

Microsoft Dynamics® AX 2012 R3

Accounting for stocked items on product receipts and vendor invoices

White Paper

This white paper describes the concepts of the two types of accounting that take place when an accounting entry is generated for a product receipt or a vendor invoice that contains stocked items. The examples in this white paper illustrate the journal entries that are created.

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Overview

The information in this white paper applies to Microsoft Dynamics AX 2012, and information that is specific to Microsoft Dynamics AX 2012 R3 is identified throughout.

This white paper describes the two types of accounting that take place when an accounting entry is generated for a product receipt or a vendor invoice that contains stocked items. Part of the process updates accrued liability or liability accounts, and uses the new accounting framework that was added in AX 2012. The other part of the process updates the inventory cost and uses the same posting process that was available in Microsoft Dynamics AX 2009. In AX 2012 R3, the resulting accounting entries from both processes will be created by using the same subledger entry journal and voucher. Accounting entries that add up to 0 (zero) for **Purchase expenditure, un-invoiced** will not be transferred to the general ledger. Accounting entries that add up to 0 for **Purchase, inventory receipt** will be transferred to the general ledger in a single zero-amount accounting entry. This entry will represent the profit and loss relationship when sales tax is applicable, and therefore will be used in tax specification reports. The examples in this white paper illustrate the journal entries that are created.

Audience

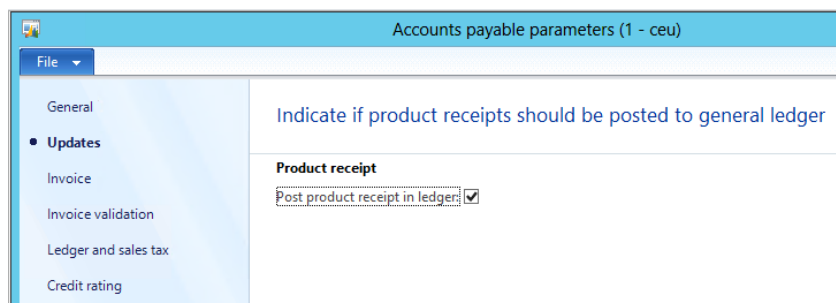
This white paper is intended for end users who work with AX 2012 Inventory management, Procurement and sourcing, Accounts payable, and General ledger, and who want to understand the journal entries created by product receipts and vendor invoices for stocked items.

The functionality described in this white paper is applicable to all countries/regions except Russia, Poland, and India.

Prerequisites

This white paper assumes that the **Post product receipt in ledger** check box is selected in the **Accounts Payable parameters** form, specifying that product receipts should be posted to the general ledger.

To open the **Accounts Payable parameters** form, from the **Accounts payable** area page, click **Setup > Accounts payable parameters**, and then click the **Updates** link.



The screenshot shows the 'Accounts payable parameters (1 - ceu)' form. On the left is a navigation pane with a 'File' menu and several tabs: 'General', 'Updates' (which is selected and marked with a bullet point), 'Invoice', 'Invoice validation', 'Ledger and sales tax', and 'Credit rating'. The main area of the form has a title bar that says 'Accounts payable parameters (1 - ceu)'. Below the title bar, there is a section titled 'Indicate if product receipts should be posted to general ledger'. Under this section, there is a sub-section titled 'Product receipt' which contains a checkbox labeled 'Post product receipt in ledger:' that is checked.

Approach

When a product receipt is posted and accounting entries are created, two accounting processes take place:

1. Accounting entries are created for the accrued liability. The accounting entry amount is for the received quantity of the stocked item, multiplied by the currency amount per unit for the purchase order. This process uses the new accounting framework that was added in AX 2012. In the following example, XX denotes the currency amount of the accounting entry.

Debit	Purchase expenditure, un-invoiced	XX
Credit	Purchase, accrual	XX

2. The cost in inventory for the received quantity of the stocked item is accounted for by crediting the expenditure ledger account and capitalizing the cost in an inventory asset ledger account. The accounting entry amount is for the received quantity of the stocked item, multiplied by the cost price per unit.

Debit	Product receipt	XX
Credit	Purchase expenditure, un-invoiced	XX

In AX 2012 R3, the results of the accounting entries are combined into one subledger journal entry and voucher.

Accounting entries for, **Purchase expenditure, un-invoiced**, will not be transferred to the general ledger if the amount for both the accounting currency and the reporting currency adds up to 0 (zero) per voucher, currency code, and ledger dimension. Because this is true for the preceding example, the General journal accounting entries would look as follows:

Credit	Purchase, accrual	XX
Debit	Product receipt	XX

When a vendor invoice is recorded for a stocked item and accounting entries are created, two accounting processes take place:

1. The accounting entries on the product receipt for accrued liability are reversed. The amount that is reversed is based on the quantity of the stocked item on the vendor invoice that is matched to the product receipt. Then the accounting entry is created to record the liability for the vendor invoice. Both entries are created by using the new accounting framework that was added in AX 2012.

Credit	Purchase expenditure, un-invoiced	XX (reversal)
Debit	Purchase, accrual	XX (reversal)
Debit	Purchase expenditure for product	XX
Credit	Vendor balance (Accounts payable)	XX

2. The accounting entry on the product receipt that records the inventory cost is reversed. The amount that is reversed is based on the quantity of the stocked item on the vendor invoice that is matched to the product receipt. Additional account entries are created to record the inventory cost under a new inventory ledger account classification.

Credit	Product receipt	XX (reversal)
Debit	Purchase expenditure, un-invoiced	XX (reversal)
Debit	Purchase, inventory receipt	XX
Credit	Purchase expenditure for product	XX

Note: More complex accounting entries that have other posting types might occur if inventory accounting is used.

There are valid scenarios where a balance for **Purchase expenditure, un-invoiced** and/or **Purchase expenditure for product** is expected for stocked items, for example:

- A stocked item is returned at a different unit price than the average cost and there is a need to expire cost.
- Different currency translation rounding logic is applied in the two accounting processes and can result in a remaining balance.

Accounting entries for **Purchase expenditure, un-invoiced** and **Purchase expenditure for product** will be transferred to the general ledger whenever there is a remaining balance. Because of this, you should consider specifying profit or loss main accounts for **Purchase expenditure, un-invoiced**.

Setup

In AX 2012, two new posting profile main accounts have been added to the **Posting** form for purchase orders. To open this form, click **Inventory and warehouse management > Setup > Posting > Posting**.

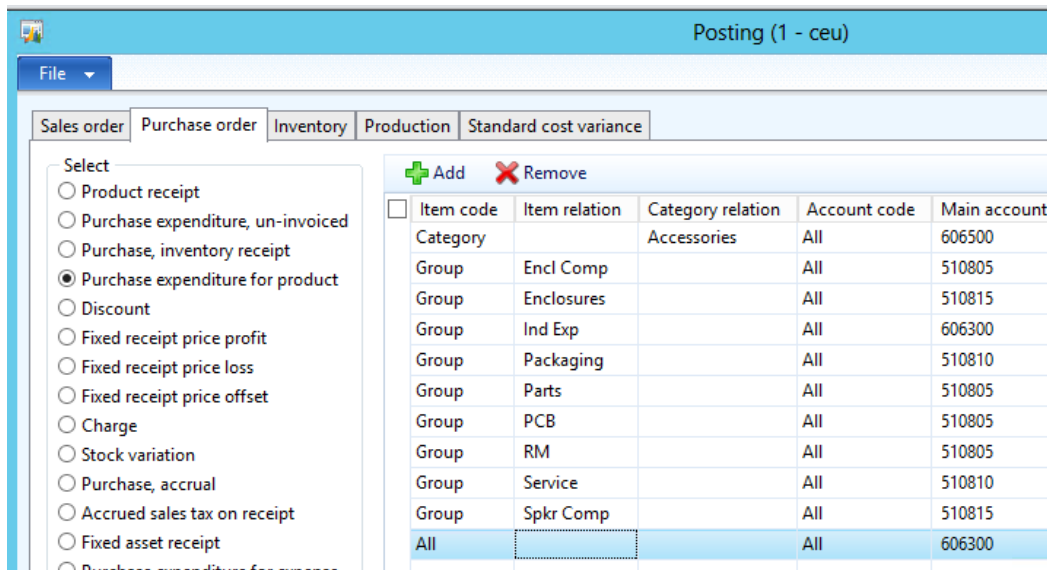
- **Purchase expenditure, un-invoiced** – This posting type is used as the offset main account for accrued liability and product receipt amounts when a product receipt is posted. This posting profile main account is used for both stocked and unstocked items, and also for procurement categories if these are set up to accrue liability upon product receipt.
- **Purchase expenditure for product** – This posting type is used as the offset main account for the liability and inventory amounts when a vendor invoice is recorded. This posting profile main account is used only for stocked items.

Tip: Main accounts for these two posting types are required. If they are not set up, errors will occur when you attempt to journalize product receipts or vendor invoices.

You should consider specifying different main accounts for **Purchase expenditure, un-invoiced** for unstocked items and procurement categories. Unstocked items and procurement categories will have a balance in this main account until the product receipt is fully invoiced.

The following illustration shows the **Posting** form, where you can specify main accounts for the **Purchase expenditure, un-invoiced** and **Purchase expenditure for product** posting profiles.

To open the **Posting** form, click **Inventory and warehouse management > Setup > Posting > Posting**, and then click the **Purchase order** tab.



The screenshot shows the 'Posting (1 - ceu)' form with the 'Purchase order' tab selected. On the left, there is a 'Select' list with the following options:

- ☐ Product receipt
- ☐ Purchase expenditure, un-invoiced
- ☐ Purchase, inventory receipt
- ☒ Purchase expenditure for product
- ☐ Discount
- ☐ Fixed receipt price profit
- ☐ Fixed receipt price loss
- ☐ Fixed receipt price offset
- ☐ Charge
- ☐ Stock variation
- ☐ Purchase, accrual
- ☐ Accrued sales tax on receipt
- ☐ Fixed asset receipt
- ☐ Purchase expenditure for expense

On the right, there is a table with the following columns: Item code, Item relation, Category relation, Account code, and Main account. The table contains the following data:

Item code	Item relation	Category relation	Account code	Main account
Category		Accessories	All	606500
Group	Encl Comp		All	510805
Group	Enclosures		All	510815
Group	Ind Exp		All	606300
Group	Packaging		All	510810
Group	Parts		All	510805
Group	PCB		All	510805
Group	RM		All	510805
Group	Service		All	510810
Group	Spkr Comp		All	510815
All			All	606300

For **Product receipt** and **Purchase, inventory receipt**, you should consider specifying the same conditions and main accounts for both posting types to make reconciliation and analysis easier.

In order to record the inventory cost, you are required to accrue the liability when you record the product receipt and generate the accounting entry. This means that when you define the item model groups for stocked items in the **Item model groups** form, the **Accrue liability on product receipt** check box is automatically selected when the **Post physical inventory** check box is selected, as shown in the following illustration.

To open the **Item model group** form, click **Inventory and warehouse management > Setup > Inventory > Item model groups**.

The screenshot shows the 'Item model group' form. The left pane lists various item model groups. The right pane shows the setup for the selected 'FIFO' group. The setup includes sections for 'Inventory policy', 'Negative inventory', 'Warehouse management', and 'Ledger integration'. The 'Inventory policy' section has 'Stocked product' checked. The 'Negative inventory' section has 'Physical negative inventory' unchecked and 'Financial negative inventory' checked. The 'Warehouse management' section has 'Quarantine management' and 'Consolidated picking method' unchecked. The 'Ledger integration' section has 'Post physical inventory' and 'Post financial inventory' checked, 'Post to Deferred Revenue Account on Sales Delivery' unchecked, and 'Accrue liability on product receipt' checked.

Example: Purchase of stocked item, standard cost

Product receipt

The following illustration shows the vouchers that appear in the **Voucher transactions** form for a stocked item after a product receipt is posted. In this example, the standard cost is USD 100.00, the unit price is USD 95.00, and the quantity is 20.

To open the **Voucher transactions** form, click **Procurement and sourcing > Common > Purchase orders > All purchase orders**, and then click on the **Receive** tab. Select a purchase order, and then, on the **Action Pane**, in the **Journals** group, click **Product receipt**. On the **Overview** tab, select a **Product receipt** journal line, and then click **Vouchers**.

The screenshot shows the 'Voucher transactions' form with the 'Overview' tab selected. The table displays the following data:

Journal number	Voucher	Ledger account	Posting type	Amount
GJT-035649	PSV-101464	510310---	Purchase price variance	100.00
GJT-035649	PSV-101464	142100---	Product receipt	2,000.00
GJT-035649	PSV-101464	150690---	Purchase, accrual	1,900.00

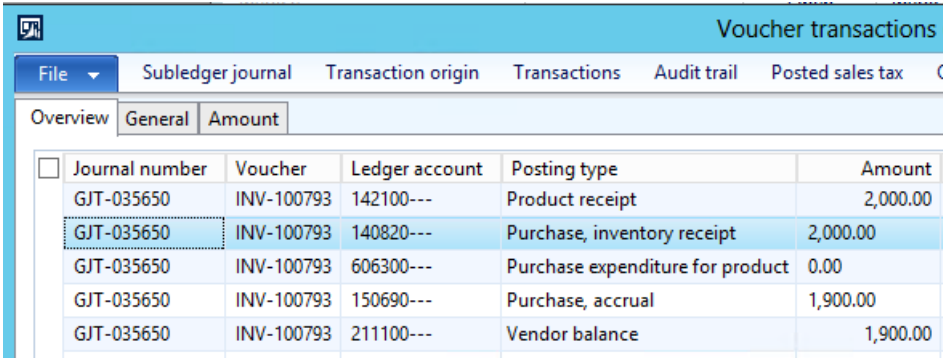
Journal: GJT-035649, Voucher: PSV-101464

510310	Purchase price variance	Credit 100
142100	Product receipt	Debit 2,000
150690	Purchase, accrual	Credit 1,900

Vendor invoice

The following illustration shows the vouchers that appear in the **Voucher transactions** form for a stocked item after the matched vendor invoice is journalized. In this example, the invoiced unit price is the same as the ordered price.

To open the **Voucher transactions** form, click **Procurement and sourcing** > **Common** > **Purchase orders** > **All purchase orders**, and then click the **Invoice** tab. Select a purchase order and then, on the **Action Pane**, in the **History** group, click **Invoice**. On the **Overview** tab, select an invoice journal line, and then click **Voucher**.



Journal number	Voucher	Ledger account	Posting type	Amount
GJT-035650	INV-100793	142100---	Product receipt	2,000.00
GJT-035650	INV-100793	140820---	Purchase, inventory receipt	2,000.00
GJT-035650	INV-100793	606300---	Purchase expenditure for product	0.00
GJT-035650	INV-100793	150690---	Purchase, accrual	1,900.00
GJT-035650	INV-100793	211100---	Vendor balance	1,900.00

Journal: GJT-035650, Voucher: INV-100793

142100	Product receipt	Credit 2,000 (reversal)
140820	Purchase, inventory receipt	Debit 2,000
606300	Purchase expenditure for product	Debit 0
150690	Purchase, accrual	Debit 1,900 (reversal)
211100	Vendor balance	Credit 1,900

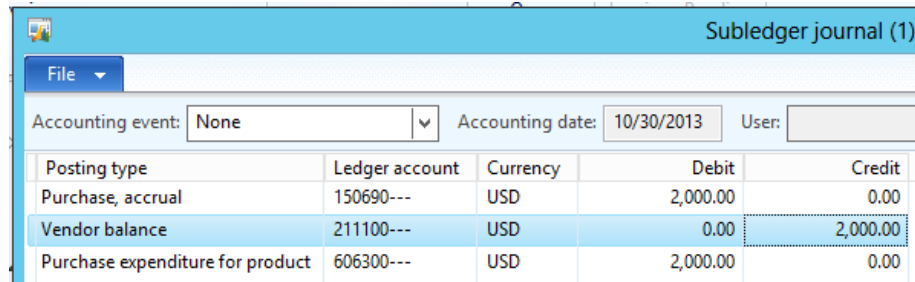
Note: Because the purchase price variance is debited and credited for the same amount, USD 100.00, the account entries are summarized together and are not displayed in the voucher transactions in the preceding example. This is possible because both account entries are within the same journal.

Example: Subledger accounting

Preview subledger accounting in the vendor invoice

The **Subledger journal** form shows a preview, based on the accounting entries that will be created by the new accounting framework that was added in AX 2012. The preview works the same way in AX 2012 R3 as it did in previous versions of AX 2012.

To open the **Subledger journal** form, click **Accounts payable > Common > Vendor invoices > Open vendor invoices**. Select a vendor invoice, and then, on the **Action Pane**, in the **Details** group, click **Vouchers**. Select a journal line, and then click **Subledger journal**.

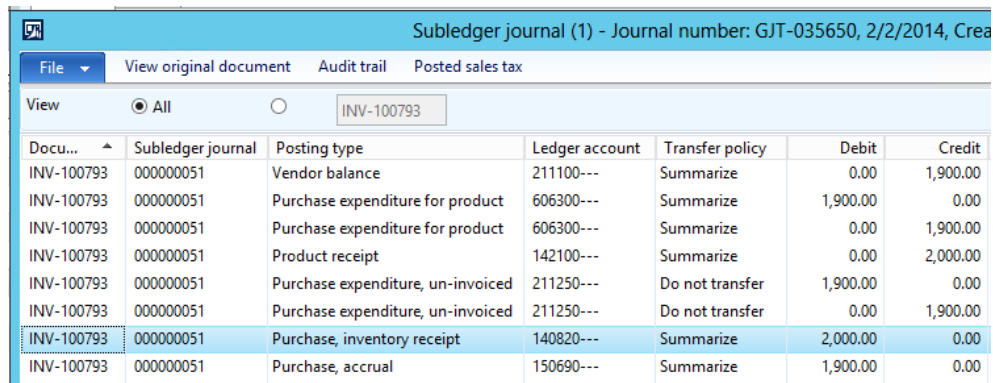


Posting type	Ledger account	Currency	Debit	Credit
Purchase, accrual	150690---	USD	2,000.00	0.00
Vendor balance	211100---	USD	0.00	2,000.00
Purchase expenditure for product	606300---	USD	2,000.00	0.00

Subledger accounting for posted product receipts and vendor invoices

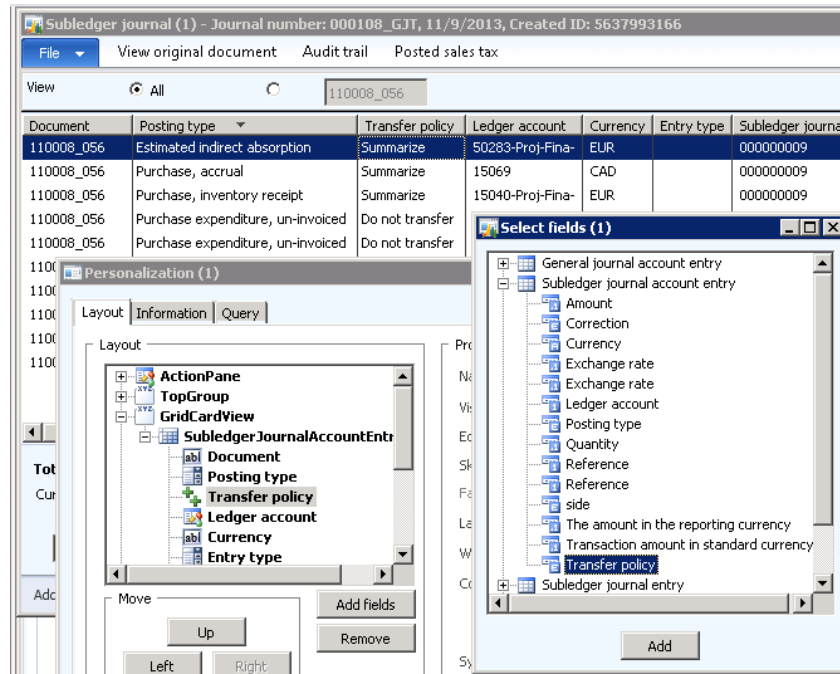
The following illustration shows how the **Subledger journal** form will display all generated subledger accounting entries, including those that are not transferred to the general ledger. In previous versions of Microsoft Dynamics AX, the **Entry type** field displayed accrual liability for the product receipt and the reversal of it in the vendor invoice, and also liability for the vendor liability. However, in AX 2012 R3, this field is blank, because this value is set for the entire subledger journal entry and now includes the inventory account entries that, in almost all cases, cannot be classified as liabilities.

To open the **Subledger journal** form, click **General ledger > Inquiries > Voucher transactions**. Add or remove the query criteria, and then click **OK**. Select a journal line, and then click **Subledger journal**.



Docu...	Subledger journal	Posting type	Ledger account	Transfer policy	Debit	Credit
INV-100793	000000051	Vendor balance	211100---	Summarize	0.00	1,900.00
INV-100793	000000051	Purchase expenditure for product	606300---	Summarize	1,900.00	0.00
INV-100793	000000051	Purchase expenditure for product	606300---	Summarize	0.00	1,900.00
INV-100793	000000051	Product receipt	142100---	Summarize	0.00	2,000.00
INV-100793	000000051	Purchase expenditure, un-invoiced	211250---	Do not transfer	1,900.00	0.00
INV-100793	000000051	Purchase expenditure, un-invoiced	211250---	Do not transfer	0.00	1,900.00
INV-100793	000000051	Purchase, inventory receipt	140820---	Summarize	2,000.00	0.00
INV-100793	000000051	Purchase, accrual	150690---	Summarize	1,900.00	0.00

Note: To view the subledger journal account entries that are not transferred to the general ledger, you can personalize the **Subledger journal** form by adding the **Transfer policy** field, as shown in the following illustration.

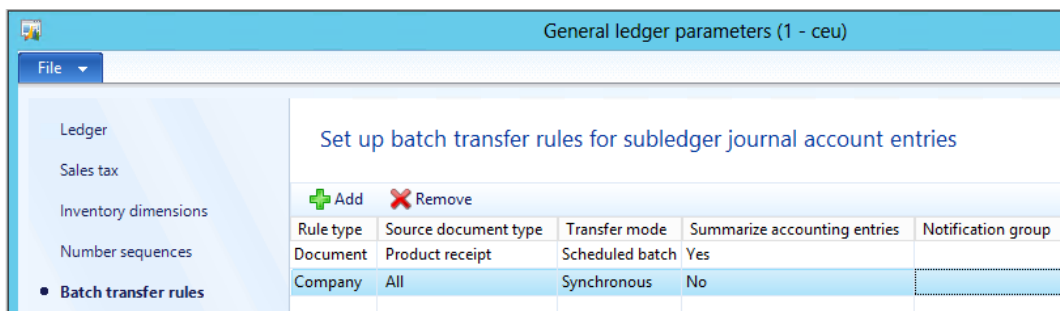


Batch transfer rules – Transfers to the general ledger

The transfer to the general ledger of inventory transactions created for product receipts and vendor invoices is now controlled by batch transfer rules. These transactions can be transferred to the general ledger in any transfer mode and are subject to summarization based on the AX 2012 posting logic.

Note: Voucher transactions will not display any information until the accounting entries for a document are transferred to the general ledger.

To view or set up batch transfer rules for subledger journal account entries, click **General ledger > Setup > General ledger parameters**, and then click the **Batch transfer rules** link.



Sales tax specification – Reports

Sales tax specification in AX 2012 and Microsoft Dynamics AX 2012 R2 is related to accounting entries for the **Purchase expenditure for expense** posting type that are generated by the new accounting framework. Sales tax specification in AX 2012 R3 is based on the combined accounting entries for the **Purchase expenditure for expense** posting type that, in most cases, will have a 0 (zero) amount. Sales tax information will be listed for these accounting entries. For the reports other than the Sales tax specification by ledger transaction report, you can go to the voucher and then to the subledger journal to view the amounts.

This functionality applies to the following reports:

- Ledger transaction list
Click **General ledger > Area page > Reports > Transactions > Ledger transaction list**. On the **General** tab, in the **Parameters** group, select the **Sales tax specification** check box.
- Dimension statement
Click **General ledger > Area page > Reports > Transactions > Dimension statement**. On the **General** tab, in the **Parameters** group, select the **Sales tax specification** check box.
- Sales tax specification by ledger transaction
Click **General ledger > Area page > Reports > Transactions > Groupings > Sales tax specification by ledger transaction**.

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Worldwide +1-701-281-6500

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