



Article # 1210

Technical Note: Understanding System-Generated Inventory Cost Adjustments

Difficulty Level: Beginner Level AccountMate User

Version(s) Affected: AccountMate 12 for SQL and Express
AccountMate 11 for SQL and Express
AccountMate 10 for SQL, Express, and LAN
AccountMate 9 for SQL, Express, and LAN
AccountMate 8 for LAN

Module(s) Affected: IC, PO, AR, SO

Posting Date: 02/17/2021

DESCRIPTION

Occasionally, you may see in the **Inventory Transaction Log** cost adjustments that do not correspond to the actual inventory cost adjustments that you recorded in AccountMate. These are what we call system-generated cost adjustments.

This Technical Note differentiates the system-generated cost adjustments from the cost and quantity adjustments recorded by users. It also discusses the scenarios when AccountMate generates cost adjustments and how the cost methods affect the calculation of these adjustments.

SOLUTION

To fully understand the cost adjustments, some terms must first be defined.

Quantity Adjustment

Quantity adjustments are recorded using the **Physical Inventory Count** or **Inventory Adjustment** functions either to decrease or increase inventory quantities. AccountMate may also generate quantity adjustments that result from recalculating inventory balances.

Cost Adjustment

Cost adjustments are recorded using the **Inventory Adjustment** function either to decrease or increase inventory costs. If you are recording an inventory item cost adjustment only, accept the default zero value in the **Inventory Adjustment ► Bin Quantity and Unit Cost** fields; then, enter the appropriate amount in the **Inventory Adjustment ► Total Value** field (see *figure 1*).

If you are recording an average unit cost adjustment, accept the default zero value in the **Inventory Adjustment ► Bin Quantity** field and enter in the **Unit Cost** field the desired unit cost for all inventory item quantities. AccountMate will automatically calculate the new total value for the inventory item.

If you are using AccountMate 12.1 for SQL/Express and higher versions, you may also adjust the unit cost of a serialized item's specific units. To do this, accept the default zero value in the **Inventory Adjustment ► Bin Quantity and Unit Cost** fields; then, click the **Item Special** button to display the **Inventory Adjustment for Item # [xxx]** window where you can specify the desired new unit cost only for the specific serialized units.

	Current Value	Adjustment	New Value
Bin Qty	19	0	19
Whse Qty	276	0	276
Unit Cost	25.45	0.00	30.88
Total Value	7,024.20	1,500.00	8,524.20

Figure 1. Inventory Adjustment Function

Cost Variance Adjustment

AccountMate automatically creates the Cost Variance Adjustment transaction under the following scenarios:

- A difference between the transaction and original cost when items with negative or zero on-hand quantities are replenished
- When received goods are cancelled
- When inventory items in a sales return are deleted or when the sales return is voided
- When there are inconsistencies between the Inventory tables [e.g., ICIWHS (*Inventory Warehouse File*) and ICIBIN (*Inventory Bin File*), ICIWHS and ICICST (*Inventory Transaction File*), etc.] during inventory recalculation. Refer to [Article # 1287: Understanding the Recalculate Inventory Data Feature](#) for more information about inventory data recalculation.

These are what we call system-generated cost adjustments. The following sections discuss the first three scenarios listed above that give rise to this kind of adjustment.

Scenarios that Result in Cost Variance Adjustments

Scenario 1: Replenishment of items with negative on-hand quantity

AccountMate calculates a cost adjustment when you replenish items with negative on-hand quantity at a transaction cost that is different from the original cost. Assume the following values for Item # AEROCHAIR-A1 (see figure 2):

Particulars	Unit Cost	On-hand Quantity	Average Cost
On-hand Quantity:			
3/1 2 units	\$10	2	\$10
3/5 3 units	\$15	5	\$13
Shipped Quantity:			
3/6 3 units		2	\$13
3/7 12 units		-10	\$13
Purchase Quantity:			
3/8 15 units	\$15	5	\$15

Figure 2. Scenario 1 - Sample Transactions

Average Cost

Using the **Average** cost method, AccountMate will generate a \$20 cost adjustment. Refer to figure 3 for the calculation.

Unit cost assigned to the shipped items	\$13.00
Unit cost of the new purchases	\$15.00
Variance	\$2.00
Shipment in excess of on-hand qty	X 10
Total cost variance adjustment	\$20.00

Figure 3. Scenario 1 - Cost Adjustment Calculations (Average Cost Method)

First-in First-out (FIFO)

Using the **First-in First-out** cost method, AccountMate will not generate any cost adjustment. Refer to figure 4 for the calculation.

Unit cost assigned to the shipped items	\$15.00
Unit cost of the new purchases	\$15.00
Variance	\$0.00
Shipment in excess of on-hand quantity	X 10
Total cost variance adjustment	\$0.00

Figure 4. Scenario 1 - Cost Adjustment Calculations (FIFO Cost Method)

AccountMate will use the available units' cost (\$15) as the cost of the units shipped in excess of the on-hand quantity. If the new purchases unit cost is other than \$15, there will be a cost adjustment.

Last-in First-out (LIFO)

Using the **Last-in First-out (LIFO)** cost method, AccountMate will generate a \$50 cost adjustment. Refer to figure 5 for the calculation.

Unit cost assigned to the shipped items	\$10.00
Unit cost of the new purchases	\$15.00
Variance	\$5.00
Shipment in excess of on-hand quantity	X 10
Total cost variance adjustment	\$50.00

Figure 5. Scenario 1 - Cost Adjustment Calculations (LIFO Cost Method)

AccountMate will use the available units' cost (\$10) as the cost of the units shipped in excess of the on-hand quantity. In AccountMate for SQL/Express the **LIFO** cost method is unavailable when the IFRS feature is activated.

Note: Shipment in excess of the on-hand quantity is not allowed for inventory items that use the **Specific ID** or **Average with S/N** cost method; thus, these cost methods are not discussed in this section.

Scenario 2: Received Goods Cancellation

AccountMate calculates cost adjustment when you cancel received goods at a transaction cost that is different from the received cost. Assume the following figures for Item # AEROCHAIR-A1:

Particulars	Unit Cost	On-hand Quantity	Average Cost
On-hand Quantity: 10/1 1 unit	\$10	1	\$10
Received Quantity: 10/5 4 units	\$15	5	\$14
Cancelled Quantity: 10/6 4 units	\$15	5	\$14

Figure 6. Scenario 2 - Sample Transactions

The cost adjustment calculation for cancelled received goods varies depending upon the cost method used.

Average or Average with S/N Cost

Using the **Average** or **Average with S/N** cost method, AccountMate will generate \$4 cost adjustment. Refer to figure 7 below for the calculation.

Unit cost of the received goods					\$15.00	
Unit cost of the cancelled goods (based on the average cost method)						
Unit cost of the received goods	1	x	\$10.00	=		\$10.00
	4	x	\$15.00	=		\$60.00
Total	5					\$70.00
Average Cost	\$70.00 / 5					\$14.00
Variance					\$1.00	
Cancelled goods in units					x 4	
Total cost variance adjustment					\$4.00	

Figure 7. Scenario 2 - Cost Adjustment Calculations (Average Cost Method)

First-in First-out (FIFO)

Using the **First-in First-out** cost method, AccountMate will generate cost adjustment of \$5. Refer to figure 8 for the calculation.

Total cost of the received goods	4	x	\$15.00		\$60.00	
Unit cost of the cancelled goods (based on the FIFO cost method)						
Beginning Balance	1	x	\$10.00	=		\$10.00
Received Goods	3	x	\$15.00	=		\$45.00
Total cost of the cancelled goods						\$55.00
Total cost variance adjustment					\$5.00	

Figure 8. Scenario 2 - Cost Adjustment Calculations (FIFO Cost Method)

Last-in First-out (LIFO)

In the illustration AccountMate does not generate any cost adjustment using the **Last-in First-out** cost method because the total received cost matches the total cancelled received goods cost. AccountMate will generate a cost adjustment under the LIFO cost method only when there is another set of goods receipt after receiving the 4 units, these are received at a different cost, and the second receipt is recorded before the first receipt is cancelled. Using the given example, there is no subsequent receipt; thus, there is no cost variance. Refer to figure 9 for the calculation. In AccountMate for SQL/Express the **LIFO** cost method is unavailable when the IFRS feature is activated.

Total cost of the received goods	4	x	\$15.00		\$60.00
Unit cost of the cancelled goods (based on the LIFO cost method)					
Received Goods	4	x	\$15.00	=	
Total cost of cancelled goods					\$60.00
Total cost variance adjustment					\$0.00

Figure 9. Scenario 2 - Cost Adjustment Calculations (LIFO Cost Method)

Note: AccountMate uses the transaction cost (received cost) when canceling receipt of inventory items that use the **Specific ID** cost method; thus, there is no cost variance.

Scenario 3: Deletion of Line Items from a Sales Return Invoice

AccountMate calculates a cost adjustment if the transaction cost at the time the inventory item is deleted from the sales return is different from the sales return cost. The sales return cost is either of the following:

- Sales Return with Invoice - The sales return cost is the inventory item value at the time it is sold. This cost is taken from the original invoice record.
- Sales Return without Invoice - The sales return cost is the **Return Cost** value specified in the **Inventory Maintenance** record.

Assume the following figures for Item # AEROCHAIR-A1:

Particulars	Unit Cost	On-hand Quantity	Average Cost
On-hand Quantity: 10/1 10 units	\$20.00	10	\$20.00
Quantity Sold: 10/5 -5 units	\$20.00	5	\$20.00
Purchased Quantity: 10/6 5 units	\$25.00	10	\$22.50
Returned Quantity: 10/7 2 units	\$20.00	12	\$22.08
Deleted Quantity: 10/8 -2 units	\$22.08	10	\$22.08

Figure 10. Scenario 3 - Sample Transactions

The cost adjustment calculation for deleted line items from a sales return invoice varies depending upon the cost method used.

Average or Average with S/N Cost

Using the **Average** or **Average with S/N** cost method, AccountMate will generate cost adjustment of \$4.16. Refer to figure 11 for the calculation.

Unit cost of the returned items	\$20.00
Unit cost of the deleted items	<u>\$22.08</u>
Variance	\$2.08
Deleted items in units	x 2
Total cost variance adjustment	\$4.16

Figure 11. Scenario 3 - Cost Adjustment Calculations (Average Cost Method)

First-In First-Out (FIFO)

Based on the given example, there is no cost adjustment because the total cost of an item upon sales return matches the total cost upon deletion of the returned item. The cost of the inventory items using the FIFO cost method is stated at the earliest cost. The on-hand quantities' earliest cost is \$20, which is the beginning on-hand quantities' unit cost. If all the beginning on-hand quantities was sold, the unit cost upon deletion of the returned item will be the unit cost upon purchase receipt; thus, cost variance will be calculated. Refer to figure 12 for the calculation based on the assumption that all the beginning on-hand quantities were sold.

Total cost of the returned items	2	x	\$20.00			\$40.00
Unit cost of the deleted line items (based on the FIFO cost method)						
Earliest cost of on-hand quantity	2	x	\$25.00	=	\$50.00	
Total cost of cancelled goods						\$50.00
Total cost variance adjustment						\$(10.00)

Figure 12. Cost Adjustment Calculations for Scenario 3 (FIFO Cost Method)

Last-In First-Out (LIFO)

Using the LIFO cost method, there is no cost adjustment based on the sample transactions. When a line item is deleted from a sales return, AccountMate uses the latest on-hand quantity cost. In the given example the latest on-hand quantities cost is \$20/unit, which is the returned inventory item cost. If, after a sales return, there is goods receipt or increase in on-hand quantity with a unit cost of \$30, there will be cost adjustment. Refer to figure 13 for the calculation. In AccountMate for SQL/Express the **LIFO** cost method is unavailable when the IFRS feature is activated.

Total cost of the returned items	2	x	\$20.00			\$40.00
Unit cost of the deleted line items (based on the LIFO cost method)						
Latest cost of on-hand quantity	2	x	\$30.00	=	\$60.00	
Total cost of cancelled goods						\$60.00
Total cost variance adjustment						\$(20.00)

Figure 13. Cost Adjustment Calculations for Scenario 3 (LIFO Cost Method)

Note: AccountMate uses the transaction cost (i.e., sales return cost) when deleting a sales return line item that uses the **Specific ID** cost method; thus, there is no cost variance.

Scenario 4: Voiding a Sales Return Invoice

The cost variance adjustments calculation is the same when deleting line items from a sales return and voiding the sales return invoice. This is true regardless of the cost method used. Refer to scenario 3, "Deletion of Line Items from a Sales Return Invoice" for more details.

Inventory Transaction Log

The **Inventory Transaction Log** shows the detailed transactions involving the inventory items; thus, you can use it to track and review the inventory transactions including the system-generated cost adjustments or cost variance adjustments. This report displays the different transaction type codes to help you better understand the nature of the transactions that give rise to the amounts shown on the report. System-generated cost adjustments are assigned the "CADJ" transaction code. Refer to [Article # 1159: Understanding the Inventory Transaction Log](#) for more information about this report.

Knowing the scenarios when and how AccountMate calculates cost adjustments can help you better understand the **Inventory Transaction Log**. Recognizing between cost adjustments created by a user and the scenarios that result in system-generated cost adjustments can also assist you in effectively reconciling the Inventory GL Account ID balance in the General Ledger and the Inventory balances in the Inventory Control and other applicable modules.

This information is provided "AS IS" without warranty of any kind. AccountMate Software Corporation disclaims all warranties, either express or implied. In no event shall AccountMate Software Corporation be liable for any damages whatsoever including direct, indirect, incidental, consequential, loss of business profits, or special damages, even if AccountMate Software Corporation has been advised of the possibility of such damages.