Microsoft Dynamics® AX
Microsoft Dynamics AX 2009 SP1

Close non-financial transfers

White Paper

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Microsoft Dynamics

Table of Contents

Introduction

The ability to close non-financial transfers in Microsoft Dynamics$^{®}$ AX is applied to cost calculation for inventory close and inventory recalculation. The new feature improves the Dynamics AX product in terms of:

- Increased performance when inventory is closed or recalculated.
- Fewer records in the InventSettlement table.

Feature description

In Microsoft Dynamics AX, the InventTrans table contains all transactions related to Inventory management, regardless of whether the transactions contribute physically or financially to the inventory status.

Financial contributions to inventory are, for example, derived from:

- Purchases
- Sales
- Transfers between two financially tracked inventory dimensions
- Posting of transaction adjustments

Physical contributions to inventory are derived from:

- Transfer between two inventory dimensions that are physically tracked. No cost is added by the transfer. This is what is referred to as a non-financial transfer.

The current architecture in Microsoft Dynamics AX builds on the assumption that all InventTrans transactions will eventually have a Closed status (ValueOpen = No). This assumption also implies that, at the given time, the InventTrans transactions have been processed in a cost calculation.

This feature has no impact on the current architecture of Microsoft Dynamics AX. The feature, however, changes when non-financial transfers are closed.

All InventTrans transactions that are associated with non-financial transfers are disregarded in the cost calculation when inventory is closed or recalculated.

This feature introduces a new step in the inventory close and recalculation processes. When an item is included in a cost calculation, all non-financial transfers are identified for a specified period and the InventTrans transactions that are associated with the non-financial transfers are closed at their current cost. This happens before any of the remaining steps in the cost calculation process so that InventTrans transactions that are associated with non-financial transfers are disregarded in the succeeding steps of the cost calculation.

## Number of transactions before and after implementation

In the following series of illustrations, you can see the difference in the number of transactions that are created in the InventTrans table before and after the implementation of the non-financial transaction feature.

Note: To help identify the components in the illustrations, refer to Appendix B for a legend overview.

The following illustration shows what happens before the implementation of the new feature. When a transfer takes place between two physically tracked dimensions, warehouse X and warehouse Y, five transactions are created in the InventTrans table.
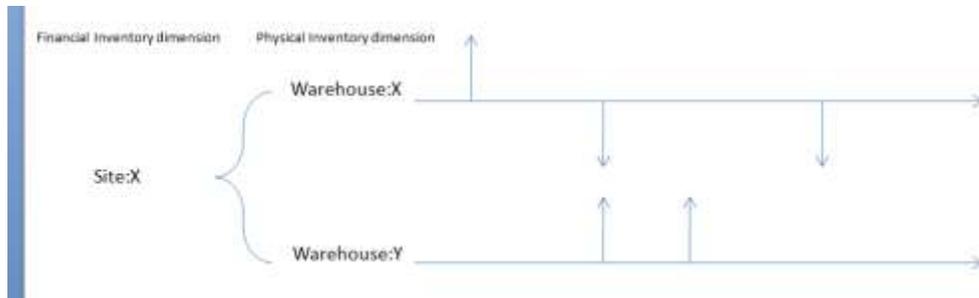
The following illustration shows what happens after the implementation of the new feature.

All InventTrans transactions that are associated with non-financial transfers are closed at their current cost.
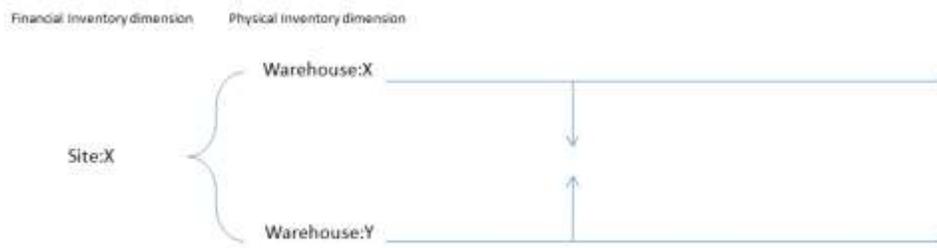
The following illustration shows how the processing of the remaining InventTrans transactions takes place after the transactions that are associated with non-financial transfers have been closed. The cost calculation is based on the cost flow assumption that is assigned to the item.
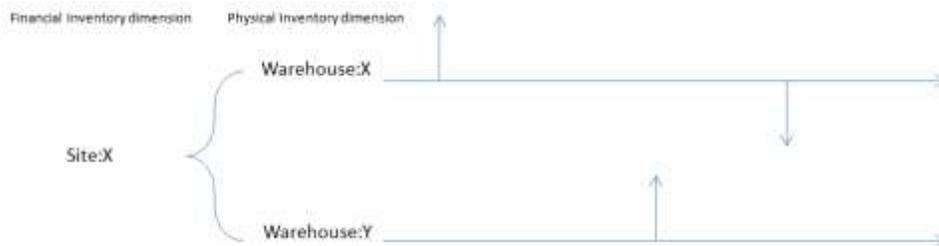
Note: The status of InventTrans transactions set to non-financial transfers is not changed if you cancel an inventory close or a recalculation. The InventTrans transactions remain closed (ValueOpen = No). As mentioned earlier, this approach supports faster processing of the inventory close and recalculation.

Marking

In Microsoft Dynamics AX, marking is used to ensure that the cost of a specific receipt is settled against a specific issue, and can be applied to inventory transactions. When you apply marking, any cost flow assumption (weighted average, FIFO, LIFO) that is set up on the item is disregarded.

With the non-financial transfers feature, InventTrans transactions that are associated with non-financial transfers are closed at their current cost. However, this change does not affect the processing of inventory transactions where marking is applied. Transactions with marking will continue to be processed the same way as today.

Transactions with marking applied

In the following examples, marking is applied in two different scenarios where a receipt is transferred by the transfer journal and a transfer order.

Example 1: In the illustration below, a receipt with marking (1@12) is transferred by a transfer journal from warehouse W1 to warehouse W2 within site S1. The transfer is considered financial, even though it takes place between two dimensions that can be physically tracked. The cost flow assumption is disregarded, and the issue is adjusted to USD 12 when the cost is calculated during inventory close or inventory recalculation.
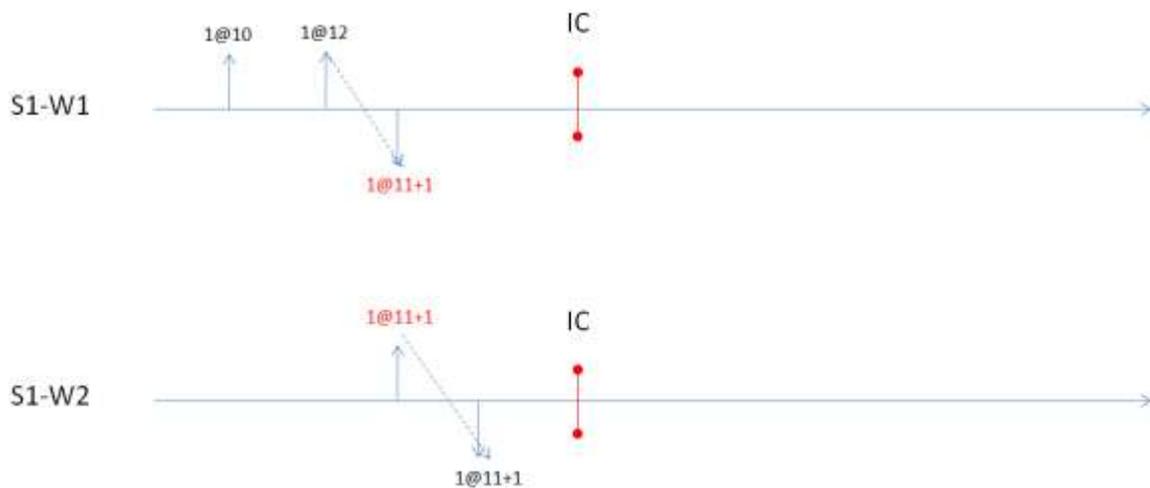

Note: When non-financial transfers are applied, the cost of an item should be marked against the original receipt. You do not need to mark against a physical transfer. The process in the illustration above becomes more streamlined because some of the marking and some settlements during the inventory close can be omitted.

Example 2: In the illustration below, a receipt with marking is transferred by a transfer order from site S1, warehouse W1 to site S2, warehouse W2. The transfer order is posted temporarily to a transit warehouse, TransW, at site S1. The first step of the transfer is considered financial, even though the transfer is between two inventory dimensions that can be physically tracked. So the cost flow assumption is disregarded and the issue is adjusted to USD 12 during cost calculation in the inventory close or inventory recalculation.

CLOSE NON-FINANCIAL TRANSFERS
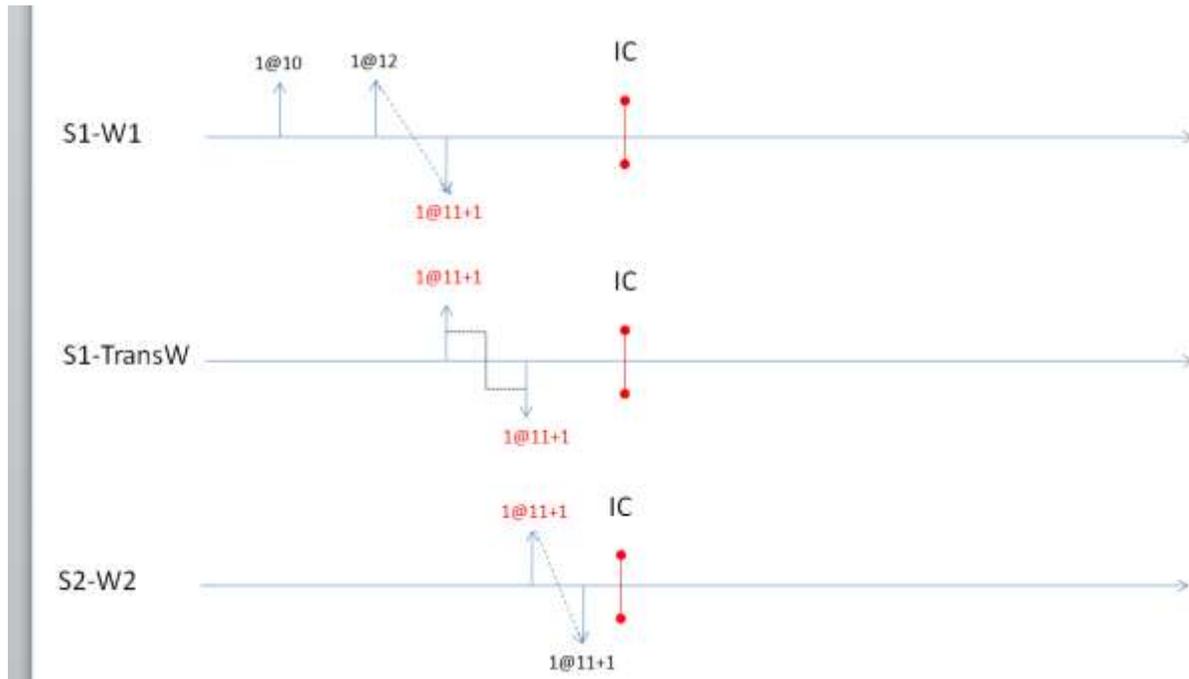
Activation

You activate the Close non-financial transfers feature in Inventory parameters form in Inventory management. You will need to verify that the feature can be activated for the current company ID.

Note: After the feature is activated, it cannot be inactivated because when you activate the feature, InventTrans transactions that are associated with physical inventory dimensions get an estimated cost.

Activate the Close non-financial transfers feature

1. Click **Inventory management** > **Setup** > **Parameters**.
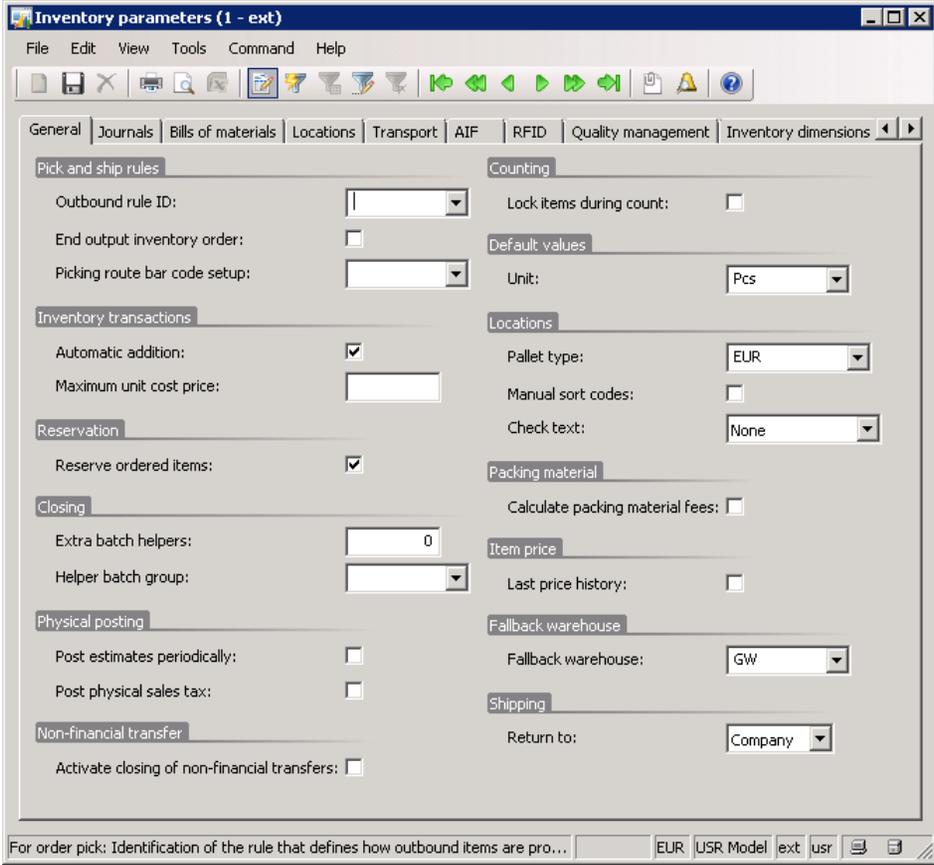
2. Select the **Activate closing of non-financial transfers** check box. A message is displayed, and you have the option to verify the action.
3. Click **Yes** to activate the feature.

The feature is applied the next time you do a cost calculation during inventory close or inventory recalculation.

Inventory transactions

After you have activated the Close non-financial transfers feature, InventTrans transactions are impacted from a cost management perspective.

A new field, Non-financial transfer, is added in the InventTrans table.

When a cost calculation is processed during an inventory close or a recalculation, the **Non-financial transfer** field is selected and the ValueOpen field in the InventTrans table is set to No. This means that the InventTrans transactions are closed. The transactions are closed at current cost (derived from the estimated cost).

The following illustration shows transactions for an item before and after a cost calculation. The transactions after cost calculation are shown both with and without the **Activate closing of non-financial transfers** check box selected.

Transactions before cost calculation (inventory close) with the **Activate closing of non-financial transfers** check box selected:

Transactions after cost calculation (inventory close) without the **Activate closing of non-financial transfers** check box selected:

Note: In the illustration above, the non-financial transfers have not been closed prior to the cost calculation and the cost calculation includes transactions of the type InventTrans origin from the transfer. These transactions make the cost calculation less accurate and can create loops in the calculation.

Transactions for an item after cost calculation (inventory close) with the **Activate closing of non-financial transfers** check box selected:

Note: In the illustration above, all non-financial transfers have been identified and closed prior to the cost calculation. The fact that the non-financial transfers have been closed helps ensure accuracy in the cost calculation and it helps to prevent loops in the calculation.

View non-financial transfers

Two new fields have been added in the **Transactions** form to identify if an InventTrans transaction is a non-financial transfer.

1. Click **Inventory management** > **Inquiries** > **Transactions** > **Transactions**.

2. Click the **General** tab in the **Transactions** form.

   A new field group, **Transfer**, with two fields has been added:

   - **Non-financial transfer**
   - **Transfer lot ID**

   If the **Non-financial transfer** check box is selected, the transaction is a non-financial transfer.
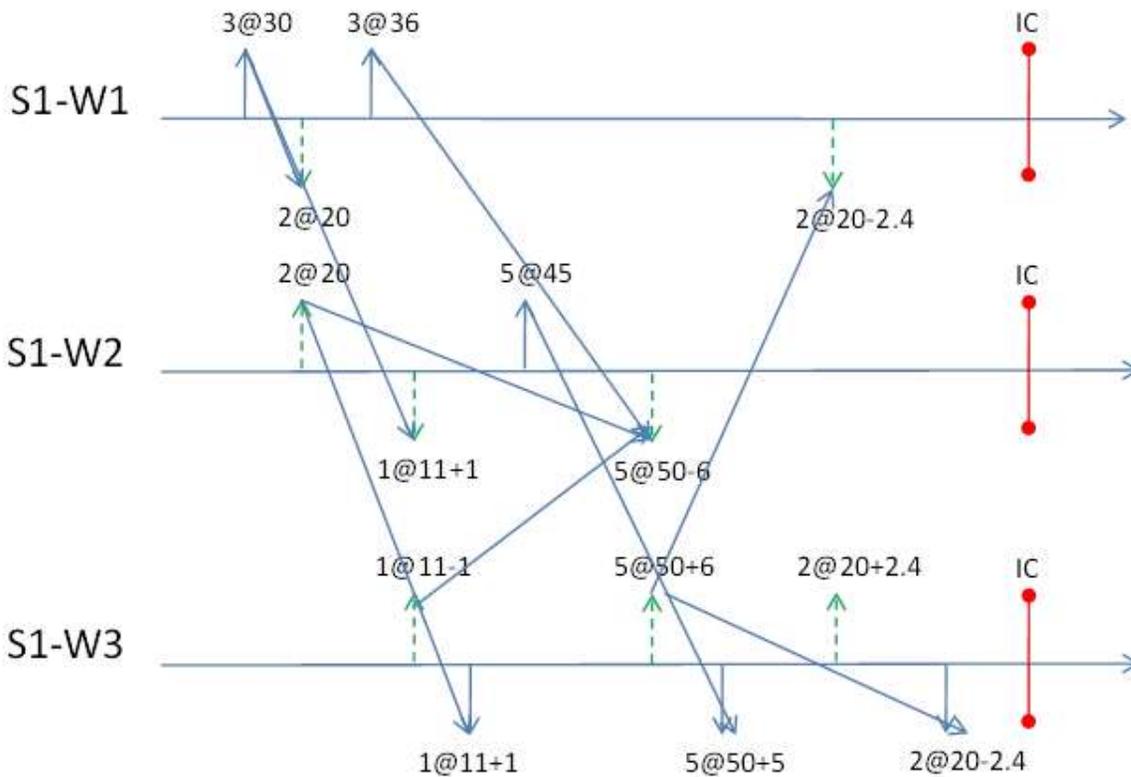
CLOSE NON-FINANCIAL TRANSFERS

Appendix A

In Microsoft Dynamics AX, the cost of an item is based on the combination of item and a set of financially active inventory dimensions. However, cost flow assumption (FIFO, weighted average, etc.) is set at the item level on the inventory model group.
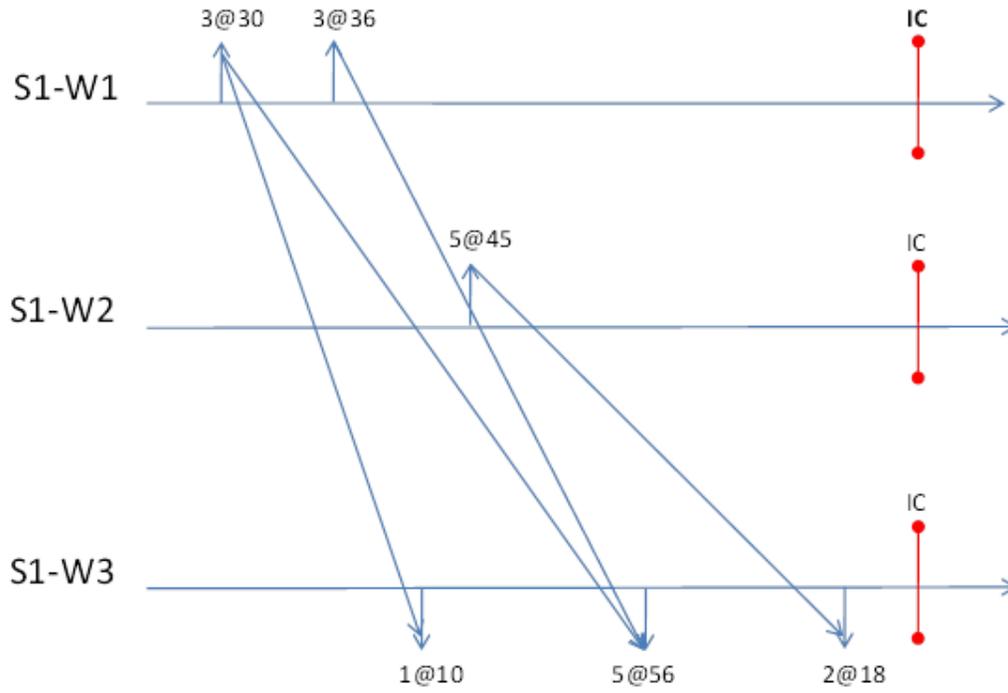
In the examples in this document, **Site** is an inventory dimension that can be financially tracked and **Warehouse** is an inventory dimension that can be physically tracked.

FIFO

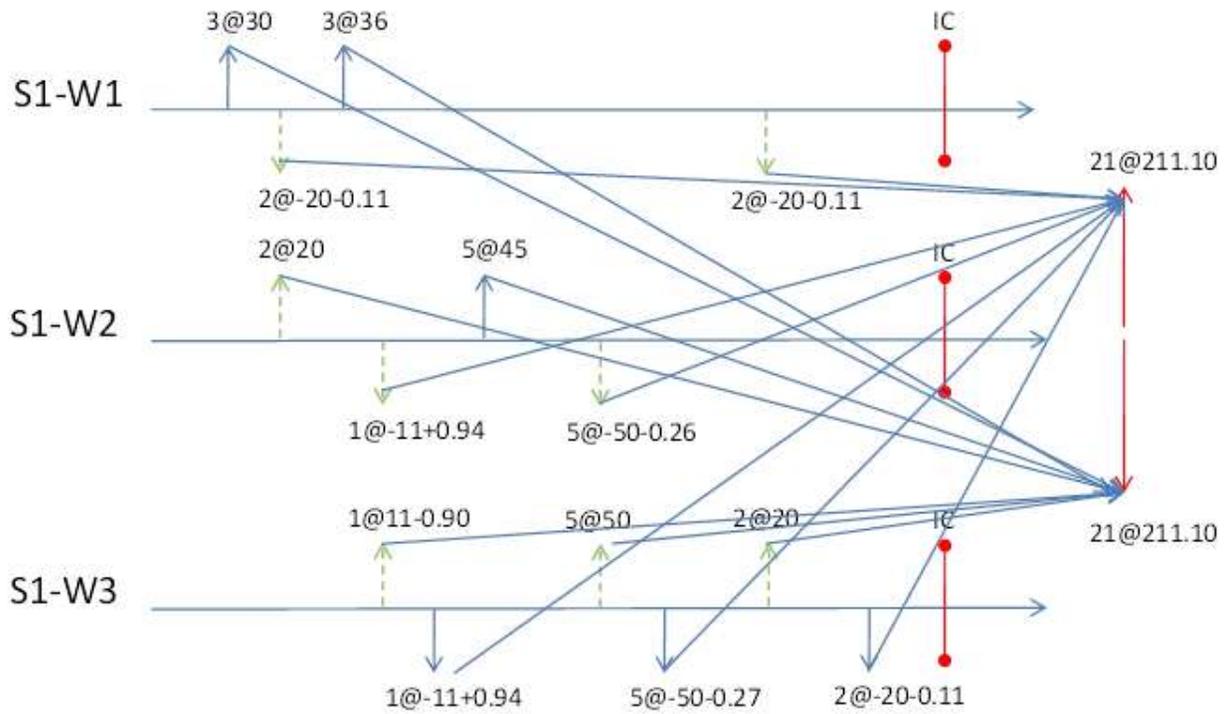Microsoft Dynamic AX 2009 SP1:

Microsoft Dynamic AX 2009 SP1 with the **Activate closing of non-financial transfers** check box selected in the **Inventory parameters** form:

CLOSE NON-FINANCIAL TRANSFERS

Weighted Average

Microsoft Dynamic AX 2009 SP1:

Microsoft Dynamic AX 2009 SP1 with the **Activate closing of non-financial transfers** check box selected in the **Inventory parameters** form:

Note: In the previous illustration 21 items have been received within the period, while the actual number, as seen in the illustration above, was only 11. The extra quantity of 10 originates from internal transfers.

CLOSE NON-FINANCIAL TRANSFERS

Appendix B

Legends applied in the illustrations in this document:

- Inventory transactions are represented by vertical arrows.

- Receipts into inventory are represented by vertical arrows above the timeline.

- Issues out of inventory are represented by vertical arrows below the timeline.

- Above (or below) each vertical arrow, the value of the inventory transaction is specified in the format Quantity@Unit price.

- An inventory transaction value surrounded by brackets indicates that the inventory transaction is physically posted into inventory.

- An inventory transaction value without brackets indicates that the inventory transaction is financially posted into inventory.

- Inventory closings are represented by a red vertical broken line and the label Inventory Close.

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