



Article # 1151

Technical Note: Understanding How Physical Count Variances Affect Inventory Costs

Difficulty Level: Intermediate Level AccountMate User

Version(s) Affected: AccountMate 8 for SQL and Express
AccountMate 7 for SQL, Express and LAN
AccountMate 6.5 for SQL, MSDE and LAN

Module(s) Affected: IC

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DESCRIPTION

Product-oriented companies often conduct periodic inventory counts to ensure that inventory items are properly accounted for and inventory valuation is accurate. Sometimes there may be a variance between the recorded and the actual inventory item on-hand quantity. In AccountMate, the system adjusts the on-hand quantity and inventory cost, depending upon the type of physical count variance.

This Technical Note discusses the inventory cost adjustment calculation and the adjusted inventory cost.

Definition of Terms

Below is a definition of terms based upon their usage in AccountMate and in this document.

- Average cost - This is the cost amount calculated by dividing the total cost of an inventory item by its on-hand quantity. This is the amount shown in the Inventory Maintenance → Settings tab → Average Cost field.
- Unit cost - This refers to the cost of an inventory item upon purchase order receipt or during inventory adjustment.

SOLUTION

A physical count variance occurs if there is a difference between the recorded on-hand quantity and the actual counted quantity of an item. A physical count variance may either be a negative count variance or a positive count variance.

Positive Count Variance

A positive count variance occurs if the recorded on-hand quantity is less than the actual counted quantity. This may occur if there are unrecorded purchase receipts from vendors or sales returns from customers.

Negative Count Variance

A negative count variance occurs if the recorded on-hand quantity is more than the actual counted quantity. This may be a result of lost, spoiled, or damaged inventory items.

Adjusted Inventory Cost Calculation

AccountMate recalculates the inventory item cost when you update its on-hand quantity using the Update Physical Count function. AccountMate uses either the average cost or the unit cost to calculate the inventory cost adjustment depending on the cost method assigned to the item and the count variance type. Below is an explanation of how AccountMate calculates the inventory cost adjustment and the adjusted inventory cost.

Average or Average with SN

AccountMate uses the inventory item's average cost at the time you update its on-hand quantity if the cost method assigned to an inventory item is Average or Average with SN.

For example, an inventory item has 150 units on-hand with a total cost of \$1,500. The average cost is \$10 per unit. The adjusted inventory cost is \$1,550 if the physical count results in a positive count variance of 5 units, calculated as follows:

Total cost before adjustment		\$1,500
Inventory cost adjustment:		
Average cost	\$10	
Quantity variance	X 5	50
Total cost after adjustment		<u><u>\$1,550</u></u>

The adjusted inventory cost is \$1,400 if the physical count results in a negative count variance of 10 units, calculated as follows:

Total cost before adjustment		\$1,500
Inventory cost adjustment:		
Average cost	\$10	
Quantity variance	x (10)	(100)
Total cost after adjustment		<u><u>\$1,400</u></u>

FIFO (First-In First-Out)

AccountMate uses the inventory item's *average cost* at the time you update its on-hand quantity if the cost method assigned to an inventory item is First-In First-Out and if the physical count results in a positive count variance. On the other hand, if the physical count results in a negative count variance, then AccountMate uses the *inventory item's earliest unit cost* to calculate the adjustment.

For example, an inventory item has 25 units received in the following order: first PO receipt of 15 units at \$100 each; then, a second PO receipt of 10 units at \$50 each. The total inventory cost is \$2,000 with an average cost of \$80 per unit. The adjusted inventory cost is \$2,400 if the physical count results in a positive count variance of 5 units, calculated as follows:

Total cost before adjustment		\$2,000
Inventory cost adjustment:		
Average cost	\$80	
Quantity variance	X 5	400
Total cost after adjustment		<u>\$2,400</u>

The adjusted inventory cost is \$450 if the physical count results in a negative count variance of 16 units, calculated as follows:

Total cost before adjustment		\$2,000
Inventory cost adjustment:		
Quantity variance: 15 x \$100 (earliest unit cost)	\$1,500	
Quantity variance: 1 x \$50	\$50	(1,550)
Total cost after adjustment		<u>\$450</u>

LIFO (Last-In First-Out)

AccountMate uses the inventory item's *average cost* at the time you update its on-hand quantity if the cost method assigned to an inventory item is Last-In First-Out and if the physical count results in a positive count variance. On the other hand, if the physical count results in a negative count variance, then AccountMate uses the *inventory item's most recent unit cost* to calculate the adjustment.

For example, an inventory item has 25 units received in the following order: first PO receipt of 15 units at \$100 each; then, a second PO receipt of 10 units at \$50 each. The total inventory cost is \$2,000 with an average cost of \$80 per unit. The adjusted inventory cost is \$2,400 if the physical count results in a positive count variance of 5 units, calculated as follows:

Total cost before adjustment		\$2,000
Inventory cost adjustment:		
Average cost	\$ 80	
Quantity variance	X 5	400
Total cost after adjustment		<u>\$2,400</u>

The adjusted inventory cost is \$900 if the physical count results in a negative count variance of 16 units, calculated as follows:

Total cost before adjustment	\$2,000
Inventory cost adjustment:	
Quantity variance: 10 x \$50 (most recent cost)	\$ 500
Quantity variance 6 x \$100	600 (1,100)
Total cost after adjustment	<u><u>\$900</u></u>

Specific ID

AccountMate uses the inventory item's *average cost* at the time you update its on-hand quantity if the cost method assigned to an inventory item is Specific ID and if the physical count results in a positive count variance. On the other hand, if the physical count results in a negative count variance, then AccountMate uses the item's specific *unit cost* that are no longer on-hand to record the adjustment. You may refer to the Specific ID Listing report to determine the inventory item's unit cost.

For example, the recorded quantity of an item consists of the following: a PO receipt of 15 units at \$100 each and an inventory adjustment of 10 units at \$50 each. The total inventory cost is \$2,000 with an average cost of \$80 per unit. The adjusted inventory cost is \$2,400 if the physical count results in a positive count variance of 5 units, calculated as follows:

Total cost before adjustment	\$2,000
Inventory cost adjustment:	
Average cost	\$80
Quantity variance	X 5 400
Total cost after adjustment	<u><u>\$2,400</u></u>

The adjusted inventory cost is \$650 if the physical count results in a negative count variance of 16 units comprise of 11 missing units from the PO receipt and 5 missing units from the inventory adjustment, calculated as follows:

Total cost before adjustment	\$2,000
Inventory cost adjustment:	
Quantity variance : 11 x \$100	
(unit cost from PO receipt)	\$1,100
Quantity variance : 5 x \$50	
(unit cost from inventory adjustment)	\$250 (1,350)
Total cost after adjustment	<u><u>\$650</u></u>

Recording a Positive Count Variance by Unit Cost

You can record the positive count variance using the Inventory Adjustment function if you want to use the unit cost instead of the item's average cost to adjust its inventory cost.

AccountMate uses the item's average cost at the time of the update to calculate the inventory cost adjustment if the physical count results in an increase in the recorded

on-hand quantity. On the other hand, AccountMate uses either the average cost or the unit cost depending upon the Cost Method assigned to the item if the physical count results in a decrease in the recorded on-hand quantity.

Inventory costing can be a complicated process to understand when physical count variances exist. The information in this document is provided to help you understand how AccountMate calculates the adjusted cost for inventory items with physical count variances.

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