automatically creates an inventory transfer that moves the split quantity to the specified warehouse. The price for the transferred inventory is the price in the *Whse Price* field.

> **Note**
> If you cancel a landed costs document, SAP Business One automatically creates a new inventory transfer that reverts the inventory transfer created for the split quantity. The reverted document enables you to create a new landed costs document based on the same goods receipt PO.
Working with the Inventory Valuation Report

The inventory valuation report lets you valuate all or some of the warehouse inventories of all items on a reporting date. The report is intended as a managerial report to check what-if scenarios. For instance, you can see what happens if you value an item based on different calculation methods. This information can help you in deciding which calculation method you should use.

Note

If your company manages a perpetual inventory system, the name of this report is Inventory Valuation Simulation Report.

SAP Business One lets you select one of the following calculation methods for inventory valuation:

- Moving Average
- FIFO
- By Price List
- Last Evaluated Price

The inventory valuation report valuates the inventory according to the selected calculation method and the purchase item prices. For more information, see Examples of Inventory Valuation Reports for Different Calculation Methods.

For calculation methods By Price List and Last Evaluated Price, the outbound and inbound movement of inventory is taken into account and the quantity in stock is evaluated by the selected price list or by the last evaluated price, respectively.

For calculation methods Moving Average and FIFO, the outbound and inbound movement of inventory is taken into account when the quantity in the documents is positive, as well as transactions that revaluate the cost of the inventory. For said calculation methods, SAP Business One uses the prices in the following documents and transactions to calculate the inventory posting value in the report:

- Goods receipt POs
- A/P invoices, as follows:
  - When the A/P invoice is not based on a goods receipt PO, the whole document price is considered in the report. When the A/P invoice is based on a goods receipt PO, only the difference between the prices in the goods receipt PO and those in the A/P invoice is considered for the calculation in the report.
- Goods receipts
- Landed costs (based on GRPO or another landed costs document) when you choose Yes in the Inventory Valuation dropdown list on the Details tab of the Landed Costs window.

Note

Moving Average - The value of the landed costs is used for calculation of the moving average price. The value of the landed costs is loaded onto the inventory even if the quantity from the original goods receipt PO document has been partially sold. However, if the landed costs is added after the item has been sold out, that is, when the inventory quantity of the item is zero, the landed costs is not considered for price calculation, even when new quantities are added to the inventory later.

FIFO - The value of the landed costs is loaded onto the relevant layer and the layer price is recalculated. If the landed costs is added after the layer has been sold out, the value of the landed costs is not considered...
in the calculation. If the landed costs is added after the layer has been partially sold, the value of the landed costs is loaded onto the layer value in proportion to the remaining quantity.

- **Inventory transfers**, when the *Use Doc. Price in Stock Evaluation* checkbox is selected in the *Inventory Transfer* window.
- **Initial quantities**
- **Inventory postings**
- **Inventory revaluations**

  1. **Note**

     **Moving Average** - Inventory revaluations are taken into consideration for price calculation. If an inventory revaluation is added when the inventory quantity is zero, it has no influence on the inventory value calculation.

     **FIFO** - No inventory revaluation is taken into consideration with this calculation method, because it does not affect any particular layer.

- **A/P credit memo**

  1. **Note**

     - Based A/P credit memo without quantity posting triggers cost recalculation; any change in the original price is also taken into account in the recalculation. This applies to both Moving Average and FIFO calculation methods.

     - Nonbased A/P credit memo without quantity posting triggers cost recalculation with the Moving Average calculation method only. In the FIFO method such a transaction is ignored, as the revaluation does not affect any particular layer.

- **A/P correction invoice**
- **A/P correction invoice reversal**

For more information, see *Inventory Valuation Report Special Cases*.

### Generating Inventory Valuation Reports

**Procedure**

1. From the SAP Business One *Main Menu*, choose *Inventory → Inventory Reports → Inventory Valuation Report*. The *Inventory Valuation – Selection Criteria* window opens.
2. Specify the following data for the selection criteria:

<table>
<thead>
<tr>
<th>Field/ Button</th>
<th>Activity/ Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Code From ... To</strong></td>
<td>Enter a range of item numbers you want to include in the report. If those fields remain empty, the report considers all items.</td>
</tr>
<tr>
<td><strong>Vendor From ... To</strong></td>
<td>You can restrict the selection by the main vendors of the items (from Inventory → Item Master Data → Purchasing Data tab → Preferred Vendor field). You can valuate all the items from one or more main vendors.</td>
</tr>
<tr>
<td><strong>Item Group</strong></td>
<td>Specify an item group as a selection criterion.</td>
</tr>
<tr>
<td><strong>Properties</strong></td>
<td>Opens the Properties window, where you can select a property or combination of properties as selection criteria.</td>
</tr>
<tr>
<td><strong>By Location</strong></td>
<td>On this tab, the warehouses are grouped by their location. Select a location to include all its warehouses in the report. You can also eliminate a specific warehouse from within a selected location by deselecting it. Use the Expand and Collapse buttons to view a detailed list of warehouses or a list of locations only.</td>
</tr>
<tr>
<td><strong>By Warehouse (Including From ... To, Excluding From ... To)</strong></td>
<td>On this tab, you can do the following:</td>
</tr>
<tr>
<td></td>
<td>- Specify a range of warehouses to be included or excluded from the report</td>
</tr>
<tr>
<td></td>
<td>- Indicate through the Do not Show Inventory Transfers checkbox whether or not you want inventory transfers of items to be displayed in the report.</td>
</tr>
<tr>
<td>Field/ Button</td>
<td>Activity/ Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>-</td>
<td>valuation report.</td>
</tr>
<tr>
<td>-</td>
<td>Depending on which warehouses you select, both inventory receipts and issues are displayed in the list.</td>
</tr>
<tr>
<td>-</td>
<td>For example, if you select only one warehouse, only the receipts and issues for this warehouse are displayed. The offsetting movements with the other warehouses involved in the transfer are not shown.</td>
</tr>
<tr>
<td>-</td>
<td>Note</td>
</tr>
<tr>
<td>Posting Date To</td>
<td>Determine the final date for the calculation.</td>
</tr>
<tr>
<td>-</td>
<td>Note</td>
</tr>
<tr>
<td>Project From ... To</td>
<td>You can valuate the warehouse inventories for one or more projects. Enter the project, if relevant.</td>
</tr>
<tr>
<td>Calc. Method:</td>
<td>Select a calculation method to examine its effects on the inventory valuation produced by the inventory valuation report.</td>
</tr>
<tr>
<td>-</td>
<td>Note</td>
</tr>
<tr>
<td>Field/ Button</td>
<td>Activity/ Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Price Source</strong></td>
<td>This field appears only when you select the <em>By Price List</em> calculation method. Choose the price list for calculating the inventory valuation.</td>
</tr>
<tr>
<td><strong>Display Method</strong></td>
<td>Select one of the following display formats for the report:</td>
</tr>
<tr>
<td></td>
<td>· <em>Row Per Item</em></td>
</tr>
<tr>
<td></td>
<td>· <em>Detailed Receipts/Releases</em></td>
</tr>
<tr>
<td>Note:</td>
<td>· If you only need to compare the warehouse inventory value with the balance sheet value, select the <em>Row per Item</em> display method option, which suffices for this purpose.</td>
</tr>
<tr>
<td></td>
<td>· The preparation of the warehouse inventory valuation using the <em>Detailed Receipts/Releases</em> display method can take a long time. Therefore, you should only start this report at the end of the workday.</td>
</tr>
<tr>
<td><strong>FC Exchange Rate</strong></td>
<td>If you valuate transactions in a foreign currency, select one of the following:</td>
</tr>
<tr>
<td></td>
<td>· <em>Exchange Rate on Report Date</em></td>
</tr>
<tr>
<td></td>
<td>· <em>Transaction Rate</em></td>
</tr>
<tr>
<td></td>
<td>All the foreign currency amounts are calculated according the exchange rate defined at the day when the report is generated.</td>
</tr>
<tr>
<td></td>
<td>The exchange rates specified in the respective documents.</td>
</tr>
<tr>
<td><strong>Allow Negative Inventory</strong></td>
<td>Allows negative inventory during valuation. For information, see <em>Allowing Negative Inventory in Inventory Valuation Reports</em>.</td>
</tr>
<tr>
<td><strong>Additional FC for Total</strong></td>
<td>Lets you display the valuation in a foreign currency also.</td>
</tr>
<tr>
<td></td>
<td>By default the field is deselected and the results are displayed in local currency.</td>
</tr>
<tr>
<td></td>
<td>If you select the <em>Additional FC for Total</em> checkbox, an additional field is displayed in which you select the required currency. You can then switch between the currencies displayed in the <em>Cumulative Value</em> field in</td>
</tr>
</tbody>
</table>
How to Set Up and Manage a Nonperpetual Inventory System

Working with the Inventory Valuation Report

<table>
<thead>
<tr>
<th>Field/ Button</th>
<th>Activity/ Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>the report results window. The local currency amount is converted into the selected foreign currency according to the exchange rate set for the document date.</td>
</tr>
</tbody>
</table>

**Sort by System Date**

Sorts the report results by system date. This checkbox is deselected and the report sorts the documents by their posting date; the report lists the inbound transactions first, followed by the outbound transactions. For more information, see Appendix: Sorting Inventory Valuation Report Results.

**Recommendation**

To obtain the actual item value to the last transaction:
- Selection criteria should include all warehouses.
- The date in the Posting Date To field should be the date of the last transaction.

3. Choose the **OK** button.

4. When the selected display method is **Row per Item**, the following report is displayed:

![Inventory Valuation Report](Image)

View the following report information:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculation Method</td>
<td>The selected calculation method in the Inventory Valuation Report – Selection Criteria window. When the selected calculation method is By Price List, the price list selected in the Price Source field is displayed here.</td>
</tr>
</tbody>
</table>
### Field Description

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Currency</strong></td>
<td>Displays the currency of the report. If you selected the Additional FC for Total checkbox, you can switch between the local currency report and the foreign currency report.</td>
</tr>
<tr>
<td><strong>Date To</strong></td>
<td>The last date the details for which are included in the report.</td>
</tr>
<tr>
<td><strong>Item No.</strong></td>
<td>The item code and its description.</td>
</tr>
<tr>
<td><strong>Item Description</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Last Evaluated Price</strong></td>
<td>Represents the simulated item cost. Displays the valuation price for a unit of the item based on the selected valuation method. SAP Business One automatically updates the last evaluated price for the item with the displayed value.</td>
</tr>
<tr>
<td><strong>Quantity</strong></td>
<td>The available quantity of the item in the warehouse.</td>
</tr>
<tr>
<td><strong>Inventory Value</strong></td>
<td>Total inventory value of the item.</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>SAP Business One calculates the inventory value as the sum of all the items’ transaction values, including transactions that do not affect the quantity of the item, such as inventory revaluations and landed costs. Therefore, the inventory value does not always match the result of the item quantity X the cost in the Last Evaluated Price field.</td>
</tr>
<tr>
<td><strong>Inventory UoM</strong></td>
<td>The unit of measure by which you manage the inventory, for example, box, carton, or case. The unit of measure for an item is defined on the Inventory tab in the Item Master Data window.</td>
</tr>
</tbody>
</table>
5. When the selected display method is *Detail Receipts/Releases*, the following report is displayed:

At first, you see the results of the report for the first item selected for valuation. Click ➡️ *(Next Record)* and ⬅️ *(Previous Record)* to navigate through the list of the valuated items.

The information in the general area of the report is the same information as described when the display method is *Row per Item*. View the following report information:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posting Date</td>
<td>The document posting date.</td>
</tr>
<tr>
<td>Document</td>
<td>The document number.</td>
</tr>
<tr>
<td>Whse</td>
<td>The warehouse in the document.</td>
</tr>
<tr>
<td>Qty</td>
<td>The quantity of the item in the document.</td>
</tr>
<tr>
<td>Price</td>
<td>The unit price of the item in the document (for inventory receipts) or the calculated price (for issue from stock).</td>
</tr>
<tr>
<td>Total</td>
<td>Total document value. The value is calculated as Qty X Price.</td>
</tr>
<tr>
<td>Cumulative Qty</td>
<td>The cumulative quantity of an item inventory after the goods are moved.</td>
</tr>
<tr>
<td>Cumulative Value</td>
<td>The cumulative value (in local or in foreign currency) after the goods are moved.</td>
</tr>
</tbody>
</table>

Note: The total balances for the quantities and values appear near the bottom of the list.
### How to Set Up and Manage a Nonperpetual Inventory System

#### Working with the Inventory Valuation Report

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Date</td>
<td>The document creation date.</td>
</tr>
</tbody>
</table>

6. To close the report, choose the OK button.

---

### Printing Inventory Valuation Reports

SAP Business One lets you print the inventory valuation report using default printing templates.

**Procedure**

1. From the SAP Business One **Main Menu**, choose **Inventory → Inventory Reports → Inventory Valuation Report**.
2. Specify the selection criteria and run the report. For more information, see **Generating Inventory Valuation Reports**.
3. From the **Tools** menu, choose **Layout Designer**, or click ![Layout Designer](image) in the toolbar.
4. Choose the preferred printing template.
5. Print the document.

---

**Note**

- When you print the report, you can also print the selection criteria on a separate page.
- You can edit the default templates or create new ones by using Print Layout Designer. For more information, see the document *How to Customize Printing Layouts with the Print Layout Designer* in the documentation area of SAP Business One Customer Portal at [http://service.sap.com/smb/sbocustomer/documentation](http://service.sap.com/smb/sbocustomer/documentation)

---

### Examples of Inventory Valuation Reports for Different Calculation Methods

The following examples describe how SAP Business One valuates the inventory according to the selected calculation method for inventory valuation in the inventory valuation report. For more information, see **Calculation Methods in Nonperpetual Inventory System**.

---

**Note**

The following examples consider the inventory valuation report when the selected display method is **Detailed Receipts/Releases**.
Moving Average

Each new receipt to stock or issue from stock updates the **Cumulative Qty** and the **Cumulative Value** fields.

- Two goods receipt PO documents are added:
  - The first goods receipt PO (PD 7) contains a quantity of 20 with an item price of 12. The total cost is $240 = 20 \times 12$.
  - The second goods receipt PO (PD 8) contains a quantity of 7 with an item price of 15. The total cost is $105 = 7 \times 15$.

As a result, the cumulative quantity is 27 and the cumulative value is 345.

- The item price when issuing from stock is calculated as the quotient of the cumulative value divided by the cumulative quantity: $12.78 = 345 \div 27$.

- A delivery (DN 2) containing a quantity of 8 is added. Therefore, the total cost is $(-102.24) = (-8) \times 12.78$.

- The inventory value after the delivery was added is $242.76 = 345 - 102.24$.

FIFO

Each new receipt to stock or issue from stock updates the **Cumulative Qty** and the **Cumulative Value** fields.

- Two goods receipt PO documents are added:
  - The first goods receipt PO (PD 24) contains a quantity of 20 with an item price of 12. The total cost is $240 = 20 \times 12$. As a result, a first FIFO layer with an item cost of 12 is created.
  - The second goods receipt PO (PD 25) contains a quantity of 7 with an item price of 15. The total cost is $105 = 7 \times 15$. As a result, a second FIFO layer with an item cost of 15 is created.

As a result, the cumulative quantity is 27 and the cumulative value is 345.

- A delivery (DN 4) containing a quantity of 8 is added and consumes 8 units from the first FIFO layer. Therefore, the total cost is $-96 = -8 \times 12$.

- A second delivery (DN 5) containing a quantity of 14 is added. The first 12 units are consumed from the first FIFO layer and close it. The total cost is $-144 = -12 \times 12$. 
The other 2 units are consumed from the second FIFO layer. The total cost is \(-30 = -2 \times 15\).

- The inventory value after the deliveries were added is \(75 = 345 - 96 - 144 - 30\).

**By Price List**

Each receipt to stock or issue from stock uses the item price in the selected price list for valuating the inventory value.

- The unit price of item A14 in Price List 1 is 10.
- Two goods receipt PO documents are added:
  - The first goods receipt PO (PD 26) contains a quantity of 20. The total cost is \(200 = 20 \times 10\).
  - The second goods receipt PO (PD 27) contains a quantity of 7. The total cost is \(70 = 7 \times 10\).

As a result, the cumulative quantity is 27 and the cumulative value is 270.

- A delivery (DN 6) containing a quantity of 1 is added. Therefore, the total cost is \(-10 = 18 \times 10\).
- The inventory value after the delivery was added is \(260 = 270 - 10\).
Last Evaluated Price

Each time an inventory valuation report is generated, SAP Business One automatically updates the last evaluated price of the valuated items according to the selected calculation method for the item cost. The last evaluated price is not maintained on a warehouse level but on an item level only.

For example, you generate the inventory valuation report for item A14 and you select the Moving Average as the calculation method. Therefore, the last evaluated price for item A14 is updated with the price of 81.85.

![Inventory Valuation Report](image)

**Note**

The above inventory valuation report example has **Row per Item** as the selected display method. The selected display method has no effect on the last evaluated price.

When you generate the same report for item A14 using the last evaluated price as the calculation method, the item price in all inventory transactions is the last evaluated price, with the updated price.

![Inventory Valuation Report](image)
Allowing Negative Inventory in Inventory Valuation Reports

Items may occasionally have negative inventories. From an accounting perspective, no procedure is available for valuating negative inventories.

⚠️ Caution

From an accounting perspective, we do not recommend using negative inventory. However, to use negative inventory, deselect the Block Negative Inventory checkbox in Administration → System Initialization → Document Settings → General tab.

💡 Note

To allow negative inventories in the inventory valuation report, in the Inventory Valuation Report – Selection Criteria window, select the Allow Negative Inventory checkbox.

When you allow negative inventories, the following 2 situations are possible:

- An item has a negative inventory in the reporting period.
- An item has a negative inventory on the reporting date.

Negative Inventory in the Reporting Period

If a selected item has a negative inventory in the reporting period, then the item is valuated based on the selected valuation method.

When you select Row per Item as the display method, if SAP Business One finds such an item while generating the report, the row for that item is displayed in green in the report results. An appropriate message also appears in the window with the report results.

When you select Detailed Receipts/Releases as the display method, the row of the transaction that caused the negative inventory is displayed in red in the report results.
SAP Business One splits the transaction that changes the inventory from negative to positive into 2 rows:

- The first row contains the quantity that brings the inventory to the zero point.
- The second row contains the remainder quantity of the transaction, if any exists.

**Example**

The in-stock quantity is -1. A goods receipt PO (PD 43) was created with a quantity of 3.

SAP Business One splits the total quantity into 2 rows:

- To level the negative in-stock quantity of -1, the first row contains 1 item.
- The second row contains the remainder quantity, which is 2 items.

**Negative Inventory on the Reporting Date**

If an item has a negative inventory on the reporting date, no valuation is possible and you do not obtain a result for the inventory value. For both *Row per Item* and *Detailed Receipts/Releases* display methods, the row for the item is displayed in red in the report results. In addition, the row for the item contains a N/A (not applicable) remark to indicate that no valuation was performed. An appropriate message also appears in the window with the report results.
To avoid negative inventories on the reporting date, post a receipt document on or just before the reporting date.
Inventory Valuation Report Special Cases

A/P Invoice Based on a Goods Receipt PO

When you draw an A/P invoice based on a goods receipt PO and you change the price of the item, the value of the A/P invoice in the inventory valuation report reflects only the difference between the values of the documents according to the in-stock quantity of the item.

Note

- SAP Business one checks the in-stock quantity in all the company’s warehouses and not only in the document warehouse.
- This scenario is relevant for the Moving Average and FIFO calculation methods.

Example

- A goods receipt PO (PD 33), which contains a quantity of 10 and an item price of 10, is created. In the inventory valuation report, the value of the goods receipt PO is 100 = 10 X 10.
- A delivery (DN 9), which contains a quantity of 3, is created. The in-stock quantity of the item is 7.
- An A/P invoice (PU 29) based on the goods receipt PO is created, and the item price is changed to 14.
- For a better explanation, the Sort by System Date checkbox is selected.

Results for Moving Average:

As displayed above, after adding the good receipt PO (PD33), the cumulative value of the inventory is 100 and the price (item cost) is 10. After the delivery (DN9) is added, the quantity in stock is 7 and the value is 70. The A/P invoice (PU29) with a price change is added; the difference between the item price in PD33 and PU(29) is 4. Since the quantity left is 7, the inventory value increases by 7x4=28.
Results for FIFO:

Adding the goods receipt PO (PD33) creates a layer with the quantity of 10, cumulative value 100, and layer price 10. The delivery (DN9) takes quantity 3 from the layer, hence the remaining cumulative value is 70 and the layer quantity is 7. Since the A/P invoice (PU29) is added when the layer quantity is 7, the price change of 4 applies to the remaining 7 items. The value of the layer is increased by 4x7=28.

Landed Costs

When working with landed costs documents in a nonperpetual inventory system, SAP Business One lets you choose whether you want to include a landed costs in the inventory valuation report or not:

- To ignore a landed costs in the inventory valuation report, in the Landed Costs window, on the Details tab, from the Inventory Valuation dropdown list, choose No. This means the inventory valuation report ignores the landed costs and considers only the goods receipt PO.
- To consider a landed costs price (the Whse Price field) in the inventory valuation report, in the Landed Costs window, on the Details tab, from the Inventory Valuation dropdown list, choose Yes. This means the inventory valuation report considers both the base goods receipt PO and the landed costs for calculating the value of the inventory.

Note

When you select to evaluate the item cost by the landed costs price, in the inventory valuation report, the posting date of the landed cost document is the goods receipt posting date. The reason is that the goods receipt PO posting date is the date when the goods were received to stock.

Example

- A goods receipt PO document was created with the following details:
  - Posting Date: October 7.
  - Quantity of 5, item price is 20.
- A landed costs document was created based on the goods receipt PO with the following details:
  - Posting Date: October 10.
The item price after the additional costs is 25.

If you choose No from the Inventory Valuation dropdown list on the Details tab of the Landed Costs window, the inventory valuation report ignores the landed costs and considers only the goods receipt PO.

However, if you choose Yes, the inventory valuation report considers both the goods receipt PO and the landed costs.

**Inventory Transfer**

In an inventory transfer document, if you select the Use Doc. Price in Stock Evaluation checkbox in the Inventory Transfer window, SAP Business One uses the price in the Info Price field as the cost of the receipt items when you generate the inventory valuation report. The cost for the issued items is the calculated price according to the selected calculation method.
Note

The **Info Price** field is not visible by default. To show this field in the **Inventory Transfer** window, click (Form Settings).

Example

You transfer 1 unit of item A08 from Warehouse1 to Warehouse2. In the **Info Price** field you specified a price of 50 for the item, and the **Use Doc. Price in Stock Evaluation** checkbox is selected.

When you generate the inventory valuation report, SAP Business One uses the price specified in the **Info Price** field as the cost of the receipt item in Warehouse 2.

Results for Moving Average
Results for FIFO

Inventory Revaluation

Note

Inventory revaluation is considered in the inventory valuation report only when you run it by the Moving Average calculation method.

Use the Inventory Revaluation window to modify the inventory value of an item. You can revaluate inventory values by:

- **Price Change** - Changing the price for a specific item.
  
  The inventory price is changed and inventory value is recalculated according to the new price.

- **Inventory Debit/Credit** - Changing the value of a specific quantity of inventory.
  
  The quantity of inventory remains unchanged, resulting in a change in the price.

When you use a nonperpetual inventory system, only the **Inventory Debit/Credit** option is enabled. Then, when you generate the inventory valuation report, SAP Business One uses the value from the Debit/Credit field to add to (when positive) or subtract from (when negative) inventory value.

Note

- Only the value in the Debit/Credit field affects the inventory value, regardless of the quantity specified in the inventory revaluation.

- For more information about the Inventory Revaluation window, see the document How to Set Up and Manage a Perpetual Inventory System in the documentation area of SAP Business One Customer Portal at http://service.sap.com/smb/sbocustomer/documentation.
Example

You increase the inventory value of item A10 by 50.

When you generate the inventory valuation report, SAP Business One uses the value in the Debit/Credit field to increase the inventory value of item E1.
A/P Credit Memo

- Based or nonbased A/P credit memo with quantity posting is issued with the item cost that is calculated according to the selected calculation method. Cost recalculation is not triggered with these types of A/P credit memos and this applies to both Moving Average and FIFO calculation methods.

Example 1

- You create a goods receipt PO (PU 32) for item A20 with a quantity of 10 and price 10.
  - You create an A/P credit memo (PC 27) for 5 items and update the Unit Price field; instead of the original 10, you enter 20.
  - In the inventory valuation report, the A/P invoice is issued for a quantity of 5 with a moving average price of 10. The cumulative inventory value is reduced by 5x10=50.
  - With the FIFO calculation method, a quantity of 5 is issued from the first available layer with the corresponding layer price.

Example 2

- For the same item as in the above example, A20, you add a nonbased A/P credit memo with quantity posting, with a quantity of 5 and unit price 50.
In the inventory valuation report, the items are issued with the current moving average price; the unit price 50 in the document is ignored. The same applies if you run the inventory valuation report by the FIFO calculation method; 5 items are issued from the first available layer with the layer price.

- Based or nonbased A/P credit memo without quantity posting triggers the cost recalculation, too.

Note

The exception is nonbased A/P credit memo when you run the inventory valuation report by the FIFO method; in the report, this type of document is ignored, since the revaluation does not affect any particular layer.

Example 1

- You create a goods receipt PO (PD 41) for item A21 with a quantity of 10 and unit price 10, copy it into an A/P invoice and add the invoice, as well.
- On said A/P invoice, you base an A/P credit memo for a quantity of 5; in the A/P credit memo (PC 29), you select the Without Qty Posting checkbox and add the document.
Moving Average Results

The report ignores the quantity from the A/P credit memo (PC 29); it takes into consideration the value posted in the document, which is 50. Therefore, the total inventory value is reduced by 50 and the moving average price is recalculated.

FIFO Results

In the report above, the value of the open layer is reduced by 50; therefore, the recalculated layer price is 5. Although the change in quantity is not posted, if the open layer contains a smaller quantity than the one that is in the A/P credit memo, the layer value is not reduced by the entire total amount defined in the A/P credit memo.

If, for example, in the A/P credit memo, the quantity is 10 and the total is 50, and in the open layer there are only two items left, the value of the layer is reduced by the following amount: \((\text{Total} / \text{Qty in the A/P invoice}) \times \text{Quantity in the existing layer}\). In said example, it would be \((50/10) \times 2 = 10\).
Italy: Working with a Purchase Accounts Posting System

For the Italy localization only, when you work with nonperpetual inventory, you can also work with a purchase accounts posting system. Purchase accounting is a mechanism that allows the direct monitoring of the total purchase expense via the profit and loss (P&L) account. Purchase accounting adds a P&L account dimension to a purchase posting. The purchase account is debited to reflect the actual total inventory-related purchase cost. This enables the analysis of purchases by period in the P&L account report.

When you work with a purchase accounts posting system, the following documents are involved with the purchase accounts postings:

- Goods receipt POs
- Goods returns
- A/P invoices, A/P reserve invoices
- A/P credit memos

For information about initializing a purchase accounts posting system, see Setting Up a Nonperpetual Inventory

Defining Purchase Accounts

When you maintain both a nonperpetual inventory system and a purchase accounts posting system, you have to define G/L accounts that reflect the purchasing transactions.

The following table describes the purchase accounts you have to define:

<table>
<thead>
<tr>
<th>Type of Accounts</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Account</td>
<td>A profit and loss account that identifies the entire purchasing value including freight. This account is debited when purchasing goods against the purchase offset account or the business partner account.</td>
</tr>
<tr>
<td>Purchase Offset Account</td>
<td>An offset account to the purchase account. This account is a liability account that is equivalent to the allocation account in a perpetual inventory system.</td>
</tr>
<tr>
<td>Purchase Return Account</td>
<td>This account is credited when goods are returned.</td>
</tr>
</tbody>
</table>

Define those G/L accounts in the following tabs:

- Administration → Setup → Financials → G/L Account Determination → Inventory tab.
- Administration → Setup → Inventory → Item Groups → Accounting tab.
- Administration → Setup → Inventory → Warehouses → Accounting tab.
Examples for Journal Entry Structures Used When Working with a Purchase Accounts Posting System

Prerequisites

The following prerequisites apply for all the described examples:

- The business partner is exempt from tax.
- In the Company Details window on the Basic Initialization tab:
  - The Use Purchase Accounts Posting System checkbox is selected.
  - The Use Negative Amount for Reverse Transaction is deselected.
- There are sufficient in-stock quantities of all the items.

Goods Receipt PO and A/P Invoice

When creating a goods receipt PO containing a quantity of 1 and unit price of 10, the following journal entry is created automatically:

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase account</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Purchase offset account</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

The purchase account is debited by the amount of the item’s quantity multiplied by the unit price.

Later, the goods receipt PO is copied into an A/P invoice. You change the unit price to 15 and add a freight charge of 10. The following journal entry is created automatically:

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>Purchase offset account</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Purchase account</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Expense (freight)</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

The purchase offset account is debited by the amount in the goods receipt PO. The price change difference between A/P Invoice and the goods receipt PO is posted to the purchase account.
Goods Return

When creating a goods return containing a quantity of 1 and unit price of 10, the following journal entry is created automatically:

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase return account</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Purchase offset account</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

The purchase return account is credited by the amount of the quantity multiplied by the unit price.

Note

This journal entry is also created when a goods return is based on a good receipt PO.

Closing Goods Receipt PO and Goods Return

When closing a goods receipt PO, the following journal entry is created automatically:

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase account</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Purchase offset account</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

The purchase account is credited by the amount of the quantity multiplied by the unit price.

When closing a goods return, the following journal entry is created automatically:

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase return account</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Purchase offset account</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

The purchase return account is debited by the amount of the quantity multiplied by the unit price.
A/P Credit Memo

When creating an A/P credit memo containing a quantity of 1 and unit price of 10, the following journal entry is created automatically:

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Purchase return account</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

The purchase return account is credited against the business partner.

Note

This journal entry is also created when the A/P credit memo is based on an A/P invoice.

A/P Credit Memo Based on a Goods Return

When creating an A/P credit memo based on a goods return containing a quantity of 1 and unit price of 10, the following journal entry is created automatically:

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Purchase offset account</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

The purchase offset account is credited against the business partner.
Authorizations

For information about the authorizations required for using a nonperpetual inventory system, see the online help for SAP Business One. In addition, see the document *How to Define Authorizations* in the documentation area of SAP Business One Customer Portal at http://service.sap.com/smb/sbocustomer/documentation.
Database Tables Reference

For information about the tables used in a nonperpetual inventory system, see the Database Tables Reference chm file. You can download it from the SAP Community Network, as follows:

2. Under BUSINESS ONE KNOWLEDGE CENTER, click the link of the SAP Business One release version you want.
3. Click the SDK Help Center link.
4. In the File Download window, do one of the following:
   - To open the .zip file, choose the Open button; then extract the REFDB.chm file to your computer.
   - To save the .zip file to your computer, choose the Save button. You can open the .zip file and extract the REFDB.chm file later.
Appendix: Sorting Inventory Valuation Report Results

SAP Business One lets you sort the Inventory valuation report results either by posting date or by system date. Sorting by system date means the report results are sorted by the creation date of the documents and by their sequence within the creation date.

When you sort the Inventory valuation report results by posting date, documents created on the same date are sorted as follows:

First, SAP Business One displays all receipt documents in the following order:
1. Positive initial inventory
2. Goods receipt POs
3. Landed costs
4. A/P invoices
5. Goods receipts
6. Inventory transfers (the transactions for the receipt warehouse)
7. Negative A/R invoices
8. Negative deliveries
9. A/R credit memos and A/R returns
10. Negative A/P credit memos
11. Positive inventory postings
12. Inventory revaluations
13. Negative goods returns

Then, SAP Business One displays all release documents in the following order:
1. Deliveries
2. A/R invoices
3. Inventory transfers (the transactions for the release warehouse)
4. Goods issues
5. Negative goods receipt POs
6. Goods returns
7. A/P credit memos
8. Negative A/P invoices
9. Negative A/R credit memos
10. Negative inventory postings
11. Negative initial inventory

The reason for displaying first the receipt documents and then the release documents is to avoid as much as possible any negative zone within the same posting date.
Sorting by system date or by posting date might retrieve completely different results. For example, when the report results are sorted by posting date, there is no negative inventory. However, when the report results are sorted by system date, the inventory can be in the negative zone.