PUBLIC

How to Set Up and Manage a Perpetual Inventory System

All Countries

Typographic Conventions

Type Style	Description
Example	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	2012-09-01	First Version
1.1	2016-06-22	Update for 9.0 release family.

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1   Introduction

A perpetual inventory system reflects the value of inventory postings in terms of monetary transactions in the accounting system. These monetary transactions are carried out only when items defined as inventory items are received or released from stock.

You should determine a perpetual inventory system during basic initialization, before posting any transactions.

SAP Business One provides the following three valuation methods for calculating the inventory value:

Moving Average – Calculates the average cost for the item in each sales, purchasing, inventory, and production transaction.

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

FIFO (First In First Out) – With this method, goods purchased first (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.

When you use a perpetual inventory system, SAP Business One lets you do the following:

- Manage the three methods in the same company.

  You can select a certain valuation method on the level of item and item group.

- Update the valuation method of your items globally. For more information, see *Updating Valuation Methods*.

- Update the calculated item cost for each item, if required. For information, see *Revaluing the Inventory*.

  ### i Note

  The SAP Business One 8.8 family release includes enhancements and changes in inventory management regarding the different valuation methods. The changes are described in this document; however, for more examples, see the document *Enhancements in Inventory Management* in the documentation area of SAP Business One Customer Portal at http://service.sap.com/smb/sbocustomer/documentation.

2 Defining Initial Settings

When you decide to use the perpetual inventory system, employees responsible for logistics and accounting must analyze the accounting transactions carried out in the background for each inventory transaction. You need to determine special G/L accounts for the inventory transactions. This influences the settings for warehouses and item groups.

2.1 Initializing a Perpetual Inventory System

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

2. To initialize the perpetual inventory system, select the *Use Perpetual Inventory* checkbox.

   ⚠️ Caution

   This selection is irreversible after you create an inventory transaction.

3. In the *Item Groups Valuation Method* dropdown list, select an inventory valuation method.

The default valuation method of new items is taken from their linked item groups, and the valuation method of new item groups is the method selected in this field.

The cost calculated for the items is in local currency.

ℹ️ Note

You can change the selected valuation method in the *Item Groups Valuation Method* field at any time; however, changes apply only to item groups added after the change, not to the ones added before.

4. To manage the cost of items for each warehouse individually, select the *Manage Item Cost per Warehouse* checkbox. When this checkbox is deselected, calculating inventory price is combined for all warehouses.

⚠️ Caution

This selection is irreversible after you create an inventory transaction.

Example

The following example shows the difference between managing the item cost per company and for each warehouse individually. The moving average valuation method is used.

Transaction	Manage Item Cost per Company	Manage Item Cost per Warehouse	
		Item Cost in Warehouse 1	Item Cost in Warehouse 2
• Goods receipt PO 1 • Quantity of 1 • Price 10 • Warehouse 1	10	10	0
• Goods receipt PO 2 • Quantity of 1 • Price 30 • Warehouse 2	20 = (10*1 + 30*1) / 2	10	30

To document your inventory transactions on the expenses side as well as to conduct a perpetual inventory system, select the *Use Purchase Accounts Posting System* checkbox. When the checkbox is selected, each journal entry includes additional rows reflecting the company's expenses. For more information, see Working with a Purchase Accounts Posting System

ℹ️ Note

○ Once you have recorded transactions, you cannot modify this setting.

○ This checkbox is not relevant for the US and Canada localizations.

5. To allow items to be included in documents such as deliveries or A/R invoices, even when the item cost has not been defined, select the *Allow Stock Release Without Item Cost* checkbox.

6. To save your changes, choose the *Update* button.

2.2 Defining Primary G/L Accounts

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *Financials* → *G/L Account Determination* → *Inventory* tab.

2. Define primary G/L accounts to be selected as defaults in new warehouses, item groups, and items master data. The following table describes the usage of each account:

Type of Account	Description
Inventory Account	Reflects the actual inventory value recorded in any inbound or outbound inventory transaction, goods receipt and issue production.
Cost of Goods Sold Account	Used in A/R outbound or inbound transactions to reflect the actual inventory value of goods sold. In the case of based A/R returns, it always reflects the COGS value from the base document.
Allocation Account	A clearing account used as an offsetting account to the inventory account only on the A/P side (in goods receipt POs, goods returns, and in A/P credit memos, A/P invoices based on goods receipt POs). The balance of this G/L account reflects the total amount of open goods receipt POs and goods returns

Type of Account	Description
Variance Account (Price Difference Account)	Used only with a standard price valuation method. In certain scenarios, if there are differences between the standard price and the actual price in purchasing and inventory documents, these differences are recorded in the variance account.
Price Difference Account	Used in purchasing transactions to reflect price differences between target A/P documents or non-based returns and insufficient inventory levels or inventory value. With inventory revaluation, this account is used for debiting or crediting inventory value of non-existing inventory quantity, if the current on-hand quantity is either zero or less than the quantity that is being revaluated by target A/P document. Price difference amount is then fully or proportionally posted to the price difference account.
Negative Inventory Adj. Acct	Used to reflect differences between the static price and inbound or outbound transaction amounts in the negative zone. This account replaces the price difference and the exchange rate differences accounts when relevant scenarios are done in the negative zone. In such cases, the moving average or FIFO prices are held static; SAP Business One saves and uses the last price for the item before zeroing the stock. The differences between these prices and inventory values resulting from the addition of new documents are posted to this account. **i** Note This account is not relevant for the standard price valuation method. ⚠ 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.
Inventory Offset - Decr. Acct	Used to balance the inventory account in case of outbound inventory transactions (goods issue, inventory posting).
Inventory Offset - Incr. Acct	Used to balance the inventory account in case of inbound inventory transactions (goods receipt, inventory posting, and initial quantities).

Type of Account	Description
Sales Returns Account	Reflects the actual inventory value recorded in A/R return documents (excluding A/R credit memos based on A/R reserve invoices).
Purchase Account / Purchase Returns Account / Cost of Goods Purchased / Purchase Balance Account	When working with the purchase accounts posting system, you should define the relevant default accounts. For more information, see *Working with a Purchase Accounts Posting System*.
Exchange Rate Differences Account	Used in purchasing transactions to reflect price differences caused by changes in the exchange rate between based A/P invoices and insufficient inventory levels or values. In certain scenarios, when you create a target document based on a base document, a difference in local currency occurs if the following conditions exist: • The item price is in a foreign currency. • The target document is connected to a different exchange rate. That difference is posted to this account. This account is used only when item has a positive or zero in-stock quantity (except when processing based A/P returns and based A/P credit memos in moving average price valuation method).
Goods Clearing Account	An offsetting account to the allocation and expense clearing costs, used when closing goods receipt POs or goods returns. In this case, no inventory entry is registered; however, a journal entry is created including this account.
G/L Decrease Account	Used as balancing account when the stock value is decreased by a material revaluation transaction.
G/L Increase Account	Used as balancing account when the stock value is increased by a material revaluation transaction.
WIP Inventory Account	An offsetting account to the inventory account used in the production process; it reflects the value of a production order during its various stages.
WIP Inventory Variance Account	This account contains the cost of the direct material, direct labor, and factory overhead placed into the products on the factory floor. A manufacturer must disclose in its financial statements the cost of its work in process as well as the cost of finished goods and on-hand materials.
Expense Clearing Account	An offsetting account used as a clearing account for freight charges influencing inventory value against the

Type of Account	Description
	inventory account in A/P documents, side by side with the allocation account (A/P reserve invoice excluded; the Stock In Transit account is used instead).
Stock In Transit Account	• Clearing account used as an offsetting account to the inventory account only in the A/P reserve invoice and its target documents). The balance of this G/L account reflects the total amount of open A/P reserve invoices.

For examples of usage of the accounts described above, see the following:

o *Examples of Journal Entry Structures When Using the Moving Average Valuation Method*

o *Examples of Journal Entry Structures When Using the Standard Price Valuation Method*

o *Examples of Journal Entry Structures When Using the FIFO Valuation Method*

> **i** Note
>
> The sum of the inventory account balance and the sales returns account balance reflects the total value of the inventory.
>
> Due to various user actions, the total balance of the inventory and sales returns accounts might be different from the inventory audit report. Those differences can be caused by one of the following scenarios:
>
> o The inventory account is involved in a manual journal entry.
>
> o In a service type document, you use a specific account as the inventory or sales returns account, as well as another account type (for example, as an allocation account), or as the G/L account.

3. On the *Purchasing* tab, define an expense and inventory account.

   This account is used for items managed by the moving average valuation method to reflect specific amount differences. Those differences are caused when you manually change prices in A/P credit memos that are based on A/P invoices.

4. To update changes, choose the *Update* button.

2.3 Defining an Opening Inventory Account

You should create an opening inventory G/L account in the chart of accounts. This G/L account is used as an offsetting account to the warehouse inventory account to which you enter initial quantities.

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Inventory Transactions* → *Inventory Opening Balances, Inventory Tracking and Inventory Posting* → *Initial Quantity* tab.

2. Specify the selection criteria of items for which you would like to enter initial quantities, and choose the *OK* button.

   The *Initial Quantity* window opens.

3. In the *Open Inventory Account* field, specify an opening inventory account. The account is automatically updated in the *G/L Account* field for all the items you selected. You can manually change the opening inventory account for each item.

4. To save your changes, choose the *Add* button.

ℹ **Note**

The opening inventory account should be different from the inventory account. Otherwise, when you enter an initial quantity, the same account is both credited and debited, producing a zero effect on the account balance.

2.4 Defining Item Defaults

1. From the SAP Business One *Main Menu*, choose *Administration → System Initialization → General Settings → Inventory* tab.

2. In the *Item Defaults* area, specify the following information:

Field	Activity/Description
Default Warehouse	In the *Default Warehouse* dropdown list, choose a default warehouse. This warehouse is used in all new transactions. When modified, this setting is updated

Field	Activity/Description
	immediately per company, for all users
	i Note
	You can also set a default warehouse at the item level and at the user level. For more information, see *Defining a Default Warehouse*
Set G/L Accounts By	When modified, this setting is updated immediately per company, for all users.
	In the Set *G/L Accounts By* dropdown list, choose the method by which you would like to set the G/L accounts connected to new item records only:
	• *Warehouse*
	The G/L accounts defined in the *Warehouses – Setup* window, located under *Administration → Setup → Inventory → Warehouses → Accounting* tab.
	• *Item Group*
	The G/L accounts defined in the *Item Groups – Setup* window, located under *Administration → Setup → Inventory → Item Groups → Accounting* tab.
	• *Item Level*
	Select this method to define G/L accounts for each item manually on the *Inventory Data* tab in the *Item Master Data* window.
	i Note
	The list of accounts can be displayed in the warehouse table. To display the relevant accounts, click (*Form Settings*). Those G/L accounts are enabled only if you choose the Item Level option.
Auto. Add All Warehouse to New Items	SAP Business One adds all the existing warehouses to every new item and every newly added warehouse to all the existing items.

2.5 Defining Warehouses

To define a new warehouse, do the following:

1. From the SAP Business One *Main Menu*, choose *Administration → Setup → Inventory → Warehouses*.

The *Warehouses – Setup* window appears.

In the *Warehouse Code* field, enter the code of the new warehouse. In the *Warehouse Name* field, enter the name of the warehouse.

2. On the *General* tab, view or define the following:

    i **Note**

    Fields that are self-explanatory are not described in the table below.

Field/Checkbox	Activity/Description
Nettable	This checkbox is selected by default. It enables the warehouse to be automatically involved in the MRP process. If you deselect this checkbox and also deselect the *Drop Ship* checkbox, you make this warehouse a non-nettable warehouse.
Drop Ship	This checkbox is enabled only when the *Nettable* checkbox is deselected.
	Select this option to define the warehouse as a drop-ship warehouse. A drop-ship warehouse is used when the company does not manage inventory, but receives commission for every order.
	i **Note**
	You cannot change the setting of the *Drop Ship* checkbox after a drop-ship warehouse is recorded in an existing document.

3. On the *Accounting* tab, you can define the G/L accounts for the item group. The default G/L accounts are taken from the *G/L Account Determination* window.

4. Choose the *Add* button.

2.5.1   Drop-Ship Warehouses

Drop shipping entails transferring goods directly from your vendor to your customer without holding the items as inventory in your warehouses. A drop-ship warehouse does not actually contain items; it is a ''virtual'' warehouse.

The moment the goods ''enter'' the drop-ship warehouse, you ship them to your customer. The system does not record any inventory postings for documents using this type of warehouse.

To work with drop shipping in SAP Business One, you must create a drop-ship warehouse.

When you work with a perpetual inventory system, documents in which drop-ship warehouses are used create journal entries that do not reflect the inventory value of the items received or released from a drop-ship warehouse.

> **i** Note
>
> If you manage an item in a drop-ship warehouse as well as in a regular warehouse, inventory postings occur only when you create documents involving the regular warehouse.

> **i** Note
>
> Drop-ship warehouses cannot be used for serial batch numbers and cannot be included in an MRP run.

2.5.2   Defining a Default Warehouse

You can set a default warehouse at three levels:

1. Item level – in the *Item Master Data* window
2. User level – in the *User Defaults* window
3. Company level – in the *General Settings* window (*Administration → System Initialization → General Settings → Inventory* tab → *Items* subtab)

The system takes the default warehouse according to the order above; for a new transaction, the system takes the default warehouse from the item level. If an item does not have a defined default warehouse at the item level, it takes the default warehouse from the user level. If there is no default warehouse defined at the user level, it takes the default warehouse defined in the general settings.

2.5.2.1   Defining a Default Warehouse in General Settings

For information about how to define the default warehouse in the general settings, see *Defining Item Defaults*.

2.5.2.2 Defining a Default Warehouse at User Level

From the SAP Business One *Main Menu*, choose *Administration → Setup → General → User Defaults*.
The *User Defaults* window appears.

For any new user defaults code, you can define a default warehouse in the *Warehouse* field, as shown in the window above.

You can change this setting for an existing user defaults code at any time. However, the change applies to new transactions only. If you create a document based on a document that was created before the change, the warehouse from the base document is used.

2.5.2.3 Defining a Default Warehouse at Item Level

To choose a default warehouse for an item, do the following:

1. Open the *Item Master Data* window of the relevant item.
2. On the *Inventory* tab, select the row of the warehouse you would like to set as the default.

Choose the *Set Default Whse* button.

The row of the default warehouse is now displayed in bold.

3. Choose the *Update* button.

You can change this setting at any time. However, the change applies to new transactions only. If you create a document based on a document that was created before the change, the warehouse from the base document is used.

2.6   Defining Item Groups

You can classify all or part of your inventory into item groups. For example, you can create groups that correspond to your business areas and assign the items to a business area using the group, or you can classify similar items to one general group. You can use the groups to format your reports and evaluations and to process items together as a group.

Whenever you create an item that belongs to a group, the item draws the defaults set from the item group, for example, the valuation method, the G/L account, the default warehouse and so on.

To create an item group:

1. From the Business One *Main Menu*, choose *Administration → Setup → Inventory → Item Groups*.

    The *Item Groups — Setup* window appears.

2. In the *Item Group Name* field, enter the name of the group you want to create.

3. On the *General* tab, view or specify the following information:

Field/Checkbox	Activity/Description
Planning Method	• *MRP* - Select this if you want this item group to be planned by MRP. • *None* - Select this if you do not want this item group to be planned by MRP.
Procurement	• *Make* – Select this if you want MRP to generate production order recommendations for this item group. • *Buy* – Select this if you want MRP to generate purchase order recommendations for the item group.
Order Interval	Select one of the defined intervals or select *Define New* to open the *Order Interval - Setup* window. In MRP calculations, the system automatically groups the recommended orders into interval periods and arranges orders within the same period into the first working day of that period.
Order Multiple	Enter the numeric value to define the size of the lots for the MRP.
Minimum Order Qty	Enter the value to define the minimum lot size.
Lead Time	Enter the number of days to calculate the duration of time from ordering a product to the time when the product is received or produced.
Cycle Group	Select an inventory cycle for this group. The inventory cycles define and schedule inventory counts.
Alert	Activates alert notifications of inventory counts for this group.
Default Valuation Method	Select the default valuation method for the item group.

Field/Checkbox	Activity/Description
	ℹ Note You can change the valuation method for a group at any time. However, the change applies only to the relevant items that you create after the change, not retroactively

4. On the *Accounting* tab, define the G/L accounts for the item group, if necessary. The item group draws the default G/L accounts from the *Inventory* tab of the *G/L Account Determination* window.

5. Choose the *Add* button.

3 Perpetual Inventory System by Moving Average

3.1 Overview

When managing a perpetual inventory system by moving average, an inventory receipt posting debits the inventory account of each warehouse according to the price entered in the document. This price also updates the item cost. An inventory release posting credits the inventory/sales returns account according to the item cost.

> **i Note**
>
> Due to various user actions, the item cost per item, as displayed on the *Inventory Data* tab in the *Item Master Data* window, might be different from the moving average price per item calculated by the inventory valuation simulation report. For example, working with negative inventory could be a cause of those differences.

3.2 Defining Item Cost When Using Moving Average Valuation Method

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Item Master Data* → *Inventory Data* tab.
2. Create a new item.
3. From the *Valuation Method* dropdown list, choose *Moving Average*.

   The default inventory valuation method of a new item is taken from its linked item group. For information about the valuation method of a new item group, see *Defining Item Groups.*

   > **i Note**
   >
   > It is possible to change the valuation method of an item at any time, as long as the item is not linked to any open documents (goods receipt PO, delivery, return and goods return) and its in-stock quantity is zero.

4. If in the *Company Details* window, the *Manage Item Cost per Warehouse* checkbox is selected, the item cost is calculated separately for each warehouse and is displayed in the warehouse row in the table.

If the button is deselected, a single item cost is managed for all the warehouses and is displayed above the warehouses table.

5. Choose the *Add* button.

> $\mathbf{i}$ Note
>
> For an item with moving average price valuation, you cannot enter the item cost into the *Item Master Data* window manually. Hence, the default cost of a newly created item without any transactions is zero. You can set the item cost in two ways:
>
> o Incoming inventory transaction — Any incoming inventory transaction sets the current moving average price. If your initial settings allow negative inventory, an outgoing transaction takes the current moving average price, which is zero, regardless of the item price entered in the document.
>
> o Inventory revaluation — You can perform inventory revaluation for a new item to set its cost. For more information, see *Revaluing the Inventory*.

3.3 Examples of Journal Entry Structures When Using the Moving Average Valuation Method

The moving average valuation method takes the weighted average of all units available for sale to determine the item cost. SAP Business One saves the cumulative quantity and the cumulative value of the item in stock. The item cost is the quotient of the cumulative value divided by the cumulative quantity.

The moving average price is calculated as follows:

Prerequisites

The following prerequisites apply to all the described examples:

- The business partner is tax exempted.
- The initial settings were defined as follows:
    o In the *Company Details* window, on the *Basic Initialization* tab:
        o *Use Purchase Accounts Posting System* is deselected.
        o *Use Negative Amount for Reverse Transaction* is selected.
    o The G/L accounts set for the items are by warehouse. For more information, see *Defining Item Defaults*.
- The G/L account code and name, '13400000-01-001-01', *'Inventory — Finished Goods'* relates to the release/receipt of items from/to warehouse 01.
- There are sufficient in-stock quantities of all the items involved in the scenarios below.

3.3.1 Sales Documents

3.3.1.1 Delivery and Delivery Based on a Return

The following journal entry is created when you add a delivery:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	51100000-01-001-01	Cost of Goods Sold	$ 100.00	
			$ 100.00	$ 100.00

The amounts in the *Debit* and *Credit* columns are calculated by multiplying the quantity of each item in the delivery document by its item cost.

The item cost in the delivery based on a return is taken from the return document. It updates the moving average price.

3.3.1.2   Return and Return Based on a Delivery

The following journal entry is created automatically when you add a return:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13500000-01-001-01	Sales Returns		$ -100.00
2	51100000-01-001-01	Cost of Goods Sold	$ -100.00	
			$ -100.00	$ -100.00

The amounts in the *Debit* and *Credit* columns are calculated by multiplying the quantity of each item in the delivery document by its item cost.

A return based on a delivery creates a transaction with the item cost taken from the base document. It updates the moving average price.

If the return is the first transaction for an item, the cost and transaction value are zero. However, the item cost can be set to a positive value using the inventory revaluation document; then the newly set item cost is used in the first transaction for this item.

3.3.1.3   A/R Invoice Based on a Delivery

When basing an A/R invoice on a delivery, no inventory posting is created; thus, only a regular journal entry is created in the accounting system.

3.3.1.4   A/R Invoice

The following journal entry is created automatically when you add an A/R invoice that is not based on a delivery:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	C1	Customer 1	$ 100.00	
2	22240000-01-001-01	Sales Tax Accrual		$ 0.00
3	41100000-01-001-01	Sales Revenues - Domestic		$ 100.00
4	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
5	51100000-01-001-01	Cost of Goods Sold	$ 100.00	
			$ 200.00	$ 200.00

i Note

This journal entry includes both the delivery's inventory transaction and the invoice's accounting transaction.

3.3.1.5 A/R Credit Memo Based on a Return

When basing an A/R credit memo on a return, no inventory posting is created; thus, only a regular credit journal entry is created in the accounting system.

3.3.1.6 A/R Credit Memo and A/R Credit Memo Based on an A/R Invoice

The following journal entry is created when you add an A/R credit memo:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	C1	Customer 1	$ -100.00	
2	22240000-01-001-01	Sales Tax Accrual		$ 0.00
3	41100000-01-001-01	Sales Revenues - Domestic		$ -100.00
4	13500000-01-001-01	Sales Returns		$ -100.00
5	51100000-01-001-01	Cost of Goods Sold	$ -100.00	
			$ -200.00	$ -200.00

The credit and debit amounts of both the sales returns and the cost-of-goods-sold accounts are calculated by multiplying the quantity of each item in the document by its item cost.

i Note

This scenario is not relevant for an A/R credit memo based on an A/R reserve invoice. A credit memo based on an A/R invoice creates a transaction with the item cost taken from the base document. It also updates the moving average price.

3.3.2 Purchasing Documents

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ 100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

3.3.2.1 Goods Receipt PO

The following journal entry is created automatically when you add a goods receipt PO:

The *Debit* and *Credit* amounts are calculated by multiplying the quantity of each item in the document by the price specified in the goods receipt PO.

The allocation account functions as a temporary alternative to the vendor's account, which is cleared only after you create a corresponding A/P invoice or goods return document.

3.3.2.2 Goods Receipt PO with Freight

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ 100.00
2	23600000-01-001-01	Expense Clearing		$ 10.00
3	13400000-01-001-01	Inventory - Finished Goods	$ 110.00	
			$ 110.00	$ 110.00

A goods receipt PO with freight behaves like any other goods receipt PO document. In addition, the freight amount recorded in the journal entry is the global amount of additional expenses for the entire quantity. The expenses clearing account is a clearing account recorded counter to the inventory account.

3.3.2.3 Goods Receipt PO Based on Goods Return

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation (HO, USA, GA)		100.00 $
2	13400000-01-001-01	Inventory - Finished Goods (HO, USA, GA)	100.00 $	
			100.00 $	100.00 $

A goods receipt purchase order based on a goods return uses the cost price from the goods return document.

3.3.2.4 Goods Return and Goods Return with Freight

In the following example, the item cost is 100 and the item price in the document is 150. The following journal entry is created automatically when you add a goods return:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ -100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
			$ -100.00	$ -100.00

The value of items returned in a non-based goods return is the current item cost calculated for the item and not the unit price entered in the goods return document.

3.3.2.5 Goods Return Based on a Goods Receipt PO

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ -100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
			$ -100.00	$ -100.00

i Note

This journal entry is identical to the entry created by a goods receipt PO, only reversed.

The item is released from the inventory with the base document price.

Goods Return Based on a Goods Receipt PO with Freight

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ -100.00
2	23600000-01-001-01	Expense Clearing		$ -10.00
3	13400000-01-001-01	Inventory - Finished Goods	$ -110.00	
			$ -110.00	$ -110.00

The item is released from the inventory with the base document price.

3.3.2.6 A/P Invoice Based on a Goods Receipt PO

When basing an A/P invoice on a goods receipt PO, the allocation costs account is debited, counter to the vendor's account, which is credited:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ 100.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 100.00	
			$ 100.00	$ 100.00

i **Note**

> The allocation account functions as a clearing account. In this example, it is debited by the amount in which it was credited in the goods receipt PO.

If the price is changed in the A/P invoice, the inventory account is affected and the moving average price is updated.

3.3.2.7 A/P Invoice

The following journal entry is created automatically when you add an A/P invoice that is not based on a goods receipt PO:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ 100.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

The amount of the debited inventory account is calculated by multiplying the quantity of each item by the price specified in the A/P invoice.

3.3.2.8 A/P Invoice with Freight

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ 110.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ 110.00	
			$ 110.00	$ 110.00

An A/P invoice with freight behaves like any other A/P invoice. In addition, the expenses clearing account is not recorded in this journal entry, since the inventory account reflects the item prices, including freight. As mentioned earlier, the expenses clearing account is a clearing account, and this journal entry recorded the final values for affecting the inventory valuation. Therefore, no intermediate accounts are recorded here.

3.3.2.9 A/P Credit Memo Based on a Goods Return with or without Freight

In the following example, you base an A/P credit memo on a goods return. The item price in the goods return is 90 with a freight amount of 10, and the item cost is 80. The following journal entry is created automatically:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ -100.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ -80.00	
4	52400000-01-001-01	Price Difference	$ -20.00	
			$ -100.00	$ -100.00

The price difference account is debited by the document total including freight charges minus the amount posted to the inventory account in the goods return.

> **i** Note
>
> The allocation account functions as a clearing account. In this example, it is debited by the amount in which it was credited in the goods return.

3.3.2.10 A/P Credit Memo

In the following example, you create an A/P credit memo. The item price in the A/P credit memo is 70, and the item cost is 100. The following journal entry is created automatically:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ -70.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
4	52400000-01-001-01	Price Difference	$ 30.00	
			$ -70.00	$ -70.00

The amount of the debited inventory account is calculated by multiplying the quantity of each item in the document by its item cost. The value of items returned is calculated from the current moving average price, not the price entered in the document.

3.3.2.11 A/P Credit Memo Based on an A/P Invoice

The following journal entry is created automatically when you add an A/P credit memo that is not based on a goods return:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ -100.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
			$ -100.00	$ -100.00

The item is released from the inventory with the base document price.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ -110.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ -80.00	
4	52400000-01-001-01	Price Difference	$ -30.00	
			$ -110.00	$ -110.00

3.3.2.12 A/P Credit Memo with Freight and A/P Credit Memo Based on A/P Invoice with Freight

The price difference account is debited by the document total including freight charges minus the amount posted to the inventory account in the A/P invoice.

The item is released from the inventory with the base document price.

3.3.3   Special Scenarios for A/P Documents

3.3.3.1   A/P Invoice Based on a Goods Receipt PO – Exchange Rate Differences

A difference in the local currency amount results from the following situation:

* You create an A/P invoice for a foreign currency vendor based on a goods receipt PO.
* In the invoice, the item price is defined with a foreign currency.
* The A/P invoice is connected to a different exchange rate from the one defined for the goods receipt PO.

In the following example, the local currency for your company is US dollars. A goods receipt PO was created for Foreign Vendor, whose currency is the euro. The goods receipt PO contains the following information:

* The posting date is July 1st. The exchange rate for that day is 1.
* 1 unit of Item1 is managed by the moving average valuation method.
* The item price in the document is EUR 100.

On July 11th, an A/P invoice was created for the vendor, based on the goods receipt PO from July 1st, and the exchange rate on that day is 2.

There are four possible scenarios for this situation:

* The quantity of the items copied from the goods receipt PO to the A/P invoice is less than or equal to their quantity in stock.

    In the example, the quantity in stock is 2. Since the actual inventory valuation changes in this situation, the inventory account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit (FC)	Credit (FC)	Debit	Credit
1	FC_V	Foreign Vendor		EUR 100.00		$ 200.00
2	66000000-01-001-01	Sales Tax Expense	EUR 0.00		$ 0.00	
3	23400001-01-001-01	Allocation	EUR 50.00		$ 100.00	
4	13400000-01-001-01	Inventory - Finished Goods	EUR 50.00		$ 100.00	
			EUR 100.00	EUR 100.00	$ 200.00	$ 200.00

* The quantity in stock of the items copied from the goods receipt PO to the A/P invoice is zero.

    Since there is no quantity in stock and the actual inventory valuation does not change in this situation; the exchange rate differences account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit (FC)	Credit (FC)	Debit	Credit
1	FC_V	Foreign Vendor		EUR 100.00		$ 200.00
2	66000000-01-001-01	Sales Tax Expense	EUR 0.00		$ 0.00	
3	23400001-01-001-01	Allocation	EUR 50.00		$ 100.00	
4	81600000-01-001-01	Exchange Rate Diff.	EUR 50.00		$ 100.00	
			EUR 100.00	EUR 100.00	$ 200.00	$ 200.00

* The quantity in stock of the items copied from the goods receipt PO to the A/P invoice is negative.

In the example, the quantity in stock is (-2). Since the in-stock quantity is negative and the actual inventory valuation does not change in this situation, the negative inventory adjustment account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit (FC)	Credit (FC)	Debit	Credit
1	FC_V	Foreign Vendor		EUR 100.00		$ 200.00
2	66000000-01-001-01	Sales Tax Expense	EUR 0.00		$ 0.00	
3	23400001-01-001-01	Allocation	EUR 50.00		$ 100.00	
4	51700000-01-001-01	Negative Inventory Variance	EUR 50.00		$ 100.00	
			EUR 100.00	EUR 100.00	$ 200.00	$ 200.00

- The quantity of the items copied from the goods receipt PO to the A/P invoice is greater than their quantity in stock.

  In the example, the quantity in stock is 1. For this scenario, the quantity of the item in the documents is 2. Since the actual inventory valuation changes only for the existing quantity in stock, the inventory account is affected by the existing quantity and the exchange rate differences account is affected by the remaining quantity.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit (FC)	Credit (FC)	Debit	Credit
1	FC_V	Foreign Vendor		EUR 200.00		$ 400.00
2	66000000-01-001-01	Sales Tax Expense	EUR 0.00		$ 0.00	
3	23400001-01-001-01	Allocation	EUR 100.00		$ 200.00	
4	13400000-01-001-01	Inventory - Finished Goods	EUR 50.00		$ 100.00	
5	81600000-01-001-01	Exchange Rate Diff.	EUR 50.00		$ 100.00	
			EUR 200.00	EUR 200.00	$ 400.00	$ 400.00

i Note

The above scenarios are also relevant for copying a goods return to an A/P credit memo.

3.3.3.2 A/P Invoice Based on a Goods Receipt PO – Price Differences

When copying a goods receipt PO to an A/P invoice, there might be a difference between the item prices recorded in the goods receipt PO and their prices in the A/P invoice.

In the following example, a goods receipt PO was created for 1 unit of Item1, with a price of 100. In an A/P invoice based on that goods receipt PO, the price was changed to 150.

There are four possible scenarios for this situation:

- The quantity of the items copied from the goods receipt PO to the A/P invoice is less than or equal to their quantity in stock.

  In the example, the quantity in stock is 2. Since the actual inventory valuation changes in this situation, the inventory account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ 150.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 100.00	
4	13400000-01-001-01	Inventory - Finished Goods	$ 50.00	
			$ 150.00	$ 150.00

- The quantity in stock of the items copied from the goods receipt PO to the A/P invoice is zero.

  Since there is no quantity in stock and the actual inventory valuation does not change in this situation, the price difference account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ 150.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 100.00	
4	52400000-01-001-01	Price Difference	$ 50.00	
			$ 150.00	$ 150.00

- The quantity in stock of the items copied from the goods receipt PO to the A/P invoice is negative.

  In the example, the quantity in stock is (-2). Since the in-stock quantity is negative and the actual inventory valuation does not change in this situation, the negative inventory adjustment account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ 150.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 100.00	
4	51700000-01-001-01	Negative Inventory Variance	$ 50.00	
			$ 150.00	$ 150.00

- The quantity of the items copied from the goods receipt PO to the A/P invoice is greater than their quantity in stock.

  In the example, the quantity in stock is 1 and the quantity of the item in the documents is 2. Since the actual inventory valuation changes only for the existing quantity in stock, the inventory account is affected by the existing quantity and the price difference account is affected by the remaining quantity.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ 300.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 200.00	
4	13400000-01-001-01	Inventory - Finished Goods	$ 50.00	
5	52400000-01-001-01	Price Difference	$ 50.00	
			$ 300.00	$ 300.00

i Note

The above scenarios are also relevant for copying a goods return to an A/P credit memo.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13900000-01-001-01	Goods Clearing		$ -100.00
2	23400001-01-001-01	Allocation	$ -100.00	
			$ -100.00	$ -100.00

3.3.3.3   Closing a Goods Receipt PO or a Goods Return

When closing a goods receipt PO or a goods return, no inventory posting is registered; however, a journal entry is created to clear the allocation costs account:

i Note

o   The above scenario is applied whether or not the goods return includes freight.
o   When a goods receipt PO is closed, the amounts are the same as when a goods return is closed, but each amount appears with a positive sign.
o   To close a goods receipt PO or a goods return, use one of the following methods:
   o   Right-click the window and choose *Close*.
   o   From the *Data* menu, choose *Close*.

3.3.3.4   Closing a Goods Receipt PO with Freight

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13900000-01-001-01	Goods Clearing		$ 110.00
2	23400001-01-001-01	Allocation	$ 100.00	
3	23600000-01-001-01	Expense Clearing	$ 10.00	
			$ 110.00	$ 110.00

3.3.3.5 A/P Credit Memo Based on an A/P Invoice when Changing the Freight Amount

In the following example, an A/P invoice was created for Item1 with a price of 100, and the freight amount in the invoice is 10. An A/P credit memo was created based on that invoice, and the freight was changed to 20.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ -120.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ -110.00	
4	23700000-01-001-01	Expense and Inventory	$ -10.00	
			$ -120.00	$ -120.00

The expense and inventory account reflects the changes made in the freight amount.

i Note

> The expense and inventory account can be defined in the *G/L Account Determination* window on the *General* subtab of the *Purchasing* tab.

3.3.4 Inventory Transactions

3.3.4.1 Goods Receipt

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	52300000-01-001-01	Inventory Offset		$ 100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

The *Debit* and *Credit* amounts are calculated by multiplying the quantity of each item in the document by the prices specified in the goods receipt.

3.3.4.2   Goods Issue

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	52300000-01-001-01	Inventory Offset	$ 100.00	
			$ 100.00	$ 100.00

The amount in the *Debit* and *Credit* columns is calculated by multiplying the quantity of each item in the goods issue by its item cost.

3.3.4.3   Inventory Transfer

If you specify different inventory accounts for your different warehouses, the inventory transfer transaction credits the inventory account of the release warehouse and debits the inventory account of the receipt warehouse. The release/receipt price is set by the moving average price of the item in the release warehouse.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	13410000-01-001-01	Inventory - Finished Goods 2	$ 100.00	
			$ 100.00	$ 100.00

i Note

If you manage the item cost per warehouse, inventory transfer changes the moving average price. The item cost in the receiving warehouse is calculated as follows: (stock value of the item in receiving warehouse + received value) / new quantity in the receiving warehouse.

3.3.4.4   Entering Initial Quantities and Inventory Postings

- A positive initial quantity creates the following journal entry:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13300000-01-001-01	Initial Inventory		$ 100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

The amount in the *Credit* and the *Debit* columns is calculated by multiplying the amounts of the *Initial Quantity* and the *Price* fields of each item in the *Initial Quantity* window.

- A negative initial quantity creates the following journal entry:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	13300000-01-001-01	Initial Inventory	$ 100.00	
			$ 100.00	$ 100.00

The price of the item is defined by its item cost.

i **Note**

If the *Allow Initial Quantities without Price* checkbox is selected and no price is entered for the items, it is not necessary to specify an opening inventory account. Notice that no monetary transaction is created in the accounting system in this scenario.

If you would like to record initial quantities, including price, you must choose an opening inventory G/L account manually.

- A positive inventory posting where the counted quantity is greater than the existing *In Whse* quantity creates the following journal entry:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	52300000-01-001-01	Inventory Offset		$ 100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

A negative inventory posting where the counted quantity is less than the existing in-stock quantity (the *In Whse* field) creates the following journal entry:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	52300000-01-001-01	Inventory Offset	$ 100.00	
			$ 100.00	$ 100.00

3.3.4.5 Landed Costs

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

3.3.4.6 Production

In a production order for a production bill of materials item, the parent item price is calculated according to the moving average prices of its child items. You cannot change this price.

In the following examples, both the parent and child items are defined with *Moving Average* as their inventory valuation method.

The two methods for issuing items in production orders are manual and backflush. For more information, see *the online help for SAP Business One.*

- Manual

  With this method, you should document the receipt of the parent item and the release of the child items.

  o Issue for production

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	13200000-01-001-01	WIP Inventory	$ 100.00	
			$ 100.00	$ 100.00

  The amounts in the *Debit* and *Credit* columns are calculated by multiplying the quantity of each child item by its item cost and summing the resulting product for all child items.

  o Receipt from production

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13200000-01-001-01	WIP Inventory		$ 100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

  The amounts in the *Debit* and *Credit* columns are calculated by multiplying the quantity of each child item by its item cost and summing the resulting product for all child items.

  i Note

  When you close a production order, if there is a difference between the actual component cost and the actual product cost, an additional journal entry is recorded for the price difference:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13200000-01-001-01	WIP Inventory		$ 50.00
2	52500000-01-001-01	WIP Inventory Variances	$ 50.00	
			$ 50.00	$ 50.00

  For example, the parent item comprises 1 child item with a quantity of 2. The price of the child item is 50.

  You issue a receipt for the product before issuing the child item. During the receipt from production, the value in the *Actual Product Cost* field on the *Summary* tab of the *Production Order* window is 2 X 50=100.

Before you issue the child item, its cost is changed to 75. During the issue for production, the journal entry created for the child item release was calculated as 2 X 75 = 150. This value is saved in the *Actual Component Cost* field on the *Summary* tab of the *Production Order* window.

When the production order is closed, the difference between the costs [2 X (50 minus 75) = -50] is recorded in the WIP inventory variance account, while the WIP inventory account is cleared.

- Backflush

    With this method, when the production order is completed, the inventory account of the parent item warehouse is debited and the inventory account of the child warehouses is credited. The release/receipt price is set by the moving average prices of the child items. With this method, there is no issue for production; however, the above two journal entries are always created.

3.3.4.7 Working with Negative Inventory

The item quantity in stock can go negative on the company level if you are not running item cost per warehouse (the *Manage Cost per Warehouse* checkbox is deselected), or on the warehouse level if you are running item cost per warehouse (the *Manage Item Cost per Warehouse* checkbox is selected).

If the item quantity in stock is negative, SAP Business One uses the static price – the last price which was used for the item before zeroing the stock. As long as the inventory level is negative, any transaction does not update the moving average price.

In the journal entry, the difference between the document or transaction balance and the value posted to the inventory account (in case of negative values) is posted to the negative inventory adjustment account.

The moving average item price cannot be changed through material revaluation, as long as the item is in the negative zone.

4 Perpetual Inventory System by Standard Price

4.1 Overview

SAP Business One lets you work with the standard price method for calculating your inventory value.

A standard (fixed) price should be entered in each item record, thus influencing every inventory posting. An inventory receipt created with a different price than the standard price set for the item debits the inventory account according to the standard price. In addition, the difference between the standard price and the actual receipt price is recorded in a variance or a price difference account. Inventory releases are recorded according to the standard price.

4.2 Defining Item Cost when Using the Standard Price Valuation Method

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Item Master Data* → *Inventory Data* tab.
2. Create a new item.
3. From the *Valuation Method* dropdown list, choose *Standard*.

   The default inventory valuation method of a new item is taken from its linked item group. For information, see *Defining Item Groups*.

   > **i** Note
   >
   > As long as an item is not linked to any open documents and its *In Stock* quantity is zero, it is possible to change its valuation method at any time.

4. In the *Item Cost* field, specify the standard price.

   If you select the *Manage Item Cost per Warehouse* checkbox, the standard price is calculated separately in each warehouse and is displayed in the warehouse row in the table.

   In this case, after specifying a value in the *Item Cost* field, you can update this item cost to all warehouses. Alternatively, you can set a different standard price manually for each warehouse.

Note

It is recommended to specify or update standard price by means of a material revaluation document, rather than using the *Item Master Data* window. The change log of item master data can be deleted at some point and the information about item cost change can be lost. If the item cost is changed by material revaluation, this information cannot be deleted.

4.3 Examples of Journal Entry Structures When Using the Standard Price Valuation Method

The standard price valuation method uses a fixed price based on the defined cost of the item to valuate the warehouse inventories.

Prerequisites

The following prerequisites apply for all the described examples:

- The business partner is tax exempted.
- The initial settings are defined as follows:
  - In the *Company Details* window, on the *Basic Initialization* tab:
    - The *Use Purchase Accounts Posting System* checkbox is deselected.
    - The *Use Negative Amount for Reverse Transaction* is selected.
  - The G/L accounts set for the items are by warehouse. For information, see *Defining Item Defaults*.
- The item's standard price is 100.

- The G/L account code and name, '13400000-01-001-01', *'Inventory – Finished Goods'* relates to the release/receipt of items from/to warehouse 01.
- There are sufficient quantities in stock of all the items involved in the scenarios below.

> **i** Note
>
> No journal entry reflecting the inventory value is created by a document containing items with *Standard* as their inventory valuation method, but with no item cost defined for them.

4.3.1 Sales Documents

4.3.1.1 Delivery and Delivery Based on a Return

The following journal entry is created automatically when you add a delivery:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	51100000-01-001-01	Cost of Goods Sold	$ 100.00	
			$ 100.00	$ 100.00

The debit and credit amounts are calculated as a multiplication of each item in the delivery by the standard price of each item.

4.3.1.2 Return or Return Based on a Delivery

The following journal entry is created automatically when you add a return:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13500000-01-001-01	Sales Returns		$ -100.00
2	51100000-01-001-01	Cost of Goods Sold	$ -100.00	
			$ -100.00	$ -100.00

The debit and credit amounts are calculated as a multiplication of each item in the delivery by the standard price of each item.

4.3.1.3   A/R Invoice Based on a Delivery

When basing an A/R invoice on a delivery, no inventory posting is created; thus, only a regular journal entry is created in the accounting system.

4.3.1.4   A/R Invoice

The following journal entry is created automatically when you add an A/R invoice that is not based on a delivery:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	C1	Customer 1	$ 100.00	
2	22240000-01-001-01	Sales Tax Accrual		$ 0.00
3	41100000-01-001-01	Sales Revenues - Domestic		$ 100.00
4	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
5	51100000-01-001-01	Cost of Goods Sold	$ 100.00	
			$ 200.00	$ 200.00

i Note

This journal entry includes both the delivery's inventory transaction and the invoice's accounting transaction.

4.3.1.5   A/R Credit Memo Based on a Return

When basing an A/R credit memo on a return, no inventory posting is created; thus, only a regular credit journal entry is created in the accounting system.

4.3.1.6   A/R Credit Memo and A/R Credit Memo Based on an A/R Invoice

The following journal entry is created automatically when you add an A/R credit memo that is not based on a return:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	C1	Customer 1	$ -100.00	
2	22240000-01-001-01	Sales Tax Accrual		$ 0.00
3	41100000-01-001-01	Sales Revenues - Domestic		$ -100.00
4	13500000-01-001-01	Sales Returns		$ -100.00
5	51100000-01-001-01	Cost of Goods Sold	$ -100.00	
			$ -200.00	$ -200.00

i **Note**

This scenario is not relevant for an A/R credit memo based on an A/R reserve invoice

4.3.2 Purchasing Documents

4.3.2.1 Goods Receipt PO

The following example displays a case in which the item's price, as recorded in the goods receipt PO, varies from the item's standard price set in the *Item Master Data* window:

- The price in the goods receipt PO is 150.
- The standard price of the item is 100.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ 150.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
3	52600000-01-001-01	Variance	$ 50.00	
			$ 150.00	$ 150.00

i **Note**

The allocation account functions as a temporary alternative for the vendor's account, which is cleared only after you create a corresponding A/P invoice.

4.3.2.2 Goods Receipt PO with Freight

This example relates to the same example as described above for the goods receipt PO:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ 150.00
2	23600000-01-001-01	Expense Clearing		$ 10.00
3	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
4	52600000-01-001-01	Variance	$ 60.00	
			$ 160.00	$ 160.00

The freight amount recorded in the journal entry is the global amount of additional expenses for the entire quantity. The expenses clearing account is recorded counter to the inventory account.

4.3.2.3 Goods Return and Goods Return with Freight

In the following example, the item price, as recorded in the goods return, varies from the standard price of the item as set in the *Item Master Data* window:

• The item price in the goods return is 150.

• The standard price of the item is 100.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ -100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
			$ -100.00	$ -100.00

The debit and credit amounts are calculated by multiplying the quantity of each item in the document by its current cost, and not the item price entered in the goods return document. Since the current cost is used, any freight addition has no effect on the allocation and inventory accounts.

4.3.2.4 Goods Return Based on a Goods Receipt PO

This example relates to the same example as described above for the goods receipt PO.

The following journal entry is created automatically when you add a goods return according to above-described scenario:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ -150.00
2	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
3	52600000-01-001-01	Variance	$ -50.00	
			$ -150.00	$ -150.00

4.3.2.5   Goods Return Based on a Goods Receipt PO with Freight

This example relates to the same example as described for the goods receipt PO.

The following journal entry is created automatically when you add a goods return according to the scenario described above for a goods receipt PO:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ -150.00
2	23600000-01-001-01	Expense Clearing		$ -10.00
3	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
4	52600000-01-001-01	Variance	$ -60.00	
			$ -160.00	$ -160.00

4.3.2.6   A/P Invoice Based on a Goods Receipt PO

When you base an A/P invoice on a goods receipt PO, the allocation account is debited counter to the vendor account, which is credited:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ 100.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 100.00	
			$ 100.00	$ 100.00

The allocation account functions as a clearing account. In this example, it is debited by the amount in which it was credited in the goods receipt PO.

4.3.2.7   A/P Invoice Based on a Goods Receipt PO with Freight

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ 110.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 100.00	
4	23600000-01-001-01	Expense Clearing	$ 10.00	
			$ 110.00	$ 110.00

i Note

In addition to the expense clearing account, the allocation account also acts as a clearing account. In this example, these accounts are debited by the amounts in which they were credited in the goods receipt PO.

4.3.2.8 A/P Invoice

The following example displays a case in which the item's price, as recorded in the A/P invoice, varies from the item's standard price.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ 150.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
4	52600000-01-001-01	Variance	$ 50.00	
			$ 150.00	$ 150.00

- The price in the A/P invoice is 150.
- The standard price of the item is 100.

  The amount of the debited inventory account is calculated by multiplying the quantity of each item by the standard price of the item. The amount of the debited variance account is calculated by multiplying the quantity of each item by the difference between the price of the item in the A/P invoice and the standard price of the item.

4.3.2.9 A/P Invoice with Freight

This example relates to the same example as described for the A/P invoice.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ 160.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
4	52600000-01-001-01	Variance	$ 60.00	
			$ 160.00	$ 160.00

The expenses clearing account is not recorded in this journal entry since the inventory account reflects the item prices, including freight. As mentioned earlier, the expenses clearing account is a clearing account, and this journal entry recorded the final values for affecting the inventory valuation. Therefore, no intermediate accounts are recorded here.

4.3.2.10 A/P Credit Memo Based on a Goods Return

When you base an A/P credit memo on a goods return, the journal entry created automatically is identical to the one created by an A/P invoice based on a goods receipt PO, only reversed:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ -100.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ -100.00	
			$ -100.00	$ -100.00

The allocation account functions as a clearing account. In this example, it is debited by the amount in which it was credited in the goods returns.

4.3.2.11 A/P Credit Memo Based on a Goods Return with Freight

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ -110.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ -100.00	
4	52600000-01-001-01	Variance	$ -10.00	
			$ -110.00	$ -110.00

The variance account is credited or debited by the document total, including freight charges, minus the amount that was posted to the inventory account in the goods return.

4.3.2.12 A/P Credit Memo and A/P Credit Memo Based on an A/P Invoice

The following journal entry is created automatically when you add an A/P credit memo that is not based on a goods return:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ -100.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
			$ -100.00	$ -100.00

4.3.2.13 A/P Credit Memo with Freight and A/P Credit Memo Based on A/P Invoice with Freight

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	➡ V1	Vendor 1		$ -110.00
2	➡ 66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	➡ 13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
4	➡ 52600000-01-001-01	Variance	$ -10.00	
			$ -110.00	$ -110.00

The expenses clearing account is not recorded in this journal entry since the inventory account reflects the item prices, including freight. As mentioned earlier, the expenses clearing account is a clearing account, and this journal entry recorded the final values for affecting the inventory valuation. Therefore, no intermediate G/L accounts are recorded here.

4.3.3 Special Scenarios for A/P Documents

4.3.3.1 A/P Invoice Based on a Goods Receipt PO — Exchange Rate Differences

The following situation results in a difference in the local currency amount:

* You create an A/P invoice for a foreign currency vendor based on a goods receipt PO.
* In the invoice, the item price is defined with a foreign currency.
* The A/P invoice is connected to an exchange rate different from the one defined for the goods receipt PO.

In the following example, the local currency for your company is US dollars. A goods receipt PO was created for Foreign Vendor, whose currency is the euro. The goods receipt PO contains the following information:

* The posting date is July 1st. The exchange rate for that day is 1.
* 1 unit of Item1 is managed by the standard price valuation method.
* The item price in the document is EUR 100.

On July 11th, an A/P invoice was created for the vendor, based on the goods receipt PO from July 1st; the exchange rate on that day is 2.

The four possible scenarios for this situation are as follows:

* The quantity of the items copied from the goods receipt PO to the A/P invoice is less than or equal to their quantity in stock.

  In the example, the quantity in stock is 2. Since the actual inventory valuation changes in this situation, the variance account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit (FC)	Credit (FC)	Debit	Credit
1	FC_V	Foreign Vendor		EUR 100.00		$ 200.00
2	66000000-01-001-01	Sales Tax Expense	EUR 0.00		$ 0.00	
3	23400001-01-001-01	Allocation	EUR 50.00		$ 100.00	
4	52600000-01-001-01	Variance	EUR 50.00		$ 100.00	
			EUR 100.00	EUR 100.00	$ 200.00	$ 200.00

- The in-stock quantity of the items copied from the goods receipt PO to the A/P invoice is zero.

  Since there is no quantity in stock and the actual inventory valuation does not change in this situation, the exchange rate differences account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit (FC)	Credit (FC)	Debit	Credit
1	FC_V	Foreign Vendor		EUR 100.00		$ 200.00
2	66000000-01-001-01	Sales Tax Expense	EUR 0.00		$ 0.00	
3	23400001-01-001-01	Allocation	EUR 50.00		$ 100.00	
4	81600000-01-001-01	Exchange Rate Diff.	EUR 50.00		$ 100.00	
			EUR 100.00	EUR 100.00	$ 200.00	$ 200.00

- The quantity in stock of the items copied from the goods receipt PO to the A/P invoice is negative.

  The exchange rate differences account is affected the same way as if the item's quantity in stock is zero.
- The quantity of the items copied from the goods receipt PO to the A/P invoice is greater than their quantity in stock.
- In the example, the quantity in stock is 1 and the quantity of the item in the documents is 2. Since the actual inventory valuation changes only for the existing quantity in stock, the variance account is affected by the existing quantity and the exchange rate differences account is affected by the remaining quantity.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit (FC)	Credit (FC)	Debit	Credit
1	FC_V	Foreign Vendor		EUR 200.00		$ 400.00
2	66000000-01-001-01	Sales Tax Expense	EUR 0.00		$ 0.00	
3	23400001-01-001-01	Allocation	EUR 100.00		$ 200.00	
4	81600000-01-001-01	Exchange Rate Diff.	EUR 50.00		$ 100.00	
5	52600000-01-001-01	Variance	EUR 50.00		$ 100.00	
			EUR 200.00	EUR 200.00	$ 400.00	$ 400.00

i Note

The above scenarios are also relevant for copying a goods return to an A/P credit memo.

4.3.3.2   A/P Invoice Based on a Goods Receipt PO – Price Differences

When copying a goods receipt PO to an A/P invoice, there might be a difference between the item prices recorded in the goods receipt PO and their prices in the A/P invoice.

In the following example, a goods receipt PO was created for 1 unit of Item1 and its price was 100. In an A/P invoice based on that goods receipt PO, the price was changed to 150.

There are four possible scenarios for this situation:

* The quantity of the items copied from the goods receipt PO to the A/P invoice is less than or equal to the quantity in stock.

  In the example, the quantity in stock is 2. Since the actual inventory valuation changes in this situation, the variance account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ 150.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 100.00	
4	52600000-01-001-01	Variance	$ 50.00	
			$ 150.00	$ 150.00

* The quantity in stock of the items copied from the goods receipt PO to the A/P invoice is zero.

  Since there is no quantity in stock and the actual inventory valuation does not change in this situation, the price difference account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ 150.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 100.00	
4	52400000-01-001-01	Price Difference	$ 50.00	
			$ 150.00	$ 150.00

* The quantity in stock of the items copied from the goods receipt PO to the A/P invoice is negative.

  In the example, the quantity in stock is -2. The journal entry recorded is the same as the journal entry recorded when the in-stock quantity is positive. Therefore, the variance account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ 150.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 100.00	
4	52600000-01-001-01	Variance	$ 50.00	
			$ 150.00	$ 150.00

- The quantity of the items copied from the goods receipt PO to the A/P invoice is greater than the quantity in stock.

  In the example, the quantity of the item in the documents is 2, and the quantity in stock is 1. Since the actual inventory valuation changes only for the existing quantity in stock, the variance account is affected by the existing quantity, and the price difference account is affected by the remaining quantity.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ 300.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 200.00	
4	52400000-01-001-01	Price Difference	$ 50.00	
5	52600000-01-001-01	Variance	$ 50.00	
			$ 300.00	$ 300.00

> **i** Note
>
> The above scenarios are also relevant for copying a goods return to an A/P credit memo.

4.3.3.3   Closing a Goods Receipt PO or a Goods Return

When a goods receipt PO or a goods return is closed, no inventory posting is registered; however, a journal entry is created to clear the allocation costs account:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13900000-01-001-01	Goods Clearing		$ -100.00
2	23400001-01-001-01	Allocation	$ -100.00	
			$ -100.00	$ -100.00

> **i** Note
>
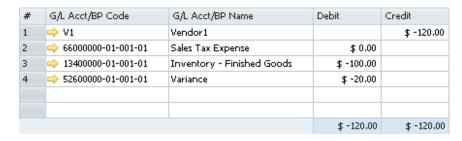> o The above scenario is applied whether or not the goods return includes freight.
>
> o When a goods receipt PO is closed, the amounts are the same as when a goods return is closed, but each amount appears with a positive sign.
>
> o To close a goods receipt PO or a goods return, use one of the following methods:
>
> > o Right-click the window and choose *Close*.
> >
> > o From the *Data* menu, choose *Close*.

4.3.3.4 Closing a Goods Receipt PO with Freight

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13900000-01-001-01	Goods Clearing		$ 110.00
2	23400001-01-001-01	Allocation	$ 100.00	
3	23600000-01-001-01	Expense Clearing	$ 10.00	
			$ 110.00	$ 110.00

4.3.3.5 A/P Credit Memo Based on an A/P Invoice when Changing the Freight Amount

In the following example, an A/P invoice was created for Item1 with a price of 100, and the freight amount in the invoice is 10. An A/P credit memo was created based on that invoice, and the freight was changed to 20.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ -120.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
4	52600000-01-001-01	Variance	$ -20.00	
			$ -120.00	$ -120.00

The variance account reflects the final freight amount.

4.3.4 Inventory Transactions

4.3.4.1 Goods Receipt

The following example displays a case in which the item's price, as recorded in the goods receipt, varies from the item's standard price:

- The price in the goods receipt is 150.
- The standard price of the item is 100.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	⇨ 52300000-01-001-01	Inventory Offset		$ 150.00
2	⇨ 13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
3	⇨ 52600000-01-001-01	Variance	$ 50.00	
			$ 150.00	$ 150.00

The amount of the debited inventory account is calculated by multiplying the quantity of each item by the standard price of the item. The amount of the debited variance account is calculated by multiplying the quantity of each item by the difference between the price of the item in the goods receipt and the standard price of the item.
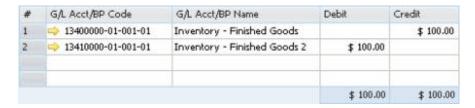
4.3.4.2   Goods Issue

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	⇨ 13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	⇨ 52300000-01-001-01	Inventory Offset	$ 100.00	
			$ 100.00	$ 100.00

The debit and credit amounts are calculated as a multiplication of each item in the goods issue by its standard price.

4.3.4.3   Inventory Transfer

If you had selected different inventory accounts for your different warehouses, the inventory transfer transaction would have credited the inventory account of the release warehouse and debite the inventory account of the receipt warehouse. The release/receipt price is set by the standard price of each item.

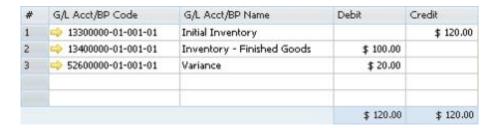| #	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	⇨ 13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	⇨ 13410000-01-001-01	Inventory - Finished Goods 2	$ 100.00	
			$ 100.00	$ 100.00

ℹ Note

If the item's standard price in the release warehouse is different from its standard price in the receipt warehouse, this difference is recorded in the variance account of the receipt warehouse.
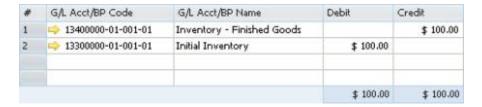
4.3.4.4   Entering Initial Quantities and Inventory Postings

- A positive initial quantity with the following data creates the journal entry shown below:
  - o   The price in the *Initial Quantity* window is 120.
  - o   The standard price of the item is 100.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13300000-01-001-01	Initial Inventory		$ 120.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
3	52600000-01-001-01	Variance	$ 20.00	
			$ 120.00	$ 120.00

The amount of the debited inventory account is calculated by multiplying the quantity of each item by the standard price of the item. The amount of the debited variance account is calculated by multiplying the quantity of each item by the difference between the price of the item and its standard price.

- A negative initial quantity creates the following journal entry

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	13300000-01-001-01	Initial Inventory	$ 100.00	
			$ 100.00	$ 100.00

The amounts in the *Debit* and *Credit* columns are calculated by multiplying the quantity of each item by its standard price.

- A positive inventory posting, where the counted quantity is greater than the quantity in stock, with the following data, creates the journal entry shown below:
  - o   The inventory difference price is 120.
  - o   The standard price of the item is 100.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	52300000-01-001-01	Inventory Offset		$ 120.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
3	52600000-01-001-01	Variance	$ 20.00	
			$ 120.00	$ 120.00

The amount of the debited inventory account is calculated by multiplying the quantity of each item by the standard price of the item. The amount of the debited variance account is calculated by multiplying the quantity of each item by the difference between the price of the item in the inventory posting and the standard price of the item.

- A negative inventory posting creates the following journal entry:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	52300000-01-001-01	Inventory Offset	$ 100.00	
			$ 100.00	$ 100.00

The amounts in the *Debit* and *Credit* columns are calculated by multiplying the quantity of each item by its standard price.

4.3.4.5 Landed Costs

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

4.3.4.6 Production

In a production order for a production bill of materials item, the parent item price is calculated according to the standard price of its child items. You cannot change this price.

In the following examples, both the parent and child items are defined with the *Standard* valuation method.

The two methods for issuing items in production orders are manual and backflush. For more information, see the online help for SAP Business One.

- Manual

  With this method, you should document the receipt of the parent item and the release of the child items.

  o Issue for production

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	13200000-01-001-01	WIP Inventory	$ 100.00	
			$ 100.00	$ 100.00

  The amounts in the debit and credit columns are calculated by multiplying the quantity of each child item by its standard price and summing the resulting product for all child items.

  o Receipt from production

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13200000-01-001-01	WIP Inventory		$ 100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

If there is a defined standard price for the parent item, the amounts in the *Debit* and *Credit* columns are calculated by multiplying the quantity of the parent item by its standard price. If no standard price is defined for the parent item, the amounts in the *Debit* and *Credit* columns are calculated by multiplying the quantity of each child item by its item cost and summing the resulting product for all child items.

i **Note**

If the item cost of the parent item is different from the total value of its child items, an additional journal entry is recorded for the price difference:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	⇨ 13200000-01-001-01	WIP Inventory	$ 50.00	
2	⇨ 52500000-01-001-01	WIP Inventory Variances		$ 50.00
			$ 50.00	$ 50.00

For example, the parent item comprises 1 child item with a quantity of 2. The cost of a child item is 100, and the cost of the parent item is 200.

During the issue for production, the journal entry created for the release of the child items is calculated as 2X100 = 200. This value is saved in the *Actual Component Cost* field on the *Summary* tab of the *Production Order* window.

During the receipt from production, the parent item's cost is changed to 250. This value is saved in the *Actual Product Cost* field on the *Summary* tab of the *Production Order* window.

When the production order is closed, the difference between the costs [250 minus 200 = 50] is recorded in the WIP inventory variance account, while the WIP inventory account is cleared.

- Backflush

  With this method, when the production order is completed, the inventory account of the parent item warehouse is debited and the inventory account of the child warehouse is credited. The release/receipt price is set by the standard prices of the child items.

  With this method, there is no issue for production; however, the above 2 journal entries are always created.

4.3.4.7   Working with Negative Inventory

If the item quantity in stock is negative, the journal entry recorded by the creation of a receipt inventory is not different from one that is recorded when the item's in-stock quantity is positive.

5 Perpetual Inventory System by FIFO

5.1 Overview

With the FIFO method, the first unit added to the inventory is the first to be sold.

The inventory comprises FIFO layers. Each layer contains the following information:

- The entry date of the layer
- The item cost for that layer
- The open quantity – the number of items in the layer

  When this number is 0, the layer is closed.

- The open value – the product of the item cost of the layer and its open quantity

Each inventory receipt transaction creates a new layer. Each inventory release transaction uses quantities and their corresponding costs from the first open layers. A layer closes when its entire quantity is released. When several inventory receipt transactions are recorded on the same date, SAP Business One identifies the first layer, second layer, and so on, according to their entry sequence.
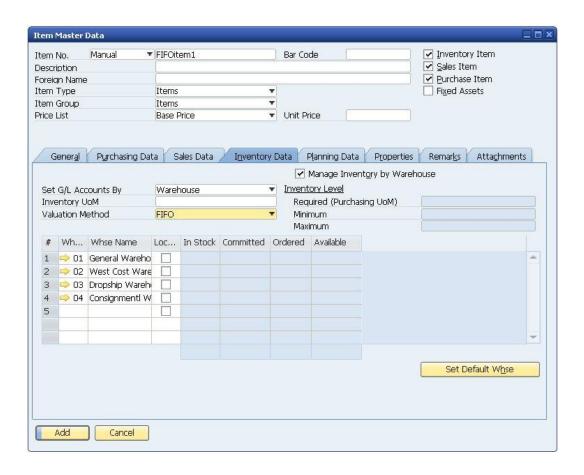
5.2 Defining Item Cost When Using FIFO Valuation Method

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Item Master Data* → *Inventory Data* tab.
2. Create a new item.
3. From the *Valuation Method* dropdown list, choose FIFO.

   The default valuation method of a new item is taken from its linked item group. For information, see *Defining Item Groups*

   i Note

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

The *Manage Inventory by Warehouse* checkbox is deselected by default and the inventory quantity is managed for all warehouses together. If you want to manage inventory quantity by warehouse, select this checkbox.

4. Choose the *Add* button.

5.3 Examples of Journal Entry Structures When Using the FIFO Valuation Method

Prerequisites

The following prerequisites apply for all the described examples:

- The business partner is tax exempted.
- The initial settings were defined as follows:
  - o In the *Company Details* window, on the *Basic Initialization* tab:
    - o The *Use Purchase Accounts Posting System* checkbox is deselected.
    - o The *Use Negative Amount for Reverse Transaction* is selected.
  - o The G/L accounts set for the items are by warehouse. For information, see *Defining Item Defaults*.
- The G/L account code and name, '13400000-01-001-01', *'Inventory – Finished Goods'* relates to the release/receipt of items from/to warehouse 01.
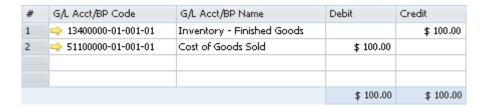
There are sufficient quantities in stock of all the items involved in the following scenarios.

5.3.1 Sales Documents

The following examples refer to the scenario in which the item cost in the first open layer is 100, and in each example only one unit is sold.

5.3.1.1 Delivery and Delivery Based on Return

The following journal entry is created automatically when you add a delivery:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	51100000-01-001-01	Cost of Goods Sold	$ 100.00	
			$ 100.00	$ 100.00

The total amount is the result of the cost in the first open layer multiplied by the quantity in the delivery document.

5.3.1.2 Return and Return Based on Delivery

The following journal entry is created automatically when you add a return:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13500000-01-001-01	Sales Returns		$ -100.00
2	51100000-01-001-01	Cost of Goods Sold	$ -100.00	
			$ -100.00	$ -100.00

- When a return is based on a delivery or an A/R invoice, it takes the item price from the base document. The return opens a new layer immediately following the original layer; the cost of the return is based on the cost of the original layer.

- When a return is not based on a delivery or an A/R invoice, the cost of the first open layer is used for calculating the amounts in the journal entry. The return opens a new layer that functions as the last open layer on the list. For more information on similar examples, see the document *Enhancements in Inventory Management* in Release 8.8 & 8.81 in the documentation area of SAP Business One Customer Portal at http://service.sap.com/smb/sbocustomer/documentation.

- If the first transaction for an item is a return, then the cost and transaction values are zero.

5.3.1.3   A/R Invoice Based on Delivery

When basing an A/R invoice on a delivery, no inventory posting is created; thus, only a regular journal entry is created in the accounting system.

5.3.1.4   A/R Invoice

The following journal entry is created automatically when you add an A/R invoice that is not based on a delivery:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	C1	Customer 1	$ 100.00	
2	22240000-01-001-01	Sales Tax Accrual		$ 0.00
3	41100000-01-001-01	Sales Revenues - Domestic		$ 100.00
4	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
5	51100000-01-001-01	Cost of Goods Sold	$ 100.00	
			$ 200.00	$ 200.00

i   Note

This journal entry includes both the delivery's inventory transaction and the invoice's accounting transaction.

5.3.1.5   A/R Credit Memo Based on a Return

When you base an A/R credit memo on a return, no inventory posting is created; thus, only a regular credit journal entry is created in the accounting system.

5.3.1.6   A/R Credit Memo

The following journal entry is created automatically when you add an A/R credit memo:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	C1	Customer 1	$ -100.00	
2	22240000-01-001-01	Sales Tax Accrual		$ 0.00
3	41100000-01-001-01	Sales Revenues - Domestic		$ -100.00
4	13500000-01-001-01	Sales Returns		$ -100.00
5	51100000-01-001-01	Cost of Goods Sold	$ -100.00	
			$ -200.00	$ -200.00

- When an A/R credit memo is based on an A/R invoice, the cost of the A/R invoice is used for calculating the amounts in the journal entry. The A/R credit memo opens a new layer immediately following the original layer and the A/R credit memo bases its costs on the original layer.

- When a credit memo is not based on an existing document, the cost of the first open layer is used for calculating the amounts in the journal entry. This A/R credit memo opens a new layer, which functions as the last open layer on the list.

    i **Note**

    This scenario is not relevant for an A/R credit memo based on an A/R reserve invoice.

- If an A/R credit memo is the first transaction for the item, the cost and the transaction values are zero.

5.3.2   Purchasing Documents

In some of the following examples, the G/L accounts and the directions (debit/credit) in the journal entry remain as they are; however, the amounts may vary according to the origin of the document, as follows:

- A document that is not based on an existing document
- A document based on a document representing an open layer
- A document based on a document representing a closed layer

    i **Note**

    SAP Business One may use several of the first open layers. This depends on the open quantities in each layer and the quantity in each document.

5.3.2.1   Goods Receipt PO

The following journal entry is created automatically when you add a goods receipt PO:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ 100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

A new layer of quantity and cost is created when you add a goods receipt PO.

The allocation account functions as a temporary alternative for the vendor and is cleared only after you create a corresponding A/P invoice.

5.3.2.2 Goods Receipt PO with Freight

The following journal entry is created automatically when you add a goods receipt PO with freight:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	➡ 23400001-01-001-01	Allocation		$ 100.00
2	➡ 23600000-01-001-01	Expense Clearing		$ 10.00
3	➡ 13400000-01-001-01	Inventory - Finished Goods	$ 110.00	
			$ 110.00	$ 110.00

The freight amount recorded in the journal entry is the global amount of freight for the entire quantity. The expenses clearing account is a clearing account recorded counter to the inventory account.

5.3.2.3 Goods Return

The following journal entry is created automatically when you add a goods return:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	➡ 23400001-01-001-01	Allocation		$ -100.00
2	➡ 13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
			$ -100.00	$ -100.00

This journal entry is identical to the entry created by the goods receipt PO, only reversed.
- When a goods return is based on a goods return PO, there are two possibilities:
  - o If the layer created by the goods receipt PO is still open, the goods receipt PO cost is used for calculating the journal entry amounts and the layer is then closed. This means the open quantity and the open value of the layer become zero.
  - o If the layer created by the goods receipt PO was closed, the cost of the first open layer is used for calculating the amounts in the journal entry. Then, the open quantity and the open value of the layer are decreased.
- When a goods return is not based on an existing goods receipt PO, the cost of the first open layer is used for calculating the amounts in the journal entry, regardless of the prices in the document.

5.3.2.4 Goods Return with Freight

The following journal entry is created automatically when you add a goods return with freight:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	23400001-01-001-01	Allocation		$ -100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
			$ -100.00	$ -100.00

- When a goods return is based on a goods receipt PO and the layer created by the goods receipt PO is still open, the goods receipt PO cost is used for calculating the journal entry amounts and the layer is closed.

- When a goods return is not based on an existing goods receipt PO, the cost of the first open layer is used for calculating the amounts in the journal entry, regardless of the prices in the document.

  The goods return behaves like a release document; therefore, the freight does not affect the inventory value.

5.3.2.5 A/P Invoice Based on a Goods Receipt PO

When you base an A/P invoice on a goods receipt PO, the allocation account is debited counter to the vendor account, which is credited:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ 100.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 100.00	
			$ 100.00	$ 100.00

ℹ Note

The allocation account functions as a clearing account. In this example, it is debited by the amount in which it was credited in the goods receipt PO.

5.3.2.6 A/P Invoice Based on a Goods Receipt PO with Freight

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ 110.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 100.00	
4	23600000-01-001-01	Expense Clearing	$ 10.00	
			$ 110.00	$ 110.00

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ 100.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

5.3.2.7   A/P Invoice

The following journal entry is created automatically when you add an A/P invoice not based on a goods receipt PO:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ 110.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ 110.00	
			$ 110.00	$ 110.00

A new layer of quantity and cost is created as you add an A/P invoice.

5.3.2.8   A/P Invoice with Freight

The expenses clearing account is not recorded in this journal entry since the inventory account reflects the item prices, including freight. As mentioned earlier, the expenses clearing account is a clearing account, and this journal entry recorded the final values for affecting the inventory valuation. Therefore, no intermediate accounts are recorded here.

5.3.2.9   A/P Credit Memo

- An A/P credit memo based on an A/P invoice:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ -100.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
			$ -100.00	$ -100.00

- o If the layer created by the A/P invoice is still open, the A/P invoice cost is used for calculating the journal entry amounts, and the layer is closed.
  - o If the layer created by the A/P invoice is closed, the first open layer's cost is used for calculating the amounts in the journal entry. Then, the open quantity and the open value of the layer are decreased.
- An A/P credit memo based on a goods return:

  When you base an A/P credit memo on a goods return, the allocation account is debited counter to the vendor's account, which is credited:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor 1		$ -100.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ -100.00	
			$ -100.00	$ -100.00

- An A/P credit memo that is not based on an existing document:

  The cost of the first open layer is used for calculating the amounts in the journal entry, regardless of the prices in the document. If the price in the A/P credit memo differs from the cost of the first open layer, this price difference is recorded in the price difference account.

  In the following example, the cost of the first open layer is 100, and the item price in the document is 80.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ -80.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	13400000-01-001-01	Inventory - Finished Goods	$ -100.00	
4	52400000-01-001-01	Price Difference	$ 20.00	
			$ -80.00	$ -80.00

5.3.2.10 A/P Credit Memo with Freight

Since this is an inventory release document, the journal entry is similar to a regular A/P credit memo and, therefore, freight does not affect the inventory valuation.

5.3.3 Special Scenarios for A/P Documents

i Note

In scenarios in which one document is based on another, the quantity has been fully copied to the target document.

5.3.3.1 A/P Invoice Based on a Goods Receipt PO – Exchange Rate Differences

A difference in the local currency amount results from the following situation:

- You create an A/P invoice for a foreign currency vendor based on a goods receipt PO.
- In the invoice, the item price is defined with a foreign currency.
- The A/P invoice is connected to a different exchange rate than the one defined for the goods receipt PO.

In the following example, the local currency for your company is US dollars. A goods receipt PO was created for Foreign Vendor1, whose currency is the euro. The goods receipt PO contains the following information:

- The posting date is July 1st. The exchange rate for that day is 1.
- 2 units of Item1 are managed by the FIFO valuation method.
- The item price in the document is EUR 100.

On July 11th, an A/P invoice was created for the vendor, based on the goods receipt PO from July 1st. The exchange rate on that day is 2.

The three possible scenarios for this situation are as follows:

- The layer created by the goods receipt PO is fully open.

  Since the actual inventory valuation changes in this situation, the inventory account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit (FC)	Credit (FC)	Debit	Credit
1	FC_V	Foreign Vendor		EUR 200.00		$ 400.00
2	66000000-01-001-01	Sales Tax Expense	EUR 0.00		$ 0.00	
3	23400001-01-001-01	Allocation	EUR 100.00		$ 200.00	
4	13400000-01-001-01	Inventory - Finished Goods	EUR 100.00		$ 200.00	
			EUR 200.00	EUR 200.00	$ 400.00	$ 400.00

- The layer created by the goods receipt PO is fully closed.

  Since there is no open quantity in the layer and the actual inventory valuation does not change in this situation, the exchange rate differences account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit (FC)	Credit (FC)	Debit	Credit
1	FC_V	Foreign Vendor		EUR 200.00		$ 400.00
2	66000000-01-001-01	Sales Tax Expense	EUR 0.00		$ 0.00	
3	23400001-01-001-01	Allocation	EUR 100.00		$ 200.00	
4	81600000-01-001-01	Exchange Rate Diff.	EUR 100.00		$ 200.00	
			EUR 200.00	EUR 200.00	$ 400.00	$ 400.00

- The layer created by the goods receipt PO is partially opened.

  Since the actual inventory valuation changes only for the existing quantity in stock, the inventory account is affected by the existing quantity and the exchange rate differences account is affected by the remaining quantity.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit (FC)	Credit (FC)	Debit	Credit
1	➡ FC_V	Foreign Vendor		EUR 200.00		$ 400.00
2	➡ 66000000-01-001-01	Sales Tax Expense	EUR 0.00		$ 0.00	
3	➡ 23400001-01-001-01	Allocation	EUR 100.00		$ 200.00	
4	➡ 13400000-01-001-01	Inventory – Finished Goods	EUR 50.00		$ 100.00	
5	➡ 81600000-01-001-01	Exchange Rate Diff.	EUR 50.00		$ 100.00	
			EUR 200.00	EUR 200.00	$ 400.00	$ 400.00

5.3.3.2   A/P Invoice Based on a Goods Receipt PO – Price Differences

When you copy a goods receipt PO to an A/P invoice, there might be a difference between the item prices recorded in the goods receipt PO and their prices in the A/P invoice.

In the following example, a goods receipt PO was created for 1 unit of Item1 and its price was 100. In an A/P invoice based on that goods receipt PO, the price was changed to 150.

The three possible scenarios for this situation are as follows:

* The layer created by the goods receipt PO is fully open.

   Since the actual inventory valuation changes in this situation, the inventory account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	➡ V1	Vendor1		$ 150.00
2	➡ 66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	➡ 23400001-01-001-01	Allocation	$ 100.00	
4	➡ 13400000-01-001-01	Inventory – Finished Goods	$ 50.00	
			$ 150.00	$ 150.00

* The layer created by the goods receipt PO is fully closed.

   Since there is no quantity in stock and the actual inventory valuation does not change in this situation, the price difference account is affected accordingly.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	➡ V1	Vendor1		$ 150.00
2	➡ 66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	➡ 23400001-01-001-01	Allocation	$ 100.00	
4	➡ 52400000-01-001-01	Price Difference	$ 50.00	
			$ 150.00	$ 150.00

* The layer created by the goods receipt PO is partially opened.

In this example, the goods receipt PO was created for 2 units of Item1. Since the actual inventory valuation changes only for the existing quantity in stock, the inventory account is affected by the existing quantity and the price difference account is affected by the remaining quantity.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	V1	Vendor1		$ 300.00
2	66000000-01-001-01	Sales Tax Expense	$ 0.00	
3	23400001-01-001-01	Allocation	$ 200.00	
4	13400000-01-001-01	Inventory - Finished Goods	$ 50.00	
5	52400000-01-001-01	Price Difference	$ 50.00	
			$ 300.00	$ 300.00

5.3.3.3 Closing a Goods Receipt PO or a Goods Return

When you close a goods receipt PO or a goods return, no inventory posting is registered; however, a journal entry is created to clear the allocation costs account:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13900000-01-001-01	Goods Clearing		$ -100.00
2	23400001-01-001-01	Allocation	$ -100.00	
			$ -100.00	$ -100.00

i Note

o The above scenario is applied whether or not the goods return includes freight.

o When a goods receipt PO is closed, the amounts are the same as when a goods return is closed, but each amount appears with a positive sign.

o To close a goods receipt PO or a goods return, right-click the window and choose *Close*, or use the *Data* menu.

5.3.3.4 Closing a Goods Receipt PO with Freight

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13900000-01-001-01	Goods Clearing		$ 110.00
2	23400001-01-001-01	Allocation	$ 100.00	
3	23600000-01-001-01	Expense Clearing	$ 10.00	
			$ 110.00	$ 110.00

5.3.4 Inventory Transactions

5.3.4.1 Goods Receipt

The following journal entry is created automatically as a result of adding a goods receipt:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	52300000-01-001-01	Inventory Offset		$ 100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

The inventory offset increasing account is credited and a new layer is created according to the price specified in the document.

5.3.4.2 Goods Issue

The following journal entry is created automatically as a result of adding a goods issue:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	52300000-01-001-01	Inventory Offset	$ 100.00	
			$ 100.00	$ 100.00

The inventory offset decreasing account is debited according to the first open layers.

5.3.4.3 Inventory Transfer

If you select different inventory accounts for your different warehouses, the inventory transfer transaction credits the inventory account of the release warehouse and debits the inventory account of the receipt warehouse. The release/receipt price is set by the first open layers linked to the release warehouse.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	13410000-01-001-01	Inventory - Finished Goods 2	$ 100.00	
			$ 100.00	$ 100.00

When creating an inventory transfer and the item price is taken from a layer that is not the latest layer, the layer that is created for reflecting the inventory transfer is added right after the original layer. This behavior applies regardless of whether or not item cost is managed per warehouse.

5.3.4.4 Entering Initial Quantities and Inventory Postings

- A positive initial quantity creates the following journal entry:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	➡ 13300000-01-001-01	Initial Inventory		$ 100.00
2	➡ 13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

A new layer is created according to the price entered in the *Initial Quantity* window.

- A negative initial quantity creates the following journal entry:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	➡ 13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	➡ 13300000-01-001-01	Initial Inventory	$ 100.00	
			$ 100.00	$ 100.00

The cost of the first open layer is used.

ℹ **Note**

- o If the *Allow Initial Quantities without Price* checkbox is selected and no price is entered for the items, it is not necessary to specify an opening inventory account. Notice that no monetary transaction is created in the accounting system in this scenario.
- o If you would like to record initial quantities including price, you must choose an opening inventory G/L account manually.

- A positive inventory posting update creates the following journal entry:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	➡ 52300000-01-001-01	Inventory Offset		$ 100.00
2	➡ 13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

A new layer is created according to the price recorded in the *Inventory Posting* window.

- A negative inventory posting update (where the counted quantity is less than the existing quantity) creates the following journal entry:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13400000-01-001-01	Inventory - Finished Goods		$ 100.00
2	52300000-01-001-01	Inventory Offset	$ 100.00	
			$ 100.00	$ 100.00

The price of the first open layer is used.

5.3.4.5 Landed Costs

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

5.3.4.6 Production

In a production order for a production bill of materials item, a new layer of costs is created for a parent item. The cost of the parent item is calculated as the total FIFO prices of its child items multiplied by the quantity.

In the following examples, both the parent and child items are defined with FIFO as their valuation method.

The two methods for issuing items in production orders are manual and backflush. For more information, see the online help for SAP Business One.

- Manual

    With this method, you should document the parent item's receipt and the child item's release.

    Issue for production:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13200000-01-001-01	WIP Inventory		$ 100.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 100.00	
			$ 100.00	$ 100.00

    The receipt from production opens a new layer for the parent item. The item cost of this new layer is calculated by summing the item costs in the first open layers for the child items.

    The amounts in the *Debit* and *Credit* columns are calculated by multiplying the quantity of each child item by its cost in the first open layers and summing the product for all child items.

    i Note

    When you close a production order, if there is a difference between the actual component cost and the actual product cost, an additional journal entry is recorded for the price difference

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	13200000-01-001-01	WIP Inventory		$ 50.00
2	52500000-01-001-01	WIP Inventory Variances	$ 50.00	
			$ 50.00	$ 50.00

For example, the parent item comprises 1 child item with a quantity of 2.

You receive the product before issuing the child item. During the receipt from production, the price of the child item is 10 in the next open layer. Therefore, the value in the *Actual Product Cost* field on the *Summary* tab of the *Production Order* window is 10 X 2 = 20.

During the issue for production, the price of the child item is 35 in the next open layer. The journal entry created for the child item release was calculated as 2 X 35 = 70. This value is saved in the *Actual Component Cost* field on the *Summary* tab of the *Production Order* window.

When the production order is closed, the difference between the costs [2 X (10 minus 35) = -50] is recorded in the WIP inventory variance account, while the WIP inventory account is cleared.

- Backflush

    With this method, when the production order is completed, the inventory account of the parent item's warehouse is debited and the inventory account of the child items' warehouse is credited according to the FIFO prices of the child items. With this method, there is no issue for production; however, the above 2 journal entries are always created.

5.3.4.7 Working with Negative Inventory

When the in-stock quantity of an item is negative or zero after a release or a receipt transaction, the following occurs:

- All FIFO layers of this item are closed.
- As long as the inventory level is negative, any inventory transaction does not create a new FIFO layer.
- The price of released items is taken from the last purchasing/receiving price before the stock is zeroed.

When the in-stock quantity of an item becomes positive as a result of the addition of a new receipt transaction, two FIFO layers are created for this item. The first layer records the quantity required to bring the stock balance to zero. This layer is closed. The second layer records the remaining quantity of the receipt transaction and functions as the first open layer for future FIFO transactions.

For example: An item's stock balance is (-4). Since the in-stock of the item is negative, there are no open layers. The item cost in this case is 100.

A quantity of 10 was recorded as a receipt transaction with a price of 150 per unit.

As a result of this transaction, two FIFO layers are created:

1. The first layer, which is required to bring the stock balance to zero, is for the quantity of 4 and is closed.
2. The second layer is for the remaining quantity of 6 and functions as the first open layer of this item. The item cost of this layer is 150.

The FIFO item price cannot be changed through material evaluation as long as the item is in the negative zone.

6 Handling Small Values

In previous SAP Business One releases, there are certain unexpected scenarios involving items with small values.

Example

Valuation Method: Standard Price

Display settings:

o   Prices: four digits after the decimal

o   Amounts: two digits after the decimal

Doc.	Quantity	Cost	Transaction Value	Cumulative Quantity	Cumulative Value
GRPO	3	3.3333	10.00	3	10.00
Goods Return	-1	3.3333	-3.33	2	6.67
Goods Return	-1	3.3333	-3.33	1	3.34
Goods Return	-1	3.3333	-3.33	0	0.01

In this example, the item quantity turns zero, but the inventory value remains positive.

As of SAP Business One 8.8, the system has functionality that helps avoid inaccuracy with all three valuation methods.

6.1 Handling Small Values for All Valuation Methods

To avoid inconsistencies between the inventory quantity and the inventory value, SAP Business One has a system for handling small value items for all three valuation methods.

SAP Business One keeps track of inventory value and inventory quantity, and detects if a transaction brings the inventory quantity to zero. If the inventory quantity is zeroed, the system recalculates the item cost, if necessary, to make a decimal rounding and consequently zero the inventory value.

Example

Valuation Method: Moving Average Price

Display settings:

o   Prices: four digits after the decimal

o   Amounts: two digits after the decimal

Doc.	Quantity	Cost	Transaction Value	Cumulative Quantity	Cumulative Value
GRPO	3	0.3333	1	3	1.00

Doc.	Quantity	Cost	Transaction Value	Cumulative Quantity	Cumulative Value
Delivery	-1	0.3333	-0.33	2	0.67
Delivery	-1	0.3333	-0.34	1	0.33
Delivery	-1	0.3333	-0.33	0	0.00

The inventory account is credited in the amount of 0.34 at the second delivery transaction, and the G/L account is fully cleared when the quantity in stock is zero.

The following is the journal entry for the second delivery:

G/L Account	Debit	Credit
Inventory Account		0.34
Cost of Goods Sold Account	0.34	

7 Updating Valuation Methods

SAP Business One lets you change the valuation method of an item. However, that is possible only as long as the item is not linked to any open documents and its in-stock quantity is zero.

Use the *Inventory Valuation Method* and the *Update Valuation Method* windows to update the valuation method of your items.

> **i** Note
>
> You can change the valuation method manually for each item separately using the *Item Master Data* window. For more information, see the following:
>
> o *Defining Item Cost When Using Moving Average Valuation Method*
>
> o *Defining Item Cost when Using the Standard Price Valuation Method*
>
> o *Defining Item Cost When Using FIFO Valuation Method*

Procedure

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Item Management* → *Inventory Valuation Method.*

    The *Inventory Valuation Method* window opens

2. Specify the following information to be used as selection criteria for items to include in the update:

Field/Button	Activity/Description
Item No. From ... To	Specify the range of items to be included in the update.
Group	Select a specific item group or *All* for all item groups.
Item Properties	Lets you specify item properties.
Default Valuation Method	Enter the new inventory valuation method for the selected range of items. The selected method is displayed by default for all items in the *New Method* field in the *Update Valuation Method* window, but can be changed manually.

3. To proceed, choose the *OK* button.

    The *Update Valuation Method* window opens.

The window displays items from the selected range. The items are displayed only if their in-stock quantity is zero and they have no open documents.

4. View or specify the following information:

Field	Activity/Description
Approved	Approves the method update.
Item Number	The item code.
Item Description	The item description.
Current Method	The item's current valuation method is displayed.
New Method	If required, choose a different valuation method.

5. To apply the changes, choose the *Update* button.

8 Revaluing the Inventory

If your company manages a perpetual inventory system, you might need to perform inventory revaluation. Use any of the supported valuation methods: moving average, standard, and FIFO.

You can revaluate inventory values by:

- *Price Change* - Changes the price for a specific item

  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 quantity of inventory

  The quantity of inventory remains unchanged, resulting in a change in the price.

When inventory is subject to FIFO control and there are items in the FIFO layer, an inventory debit or credit results in a posting to the inventory account. If the FIFO layer is empty, the posting goes to the price difference account.

> **i** Note
>
> You cannot perform inventory revaluation if any item involved has a negative value.

Procedure

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

2. View or specify the following data in the general area:

Field/Checkbox	Activity/Description
Number	Displays the number of the inventory revaluation document. The system assigns the numbers automatically and consecutively. You cannot change this number.
Series	Select the required numbering series for the document.

Revaluation Type	In the dropdown list, choose the required revaluation type:
	
	• *Price Change*
	  Choose to change the cost of the item and calculate the value of the whole inventory according to the new price.
	
	• *Inventory Debit/Credit*
	  Choose to revaluate by changing the inventory value, which causes the item cost to change accordingly.

Posting Date	Date on which the document that changed the inventory was posted. Displays by default the current date for the inventory revaluation. You can change this date if necessary.
Document Date	Displays by default the current date for the inventory revaluation. You can change this date if necessary.
Ref. 2	Enter a reference for the journal entry, if required.
Remarks	Enter any additional information regarding the revaluation.
Journal Remark	By default *Inventory Revaluation* is displayed. This text is copied to the journal entry.

3. To revaluate the cost of the item, in each row of the table, in the *Item No.* field or in the *Item Description* field, specify the item number. You can add as many items as you want to the table.

   In the upper table, view or change the following information:

Field/Button	Activity/Description
Item No.	The item number.
Item Description	The item description.

Whse	Displays the default warehouse as defined in your company.
	
	If you manage the item cost per warehouse, changes for the item cost are applied for the specified warehouse.
	
	   i **Note**
	
	   The following applies if you set the G/L account for an item by warehouse or item level:
	
	   If you do not manage item cost per warehouse, but you have a different account for each warehouse, the difference between the old and the new price is debited to the inventory account of the warehouse you have specified in this field. This is also reflected in the inventory audit report.

Field/Button	Activity/Description
	For more information, see *Defining Item Defaults.*
Current Cost	Displays the current average or standard cost of the item. This field appears only if the selected revaluation type is *Price Change.*
New Cost	Enter the new cost you wish to assign to the item. This field appears only when the selected revaluation type is *Price Change.* For FIFO inventory items the field is blank.
Unit of Measure	Displays the type of unit by which you manage the inventory, for example, box, carton, or case.
Quantity	Enter the quantity of inventory item subject to debit/credit.
Debit/Credit	Enter the amount you wish to credit or debit from the current inventory value of the item. Enter credit as a negative value. The negative/positive amounts depend on the *Display Credit Balance with Negative Sign* checkbox selection (*Administration → System Initialization → Company Details → Basic Initialization* tab). This field appears only if the selected revaluation type is *Inventory Credit/Debit*.
In Stock	The total quantity in stock.
Issued Layers	Select to display all layers (including empty layers) for the item in the FIFO Layers table. The column appears only for FIFO items, if the selected revaluation type is *Inventory Credit/Debit*.
G/L Increase Acct, *G/L Decrease Acct*	Specify the G/L accounts to be used as the balancing accounts in the transaction created by the revaluation. The accounts appear as default in these fields and are taken from the item master data, item group, or warehouse level. • The G/L Increase Acct is used when the inventory value is increased due to the revaluation. • The G/L Decrease Acct is used when the inventory value is decreased.
Val. Method	Displays the valuation method. If the method is FIFO, additional information is displayed in the FIFO Layers table.
Distr. Rule	Enter the distribution rule/profit center to which the revenue resulting from the revaluation is allocated.

If the item's valuation method is FIFO, use the information in the *FIFO Layers* table to view and change the item cost for the different FIFO layers:

Field/Button	Activity/Description
Doc No.	Displays the document/transaction involved with the creation of the layer.
Entry Date	Displays the entry date of the document/transaction.
Current Cost	Displays the current cost of the *FIFO* inventory item from one particular layer.

Field/Button	Activity/Description
	This field appears only if the selected revaluation type is *Price Change*.
New Price	Price for the layer. This field appears only if the selected valuation type is *Price Change*.
Quantity	Enter the quantity of the inventory item's layer subject to debit/credit.
Debit/Credit	Enter the amount you wish to credit or debit from the current inventory value of the item's layer. Enter credit as a negative value. The negative/positive amounts depend on the *Display Credit Balance with Negative Sign* checkbox selection (*Administration → System Initialization → Company Details → Basic Initialization* tab). This field appears only if the selected revaluation type is *Inventory Credit/Debit*.
Open Qty	Displays the available quantity for the layer.

4. If you chose the *Price Change* revaluation type in the *Inventory Revaluation* window, in the *New Cost* field, enter the new item cost.

5. If you chose the *Inventory Debit/Credit* revaluation type, in the *Quantity* field, specify the quantity for which you would like to document a change in the inventory value.

The quantity specified does not change the quantity in stock and is used only for the recalculations of the item cost. For example, you know a price mistake was made in a certain receipt document and you want to specify the related quantity. The quantity in stock does not change, but the inventory value of the entire quantity is updated regardless of the quantity specified here.

i Note

If the amount in the *Quantity* field is greater than the *In Stock* quantity, the amount recorded in the journal entry is proportionally divided between the inventory and the price difference accounts (according to the item's valuation method and current in-stock quantity).

6. In the *Debit/Credit* field, enter the required cost. Enter a positive amount to debit the inventory account and a negative amount to credit it. The negative/positive amounts depend on the *Display Credit Balance with Negative Sign* checkbox selection (*Administration → System Initialization   Company Details   Basic Initialization* tab).

7. To post the inventory revaluation, choose the *Add* button.

Result

A journal entry is created which consists of a G/L increase or decrease account and the inventory account.

The G/L increase or decrease accounts are those defined for the item row in the *Inventory Revaluation* window.

When the selected revaluation type is by *Price Change*, the amounts in the *Debit* and *Credit* columns are calculated by multiplying the in-stock quantity of the item by the delta between the current and the new item cost.

i Note

o If you manage the item by the FIFO valuation method, the item cost refers to the cost of the selected FIFO layer.

o If you manage the item cost per warehouse, the quantity affected is the quantity in the specified warehouse.

o If you manage the item cost per company, the quantity affected is the total in-stock quantity of all the company's warehouses.

For example, the in-stock quantity of Item1 is 6, and its cost is 50. You change the cost to 100. As a result the G/L increase account is credited by 300 = 6 X (100 minus 50).

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	52300000-01-001-01	Inventory Offset		$ 300.00
2	13400000-01-001-01	Inventory - Finished Goods	$ 300.00	
			$ 300.00	$ 300.00

When the selected revaluation type is by *Inventory Debit/Credit*, the amounts in the *Debit* and *Credit* columns are set according to the value in the *Debit/Credit* field. If the item is managed by the standard price method, the variance account replaces the inventory account.

When the selected revaluation type is by *Inventory Debit/Credit* for a partial quantity of a FIFO layer, the original layer is reduced by the revalued quantity, and a new layer is added for the revalued quantity and the revaluated price right after the original layer.

In addition, in the *Item Master Data* window, on the *Inventory Data* tab, the *Item Cost* field is updated.

8.1 Printing Inventory Revaluation Documents

SAP Business One lets you print inventory revaluation documents using default printing layouts.

1. From the SAP Business One *Main Menu*, choose *Inventory* → *Inventory Transactions* → *Inventory Revaluation*.
2. Find the relevant record.
3. From the *Tools* menu, choose *Print Layout Designer*, or click ✎ in the toolbar.
4. Choose the preferred printing layout.
5. Print the document.

> 🛈 Note
>
> You can edit the default layouts or create new ones by using Print Layout Designer (PLD). For more information about Print Layout Designer, 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.

9 Working with Inventory Audit Reports

9.1 Generating Inventory Audit Reports

The inventory audit report is available only for companies using the perpetual inventory system. It provides an audit trail for the posted inventory transactions in the chart of accounts.

Use this report to make comparisons between the accounting view (inventory balance accounts) and the logistics view (inventory value displayed by the audit report). The report explains the value changes in inventory accounts.
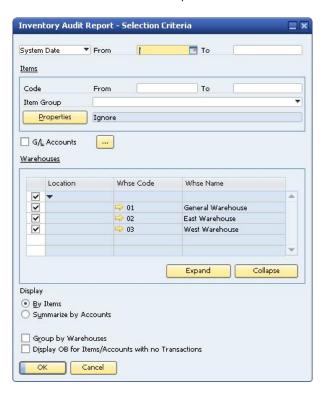
This report does not recalculate the item cost but displays the information from the database. In addition, only inventory related transactions are displayed in the report. Transactions with non-inventory items or drop-ship warehouses are not displayed.

> **i** Note
>
> To create what-if scenarios, use the inventory valuation simulation report.

Procedure

1. From the SAP Business One *Main Menu*, choose *Inventory → Inventory Reports → Inventory Audit Report*.
   The *Inventory Audit Report − Selection Criteria* window opens.

2. Specify the following data:

Field/Button	Activity/Description
Date From ... To	To check the item cost and value of particular transactions, select *System Date*. To compare the inventory account balance with the inventory audit report, select *Posting Date*. Specify the range of dates to include in the report. When running the inventory audit report by posting date and the posting date of a transaction falls within the defined range, but the system date falls outside the range, the report displays the row for this transaction in blue.
Code From ... To	Select the range of items to include in the report.
Item Group	Select a specific item group.
Properties	Lets you specify item properties.
G/L Accounts	Includes all accounts in the report. Click 〔⋯〕 (*Browse)* to specify which accounts to include in the report.
Warehouses	Select the checkbox of each warehouse to include in the report. Drop-ship warehouses do not appear in the list of warehouses. If you manage item cost on the company level and not for each warehouse individually, select all warehouses. Otherwise, when running the report, you might obtain incorrect results for the value of your inventory. For a scenario that causes incorrect results in the report, see *Moving Average*.
Display	Select one of the following: • *By Items* View and audit the results by items. • *Summarize by Accounts* View the information summarized by accounts.
Group by Warehouses	Group the items by warehouse. **i Note** This option is activated only if both of the following are true: o Your company has been defined to manage item cost by warehouse (the *Manage Item Cost per Warehouse* checkbox is selected in SAP Business One *Main Menu → Administration → System Administration → Company Details → Basic Initialization* tab). o You have selected the *By Items* radio button in the *Display* area. We recommend that you select this checkbox if you are managing item cost per warehouse. Otherwise, the inventory audit report may return unexpected results. If you are not running inventory cost by warehouse, this checkbox is not activated and the inventory audit report generates results for all the warehouses together.
Display OB for Items/Accounts	Displays the opening balances for items or accounts that have no transactions

Field/Button	Activity/Description
with no Transactions	posted in SAP Business One. 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. As a result, the report total displays the item valuation from the end date of the defined date range - that is, it contains both the opening balance figures and the transactions that are within the defined date range.

3. To generate the report, choose the *OK* button. The inventory audit report opens.

This report displays the total inventory value for the items according to the configured selection criteria. The fields that appear in the report depend on whether you selected *By Items* or *Summarize by Accounts* as the display option.

To display detailed information of the inventory transactions or a summary on the item level, use the *Expand* and the *Collapse* icons and buttons.

In the expanded view, the text color of each transaction changes as follows:

o Red text

If the transaction causes the cumulative quantity or the cumulative value to fall below zero, the text color of those fields is red.

o Blue text

When you run the Inventory Audit report by posting date, if the transaction's system date deviates from the posting date range, the text color of its row is blue.

4. View the following information:

Field	Activity/Description
General Area	
Date From ... To	Displays start and end dates for the report calculations, as defined in the selection criteria. The report is sorted by either the posting date or the system date. When the posting date in some documents differs from the system date, sorting the report by posting date can lead to misleading results in some cases.

Field	Activity/Description
Currency	Displays the company's local currency.
Items	Displays the range of items included in the report, as defined in the selection criteria. If nothing was defined in the selection criteria for the item, the field displays *All*. If more than one type of criteria was selected, the field displays *Multiple*. This field is displayed only if you selected the *By Items* checkbox in the selection criteria.
Warehouses	Displays the warehouses included in the report, as defined in the selection criteria. If all warehouses were selected, the field displays *All.* This field is displayed only if you selected the *By Items* checkbox in the selection criteria.
Accounts	Displays the range of accounts to be included in the report, as defined in the selection criteria. This field is displayed only if you selected the *Summarize by Accounts* checkbox in the selection criteria.
Table Area	
Item No.	The item code.
Description	The description of the item code, as defined in the item master data.
G/L Account	The account number.
System Date	The system date of the transaction creation.
Posting Date	The posting date of the transaction.
Document	Displays the abbreviated name of the document. To view the journal entry of the transaction, click ➡ (*Link Arrow*).
Whse	The warehouse in which the transaction occurred.
Quantity	The quantity of the item in the transaction. A positive quantity refers to a receipt transaction, while a negative quantity refers to a release transaction.
Cost	Displays the cost of the item in the transaction.
Trans. Value	Displays the value that was posted to the inventory account.
Cumulative Qty	Displays the total quantity in stock after the transaction. At the summary levels (by G/L account or by item), it summarizes the quantities from the lower levels up to the report end date.
Cumulative Value	Displays the total value of inventory after the transaction. At the summary levels (by G/L account or by item), it summarizes the values from the lower levels up to the report end date. The bottom of the report displays the cumulative value for all the items in the report.
Valuation Meth.	The current valuation method of the item.

> **i** Note
>
> Some of the fields in the report are not visible by default. To show them in the Inventory Audit report, click
> 🔧 (*Form Settings*).

> **i** Note
>
> Since the valuation method for an item can be changed, the method in the *Valuation Meth.* field does not
> necessarily reflect the valuation method by which the item cost was calculated.
>
> Note that the valuation method can be changed only when the cumulative quantity of an item is zero.

5. To close the report, choose the *OK* button.

9.2 Examples of Inventory Audit Reports for Different Calculation Methods

The following examples describe how SAP Business One generates the Inventory Audit report.

9.2.1 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 contains 5 items with an item price of 20. The total cost is 100 = 5 X 20.
  - The second goods receipt PO contains 5 items with an item price of 10. The total cost is 50 = 5 X 10.

As a result, the cumulative quantity is 10 and the cumulative value is 150.

- The item cost applied when issuing from stock is calculated as the result of the cumulative value divided by the cumulative quantity: 15 = 150 / 10.
- A delivery of 3 items is added. Therefore, the total cost is -45 = -3 X 15.
- The inventory value after the delivery is added is the difference between the previous inventory value and the released transaction value: 105 = 150 − 45.

Document	Quantity	Cost	Trans. Value	Cumulative Qty	Cumulative Value
Opening Balance				0	0
Goods Receipt PO 1	5	20	100	5	100
Goods Receipt PO 2	5	10	50	10	150
Delivery 1	-3	15	-45	7	105

If you manage item cost on the company level and not for each warehouse individually, all warehouses must be selected in the *Inventory Audit Report – Selection Criteria* window. Otherwise, when running the report, you might obtain incorrect results for the value of your inventory.

The following example describes a scenario of incorrect results in the Inventory Audit report:

- Two goods receipt PO documents are added:

- o The first goods receipt PO contains 1 item with an item price of 10 received by warehouse 01. The total cost is 10 = 1 X 10.
- o The second goods receipt PO contains 1 item with an item price of 20 received by warehouse 02. The total cost is 20 = 1 X 20.

As a result, the cumulative quantity is 2 and the cumulative value is 30.

- The item cost applied when issuing from stock is calculated for all warehouses as the result of the cumulative value divided by the cumulative quantity: 15 = 30 / 2.
- A delivery of 1 item from warehouse 01 is added. Therefore, the total cost is -15 = -1 X 15.

In the *Inventory Audit Report – Selection Criteria* window, only warehouse 01 is selected. Therefore, the following incorrect results are displayed:

Document	Warehouse	Quantity	Cost	Trans. Value	Cumulative Qty	Cumulative Value
Opening Balance					0	0
Goods Receipt PO 1	01	1	10	10	1	10
Delivery 1	01	-1	15	-15	0	-5

When all warehouses are selected in the *Inventory Audit Report – Selection Criteria* window, the report displays the correct results:

Document	Warehouse	Quantity	Cost	Trans. Value	Cumulative Qty	Cumulative Value
Opening Balance					0	0
Goods Receipt PO 1	01	1	10	10	1	10
Goods Receipt PO 2	02	1	20	20	2	30
Delivery 1	01	-1	15	-15	1	15

9.2.2   Standard Price

Each receipt to stock or issue from stock uses the standard price as defined for the item in the item master data. For more information, see *Defining Item Cost when Using the Standard Price Valuation Method.*

- The standard price of the item is 20.
- Two goods receipt PO documents are added:
  - o The first goods receipt PO contains 5 items. The total cost is 100 = 5 X 20.
  - o The second goods receipt PO contains 3 items. The total cost is 60 = 3 X 20.

  As a result, the cumulative quantity is 8 and the cumulative value is 160.

- A delivery of 4 items is added. Therefore, the total cost is -80 = -4 X 20.
- The inventory value after the delivery was added is 80 = 160 − 80.

Document	Quantity	Cost	Trans. Value	Cumulative Qty	Cumulative Value
Opening Balance				0	0
Goods Receipt PO 1	5	20	100	5	100
Goods Receipt PO 2	3	20	60	8	160
Delivery 1	-4	20	-80	4	80

9.2.3 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 contains 5 items with an item price of 20. The total cost is 100 = 5 X 20. As a result, a first FIFO layer with item cost 20 is created.
  - The second goods receipt PO contains 5 items with an item price of 10. The total cost is 50 = 5 X 10. As a result, a second FIFO layer with item cost 10 is created.

  As a result, the cumulative quantity is 10 and the cumulative value is 150.
- A delivery of 3 units is added and consumes 3 units from the first FIFO layer. Therefore, the total cost is -60 = -3 X 20.
- A second delivery of 4 units is added. The first 2 units are consumed from the first FIFO layer and close it. The total cost is -40 = -2 X 20.

  The other 2 items are consumed from the second FIFO layer. The total cost is -20 = -2 X 10.
- The inventory value after the deliveries were added is 30 = 150 − 60 − 40 − 20

Document	Quantity	Cost	Trans. Value	Cumulative Qty	Cumulative Value
Opening Balance				0	0
Goods Receipt PO 1	5	20	100	5	100
Goods Receipt PO 2	5	10	50	10	150
Delivery 1	-3	20	-60	7	90
Delivery 2	-2	20	-40	5	50
Delivery 2	-2	10	-20	3	30

9.3 Cost of Revaluation Document in Inventory Audit Report

For any revaluation document – a document that changes an item cost, such as an A/P invoice based on a goods receipt PO, landed costs, material revaluation, and so on – the cost in the inventory audit report is the delta value divided by the relevant quantity.

9.4 Unexpected Results in Inventory Audit Report

9.4.1 Difference Between Inventory Audit Report and Inventory Account Balance

A difference between the inventory audit report and the inventory account balance may occur when the inventory account is used for a non-inventory related transaction, for example, a manual journal entry, payment, service type invoice and so on. In this case, you should eliminate the non-inventory related postings from the inventory account balance and then compare it to the inventory audit report.

9.4.2 Number of Records Returned Is Too Large

In some releases, there is an application limitation to display a certain number of records. If the number of the records that the inventory audit report needs to display exceeds the limitation, the system displays the following message: ''You have insufficient resources to complete this action. Select fewer records and try again. [Message 131-225].''

9.4.3 Unexpected Results Due to Particular Basic Initial Settings

- When using certain inventory audit report filters, misleading results can occur due to the basic initialization settings regarding item cost managing.
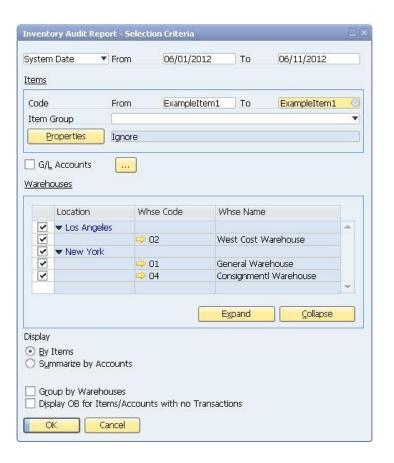
  Example
  - o Valuation Method: Moving Average Price
  - o Two different warehouses are defined for this item. The item has a different cost in each warehouses.
  - o The *Manage Item Cost per Warehouse* checkbox in the *Company Details* window is selected.

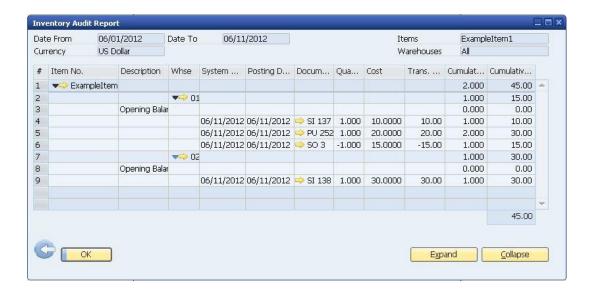The following transactions have been created for this item:

No.	Document Type	Item Cost	Quantity	Warehouse
1	Goods Receipt	10	1	01
2	A/P Invoice	20	1	01
3	Goods Receipt PO	30	1	02
4	Goods Issue	20	1	01

The following are the results of the inventory audit report:

The result of the inventory audit report appears not to be as expected. The initial 3 incoming transactions resulted in a cumulative quantity of 3 and a cumulative value of 60. Since the item valuation method is Moving Average Price, any outgoing transaction would be expected to use item cost of 20 (60/3=20) per unit. However, the above quantity of 1 is released with item cost 15 in the goods issue document.

Inventory Audit Report

	Date From	06/01/2012	Date To	06/11/2012				Items		ExampleItem1
	Currency	US Dollar						Warehouses		All

#	Item No.	Description	Whse	System ...	Posting D...	Docum...	Qua...	Cost	Trans. ...	Cumulat...	Cumulativ...
1	▼⇒ ExampleItem									2.000	45.00
2			▼⇒ 01							1.000	15.00
3		Opening Balar								0.000	0.00
4				06/11/2012	06/11/2012	⇒ SI 137	1.000	10.0000	10.00	1.000	10.00
5				06/11/2012	06/11/2012	⇒ PU 252	1.000	20.0000	20.00	2.000	30.00
6				06/11/2012	06/11/2012	⇒ SO 3	-1.000	15.0000	-15.00	1.000	15.00
7			▼⇒ 02							1.000	30.00
8		Opening Balar								0.000	0.00
9				06/11/2012	06/11/2012	⇒ SI 138	1.000	30.0000	30.00	1.000	30.00

45.00

OK   Expand   Collapse

If you return to the *Inventory Audit Report – Selection Criteria* window and select the *Group by Warehouses* checkbox, the inventory audit report returns the following results:

The goods issue was issued from warehouse 01, where the cumulative quantity at that time was 2 and the cumulative value was 30. Hence, the item is released at the cost of 15 from warehouse 01.

To avoid similar unexpected results, we recommend that you apply the rules in the following diagram when running the inventory audit report:

9.5   Printing Inventory Audit Reports

SAP Business One lets you print the Inventory Audit reports using default printing layouts.

1. From the SAP Business One *Main Menu*, choose *Inventory → Inventory Reports → Inventory Audit Report*.
2. Specify the selection criteria and run the report. For more information, see *Generating Inventory Audit Reports.*
3. From the *Tools* menu, choose *Print Layout Designer*, or click ✎ in the toolbar.
4. Choose the preferred printing layout and print the document.

i Note

- o   When you print the report, you can also print the selection criteria on a separate page.
- o   You can edit the default layouts or create new ones by using Print Layout Designer (PLD). For more information about Print Layout Designer, 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.

10 Working with Inventory Valuation Simulation Reports

This report contains information that may be required for IFRS reporting disclosure. IFRS reporting requires an overview of the method used to value your company's inventory, for example in the Notes to Financial Statements. In SAP Business One, it is possible to specify the inventory valuation method at the item level, and to group the inventory items that are of a similar nature in item groups. Inventory items with a similar nature should be valued using the same method, and this report can be used to validate your inventory valuation methods prior to IFRS reporting. You may need to provide the result of this report as part of your IFRS disclosure requirement.

You can use this report to valuate the entire inventory of all items on a reporting date on a reporting date on the company or warehouse levels. You would normally valuate the warehouse inventory on the balance sheet reporting date.

It is intended to be a managerial report to check what-if scenarios. For instance, you can see what happens if you value an item based on a different calculation method.

> **i** Note
>
> This report is not intended to be used as a report for auditing. For auditing purposes, use the inventory audit report.

To generate the inventory valuation simulation report, do the following:

1. From the SAP Business One *Main Menu*, choose *Inventory → Inventory Reports → Inventory Valuation Simulation Report.*

   The *Inventory Simulation Valuation Report – Selection Criteria* window appears.

Define the following filters:

> **i** Note
>
> Fields that are self-explanatory are not described in the table.

Field/Checkbox	Activity/Description
General Area	
Code From... To...	Define the items for which you want to create the report.
Vendor From... To...	You can restrict the selection by the preferred vendor of an item. The preferred vendor is specified in the item master record. You can valuate all the items from one or more preferred vendors.
Project From...To...	You can valuate the warehouse inventories for one or more projects. Enter the project(s) if relevant.
Calc. Method	Choose one of the calculation methods from the dropdown menu: • *Moving Average* • *FIFO* • *By Price List* You can use one of the price lists defined in the system to valuate the warehouse inventories. When you choose this method, the *Price Source* field appears. In the dropdown list, select the price list • *Last Evaluated Price* You can perform the valuation based on the last evaluated prices. In this case, SAP Business One uses the last calculated costs for each item. If you run a valuation under the FIFO method, for example, and then run a valuation for the last calculated costs, SAP Business One valuates the items using the last value that was determined for an item under the FIFO method. ⁱ **Note** You cannot select the same calculation method as that defined for the item in the *Item Master Data* window, because this report is intended for examining what-if scenarios.
By Price Source	Choose the price list for the report calculation. ⁱ **Note** This field appears only if you have chosen the *By Price List* calculation option.
Display Method	Choose one of the following display formats for the report: • *Row Per Item* Displays one row per item. • *Detailed Receipts/Releases* Displays all goods issues and receipts.
FC Exchange Rate	If you valuate transactions in a foreign currency, select one of the following: • *Exchange Rate on Report Date* The cumulative values are converted according to the exchange rate on the date of the report. • *Transaction Rate*

Field/Checkbox	Activity/Description
	o If the calculation method is *Moving Average* or *FIFO* and you have selected *Additional FC for Total* and specified a foreign currency, the exchange rate is used for display purposes only. The item costs are always based on the transaction value in local currency. The foreign currency values are displayed according to the exchange rates that exist for the dates on which the respective documents were added (*Administration → Exchange Rates and Indexes*) and are used to calculate the item costs in local currency.
	o If the calculation method is *By Price List* or *Last Evaluated Price* and the price is maintained in the respective price list in a foreign currency, the exchange rates that exist for the dates on which the respective documents were added (*Administration → Exchange Rates and Indexes*) are used to calculate the item costs in local currency
Allow Negative Inventory	Select the checkbox: • To allow negative inventory during valuation. Items may have negative inventories. From the accounting perspective, no procedure is available for valuating negative inventories. • To create the report for an item that has a positive inventory quantity, but reached a negative level in the past. **ⁱ Note** If the checkbox is not selected and the item reached negative inventory level, the report stops at the point when the inventory quantity reaches a negative level. Respective row is displayed in red and the system message "Inventory valuation cannot be calculated for item" appears in the report.
Additional FC for Total	Displays the valuation in a foreign currency. By default the field is deselected and the results are displayed in local currency. If you select *Additional FC for Total*, an additional field is displayed in which you must select the required currency. You can then switch between the local currency and the selected foreign currency on the top left of the report results window. If you specify an additional currency, it is displayed the next time you open the report.

Tab	Activity/Description
Table Area (Warehouses Selection)	
By Location	Determine which storage locations will be considered in the report. Make the selection by location or by warehouse, in which case you define the range of included or excluded warehouses.
By Warehouses	

2. Choose the *OK* button.

The following is an example of the inventory simulation valuation report:

Inventory Valuation Simulation Report										
Calculation Method	Moving Average						Currency		US Dollar	
Item No.	⇒ Printer5					Inventory UoM		Date To	07/09/2012	
Item Description										
Posting Date	Document	Whse	Qty	Price	Total	Cumulative Qty	Cumulative Value	System Date	G/L Account	
06/26/2012	⇒ PD 300	⇒ 01	100	99.0000 $	9,900.00 $	100	9,900.00 $	06/26/2012	⇒ 13400000-01-001-01	
06/26/2012	⇒ PD 301	⇒ 01	10	110.0000 $	1,100.00 $	110	11,000.00 $	06/26/2012	⇒ 13400000-01-001-01	
06/26/2012	⇒ IN 271	⇒ 01	-1	100.0000 $	-100.00 $	109	10,900.00 $	06/26/2012	⇒ 13400000-01-001-01	
06/28/2012	⇒ PR 16	⇒ 01	-5	110.0000 $	-550.00 $	104	10,350.00 $	06/28/2012	⇒ 13400000-01-001-01	
07/09/2012	⇒ IM 6	⇒ 01	-1	99.0000 $	-99.00 $	103	10,251.00 $	07/09/2012	⇒ 13400000-01-001-01	
07/09/2012	⇒ IM 6	⇒ 05	1	99.0000 $	99.00 $	104	10,350.00 $	07/09/2012	⇒ 13400000-01-001-01	
07/09/2012	⇒ PR 22	⇒ 01	-1	99.5192 $	-99.52 $	103	10,250.48 $	07/09/2012	⇒ 13400000-01-001-01	
07/09/2012	⇒ IN 276	⇒ 05	-1	99.5192 $	-99.52 $	102	10,150.96 $	07/09/2012	⇒ 13400000-01-001-01	
						102	10,150.96 $			

OK

11 Working 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. Depending on the localization, a purchase accounts posting system can be used in companies that manage a perpetual inventory system.

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 correction invoices
- A/P credit memos, A/P correction reversals
- Landed costs

A purchase accounts posting is not linked to the inventory-item valuation basis. For information about initializing a purchase account posting system, see *Initializing Perpetual Inventory System*.

11.1 Defining Purchase Accounts

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

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

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

Type of Account	Description
Purchase Account	A profit and loss account that identifies the entire purchasing value. This account is debited when you purchase goods against the cost-of-goods-purchased account.
	The amount posted to the purchase account is equal to one of the following:
	• The amount posted to the allocation account plus the expense clearing account, when those accounts are credited.
	• The amount posted to the business partner minus (the amount posted to the allocation account plus the expense clearing account), when the allocation

Type of Account	Description
	and the expense clearing accounts are debited.
Purchase Return Account	This account functions as a purchase account for returning goods. It is credited when goods are returned.
Cost of Goods Purchased	This profit and loss account is credited to reflect an increase in inventory value, just like the cost-of-goods-sold account, and it is debited to reflect a decrease in inventory value. This account acts as an offset account to the purchase account. The amount posted to this account is equal to but opposite of the amount posted to the inventory account.
Purchase Balance Account	This account is credited or debited to reflect any variance between the purchase account and the cost-of-goods-purchased account. Purchase balance account postings are always equal to but opposite of the variance account postings.

11.2 Examples for Journal Entry Structures Used When Working with a Purchase Accounts Posting System

Prerequisites

The following prerequisites apply for all the examples below:

- The business partner is exempt from tax.
- The initial settings are defined as follows:
  - o In the *Company Details* window on the *Basic Initialization* tab:
    - o The *Use Purchase Accounts Posting System* checkbox is selected.
    - o The *Use Negative Amount for Reverse Transaction* is deselected.
  - o The G/L accounts set for the items are by warehouse. For more information, see *Defining Item Defaults*.
- If not mentioned otherwise in the example, assume sufficient in-stock quantities of all the items involved in the scenarios below.

11.2.1 Goods Receipt POs and A/P Invoices

The following examples describe the journal entry structures created for the different scenarios involved with the creation of a goods receipt PO and then drawing it into an A/P invoice.

Example 1

A goods receipt PO is created for a standard item and contains the following information:

- o Cost of 3
- o Quantity of 1
- o Unit price of 10

The following journal entry is created automatically when you add the goods receipt PO:

Account	Debit	Credit
Allocation account		10
Inventory account	3	
Variance account	7	
Cost of goods purchased		3
Purchase balance account		7
Purchase account	10	

The cost of goods purchased is credited by the standard price of the item; the credit in the purchase balance account is balanced by the debit of the variance account.

The goods receipt PO is copied into an A/P invoice, and the unit price is changed to 12. The following journal entry is created:

Account	Debit	Credit
Vendor		12
Allocation account	10	
Variance account	2	
Purchase balance account		2
Purchase account	2	

Both the purchase balance and purchase accounts reflect the price increase of 2.

Example 2

A goods receipt PO is created containing the following information:
o   The item is managed by the moving average method.
o   The quantity is 1.
o   The unit price is 10.

The following journal entry is created automatically when you add the goods receipt PO:

Account	Debit	Credit
Allocation account		10
Inventory account	10	
Cost of goods purchased		10
Purchase account	10	

For an item managed by the moving average method, the cost-of-goods-purchased account is credited by the purchase price.

The goods receipt PO is copied into the A/P invoice after a delivery for a quantity of 1 was created. The unit price in the A/P invoice has been changed to 15. The following journal entry is created:

Account	Debit	Credit
Vendor		15
Allocation account	10	
Price difference account	5	
Purchase balance account		5
Purchase account	5	

Since the in-stock quantity is changed before the A/P invoice is created, the price difference and the purchase balance accounts reflect the price increase.

Example 3

A goods receipt PO is created containing the following information:

o   The item is managed by the moving average method.
o   The quantity is 1.
o   The unit price is 10.
o   The freight charges are 5.

The following journal entry is created automatically when you add the goods receipt PO:

Account	Debit	Credit
Allocation account		10
Expense clearing account		5
Inventory account	15	
Cost of goods purchased		15
Purchase account	15	

The above goods receipt PO is copied into the A/P invoice after a delivery for a quantity of 1 was created. The unit price in the A/P invoice is changed to 15, and freight charges are changed to 10. The following journal entry is created:

Table Heading	Table Heading	Table Heading
Vendor		25
Allocation account	10	
Expense clearing account	5	
Price difference account	10	
Purchase balance account		10
Purchase account	10	

Example 4

A goods receipt PO is created containing the following information:

o   The item is managed by the moving average method.

- o The quantity is 1.
- o The unit price is 10.
- o The freight charges are 7.

In addition, the in-stock quantity is (-10). The static item cost is 5. The following journal entry is created automatically when you add the goods receipt PO:

Account	Debit	Credit
Allocation account		10
Expense clearing account		7
Inventory account	5	
Negative inventory adjustment account	12	
Purchase account	17	
Cost of goods purchased		5
Purchase balance account		12

The cost-of-goods-purchased account reflects the inventory value, and the purchase balance account reflects the variance between the purchase and the cost-of-goods-purchased accounts.

11.2.2   Closing a Goods Receipt PO

When closing a goods receipt PO, no inventory posting is made; however, a journal entry is created to clear the allocation account and to reduce the purchase account. For example, when closing a goods receipt PO with a quantity of 3 and a unit price of 10, the following journal entry is created:

Account	Debit	Credit
Allocation account	30	
Goods clearing account		30
Purchase account		30
Goods clearing account	30	

11.2.3   Goods Return

When creating a goods return based on this goods receipt PO, the allocation, the inventory, and the cost-of-goods-purchased accounts are reverted. In addition, the value of the purchase account is reverted by the purchase return account.

For example, a goods receipt PO is created containing the following information:

- The item is managed by the moving average method.
- The quantity is 1.

- The unit price is 10.

When creating a goods return based on this goods receipt PO, the following journal entry is created:

Account	Debit	Credit
Allocation account	10	
Inventory account		10
Cost of goods purchased	10	
Purchase return account		10

11.2.4   A/P Credit Memo

When creating an A/P credit memo not based on an existing document, the purchase return account is debited by the document price. The cost-of-goods-purchased account is credited by the product of the item quantity multiplied by the item cost.

For example, an A/P credit memo is created containing the following information:

- Item is managed by the moving average method.
- Quantity of 1, unit price is 7.
- Freight charges of 2.

In addition, the in-stock quantity is 6 and the item cost is 2. The following journal entry is created:

Account	Debit	Credit
Vendor	9	
Inventory account		2
Price difference account		7
Purchase return account	9	
Cost of goods purchased		2
Purchase balance account		7

11.2.5   Landed Costs

The following examples describe the journal entry structures created for scenarios involving the creation of a landed costs document.

 Example 1

A landed costs document based on a goods receipt PO is created and contains the following information:

- o The item is managed by the moving average method and has a positive inventory level.
- o The actual customs is 30.

The following journal entry is created once the document is added:

Account	Debit	Credit
Inventory account	30	
Customs allocation account		30
Purchase account	30	
Cost of goods purchased		30

The cost-of-goods-purchased account reflects the price increase of the purchased item due to customs.

Example 2

A landed costs document based on a goods receipt PO is created and contains the following information:

o A quantity of 10 with an in-stock quantity of 4

o Actual customs of 30

The following journal entry is created when the document is added:

Account	Debit	Credit
Inventory account	12	
Customs allocation account		30
Price difference account	18	
Purchase account	30	
Cost of goods purchased		12
Purchase balance account		18

The customs charge is applied equally to each unit, that is, 3 per unit. The cost-of-goods-purchased account reflects the increased value of the in-stock quantity, and the price difference account reflects the remaining quantity: 18 = 3 X (10 minus 4).

Example 3

A landed cost document for a quantity of 10 is created based on a goods receipt PO. The actual customs is 30, and the inventory level of the item is negative. The following journal entry is created when the document is added:

Account	Debit	Credit
Customs allocation account		30
Negative inventory adjustments account	30	
Purchase account	30	
Purchase balance account		30

12 Authorizations

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

13 Database Tables Reference

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

To download the *Database Tables Reference* .chm file:

1. Go to https://www.sdn.sap.com/irj/sdn/businessone.
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:
   - o To open the .zip file, choose the *Open* button; then extract the `REFDB.chm` file to your computer.
   - o 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.