PeopleSoft®

EnterpriseOne B73.3.1 Advanced Stock Valuation PeopleBook

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Stock Valuation Overview

Stock valuation determines the current value of a company's stock. Stock is also referred to as inventory. Stock value is based on the total cost of the stock owned by a company at a specific time. The value of stock can vary, depending on the different methods used to calculate the total cost and the method used to value the stock.

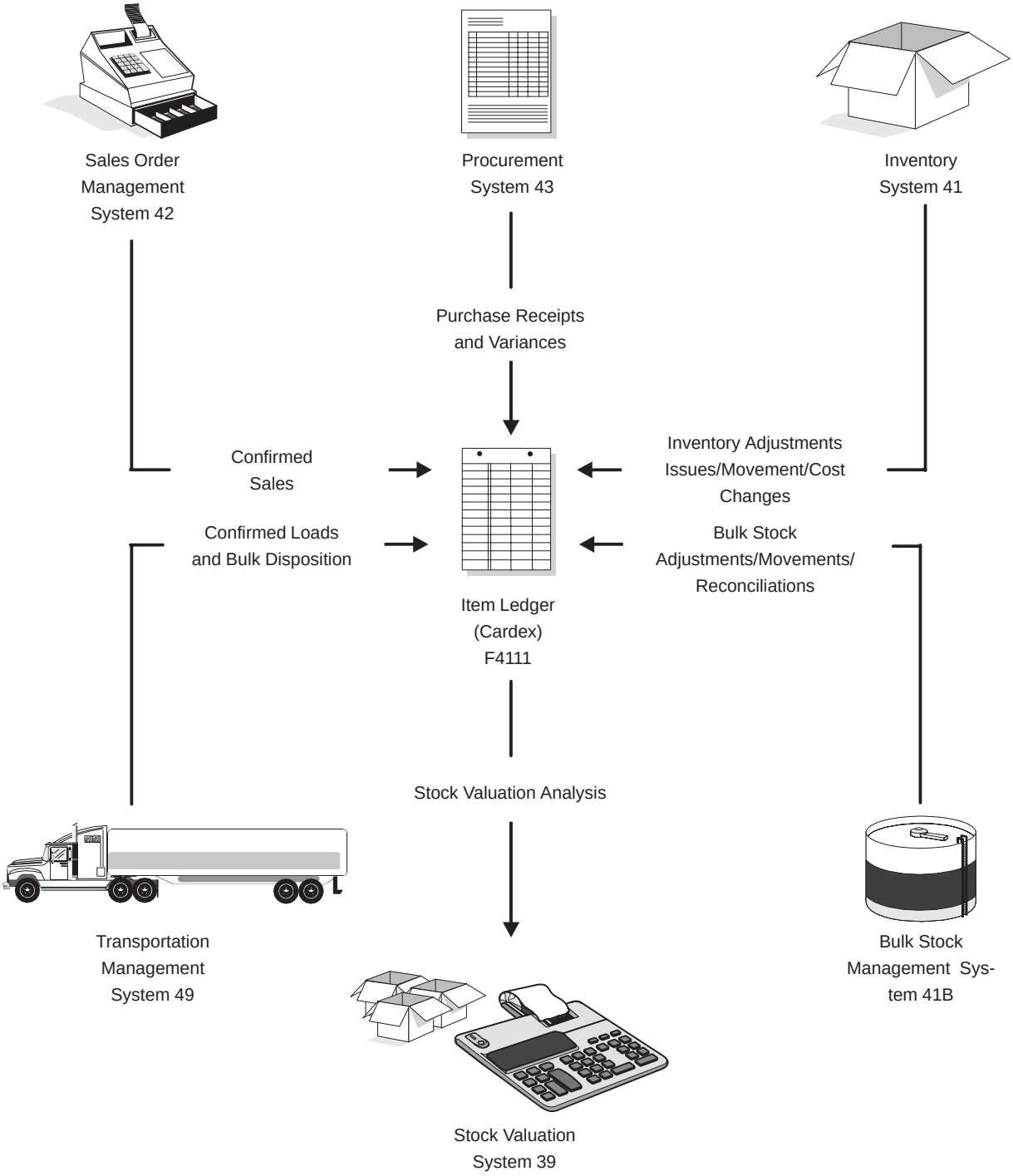
System Integration

The Stock Valuation system integrates with the following systems:

Procurement	This system retrieves item costs based on the purchasing costing method that is defined for each item. When you receive an voucher the item, the system updates the general ledger.
Inventory Management	This system stores item information that all of the other systems can use.
Bulk Stock Management	This system controls the storage, measurement, and movement of dynamic bulk inventory. This system lets you complete transactions that move bulk inventory. In addition, it accurately calculates product gains and losses for each bulk stock transaction.
Sales Order Management	This system retrieves item prices and costs from the Inventory Management system for sales orders. The system updates the general ledger and creates accounts receivable entries to record inventory, cost of goods sold, revenue, and tax transactions for use in cash receipts processing.
Distribution Contracts Management	This system allows you to manage contracts with business partners. You can accurately accommodate loans, borrows, and exchanges, and ensure that the stock involved is valued correctly.
Transportation Management	This system confirms the release of stock from your inventory and records the amount of stock in transit, thereby accurately reflecting the actual stock to be valued at the end of a period.

The systems that integrate with stock valuation store all inventory activity in a central table known as the Cardex, or Item Ledger (F4111). The Cardex is the central repository of all inventory and cost movements. Programs from other systems that handle inventory create records in this table whenever inventory and cost are affected. The Stock Valuation system uses inventory information from the Cardex to ensure that the correct inventory is valued.

The following diagram identifies the programs that affect inventory balances and write entries to the Cardex:



System Flow

Stock Valuation uses the Cardex as the base for its processing. The system extracts the inventory activities from the Cardex by document number, type, and item. Based on the valuation methods, the system then determines the various balances and updates the valuation files. When you post the valuation, the system updates the general ledger and the valuation period table (F39061).

The following process flow summarizes the tasks performed by the system.

From the Item Ledger (F4111)	The system retrieves records by specific document number, document type, and item for a given date range.
From the Item Pool Valuation Master table (F3904)	The system retrieves the item or pool valuation method and unit of measure.
From the Valuation Method Master (F3905)	The system retrieves attributes of the valuation method.
From the Valuation Period table (F39061)	The system retrieves the closing balance and other necessary information from the prior period's record.
Period Build program (R39120)	This program: • Updates current information to Valuation Period Detail. • Builds layers in detail or summary, based on the valuation method, to the Valuation Layers table (F39062). • Accumulates totals by document type, to Valuation Document Summary, F3906. • Writes and updates current information to Period Additional Quantity, F39063
From the Company G/L Update Method Master (F39042)	The system retrieves the valuation method to use to update the Account Ledger (F0911).
From Valuation Layers (F39062)	The system updates layer information and rolls up layers at year end.
General Ledger Post program (R09801)	You run the G/L Post program to update the G/L from journal entries.

Valuation G/L Update Program (R39130)

This program:

- Updates the general ledger based on the valuation method defined.
- Updates the Valuation Period table (F39061), as posted.

Business Considerations

J.D. Edwards integration provides the flexibility needed to accommodate the many stock valuation methods throughout the distribution industries. Additional features support the unique considerations of energy and chemical businesses and the demands placed on companies that must meet the requirements of many national and local regulatory agencies.

Stock valuation is a vital component of all distribution and manufacturing industries. It provides the information that you need for reporting purposes and to evaluate profit margins.

You calculate stock value on a periodic schedule, generally monthly, quarterly, and yearly. Business and government requirements determine when a company completes the reporting for the following reasons:

- Measure and manage stock levels and related cash flow
- Comply with the accounting standards that require companies to provide a true and fair value of the company's financial performance and capital used

Stock valuation reporting is necessary for corporate, management, and statutory purposes. Corporate reporting analyzes the value of the company's stock and the cost of the stock that was sold (Cost of Goods Sold). Management reporting verifies that your company's storage and handling methods comply with the laws enforced by various governmental organizations.

To determine how to account for your company's inventory, you must do the following:

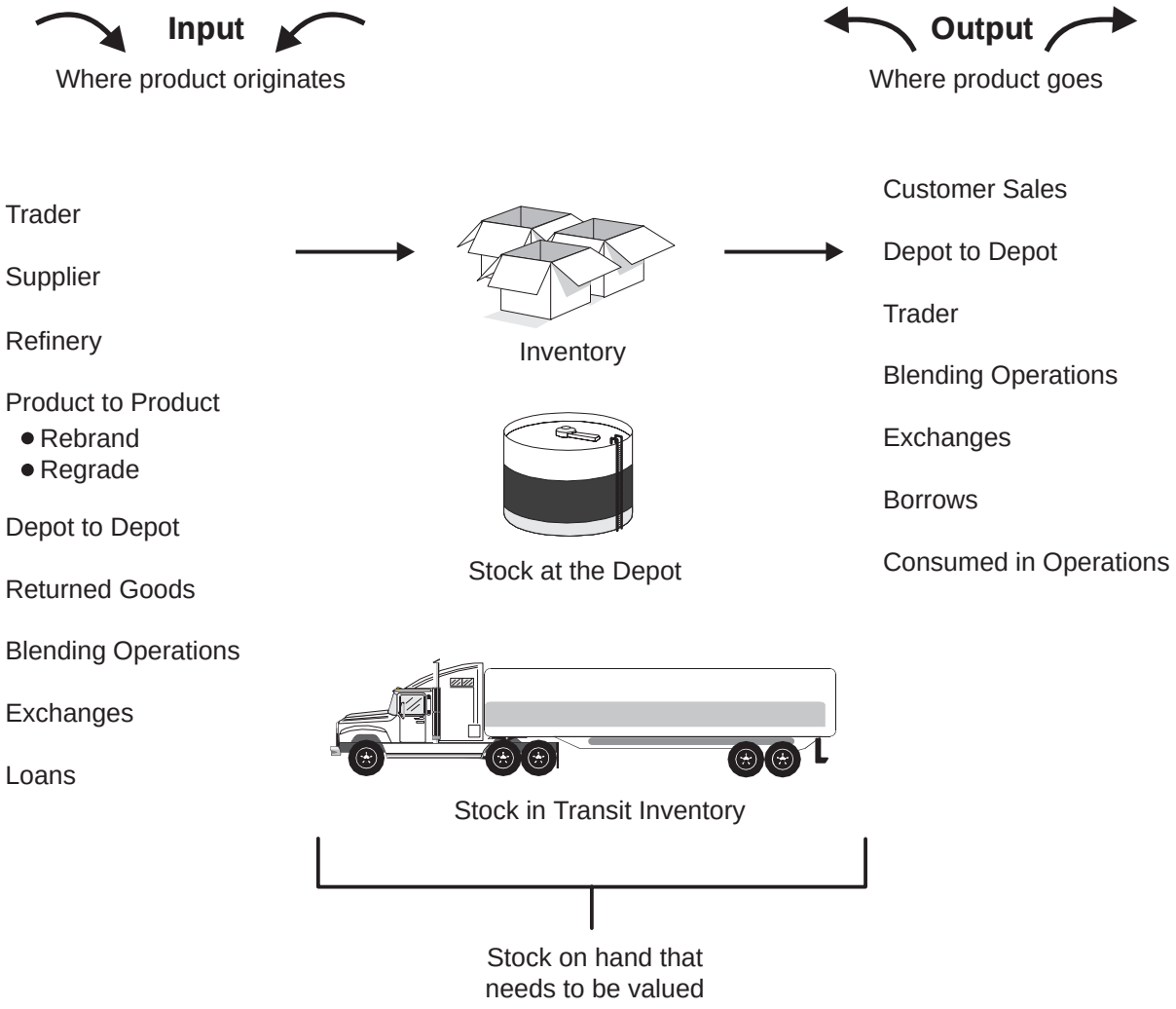
- Identify the items to include in inventory
- Identify all of the costs assigned to the inventoried items
- Choose a stock valuation method to distinguish costs associated with inventory that has been sold from inventory that is still on hand

Each of these actions is explained in further detail below.

Identifying Inventory

To value your stock, you must be able to identify the items in your inventory. Possession of legal title of inventory is a fundamental criterion for determining whether items should be reflected in the inventory of a seller or a buyer. However, possession of title does not necessarily coincide with actual physical possession of the goods. For example, title to goods that are in the possession of a common carrier and that are in transit from the seller to the buyer should remain in the inventory of the seller until delivered. The integration of the various systems ensures that you can identify your entire inventory.

The following diagram illustrates how product enters your inventory and some of the ways that you can deplete your inventory.



Many companies consolidate items into groups of similar items for stock valuation purposes. This process is called “pooling” or “product consolidation.” When you pool items, you can apply a single purchase price and associated costs to all items in that pool.

Whether each item is valued separately or as a pool varies from industry to industry. The Stock Valuation system allows you to value by individual items, pools, or both.

Many companies maintain contracts with other companies to store bulk product. Therefore, bulk stock might be commingled and belong to more than one owner. The Stock Valuation system allows you to exclude commingled stock from the valuation.

Identifying Costs

You generally post inventory at an amount that reflects the price paid plus all costs incurred to bring the items to the location and to make them salable.

In some distribution industries, especially energy and chemical businesses, the actual purchase cost from a supplier might not be known at the time the items are received into your inventory or only become known after you issue a voucher for payment.

J.D. Edwards allows you to update, or “recost” these open receipts and paid vouchers, which ensures that the value of your stock is represented by the actual cost.

Choosing Stock Valuation Methods

Determining which method is used to assign inventory costs to the Cost of Goods Sold (COGS) account in the income statement is a major management decision. Inventory items in a company’s possession and available for sale throughout a period must acquire a period-end status of either “sold” or “on hand.” If the items have been sold, you must reflect the costs assigned to those goods on the period’s income statement. If the items remain unsold, you must be able to determine which portion of the cost of goods available for sale is to be assigned to the income statement and which portion is to be assigned to the balance sheet.

Inventory items physically move out of the business when they are sold. Similarly the costs assigned to those items must move from the balance sheet to the income statement, where they are no longer reflected as an available resource, but as an operating expense for that period.

The Stock Valuation system provides the following valuation methods for all items in your inventory:

- First In/First Out (FIFO)
- Last In/First Out (LIFO)
- Weighted Average Cost
- Replacement/Current Cost

In this documentation, we refer to these methods as stock valuation methods to differentiate between the cost of an item and its current value. “Cost” refers to the cost of an item so that you can determine its selling value. Valuation determines the value of any item that is currently in your inventory for reporting and financial purposes.

Dual Currency

Businesses operating in an inflationary market need to be able to maintain a set of books in two currencies, the local currency and a stable currency, commonly U.S. dollars. The Stock Valuation system allows a business to value inventory based on a valuation method, such as LIFO, FIFO, and replacement/current cost. With Dual Currency, a second ledger type allows a business to adjust its inventory in both the domestic and the stable currency.

Tables and Descriptions

The following identifies the primary stock valuation tables and their contents:

Item Pool Valuation Master (F3904)	Contains the information for all valuation methods, including the following: • Item number or pool • Valuation method • User identification and update information
Valuation Category Master (F39041)	Contains information for valuation methods including the following: • Unit of measure • G/L class
Company G/L Update Method Master (F39042)	Contains information for valuation methods including the following: • G/L update method • Default Branch Plant
Valuation Method Master (F3905)	Contains the information for all valuation methods that you define for your company. See *Defining Valuation Methods* for more information about defining names and attributes for your valuation and auxiliary methods.
Item Pool Valuation Cost Master (F3908)	Maintains the replacement cost of the items and pools.

G/L Adjustment Table (F3910)

Shows the adjustments made to the G/L table.

Valuation Period Table (F39061)

Contains all of the stock valuation information for the period, including the following:

- Opening quantities and amounts
- Period incoming quantities and amounts
- Period outgoing quantities and amounts
- Closing quantities and amounts
- Inventory and COGS adjustment
- LIFO adjustment and adjustment cost
- General ledger classification
- Posted and closed information
- User identification and update information

Valuation Layers (F39062)

Contains all of the information for the historical layers for all stock valuation methods that you define for your company, including:

- Receipt information
- Current quantity, amount, and allocations
- Last allocation amount, quantity, and date
- User identification and update information

Period Additional Quantities (F39063)

Contains the valuation information for those methods that you defined to include not-in-stock inventory, in-transit inventory, or loan and borrow accommodations.

Valuation Document Summary (F39064)

Contains the cost information summarized by document type.

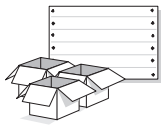
Menu Overview

The following diagram identifies the commonly used menus for the J.D. Edwards Stock Valuation system:

Stock Valuation (G39)

Daily Operations

- Stock Valuation Updates G3930
- Stock Valuation Setup G3940

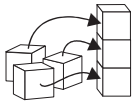


Stock Valuation Reports

- Stock Valuation Updates G3930
- Stock Valuation Setup G3940

Stock Valuation Updates

- Stock Valuation Setup G3940



Stock Valuation Setup

- Stock Valuation Updates G3930

Periodic

Stock Valuation Processing

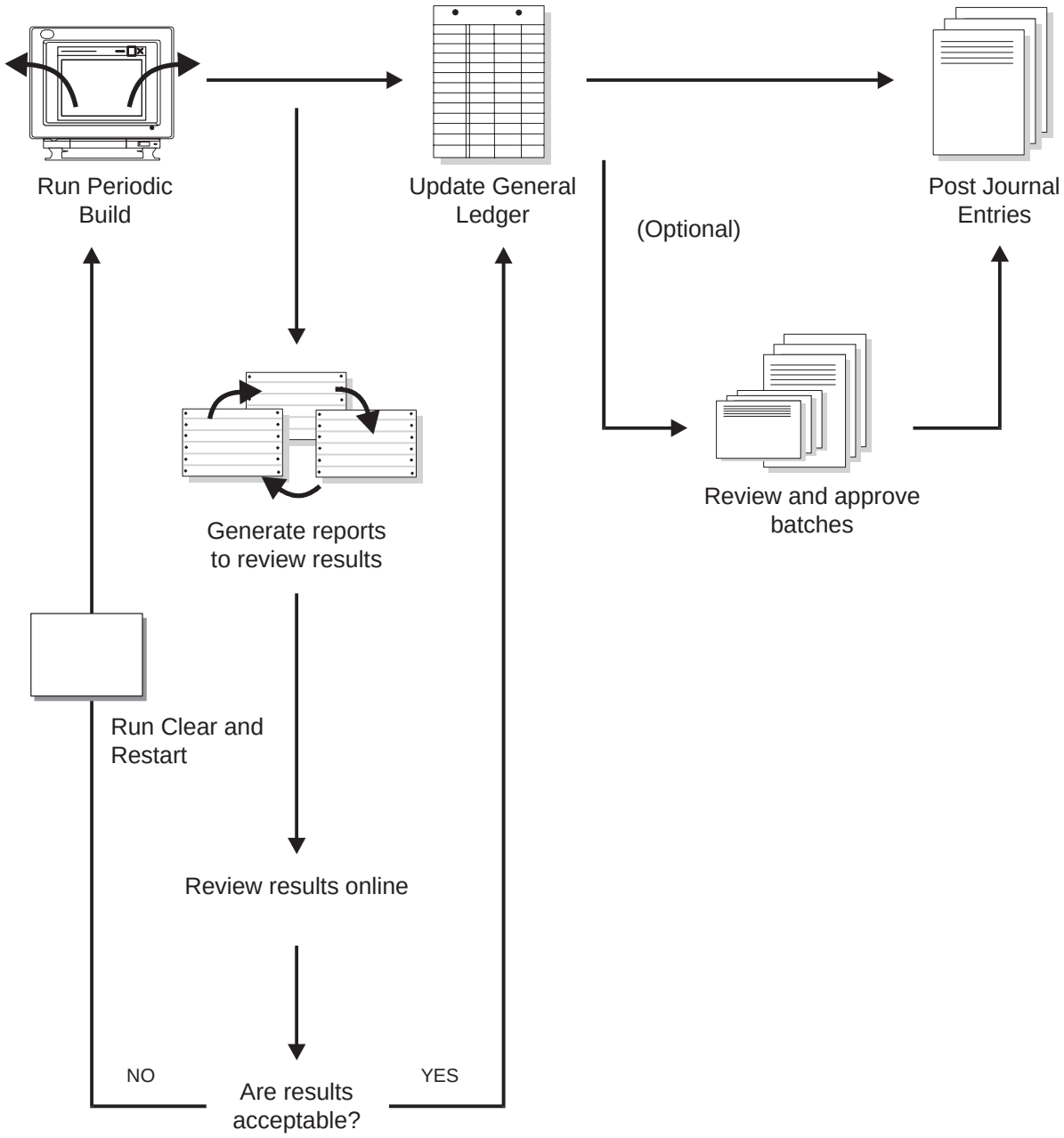
The central function of stock valuation is to establish the cost of your ending inventory based on the period's activity and the prior periods' layers. The accuracy of this value relies on information from other systems.

The systems that integrate with Stock Valuation store all inventory activity in a central table known as the Cardex (Item Ledger). The Stock Valuation system:

- Extracts the period's activity from this table
- Builds historical layers based on the activity
- Stores the information in a transaction table

Stock valuation provides vital information for reporting and profitability. It is important that all stock is valued with the correct costs. Therefore, the Stock Valuation system provides you with opportunities to review and analyze the results of the extraction before you update the general ledger. You can review and approve the valuation before you actually post it. With dual currency, you can value stock based on a stable currency in addition to the domestic currency.

The following diagram illustrates the information flow for stock valuation:



Stock Valuation Processing consists of the following tasks:

- ❑ Understanding sources of stock valuation information
- ❑ Understanding dual currency
- ❑ Determining the value of stock

Understanding Sources of Stock Valuation Information

The Stock Valuation system integrates with other systems to accurately reflect the cost of your inventory. Understanding how these systems work together helps you determine how each system affects the stock valuation results.

Updating Actual Costs

You do not always know the price of the inventory when you purchase it. Typically, you enter an average price or average formula price when you receive the inventory. Later, you update the system information with the actual price or formula when it is known. This process is also called "recosting."

Procurement System

Landed costs are costs in excess of the purchase price of an item. You assign each item a landed cost or landed cost rule. You need this information to accurately reflect the value of your stock.

You enter the cost of an item during purchase order entry. If you do not enter a different cost or adjust the cost at any other point, the system retrieves this cost to determine the cost of an item.

When you receive an invoice for purchased items, use the voucher matching programs to match invoices, either in detail (sales line by sales line), or in summary (total of all sales lines to the total amount owed to the supplier). At this point, you can change the cost of an item if it is different from what the system retrieves. You can also revise paid vouchers by using the Summary Voucher Matching program. The voucher matching programs do the following:

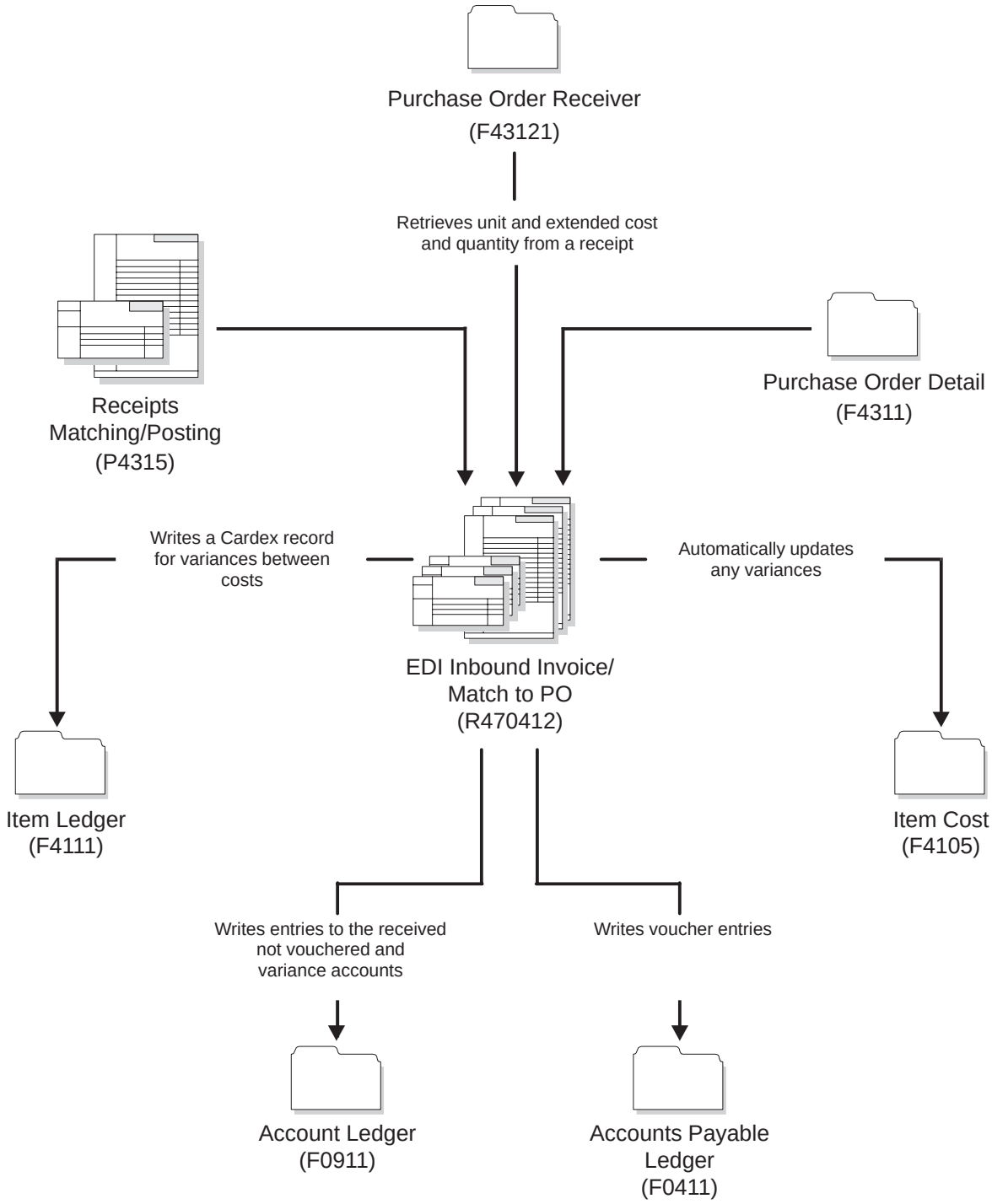
- Update the general ledger accounts for any variances
- Keep the general ledger and inventory tables in balance
- Update the Item Cost table (F4105) with the last-in cost
- Write records to the Average Cost Work table (F41051) to be extracted later by the batch update program

You must run the EDI Inbound Invoice/Match to PO program (R470412) to process any variances between the invoice and landed costs.

See Also

- *Setting Up Landed Costs* and *Creating Vouchers* in the *Procurement Guide*

The following diagram illustrates how the subsystem integrates with other systems for the recosting process:



Loans, Borrows, and Exchanges

Loans, borrows, and exchanges are agreements made with business partners to facilitate smooth operations when one partner has low inventory one or more items. You define the terms of these agreements in the Agreement Management programs and assign a unique number to each agreement. To fulfill the terms of the agreements, you use the sales order entry programs or purchase order entry programs and assign the unique agreement number to the appropriate document.

Loans, borrows, and exchanges might cause physical inventory to be transferred. A loan to another company can be shipped out of the depot of the loaning company directly to a customer. The borrowing company might never take physical possession of the product. Storage, transportation, and handling charges might be part of an agreement that can add to the cost of an item and increase the valuation for borrowed inventory.

The following steps outline the process to loan product to a partner:

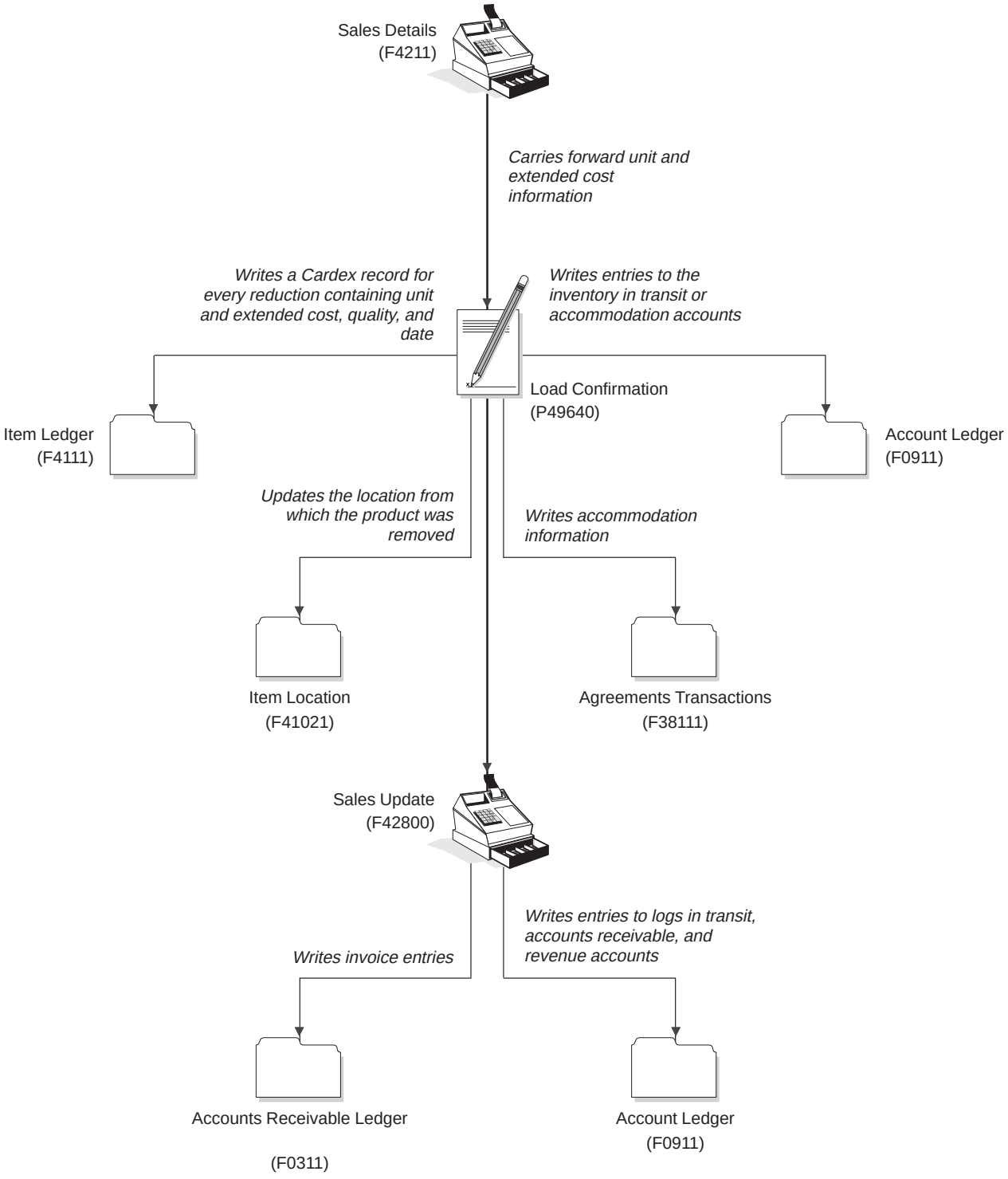
- You enter a sales order to record the loan.
- The system retrieves the item cost from the Item Cost table (F4105) and assigns the selling price based on the sales costing method defined in the Inventory Management system.
- Generally, you reduce inventory during the load confirmation process when you actually remove the item from its location in your inventory. Because this process reduces inventory, the system writes a record to the Cardex using the item and cost information from the sales order.
- The Sales Update program updates the general ledger accounts for the inventory reduction.

When you loan product to another company, the system reduces the on-hand inventory quantity. Because you anticipate the borrowing company to return the loan and you still own the inventory, you will want to include this quantity in your valuation. Conversely if you borrow product, you anticipate returning the quantity to the other company. Therefore, even though the borrowing transactions actually increase your inventory quantity, you do not want to include them in your valuation. A flag to include accommodations in the Agreement Management system allows you to capture the net value, or accommodations, from loans and borrows.

See Also

- *Working with Detail Information* in the *Sales Order Management Guide* for entering a sales order
- *Defining Agreement Relationships* in the *Agreement Management Guide*
- *Setting Up Branch Sales Markups* in the *Sales Order Management Guide*

The following diagram illustrates the process for a loan.



To process a borrow or an exchange, you usually use a purchase order or a sale out of a foreign depot.

Transfers

When you enter a transfer order, you create both a sales order and a purchase order so that you can move items from one branch/plant within your company to another branch/plant. Additional costs are generally part of a transfer order. Because transfers have a different document type, these additional costs can be included in the price and processed through the stock valuation build.

See Also

- *Entering Order Header Information* and *Entering Order Detail Information* in the *Procurement Guide*

Stock in Transit

When you value stock at the end of each period, you need to ensure that you accurately reflect all of the stock that is in your inventory. When you define each of the valuation methods that you use, you can select to include stock in transit. Stock in transit is still owned by your company and needs to be included as part of your inventory.

Unless you excluded them when you defined the valuation method, items that have completed the load confirmation process but for which delivery has not been confirmed are automatically processed as part of the stock valuation.

See Also

- *Recording Intra-Depot Stock Movements* in the *Bulk Stock Management Guide*
- *Defining Valuation Methods*

Understanding Dual Currency

Businesses operating in an inflationary market need to be able to maintain a set of books in two currencies, the local currency and a stable currency, commonly U.S. dollars. The Stock Valuation system allows a business to value inventory based on a valuation method, such as LIFO or FIFO. With dual currency in Inventory, a second ledger type (XA) allows a business to adjust its inventory in both the domestic currency and the stable currency.

Dual currency in Stock Valuation works with multi-currency accounting, which allows you to do business in multiple currencies and follow the reporting and accounting requirements of the corresponding countries. You must set up multi-currency in order to use dual currency in Stock Valuation.

Itemizing at the conversion rate will result in a different total than if you add up all of your transactions and then multiply by the conversion rate.

Dual Currency Accounts

The system maintains dual currency for valuation layers by creating an additional ledger for the stable currency, using the current exchange rate to calculate the amount. The system writes a record for each currency in the Stock Valuation tables. For example, when data is extracted from the Cardex, two records are written, one containing the domestic currency amounts and one containing the stable currency amounts.

See Also

- *About Multi-Currency Setup* and *Setting Up Multi-Currency* in the *General Accounting Guide*
- *Assigning Valuation Methods* for information about setting up dual currency in inventory

Determining the Value of Stock

You can run the stock valuation process as many times as you like during each accounting period. During processing, the system builds the valuation for all assigned methods for each item and pool. When the build is complete, you can print reports to verify the completeness and accuracy of the company's stock value before you post it for the period. You can also review the valuation built for all auxiliary valuation methods that you have assigned to each item and pool.

Determining the value of stock consists of the following tasks:

- ❑ Working with period build
- ❑ Generating reports (optional)
- ❑ Reviewing results (optional)
- ❑ Running the Stock valuation G/L Update

Before You Begin

- ❑ Verify that the programs that integrate with stock valuation are installed and set up.

See Also

- *Understanding Sources of Stock Valuation Information.*

Working with Period Build

You use Valuation Period Build to build the Stock Valuation period activity tables for calculating the value of stock. Most users of the Stock Valuation system use two versions of Valuation Period Build to accomplish separate results. You can use a different version to rerun the build if you discover inaccurate information or omissions in the first build that you run. If the system encounters any errors, a message is sent to the message center or printed on a report.

For dual currency, the program creates additional records for the stable currency for every layer at the domestic currency. If dual currency is active and the Cardex transaction is a reversal, the Period Build uses the transaction date of the reversal to calculate the exchange rate.

The following table describes the two versions of Valuation Period Build.

Valuation Period Build	This version selects any records for the current period that were not previously processed.
Period Build - Clear and Restart	This version clears the stock valuation tables for the period and reprocesses the entire period.

Working with Period Build consists of the following tasks:

- ❑ Running the Valuation Period Build
- ❑ Running the Period Build - Clear and Restart

Before You Begin

- ❑ Verify that each item or pool has an assigned valuation method. See *Assigning Valuation Methods.*
- ❑ Verify that two versions of Valuation Period Build are set up. See *Creating (Adding) a Batch Version* in the *OneWorld Foundation Guide*.

During period build, if there is an accumulation for the year, the program starts at the beginning of the year and allocates the accumulated quantity forward throughout the layer. If there is a depletion for the year, the program starts at the end of the layer previous to the current year and subtracts the depleted amount backward throughout the layer.

The program uses the allocations to calculate the adjustment amounts for LIFO accumulation/depletion.

Running the Valuation Period Build

From the Stock Valuation Updates menu (G3930), choose Stock Valuation Period Build.

The Valuation Period Build program extracts the transactions by document type for specific date ranges to build the valuation tables.

Use this version to extract all records since the end of the previous period and post them to the general ledger. If you approve of the data, this is the only version that you need to run.

Processing Options for Processing Options for Valuation Period Build

```
Selection

      1.  Please Enter the G/L Date to                    _____________
      execute
```

Running the Period Build - Clear and Restart

From the Stock Valuation Updates menu (G3930), choose Clear and Restart Period Build.

Use the Period Build - Clear and Restart program to correct errors, such as omitted documents or incorrect entries. This version completely clears the valuation table and runs the entire extraction again. The system does not clear any previous valuations that have been posted to the general ledger.

Processing Options for Processing Options for Clear and Restart

```
Selection

      1.  Please Enter the G/L Date to                    _____________
      execute
```

Generating Reports

From the Stock Valuation Reports menu (G3920), choose Unit Cost Period Report.

After you run Valuation Period Build, you can generate a report to verify the accuracy and completeness of your valuation. For the Unit Cost Period Report, you can specify in a processing option whether to display domestic or dual currency. The report format is summarized below:

Unit Cost Period Report

- This report provides the average cost of each item or pool for selected periods based on valuation method.

Processing Options for Unit Cost Period Report

```
Process

      Enter the first Fiscal Period you                   _____________
      want to print on the report. Blank
      will default to current fiscal
      period for the company
      Enter the Fiscal Year of the first                  _____________
      period you want to print on the
      report. Blank will default to the
      current fiscal year for the
      company.
      Enter a '1' if you would like to                    _____________
```

```
print the report displaying
Average Unit Cost for Closing
Inventory.  A default value of
Blank will display Average Unit
Cost for Incoming Transactions.
Enter a '1' to include dual
currency amounts on the report.  A
default value of Blank will not
print dual currency amounts.
```

Reviewing Results

After you run any Valuation Period Build version, you can access the valuation information on several different forms. You can use these forms to research any problems with the the build before you run another version or accept the results of the valuation. You can use these forms to review different aspects of the valuation continuously throughout the period until you post the next period's valuation.

With most of these review options, you can review item or pool information by a specific valuation method. The system can only display valuation information using one of the methods that is assigned to an item on the Item/Pool Valuation Maintenance form.

Reviewing results consists of the following tasks:

- ❑ Working with stock valuation
- ❑ Reviewing item or pool quantities
- ❑ Reviewing historical layers
- ❑ Reviewing methods
- ❑ Reviewing by document type
- ❑ Reviewing G/L adjustments
- ❑ Reviewing Unit Cost Inquiry

If you defined a valuation method to include in-transit inventory or loan and borrow accommodations, the system includes these amounts in the valuation. You can use Period Additional Quantities to review this information on separate detail lines from the Valuation Period Review and Valuation Summary Review programs.

See Also

- *Assigning Valuation Methods*
- *Defining Valuation Methods*

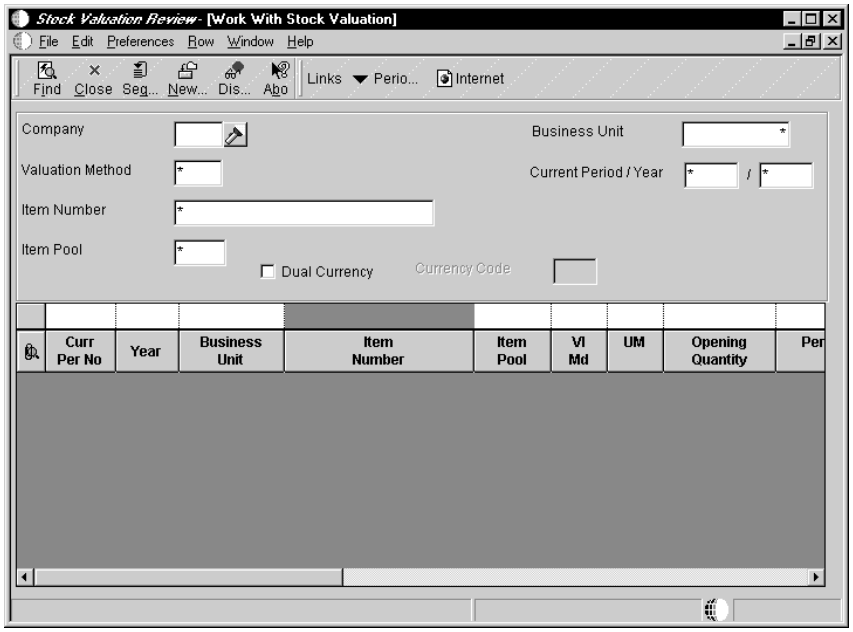
Working with Stock Valuation

Use Valuation Summary Review to review a summary of the valuation for any item or pool and a specific valuation method. You can choose between domestic and dual currency modes.

▶ To work with stock valuation

From the Daily Operations menu (G3910), choose Stock Valuation Review.

On Work With Stock Valuation



1. Complete the following field and click Find:
   - Company
2. Complete the following optional fields:
   - Valuation Method
   - Item Number
   - Item Pool
   - Business Unit
   - Current Period / Year

Field	Explanation
Company	A code that identifies a specific organization, fund, entity, and so on. The company code must already exist in the Company Constants table (F0010) and must identify a reporting entity that has a complete balance sheet. At this level, you can have intercompany transactions. NOTE: You can use Company 00000 for default values, such as dates and automatic accounting instructions (AAIs). You cannot use Company 00000 for transaction entries.
Valuation Method	A two-character abbreviation for the methods that the system uses to determine the value of your company's stock for reporting and financial purposes. Examples include: • FI (FIFO) • F2 (FIFO Detail by Branch) • LI (LIFO) When you run the Stock Valuation Extraction program, the system updates the Stock Valuation Detail tables for the assigned valuation methods.
Item Number	A number that the system assigns to an item. It can be in short, long, or third item number format.
Item Pool	A user defined code (41/05) that indicates a group of items that are evaluated using the same set of valuation methods. You assign the item pool to the item and then set up valuation methods for the pool using the Pool Valuation Method Maintenance program.
Business Unit	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table.
Current Period / Year	A number that identifies the current accounting period (from 1 to 14). The system uses this number to generate error messages, such as PBCO (Posted Before Cut Off) and PACO (Posted After Cut Off).

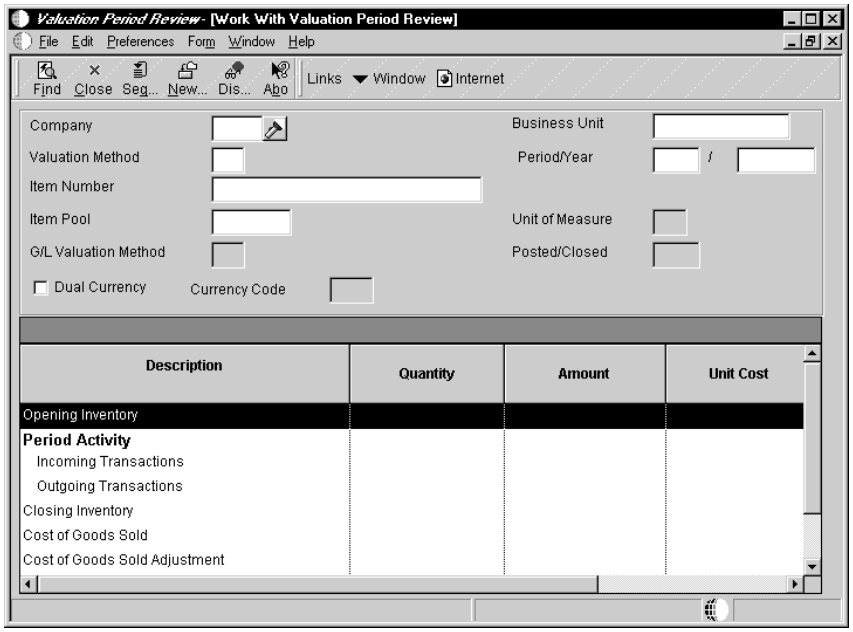
Reviewing Item or Pool Quantities

Use Valuation Period Review to review the opening, incoming, outgoing, and period ending values of any item or pool for a specific valuation method. You can choose between domestic and stable currency modes when reviewing specific valuation methods.

▶ To review item or pool quantities

From the Daily Operations menu (G3910), choose Valuation Period Review.

On Work With Valuation Period Review



1. Complete the following fields:
   - Company
   - Valuation Method
   - Period/Year
2. Complete one of the following fields:
   - Item Number
   - Item Pool

While reviewing item or pool quantities, you can access the Period Additional Quantities form to review stock status, accommodations, and in-transit quantities.

3. If the valuation method is allocated within all branch/plants, complete the following field:

    - Business Unit

Reviewing Historical Layers

Layers are receipts of product that you enter into the system. Use this option to review the historical layers for your ending inventory. You can choose between domestic and dual currency modes.

You can identify and review the layers in one of two different formats. The system displays the information in either detail or summary format depending on how you define the valuation method, as described below:

- If you define the valuation method to use detail mode, each receipt is a layer.
- If you define the valuation method to use summary mode, each period is a layer and the prior years' layers are rolled up at the year end into one layer.

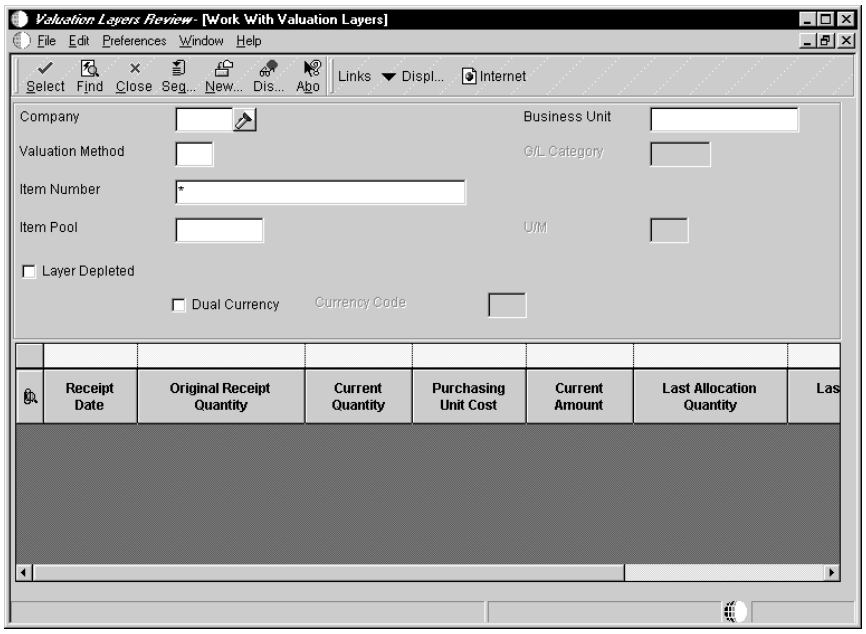
See Also

- *Defining Valuation Methods*

▶ To review historical layers

Form the Daily Operations menu (G3910), choose Valuation Layers Review.

On Work With Valuation Layers



1. Complete the following fields:
   - Company
   - Valuation Method
2. Complete one of the following fields:
   - Item Number
   - Item Pool
3. If the valuation method is allocated within all branch/plants, complete the following field:
   - Business Unit
4. To view the depleted layers, click the following option and then click Find:
   - Layer Depleted

Field	Explanation
Layer Depleted	Designates that the layer doesn't have any quantity left to allocate. The layer is fully depleted.

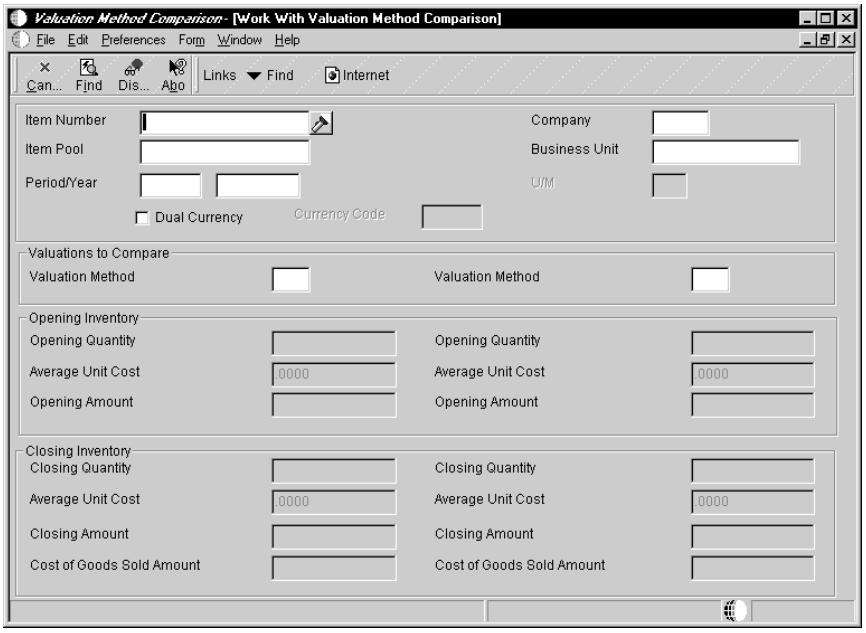
Reviewing Methods

Use Valuation Method Comparison to compare the valuation differences between two different methods. You can choose between domestic and stable currency modes.

▶ To review methods

Form the Daily Operations menu (G3910), choose Valuation Method Comparison.

On Work With Valuation Method Comparison



1. Complete one of the following fields:
   - Item Number
   - Item Pool
2. Complete the following fields and click Find:
   - Period/Year
   - Company
   - Business Unit
   - Valuation Method

Field	Explanation
Valuation Method	A two-character abbreviation for the methods that the system uses to determine the value of your company's stock for reporting and financial purposes. Examples include: • FI (FIFO) • F2 (FIFO Detail by Branch) • LI (LIFO) When you run the Stock Valuation Extraction program, the system updates the Stock Valuation Detail tables for the assigned valuation methods.

Reviewing by Document Type

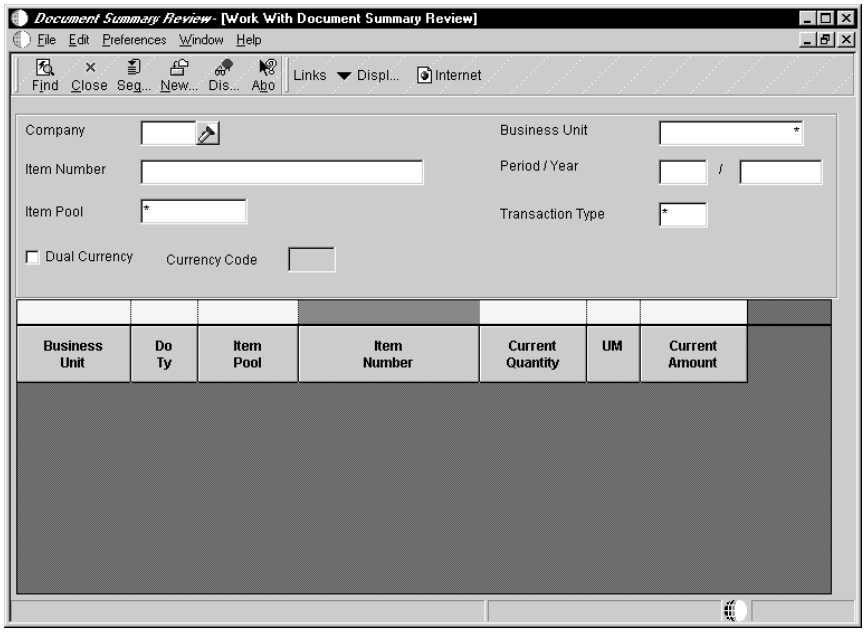
Use Document Summary Review to review a summary of transactions by document type. Use this program to resolve problems that might be caused by missing or inaccurate document type information.

You can choose specific transaction types, such as incoming, outgoing, or both. If you choose to review by a specific item or pool, the system also displays quantity and amount totals. You can toggle between domestic and dual currency modes.

▶ To review by document type

From the Daily Operations menu (G3910), choose Document Summary Review.

On Work With Document Summary Review



1. Complete the following fields:
   - Company
   - Period / Year
2. Complete one of the following optional fields:
   - Item Number
   - Item Pool
3. Complete the following optional fields and click Find:
   - Business Unit
   - Transaction Type

Field	Explanation
Transaction Type	A value that specifies if the transaction type is incoming, outgoing, or both. Valid values are: * Select all transactions. 1 Select only incoming transactions. 2 Select only outgoing transactions. 3 Select only transaction types that are both incoming and outgoing.

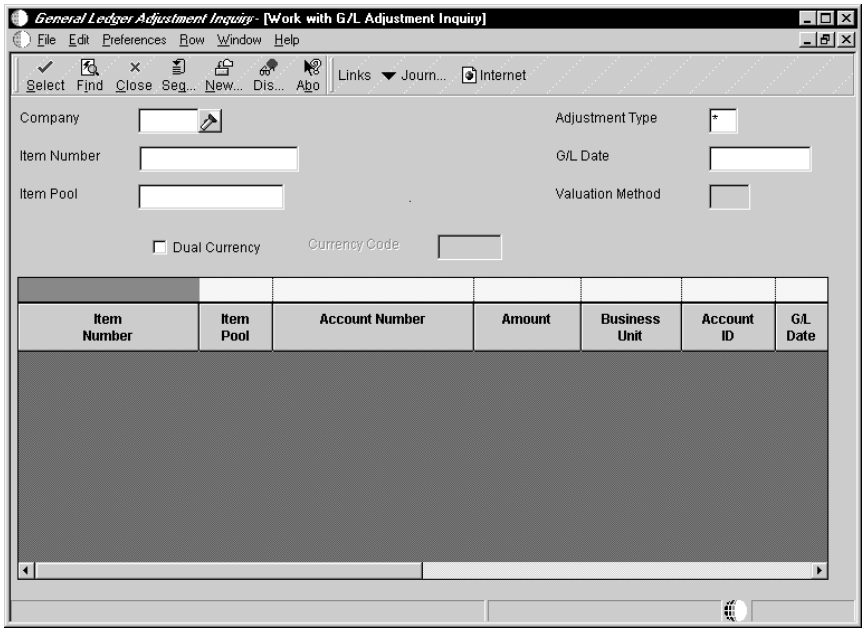
Reviewing G/L Adjustments

You can view stock valuation adjustments to the general ledger with the Valuation G/L Adjustment Inquiry program. You can choose between domestic and dual currency modes.

▶ To review G/L adjustments

From the Daily Operations menu (G3910), choose General Ledger Adjustment Inquiry.

On Work with G/L Adjustment Inquiry



1. Complete the following field:
   - Company
2. To select a pool or item, complete one of the following optional fields:
   - Item Number
   - Item Pool
3. To select a specific G/L date, complete the following field:
   - G/L Date
4. Complete the following optional field and click Find:
   - Adj Type

Field	Explanation
G/L Date	A date that identifies the financial period to which the transaction will be posted. The company constants table for general accounting specifies the date range for each financial period. You can have up to 14 periods. Generally, period 14 is used for audit adjustments.
Adj Type	Type of Adjustment which will be written to General Ledger. Allowed values are: 1 Accumulated/Depleted Adjustment Offset 2 Cost of Goods Sold 3 LIFO Accumulated/Depleted Adjustment 4 Inventory

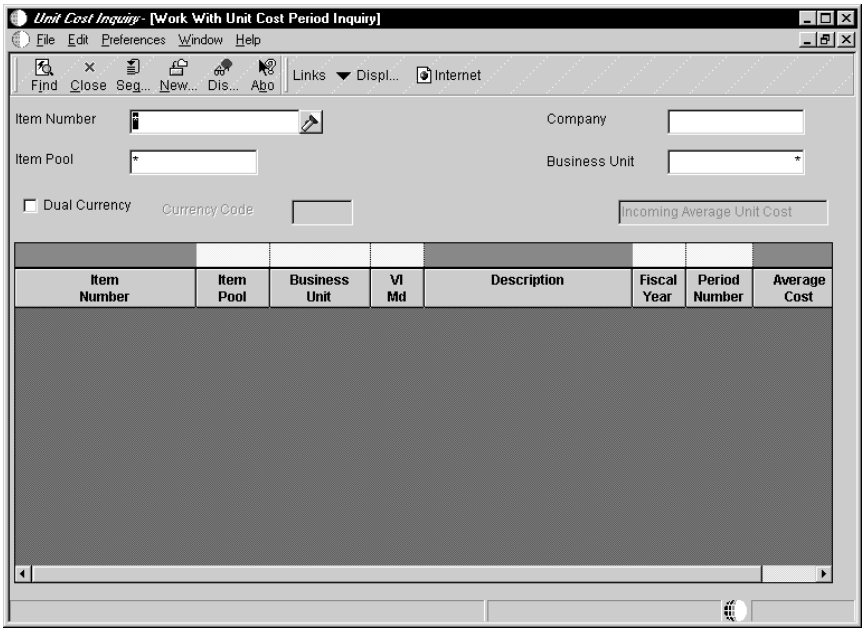
Reviewing Unit Cost Inquiry

You can use this program to view the average cost for current and prior periods, based on valuation method.

▶ To review unit cost inquiry

From the Daily Operations menu (G3910), choose Unit Cost Inquiry.

On Work With Unit Cost Period Inquiry



1. Complete the following field:
   - Company

2. Complete one of the following optional fields and click Find:
   - Item Number
   - Item Pool
   - Business Unit

If the Check Box field is selected, Dual Currency is displayed along with Domestic values.

Processing Options for Unit Cost Inquiry

```
Unit Cost

      Enter a '1' if you would like to                    _____________
      print the report displaying
      Average Unit Cost for Closing
      Inventory.  Default of blank will
      dsiplay Average Unit Cost for
      Incoming Transactions.
```

Running the Stock Valuation G/L Update

From the Stock Valuation Updates menu (G3930), choose Stock Valuation G/L Update.

Run the Valuation G/L Update program after you review the data from the Period Build program. The Valuation G/L Update program updates the general ledger for the valuation methods that are defined as general ledger update methods. The program updates the general ledger based on one valuation method for each item number or item pool.

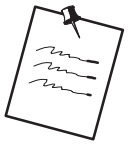
The Period Build program calculates the amounts to be updated. The G/L Update simply performs the update after you have reviewed the data. Additionally, records for the next period are built for the Valuation Period and Period Additional Quantities tables (F39061 and F39063 respectively). These records contain the opening balance for the next period. For dual currency, the program writes a record to the general ledger for the stable currency.

You can run proof and final versions of this program. When you run the proof version, the system does not update the general ledger. After you review the proof version, you run the final version to update the general ledger.

Before you update the general ledger, you can review and approve batches produced by the system. After you approve the general ledger updates, you can post them to the account ledger. Posting completes the valuation process and posts the actual stock value for the period end.

See Also

- *Reviewing Journal Entries* and *Approving Batches of Journal Entries for Posting* in the *General Accounting Guide* for information on reviewing and approving batches before posting
- *Posting Journal Entries* in the *General Accounting Guide* for information on posting journal entry batches and verifying journal entry posts



The G/L Update program writes accumulations and depletions to separate accounts. If the offset amount for the LIFO accumulation/depletion amount is positive, the program writes a journal entry to the Asset for LIFO AAI. If the offset is negative, the update writes a journal entry to the Liability for LIFO AAI.

Processing Options for Valuation G/L Update

Default

Enter a '1' to execute in UPDATE mode which will create journal entries and set the update flag on the period detail file. Default of bblank will execute in PROOF mode (no update will occur). _____

Process

1. G/L Date. Default of blank will use current date. _____
2. Document Type. Default of blank will use 'JE'. _____
3. Domestic Ledger Type. Default of blank will use 'AA'. _____
4. Dual Currency Ledger Type. Used only when Dual Currency is active. Default of blank will use 'XA'. _____
5. Enter a '1' to summarize entries by account. Default of blank will create detail entries. _____
6. Enter the version ID to use for teh G/L Journal Entry Server program. Default of blank will use version 'ZJDE0001'. _____
7. Enter a '1' to roll up remaining FIFO layers for year end processing. _____

What You Should Know About Processing Options

Year-end processing (7) For LIFO valuations, the system always rolls up all layers at the end of the year into a single layer for the opening balance for the next year. If you want the FIFO valuations to roll up into one layer, enter 1 in this option. Otherwise, the system does not roll up the FIFO valuations into one layer.

Setup

Stock Valuation Setup

Before you can use the Stock Valuation system, you must complete certain tasks to define information that the system uses during processing. You can customize much of this information to meet the business needs of your company.

Stock Valuation setup consists of the following tasks:

- ❑ Activating Stock Valuation
- ❑ Activating Dual Currency
- ❑ Setting up user defined codes
- ❑ Defining valuation methods
- ❑ Working with pools and items
- ❑ Setting up automatic accounting instructions

What Are the System Setup Requirements?

User defined codes	These define customized codes, such as documents types and pools, that are appropriate for your business needs.
Valuation methods	These define the attributes for all of the valuation methods that you want to use to value your stock.
Pools and items	Pools identify all of the items associated with an item pool and assign the valuation methods that you use for each item and pool.
Company selection	You must set up the companies to use when you extract the valuation by company.
Automatic accounting instructions	Automatic accounting instructions define the rules for the chart of accounts and establish how the system creates automatic entries.

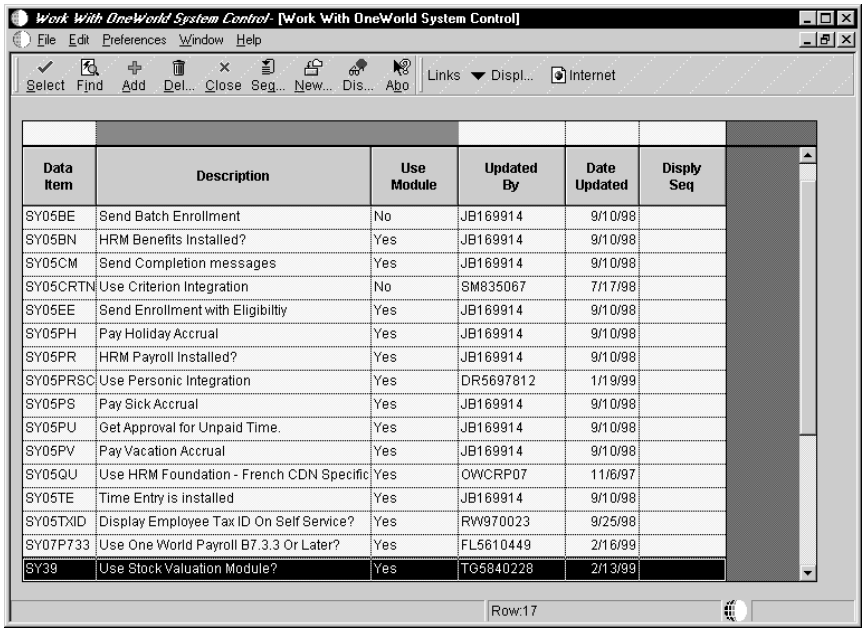
Activating Stock Valuation

Before you can use Stock Valuation with other systems, you must activate the Stock Valuation system using OneWorld System Control.

To activate Stock Valuation

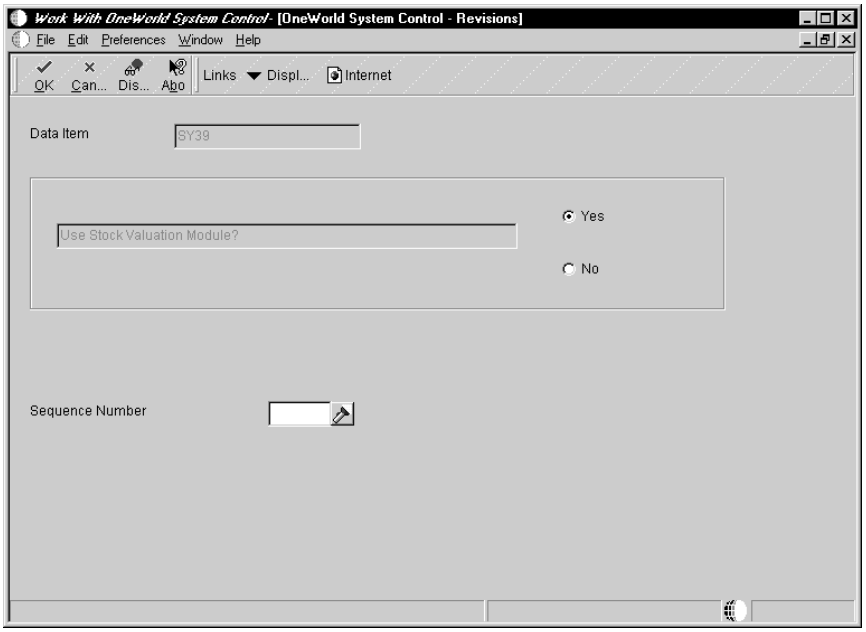
From the Stock Valuation Setup menu (3940), choose Activate Stock Valuation.

On Work With OneWorld System Control



Data Item	Description	Use Module	Updated By	Date Updated	Disply Seq
SY05BE	Send Batch Enrollment	No	JB169914	9/10/98	
SY05BN	HRM Benefits Installed?	Yes	JB169914	9/10/98	
SY05CM	Send Completion messages	Yes	JB169914	9/10/98	
SY05CRTN	Use Criterion Integration	No	SM835067	7/17/98	
SY05EE	Send Enrollment with Eligibiltiy	Yes	JB169914	9/10/98	
SY05PH	Pay Holiday Accrual	Yes	JB169914	9/10/98	
SY05PR	HRM Payroll Installed?	Yes	JB169914	9/10/98	
SY05PRSC	Use Personic Integration	Yes	DR5697812	1/19/99	
SY05PS	Pay Sick Accrual	Yes	JB169914	9/10/98	
SY05PU	Get Approval for Unpaid Time.	Yes	JB169914	9/10/98	
SY05PV	Pay Vacation Accrual	Yes	JB169914	9/10/98	
SY05QU	Use HRM Foundation - French CDN Specific	Yes	OWCRP07	11/6/97	
SY05TE	Time Entry is installed	Yes	JB169914	9/10/98	
SY05TXID	Display Employee Tax ID On Self Service?	Yes	RW970023	9/25/98	
SY07P733	Use One World Payroll B7.3.3 Or Later?	Yes	FL5610449	2/16/99	
SY39	Use Stock Valuation Module?	Yes	TG5840228	2/13/99	

1. Choose the row containing the data item SY39, and click Select.



2. On OneWorld System Control - Revisions, click the Yes option.
3. Click OK.

Activating Dual Currency

As part of working with different currencies, you need to be able to convert foreign currencies to domestic currencies, revalue currencies, and restate the amount into one common currency rate. For dual currency to work in the Stock Valuation system, you need to verify or set the correct currency code.

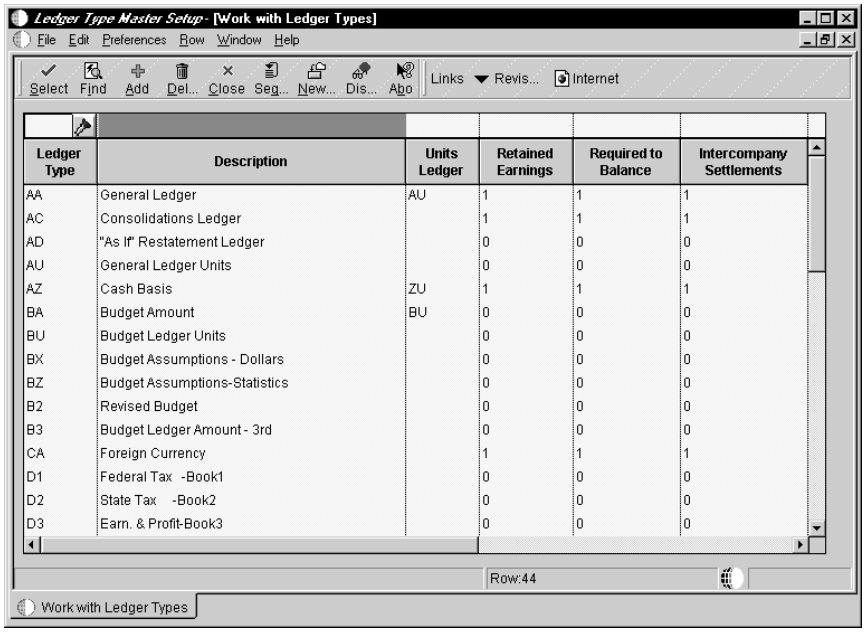
Before You Begin

- ❑ Verify that multi-currency is set up. See *Activating Multi-Currency* in the *General Accounting Guide* for information about multi-currency setup.

▶ To activate dual currency

From the General Accounting System Setup menu (G0941), choose Ledger Type Master Setup.

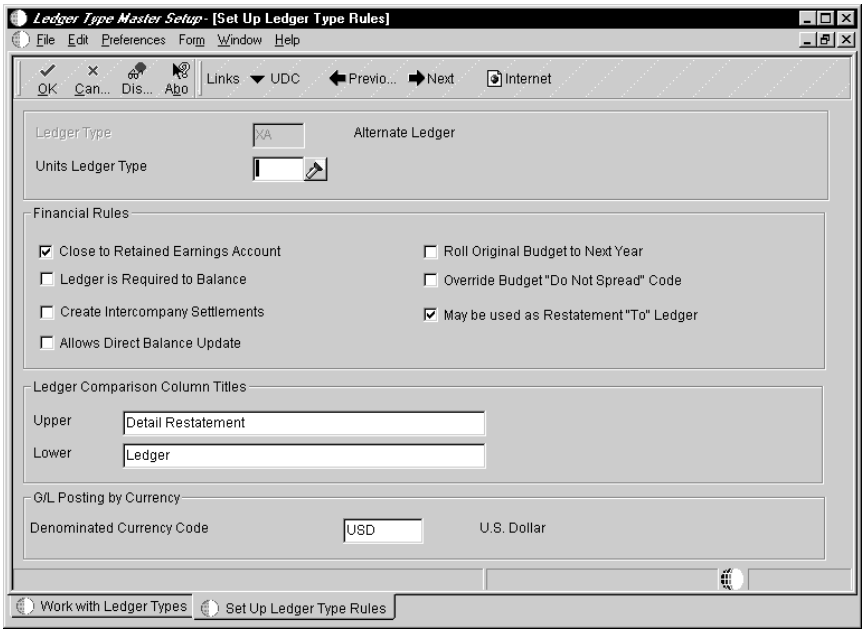
On Work with Ledger Types



Ledger Type	Description	Units Ledger	Retained Earnings	Required to Balance	Intercompany Settlements
AA	General Ledger	AU	1	1	1
AC	Consolidations Ledger		1	1	1
AD	"As If" Restatement Ledger		0	0	0
AU	General Ledger Units		0	0	0
AZ	Cash Basis	ZU	1	1	1
BA	Budget Amount	BU	0	0	0
BU	Budget Ledger Units		0	0	0
BX	Budget Assumptions - Dollars		0	0	0
BZ	Budget Assumptions-Statistics		0	0	0
B2	Revised Budget		0	0	0
B3	Budget Ledger Amount - 3rd		0	0	0
CA	Foreign Currency		1	1	1
D1	Federal Tax -Book1		0	0	0
D2	State Tax -Book2		0	0	0
D3	Earn. & Profit-Book3		0	0	0

1. Choose the record for the XA ledger type.

2. Verify the correct code for the following field:
   - Currency Code
3. To change the currency code for XA, click Select.



4. On Set Up Ledger Type Rules, complete the following field and click OK:
   - Denominated Currency Code

Field	Explanation
Currency Code	A code that indicates the currency that an amount is denominated in.

Setting Up User Defined Codes

You can define most standard information in user defined codes (UDCs). Generally, you define these codes for your business purposes. Many of these codes are set up by J.D. Edwards and are included when you install your system. When a UDC is referred to as hard-coded, you should not change it. Programming has been defined to work with hard-coded UDCs. If you change the UDC, the programming will not work correctly.

Each system has its own UDC types. Stock Valuation is system 39. It also integrates with other systems, such as the Inventory Management system. UDCs are referenced by the system number and type. Therefore, 39/OD indicates that OD (Outbound Documents) is a UDC type for the Stock Valuation system. The following table lists the UDCs associated with stock valuation:

39/VA **Valuation Type**	These hard-coded UDCs include valuation types such as LIFO, FIFO, Weighted Average Cost, and Replacement/Current Cost.
39/WT **Allocation by Branch or Company**	These hard-coded UDCs include options for defining valuation methods, by branch or company.
41/05 **Item Category Code O5**	These codes include all pool codes that you use to group items for valuation purposes.

Setup Considerations

Document type	You can classify document types as incoming, outgoing, or both. Document types classified as ”both” indicate that this type of document can represent a transaction that is either bringing stock into the inventory or taking stock out of inventory. Bulk stock movements that use “from” and “to” transactions are examples of transactions that use a document type of both.

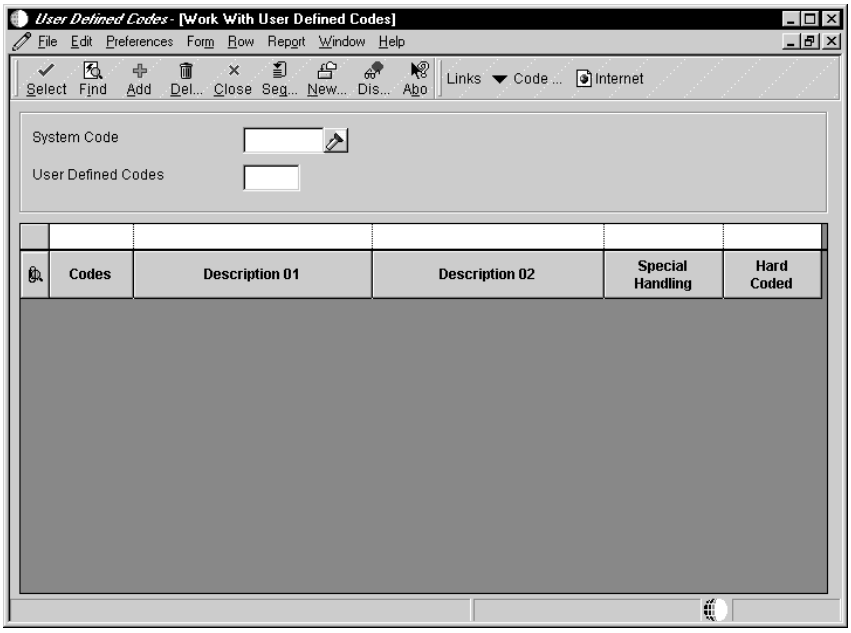
See Also

- *Adding or Changing a User Defined Code* in the *OneWorld Foundation Guide* for more information about adding or changing UDC values

▶ To set up User Defined Codes

In the Fast Path field, enter UDC.

On General User Defined Codes



1. Complete the following fields:
   - System Code
   - User Defined Codes
2. Verify that the data is set up correctly.

Field	Explanation
System Code	A user defined code (98/SY) that identifies a J.D. Edwards system.
User Defined Codes	A code that identifies the table that contains user defined codes. The table is also referred to as a code type.

Defining Valuation Methods

You must define the name and attributes for your primary valuation method and each of your auxiliary methods. You need to consider all of your company's valuation requirements before you can use Stock Valuation. These definitions tell the system how to value the stock, what to include in the valuation, and how to display and report the results.

The following descriptions provide an overview of the stock valuation methods available with J.D. Edwards systems.

First In/First Out (FIFO)

This method assumes that the first inventory items purchased or manufactured are the first items sold. With FIFO, the cost of the most recently acquired items are the costs associated with the ending balance.

Last In/First Out (LIFO)

This method assumes that the last inventory items purchased or manufactured are the first items sold. The system assigns the most recent inventory costs to the current period's cost of goods sold, leaving the oldest costs in the balance sheet account.

LIFO accounting requires an understanding of inventory layers and inventory liquidation. If you receive or increase inventory from one period end to the next, a new LIFO layer is created in the system. If you have a net decrease in inventory from one period end to the next, no new layer is added to the system. However, if you have a net decrease in inventory and no new layer is added, the prior period's layer is liquidated or reduced by the amount of the decrease.

Weighted Average Cost

This method calculates the inventory on a weighted average of all the purchases.

Replacement/Current Cost

This method reflects the current value of inventory for a given period. In effect, it is the cost of replacing the inventory for a specific period. You can specify the cost that will be used during the valuation, instead of using a calculated cost.

It is not unusual for a company to need more than one method for valuating stock. For example, local governments might require a different method for financial reporting than the method that you use within the company. Tax authorities might require a different method than that used for profitability reports within a company.

With the J.D. Edwards Stock Valuation system, you can choose one primary method of stock valuation per company to update the general ledger for standardized accounting and reporting. You can also assign auxiliary methods to use for comparison or other reporting purposes.

By choosing one of the four valuation methods on Valuation Method Master Revisions, you can customize both Unit Cost and Negative Inventory.

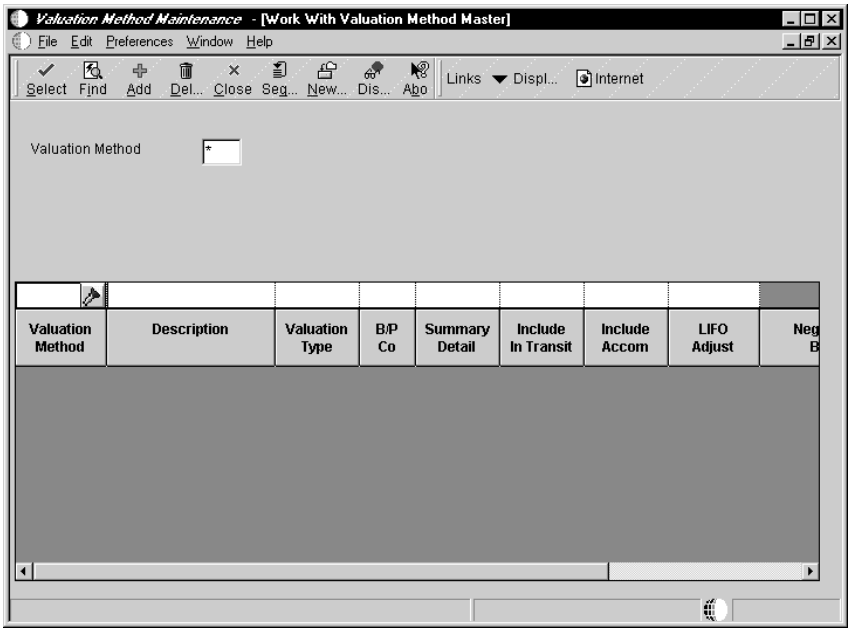
See Also

- Appendix A: Valuation Calculations for examples of sample data illustrating how the Stock Valuation system calculates the stock value using FIFO, LIFO, Weighted Average Cost and Replacement Cost methods.

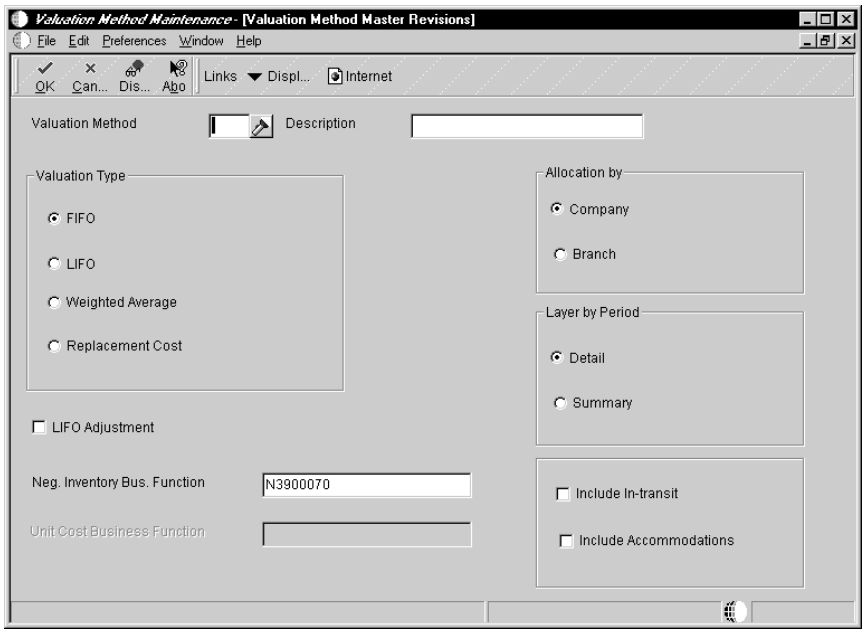
▶ To define valuation methods

From the Stock Valuation Setup menu (G3940), choose Valuation Method Maintenance.

On Work With Valuation Method Master



1. Click Add.



2. On Valuation Method Master Revisions, complete the following fields:
   - Valuation Method
   - Description
   - Negative Replacement BSFN Description
3. Under the Valuation Type heading, click one of the following options:
   - FIFO
   - LIFO
   - Weighted Average
   - Replacement Cost
4. If the valuation method that you selected is LIFO, click the following:
   - LIFO Adjustment
5. If the valuation method that you selected is Weighted Average, complete the following field:
   - Unit Cost Business Function
6. Under the Allocation by heading, click one of the following:
   - Company
   - Branch

7. Under the Layer by Period heading, click one of the following:
   - Detail
   - Summary

   If the valuation type you choose is Weighted Average or Replacement Cost, these fields will be grayed out.

8. Click either of the following options:
   - Include In–transit
   - Include Accommodations

Field	Explanation
Valuation Method	A two-character abbreviation for the methods that the system uses to determine the value of your company's stock for reporting and financial purposes. Examples include: • FI (FIFO) • F2 (FIFO Detail by Branch) • LI (LIFO) When you run the Stock Valuation Extraction program, the system updates the Stock Valuation Detail tables for the assigned valuation methods.
Description	A brief description of an item, a brief description of a remark, or a brief description of an explanation.
Neg. Inventory Bus. Function	A business function that retrieves a replacement unit cost when the Stock Valuation closing quantity is negative. A custom user defined BSFN or the Stock Valuation BSFN can also be used.
FIFO	A hard-coded user defined code (39/VA) indicating the type of valuation method to use in stock valuation. Valid values are: FIFO Valuation LIFO Valuation Weighted Average Valuation Replacement/Current Cost
LIFO	A hard-coded user defined code (39/VA) indicating the type of valuation method to use in stock valuation. Valid values are: FIFO Valuation LIFO Valuation Weighted Average Valuation Replacement/Current Cost
Weighted Average	A hard-coded user defined code (39/VA) indicating the type of valuation method to use in stock valuation. Valid values are: FIFO Valuation LIFO Valuation Weighted Average Valuation Replacement/Current Cost

Field	Explanation
Replacement Cost	A hard-coded user defined code (39/VA) indicating the type of valuation method to use in stock valuation. Valid values are: FIFO Valuation LIFO Valuation Weighted Average Valuation Replacement/Current Cost
LIFO Adjustment	This adjustment removes the effect of any accumulation or depletion at the end of a reporting period. The adjustment should not be applied for the closing period of a fiscal year. You should record the LIFO adjustment against the income statement and balance sheet accounts. The system uses the following formula to determine the LIFO adjustment: (Average cost of the accumulation or depletion – current period's average cost) * accumulation or depletion If this valuation method is a LIFO method type and set up as a company-wide method, you might want the system to calculate a LIFO adjustment. Valid values are: Y or 1, include the LIFO adjustment calculation. This is a company-wide LIFO valuation method. This is the default. N or 0, do not include the LIFO adjustment. This LIFO method is either layered within a branch/plant or is not company wide.
Unit Cost Business Function	A code that identifies how the system allocates the historical layers built by the valuation method. Valid values are: 1 Within company. The system creates one record per company, item or pool, valuation method, and period. Additionally, it creates records by branch that are informational only and are not posted to the general ledger. 2 Within branch. The period detail contains one record per branch, item or pool, valuation method, and period. At the end of the year, the system rolls all detail layers and period summary layers into one layer.

Field	Explanation
Company	A code that identifies how the system allocates the historical layers built by the valuation method. Valid values are: 1 Within company. The system creates one record per company, item or pool, valuation method, and period. Additionally, it creates records by branch that are informational only and are not posted to the general ledger. 2 Within branch. The period detail contains one record per branch, item or pool, valuation method, and period. At the end of the year, the system rolls all detail layers and period summary layers into one layer.
Branch	A code that identifies how the system allocates the historical layers built by the valuation method. Valid values are: 1 Within company. The system creates one record per company, item or pool, valuation method, and period. Additionally, it creates records by branch that are informational only and are not posted to the general ledger. 2 Within branch. The period detail contains one record per branch, item or pool, valuation method, and period. At the end of the year, the system rolls all detail layers and period summary layers into one layer.
Detail	A code that indicates whether the inquiry is to be in detail or summary mode. Valid codes are: D Detail mode S Summary mode
Summary	A code that indicates whether the inquiry is to be in detail or summary mode. Valid codes are: D Detail mode S Summary mode
Include In–transit	This field indicates whether the system should include in-transit stock in the valuation. For WorldSorftware, valid values are: Y Yes, include stock that is currently in transit to a customer in the calculation of stock value. N No, do not include stock that is in transit in the calculation of stock value. For OneWorld, a check mark indicates that the system should include in-transit stock in the valuation.

Working with Pools and Items

The Stock Valuation system can compute the value of stock at the item level or the pool level. If you want to value stock at the item level, the system calculates the cost and value of each item. To value stock at the pool level, group items of similar products and relatively similar purchase prices, using the following guidelines:

- If you define the pool's valuation method to use a summary layer, the system applies a single purchase price to all items in the pool for a period.
- If you define the pool's valuation method to provide detailed layers, the system uses each purchase as a layer to determine the pool's value.

You can value part of your stock at the item level and part in pools. The primary method of valuation (the method that the system uses to update the general ledger) must be the same for all items and pools within a company.

Working with pools and items consists of the following tasks:

- ❑ Assigning pools
- ❑ Assigning valuation methods
- ❑ Assigning unit cost

Assigning Pools

You assign pools only for items that you want to value at the pool level. If you want to value an item only at the individual item level, do not assign a pool to that item.

If you are assigning pool codes to items, you must enter the pool code at the branch/plant level for each item that you want to include in a pool.

Assigning pools consists of the following tasks:

- ❑ Assigning default pools for new items
- ❑ Assigning branch/plant pools for existing items

Before You Begin

- ❑ Set up user defined codes for pools. See *Setting Up User Defined Codes.*
- ❑ Set up an item during item setup. See *Entering Item Master Information* in the *Inventory Management Guide.*

Setup Considerations

Kit Items

Kit items are priced at the master item (kit) level, but costs are set up at the component level. The system maintains inventory for each component item of the kit, not the master kit number. Therefore, the master kit item has no stock valuation.

See *Entering Item Master Records for Kits* in the *Inventory Management Guide.*

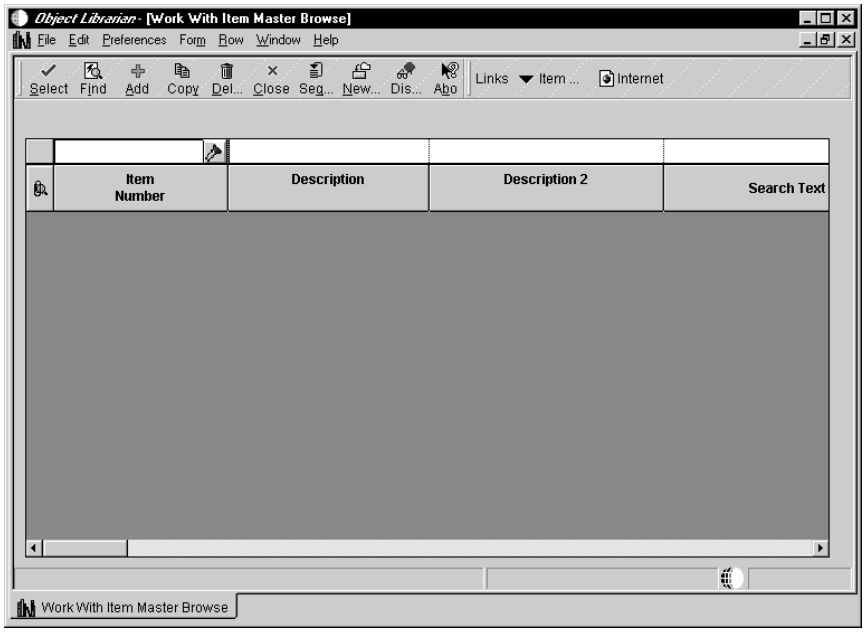
Assigning Default Pools for New Items

When you first set up a new item, you must assign a pool code if you want that item included in a pool for stock valuation purposes. The system automatically enters the pool code that you enter on Item Category Codes onto the Branch/Plant class codes form.

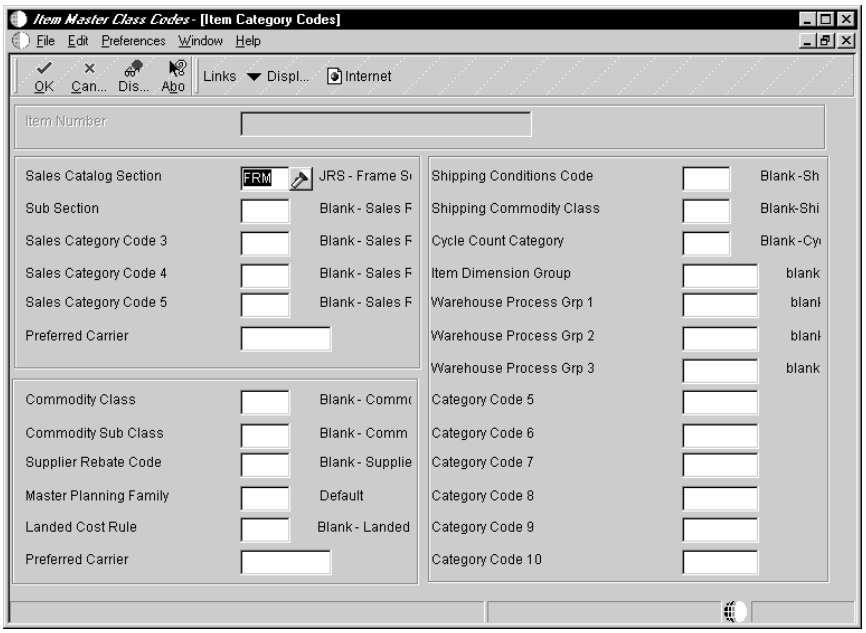
To assign default pools for new items

From the Stock Valuation Setup menu (G3940), choose Item Master Class Codes.

On Work With Item Master Browse



1. Complete the following field and click Find
   - 2nd Item Number
2. Choose the row for which you want to assign default pools, and then choose Category Codes from the Row menu.



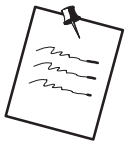
3. On Item Category Codes, verify or change the following field so that it is part of a pool:

   - Category Code 5

Field	Explanation
Category Code 5	A code (table 41/P0) that represents an item property type or classification, such as commodity type, planning family, or so forth. The system uses this code to sort and process like items. This field is one of six classification categories available primarily for purchasing purposes.

Assigning Branch/Plant Pools for Existing Items

If you are assigning pool codes to items that you set up previously, you must enter the pool code at the branch/plant level for each item that you want to include in a pool.

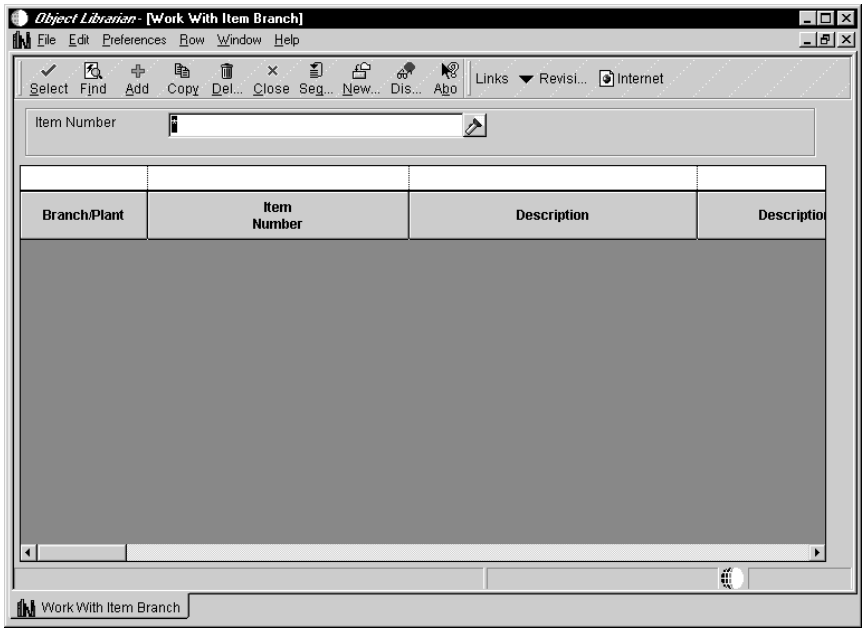


The Stock Valuation system uses only the information designated at the branch/plant level. It is not necessary to change the information on the Item Master Class Code form if you previously set up this item.

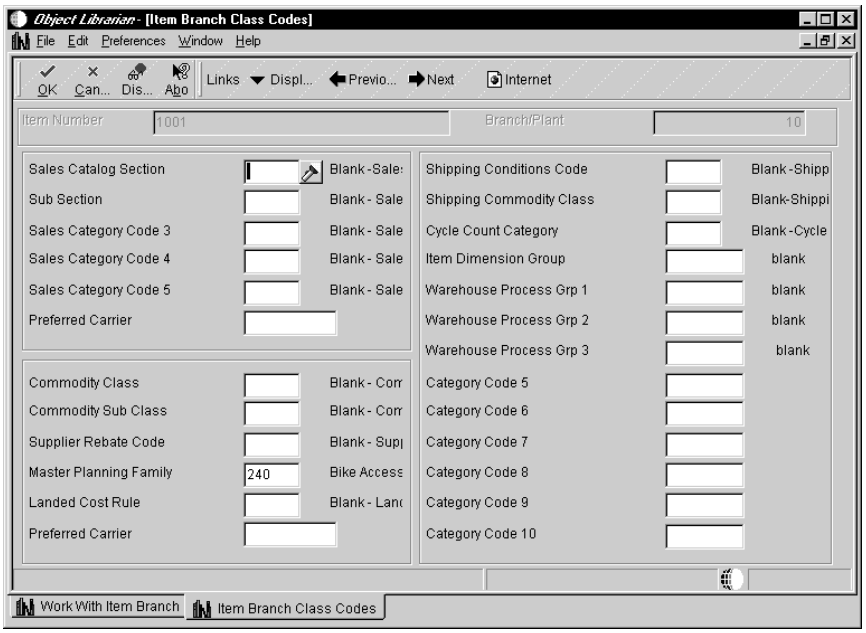
To assign branch/plant pools for existing items

From the Stock Valuation Setup menu (G3940), choose Branch Plant Class Codes.

On Work With Item Branch



1. Complete the following field and click Find:
   - 2nd Item Number
2. Choose the row for which you want to assign branch/plant pools, and then choose Class Codes from the Row menu.



3. On Item Branch Class Codes, verify that the information imported from Item Category Codes is correct.

Assigning Valuation Methods

You must assign a valuation method to each item and pool that you want valued. The system uses this information to calculate the value of your stock. If you want to update the general ledger, you must assign only one method as the general ledger update for all items and pools. The valuation method that you use to update the general ledger is often called the primary method.

You can assign any number of auxiliary methods. The system uses the auxiliary methods to track the value of stock for comparison or reporting purposes, but does not post the auxiliary results to the general ledger.

When you add an item or pool with Item/Pool Valuation Maintenance, the system verifies that it doesn't yet exist in this table. The system does not allow you to make duplicate entries for the same item or pool.

If you are using dual currency, you can specify for each valuation method within a company and item/pool whether to enable dual currency.

Before You Begin

❑ Define the valuation methods. See *Defining Valuation Methods.*

❑ For dual currency, set up multi-currency. See *Setting Up Multi-Currency* in the *General Accounting Guide*.

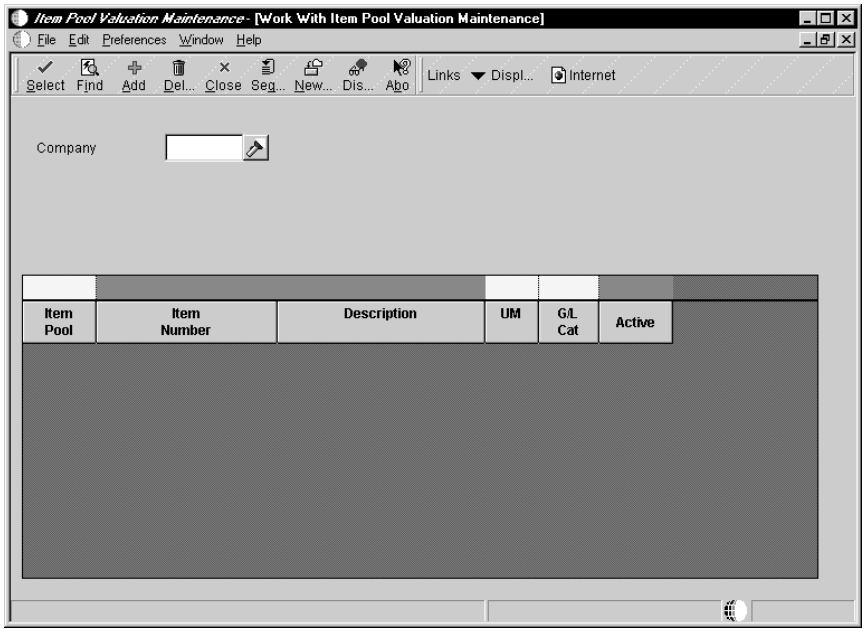
See Also

- *Understanding Dual Currency*

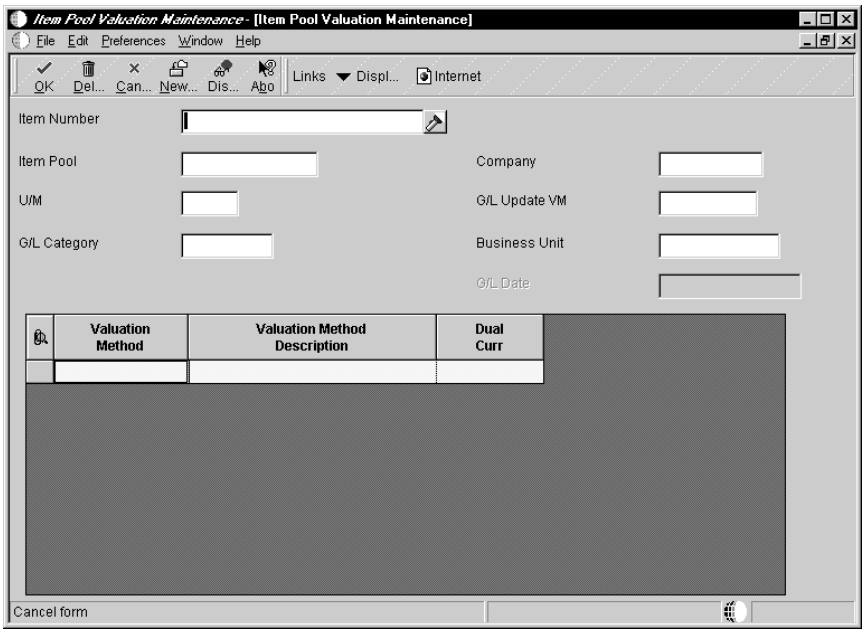
▶ To assign valuation methods

From the Stock Valuation Setup menu (G3940), choose Item Pool Valuation Maintenance.

On Work With Item Pool Valuation Maintenance



1. Click Add.



2. Complete one of the following fields:
   - Item Number
   - Item Pool
3. On Item Pool Valuation Maintenance, complete the following fields:
   - Company
   - U/M
   - G/L Category
   - Business Unit
4. To specify the valuation method that you want the system to use to update the general ledger, complete the following field:
   - G/L Update VM
5. On a separate line for each, enter the primary and all of the auxiliary valuation methods that you want to use for this number or pool in the following field:
   - Valuation Method
6. If you use dual currency, complete the following field:
   - Dual Curr

Assigning Unit Cost

Instead of using a calculated cost, you can specify a cost for each item and pool that you want to value stock using the replacement/current cost method. The system uses this information to calculate the value of your stock.

Use this program to maintain the replacement cost of the items and pools as well as the specified effective dates. If multi currency is active for the company, you can choose to store the values in domestic or dual currency.

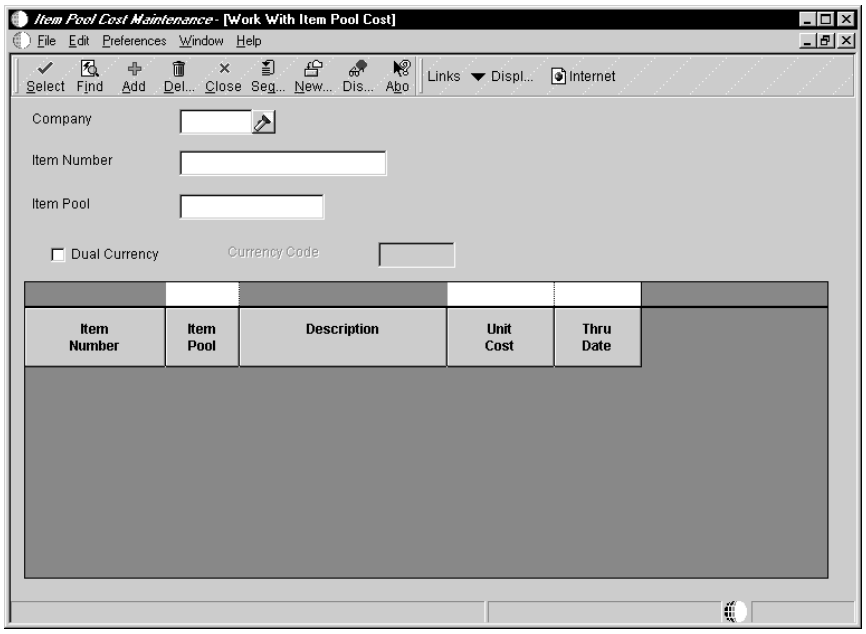
Before You Begin

❑ Define the valuation methods. See *Defining Valuation Methods.*

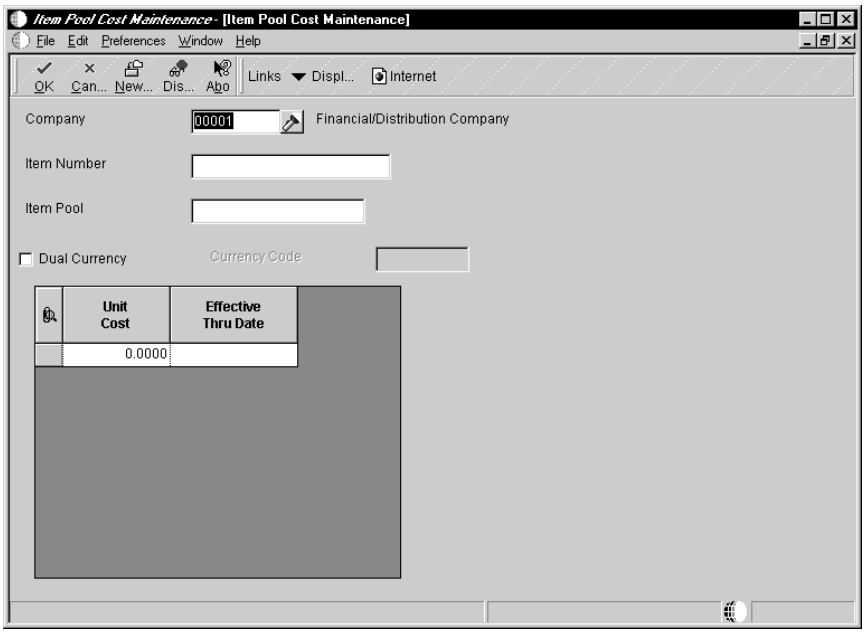
▶ To assign cost methods

From the Stock Valuation Setup menu (G3940), choose Item Pool Cost Maintenance.

On Work With Item Pool Cost



1. Complete the following field:
   - Company
2. To enter values for a stable currency, click the following option:
   - Dual Currency
3. Click Add.



4. On Item Pool Cost Maintenance, complete one of the following optional fields:
   - Item Number
   - Item Pool
5. Complete the following fields in the detail area:
   - Unit Cost
   - Effective Thru Date

Field	Explanation
Unit Cost	The amount per unit, derived by dividing the total cost by the unit quantity. You can change the dollar amount for any cost method at any time. If you change the amount for the cost method that you use to track costs of goods sold, the system applies the new amount to your on-hand quantity of the item. It also creates journal entries to account for the difference between the old and the new amounts. Certain programs update the dollar amount for some cost methods. Examples include the following: • Last-in method - The system interactively updates this unit cost based on the last cost of the item at the time of a purchase order receipt or after an inventory adjustment. • Weighted average method - The system calculates and updates this amount by adding transaction quantities, adding transaction costs, and dividing the total cost by the total quantity. • Purchase method – The system updates similarly to the last-in method, but without landed costs.
Effective Thru Date	The date on which the item, transaction, or table becomes inactive or through which you want transactions to appear. This field is used generically throughout the system. It could be a lease effective date, a price or cost effective date, a currency effective date, a tax rate effective date, or whatever is appropriate.

Setting Up Automatic Accounting Instructions

Automatic Accounting Instructions (AAIs) tell the system how to create general ledger entries for programs that generate automatic journal entires. AAIs are the user-defined link between program functions, your chart of accounts, and financial reporting. AAIs direct transactions to the appropriate general ledger accounts.

The system already has AAIs in place. You need to ensure that these AAIs are appropriate for your business needs. You can revise existing AAIs and set up additional AAIs as needed to accommodate growth and change in your business functions and financial reporting. Follow the same setup steps to create a new AAI or to revise an existing AAI.

For distribution systems, you must create AAIs for each unique combination of company, transaction, document type, and general ledger class that you will use. Each AAI identifies a specific general ledger account consisting of a business unit, an object, and a subsidiary. When the system processes a transaction, it creates accounting entries.

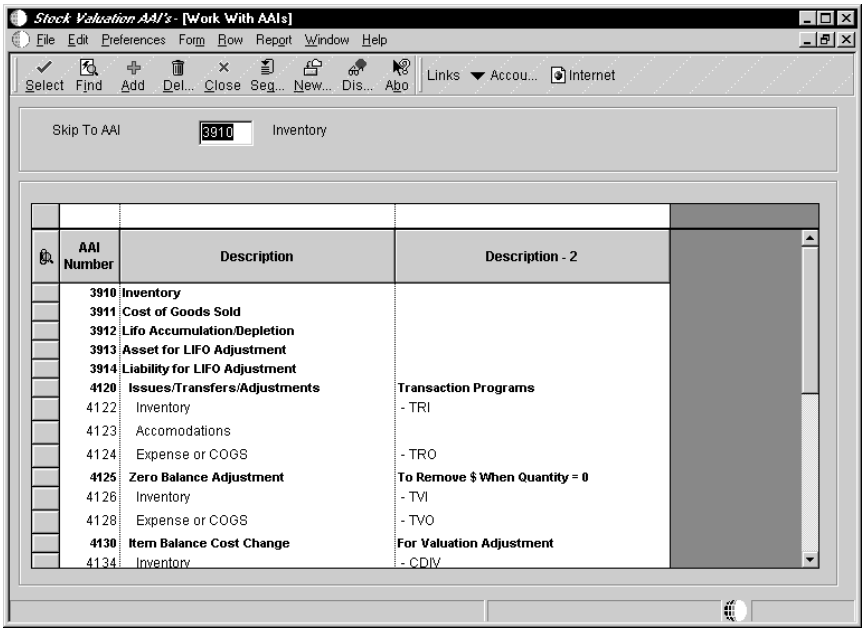
When setting up each AAI item, verify that there is a default for company 00000. For each company requiring specific instructions, verify that there is a business unit or object account.

You can attach explanatory messages to any AAI. Choose the memo function and enter your message. When you attach a message, a ”See Memo” message appears next to the AAI.

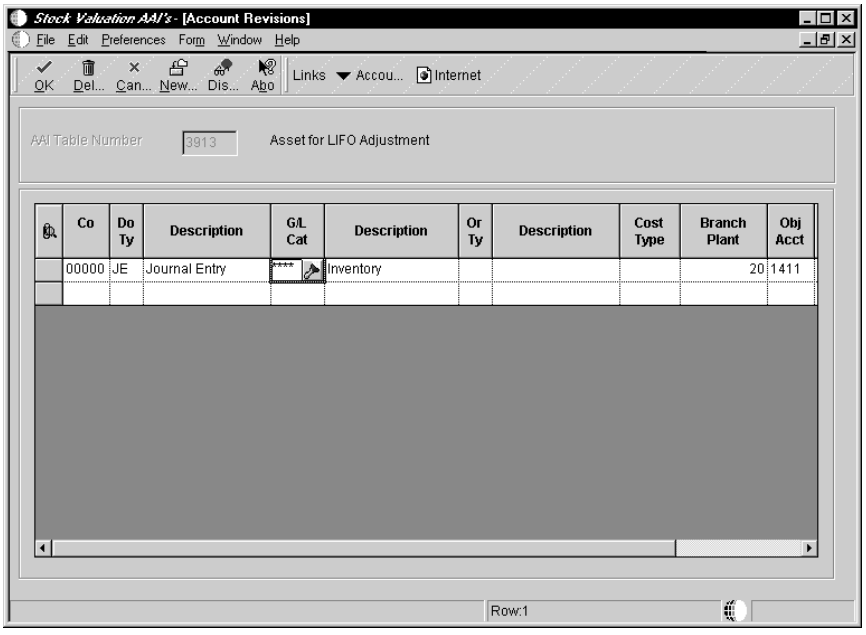
▶ To set up automatic accounting instructions

From the Stock Valuation Setup menu (G3940), choose Stock Valuation AAIs.

On Work With AAIs



1. Choose an AAI and click Select.



2. On Account Revisions, verify that Company 00000 has four asterisks in the following field:
    - G/L Cat

3. Complete one or more of the following fields:
   - Co
   - Do Ty
   - Description
   - G/L Cat
   - Description
   - Obj Acct
   - Sub

Field	Explanation
G/L Cat	A user defined code (41/9) that identifies the G/L offset that system uses when it searches for the account to which it posts the transaction. If you do not want to specify a class code, you can enter **** (four asterisks) in this field. You can use automatic accounting instructions (AAIs) to predefine classes of automatic offset accounts for the Inventory, Procurement, and Sales Order Management systems. You might assign G/L class codes as follows: IN20 Direct Ship Orders IN60 Transfer Orders IN80 Stock Sales The system can generate accounting entries based upon a single transaction. For example, a single sale of a stock item can trigger the generation of accounting entries similar to the following: Sales–Stock (Debit) xxxxx.xx A/R Stock Sales (Credit) xxxxx.xx Posting Category: IN80 Stock Inventory (Debit) xxxxx.xx Stock COGS (Credit) xxxxx.xx The system uses the class code and the document type to find the AAI.
Co	A code that identifies a specific organization, fund, entity, and so on. The company code must already exist in the Company Constants table (F0010) and must identify a reporting entity that has a complete balance sheet. At this level, you can have intercompany transactions. NOTE: You can use Company 00000 for default values, such as dates and automatic accounting instructions (AAIs). You cannot use Company 00000 for transaction entries.

Field	Explanation
Do Ty	A user defined code (00/DT) that identifies the origin and purpose of the transaction. J.D. Edwards reserves several prefixes for document types, such as vouchers, invoices, receipts, and timesheets. The reserved document type prefixes for codes are: P Accounts payable documents R Accounts receivable documents T Time and Pay documents I Inventory conversion issues O Ordering document types The system creates offsetting entries as appropriate for these document types when you post batches.

Appendices

Appendix A: Valuation Calculations

This appendix contains important information that is used for FIFO and LIFO calculations. This appendix includes the following information:

- Formulas and examples used for calculating FIFO
- Formulas and examples used for calculating LIFO
- Terminology used in LIFO calculations
- Formulas used in LIFO calculations

First In/First Out (FIFO) Calculations

The FIFO costing method assumes that the first inventory items purchased are the first ones sold. This method results in an ending inventory balance based on the costs associated with the most recent purchases. The allocated ending inventory and value become the opening inventory for the next period.

The following example demonstrates the FIFO principle using the first five and last months of a fiscal year. For simplicity, this example assumes that the company made no transactions from June through November.

The example does not include the other factors that can affect the cost of the inventory, such as freight, exchange rate differences, and loans and borrows.

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
January Opening Inventory		500	1.00	500.00		
Fuel A	01/05	500	2.00	1000.00	100	200.00
Fuel B	01/09	300	2.50	750.00	300	750.00
Fuel C	01/25	600	1.75	1050.00	600	1050.00
January Purchases		1400	2.00	2800.00	Period Ending January 31	
January Sales		900				
Total Closing Inventory		1000	2.00	2000.00		
Cost of Goods Sold				1300.00		

The opening inventory quantity and price for Pool 1 for the month of January is the closing inventory from December of the previous year. In January, the company purchased a total of 1400 units for 2800.00. The company sold 900 units.

The system uses the following formula to calculate the closing inventory units:

Opening inventory + purchases – sales = closing inventory

In determining the closing inventory value using FIFO, the system allocates the closing inventory quantity to the most recently purchased quantities. Because this costing method specifies that inventory that is purchased first is sold first, the system calculates the closing inventory as follows:

Purchases	Price	Date	Closing Allocations	Closing Value
500	1.00	Opening		
500	2.00	01/05	100	200.00
300	2.50	01/09	300	750.00
600	1.75	01/25	600	1050.00
Total Closing Inventory Value				2000.00

After the closing inventory is properly allocated, the system calculates the closing inventory value by multiplying the closing allocations by the respective purchase price, and then summing:

Closing inventory value = sum (closing allocations * purchase price)

Closing inventory value (January) =

(600 * 1.75) + (300 * 2.50) + (100 * 2.00) = 2000.00

After the system determines the closing inventory, it then calculates the cost of the goods sold (COGS) by using the following formula:

Opening inventory value + purchases – closing inventory value = COGS

The system calculates the cost of the closing inventory per unit as follows:

Closing inventory value / closing inventory quantity = closing inventory value per unit

The January closing inventory becomes the February opening inventory. Figures for February through May follow the same calculation formulas as illustrated in the following tables:

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
February Opening Inventory		1000	2.00	2000.00	500	1000.00
Fuel A	02/08	700	2.50	1750.00	700	1750.00
Fuel B	02/17	800	1.75	1400.00	800	1400.00
February Purchases		1500	2.10	3150.00		
February Sales		500			Period Ending	
Total Closing Inventory		2000	2.08	1450.00	February 28	
Cost of Goods Sold				1000.00		

The closing inventory quantity allocation is as follows:

Purchases	Unit Cost	Date	Closing Allocations	Closing Value
1000	2.00	Opening	500	1000.00
700	2.50	02/08	700	1750.00
800	1.75	02/17	800	1400.00
Total Closing Inventory Value				4150.00

March

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
March Opening Inventory		2000	2.08	4150.00		
Fuel A	03/10	200	1.50	300.00		
Fuel B	03/20	500	1.25	625.00	200	250.00
March Purchases		700	1.32	925.00		
March Sales		2500			Period Ending	
Total Closing Inventory		200	1.25	250.00	March 31	
Cost of Goods Sold				4825.00		

April

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
April Opening Inventory		200	1.25	2.50.00		
Fuel A	04/11	1200	1.35	1620.00	400	540.00
Fuel B	04/15	1100	1.50	1650.00	1100	1650.00
April Purchases		2300	1.42	3270.00		
April Sales		1000			Period Ending	
Total Closing Inventory		1500	1.46	2190.00	April 30	
Cost of Goods Sold				1330.00		

May

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
May Opening Inventory		1500	1.46	2190.00	1000	1460.00
Fuel A	05/13	600	1.63	975.00	600	975.00
Fuel B	05/24	500	1.35	675.00	500	675.00
May Purchases		1100	1.50	1650.00		
May Sales		500			Period Ending	
Total Closing Inventory		2100	1.48	3110.00	May 31	
Cost of Goods Sold				730.00		

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
December Opening Inventory		2100	1.48	3110.00	100	148.10
Fuel A	12/15	1200	1.35	1620.00	1200	1620.00
Fuel B	12/16	1500	1.50	2250.00	1500	2250.00
December Purchases		2700	1.43	3870.00		
December Sales		2000			Period Ending	
Total Closing Inventory		2800	1.44	4018.10	December 31	
Cost of Goods Sold				2961.90		

Closing inventory:

Purchases	Price	Date	Closing Allocations	Closing Value
2100	1.48	Opening	100	148.10
1200	1.35	12/15	1200	1620.00
1500	1.50	12/16	1500	2250.00
Total Closing Inventory Value				4018.10

The system calculates the following end-of-year values as follows:

Closing inventory value = (100 * 1.48) + (1200 * 1.35) + (1500 * 1.50) = 4018.10

Closing inventory cost per unit = 4018.10 / 2,800 = 1.44

The system calculates the COGS for December as follows:

COGS (December) = 3110.00 + 3870.00 – 4018.10 = 2961.90

Using these calculations, the opening inventory values for January are:

Inventory Quantity	2800 units
Unit Price	1.44
Inventory Value	4018.10

Last In/First Out (LIFO) Calculations

The LIFO costing method assumes that the last inventory items purchased are the first ones sold. This costing method determines the stock value and cost of goods sold based on the sale of the newest stock first. That is, the inventory that has been in stock the shortest amount of time is sold first. This method results in an ending inventory balance based on the costs associated with the oldest inventory. Second, this method requires that the system records historical costs for all years with stock remaining for that year.

The LIFO costing method values inventory using the following unique processes:

- The LIFO method values inventory based on the activity that occurred on a year-to-date basis instead of a rolling inventory balance that is carried forward. To facilitate this type of processing, when the system applies this method for each period, it reverses the prior period's entries, which makes the new entries the current year-to-date values. This reversal is done for all periods except for the last period of the year.

  The reversals every period also keep the opening inventory constant until the end of the year. Thus, because the prior period's entries are reversed, the opening inventory is always the same regardless of what transpired in the prior period.

- The system stores the total purchase quantity, amount, and average price for each period of the year. The stored information allows the system to allocate the closing inventory, starting with the current period and allocating to prior periods.

The LIFO example presented later in this appendix further illustrates this process.

- Because the LIFO method's purpose is to reflect the inventory value accumulation or depletion at the end of the year, the entries that are logged at the end of each period need to be adjusted to remove the effect of any accumulation or depletion. This adjustment is called a "LIFO adjustment." You must do a LIFO adjustment for all periods except the last period of the year. The system records the LIFO adjustment against the income statement and balance sheet accounts. See the Accumulation/Depletion matrix for instructions on when to edit or debit the appropriate accounts.
- You might not always know the price of an item when you receive it. Because a quantity without a price can cause a large fluctuation in the average price, you can enter and use an override price for each period.

  In the LIFO calculation example that follows, the tables for May and December illustrate price overrides.

Terminology and Formulas Used in LIFO Calculations

The following tables show the terminology and formulas used in LIFO calculations:

Abbreviation	Definition
ABS	Absolute value of
Accum	Accumulation
COGS	Cost of goods sold
CPUR	Current period average cost
DEPLT	Depletion
FPUR	First average cost (average allocated cost)
INVL	Inventory value
INVQ	Inventory quantity
PTD	Period to date
PURQ	Purchase quantity

PURV	Purchase value
QTY	Quantity
SALQ	Sales quantity
YTD	Year-to-date

Term	Equation
Opening inventory quantity	Sum of quantity accumulations of all existing layers
Opening inventory value	Sum of value accumulations of all existing layers
Period purchase price average	((Sum of PURV) / (Sum of PURQ))
Accumulation/ Depletion	YTD PURQ – YTD SALQ
Total closing INVQ	Opening INVQ + YTD PURQ – YTD SALQ
Closing INVQ allocations	Accumulations: QTY = (accumulation – Jan PURQ) • If QTY > 0, then QTY – (QTY – Feb PURQ) Depletions: QTY = (depletion – prior Year1) • If QTY > 0, then QTY = (QTY – Prior Year2)
Closing inventory value	Opening INVL + total allocation value
Cost of goods sold	Opening INVL + total YTD PURV – closing inventory value
Material balance	Opening INVQ + total YTD PURQ – closing INVQ – YTD SALQ
Average accumulation price	Total allocation value / total allocation quantity

Accumulation or depletion adjusted price	Average accumulation price – PTD average price
Accumulation or depletion amount	Accumulation or depletion price * ABS (accumulation or depletion)

Accumulation Depletion Matrix for Credit or Debit

Accumulation

Balance Sheet

- If FPUR < CPUR, then debit
- If FPUR > CPUR, then credit

Income Statement

- If FPUR < CPUR, then credit
- If FPUR > CPUR, then debit

Depletion

Balance Sheet

- If FPUR < CPUR, then credit
- If FPUR > CPUR, then debit

Income Statement

- If FPUR < CPUR, then debit
- If FPUR > CPUR, then credit

The following example demonstrates the LIFO principle using the first five months and the last month of a fiscal year. For simplicity, the example assumes that the company made no transactions from June through November.

The example reflects only the effect of the purchase price on the cost of inventory. It does not show other factors that can affect the cost of the inventory, such as freight, exchange rate differences, loans, and borrows.

The example presents three layers of accumulation prior to the current year (1998). The opening balance for the year is the sum of the accumulations for the prior layers.

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
	1985	70,000	1.00	70,000.00		
	1990	35,000	1.50	52,500.00		
	1996	42,000	1.15	48,300.00		
Opening Inventory	1998	147,000		170,800.00		
Jan. Purchase Average		1400	2.00	2800.00	500	1000.00
Fuel A	01/05	500	2.00	1000.00		
Fuel B	01/09	300	2.50	750.00		
Fuel C	01/25	600	1.75	1050.00		
January Sales		900			Period Ending	
					January 31, 1998	
Accumulation or Depletion		500	2.00	1000.00		
Total Closing Inventory		147,500		171,800.00		
Cost of Goods Sold				1800.00		
Material Balance		0				
LIFO Accumulation/ Depletion Cost			0.00			
					Accumulation	
General Ledger Entries						
New Entries:						
Inventory (Balance Sheet)				171,800.00		
Closing Inventory (Income Statement)				<171,800.00>		
LIFO Accumulation or Depletion Adjustment (Balance Sheet)				0.00		
LIFO Accumulation or Depletion Adjustment (Income Statement)				0.00		
Closing Inventory Balance						
1985		70,000	1.00	70,000.00		
1990		35,000	1.50	52,500.00		
1996		42,000	1.15	48,300.00		
1998		500	2.00	1000.00		
Total		147,500		171,800.00		

During January, the company purchased a total of 1400 units for 2,800.00. It sold 900 units. The system uses the following formula to determine the closing inventory for a specified period:

Opening inventory + purchases – sales = closing inventory units

The system uses the following formula to calculate the accumulation or depletion from the beginning of the year:

Closing inventory – opening inventory = accumulation or depletion

The LIFO method requires that the closing inventory quantity be allocated to the correct purchase quantities and dates. The system allocates the closing inventory as follows:

Layers	Purchases	Unit Cost	Closing Allocations	Closing Value
1985	70,000	1.00	70,000	70,000.00
1990	35,000	1.50	35,000	52,500.00
1996	42,000	1.15	42,000	48,300.00
January 1998	1400	2.00	500	1000.00
Total Closing Inventory Value				171,800.00

After the closing inventory is properly allocated, the system multiplies the closing allocations by the respective purchase price and adds them together to calculate the closing inventory value as follows:

(Closing allocation*unit cost) + closing value = closing inventory value

After the closing inventory value has been determined, the system calculates the Cost Of Goods Sold using the following formula:

Opening inventory value + purchases – closing inventory value = Cost of Goods Sold

The system calculates the average cost using the following formula:

Total purchase amount / total purchase quantity = average cost

The system uses the following formula to calculate the LIFO adjustment:

Average price of the accumulation or depletion – current period's average price = LIFO adjustment

(1000.00 / 500) – (2800.00 / 1400) = (0.00)

Therefore, the LIFO adjustment is the accumulation or depletion (500) * the accumulation or depletion cost (0.00).

In February, you reverse the January period ending entries before you make the February entries.

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
	1985	70,000	1.00	70,000.00		
	1990	35,000	1.50	52,500.00		
	1996	42,000	1.15	48,300.00		
Opening Inventory	1998	147,000		170,800.00		
Jan. Purchase Average		1400	2.00	2800.00	1400	2800.00
Feb. Purchase Average		1500	2.10	3150.00	100	210.00
Fuel A	02/08	700	2.50	1750.00		
Fuel B	02/17	800	1.75	1400.00		
January Sales		900			Period Ending	
February Sales		500			February 28, 1998	
Accumulation or Depletion		1500	2.01	3010.00		
Total Closing Inventory		148,500		173,810.00		
Cost of Goods Sold				2940.00		
Material Balance		0				
LIFO Accumulation/ Depletion Cost			0.09			
					Accumulation	
General Ledger Entries						
Prior Period Reversal:						
Inventory (Balance Sheet)				<171,800.00>		
Closing Inventory (Income Statement)				171,800.00		
LIFO Accumulation or Depletion Adjustment (Balance Sheet)				0.00		
LIFO Accumulation or Depletion Adjustment (Income Statement)				0.00		
New Entries:						
Inventory (Balance Sheet)				173,810.00		
Closing Inventory (Income Statement)				<173,810.00>		
LIFO Accumulation or Depletion Adjustment (Balance Sheet)				140.00		
LIFO Accumulation or Depletion Adjustment (Income Statement)				<140.00>		
Closing Inventory Balance						
1985		70,000	1.00	70,000.00		
1990		35,000	1.50	52,500.00		
1996		42,000	1.15	48,300.00		
1998		1500	2.01	3010.00		
Total		148,500		173,810.00		

For the following table, the system uses the same formulas and makes the calculations based on the February transactions.

During February, the company purchased a total of 1500 units for 3150.00. The company sold 500 units. The system uses the following formula to determine the closing inventory:

Opening inventory + purchases – sales = closing inventory

The accumulation or depletion from the beginning of the year is as follows:

Closing inventory (148,500) – opening inventory (147,000) = 1500

The system allocates the closing inventory as follows:

Layers	Purchases	Unit Cost	Closing Allocations	Closing Value
1985	70,000	1.00	70,000	70,000.00
1990	35,000	1.50	35,000	52,500.00
1996	42,000	1.15	42,000	48,300.00
Jan. 1998	1400	2.00	1400	2800.00
Feb. 1998	1500	2.10	100	210.00
Total Closing Inventory				173,810.00

The system calculates the February Cost of Goods Sold:

Opening inventory value + purchases – closing inventory value = Cost of Goods Sold

The system calculates the February average cost as follows:

Total purchase amount / purchase quantity = average cost

The system calculates the LIFO adjustment as follows:

Average cost of the accumulation or depletion – current period's average cost = LIFO adjustment

Accumulation or Depletion * accumulation or depletion average cost = LIFO accumulation or depletion adjustment

See the Accumulation or Depletion matrix for information about how to credit or debit accumulation or depletion to make the income statement and balance sheet entries for the LIFO adjustment.

In March, you reverse the February period ending entries before you make the March entries.

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
	1985	70,000	1.00	70,000.00		
	1990	35,000	1.50	52,500.00		
	1996	42,000	1.15	48,300.00	<300>	<345.00>
Opening Inventory	1998	147,000		170,800.00		
Jan. Purchase Average		1400	2.00	2800.00		
Feb. Purchase Average		1500	2.10	3150.00		
March Purchase Average		700	1.32	925.00		
Fuel B	03/10	200	1.50	300.00		
Fuel C	03/20	500	1.25	625.00		
January Sales		900			Period Ending	
February Sales		500			March 31, 1998	
March Sales		2500				
Accumulation or Depletion		<300>	1.15	<345.00>		
Total Closing Inventory		146,700		170,455.00		
Cost of Goods Sold				7220.00		
Material Balance		0				
LIFO Accumulation/ Depletion Cost			<0.17>			
					Depletion	
General Ledger Entries						
Prior Period Reversal:						
Inventory (Balance Sheet)				<173,810.00>		
Closing Inventory (Income Statement)				173,810.00		
LIFO Accumulation or Depletion Adjustment (Balance Sheet)				<140.00>		
LIFO Accumulation or Depletion Adjustment (Income Statement)				140.00		
New Entries:						
Inventory (Balance Sheet)				170,455.00		
Closing Inventory (Income Statement)				<170,455.00>		
LIFO Accumulation or Depletion Adjustment (Balance Sheet)				<51.43>		
LIFO Accumulation or Depletion Adjustment (Income Statement)				51.43		
Closing Inventory Balance						
1985		70,000	1.00	70,000.00		
1990		35,000	1.50	52,500.00		
1996		41,700	1.15	47,955.00		
Total		146,700		170,455.00		

The system uses the same formulas and makes the calculations based on the March transactions.

During March, the company purchased a total of 700 units for 925.00. The company sold 2500 units. The system uses the following formula to determine the closing inventory:

Opening inventory + purchases – sales = closing inventory

The accumulation or depletion from the beginning of the year is:

Closing inventory (146,700) – opening inventory (147,000) = <300>

The system allocates the closing inventory as follows:

Layers	Purchases	Unit Cost	Closing Allocations	Closing Value
1985	70,000	1.00	70,000	70,000.00
1990	35,000	1.50	35,000	52,500.00
1996	42,000	1.15	42,000 – 300	47,955.00
Jan 1998	1400	2.00		
Feb 1998	1500	2.10		
March 1998	700	1.32		
Total Closing Inventory Value				170,455.00

The system calculates the March Cost of Goods Sold as follows:

Opening inventory value + purchases – closing inventory value = Cost of Goods Sold

The system calculates the March average cost as follows:

Total purchase amount / total purchase quantity = average cost

The system calculates the LIFO adjustment as follows:

Average cost of the accumulation or depletion – current period's average cost = accumulation or depletion cost

Accumulation ordepletion * accumulation/depletion cost = LIFO accumulation or depletion adjustment

See the Accumulation or Depletion matrix for information about how to credit or debit accumulation or depletion to make the income statement and balance sheet entries for the LIFO adjustment.

The depletion in March reduced the inventory of a prior layer. April's opening balance will be the same as all of the other months, due to the fact that the prior period entries are reversed.

The remaining months use the same calculations. In December, the last period in the year, no LIFO adjustment entries are made to the accounts.

Two different tables are presented for December:

- The first December example has a closing inventory as an accumulation. This creates a LIFO layer for 1998.
- The second December example has a depletion. The depletion is removed from the prior layer's quantity (1996). No new layer is created.

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
	1985	70,000	1.00	70,000.00		
	1990	35,000	1.50	52,500.00		
	1996	42,000	1.15	48,300.00		
Opening Inventory	1998	147,000		170,800.00		
Jan. Purchase Average		1400	2.00	2800.00	1000	2000.00
Feb. Purchase Average		1500	2.10	3150.00		
March Purchase Average		700	1.32	925.00		
April Purchase Average		2300	1.42	3270.00		
Fuel C	04/11	1200	1.35	1620.00		
Fuel A	04/15	1100	1.50	1650.00		
January Sales		900			Period Ending	
February Sales		500			April 30, 1998	
March Sales		2500				
April Sales		1000				
Accumulation or Depletion		1000	2.00	2000.00		
Total Closing Inventory		148,000		172,800.00		
Cost of Goods Sold				8145.00		
Material Balance		0				
LIFO Accumulation/ Depletion Cost			0.58			
General Ledger Entries					Accumulation	
Prior Period Reversal:						
Inventory (Balance Sheet)				<170,455.00>		
Closing Inventory (Income Statement)				170,455.00		
LIFO Accumulation or Depletion Adjustment (Balance Sheet)				51.43		
LIFO Accumulation or Depletion Adjustment (Income Statement)				<51.43>		
New Entries:						
Inventory (Balance Sheet)				172,800.00		
Closing Inventory (Income Statement)				<172,800.00>		
LIFO Accumulation or Depletion Adjustment (Balance Sheet)				<578.26>		
LIFO Accumulation or Depletion Adjustment (Income Statement)				578.26		
Closing Inventory Balance						
1985		70,000	1.00	70,000.00		
1990		35,000	1.50	52,500.00		
1996		42,000	1.15	48,300.00		
1998		1000	2.00	2000.00		
Total		148,000		172,800.00		

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
	1985	70,000	1.00	70,000.00		
	1990	35,000	1.50	52,500.00		
	1996	42,000	1.15	48,300.00		
Opening Inventory	1998	147,000		170,800.00		
Jan. Purchase Average		1400	2.00	2800.00	1000	2000.00
Feb. Purchase Average		1500	2.10	3150.00		
March Purchase Average		700	1.32	925.00		
April Purchase Average		2300	1.42	3270.00		
May Purchase Average		500	3.30	1650.00		
Fuel C	05/13	****	****	975.00		
Fuel A	05/25	500	1.35	675.00		
January Sales		900			Period Ending	
February Sales		500			May 31, 1998	
March Sales		2500				
April Sales		1000				
May Sales		500				
Accumulation or Depletion		1000	2.00	2000.00		
Total Closing Inventory		148,000		172,800.00		
Cost of Goods Sold				9795.00		
Material Balance		0				
LIFO Accumulation/ Depletion Cost			<1.30>			
General Ledger Entries					Accumulation	
Prior Period Reversal:						
Inventory (Balance Sheet)				<172,800.00>		
Closing Inventory (Income Statement)				172,800.00		
LIFO Accumulation or Depletion Adjustment (Balance Sheet)				578.26		
LIFO Accumulation or Depletion Adjustment (Income Statement)				<578.26>		
New Entries:						
Inventory (Balance Sheet)				172,800.00		
Closing Inventory (Income Statement)				<172,800.00>		
LIFO Accumulation or Depletion Adjustment (Balance Sheet)				1300.00		
LIFO Accumulation or Depletion Adjustment (Income Statement)				<1300.00>		
Closing Inventory Balance						
1985		70,000	1.00	70,000.00		
1990		35,000	1.50	52,500.00		
1996		42,000	1.15	48,300.00		
1998		1000	2.00	2000.00		
Total		148,000		172,800.00		

****Transactions were entered with extended price and did not include quantity and unit price.

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
	1985	70,000	1.00	70,000.00		
	1990	35,000	1.50	52,500.00		
	1996	42,000	1.15	48,300.00		
Opening Inventory	1998	147,000		170,800.00		
Jan. Purchase Average		1400	2.00	2800.00	1400	2800.00
Feb. Purchase Average		1500	2.10	3150.00	1500	3150.00
March Purchase Average		700	1.32	925.00	700	925.00
April Purchase Average		2300	1.42	3270.00	200	284.35
May Purchase Average #		1100	1.50	1650.00		
Dec. Purchase Average		2700	1.14	3075.00		
Fuel C	12/15	1200	1.00	1200.00		
Fuel B	12/16	1500	1.25	1875.00		
January Sales		900			Period Ending	
February Sales		500			December 31, 1998	
March Sales		2500				
April Sales		1000				
May Sales		500				
December Sales		500				
Accumulation or Depletion		3800	1.88	7159.35		
Total Closing Inventory		150,800		177,959.35		
Cost of Goods Sold				7710.65		
Material Balance		0				
General Ledger Entries					Accumulation	
Prior Period Reversal:						
Inventory (Balance Sheet)				<172,800.00>		
Closing Inventory (Income Statement)				172,800.00		
LIFO Accumulation or Depletion Adjustment (Balance Sheet)				<1300.00>		
LIFO Accumulation or Depletion Adjustment (Income Statement)				1300.00		
New Entries:						
Inventory (Balance Sheet)				177,959.35		
Closing Inventory (Income Statement)				<177,959.35>		
Closing Inventory Balance						
1985		70,000	1.00	70,000.00		
1990		35,000	1.50	52,500.00		
1996		42,000	1.15	48,300.00		
1998		3800	1.88	7159.35		
Total		150,800		177,959.35		

Purchase average overridden with corrected quantity and unit price for previous month.

Product	Date	Quantity	Unit Cost	Value	Allocation	Value
	1985	70,000	1.00	70,000.00		
	1990	35,000	1.50	52,500.00		
	1996	42,000	1.15	48,300.00	<700>	<805.00>
Opening Inventory	1998	147,000		170,800.00		
Jan. Purchase Average		1400	2.00	2800.00		
Feb. Purchase Average		1500	2.10	3150.00		
March Purchase Average		700	1.32	925.00		
April Purchase Average		2300	1.42	3270.00		
May Purchase Average #		1100	1.50	1650.00		
Dec. Purchase Average		2700	1.14	3075.00		
Fuel C	12/15	1200	1.00	1200.00		
Fuel B	12/16	1500	1.25	1875.00		
January Sales		900			Period Ending	
February Sales		500			December 31, 1998	
March Sales		2500				
April Sales		1000				
May Sales		500				
December Sales		5000				
Accumulation or Depletion		<700>	1.15	<805.00>		
Total Closing Inventory		146,300		169,995.00		
Cost of Goods Sold				15,675.00		
Material Balance		0				
General Ledger Entries					Depletion	
Prior Period Reversal:						
Inventory (Balance Sheet)				<172,800.00>		
Closing Inventory (Income Statement)				172,800.00		
LIFO Accumulation or Depletion Adjustment (Balance Sheet)				<1300.00>		
LIFO Accumulation or Depletion Adjustment (Income Statement)				1300.00		
New Entries:						
Inventory (Balance Sheet)				169,995.00		
Closing Inventory (Income Statement)				<169,995.00>		
Closing Inventory Balance						
1985		70,000	1.00	70,000.00		
1990		35,000	1.50	52,500.00		
1996		41,300	1.15	47,495.00		
Total		146,300		169,995.00		

Purchase average overridden with corrected quantity and unit price for previous month.

Weighted Average Cost Calculations

The Weighted Average Cost method calculates the inventory value based on a cost that is a weighted average of the purchases for a given period. The given period can also be a year-to-date range that includes all purchases from the beginning of the year.

The following example only reflects the effect of the purchase price on the cost of inventory. It does not show the other factors that can affect the cost of the inventory, such as freight, exchange rate differences, loans, and borrows.

Product	Date	Quantity	Unit Cost	Value
January Opening Inventory		500	1.20	600.00
Fuel A	01/05	500	2.00	1000.00
Fuel B	01/09	300	2.50	750.00
Fuel C	01/25	600	1.75	1050.00
January Purchases		1400	2.00	2800.00
January Sales		900		
Total Closing Inventory		1000	1.79	1789.47
Cost of Goods Sold				1610.53

The opening inventory quantity, cost, and value are the closing figures from December of the previous year. In the month of January, the company purchased a total of 1400 units for 2800.00. The company sold 900 units.

The system uses the following formula to calculate the closing inventory for January:

Opening inventory + purchases – sales = total closing inventory

The system calculates the closing inventory value using the following formula:

Closing inventory value = (closing inventory units * weighted average cost)

The system calculates the weighted average cost with the following formula:

((opening inventory value + total purchases value) / (opening inventory units + total purchase units)) = Weighted average cost

((600.00 + 2800.00) / (500 + 1400)) = 1.79

Because the weighted average cost for January is 1.79, the closing inventory value is:

1000 * 1.79 = 1789.47

After the system determines the closing inventory value, it then calculates the Cost of Goods Sold using the following formula:

Opening inventory value + purchases – closing inventory value = Cost of Goods Sold

This closing inventory value, along with the weighted average price of 1.79, will be the opening value for the next period, February.

Product	Date	Quantity	Unit Cost	Value
February Opening Inventory		1000	1.79	1789.47
Fuel A	02/08	700	2.50	1750.00
Fuel B	02/18	800	1.75	1400.00
February Purchases		1500	2.10	3150.00
February Sales		500		
Total Closing Inventory		2000	1.98	3951.58
Cost of Goods Sold				987.89

The system performs the same calculations for the remaining months of the fiscal year.

The month of December follows the same principles and the closing inventory becomes the opening inventory for the next year.

Glossary

Glossary

A/R. Acronym for Accounts Receivable.

AAI. See automatic accounting instruction.

absorption. The physical assimilation of one or more components of a gaseous or vapor phase into a second phase (liquid or solid). The distribution of absorbed material inabsorbent tending toward homogeneity, as contrasted to the surface phenomena of adsorption.

account site. In the invoice process, the address where an invoice is mailed. Invoices may go to a different location or account site, than the statement.

active truck. Truck that is available for assignment scheduling.

actual demand. Actual customer orders and allocations of items/ingredients/raw materials to production or distribution.

actual volume. Actual output expressed as a volume of capacity. Used to calculate variances when compared to demonstrated capacity (practical capacity) or budgeted capacity.

added value. Amount of increased worth of inventory to the corporation through manufacturing, processing, or packaging.

addition agents. See additives.

additives. Chemicals that are added in minor proportion to a parent substance to create, enhance, or suppress a certain property or properties in the parent material. Examples include antiknock compounds, antioxidants, detergents, cetane number improvers, pour point depressants, and viscosity index improvers.

adsorption. The adhesion of molecules of gases or liquids to the surface of other bodies, usually solids, resulting in a relatively high concentration of the gas or solution at the point of contact. Silica gel and activated carbon, for example, can adsorb relatively large amounts of other gases or liquids and are used for the selective removal of impurities from petroleum products during refining.

AFRA. See average freight rate assessment.

aggregate planning. The sum of all forecasted demand (customer, distribution, manufacturing) for all items in a family for purposes of planning gross requirements.

aggregate reporting. Reporting of process hours in general, allowing the system to assign the actual hours to specific products run during the period based upon standards.

allocation. The amount or proportion of a product allotted to a customer or customer group over a specific period of time. It sets a maximum ceiling on the amount of a product the customer can order. The opposite of allocation is sales targeting.

alphanumeric character. A combination of letters, numbers, and symbols used to represent data. Contrast with numeric character and special character.

alternate feedstock. A backup supply of an item to act either as a substitute or to be used with alternate equipment. See also feedstock.

ambient. A term usually referring to surrounding conditions. Ambient temperature, for example, as used with storage tanks, is the temperature ouside the tank.

ambient temperature. The temperature of the environment a product is in. For example, the temperature of product within a tank, or a compartment in a vehicle such as a barge, truck, or rail van.

ambient volume. The volume of a product measured at the ambient (surrounding) temperature. The volume of a product changes with temperature, so while volumes are measured at ambient temperatures, the volume sold is based on a standard temperature. See also standard temperature.

American Petroleum Institute Gravity. Specific gravity measured in degrees on the American Petroleum Institute scale. The specific gravity of oil is normally specified not as a fraction in relation to water taken at the figure “1”, but in terms of API degrees. On the API scale, oil with the least specific gravity has the highest API gravity. Other things

being equal, the higher the API gravity, the greater the value of the oil.

American Tanker Rate Schedule. An index used in lieu of the U.S.M.C. (US Maritime Commission) index. This is due to the U.S.M.C. being unsatisfactory because it covers large areas under the same rate and includes the canal tolls as part of the basic rate.

antioxidants. Detergents, cetane number improvers, pour point depresants, and viscosity index improvers.

API. American Petroluem Institute.

application. In the computer industry, the same as an executable file. In OneWorld, an interactive or batch application is a DLL that contains programming for a set of related forms that can be run from a menu to perform a business task such as Accounts Payable and Sales Order Processing. Also known as system.

assays. Report of physical and chemical properties of sample tested by QA. Tied by time period to a portion of production. See also specifications; composition.

assignment scheduling. Planning loads and assigning orders to active vehicles. Orders cannot be split and product must fit in to available compartments. If an order is on hold for credit reasons, a vehicle cannot be assigned.

associated product. Product is stored at one grade, and then an additive is added to bring the product to another level at sales time.

ASTM. See American Society for Testing and Materials.

ASTM distillation. A distillation test made on such products as gasoline and kerosene to determine their initial and final boiling points and the boiling range.

atmosphere. The mass of air surrounding the earth. The pressure of the air at sea level is used as a unit of pressure.

atmospheric pressure. The pressure of air exerted equally in all directions. The standard pressure is that at sea level under which a mercury barometer stands at 760 mm.

ATRS. See American Tanker Rate Schedule.

audit trail. The detailed, verifiable history of a processed transaction. The history consists of the original documents, transaction entries, and posting of records, and usually concludes with a report.

automatic accounting instruction (AAI). A code that refers to an account in the chart of accounts. AAIs define rules for programs that automatically generate journal entries, including interfaces between Accounts Payable, Accounts Receivable, Financial Reporting, and General Accounting systems. Each system that interfaces with the General Accounting system has AAIs. For example, AAIs can direct the General Ledger Post program to post a debit to a specific expense account and a credit to a specific accounts payable account.

availability. For packaged product, the system checks availability. For bulk product, you can assume it is in stock and available for sale.

average cost. A calculated cost of all receipts at actual cost for the period averaged with last period's average cost. Primarily used for setting the value of raw materials.

average freight rate assessment (AFRA). Shows the average cost of a ton of oil delivered. Published monthly, it is not a current index, but a mixture of current and historic costs, intended to show at any time the cost of oil in transit. AFRA is published monthly on the first business day of the month by an independent body, the London Tanker Brokers' Panel. Its AFRA rates reflect on the panel's assessment of the weighted average cost of all commercially chartered ocean-going tonnage employed for international petroleum shipment during a given period-the calculation period. These calculation periods run from the 16th of one month to the 15th of the following month. For example, the AFRA published on October 1,1992 covers cost of vessels fixed during the period of August 16 to September 15, 1992.

average samples. A sample taken so as to contain parts from all sections of a container or pipe, in proportion to the volume of each part.

avoirdupois weight. A British and American system of weights based on a pound of 16 ounces.

B/L. bill of lading.

back calculated consumption. Deductions made upon receipt of parent. The determination of usage of raw materials by multiplying receipt quantity of the parent times standard quanitity per a recipe, recogonizing standard yield factors.

back haul. The practice of loading an ocean-going tanker with cargo at or near the port of reloading of the previous cargo in order to maximize the vessel's profitable use.

back order. A sales order whose shipment date is uncertain due to lack of available product.

back–to–back ship. direct shop orders.

backflushing. Deductions of inventory required at standard and made upon receipt of the end item. See also calculated merge; indirect usage.

balanced loading. Scheduling the production lines to accommodate the limiting rate of one piece of equipment, where line balancing is not possible or feasible. Must accommodate both previous and subsequent work stations or lines.

bareboat charter. This type of agreement provides for the delivery of a "bare" vessel to the company that charters the vessel. This company assumes responsibility for providing crew, provisions, supplies, fuel, and whatever else is needed. See also charter, consecutive–voyage charter.

barrel. For statistical purposes, the petroleum industry uses a barrel containing 42 US standard gallons as a volumetric unit of measure for crude oil and petroleum products. The barrel is equivalent to 34.97 UK gallons, to 0.159 cubic meters, and to 5.61 cubic feet.

base discounts. Discounts that apply to the quantity ordered, not the quantity shipped.

base inventory level. A minimum inventory level typically set by top management.

base price. Company's beginning price, used as the foundation or base from which the actual price is derived. The base price is determined by components, like the cost of the goods, freight, tax, and so forth. A base price can change when the components change. Depending on the situation, these components may need to be shown on an invoice as separate line items, or rolled into one price.

base stock. A raw material supply for multiple end items.

basket discount. A reduction in price that applies to a group or "basket" of products within a sales order.

batch bills. A recipe or a formula whose statement of quantity per for all resources relates to the standard batch quantity (SBQ) of the parent.

batch header. The information that identifies and controls a batch of transactions or records.

batch job. A task or group of tasks you submit for processing that the system treats as a single unit during processing, for example, printing reports and purging files. The computer system performs a batch job with little or no user interaction.

batch processing. A method by which the system selects jobs from the job queue, processes them, and sends output to the outqueue. Contrast with interactive processing.

batch quantity. See standard batch quantity (SBQ).

batch sensitivity factor. A multiplier that is used for the rounding rules in determining the number of batches required to produce a given amount of product.

batch sheet. A list that combines the product and process definition by combining a statement of required materials as well as required manufacturing procedures. See also pick list; material list; routing.

batch size. See standard batch size.

batch type. A code assigned to a batch job that designates to which J.D. Edwards system the associated transactions pertain, thus controlling which records are selected for processing. For example, the Post General Journal program selects for posting only unposted transaction batches with a batch type of O.

batch/lot tracing. Starting with an end item lot number and determining all lot numbers of ingredients/materials consumed to produce the end item lot number. See also batch/lot tracking.

batch/lot tracking. Starting with the lot number of an ingredient and determining all lots into which this lot number went.

batch/mix. A manufacturing process that primarily schedules short production runs of products. See also process/flow.

Baume gravity (Be). Specific gravity expressed on the Baume scale for liquids lighter or heavier than water. However, the API scale is now used for liquids by the petroleum industry instead of the Baume scale. Both scales are identical for liquids as dense as water, but for very light oils, there is a difference.

beginning inventory. Used in period costing for calculating material usage. A statement of the

inventory count at the end of last period, most properly based upon a physical count.

bench scale. Testing of materials or methods on a small scale where the work can be carried out on a laboratory work table.

BFOE. Barrels of fuel oil equivalent based on a net heating value (LHV) of 6,050,000 Btu per BFOE.

bill of lading (B/L). A legal document issued by a shipping company, owner, or agent of either, to a shipper stating that certain goods received for shipment are promised to be delivered at a specified destination, either to the carrier's agent or to a particular consignee or customer. Usually three or four copies are signed, one each being kept by carrier and shipper, and a third forwarded to the consignee. Customarily abbreviated B/L. The legal importance of this document lies in its being a receipt for goods, a contract for carriage, and a title to property. As such, it is a legally negotiable instrument.

bills of labor. A statement of required labor to complete a process. Stated by labor rate or craft and hours. Used in determining manpower needs. It can also state all or critical resources.

black products. Products derived from the low or heavy end of the distillation process. For example, diesel oils and fuel oils. See also white products.

blanket order. An order that commits the purchaser to take delivery of specified products in agreed quantities over a finite period of time. See also blanket releases; contract reporting.

blanket releases. Authorization to ship (purchase order) or produce (schedule) against a blanket agreement or contract. The blanket agreement or contract covers multiple releases over a period of time.

bleeding. The tendency of a liquid component to separate from a liquid-solid or semisolid product, as oil from lubricating grease in storage.

blend. See blending.

blend note. Document that authorizes a blending activity and describes both the ingredients for the blend and the blending steps that are to occur.

blend off. Reworking off-spec material by introducing a small percentage back into another run of the same product.

blending. The process of mixing two or more oils having different properties to obtain a product of intermediate properties. Lubricating oil stocks are blended to a desired viscosity, while naphthas and gasolines are blended to meet volatility and octane requirements.

blending tank. A tank that is designated to hold more than one product at a time.

block order. See blanket order.

blocked operations. A group of operations indentified separately for instructions and documentation but reported only when all are complete.

body. Trade term for describing the consistency or viscosity of a lubricating oil. See also viscosity.

boiling point. The temperature at which the vapor pressure of a liquid is equal to the pressure of the atmosphere. The temperature varies with the atmospheric pressure.

boiling range. The spread of temperatures over which an oil starts to boil or distill vapors and proceeds to complete evaporation. Boiling range is determined by test procedures for specific petroleum products.

BOL. See bill of lading.

BOM. See bill of materials.

bomb. Steel cylinder with screwed-on head used as testing device for conducting oil tests under high pressure. Used for test methods such as Reid Vapor Pressure and gum in gasoline.

book inventory. Inventory as it is shown in the computer. This shows inventory on hand, not necessarily available inventory. See also reconciliation; physical inventory.

Boolean Logic Operand. In J.D. Edwards reporting programs, the parameter of the Relationship field. The Boolean logic operand instructs the system to compare certain records or parameters. Available options are:

EQ	Equal To.
LT	Less Than.
LE	Less Than or Equal To.
GT	Greater Than.
GE	Greater Than or Equal To.
NE	Not Equal To.
NL	Not Less Than.
NG	Not Greater Than.

borrow. See loan/borrow agreement.

bottleneck operation. The point of constraint in a process, either because of rate or capacity limits.

bottom sediment and water (BS&W). A test made on fuel oils, crude oils, and used crankcase oils to show the approximate amount of sediment and water.

bottoms. In a distilling operation, that portion of the charge remaining in the still or flask at the end of the run. In a pipe stilling or distillation process, the portion that does not vaporize.

british thermal unit (BTU). A unit of heat commonly used in heat engineering. It is the amount of heat necessary to raise the temperature of one pound of water by one degree Fahrenheit.

BS&W. See bottom sediment and water.

BTU. See British thermal unit.

BTX. Acronym for benzene, toluene, and xylenes. These are the main aromatic compounds used as feedstocks when manufacturing petrochemicals.

budget. A plan, often in financial terms, but also used synonymously with production plan. A statement of planned volumes by product family for a specific period.

budgeted capacity. The volume/mix of throughput upon which financial budgets were set and overhead/burden absorption rates established.

budgeted volume. A statement of planned volumes (capacity utilization) upon which budgets for the period have been set.

build cycles. Products run between major set up and major clean up. Cyclical scheduling of similar product with minor changes from one product/model to another. See also cycle length; cyclical scheduling.

bulk issue. An issue of non-packaged product from a controlled stockroom for use on multiple schedules as needed. The product is issued in quantities more closely aligned to packaging or storage quantities than the planned required quantity for any or all schedules.

bulk order. An order that is comprised entirely of bulk (non-packaged) products.

bulk products. A mass quantity of liquid, non-packaged product, usually in excess of 100 gallons or 100 liters.

bunker. A compartment or tank usually situated in the vicinity of a ship's boilers or machinery space, and specially constructed for stowage of fuel, such as coal or petroleum. A bunker is usually designated according to location (such as side, wing, reserve, cross, or thwartship).

bunkering. A rate per ton or sum of money charged for placing fuel on board; also the operation itself.

burning point. The lowest temperature at which a volatile oil in an open vessel will continue to burn when ignited by a flame held close to its surface. It indicates the degree of safety with which kerosene and illuminating oils can be used.

butterworth head. A mechanical hose head with revolving nozzles used to wash down tanks.

buy–back crude. In foreign producing countries, that portion of the host government's share of "participation crude" which it permits the company holding a concession to "buy back".

C&F. See cost and freight.

C.Degrees centigrade. On the centigrade thermometer, the interval between the freezing point and the boiling point of water is divided into 100 parts. 0C corresponds to 32F, and 100C to 212F.

calculated usage. The determination of usage of components or ingredients by multiplying receipt quantity of the parent times the quantity per of each component/ingredient in the bill/recipe, accommodating standard yields. See also backflushing.

calibration. The act of fixing, correcting or verifying the graduations of the measurement instruments used to record product volumes within a storage container.

capacity. 1)The amount of space, by weight and volume, that can be filled. Relates to bulk vehicle compartments and bulk depot tanks. 2) The ability to add value through machine or man hours.

capacity analysis. Review of the load of schedules against available capacity to determine over and under utilization by work center and by period.

capital intensive. A facility or facilities which, in order to process product, must invest so heavily in plant and equipment that the fixed costs are greater than the variable costs.

capital investment. The purchase of assets other than inventory. In most corporations, such

investments require a capital expenditure authorization.

capitve manufacturer. A small, independent manufacturing company that manufactures products only for one company. In J.D. Edwards' system, this would be considered a branch, plant or depot.

captive tanker fleets. Fleets of tankers chartered to oil companies for most or all of their useful lives on a cost-of-service basis.

carrying costs. The cost of holding, storing, insuring, controlling and handling raw, intermediate or finished inventory. Often expressed as a percentage of standard unit cost per year.

catalyst. A substance used to accelerate or retard a chemical reaction without itself undergoing significant chemical change or changing in volume during the process.

category code. In user defined codes, a temporary title for an undefined category. For example, if you are adding a code that designates different sales regions, you could change category code 4 to Sales Region, and define E (East), W (West), N (North), and S (South) as the valid codes. Sometimes referred to as reporting codes.

certificate input. See direct input.

change over. The refitting of equipment to neutralize the effects of the just completed production, to further prepare the equipment for production of the next scheduled product, or both. See also set up time; clean up; wash down.

charter. A written agreement covering the assigment of an oceangoing tanker to transport petroleum, to which the ship owner and charterer are parties. It contains clauses that cover all details of the transaction, such as: the nature of charter (single voyage or time charter); loading/unloading ranges, with any exceptions within given ranges clearly indicated; dates; and total cost of fixture, usually stated as a percentage of worldscale. Other standard clauses in a typical charter are laytime, demurrage, force majeur See also bareboat charter; consecutive-voyage charter.

CIF. See cost, insurance, freight.

classifications. A sub-grouping of inventory to reflect its state of availability (for example, in-transit, in quarantine, awaiting rework).

clean cargo. Term that refers to cargos of gasoline and other refined products. See also dirty cargo.

clean up. The neutralizing effects of production just completed. May involve cleaning of residues, sanitation, and equipment re-fixturing. See also change over; set up time; wash down.

clerk. See customer service representative; order taker.

co–product. An end item produced as the result of a process. There are usually two or more co-products. See also end item and by-product.

COA. See certificate of analysis.

COGS. See cost of goods sold.

cold test. The temperature at which an oil becomes solid. Generally considered to be 5F lower than the pour point.

color. Color is measured for undyed commercial petroleum products ranging from colorless to opaque. It is determined by matching the transmitted light from the oil sample with specified standards. The color of an oil gives some indication of its degree of refinement.

combustible. The general term describing any material that will burn. However, in the case of petroleum products, only those that give off flammable vapors above 80F are classed as combustible.

commingled stock. Stock of a product that is held in a single storage area and owned by several parties.

commodity price. A published price for commodity products. For example, Platt's price plus some additional pricing factor.

commonality. A condition wherein raw materials or ingredients are used in multiple formulas or parent bills of materials.

compartment. Container attached to a vehicle designed to transport bulk products. Also the term for individual compartments within a vehicle or for a separate tank. See also logical compartment.

compatibility. Indication of whether two products can be safely shipped together.

competitive thrust. The manufacturing strategy selected by a corporation by which they will gain market share. For example, lowest unit cost and customized engineering are two strategies.

composite sample. A sample that is a mixture of samples taken from the upper, middle, and lower thirds of a container.

composition. The make-up of an intermediate ingredient or finished item, typically expressing chemical rather than physical properties. See also specifications; assays.

compound. A distinct chemical substance formed by the combination of two or more elements in definite proportions by weight and possessing physical and chemical properties different from those of the combining elements. In lubricants, the term connotes the product formed by adding fatty oils and materials foreign to petroleum lubricants to impart special properties.

compulsory stock. Stock level required to be held by agreement or governmental regulations.

conflict. The condition of being unable to run two products at the same time because of contamination or because they compete for the finite capacity of a single piece or series of equipment.

connected vehicle. One or more vehicles joined together to form a single entity. Rail cars joined temporarily to form a train, or trucks and trailers attached to one another are examples of connected vehicles.

consecutive–voyage charter. A written agreement covering ocean-going tanker transport. It is similar to a single-voyage charter, but covers either an extended number of consecutive trips or an extended time period. See also charter; bareboat charter.

consigned stock. Product stock that is held by a third party but is owned by the parent company (the stock is normally intended for distribution and consumption by the third party).

consignment agreement. A retailer acts as an agent for the company. The product sold from the retail site is owned by the company. The agent does not pay for the product upon delivery, but only upon the sale of the product (at an agreed upon price).

constants. Parameters or codes that you set and the system uses to standardize information processing by associated programs. Some examples of constants are: validating bills of material online and including fixed labor overhead in costing.

consumed in operations. Using inventory for your own purposes. For example, using fuel in delivery trucks.

consumed resource. A raw material, ingredient, utility, or capacity used during a manufacturing process. Anything required for production that is placed into the process (as opposed to taken out of the process).

contamination. The addition to a petroleum product of some material not normally present, such as dirt, rust, water, or another petroleum product.

continuous process run. A campaign of extended duration. The production is done on dedicated equipment that can produce one product (or product line of slightly varying specifications) without change over to other products also in demand. See also process/flow.

contract balance. A running balance of transactions that affect a distribution contract.

contract name. A user defined code entered on the Distribution Contract Master to describe a contract with a business partner in the Distribution Contract system.

contract of affreightment. An agreement providing for the ocean-going transportation of a given amount of petroleum products between two ports over an extended period of time but on such vessels and at such time as the owners find advantageous. A provision in the agreement may define “min/max” limits of monthly flows. These contracts, that are not very common, are used to alleviate frictional unemployment and utilize ballasted capacity.

contract price. A product’s price is governed by a contractual agreement existing for a period of time between a buyer and seller. Contract prices protect buyers during a period of rising prices by limiting the price increases over the period of the contract.

contract reporting. Reporting of each instance and the accumulation to date of finished production against both the individual schedule and a customer’s blanket commitments to purchase a stated quantity. See also blanket order; blanket releases.

contract status. A value to indicate the current status of a contract in the Distribution Contracts system.

contract type. A user defined code used to indicate the general type of contract used in the Distribution Contracts system.

contractor. Third party supplier of transportation resources (for hire).

contribution to profit. Selling price of an item minus its variable costs.

control number. Typically the manufacturing order of schedule number used to identify a specific instance or period of production.

control technique. A method of managing material movement and assigning usage and costs to product/process or production.

controllable loss. Unfavorable usage or yield variance directly attributed to human or process errors, and that, once identified, can be prevented in the future.

controlled issue. A specific transaction of a resource in a schedule or manufacturing order of an exact quantity. For example, to indicate usage of materials to a specific production run or reporting of labor/machine hours. See also direct usage; planned issue.

conversion. The ratio of the quantity of feedstock converted to other products in any process.

conversion costs. The costs of transforming raw materials (ingredients) into salable product. See also added value.

conversion factor. The value used to convert one value to another.

core. The central and foundation systems of J.D. Edwards software, including General Accounting, Accounts Payable, Accounts Receivable, Address Book, Financial Reporting, Financial Modeling and Allocations, and Back Office.

cost accounting. The management discipline responsible for ascertaining product/process costs.

cost and freight (C & F). Similar to cost, insurance, freight (CIF), but under this transaction, the buyer gets his own insurance. See also cost, insurance, freight.

cost of goods sold (COGS). The cost of products sold during an accounting period including material, labor, and factory overhead expenses.

cost, insurance, freight (CIF). Term that refers to a sale in which the buyer agrees to pay a unit price that includes the free on board (FOB) value at the port of origin plus all costs of insurance and transportation. This type of transaction differs from a “delivered” agreement in that it is generally without duty, and the buyer accepts the quantity and quality at the loading port (as certified by the Bill of Lading and Quality Assurance Report), rather than pay on quality/quantity as determined at the unloading port. Risk and title are transferred from the seller to the buyer at the loading port, although the seller is obliged to provide insurance in a transferable policy at the time of loading.

costing elements. The individual classes of added value or conversion costs – typically material (raw, packaging) labor/machine costs, overhead (fixed, variable). Each corporation will define the necessary detail of product costs by defining and tracking cost categories and subcategories.

count. The quantity of finished product. May have multiple units of measure over many product lines or may be standardized across all products.

cracking. The process by which an organic compound is split into two or more compounds of lower molecular weight. The cracking process has become increasingly important in the petroleum industry as a means for breaking down the heavier components of petroleum into gas, naphthas and distillates, thereby increasing the yield of gasoline and distillate fuels that can be obtained from crude oils. The cracking process may be carried out with heat and pressure (thermal cracking) or in the presence of a catalyst (catalytic cracking).

credit checking. The process of reviewing the credit worthiness of the organization. Typically entails a review of the organization’s Accounts Receivable balance, including its size and its relative age, as well as the net equivalent balance of any loan or borrow arrangements. May include a method of checking credit limits of the parent company (the company a product is sold to, that might be different from the company a product is shipped to).

credit memo. See credit order; return order adjustment.

credit notice. The physical document used to communicate the circumstances and value of a credit order.

credit order. A credit order is used to reflect products or equipment that is received or returned, so it may be viewed as a sales order with negative amounts. Credit orders usually add the product back into inventory. This process is linked with delivery confirmation.

crude oil assay. A procedure for determining the distillation curve and quality characteristics of a crude oil. See also assays.

crude oil quality. There are two main aspects of crude oil quality that influence the price: the distillate content and the sulfur content. Additionally

the price of crude oil varies with its location, the price differential naturally reflecting transportation costs.

crude oil, crude petroleum. A naturally occurring mixture, consisting predominately of hydrocarbons and organic compounds containing sulfur, nitrogen, oxygen and traces of metallic constituents, that is capable of being removed from the earth in a liquid state. Crude petroleum is commonly accompanied by varying quantities of extraneous substances such as water, inorganic matter, and gas. Basic types of crudes are asphaltic, naphthenic or paraffinic, depending on the relative proportion of these types of hydrocarbons present.

CUM. Acronym for cubic meter. One of many acronyms and abbreviations commonly used.

cummulative price. Price determined by some combination of these prices: internal list price, base price, contract price and promotional price.

current cost. The cost associated with an item at the time a parts list and routing are attached to a work order or rate. Current cost is based on the latest bill of material and routing for the item.

current tank. The tank currently being used for product sales. Only one tank per product can be designated as the current tank at one time.

customer business line. Describes the nature of the customer's business and controls the relationship with that customer, including such things as product pricing.

customer's usuals list. A list of the products and quantities normally ordered by a customer.

cut. A cut is a fraction of the charge stock separated by distillation. For example, kerosene is a cut of crude oil.

cycle billing. Describes a practice of invoicing a customer on a specific date for all sales within a specified date range. For example, a customer may request that all sales between the first and the 15th of the month be invoiced on the 25th. Invoicing is not done per delivery, but per sales period. When an invoice is not sent with the delivery, a delivery ticket is sent instead. Delivery tickets don't show prices or due dates. Also called periodic invoicing, invoice cycles. See also delivery ticket.

cycle count tag. Document numbering system used for packaged lubricants. This number is used through the entire product transportation and invoicing process.

cycle length. The time between major setups. The time between the start of one production run of similar items/models and the start of a run of the next.

cyclical scheduling. A method of scheduling product/manufacturing families. A technique to determine run times and quantities of each item within the family to produce enough of each individual product to satisfy demand until the family can be scheduled again. See also build cycles; product sequencing.

database. A continuously updated collection of all information a system uses and stores. Databases make it possible to create, store, index, and cross-reference information online.

date code. The labeling of products with the date of production. This is often the lot number.

de–blend. Where blend off will not result in a product accepted by customers. The further processing of product to adjust specific physical and chemical properties to within specification ranges. See also blend-off.

deadweight. Total weight a vessel carries when immersed to her authorized load draft, including cargo, mail, fuel, water, stores, crew, passengers, baggage, and personal effects.

decant. Activity that serves to empty product from its existing package and return it to a larger container.

default. A code, number, or parameter value that is assumed when none is specified.

delayed billing. The invoicing process is delayed until the end of some designated period (for example, accumulated volume discounts, Platt's published rates at month end).

delivered. The buyer pays on the basis of delivered quality/quantity. Risk and title are borne by the seller until such time as the product passes to the buyer's installation. The seller is responsible for clearance through customs and payment of all duties. Any in-transit contamination or loss of cargo is the liability of the seller. In delivered transactions, the buyer pays only for the quantity of product actually received in storage, not on the bill of lading figures that reflect the amount loaded.

delivery confirmation. The delivery confirmation process verifies that the goods on an order or trip were delivered to their destination. Part of the confirmation may include defining the disposition of

product not delivered, for example, return to tank or left on board. See also return confirmation.

delivery date. The date the customer receives the product.

delivery invoice. Provides the delivery instructions for a specific order or trip, specifying the products and quantities that should be delivered. Shows the product price, value added tax (VAT), and any other additional charges associated with a delivery to the customer.

delivery ticket. An itemized list of goods shipped that is sent with the product to the ship-to customer location. It is like an invoice except it has no prices or due date listed. Invoices may go to a different address than the product. Delivery tickets are used when the customer does not want prices shown, when the customer wants to pay against a periodic invoice, or when the product quantity is not known until after delivery. Several delivery tickets can roll up into a single invoice, with either separate line items or aggregate amounts shown. See also priced delivery ticket.

demand. A need for a particular product or component. The demand could come from any number of sources, such as customer order, forecast, an interplant requirement, or a request from a branch warehouse for a service item.

demand rate. A statement of requirements in terms of quantity per time (hours, day, week, month).

demonstrated capacity. Actual average capacity utilization level expressed as a rate. Excludes downtime, planned, or unplanned. See also proven capacity; budgeted capacity.

demurrage. A term widely used in the shipping industry to quantify the amount of (and liability for) any additional costs incurred by loading/unloading vessel arising from delays and lost time. In international tanker trade, the charter parties specify (and thereby strictly limits) the amount of time granted to load/unload cargo. Time spent in excess of this limit is demurrage.

density. The mass of a substance per unit volume. Its numerical expression varies with the units selected, most often in grams per cubic centimeter or in pounds per cubic foot or gallon. Density is usually related to a Celsius situation, whereas gravity is usually related to Fahrenheit situation. See also gravity.

depot. Location from which stock is picked up, delivered, handled or stored. Handling may include blending and packing operations. Also called branch, plant, branch/plant, terminal, or warehouse.

derv. See user defined code.

detail. The specific pieces of information and data that make up a record or transaction. Contrast with summary.

deterioration. Any undesirable chemical or physical change that takes place in petroleum products while in storage or use.

deutsche industrie norm (DIN). Deutsche Industrie Norm. The German industry standard. The equivalent of the US ASTM and the UK BSI.

dew point. The temperature at which vaporized materials start to condense into liquid form.

diesel fuel. A general term convering light fuel oil derived from gas oil and used in diesel engines. Diesel fuel used in road diesel engines is called Derv (Diesel Engine Road Vehicle).

DIN. Deutsche Industire Norm.

dip. Any one of a series of methods of product measurement that uses a device to determine the relative level of product contained in a storage container.

dip reading. See gauge reading.

direct input. The system calculates the net units when you enter gross volume, temperature, and gravity or density. This data is generally entered during product receiving from the certificate prepared by an independent inspector.

direct ship orders. A purchase order to a third-party supplier that designates the destination as the customer. Direct ship orders occur when a product is not available from a company-owned or operated source, so the system creates an order to ship the product from a third-party source directly to the customer. Such transactions can result from loan/borrow or exchange agreements.

direct usage. Consumption of resources attributable to specific production runs because it was directly issued to the schedule/order. See also controlled issue; planned issue.

dirty cargo. Term that refers to crude oil cargos or other non-refined petroleum cargos. See also clean cargo.

discharge. The physical movement that effectively transfers custody and/or ownership of the product.

dispatch group. A group products grouped by the physical characteristics that are important when storing and transporting these products.

dispatch planning. Efficient planning and scheduling of product deliveries. Considerations include dispatch groups, scheduled delivery date and time, preferred delivery date and time, average delivery time for that geographical location, available resources, and special equipment requirements at the product's source or destination.

disposition. The indication of what should be done with bulk product left on board a vehicle after delivery.

dissimilar exchange transactions. See exchange transactions.

distillate. That portion of oil that is removed as a vapor and condensed during a distillation process. Also known as the overhead fraction as distinguished from the non-vaporizing residual components left in the still.

distillation. The general process of vaporizing liquids, crude oil, or one of its fractions in a closed vessel, collecting and condensing the vapors into liquids, thereby effecting a separation between those fractions that vaporize and those that remain in the bottom.

distribution contracts. A system to enter into and track contracts with business partners. These may be formal or informal contractual agreements. Examples include: exchange agreements, loan and borrow agreements, tonne per tonne agreements, throughput agreements, consignment agreements, storage contracts, purchase contracts, and sales contracts.

document–export. Documents required to accompany a shipment of product across national boundaries.

document–safety. Documents required to accompany a product shipment that describe the product's properties and include handling, transport and emergency instructions.

dopes. Industry parlance for substances other than petroleum added to motor fuels, diesel fuels, heating oils, and lubricating oils to improve their performance characteristics. See also additives.

downgrade profile. A statement of the hierarchy of allowable downgrades. Substitutions of items meeting tighter specifications for those with wider or overlapping specification ranges.

downgrading. Assigning a petroleum product for use where a lower grade of product would normally be employed, provided it meets the requirements for the lower grade. May also occur after analysis of the actual specifications achieved during production reveals that the product does not fall within prime product specification ranges.

downstream operation. General description of all operations that occur following the exploration and production of petroleum and natural gas. This usually includes the refining, transportation and marketing of the product and by-products of the refining processes.

downtime. The period of time when a plant or certain equipment is idle. May be due to breakdown (unplanned) or for preventative maintenance and/or changeover (planned).

drawdown. The act of reducing quantities authorized, previously committed or generally available. Typically occurs through the use of sales order or as a release against a blanket or block order. Also called a release.

drop ship. See direct ship.

dry ticket. A tank inspection record form signed by shore and ship inspectors before loading and after discharging cargo.

dummy vehicle. A vehicle record that is created to use temporarily in place of an actual vehicle record for trip assignment.

dutiable. Necessitating payment of a duty or tax, as imported goods.

duty. A payment due to the government, especially a tax imposed on imports, exports or manufactured goods. Duty can be based on a product's end use and is subject to other taxes and discounts. Unlike taxes, that tend to be based on percentages, duties tend to be fixed amounts. The same ship-to customer may have two different customer ID numbers (duty-free and requires duty) to designate the duty attached to a sale. Depending upon the country, duty may be displayed as a line item on an invoice, or be built into an item's price.

duty–free. No payment of a duty or tax is required. The records for the customer reveiving the product (ship-to customer) indicate duty-free sales. The

same ship-to customer may have two different customer ID numbers (duty-free and requires duty) to designate the duty attached to a sale. Product item codes or the Duty Status assigned on the End Use preference determine if a product is duty-free.

earned volume. A statement of capacity reflecting the standard hours for actual production reported during the period.

easel. A software product known as interactive Easel. This software product provides a bridge between AS/400 video terminals and PCs. It enhances graphics processing and provides some programmer tools. Easel is sometimes thought of as a programmer's tool that simplifies the use of OS/2's presentation manager.

economy of scale. A phenomenon whereby larger volumes of production reduce unit cost by distributing fixed costs over a larger quantity. Variable costs are constant, but fixed costs per unit are reduced, thereby reducing total unit cost.

EDA. Acronym for Estimated Date Available.

EDI. See Electronic Data Interchange.

Electric Data Interchange. The transmission, in a standard syntax, of a given business document from computer to computer.

ending inventory. A statement of on-hand quantities at the end of a period often terminated by a verification of physical inventory.

EOM. Acronym for End of Month.

equivalent fuel. A barrel of equivalent fuel supplies six million BTU of heat. Fuel gas quantities are usually calculated as equivalent fuel barrels in economic calculations for refinery operations.

evaporation loss. The loss of petroleum products, particularly gasoline, through the evaporation of the most volatile fractions.

excess issues. Removal from stockroom and assignment to a schedule of a quantity higher than the quantity per times the schedule quantity. Indicative of an unfavorable usage variance.

exchange agreement. An exchange agreement allows products to be traded between companies. The partners often agree to exchange specific quantities of product for a given time period. Exchanges involve different products or multiple products and often include a differential that one partner pays per unit of product exchange. The agreement may cover multiple locations (depots). Partners generally expect exchanges of physical product to remain roughly in balance; however, imbalances do occur and are usually monitored monthly. An annual rebalance is common and often repaid in product.

exchange transactions. Transactions that involve an exchange of products between two companies having an exchange agreement. An exchange transaction usually involves different products and different exchange differentials. Also called dissimilar exchanges.

exit. 1) To interrupt or leave a computer program by pressing a specific key or a sequence of keys. 2) An option or function key displayed on a form that allows you to access another form.

expense distribution. Assignment to product cost of those expenses that are neither material nor labor. Method of assignment has traditionally been a burden rate applied based upon labor dollars or machine dollars.

export invoice. Any one of several specially formatted invoices required for customs or commercial purposes and that contain mandated information in addition to that required by the customer.

F. Degrees Fahrenheit. On the Fahrenheit thermometer, the boiling point of water is 212F and the freezing point is 32F above the zero of the scale.

facilities. The physical plant and equipment. See also production facilities.

facility. 1) A separate entity within a business for which you want to track costs. For example, a facility might be a warehouse location, job, project, work center, or branch/plant. Sometimes referred to as a business unit.

feeder work stations. A manufacturing area whose prodcuts are planned to be available for use in a primary work area, often for final assembly of filling and packaging. Primary work area planning drives the plan for the feeder work station. This plan may be stated as a rate.

feedstock. An intermediate product produced during the refining process. Feedstock requires additional processing to make an end product. Material suppy for multiple end items. For example, Base Grey Paint is the primary ingredient (feed stock) of all colors. See also feedstream.

FIFO. See first in, first out.

File. 1) In AS/400 environments, a collection of related data records organized for a specific use and electronically stored by the computer. Also known as file. 2) In database environments, a two-dimensional entity made up of rows and columns. All physical data in a database are stored in tables.

fill. The act of putting a blended product into a container. Alternatively, the percent of a stock that is distilled at a given temperature is referred to as the fill at that temperature.

fill note. Document that authorizes a filling activity and describes the ingredients, materials required, and the filling steps that are to occur.

filling line. Equipment used to receive the bulk product that is needed to fill product containers.

finished goods reporting. A statement of products produced in terms of end item and grade. See also production reporting.

finished materials. See finished goods.

finite loading. To schedule up to the stated finite availability of a resource. Traditionally used to plan capacity where machine hours are loaded in day one to the stated limit and additional requirements are pushed into subsequent periods.

fire point. The lowest temperature at which, under specified test conditions, a petroleum product vaporizes rapidly enough to form above its surface an air-vapor mixture that burns continuously when ignited by a small flame. See also flash point.

fixture. Another term for a charter. See also charter.

flag of convenience/necessity vessel. A vessel registered in a nation with laws and regulations that are less restrivtive than most maritime nations. The two most important flag of convenience/necessity nations are Liberia and Panama. Typically, vessel owners registered in these nations have limited liability, pay no taxes, and have the freedom to change the nationality of crews at will.

flammable. Term describing any combustible material that can be easily ignited and that will burn rapidly. Petroleum products that have a flash point of 80F or lower are classed as flammable.

flammable liquids. Those liquids that give off combutible vapors.

flash point. The lowest temperature at which, under specified test conditions, a petroleum product vaporizes rapidly enough to form above its surface an air-vapor mixture that gives a flash or slight explosion when ignited by a small flame. The flash point of an oil is an indication of the risk of fire or explosion associated with its use or storage. Flash point limits are included in the specifications of most products above the gasoline boiling range, but the test does not have any economic significance as long as the value recorded is inside the specification limit. See also fire point.

floating roof. A type of tank roof that actually floats on the surface of the oil or other liquid stored in the tank. It rides up and down inside the tank as the fluid level changes. A sealing system is used to close off the space between the roof and the inside wall. There are various designs of floating roofs in use.

floating terminal. Describes an operations wherein a water craft – often a barge – receives a load of product and delivers that product to a series of customers.

floating terminals.Boats that have an instrument or apparatus for measuring and recording the quantity of a product being unloaded. These boats are used in the Bahamas in much the same way as metered trucks are used elsewhere. See also metered trucks.

flush. The process of removing the last vestiges of product from a storage compartment, tank or vehicle. Clean a vehicle or tank.

FOB. See free on board.

formula. A statement of ingredient requirements, although a formula may also include processing instructions and ingredient sequencing directions.

four–point analysis. The process that captures measured quantities at four separate points in the product movement cycle and reconciles any resulting gains or losses.

fraction. A separate, identifiable part of crude oil that is a product of a refining or distillation process. A portion of distillate (having a particular boiling range) separated from other portions in the fractional distillation of petroleum products.

free on board (FOB or F.O.B.). A transaction in which the seller provides a product or crude oil at an agreed unit price, at a specified loading location within a specified period. It's the buyer's responsibility to arrange for the transportation and insurance, and lift the material within the specified loading/unloading time (laytime).

freestock. The quantity of product that can be promised for sale or transfer at a particular time,

taking into consideration current on-hand quantities, replenishments in process and anticipated demand.

freight (charge). Costs incurred for the transportation of product between two points, as well any charges for related services.

fuel oil. The heavy oils from the refining process that are used as fuel for power stations, industry, ships, and so forth. See also petroleum fuels.

full payout charter. Charter with a charter period that extends as long as the underlying debt that financed the acquisition of the vessel. At the end of the charter period, the vessel is free of all debt.

gain. 1) An increase in value of product attributed to an increase in its measured quantity. 2) An increase in profit attributable to the reduction of a transaction's quantity. 3) An increase in inventory when an actual measurement of the physical inventory is greater than the book inventory shown on the computer. As this is an unidentified gain, research might be done to determine if the gain is associated with temperature, over shipment, or for other reasons.

gallon (Imperial). Unit of volume used in the United Kingdom and other Commonwealth countries and defined as the volume of 10 pounds of water at 62F. It is equivalent to 277.418 cubic inches or 1.2009 US gallons or 4.54596 liters.

gallon (US). Unit of liquid measure equal to 231 cubic inches inches or 3.785 liters.

gantry. An automated device operated by a process control system that releases a set quantity of product to a transport vehicle and records the volume loaded electronically as well as in printed form. See also loading rack.

gas oil. The medium oil from the refining process used as fuel in diesel engines, burned in central heating systems and used as feedstock for the chemical industry. Gas oil is the European designation for No. 2 heating oils and diesel fuels.

gasoline. A volatile, flammable liquid hydrocarbon refined from crude oils and used universally as a fuel for internal-combustion, spark-ignition engines.

gate–pass confirmation. See shipping confirmation.

gauge reading. A method used to measure products within a tank or compartment on a vehicle. An extended ruler is inserted into a tank to measure the depth of product within the container.

graded products. An item whose specifications of critical chemical or physical properties will differentiate it from another with the same item number. The specification variation may determine its eventual use, cause alterations in other ingredients in formulas for which it is required, and/or alter its worth in the marketplace, although not necessarily its processing cost. Graded products may be raw ingredients, intermediates, or finished goods.

gravity. The displacement of the product that serves as an index of the weight of a measured volume of the product. Gravity determinations are necessary for the conversion of measured volumes to weight. Gravity is read with a hydrometer. There are two types of gravity: observed and API. Product at observed gravity will be different after it is converted to a standard temperature. Gravity is usually used in Fahrenheit situations.

gross registered tonnage. A vessel's internal volume, figured on the basis of 100 cubic feet (cf) per ton. Abbreviation: grt.

gross volume/gross quantity. The quantity or volume of a product at the ambient temperature. See also ambient temperature and standard temperature.

gross weight. See weight.

head box. A storage container for feedstock. See also hold tanks; surge tank.

header. Information at the beginning of a table or form. This information is used to identify or provide control information for the group of records that follows.

heating oil. Generic term for oils used exclusively for home heating, and widely used as a synonym for No. 2 fuel.

hidden selections. Menu selections you cannot see until you enter HS in a menu's Selection field. Although you cannot see these selections, they are available from any menu. They include such items as Display Submitted Jobs (33), Display User Job Queue (42), and Display User Print Queue (43). The Hidden Selections window displays three categories of selections: user tools, operator tools, and programmer tools.

hold order. Suspend order, back order, or conditional order. If an order is on hold for credit reasons, a vehicle cannot be assigned.

hold tank. See holding tank.

holding costs. A calculation of the cost of money, storage, warehousing, personnel, insurance, and so forth, over the number of days material sits idle. See also carrying costs.

holding tank. A storage container designed to receive a blended product after the blend process is complete and before the fill process begins. Any storage container used temporarily for intermediates, finished goods, raw ingredients, feedstocks, base stocks, and so forth.

idle capacity. Available processing hours not used in producing products. May be budgeted in that demands do not consume the entire capacity or preventative maintenance is scheduled. May be unplanned downtime for emergency repair. This unplanned downtime maybe budgeted by management knowing that they must expect some emergency downtime.

imbalance partner. A business partner who does not meet the terms of a distribution contract.

improvers. See additives.

in–line blending. In the industry, this generally refers to a blending process done with two converging pipelines, usually under pressure. This may occur at the loading rack when a vehicle (barge or truck) is being loaded. It can also occur on a ship transporting the product. When combining products to create another product, each product may have its own unit of measure. Blending may also result in a Bill of Materials containing more than one product. See also splash blending.

in–process rework. Recycling for further processing a semi-processed product that doesn't meet acceptable standards out of a given operation back into the beginning of that operation or a previous operation (for example, unreacted materials). Rework that is detected prior to receipt of finished goods and corrected during the same schedule run. See also return to production.

incubation period. The length of time required to hold a product in order to verify its quality or to allow a chemical/physical change to happen before further processing (for example, fermentation). See also quarantine.

indented bill of material. A multi-level statement of material requirements showing all fabrications and subassemblies required for end-item manufacture. It includes all bills of material for the product and its components.

indented tracing. The following of all lot numbers of intermediates and ingredients consumed in the manufacture of a given lot of product down through all levels of the bill of material, recipe, or formula.

indirect measurement. Determining the quantity on hand by (a) measuring the storage vessels and calculating the content's balance quantity; or (b) theoretically calculating consumption of ingredients and deducting them from the on-hand balance.

indirect usage. Determining what should have been used by multiplying receipt quantity of the parent times the quantity per statement in the formula, recipe, or bill of material. This transaction typically affects both consumption on schedule as well as issue from on-hand balances. See also backflushing; key point.

infinite resource. Anything whose availability can be planned for in any quantity for any one-time period.

ingredient. A required material for the manufacture of its parent; specifically material that is purchased as opposed to a processed intermediate.

innage. Depth of liquid in tank, measured from the surface of the liquid to the tank bottom.

inspector input. See direct input.

inter–depot transfers. Stock transfers between depots.

inter–plant transfer. The movement of goods (raw ingredients, intermediates, or finished goods) from one production facility to another. The facilities are typically within a vertically integrated corporation with the receiving facility further processing the goods.

interactive processing. Processing actions that occur in response to commands you enter directly into the system. During interactive processing, you are in direct communication with the system, and it might prompt you for additional information while processing your request. See also online. Contrast with batch processing.

interface. A link between two or more computer systems that allows these systems to send information to and receive information from one another.

internal list price. Price as given in an internal list or catalog used by a company's employees for reference purposes. See also non-list price; list price.

invoice. An itemized list of goods shipped and/or services rendered, stating quantities, prices, fees, shipping charges, and so forth. In the energy/chemical industry, the invoice format can vary based upon product group. Also, companies often have their invoices mailed to a different address than where they ship products. In such cases, the "bill-to" address differs from the "ship-to" address. Invoices sometimes show dual units of measure (for example, gallons and barrels equivalent in liters). See also delivery ticket.

invoice cycles. See cycle billing.

ISO 9000. A series of standards established by the International Organization for Standardization, designed as a measure of product and service quality.

item. Any unique manufactured or purchased part, material, intermediate, subassembly, or product, based on form, fit, or function.

item master. A record for an item. This record contains descriptive data and control values (leadtimes, lot sizes, and so on), and might contain data on inventory status, requirements, planned orders, and costs. Item records are linked together by product structure records that define the bill of material for an item.

job costing. Determination of actual production cost by tracking material, labor, and overhead costs to each instance of production for that item. The typical control and collection mechanism is the manufacturing order or job order, consequently, the term job costing.

job queue. A group of jobs waiting to be batch processed. See also batch processing.

joint–operated plant. A facility shared and managed in rotation by different companies. This is common at airports, because airports typically minimize the number of tanks and facilities.

kerosene. A medium light oil from the refining process intermediate between gas oil and gasoline; used for lighting, heating, and as a fuel for jet and turbo-prop aircraft engines.

key point backflushing. The theoretical consumption of resources triggered not upon the receipt of the end item but through reporting and intermediate quantity produced and passed forward to the next task. The theoretical consumption will consume only the resources required for this processing task and all previous processing tasks that are defined as non-reporting (not serving as trigger points for key point backflushing). See also indirect usage.

labor cost. The dollar amount of labor performed during manufacturing.

laytime (or layhours). Term that refers to the amount of time allotted to a tanker at berth to complete loading or discharging cargo. This time is usually expressed in running hours and is fixed by prior agreement between the vessel owner and the company chartering the vessel. Laytime is stipulated in the charter that states exactly the total of number of hours granted at both loading and unloading ports, and indicates whether such time is reversible. A statement of "Seventy-Two Hours, Reversible" means that a total of 72 hours is granted overall at both ports, and any time saved at one port can be applied as a credit at the other port. For example, if the vessel uses only 32 hours instead of the 36 hours to load cargo, it can apply an additional four hours to the 36 hours allotted at the dicharge port. Such considerations are important for purposes of computing demurrage.

leading zeros. A series of zeros that certain facilities in J.D. Edwards systems place in front of a value you enter. This normally occurs when you enter a value that is smaller than the specified length of the field. For example, if you enter 4567 in a field that accommodates eight numbers, the facility places four zeros in front of the four numbers you enter. The result appears as: 00004567.

level. The code used for every item or assembly in a product structure to signify the relative level in which that item or assembly is used within the product structure. Normally the end items are assigned to level 0 with the components and subassemblies of the item assigned to level 1 and so forth. The MRP explosion process starts from level 0 and proceeds downward one level at a time.

level of detail. 1) The degree of difficulty of a menu in J.D. Edwards software. The levels of detail for menus are as follows:

A	Major Product Directories
B	Product Groups
1	Basic Operations
2	Intermediate Operations
3	Advanced Operations
4	Computer Operations
5	Programmers
6	Advanced Programmers Also known as menu levels

2) The degree to which account information in the General Accounting system is summarized. The highest level of detail is 1 (least detailed) and the lowest level of detail is 9 (most detailed).

LIFO. See last in, first out.

limited resource. Anything for which requirements above and beyond stated availability must be tagged, so planners may have sufficient time to acquire the resource often through expediting and rescheduling.

line. A specific physical space for the manufacture of a product. In a flow plant, layout is often represented by a straight line. This may be in actuality a series of pieces of equipment connected by piping or conveyor systems.

line of business. Describes a segment of the customer base and the products or product lines they typically purchase. Line of business maybe a factor in pricing products.

liquid fuel. Any liquid used as fuel that can be poured or pumped.

liquid petroleum gas (LPG). A product that consists of propane, butane, or a mixture of the two and which may be wholly or partially liquified under pressure for transport and storage.

list price. Retail price as given in a list or catalog, variously discounted in sales to dealers or industrial customers. The list price is calculated from the base price. See also non-list price; internal list price.

liter. Unit volume in the metric system equal to 61.025 cubic inches or 0.264178 gallons US liquid.

load balancing. Physically arranging components of a load by weight and height to ensure the safety of the trip.

load confirmation. Date the product leaves the plant.

load date. Date the product leaves the plant.

load slip. 1) A statement of required materials to fulfill a customer's order. 2) A statement of required materials to move to processing when manufacturing an end item. 3) A sub-lot control ticket designating precise production time required to bring a specific sample back to specifications.

loading note. Document that tells the delivery driver how much of the product to load and describes how the driver should load the product (unless the order is automated). The note includes trip number, sequence number and loading sequence information. There are both packaged and bulk loading notes. Also called pick list, pick slip, packing slip.

loading rack. The equipment used to load bulk products into a vehicle. An automated loading rack is computerized and can record and update orders and inventory based on computer entries. A non-automated loading rack simply records the information for later data entry.

loan/borrow agreement. An agreement with a business partner usually made in response to a potenial stock shortage. It normally is for the same product and does not involve product or price differentials. In a shared facility, a simple borrow and loan agreement may occur when a partner exhausts its stock of a product. If another partner at the facility has stock available, it may agree to loan the stock against a planned replenishment. In another scenario, a company may pick up product from a partner at another depot and replace the product at a later date. Normally, loans and borrows are informal agreements settled in product. See also loans; borrow; exchange agreement.

loans. Loaning product to another company. Repayment will be made by the borrower in the same product. See also borrow; loan/borrow agreement.

logical compartment. One of two ways identified in the transportation constants to display compartments on vehicles. Logical display numbers the compartments sequentially. For example, if there are two vehicles on a trip and each vehicle has three compartments, the logical display is 1,2,3,4,5,6. See also physical compartments.

logical file. A set of keys or indices used for direct access or ordered access to the records in a physical file. There can be several logical files with different accesses to a physical file.

logical shelf. A logical, not physical location for inventory, used to track inventory transactions in loan/borrow or exchange agreements with other companies. See also logical warehouse.

logical warehouse. Not a physical warehouse containing actual inventory, but a means for storing and tracking information for inventory transactions in loan/borrow or exchange agreements with other companies.

long ton. An avoirdupois weight measure equaling 2,240 pounds or 1.0160 metric tons.

long–term rework. Rework materials that cannot be re-processed and brought up to specification immediately or within a very short period of time.

loss. The decrease in inventory when physical inventory is less than the book inventory shown on the computer. This is an unidentified loss and further research might be done to determine if the loss is associated with temperature, under shipment, or other reasons.

lot. A quantity produced together that shares the same production components. Lots are uniquely identified to allow for traceability.

lot tracking. See also batch/lot tracking.

LRS. Acronym for Loading Rack System. See also loading rack.

lube. See lubricants.

lube oil. See lubricants.

lubricants. A class of petroleum-based products that are typically stored as intermediate products, then blended and packed for delivery. Also known as lube oil.

main fuels. Usually refers to bulk fuel products, but sometimes includes packaged products.

manual invoices. Invoices that are generated after recording manual or "milk run" product deliveries. Recorded after-the-fact into the system.

manufacturing family. See family.

manufacturing request. Work order issued to initiate the manufacturing of product for a specific customer or to replenish stock.

margin. The difference between the cost and the selling price of goods produced and sold.

marginal cost. The cost of making one more than planned or stated volume; in essence, variable cost only, with the pricing strategy relying on originally planned production to absorb all fixed costs.

marketing unit. The unit of measure (UOM) for sales. UOM in which sales price is stated and customer orders are booked. May require conversion from stocking UOM and/or planning UOM.

master schedule. A statement of production, input into the material plan and the driver of requirements.

master table. A database table used to store data and information that is permanent and necessary to the system's operation. Master tables might contain data such as paid tax amounts, supplier names, addresses, employee information, and job information.

material. General description applied to any blending or filling process component that is not petroleum based.

material list. A statement of ingredients (materials) required out of storage to support production. See batch sheet.

material usage variance. The difference between planned or standard requirements for materials to produce the parent and the actual quantity used for a particular manufacturing run. Typically valued at standard dollars (purchase price variance stripped at receipt time) or at calculated average cost whereupon a rate variance is also possible.

menu levels. See level of detail.

menu masking. A security feature of J.D. Edwards systems that lets you prevent individual users from accessing specified menus or menu selections. The system does not display the menus or menu selections to unauthorized users.

metal content. A series of properties of a blended product that help to determine its suitability for a prescribed purpose.

metals management. Term applied to the process of maintaining information about the location and status of durable product containers such as liquid petroleum gas (LPG) cylinders.

meter. There are two types of meters: regular meters that measure the amount of flowing product, and temperature compensating meters that measure the temperature of the flowing product and convert it to standard temperature.

meter readings. The reported number from the meter used to calculate the actual inventory quantity of materials.

metered issue. A quantity of consumption wherein the determination of actual quantity used was not counted by hand, rather by meters.

metered trucks. Trucks having an instrument or apparatus for measuring and recording the quantity of a product being unloaded. Metered trucks are often used for milk runs or topping off, where the truck follows some routes and delivers a product on-site to customers. See also milk run; unmetered trucks; floating terminals.

method of payment. Describes the financial instrument that can be used to retire the debt

incurred. This may be cash, check, post-dated check, letter of credit, and so forth.

metric ton. A weight measure equal to 1,000 kilograms, 2,204.62 pounds. (avoir.) and 0.9842 long tons. For approximate conversion purposes, there are about 7.55 barrels of No. 2 distillate fuel in one metric ton, 8.51 barrels of gasoline, and 6.7 barrels of residual fuel.

milk runs. Industry terminology for delivering products to customers along an established route. The product is loaded into the vehicle at a depot, and the driver follows a requlat route, topping off tanks for customers. The driver measures the amount of each delivery and creates manual invoices. The amount sold to a customer is not known until the driver returns to the depot with manual invoices. Although metered trucks or barges are most frequently used on milk runs, packaged products may be delivered as well. Also known as unscheduled deliveries. See also manual invoices; metered trucks.

mixing. Blending or stirring.

MMbpd. Abbreviation for Million Barrels Per Day. A measure of crude oil consumption.

mobile inventory. Inventory transferred from a depot to a barge or truck for milk-run deliveries.

MOD. Acronym for Method of Delivery.

mogas. Industry abbreviation for motor gasoline.

multiple stocking locations. Authorized storage locations for the same item number at locations in addition to the primary stocking location.

national flag vessel. A vessel registered in a nation other than a flag of convenience/necessity nation. National flag vessels are under the jurisdiction of the maritime authority of the nation and are bound by its laws and regulations.

net registered tonnage. The internal volume of a vessel's cargo-carrying spaces, measured at 100 cubic feet per ton.

net volume. The volume of a product adjusted to relfect its volume at a standard (defined) temperature. For example, 100 gallons of a product measured at a temperature of 25 C might actually be 80 gallons at 15 C. There are different standard temperatures based on country. For multinational companies, local standards apply. There may be a difference between booked inventory and what is billed. Billing can be based on the customer's standard. See also ambient; ambient volume.

net volume calculator. A program that converts product quantities to standard as the information to reduce inventory is entered. The net volume calculator can also be used to calculate entries for review without affecting inventory. See also standard temperature.

net volume/net quantity. The quantity or volume of a product converted to standard. See also standard temperature.

net weight. See weight.

new buildings. Count of new vessels under construction.

next numbers. A feature you use to control the automatic numbering of such items as new G/L accounts, vouchers, and addresses. It lets you specify a numbering system and provides a method to increment numbers to reduce transposition and typing errors.

non–list price. A price for bulk products that is determined by its own algorithms, such as a rolling average, commodity price plus. See also internal list price; list price.

non–prime product. A manufactured product with a revenue potential less than the product planned for, scheduled, and thought to be produced. See also off-specification; off spec product.

NOR. See notice of readiness.

notice of readiness (NOR). In international maritime practice, the ship captain is obligated to cable the receiver at port that his vessel is "ready, willing, and able" to proceed to berth. In most Charter Parties, the official tendering of the notice of readiness to the receiver determines the commencement of laytime. Usually, laytime commences upon the arrival at berth of the vessel and its connection to receiver's hose connection or at the expiration of six full hours after tendering the notice of readiness, berth or no berth, whichever first occurs.

numeric character. Digits 0 through 9 that are used to represent data. Contrast with alphanumeric characters.

off specification (off spec). Term describing a product that fails to meet requirements of applicable specifications.

off–spec product. A product whose physical or chemical properties fall outside the acceptable ranges.

oil. General term for a water-insoluble viscous liquid.

olefins. A class of unsaturated (hydrogen deficient) paraffinic hydrocardons having one or more double bonds per molecule. Although not normally found in crude petroleum, they are produced by various cracking processes. The most important olefins are ethylene, propylene, and the diolefins; isoprene and butadiene. All are important petrochemical feedstocks.

online. Computer functions over which the system has continuous control. Users are online with the system when working with J.D. Edwards system provided forms.

operand. See Boolean Logic Operand.

operating efficiency. A ratio of the actual operating level of a piece of equipment, department, or plant as compared to the planned or standard level.

operating expense. The cost to run the facilities, maintain equipment, and carry a staff prepared to manufacture product.

operating point. The rate of output of a piece of equipment, department or plant.

operational reconciliation. The measured physical stock levels are compared with the book inventory values, and any differences can be reconciled, and any operational gains or losses recorded. This is the second reconciliation stage. See also throughput reconciliation.

operational standard. The statement of planned consumed resources and their quantity per relationship (with or without cost) to manufacture a product using the most recently authorized Production Model (BOM/Batch Sheet), versus the Production Model (PM) used to generate financial standards at the beginning of the fiscal year.

optimal quantity. The quantity that meets demand, satisfies inventory and distribution requirements between this production run and the next cycle for this product, and also balances per unit production costs versus carrying costs.

order capture clerk. See order taker.

order consolidation. See trip building.

order splitting. Process by which a single order is split into two or more orders. There may be various reasons for splitting an order, including: terms of trade (payment terms), dispatch group, method of delivery, order size and vehicle capacity. See also trip building.

order taker. Referred to as clerk, order capture clerk, order taker or customer service representative. May be a sales person who negotiates price and trading activity. May not be authorized to change prices.

order–based pricing. Pricing strategy that grants reductions in price to a customer based upon the contents and relative size (volume or value) of the order as a whole.

outage. The difference between the full or rated capacity of a barrel, tank, or other container and the actual contents. With many petroleum products, it is important that some appreciable difference exist between a tank's capacity and its contents to allow the contents to expand with a rise in temperature.

output. Information that the computer transfers from internal storage to an external device, such as a printer or a computer form.

output queue. See print queue.

outturn. Term that refers to the quantity of oil actually received into a buyer's storage tanks when a vessel is unloaded. For various reasons (vaporization, clingage to vessel tank walls, and so forth) the amount of a product pumped into shore tankage at unloading is often less than the quantity originally loaded onto the vessel, as certified by the Bill of Lading. Under a delivered or CIF outturn transaction, the buyer pays only for the barrels actually "turned out" by the vessel into storage. When a buyer is paying CIF Bill of Lading figures, a loss of 0.5% of total cargo volume is considered normal. Losses in excess of 0.5%, however, are either chargeable to the seller, or are covered by specialized insurance that covers partial as well as total loss of the cargo.

overhead. In the distillation process, that portion of the charge that leaves the top of the distillation column as vapor.

overhead distribution, allocation, assign. The apportionment of overhead expenses as a rate or percent of dollar cost of a resource that is directly costed to actual production.

overlap quantity. The amount of product that needs to be run and sent ahead to the following operation before the following “overlap” operation can begin.

pack. Process that fills containers with bulk product, attaches outer labels, and places containers in one or more outer cartons or shipping containers.

package total. The total number of cartons or shipping containers on an order or shipment.

packaged products. Products which by their nature must be delivered to the customer in containers suitable for discrete consumption or resale.

packed products. See packaged products.

pallet. A low, portable platform, usually double-faced, on which materials are stacked for storage or transportation.

pallet ticket. A sub-lot label to track pallet size quantities of end-items produced at a precise time. Used to match the sub-lot with specifications determined by periodic sampling and analysis during production.

parameter. A number, code, or character string you specify in association with a command or program. The computer uses parameters as additional input or to control the actions of the command or program.

payment terms. Terms of trade. These can vary by product, customer, and customer type. Many types of terms can be set up (for example, 30 days, first Friday of the following month, and so forth). Payment terms are specified during order capture.

PC. Personal computer.

PDBA. See individual entries for pay type, deduction, benefit, and accrual.

pegging. A technique used to identify the parent item that generated a specific requirement.

period costing. The costing of product in aggregate determined for a period of time by assigning costs to all production for a specific period.

periodic billing. Billing cycle in which the due date of an invoice is based on the delivery date of the product. See also cycle billing.

petrochemical. A chemical compound or intermediate chemical recovered from petroleum or natural gas or derived, in whole or in part, from petroleum or natural gas hydrocarbons and intended for chemical markets. Examples include ethylene, propylene, xylene, toluene, benzene.

petroleum. A generic name for hydrocarbons, including crude oils, natural gas liquids, and their products. See also crude oil, crude petroleum.

physical compartment. One of two ways identified in the transportation constants to display compartments on vehicles. Physical display numbers the compartments by vehicle. For example, if there are two vehicles on a trip and each vehicle has three compartments, the physical display is 1/1, 1/2, 1/3, 2/1, 2/2, 2/3. See also logical compartments.

physical inventory. Actual inventory in a storage location. See also book inventory; reconciliation.

pick list, pick slip, picking list. List that tells warehouse personnel what inventory to pick up and where it is located. Used for packed (packaged) products to let depot/warehouse personnel know what products to pull from inventory for an order. See also batch sheet; loading note; material list.

pickup order. Customer collects (or picks up) the order at the source, using a customer-owned or third-party vehicle. For pickup orders, shipping confirmation and delivery confirmation are combined into one step.

pipeline delivery. The product is delivered in a pipeline.

plant. A seperate factory or production facility that may be physically seperate or may be used only for planning or accounting purposes.

plant–to–plant transfer. Remove product from one location in a plant to another tank in a different plant (for example, to transfer from a sea port to an airport). Two basic types of transfers have been identified: planned and after-the-fact. Planned transfers work almost like sales/purchase orders, requiring formal documentation to initiate the transfer. Transfer pricing may be needed. After-the-fact transfers are informal transfers entered into the system after a transfer has occured.

plastics. A large and varied group of materials that consists of, or contains as an essential ingredient, an organic substance of large molecular weight and which, while solid in the finished state, at some stage in its manufacture has been or can be formed into various shapes by flow, usually through applications of heat and pressure or both.

post order assignment. A system function that produces suggested vehicle assignments that can be modified or confirmed by the dispatcher.

post–dated check slot. The system logs and tracks post-dated check payments that must be tracked for deposit and credited against a customer's account. Allows customer to provide post-dated checks for product.

post–deduct. Deduction of inventory required, at standard, made upon the start of production of an end item.

pour point. The lowest temperature at which an oil will pour when chilled without disturbance under specific conditions. It is the temperature at which an oil solidifies plus 5 F. Although widely used to indicate the temperature below which it may not be possible to use an oil without some heating to maintain flow from storage, the test is relatively imprecise. For residual fuel oils, the viscosity and pumpability are the important parameters, and for gas, oils, and kerosene, it is the cloud point that is important.

PPAT. Acronym for "People, Places and Things", J.D. Edwards electronic mail system. This E-mail system provides an effective internal communications tool for sending and receiving messages online.

PPM. Acronym for Parts Per Million, usually by weight.

practical capacity. A statement of production rate or available capacity that can reasonably be expected for actual production, excluding all (anticipated) idle and non-productive time. See also proven capacity.

pratique. Permission from health authorities to proceed.

pre–planend order. An order, generated automatically by the system, that specifies either the purchase of material or the manufacture of product to meet anticipated future demand.

prepaid terms. Terms of trade (payment terms) that bypass the standard credit limit because a credit check was done by product line.

price. See base price; commodity price; contract price; cumulative price; internal list price; list price; non-list price; promotional price; standard price.

price adjustment. A discount or surcharge added to the base price. May be based on factors such as contracts, customer line of business, duty status, payment terms, and so forth.

price calculation. The series of calculations required to derive the amount to be charged to a customer for the product that has been delivered.

priced delivery ticket. Provides the delivery instructions for an order or trip, specifying the products and quantities that should be delivered. Shows product price, value added tax (VAT), and any other additional charges associated with the delivery. A priced delivery ticket is also used to record information about what was actually delivered. The prices are for display purposes only, and no generations are made to accounts receivable. See also delivery ticket.

print queue. A list of tables, such as reports, that you have submitted to be written to an output device, such as a printer. The computer spools the tables until it writes them. After the computer writes the table, the system removes the table identifier from the list.

process. The manufacturing procedure. See also process steps.

process controllers. Sophisticated, custom-programmed computers designed to monitor the manufacturing cycle during production. Often with the capability to modify conditions (temperature, flow, pressure, and so forth) to return the production to prescribed ranges.

process hours. The time required for any specific operation or task to process product. A resource usually considered finite and corresponding to traditional statements of capacity requirements. See also run time.

process list. A listing of procedures in the manufacture of product that may or may not also include a statement of material requirements. See also product/process definition; routing; spec sheet.

process sheet. See process list, spec sheet.

process steps. The operations or stages within the manufacturing cycle required to transform raw ingredients into intermediate or finished goods. See also process list; spec sheet.

process stocks. Raw intermediate ingredients available for further processing into marketable products. See also feedstock.

process time. The hours, minutes, and seconds required to perform a specific task or operation.

process/flow. Manufacturing technique with minimal interruptions in any one production run or

between production runs of products that exhibit process characteristics such as liquids, fibers, powders, gases. Characterized by the difficulty of planning and controlling quantity and quality yield variances. Process manufacturing differs from discrete manufacturing. See also continuous process run; batch/mix.

processing option. A feature of the J.D. Edwards system that allows you to supply parameters to direct the functions of a program. For example, processing options allow you to specify defaults for certain form displays, control the format in which information prints on reports, change how a form displays information, and enter beginning dates.

product grade. The categorization of different lots of the same end item based upon each lot's specifications and where these lie within the range of acceptable specifications.

product group. See product line.

product line. A group of products whose similarity in manufacturing procedures, marketing characteristics, or specification allow them to be aggregated for planning, marketing, and occasionally costing. See also master planning family.

product mix. The proportion of one end item versus another inside the aggregate production output.

product mix variance. The difference in actual contribution or potential contribution of an actual production mix versus the planned mix of the original aggregated statement of production.

product quality giveaway. Product quality that exceeds specifications and results in higher manufacturing costs. The quality of petroleum products is strictly controlled. They are blended to manufacturing specifications that may cover one or more product or brand specifications. Most specification clauses are readily met without any economic incentive limit. However, there may be a clause on which failure to blend near the limit does incure a cost penalty, examples being the sulfur content of fuel oil and the octane number of gasoline of 99 research octane, a target level of 99.4 may be used to ensure that 99% of blends have octane numbers greater than 99. This product giveaway of 0.4 octane numbers would result in higher manufacturing costs.

product sequencing. A natural progression from one product to another within a family to minimize set-up and clean-up (switch over) costs. See also cyclical scheduling; wash down.

product specification. A statement of acceptable physical and chemical properties or an acceptable range of properties that distinguish one product from another. See also specifications.

product tank file. The program file that describes what product is in inventory, in which tanks it is stored, the gravity for the tank, the temperature of the tank, and when the temperature expires.

product transfer. See plant-to-plant transfer.

product variation. A phenomenon wherein actual finished product may differ in grade.

product/process definition. A combination of bill of material (recipe/formula) and the routing (process list). Organized into tasks with a statement of required consumed resources and produced resources. See also process list.

production model. A product/process definition that is organized into tasks with a statement of required consumed resources and produced resources.

production rate. A statement of output from a facility, department, or piece of equipment by product as a statement of product output per process hour.

production reporting. A statement of production received from the manufacturing floor that may or may not have all quality assurance performed and may or may not be final statement of production in terms of grade or end-item number. See also finished goods reporting.

program temporary fix (PTF). A representation of changes to J.D. Edwards software that your organization receives on magnetic tapes or diskettes.

projected cost. The target expenditure in added value for material, labor and so forth during manufacture. See also standard cost.

promotional price. Special discount pricing during a specific time period done for advertising or promotional purposes. Promotional pricing can affect contract pricing. Althought typically its effect is additive, promotional pricing can also replace contract prices. Products sold during the promotional period must be invoiced at the promotional rate, even thought they may be delivered and invoiced after the promotional period

has ended. Promotional pricing is normally handled through price adjustments.

proven capacity. The historical average availability of capacity for production excluding all idle maintenance time. See also demonstrated capacity; budgeted capacity; practical capacity; rated capacity.

PSI. Acronym for Pounds Per Square Inch.

PSIA. Acronym for Pounds Per Square Inch Absolute. Total pressure including that of the atmosphere.

PSIG. Acronym for Pounds Per Square Inch Gauge. Pressure above that of the atmosphere.

pumpability. The property of a fluid, especially any petroleum based product, that allows it to flow under pressure through the line, nozzel, and fittings of a product-dispensing system.

purchase contract. An agreement with a vendor to purchase specific products. It can govern volume rebates, based upon the amount ordered.

purchase price variance (PPV). The difference between actual invoice price per unit and the standard cost per unit.

purge. The process of removing records or data from a system table.

quad. A quad is one quadrillion BTUs or roughly about 25 million tons of oil.

qualified petroleum products. Products that have successfully passed certain tests required to determine whether or not they conform to all qualification test requirements of applicable specifications.

qualitative test. Laboratory procedure to determine the nature of a compound or mixture or the identity of the constituents, without the regard to the amounts present.

quality assurance (QA). The discipline or function of verifying conformance to specification. May also include the responsibility for standard specification.

quantitative test. Laboratory procedure to determine the amount of the constituents present in a compound or mixture.

quarantine (QC–hold). The setting aside from availability for use or sale of finished product or raw ingredients until all required quality tests have been performed and conformance to specification or regulations certified. See also incubation period.

quotas. The practice of limiting the volume of product that may be delivered to a particular customer site during a specified period of time. See also allocation.

rate variance. The difference between actual output rate of product and planned or standard.

rated capacity. A statement of capacity reasonably expected to be available from a given piece of equipment. More narrowly, the statement of output performance as a rate, either from the manufacturer or from the internal engineering studies. See also proven capacity; demonstrated capacity.

rebate. Refund, calculated after the original pricing, on the stated price of a product or service.

reblend. The process of adding components to the results of a failed blend order in an attempt to produce a conforming blend product.

rebrand. The act of changing the identifier associated with a given lot, batch or container of product for the purpose of selling it as though it were a lesser product.

recipe. A statement of material requirements for the parent item. May include sequencing of ingredients and/or processing instructions. See also formula; bill of materials.

recon crude. Reconstituted crude. A crude oil that has been blended, usually in a producing country, to meet the needs of a refinery in a consuming country. A reconstituted crude often has lower sulfur or higher distillate content than the natural crude oil.

reconciliation. The balancing of physical, actual, on-hand inventory to book inventory. Any difference between the two is written to a variance account for physical inventory adjustments. See also book inventory, operational reconciliation; throughput reconciliation.

reference point. The distance from the reference point to the datum plate or the bottom of the tank. It should be stamped on the fixed benchmark plate or stenciled on the tank roof near the gauging hatch.

reference point. 1) The point at which a tape is lowered and read on a tank, usually at the rim of the hatch, manway, or expansion dome. 2) A point to which all subsequent measurements are related. 3) The point from which the reference height is determined and from which the ullages/innages are taken.

reformulate. The practice of mixing a product with one or more additional products to produce a third product.

regrade. The pratice of mixing a product with one or more additional products to produce a third product. This is normally done when the first product no longer meets specifications.

release. Being able to associate a particular order with a block order. Also called a drawdown.

reletting. The practice of oil companies chartering out owned or chartered-in tonnage to competitors.

remote site. A site that cannot support an AS/400. Electronic interfacing with remote sites is needed. For example, efficient aviation transactions would allow airports to communicate directly with the head office rather than with an intermediary clearinghouse.

repack. Activity whose purpose is to remove product from one size or type of container and place it in a different size or type.

replacement cost. A method for setting the value of inventories based upon the cost of the next purchase.

reprice. The process of examining unshipped, uninvoiced orders and applying the most current pricing rules. Also includes finding orders that should have different pricing and applying a final price to them. Repricing occurs when the price of a product changes. See also time-based repricing.

resource availability. The act of predicting the availabilty of all the resources needed for an operation and scheduling the operation based on that prediction.

resource commitment. The act of reserving the resources required to accomplish a blending, filling, or delivery procedure.

restricted by–product. A restricted secondary or incidental product produced while making another product. Such by-products cannot be sold because they are restricted from sale by government policies. The company may have to forego making a product if a restricted by-product is produced.

return confirmation. Recording the fact that product loaded on a vehicle and destined for a customer ship-to site was not delivered. See also delivery confirmation.

return order adjustment. Also called credit order, credit memo. See also credit order.

return to production(RTP). The removal of goods from a finished goods status for purposes of rework or recoup to bring the product into specification compliance. See also in-process rework.

revenue cost center. See cost center.

routing. See process steps, process list.

run. To cause the computer system to perform a routine, process a batch of transactions, or carry out computer program instructions.

run out list. A statement of ingredients required to use up an available resource. For example, how much of ingredient “A” is required to consume 300 pounds of ingredient “X”.

run size. See standard batch quantity.

runtime. The length of time equipment is in use producing product. Distinct from set up and clean up. A portion of the total in use time of capacity. See also process hours.

sales contract. A commitment to supply a given product to a customer. The customer normally agrees to take a certain volume of product from a specific location over a specified time period. The contract can guarantee quantities of product, product price, or both. If a product reservation is made, the customer normally pays the agreed upon price at the commencement of the agreement in return for guaranteed product availability during the term of the contract. It is critical to track the delivered quantities against the reserved quantities to ensure they don’t exceed the reservation.

sales targeting. Attempting to sell as much product as possible to a customer. This is the opposite of allocation.

sampling. Removing a portion of material from receiving in process or finished goods for quality assurance analysis.

scheduled downtime. Planned shutdown of equipment plant for maintenance or to adjust to softening demand.

scrap. Produced material outside acceptable range of material and of such characteristics that rework is impossible or impractical. Not waste, which is an anticipated by-product. Must be used in addition to yield loss in determining good output to input. See also waste.

seasonal specifications. Product specifications that are dependent on the season. The most important of these changes in product specifications with the

season are those for motor gasoline. Low vapor pressure specifications in the summer permit the use of little or no butanes in the gasoline, whereas winter specifications may permit butanes to be blended. Butanes that cannot be blended into gasoline might otherwise have to be used for fuel at much reduced values.

sediment. Deposits of material that settle to the bottom of a tank or storage container. Several sediment tests are used to indicate the tendency of an oil to deposit sediment during storage. See also bottom sediment and water.

sediment and water. Solids and aqueous solutions that may be present in an oil and that either settle out on standing or may be separated more rapidly by a centrifuge.

selection. Found on J.D. Edwards menus, selections represent functions that you can access from a menu. To make a selection, type the associated number in the Selection field and press Enter.

self–building invoice. A document produced by the cosigner as the official record of freight charges attributable to a trip conducted by a contractor, hauler or common carrier.

sequencing. The prioritizing of products within a family that is scheduled cyclically. Prioritization is intended to minimize lost time due to clean-up/set-up time between products.

setup time. Preparing equipment and tools for the processing of product. For most process companies, this is tracked separately from cleanup time. See also change over; clean up; wash down.

shared facilities. See shared tankage; joint-operated plant.

shared tankage. An operating environment that requires that two or more companies share storage facilities simultaneously, so tracking product in/out movement is important. See also joint-operated plant.

shelf life. The amount of time an item may be held in inventory before it becomes unusable.

shelf life control. A technique of physical FIFO aimed at reducing stock obsolenscence through deterioration over time. Also the tracking of the number of days in storage.

shift. The regular work period of a work group. Minimum time unit of planning for allocating human resources.

ship. Generally, any decked vessel that is used in deep water navigation.

shipment building. See trip building.

shipping confirmation. Confirm and capture actual shipping arrangements. The following information is recorded at shipping confirmation: vehicle ID, trip or voyage, standard/observed load volumes, serial numbers, weight.

short ton. An avoirdupois measure of weight equal to 2,000 pounds.

shrinkage. Component yield loss planning factor applied to the parent's required quantity. Cannot be used where yield loss is parent component specific.

single–level backflushing. Deduction from on hand balance of only those components or ingredients in the immediate recipe or formula. For example, it will not explode sub-assemblies or intermediates to consume their components. May or may not explode phantom intermediates. See also superflush.

single–level tracking. Finding all immediate parents where a specific lot has been used (consumed). Parallel logic to single-level pegging in planning.

single–voyage (spot) charter. An agreement for a single voyage between two ports. The payment is made on the basis of tons of product delivered. The owner of the vessel is responsible for all expenses.

software. The operating system and application programs that tell the computer how and what tasks to perform.

spec sheet. A routing expanded to include ingredients with specific detailed instructions as to their point and method of introduction into the process.

special character. A symbol used to represent data. Some examples are *, &, #, and /. Contrast with alphanumeric character and numeric character.

specific gravity. The ratio of the weight of a given volume of material to the weight of an equal volume of some standard substance. In the case of oil, the standard reference material is distilled water and the temperature of both the oil and water is 60F.

specifications. Statement of acceptable ranges for physical and chemical properties of raw material, intermediate, or finished product. Specifications refer to the properties of a given crude oil or petroleum product that are "specified", because properties often vary widely even within the same

grade of product. Guaranteed specifications are part of the normal process of negotiation. The seller guarantees the buyer that a product or crude to be sold will meet certain specified limits certified in writing (certificate of analysis). A seller may also declare typical specifications to the buyer that indicate the typical properties. Since most guarantees are conservative, a product, for example, that is sold as 1.0% sulfur max., may be actually 0.6% sulfur. This latter figure is the product's "typical" sulfur that is well within the contractual limits. For buyers who blend products, typical specifications are essential in order to compute blend percentages. See also product specification.

splash blending. This gererally refers to a blending process done by pouring products together, for example, manually pouring an additive into a shipping compartment. This may occur at the loading rack when a vehicle (barge or truck) is being loaded, or enroute. Typically, analysis is only done for the splash blending of lubricants.

split order. An order that results from the analysis and segregation of portions of an order as originally submitted by a customer. See also order splitting.

spool. The function by which the system stores generated output to await printing and processing.

spooled table. A holding file for output data waiting to be printed or input data waiting to be processed.

spot charter. See single-voyage charter.

spot hire. The use of other than a contracted resource for the transportation of product.

stability. Property of petroleum product that enables it to retain its physical and chemical properties intact even during extended storage. Gum stability in gasoline means resistance to gum formation while in storage. Oxidation stability in lubricating oils and other products means resistance to oxidation to form sludge or gum in use.

staging. Preparing materials ahead of actual processing. Physically moving to point of use prior to schedule commencing.

standard batch quantity. The quantity of a parent that is used as the basis for specifying the material requirements for production. The quantity per is expressed as the quantity needed to make the standard batch quantity, not to make only one of the parent. It is often used by manufacturers that use some components in very small quantities or by process-related manufacturers. Sometimes referred to as run size.

standard cost. The target cost for a product if purchase price is held and it is manufactured per standard recipe and routing. See also projected cost.

standard price. The current, international price of a product. Used in negotiations.

standard temperature. Ambient volumes are converted to a standard temperature in order to record product volumes at a common base for all inventory calculations. The ambient measurement is converted to the standard temperature. For example, 1000 gallons of gasoline measured at an 80F ambient temperature and converted to a 60 F would equal only 990 gallons of accountable inventory. In the US and many other contries, custody transfer of bulk petroleum products is at a base temperature (for example, 60F and 15C).

standardization. The function of bringing a raw ingredient into the standard (acceptable) specification prior introduction to the main process.

standardized ingredient. A raw ingredient that has been preprocessed to bring all specifications within standard ranges prior to introduction to the main process. Used to minimize variability in recipes. See also standardization.

standing order. See blanket order.

stock transfers. See plant-to-plant transfers.

storage contract. An agreement in which one business partner in a distribution contract provides storage facilities for another, and charges a fee based on the quantity stored (cost per unit volume) and for the time the product is stored or the storage space is reserved.

strapping. Measuring a tank in order to obtain certain of its dimensions, such as the depth of the tank inside and outside, the circumference of each ring on the tank, and the height of the liquid in the tank. Tanks are seldom perfectly round, are generally cone shaped at the bottom to hold water and sediment below the product line, and might have numerous dents. Therefore, circumference strapping points are measured and marked the length of the tank (1/16th inch US). Measurements are taken at every strapping point to account for the variances throughout the tank.

strapping tables. See strapping.

striking point. A spot on the bottom of a storage tank or on the datum plate that is directly below the reference point on the hatch. This location is where the innage bob comes to rest when the tank is gauged and serves as the zero point for all innage measurements.

stripping lines. Small suction lines from the pump room to each tank for removing the last of the cargo from the tank bottom.

subfile. See detail.

submit. See run.

substitution. Act of selling a different product that was ordered or using a different component product in a formula. In such instances, the substituted product is always of comparable or higher quality or chemical composition than the product originally specified.

substitutions. An ingredient which may be used in a recipe/formula when standard ingredient is unavailable. See also substitution.

sumax tanker. A cargo ship with 50,000 – 60,000 deadweight tonnage.

summary. The presentation of data or information in a cumulative or totaled manner in which most of the details have been removed. Many of the J.D. Edwards systems offer forms and reports that are summaries of the information stored in certain tables. Contrast with detail.

superflush. Theoretical consumption through multiple levels in the recipe or formula. Typically allows for consumption of sub-assemblies from stock in the discrete world, but may be used to explode through intermediates in the process world, therefore, not expecting on-hand balances.

supersession. Specification that an active product is being replaced by a new product at a specified effective date.

supply point. Generic term used to describe all of the various kinds of physical facilities-terminals, depots and warehouses – that may be used to store and distribute product.

supply–point differential. A factor in pricing a product is the location from which the product is supplied. The price differential that is based on a product's source is called the supply-point differential.

swash plates. Vertical dividing plates in cargo tanks. They reduce the amount of movement of the oil when in a seaway and reduce the possibility of bulkhead damage.

switch loading. The mixing of products. As this can be dangerous, controls are put in the system to check for mixing. For example, if you try to receive a product other than what is specified in the Tank Master file, an error message is displayed.

switching cost. The cost of tearing down and setting up from one production cycle to another, or from one product to another.

system. See application.

system code. The code that identifies a J.D. Edwards system. For example, 01 for the Address Book system, and 31 for the Shop Floor Management system.

T–2 equivalent. A rough measure of a vessel's capacity. In the absence of size homogeneity, the industry often uses the T-2 as a measure of capacity. To convert into T-2 equivalents, one has to multiply the deadweight by the speed of a vessel and divide by 16,500 x 14.5.

tailings. Remains or residues of final by-products from refining crude petroleum or its fractions.

tank inventory. Goods stored in tanks or silos. These goods may be raw intermediates or finished. The description of the inventory as tank inventory indicates the necessity of calculating the quantity on hand from the levels within the tanks.

tank master file. The program file that describes the physical make-up of the tank, its dimensions, holding volume, and its shared pipeline volume. Information on the assigned plant and the current product it also included.

tank strapping. See strapping.

tankage capacity. The capacity of a designated group of tanks. It is important to track customer tankage capacity and usage.

tare weight. See weight.

tariff. A scale or list of prices. Also, a system of taxes placed by a government on exports or, more often, imports. Additionally, the tables that describe the charges that will accrue for the transport of specific products over a given distance.

tax. A compulsory payment, usually a percentage, levied on income, property value, sales price, and so forth for the support of a government. Taxes can be displayed on invoices as separate items or can be

rolled into the product's price. Each tax has its own unit of measurement. Taxes for rents and loans associated with bulk product sales change daily and are converted by indexes. See also duty.

temperature variance. The difference between gross volume or quantity and net volume quantity due to temperature. For example, if 1000 gallons of product at 80 F is 990 gallons at 60 F and no spillage occurred, this is a temperature variance of ten gallons.

template. A standard, user-defined form used during the order entry process. Templates are defined by type of transaction, such as bulk, packaged, direct shipment, or customer transfers.

terminal. Term used for a large depot. Terminals can normally feed depots, but not vice-versa.

terms of trade. Payment terms. These can vary by product, customer and customer type. Many terms can be set up: for example 30 days, first Friday of the following month. Payment terms are specified during order capture.

theoretical consumption. See indirect usage, key point backflushing.

third–party supply. See direct ship order.

throughput. A volume of product movement based upon computing the difference between the meter reading at the beginning of a period and the reading at the end of that period. This is then modified by additions or withdrawals that were known not to have passed through the meter.

throughput agreement. A service agreement in which a business partner agrees to store and manage product for another business partner for a specified time period. The second partner actually owns the stock stored in the first partner's depot, but the first partner monitors the stock level, suggests replenishments, unloads, stores, and delivers product to the partner or its customers. The first partner charges a fee for storing and managing the product.

throughput reconciliation. Reconcile confirmed sales figures in a given period with the measured throughput based on the meter readings. This process is designed to catch discrepancies due to transactions not being entered, theft, and/or faulty meters. This is the first reconciliation stage. See also operation reconciliation.

time charter. A contract of longer duration than a single voyage. The rent (hire) is paid usually on the basis of deadweight tons per month, and it does not include fuel for propulsion, port charter, or canal tolls.

time–based repricing. Procedure wherein the unit price charged for certain products for certain customers is restated periodically and all invoices previously generated using a null or orignal price are credited and rebilled. In some markets, the price is not known until the end of the month.

tolerance. An allowable variation from a specified limit for a product property.

tonne per tonne agreement. An agreement which involes moving product for a partner. Partner A transports its product, along with Partner B's product, and then unloads, stores, and delivers product to Partner B. Partner B does the same for Partner A at a different location. Imbalances usually are settled with financial transaction, rather than transfers of physical product.

tonnes. Metric tons.

tons. Unless further qualified could be short tons, long tons, or metric tons. When used with tankers, the ton is most likely to be a long ton. A short ton contains 2,000 pounds and a long ton contains 2,240 pounds.

topping–off. Trading activities. Used to access the standard prices for use in negotiations.

transactions. Individual events reported to the computer system (for example, issue, receipts, transfers, adjustments).

trip. A scheduled delivery of one or more orders.

trip building. Process by which two or more orders are consolidated into shipments to optimize deliveries and keep transportation costs down. One order may also be split into two or more shipments, especially if the order contains both bulk and packaged products. See also order splitting.

truck capacity. A product of the cubic capacities of all of the compartments, if any, on the truck.

truck history. Record of what product was last carried in the truck and whether or not the truck has been cleaned. The purpose of maintaining a truck history is to minimize the necessity of cleaning and avoid product contamination.

turnover. See employee turnover.

ullage. The space in a tank not occupied by its contents, measured by the distance of the oil level from the top of the tank. It is used to measure the amount of oil in the tank. Opposite of innage.

unit of measure. The standard quantity by which an item is managed, such as by weight, box, package, case, each, and so forth.

unmetered trucks. Trucks that do not have an apparatus for measuring or "metering" the amount of product that is unloaded. Unmetered trucks can only deliver full compartment loads. See also metered trucks.

unpaid cash sales. Situation that can occur when the terms of trade (payment terms) for a sale are for cash on delivery. An unpaid cash sale occurs when the product is delivered and no payment is made. For example, the manager went home before the delivery was made, so no cash was collected.

UOM. See unit of measure.

user defined code type. The identifier for a table of codes with a meaning you define for the system, such as ST for the Search Type codes table in Address Book. J.D. Edwards systems provide a number of these tables and allow you to create and define tables of your own. User defined codes were formerly known as descriptive titles.

user defined codes (UDC). Codes within software that users can define, relate to code descriptions, and assign valid values. Sometimes user defined codes are referred to as a generic code table. Examples of such codes are unit-of-measure codes, state names, and employee type codes.

usuals, usuals list record. Indicates what products and quantities a customer normally or usually purchases. This is based on the customer's past order history. See also template.

valid codes. The allowed codes, amounts, or types of data that you can enter in a field. The system verifies the information you enter against the list of valid codes.

valuation. The technique of determining worth, typically of inventory. Valuation of inventories may be expressed in standard dollars, replacement dollars, current average dollars, or last purchased price dollars.

value–added tax. A form of indirect sales tax paid on products and services at each stage of production or distribution, based on the value added at that stage and included in the cost to the ultimate consumer. A VAT charge is not rolled up into the price, but shown on an invoice as a separate line item with both the amount and the rate shown. Customers need the VAT shown separately, so that a portion can be reclaimed.

variance. The difference between planned (standard) and actual performance.

VAT. See value-added tax.

vehicle identification number (VIN). A unique VIN is attached to each vehicle when it is manufactured. Companies can use the VIN to track all vehicles, including third-party vehicles, used to transport products. This becomes critical under certain responsible care situations. For example, in certain countries, the company may be responsible for the safety of the product's transportation, even if the customer provides the vehicle.

very large crude carrier(VLCC). Tanker over 200,000 dead weight and tonnage.

VIN. See vehicle identification number.

viscosity. A critical property that describes a product's relative thickness as well as its ability to adhere to a surface.

viscosity index (VI). An empirical index relation to the change in viscosity of an oil with a change in temperature. The higher the viscosity index, the less the change in viscosity with temperature. Used for evaluation lubrication oils.

vocabulary overrides. A feature you can use to override field, row, or column title text on forms and reports.

volatility. A measure of the tendency for a material to vaporize, that is, the ease with which it changes from a liquid to a gaseous state. The more volatile a component, the easier it is vaporized and the higher its vapor pressure. For petroleum oils, it is determined by volume percentage recovered at a specified temperature in a standard distillation test.

volume discount. A discount based on the monetary amount, weight, or quantity of an item or group of items on an order.

walk–in price. Standard list price of a product. Also known as posted price, scheduled price, and published price.

warehouse. A physical location for storage of materials. A logical grouping of locations of specific materials. May or may not be within a production

facility. One or more warehouses may supply one production facility.

wash down. Sometimes more specifically a minor cleanup between similar product runs. Sometimes used in reference to sanitation process of a food plant. See also clean up; change over; set-up time.

waste. A by-product with negative value. Waste whose disposal is controlled, or a by-product of a process or task with unique characteristics requiring special management control has a negative value. Waste production can usually be planned and somewhat controlled. Scrap (off-spec) is typically not planned and may result from the same production run as waste. See also by-product; restricted by-product; scrap; off-spec material.

water level. The level of water found in a tank or other container. Water should be excluded when reading volume. To determine water level, measure product from the top of the water level to the top of the product. Measure from the top of the water level to the top of the container.

weight (gross, net, and tare). Gross weight is the total weight of the product and the vehicle. Tare weight is the weight of the product. Net weight is the difference between gross weight and tare weight and is the weight used for the net reduction of inventory.

weight due date. Invoice due date is based on the amount owed.

weightbridge. A device designed to capture the gross weight of the truck that is parked on it. From this weight is subtracted the weight of the truck itself to derive the weight of the product it is carrying.

where–used tracking. A procedure to determine every instance of use or sale of a specific lot number, including the use and or sale of all parent lot number's. Parallels the logic of where used tracing for ingredients/components on bills of materials.

white products. Products from the high or light end of the distillation process. This includes; gasoline, naphtha, kerosene, and gas oil. See also black products.

window. See form.

WIP. See work-in-process.

withdrawals. Removal of material from stores. A transaction issuing material to a specific location, run, or schedule.

work–in process(WIP). One or more products in various stages of completion throughout the plant, including all material from raw material that has been released for initial processing up to completely processed material awaiting final inspection and acceptance as finished product. Sometimes referred to as in-process inventory.

working petroleum fleet. The working petroleum fleet is equal to the total fleet less government owned (commercial) vessels, special-purpose ships, and vessels idle because of tie-ups or repairs over 30 days.

worldscale. A schedule of tanker shipping rates published by an independent body, covering costs of transportation between any two ports. The basic rate established for any given voyage expressed in dollars per ton, and referred to as WS 100, is subject to negotiation.

zone. A defined geographic area.

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