



Article # 1210

Technical Note: Understanding System-Generated Inventory Cost Adjustments

Difficulty Level: Intermediate Level AccountMate User

Version(s) Affected: AccountMate 6.5 for SQL and MSDE, build MS/MD607
AccountMate 6.5 for LAN, build LN602

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

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DESCRIPTION

Occasionally you might see cost adjustments in the Inventory Transaction Log 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 system-generated cost adjustments from cost and quantity adjustments entered by the user. It also discusses the scenarios where the system generates cost adjustments and how the cost methods affect the computation of these adjustments.

SOLUTION

Definition of Terms

Before we discuss the system-generated cost adjustments, let us first define some terms to understand the succeeding discussion.

Quantity Adjustment

Quantity adjustments are entered through the Physical Inventory Count or Inventory Adjustment functions either to decrease or increase inventory quantities. The system may also generate quantity adjustments that result from recalculating inventory balances.

Cost Adjustment

Cost adjustments are entered through the Inventory Adjustment function either to decrease or increase inventory costs. If you are adjusting only the cost of an inventory item, accept the default zero value in the Bin Quantity Adjustment and Unit Cost Adjustment fields; then, enter the appropriate amount in the Total Value Adjustment field of the Inventory Adjustment function. (See figure 1.1)

Inventory Adjustment

Save Void Copy Clear Close

Item # AEROCHAIR-A1
 Description Aero A1 Conference Chair Beige
 U of M EACH
 Warehouse MAIN Main Warehouse
 Bin A1 Row A Section 1

	Current Value	Adjustment	New Value
Bin Qty	56	0	56
Whse Qty	66	0	66
Unit Cost	61.46	0.00	84.19
Total Value	4,056.36	1,500.00	5,556.36

Item Special

Remark Cost Adjustment
 Date 11/19/04

☒ Transfer to General Ledger

Inventory 130100-110-00 Standard Products Inventory
 Adjustments 603820-110-00 Inventory Adjustments

Figure 1.1 Inventory Adjustment Window

Cost Variance Adjustment

A Cost Variance Adjustment is automatically created by the system under the following scenarios:

1. A difference between the transaction and original cost when items with negative or zero on-hand quantities are replenished
2. When received goods are cancelled
3. When inventory items in a sales return are deleted or when the sales return is voided.
4. When there are inconsistencies between ICIWHS (Inventory Warehouse File) and ICIBIN (Inventory Bin File) during inventory recalculation. For more information on the recalculation of inventory data, please refer to your AccountMate Online Help.

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

Scenarios that Result in Cost Variance Adjustments

1. Replenishment of items with negative on-hand quantity

The system computes for 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 figures for Item # Aerochair-A1:

Details	Unit Cost	On-hand Qty	Ave. Cost
On-hand Qty:			
3/1 2	10	2	10
3/5 3	15	5	13
Shipped Qty:			
3/6 3		2	13
3/7 12		-10	13
Purchase Qty:			
3/8 15	15	5	15

Figure 1.2 Sample Transactions for Scenario 1

Average Cost

Using the Average cost method, the system will generate a \$20 cost adjustment. Refer to the matrix below for the computation:

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

Figure 1.3 Cost Adjustment Computations for Scenario 1 – Average Costing

First-in First-out (FIFO)

Using the First-in First-out cost method, the system will not generate any cost adjustment. Refer to the matrix below for the computation:

Unit cost assigned to the shipped items	\$15.00
Unit cost of the new purchases	\$15.00
Variance	\$ 0.00
Shipment in excess of system's on-hand qty	x 10
Total cost variance adjustment	\$0.00

Figure 1.4 Cost Adjustment Computations for Scenario 1 – FIFO Costing

The system will use the cost of the available units (\$15) as the cost of the units shipped in excess of the on-hand quantity in the system. If the unit cost of the new purchases is not \$15; then, there will be a cost adjustment.

Last-in First-out (LIFO)

Using the Last-in First-out cost method, the system will generate a \$50 cost adjustment. Refer to the matrix below for the computation:

Unit cost assigned to the shipped items	\$10.00
Unit cost of the new purchases	\$15.00
Variance	\$ 5.00
Shipment in excess of system's on-hand qty	x 10
Total cost variance adjustment	<u>\$50.00</u>

Figure 1.5 Cost Adjustment Computations for Scenario 1 – LIFO Costing

The system will use the cost of the available units (\$10) as the cost of the units shipped in excess of the on-hand quantity in the system.

Note: Shipment in excess of the on-hand quantity in the system is not allowed for inventory items that use the Specific ID or Average with SN cost methods; thus, these will not be included in the discussion.

2. Cancel Received Goods

The system computes for a 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:

Details	Unit Cost	On-hand Qty	Ave. Cost
On-hand Qty: 10/1 1	10	1	10
Received Qty: 10/5 4	15	5	14
Cancelled Qty: 10/6 4	15	5	14

Figure 1.6 Sample Transactions for Scenario 2

The cost adjustment computation for cancelled received goods varies depending upon the cost method used:

Average or Average with SN Cost

Using the average cost method, the system will generate a cost adjustment of \$4. Refer to the matrix below for the computation:

Unit cost of the received goods				\$15.00
Unit cost of the cancelled goods (based on the new average cost calculated below)				
Beginning balance	1	x \$10.00 =	\$ 10.00	
Received goods	4	x \$15.00 =	60.00	
Totals	5		<u>\$ 70.00</u>	
New Average Cost	\$70.00/5 units			14.00
Variance per unit				\$ 1.00
Cancelled goods in units				x 4
Total cost variance adjustment				<u>\$ 4.00</u>

Figure 1.7 Cost Adjustment Computations for Scenario 2 – Average Costing

First-in First-out (FIFO)

Using the First-in First-out cost method, the system will generate a cost adjustment of \$5 dollars. Refer to the matrix below for the computation:

Total cost of the received goods				
4 units @ \$15/unit				\$60.00
Unit cost of the cancelled goods (FIFO cost); calculation is shown below				
Beginning balance	1	x \$10.00 =	\$10.00	
Received goods	3	x \$15.00 =	<u>45.00</u>	
Total Cost of the cancelled goods				55.00
Total cost variance adjustment				<u>\$ 5.00</u>

Figure 1.8 Cost Adjustment Computations for Scenario 2 – FIFO Costing

Last-in First-out (LIFO)

In our illustration, the system will not generate any cost adjustment using the Last-in First-out cost method. This is because the total received cost and total cancelled received goods cost are the same. The system will only generate a cost adjustment under the LIFO cost method if another set of goods is received after the 4 items, they are received at a different cost, and the second receipt is recorded before the first receipt is cancelled. In our example, there is no subsequent receipt; thus, there is no cost variance. Refer to the matrix below for the computation:

Total cost of the received goods				
4 units @ \$15/unit				\$60.00
Unit cost of the cancelled goods (FIFO cost); calculation is shown below				
Received goods	4	x \$15.00 =	<u>60.00</u>	
Total Cost of the cancelled goods				60.00
Total cost variance adjustment				<u>\$ 0.00</u>

Figure 1.9 Cost Adjustment Computations for Scenario 2 – LIFO Costing

Note: The system 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.

3. Delete Line Items in a Sales Return Invoice

The system computes for a cost adjustment if the transaction cost at the time the inventory item is deleted in the sales return is different from the sales return cost. The sales return cost is either of the following:

- a. For a Sales Return with Invoice, the sales return cost is the value of the inventory item at the time it is sold. This cost is taken from the original invoice record.
- b. For a 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:

Details		Unit Cost	On-hand Qty	Ave. Cost
On-hand Qty: 10/1	10	20.00	10	20.00
Sales: 10/5	-5	20.00	5	20.00
Purchases: 10/6	5	25.00	10	22.50
Sales Return: 10/7	2	20.00	12	22.08
Delete Line Item: 10/8	-2	22.08	10	22.08

Figure 1.10 Sample Transactions for Scenario 3

The cost adjustment computation for deleted line items in a sales return invoice varies depending upon the cost method used:

Average or Average SN Cost

Using the average cost method, the system will generate a cost adjustment of \$4.16 dollars. Refer to the matrix below for computations:

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

Figure 1.11 Cost Adjustment Computations for Scenario 3 – Average Costing

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 and the total cost upon deletion of the sales return item is the same. The cost of the inventory items using the FIFO cost method are stated at the earliest cost. The earliest cost of the on-hand quantities is \$20, which is the unit cost of the beginning on-hand quantities.

If all the beginning on-hand quantities were sold, the unit cost upon deleting the sales return item will be the unit cost upon receipt of the purchases; thus, a cost variance will be computed. Refer to the matrix below for the computation based on the assumption that all the beginning on-hand quantities were sold:

Total cost of the returned items		
2 units @ \$20/unit		\$ 40.00
Unit cost of the deleted line items (FIFO cost); calculation is shown below		
Earliest cost of on-hand quantity	2 x \$25.00 =	50.00
Total Cost of the deleted line item		<u>50.00</u>
Total cost variance adjustment		<u>\$ (10.00)</u>

Figure 1.12 Cost Adjustment Computations for Scenario 3 – FIFO Costing

Last-In First-Out (LIFO)

Using the LIFO cost method, there is no cost adjustment based on the sample transactions. The cost used by the system upon deleting a line item in a sales return is the latest cost of the on-hand quantity. In this instance the latest cost of the on-hand quantities is \$20 per unit which is the cost of the returned inventory item.

If after a sales return there is a receipt of goods or increase in on-hand quantity with a unit cost of \$30, there will be a cost adjustment. Refer to the matrix below for the computation:

Total cost of the returned items		
2 units @ \$20/unit		\$ 40.00
Unit cost of the deleted line item (LIFO cost); calculation is shown below		
Latest cost of on-hand quantity	2 x \$30.00 =	60.00
Total Cost of the deleted line item		<u>60.00</u>
Total cost variance adjustment		<u>\$ (20.00)</u>

Figure 1.13 Cost Adjustment Computations for Scenario 3 – LIFO Costing

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

4. Voiding a Sales Return Invoice

The computation of cost variance adjustments when deleting line items in a sales return and voiding the sales return invoice itself is the same. This is true regardless of the cost method used. Refer to section 3 for more information.

Inventory Cost Adjustment Report

You can generate the following report to obtain information about the system-generated cost adjustments or cost variance adjustments:

Inventory Transaction Log

The Inventory Transaction Log shows the details of transactions affecting your inventory items. You can use this report to track and review inventory transactions. This report displays different transaction type codes to help you better understand the nature of the transactions that give rise to the amounts shown. System-generated cost adjustments are assigned the 'CADJ' transaction code.

Knowing the scenarios when AccountMate computes for cost adjustments and how these cost adjustments are computed will 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 will also assist you to effectively reconcile the Inventory account balance in General Ledger and Inventory balances in Inventory Control.

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