EBS Financial Integration

By Melanie Cameron

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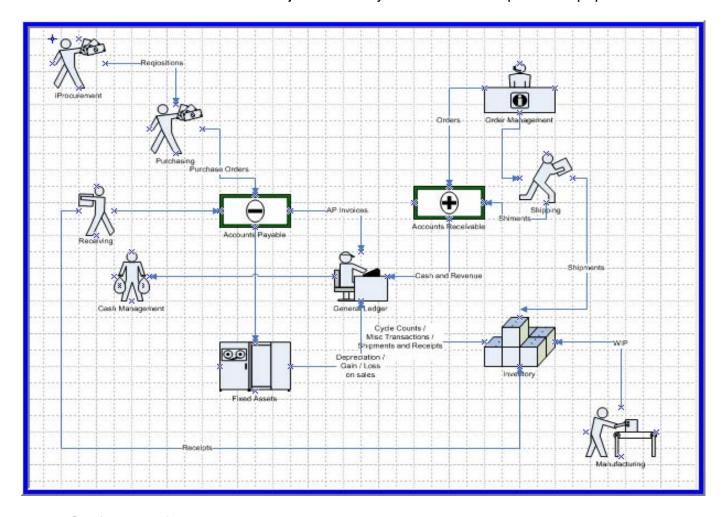
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Overview

Oracle E-Business Suite (EBS) consists of tightly integrated modules that result in a company's financial statements. Tracking transactions through the system back to the source, then to the setups that affected the way the source transactions behaved is difficult at best. Based on R11.5.10 CU2, this paper will help understand where these transactions are coming from, back though the interfaces to the transactions, then even farther into the setups dictating their behavior. Please note that Projects and Payroll are out of scope of this paper.



Confused yet? You should be. Let's break it down section by module.

Procurement

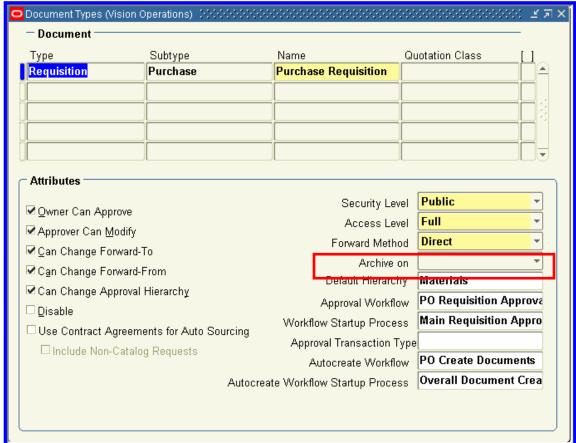
The end transaction that comes from Procurement into the General Ledger is the Distribution coding for an invoice matched to a purchase order.

Requisitions are entered in either iProcurement or Purchasing. These requisitions can have a defaulted distribution code, or the creator can override the default and enter an alternative coding. Requisitions are then created into Purchase Orders, defaulting the coding from the requisition, or the creator can again override it. Purchase Orders created without requisition will default the coding, again based on the setups, or allow the creator to override it. Purchase orders are then received (creating an accrual if this option is selected), then matched to an invoice in Payables. Payables has the option of again accepting what was defaulted from the Purchase Order, or creating an alternative distribution. Liability accounts are added to the accounting, and the transactions are sent to the GL.

Payables Transactions that are coded to the clearing accounts setup in Assets can be interfaced to the Asset module.

Requisition Default Coding

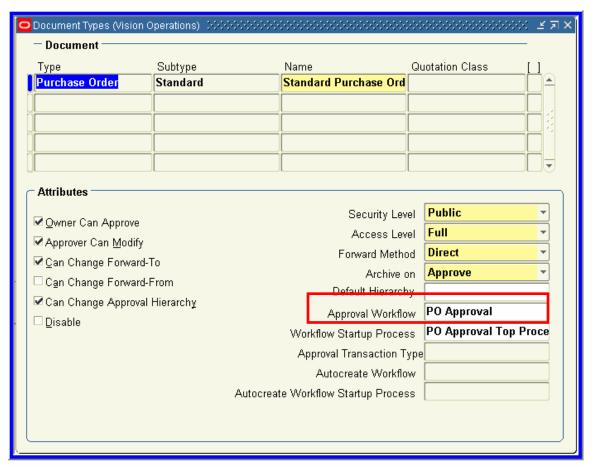
The coding for a requisition comes from the Work Flow associated with this transaction type:



You can find the Work Flow that is associated to Requisitions in the Document Types setups. The Approval Workflow will have the workflow's name. Open this work flow to see how the requisition accounts are defaulted in – most companies modify this work flow. The creator also has the option of overriding this default, so what you see on a requisition may not match what is in the Work Flow.

Purchase Order Default Coding

If a Purchase Order is created from a Requisition, it will automatically take on the distribution from the Requisition. If it is created without a Requisition, the Document Types will show the Work Flow dictating the coding:



Purchasing> Setup> Purchasing> Document Types

The creator has the option of overriding both the Work Flow default as well as the Requisition default, so the Purchase Order may not agree to the requisition or the PO Approval workflow.

The Requisition and Purchasing Accounting Workflows are often setup to use a combination of segments from an Employee Record and an Item or Category.

Payables

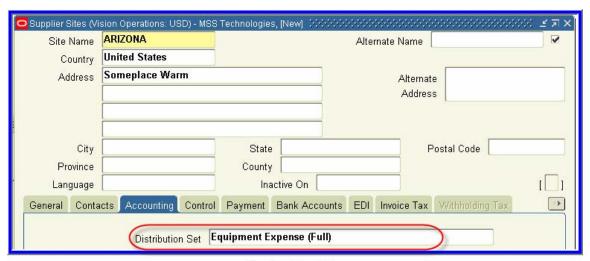
The main transactions that come from the Payables Module are Invoices and Payments.

Invoice Default Coding

Payables can default coding from several places, and there is a hierarchy to what is used.

If the invoice is matched to a Purchase Order, then the default coding will come from the Purchase Order.

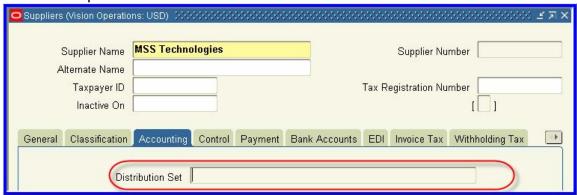
If the invoice is NOT matched to a Purchase Order, then the default coding may have come from the Supplier Setup:



Supplier> Entry, Sites

A distribution set on a Site can dictate the default coding on an invoice that is not matched to a Purchase Order.

You can only add a Distribution Set to a Site. Suppliers in a multi org environment can not have a default distribution set on the supplier header, so the field is not updatable:

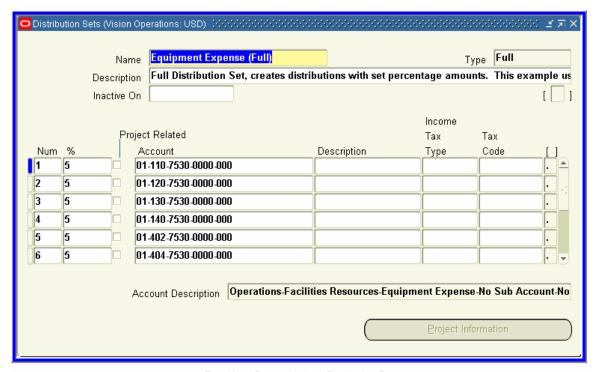


Supplier> Entry

Notice there is no list of values, and the field is not updatable.

(Multi Org does not denote that there are multiple operating units setup in a particular instance – it denotes that the environment is Multi Org enabled and CAN have multiple operating units. In 11.5 10, all environments should be multi org enabled. Earlier version you had the option of being multi org enabled)

Distribution Setups are setup in the Payable Setups:



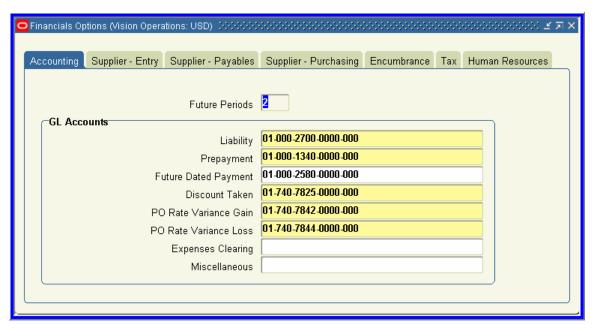
Payables> Setup> Invoice> Distribution Set

This setup is showing 5% of the total invoice going to a separate GL Code Combination.

With either default (Matched to a Purchase Order or a Distribution Set on the Supplier), the invoice creator can override the distribution and change it to something totally different.

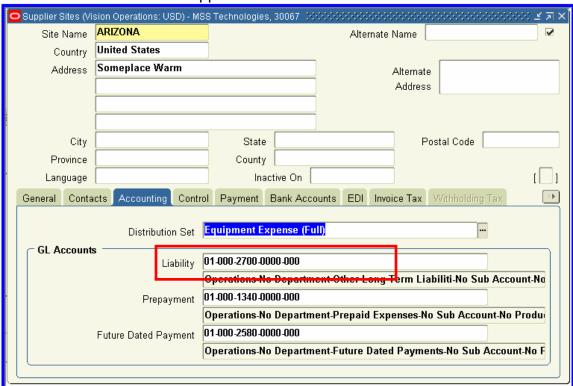
If there is no default, then the creator of the invoice will have to enter the distribution manually. If an invoice is sent out for approval via Work Flow, the approver also has the option of changing the distribution. (This option can be disabled)

The **Liability Account** will always default in when the Accounting is created for the transaction. When a supplier is created, the liability account will default in from the system setups:



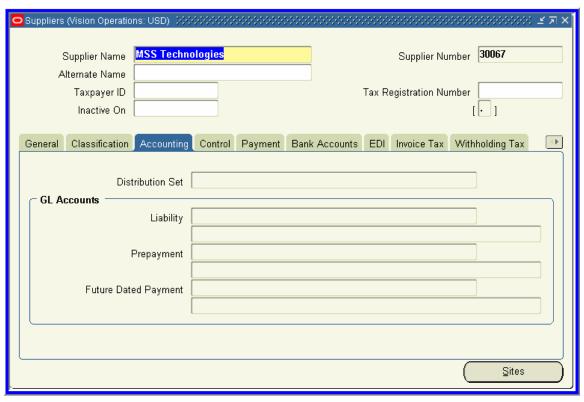
Payables> Setup> Options> Financials

This defaults on both the Supplier site when it is created:



Supplier> Entry> Site

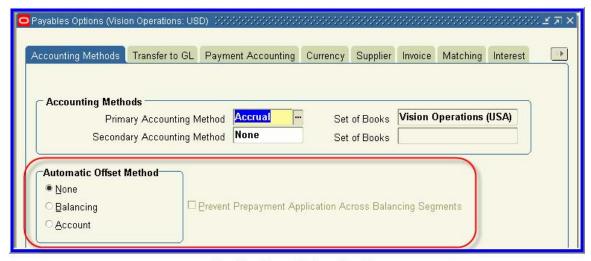
Note that in a multi org environment the defaults on the Suppliers are not updatable or defaulted in:



Supplier> Entry

Oracle will always default the Liability account from the Supplier Site, whether that is the system default or a unique account. Users can not override the Liability Account created on an invoice.

The final alternative to a default liability account is creating an Automatic Offset (i.e. the liability account) based on the Balancing or Account:



Payables> Setup> Options> Payables

None: Default liability account to the account string on the Supplier Site

Balancing: Oracle will override the Company segment of the default account string on the Supplier Site with the company code on the distribution lines. If the distribution lines are as follows:

01-200-51545 100.00 02-400-51545 50.00

Then the offsetting liability accounts would be:

01-000-210000 100.00 02-000-210000 50.00

Where xx-000-21000 is the default account on the supplier site, and the 01 and 02 were derived from the distribution line coding itself.

Account: This works the same as the **Balancing**, except that all segments except the natural account are overridden:

01-200-51545 100.00 02-400-51545 50.00

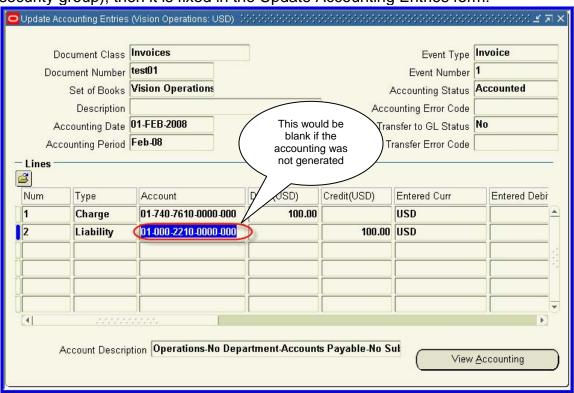
Then the offsetting liability accounts would be:

01-200-210000 100.00 02-400-210000 50.00

In this case, the default account on the supplier was 01-000-21000, but all segments except the natural account are ignored and obtained from the distribution account.

Prevent Prepayment Applications from applying across Balancing Segments: checking this will prevent prepayments coded to company 001 from being applied to invoices or portions of invoices that were coded to company 002.

If an invoice fails during the Payable Accounting process to create a liability account (the liability account being disabled is the most likely reason for this or if using automatic offsets, the offset created violates a cross validation rule or security group), then it is fixed in the Update Accounting Entries form:

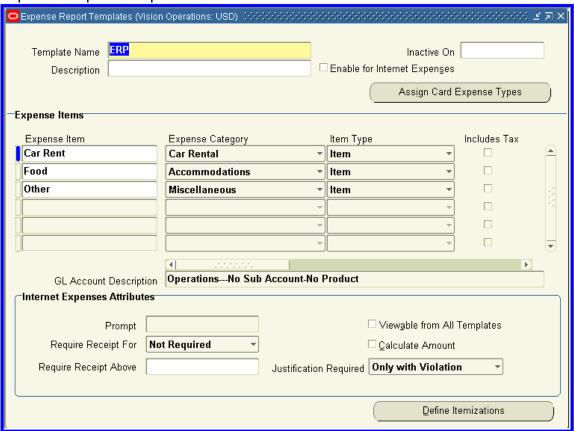


Payables> Accounting> Update Accounting Entries

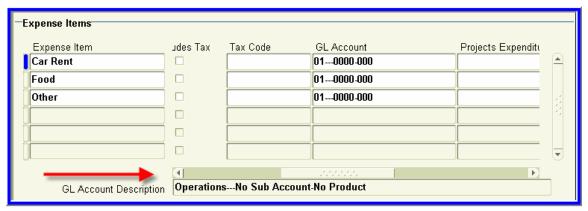
The correct account could be added here and saved. In this case, there is the potential that the default accounts and the account on an invoice do not agree.

Expense Reports

Expense reports can be created either in iExpenses, or in the Expense Report form in Accounts Payables. Both options will default the coding from the Expense Report Template.

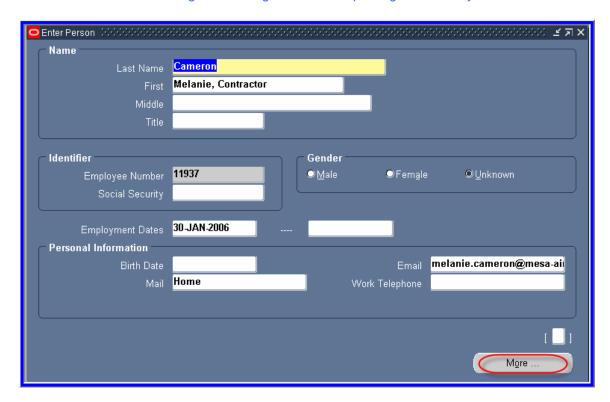


Setup> Invoice> Expense Report Templates

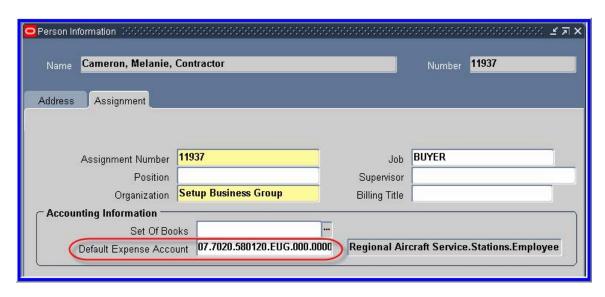


Scroll over to see the GL Account coding

The Default Account will come from the GL Account on the template. Note that some of the segments are not filled in – this will cause Oracle to default these segments from the Employee Record. Employees can be entered even when Human Resources is not implemented. It is called a Shared Module in Oracle, and limited functionality can be used even without implementing HR. The Employee screen looks as follows without HR installed:



On the second page the accounting for this employee can be found:



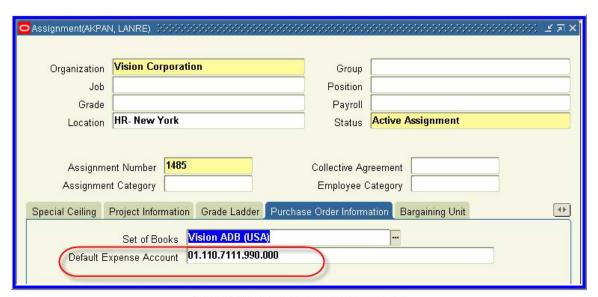
The Default account for expense reports would be as follows for Car Rental:

- 01 from the Expense Report template
- 7020 from the Employee record
- 0000 from the Expense Report template
- 000 from the Expense Report template

01-7020-0000-000

This combination must not violate any cross validation or security rules when it is generated, or the Workflow will fail with an error.

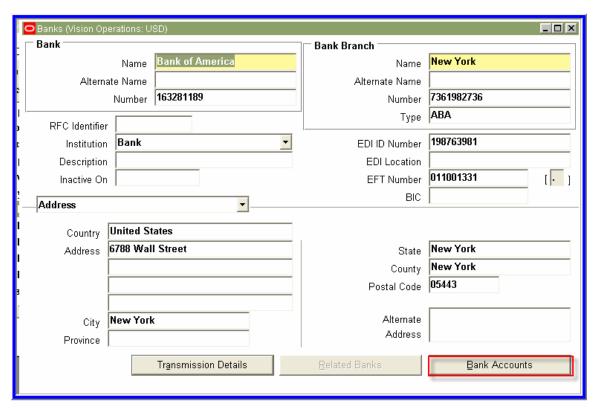
When HR is fully installed, the expense account is found here:



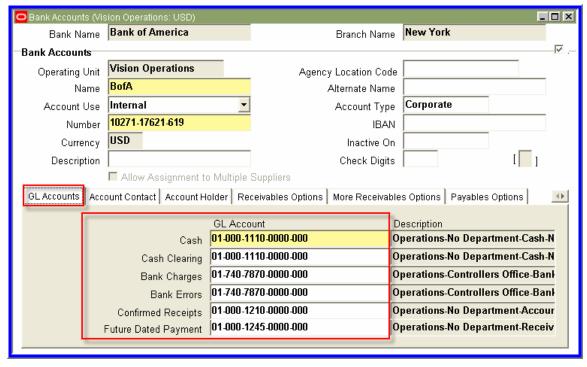
People> Assignment> Purchase Order Information

Payments

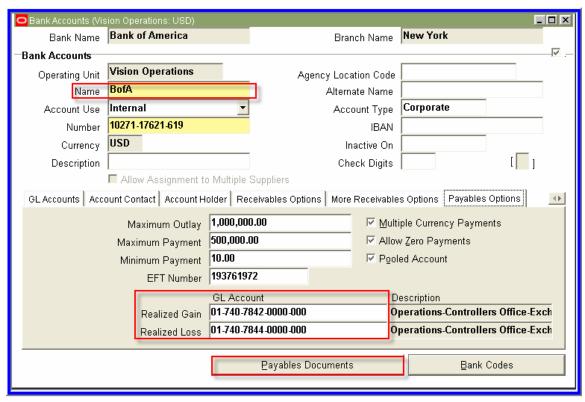
The accounting for a payment defaults from 2 different places. The accrual account will default in from the Liability Account on the Transaction being paid. The Cash and Clearing accounts will default in from the Bank Account the payment is made from:



Setup> Payments> Bank Accounts



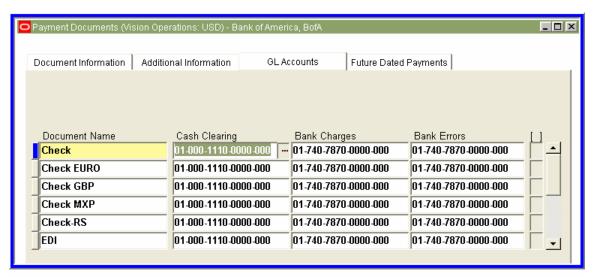
These default accounts will be for ALL receivables and payables transactions, but can be overridden for Payables under Payables Documents.



Setup> Payments> Bank Accounts> Bank Accounts

The name that appears on the Payments tab is the NAME of the Account (shown here), not the name of the Bank (seen on the previous screen shot).

The Realized Gain and Loss accounts for intercurrency transactions are defaulted from here.



Setup> Payments> Bank Accounts> Bank Accounts> Payables Documents

Backtracking Payables transactions from the General Ledger

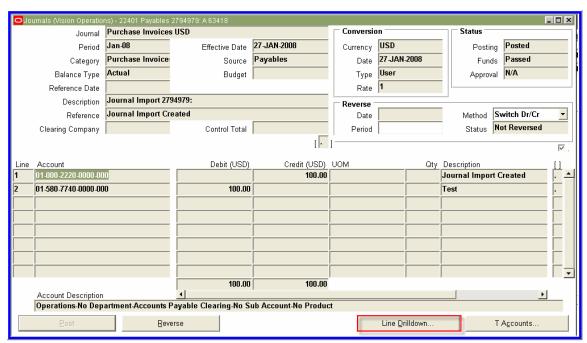
Now that we have identified all the places that a transaction can default in from, how can you take a Payable Transaction in the General Ledger and backtrack it?

From either the Journal Entry screen or the Account Analysis Screen, you can see the transaction that caused the entry in the General Ledger.

From Journal Entries:

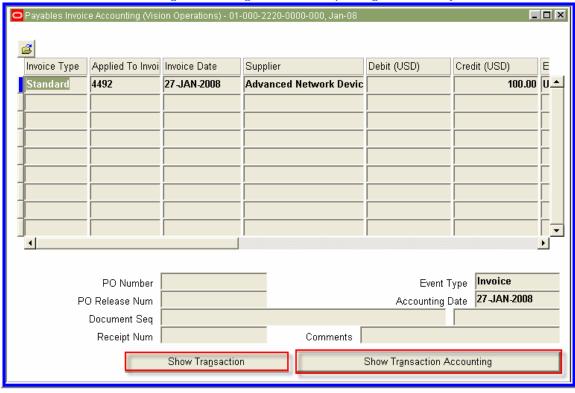


Journals> Entry



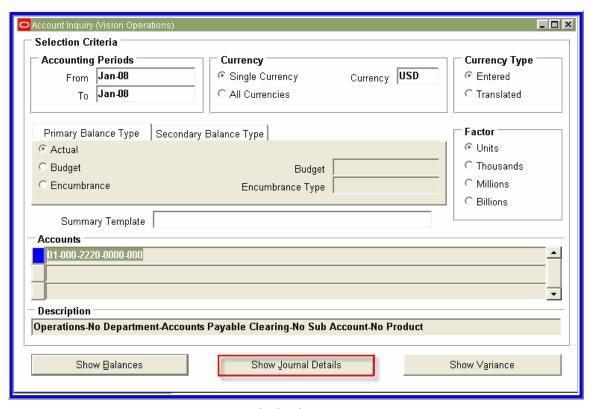
Journal> Entry> Review Journal

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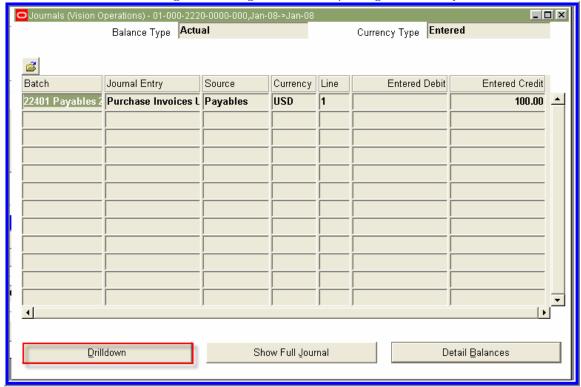


Line Drilldown

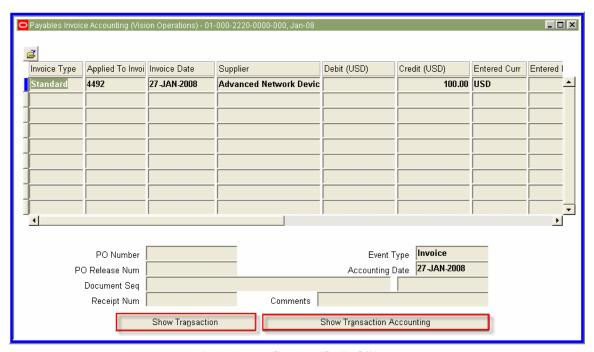
From Account Inquiry:



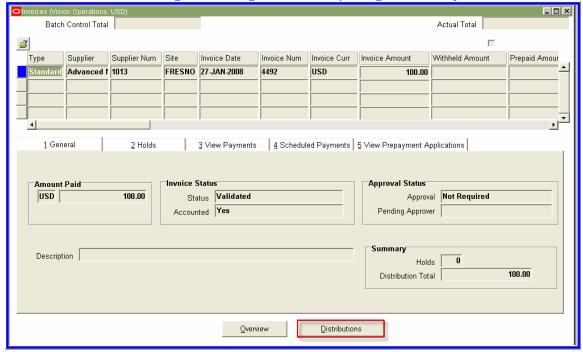
Inquiry> Account



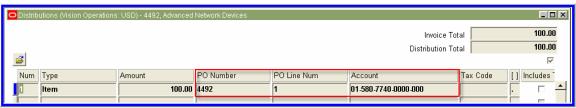
Inquiry> Account> Show Journal Details



Inquiry> Account> Show Journal Details> Drilldown

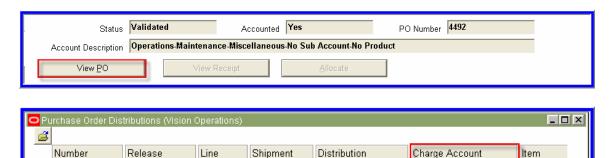


Inquiry> Account> Show Journal Details> Drilldown> Show Transaction



Distributions

You can see from the Distributions that the Transaction is matched to a Purchase Order. Click on the View PO to see the coding from the PO:



The Account on the PO matches the account on the Invoice.



01-580-7740-0000-000

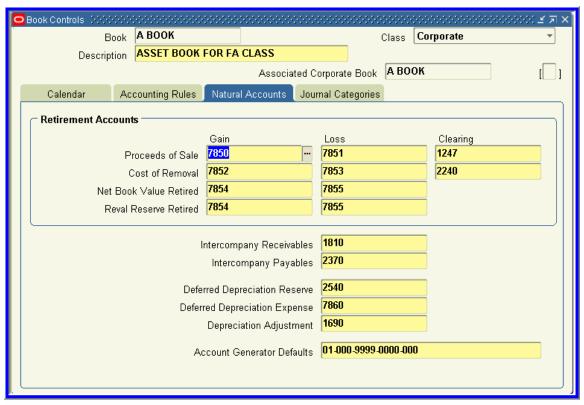
Since the Requisition field is Blank, the Purchase Order is place the account number was originated.

Looking at the Purchasing Work flow in your system will tell you if this came from the workflow itself, or if the person creating the Purchase Order overrides it.

Identifying the source of a transaction that is posting incorrectly helps determine if you have a user problem (the creator is constantly overriding a default workflow) or a system problem, where the default is incorrect and needs to be revised.

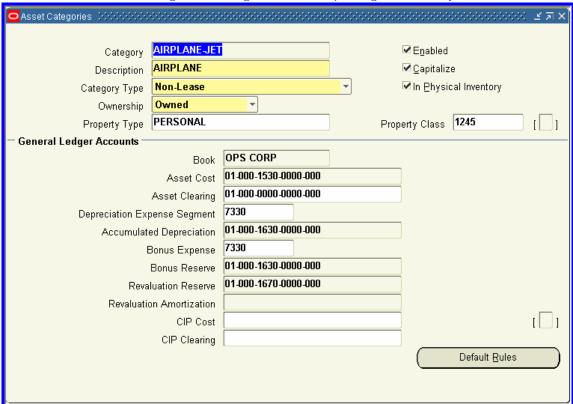
Fixed Assets

The **Book Controls** is the first level of defaults:



Setup> Asset System> Book Controls

This will default the Natural Account segment on all additional setups, as well as give the default segments for the Oracle Account Generator (Account Generator Defaults). Without modification to the workflow, the Defaults are used to decide what accounts are used for the Company, Department and Sub Accounts.



Setup> Asset System> Asset Categories

The **Asset Categories** will default in the Account from the setups. They can be overridden when setting up the category.

Asset Cost is the Asset account this asset will live in

Asset Clearing is the clearing account that would be assigned on a requisition, purchase order, or Payables Invoice, and allows a transaction to interface to Assets. The Asset Clearing account does not ensure that this transaction will be added in this category, but it does ensure the transaction interfaces to Mass Additions. When the asset is moved out of Mass Additions, the account that is on the transaction is then relieved.

Depreciation Expense Segment is the Account that will be used for the monthly Depreciation Expense. The seeded account generator will add this segment to the assignment of an asset to generate the entire expense account.

Accumulate Depreciation is used to hold the total depreciation for assets in this category.

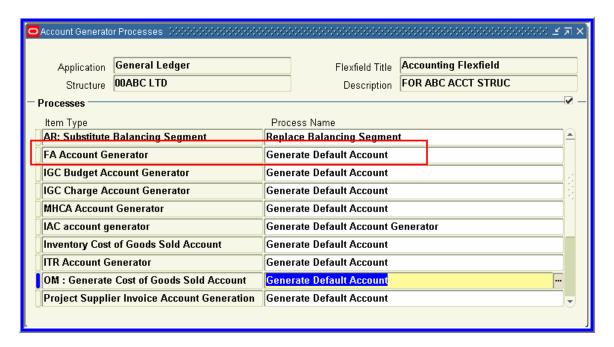
Bonus Reserve is the default for any bonus calculations.

Revaluation Reserve is used when Accumulated Depreciation is revalued for currency valuation changes.

Revaluation Amortization is the account that will amortize any Revaluation Reserves over the remaining life of the asset.

CIP Cost is used to hold the cost of all Construction in Process.

CIP Clearing is used when the CIP cost is relieved.

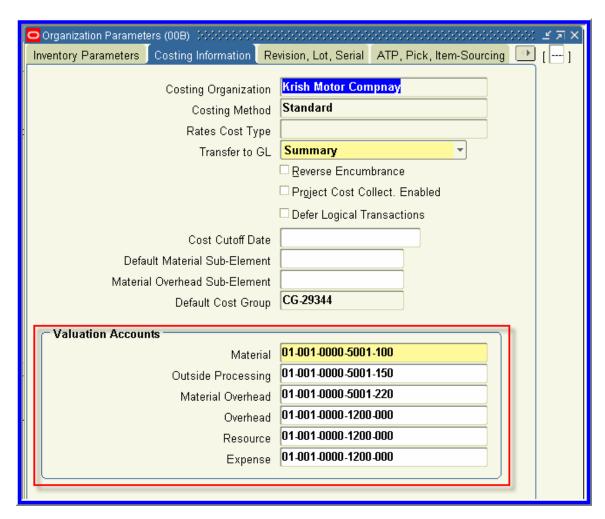


The Account Generator Processes will tell you the default process name for the FA Account Generator. See Metalink Note 115322.1 for a white paper on how to modify your Asset Account Generator.

Inventory

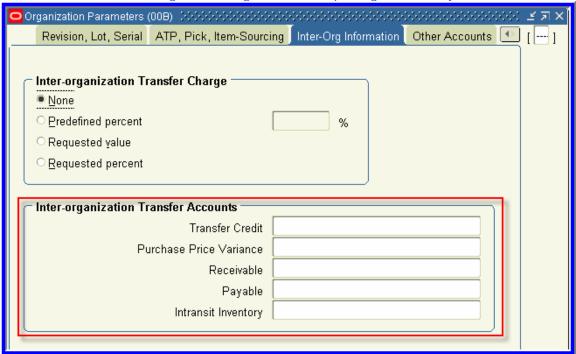
The Inventory Module will default a lot of the accounts used in both Inventory, Purchasing, Order Management and other modules.

The defaults for an Inventory Org will default all the other setups, and can be overridden at each step. Inventory Orgs contain default setups for:



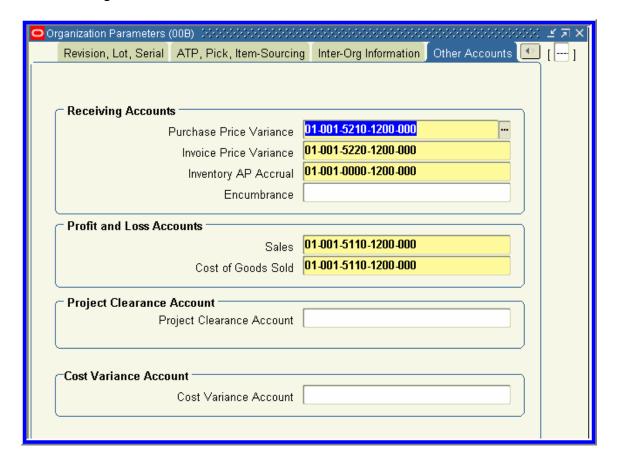
Costing Information Tab:

The costing information in inventory for valuation of an item in inventory comes from these Valuation Accounts.



Interorg Transfer accounts:

When items are transferred between orgs, the default accounts are setup here in the Inter-Organization Transfer Accounts.



Miscellaneous GL Accounts for Inventory default in from the Other Accounts tab.

Purchase Price Variance is where the difference between the Purchase Order and the Actual Cost of an item is recorded.

Invoice Price Variance will record the difference between the Invoice and a Purchase Order.

Encumbrance is used to record the Inventory Encumbrance entries, and is most often found in Government Accounting.

Sales is the default sales account for this inventory org.

Cost of Goods Sold is the default cost of goods account for this inventory org.

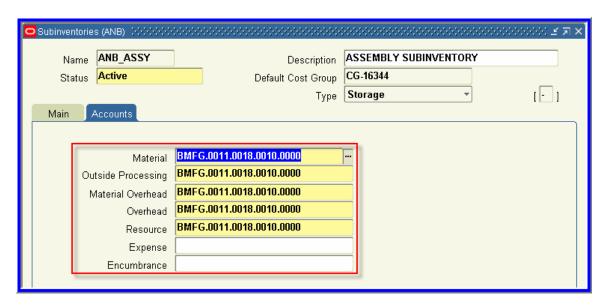
Project Clearing Account is the clearing account for project related inventory items (projects would relieve this account)

Cost Variance Clearing Account is used when Average Costing is enabled with Allow Negative Balances. This is the clearing account used to process issues for inventory items prior to making the receipts. The receipt will clear this account.

Note: For a detailed flow of transactions and their entries, see Metalink Note 198545.1, which contains the white paper on Receipt Accounting.

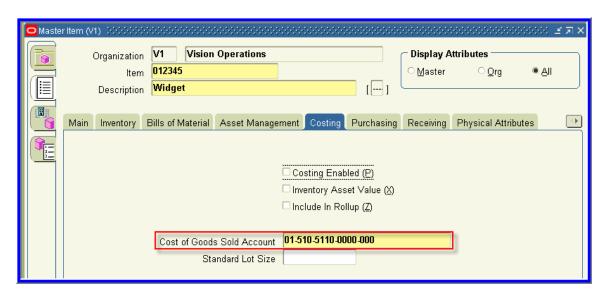
Many of the accounts listed above can be overridden in several areas:

Subinventory setups are the first override:

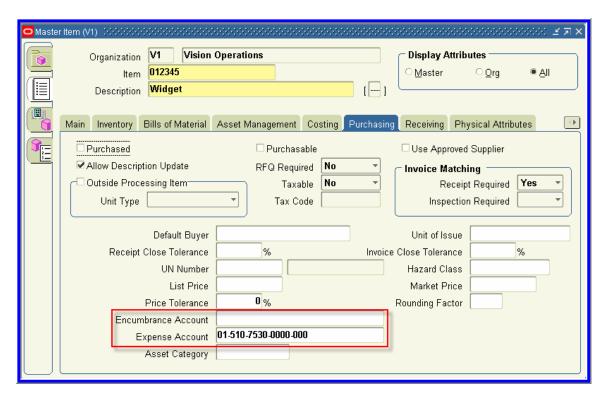


These accounts will default in from the Costing Information Tab on the Inventory Org setups. They can be overridden for specific accounts for this sub-inventory.

Items have several Accounts on them, and will override the Organization and Subinventory setups:



The **Cost of Goods Sold Account** is defaulted in on transactions when an item is shipped on a Sales Order.



The *Encumbrance Account* is defaulted in when this item is used on a Purchase Order and Encumbrances are enabled.

The **Expense Account** is defaulted in on an Expense Purchase Order or Requisition, based on their Workflows for Accounting.

Master Item (V1) Organization V1 Vision Operations **Display Attributes** 012345 ○ <u>M</u>aster ○ <u>O</u>rg ltem All Description Widget [---] Lead Times Work In Process Order Management Invoicing Service Web Option ☑ Invoiceable Item ✓ Invoice Enabled Accounting Rule Invoicing Rule

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The **Sales Account** is the default revenue account on a Sales Order.

Sales Account 01.510.4110.0000.000

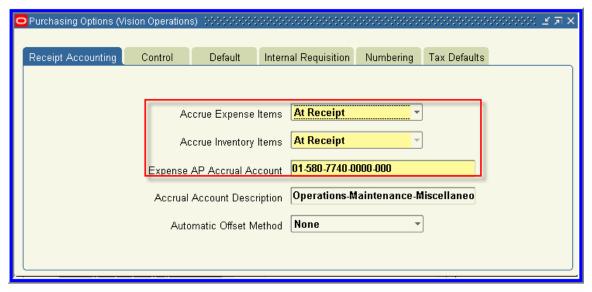
Tax Code

Payment Terms

Accruals for Received items not invoiced

Purchasing has the ability to Accrue received items that have not yet been invoiced, for both Expense or Inventory items. This accrual process for Expenses will create a reversing journal entry in the general ledger. The accrual process for Inventory will create a journal entry in an accrued account, which is relieved when the item is invoiced.

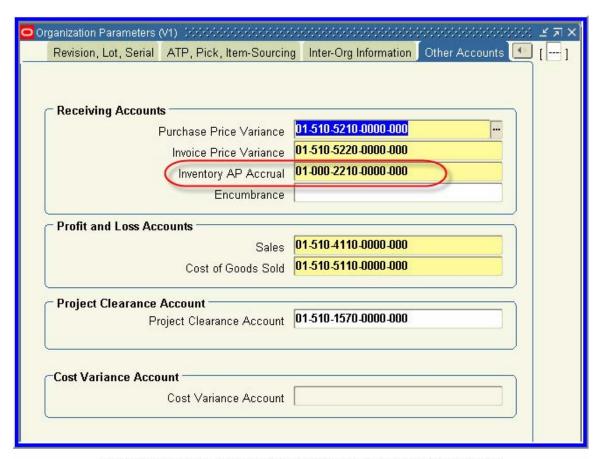
To accrue Expense Items, run the Receipt Accrual – Period End concurrent request. This will generate a reversing journal entry in the general ledger based on the following setups:



Setup> Options> Purchasing Options

Oracle will accrue all Expense items either At Receipt, or At Period End, offsetting the expense entry in the Expense AP Accrual Account.

Inventory Items will be accrued At Receipt, based on the Receiving Account in the Receiving Options for that Inventory Organization:

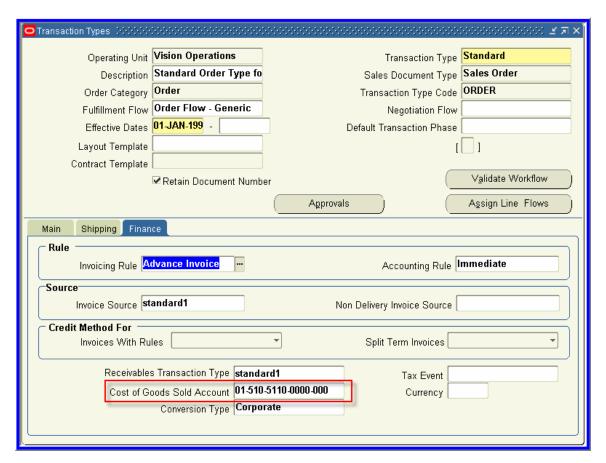


Organizations> Inventory Organization> Inventory Information> Other Acccounts

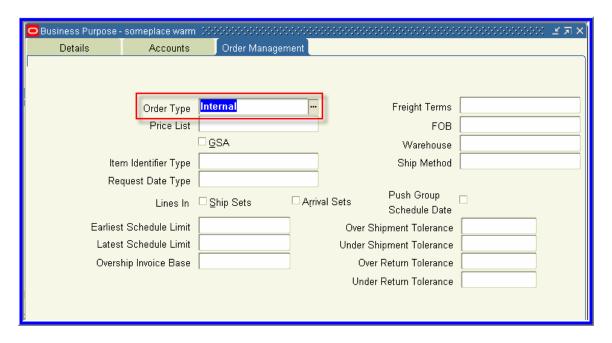
A Receipt would Dr Inventory and Cr Inventory AP Accrual at time of receipt, then the Inventory AP Accrual would be relieved when the invoice is entered.

Order Management

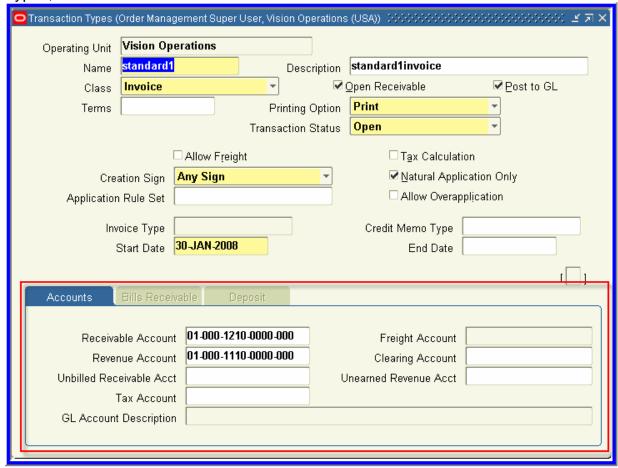
Transaction Types will override Item Setups:



Order Management Transaction Types can be linked to specific customers:

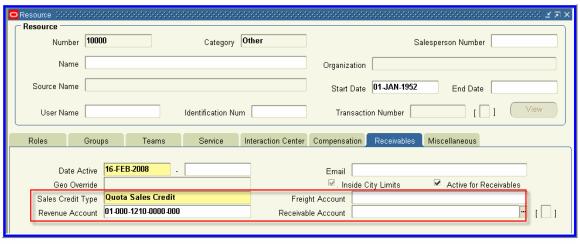


The Invoice Source will connect OM Transaction Types to AR Transaction Types, which contain Receivables accounts:



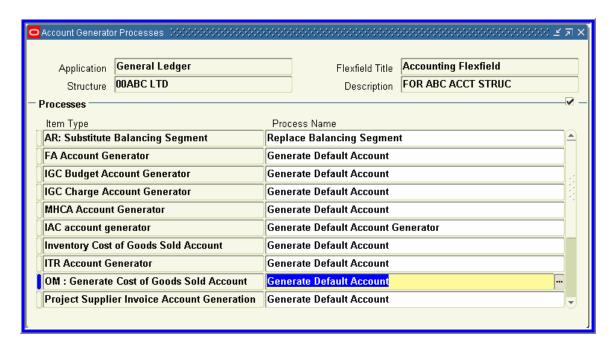
Setup> Financials> Transaction Types

The next layer is Sales Persons:



Setup> Sales> Sales Persons

How does this all fit in? The Oracle Account Generator will dictate what defaults from where:



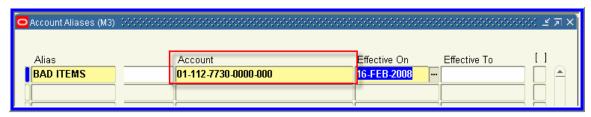
There are 2 basic options here:

Generate Default Account uses the system default accounts as defined in the setups above, following the hierarchy (Items, Sales Persons, Transaction Types, Default system options)

Generate Default Account Generator, which will call a customized workflow that will use all or some of the elements of the above setups.

The last transaction coming from Inventory is **Miscellaneous Issues** and **Miscellaneous Receipts**. These are straight forward in the accounting. There are 2 types of miscellaneous transactions:

Account Alias, where the account number is assigned to the Alias selected:

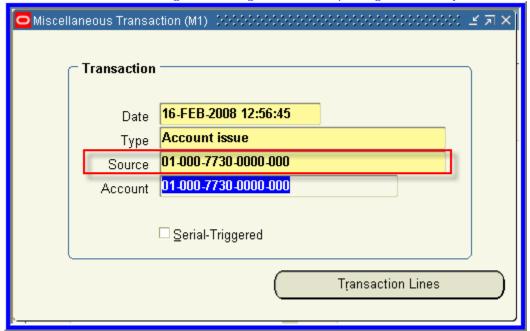


Setup> Receiving> Account Alias

The user in this case would not have the option of overriding this account.

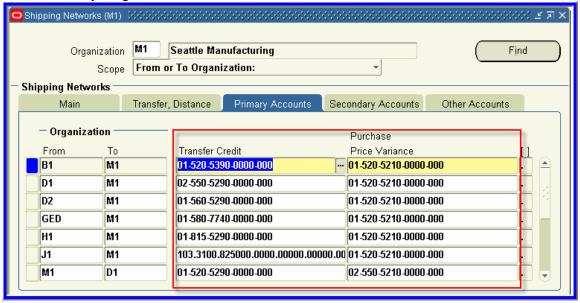
Miscellaneous Issues or Receipts require the user to key an account in when the items are issued or received:

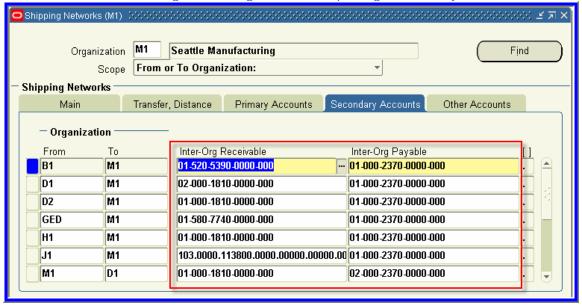
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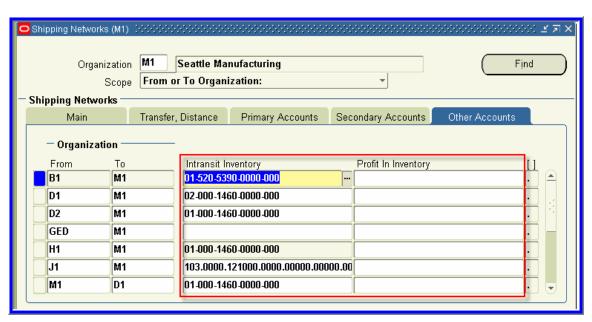


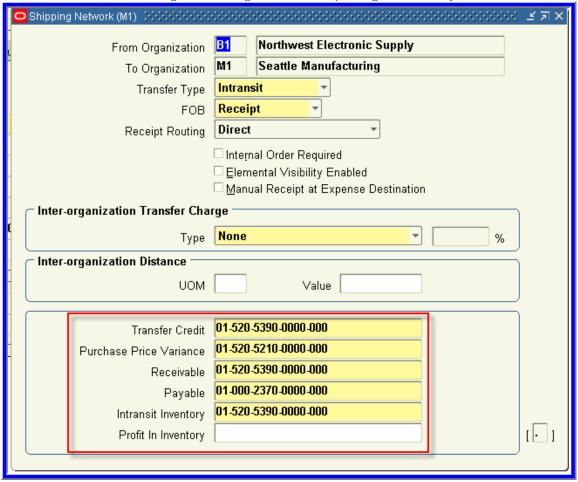
Source would be entered by a user to create the inventory offset account.

Shipping Networks dictate what accounts are hit when items are transferred from one Inventory Organization to another:

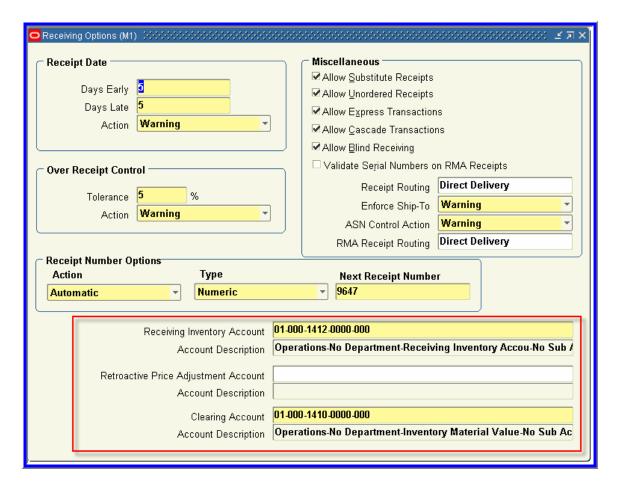








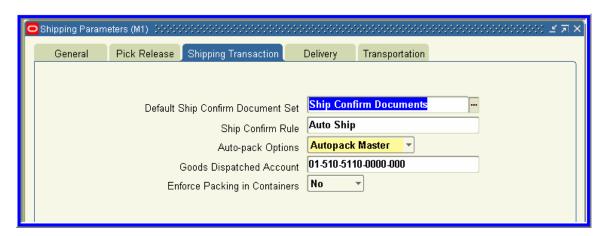
Receiving Options have defaults for the *Receiving Account*, which is where all receipts are recorded. This account is relieved when the item is processed though to inventory.



Retroactive Price Adjustments is used when an item is on a Blanket Purchase Order Agreement and there is a price adjustment on that item. Reapproving the Blanket Agreement will adjust any Receipt Accruals that are still outstanding.

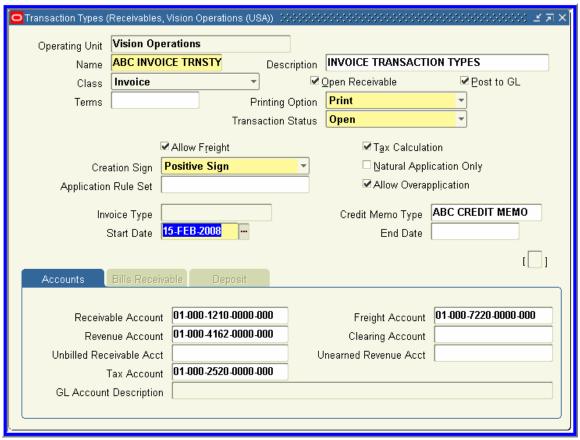
Clearing Account is the intercompany account used to receive an item in an organization that is different from the org that created the Purchase Order.

Shipping Parameters has the account called *Goods Dispatched* – don't let the name fool you. This is just another setup for the Cost of Goods Sold account, and can be setup here as a default if it is not derived from the other locations.



Receivables

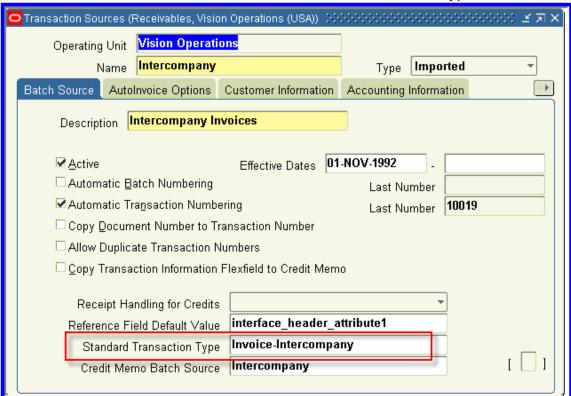
Transaction Types are the main default for receivables:



Setup> Transactions> Transaction Types

Transaction Types will default in the accounts for all transactions at the highest level.

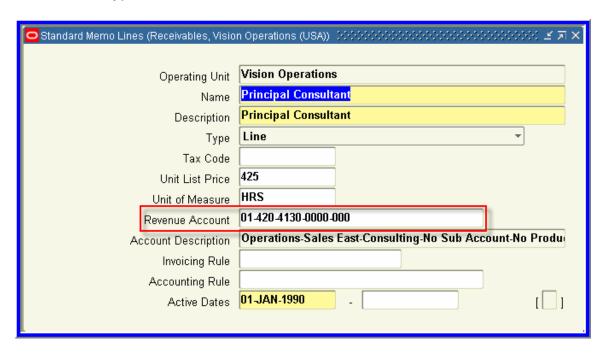
These are then linked to the Batches as a default Transaction Type:



Accounts entered to the Accounts tab on a business purpose will override the Order Type accounts:



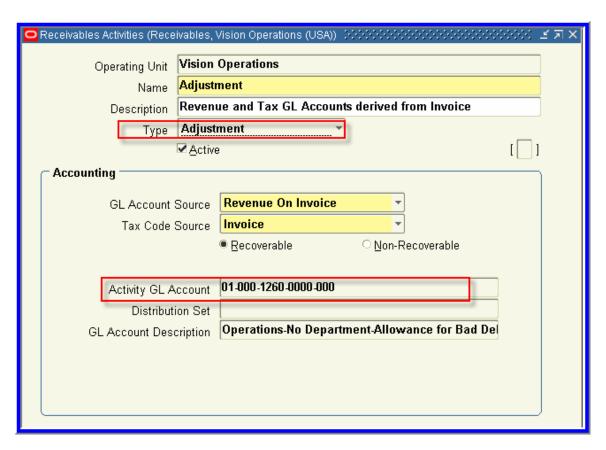
Standard Memo Lines can be used in place of the accounting on a Transaction Type as well:



When entering a transaction, select the Name of the Memo Line in the Description, and the accounting will default from the *Memo Lines Setups*:

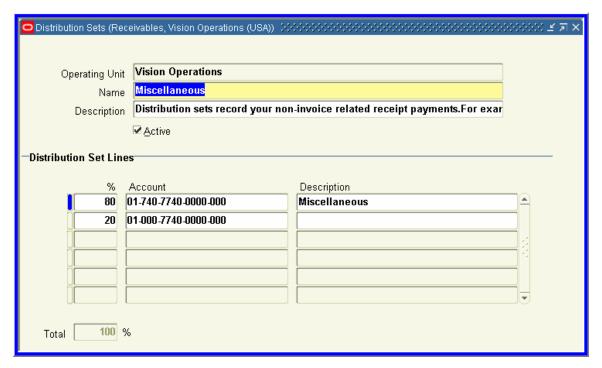


Receivables Activities allows you to setup accounts for Adjustments, and Miscellaneous Transactions:

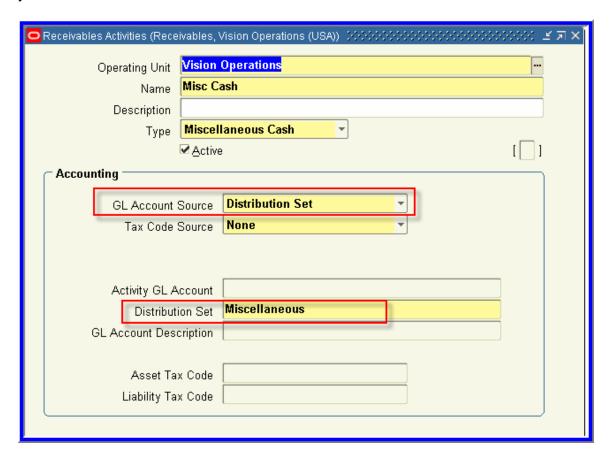


Select the Type of transaction you want to setup, the assign it an **Activity GL Account.**

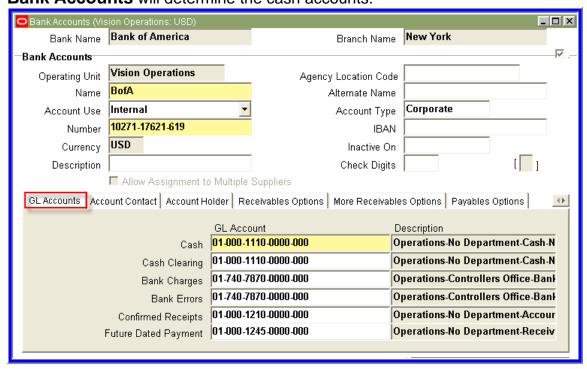
Just like in Payables, **Distribution Sets** are preset account distributions:



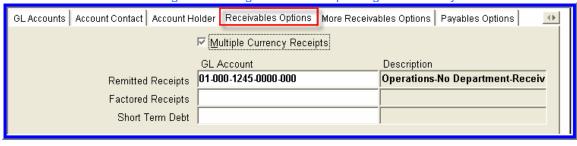
These are attached to **Receivables Activities** for Miscellaneous Cash, allowing you to distribute the cash of more then one account:

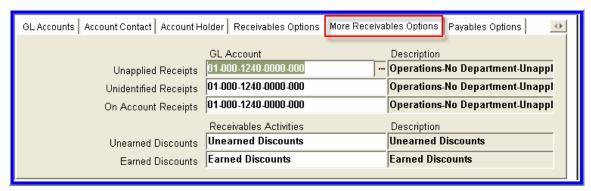


Bank Accounts will determine the cash accounts:

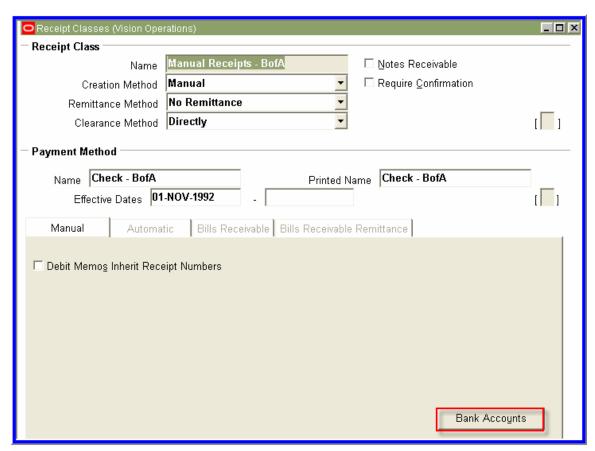


Setup> Receipts> Banks





Then the accounts are attached to **Receipt Classes** where some of the accounts can be overridden:



Setup> Receipts> Receipt Classes> Banks

Bank Name Account Name Minimum Receipt Amount	Bank of America BofA	Branch Name	New York
	BofA	^	
Minimum Receipt Amount		Currency	USD
tooolpt i iiioaiit		Risk Elimination Days	
Clearing Days		□ <u>0</u> v	erride Bank
Effective Dates	01-NOV-1992	✓ Pr	imary [🔲]
GL Accounts Bills Rec	eivable Formatting Pro	grams	
Cash Receipt Confirmation Remittance Factoring Short Term Debt Bank Charges Unapplied Receipts Unidentified Receipts On Account Receipts Unearned Discounts	01-000-1240-0000-000 01-000-1240-0000-000		

Setup> Receipts> Receipt Classes> Banks> Bank Accounts

General Ledger

The General Ledger is the end result for all transactions, and can also have transactions entered directly into it. Use the Batch Source to determine where the Journal Entry came from:



Journal> Entry

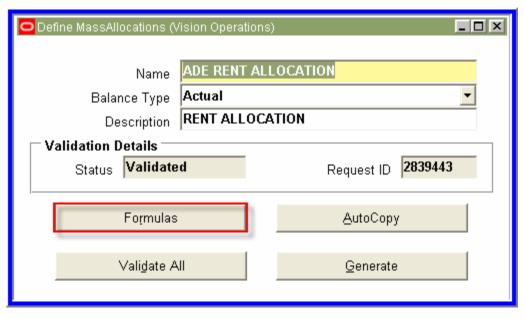
Oracle uses some Sources for interfaced transactions from other modules, and these include:

		Import
		Journal
Source	Description	References
Assets	Fixed Assets System	*
AX Inventory	AX Inventory Entry	*
AX Payables	AX Payables Entry	*
AX Receivables	AX Receivables Entry	*
		*
Budgetary Transaction Consolidation	Budgetary Transaction Consolidation Transfer	*
		*
Inventory	Inventory Control System	*
Lease	Oracle Lease Management	*
Marketing	Marketing Online System	
OPM Costing	OPM Costing	*
OPM Inventory Ctrl	OPM Inventory Control	*
OPM Order Processing	OPM Order Processing	*
OPM Production Mgmt	OPM Production Management	*
OPM Purchasing	OPM Purchasing	*
OPM/Order Management	OPM/Order Management	*
Payables	Accounts Payable System	*
Payroll	Payroll System	*
Periodic Inventory	Periodic Inventory Control System	*
Projects	Projects	*
Property Manager	Property Manager	*
Public Sector Budget	Public Sector Budget	*
Purchasing	Purchasing System	*
Ĭ	Oracle Purchasing - Inventory Transactions	
Purchasing/OPM	for Process Items	*
Receivables	Accounts Receivable System	*
Revenue	Revenue Accounting System	*
Student Fees	Student Fees	*
Student System	Student System	*
Treasury	Treasury	*
Year End Close	Federal Year End Close	*
u · · · · · · · · · · · · · · · · · · ·		

To eliminate confusion if a Journal was created from an interface or entered manually into the General Ledger, these Sources should be reserved for interfaced journal entries only.

Besides Manual and Spreadsheet (uploaded from ADI) sources, General Ledger can also create journal entries with default coding.

Allocations. Allocations are used to allocate transactions or account balances from one department or company to others:



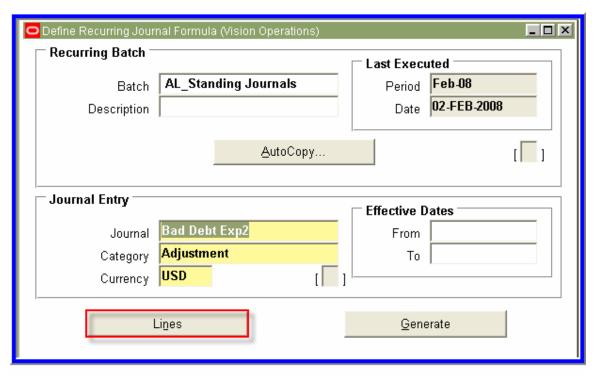
Journasl> Define> Allocations

Formula (Vision Op	erations) - ADE RENT ALLOCATION				_
Name	RENT ALLOCATION		Catego	ory Allocation	₹.
Description	scription RENT ALLOCATION		Stat	us Validated	
☐ Allocate Balances From					
	Full Balance				
	C Single Entered Currency			Currency	
☐ Full Cost	Pool Allocation				✓.
			Amount		
Amount	Account	Currency	Туре	Relative Period	
А	01-140-1170-0000-000	USD	PTD	Current Period	▼
*	C-C-C-C				
В 1					▼
1					
C 1					
i					
T:	01-000-1110-0000-000	USD	PTD	Current Period	₹
	C-C-C-C		•		
O:	01-000-1170-0000-000	USD	PTD	Current Period	▼
	C-C-C-C	4			<u> </u>

Journals> Define> Allocations> Formulas

It is the T (Target) and O (Offset) accounts that will be the Debit and Credit of an allocating journal entry.

Recurring. Recurring entries are setup as repeating entries or masters for journal entries



Journals> Entry> Define> Recurring



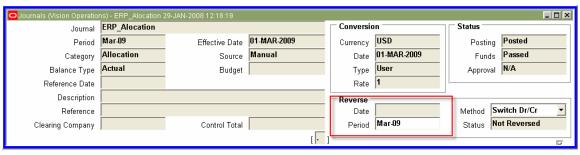
Journals> Entry> Define> Recurring> Lines

The Account field is the account that will be on this journal entry – All recurring entries must have at least 2 lines. The Line 9999 will always be the offsetting account for the recurring entry:



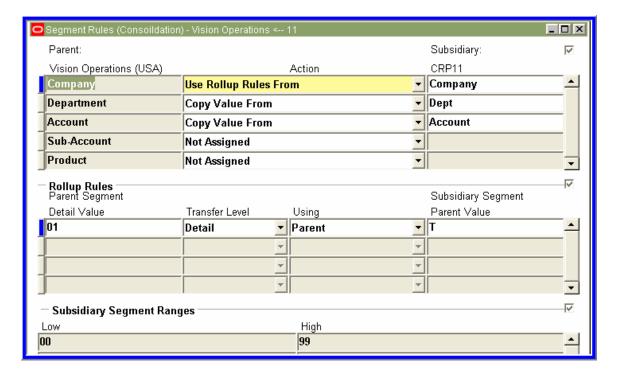
Journals> Entry> Define> Recurring> Lines

Reversing. Reversing Entries are created when a Journal Entry has a Period completed in the Reverse field, and then the reversal is Generated.



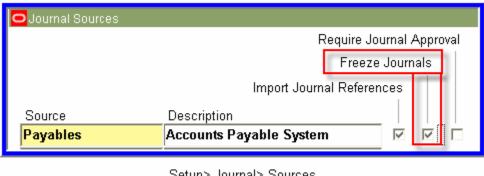
Journals> Entry

Consolidation. Consolidation Entries are defined in the Consolidation workbench, and dictated by Segment Rules:



In this example, the Company will replace company 01 with T when consolidations are run, and default the Department and Account from the subsidiary ledger.

Remember that all of the above Journals, as well as Journals created from subsidiary modules, can be changed prior to posting unless the Freeze Journal field is checked for the source:



Setup> Journal> Sources

Conclusion

Integration within the modules is flexible within Oracle E-Business Suite, allowing numerous defaults and override places. It takes a little detective work to follow the transactions and defaults back to their sources, but is well worth the while to understand the integration as well as correct recurring issues with coding in the General Ledger.

About Melanie Cameron

Melanie Cameron, the EBS Manager for MSS Technologies, is a Funco Techn consultant specializing in Oracle Financials related to SOX, Process Improvements, System Integration, Upgrades, Implementations, and Workflow. Based in Phoenix Arizona, Melanie served on the Board of Directors of the AZOAUG for six years and can be found at most Oracle events in the Valley of the Sun. She can be reached at mcameron@msstech.com.