

EAM Costing, How Is It Different from MFG Costing?

**OAUG Cost Mgmt SIG Meeting
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Douglas Volz

Douglas Volz Consulting
doug@volzconsulting.com

Learning Points

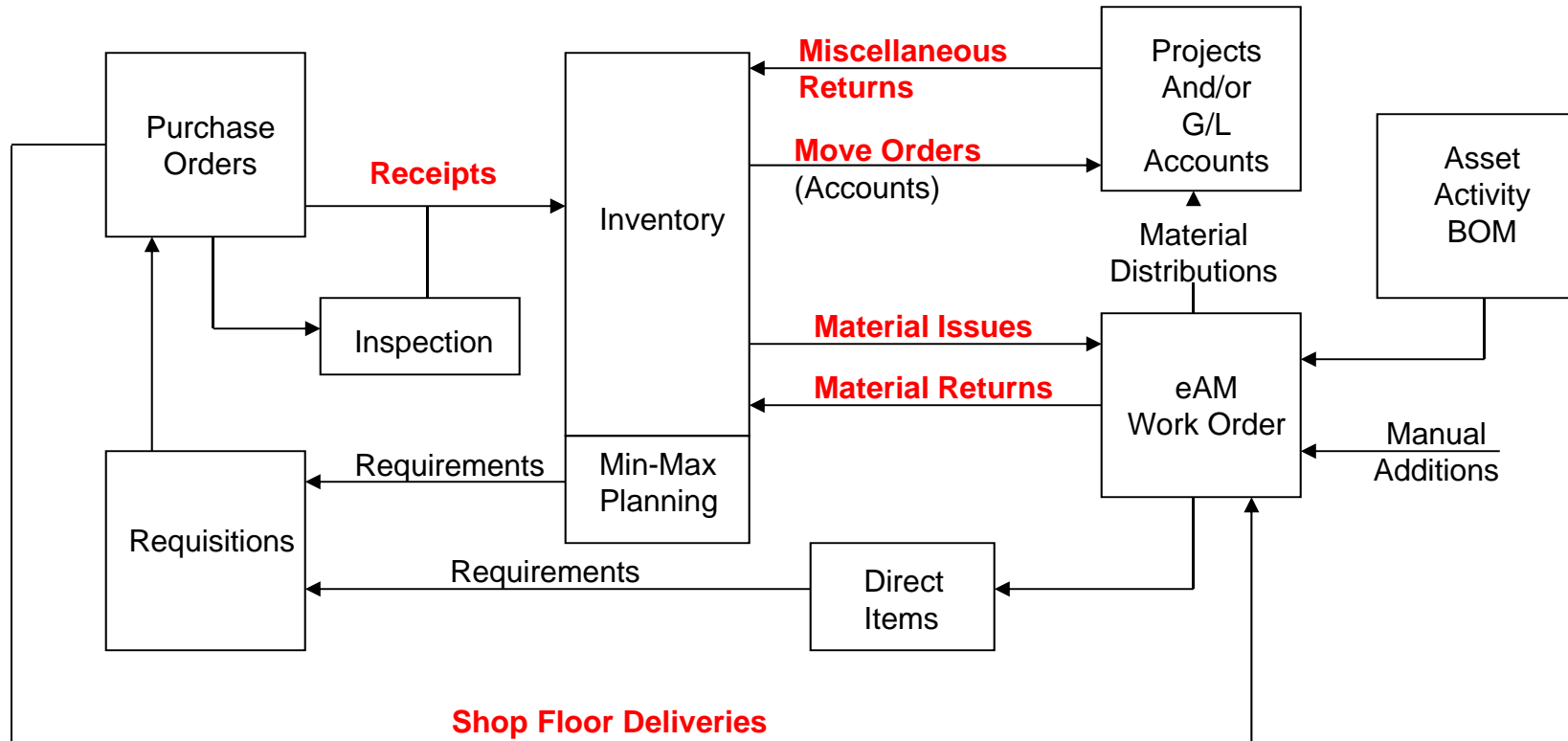
- Introduction to the Oracle Enterprise Asset Management Applications (EAM)
- How Does EAM Costing fit in with Oracle Cost Management?
- How Does EAM Costing work and how is it different from Oracle Cost Management or Discrete Costing?

Agenda

- Overview for eAM Costing
- General Implementation Principles
- Item Cost Setup
- Accounts Setup
- Receiving Accounting Flows
- Inventory Accounting Flows
- eAM WIP Accounting Flows
- eAM WIP Job Costing
- Subledger Accounting
- Summary

Overview of EAM Transaction Costing

Accounted for Entries



Uses the same accounting engines or processors as Oracle Cost Management

Special features for EAM Work Orders for Shop Floor Deliveries

General Implementation Concepts

- EAM focuses on planning, scheduling and delivering maintenance services:
 - Preventative maintenance
 - Emergency repairs and overhauls
 - Spares planning and tracking
 - Asset rebuilds
 - Cost tracking and allocation
 - Machine or asset usage and tracking

General Implementation Concepts (continued)

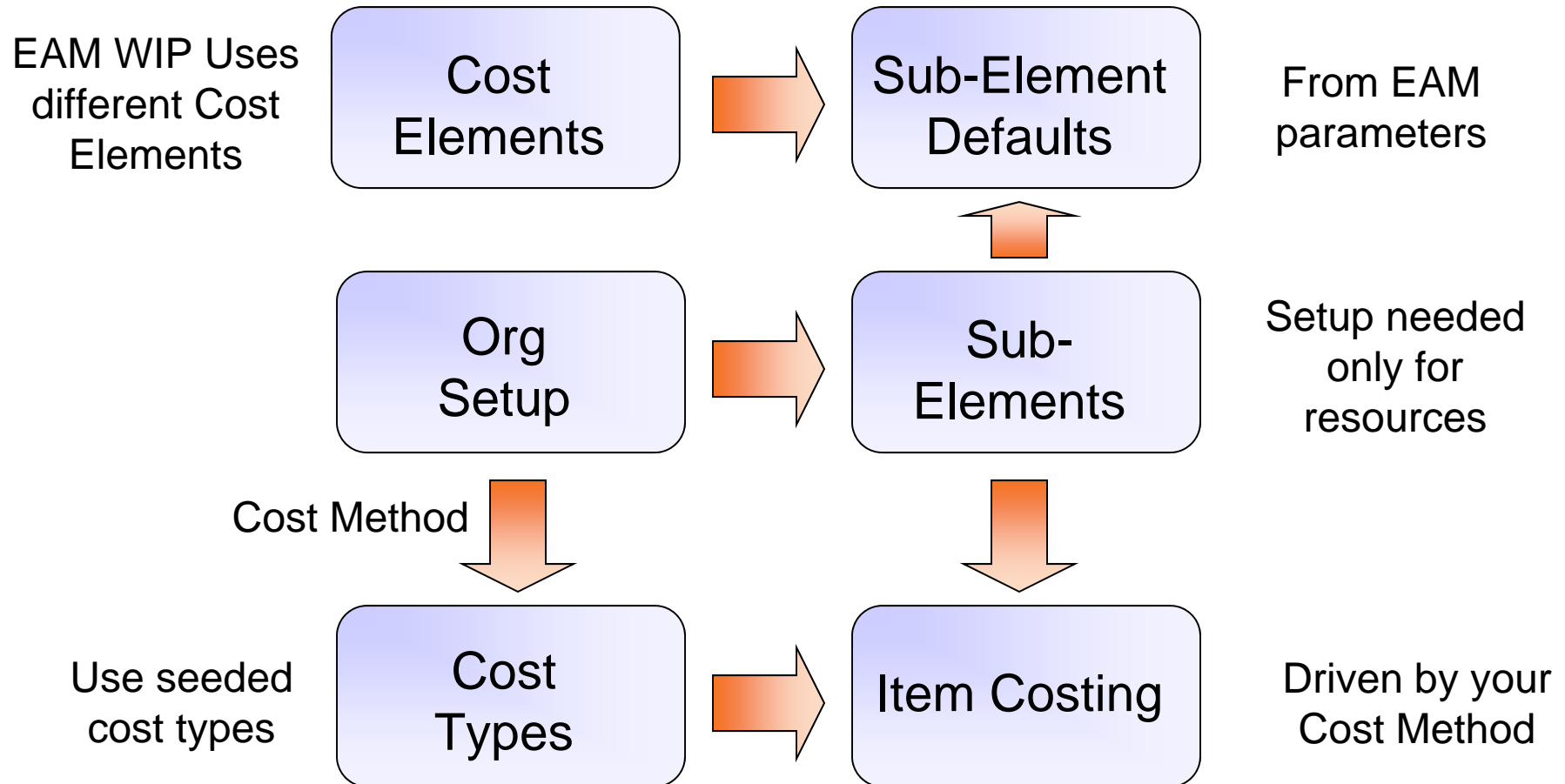
- Best or leading EAM Cost practices across industries:
 - Keep it simple, don't burden Operations / Field Service with financial cost accounting "requirements" such as entering account numbers
 - Use an actual cost method (Average preferred, is FIFO worth the extra effort? You decide.)
 - Keep the number of inventory organizations to a minimum
 - With shared maintenance services use SLA rules to record maintenance expenses for different divisions as opposed to having multiple inventory organizations
 - Implement in a non-MFG inventory organization
 - MFG is typically at Standard Costing – EAM variances don't mean much
 - MFG is mostly based on dependent demand planning

General Implementation Concepts (continued)

- Common EAM projects pain points:
 - Unwilling to make business changes
 - i.e. move from emergency repairs to PM-based management
 - Hire team to implement EAM based on firm reputation instead of experience, team member knowledge and past performance
 - Choose EAM team based on price and not industry experience; witness these real-world client examples:
 - Having multiple EAM inventory orgs in US using Standard Costing, with one common maintenance team
 - Break standard Oracle functionality and force maintenance staff to hand-enter account numbers on bills, routings or work orders
 - Stay as a “repair shop” with little to no preventative maintenance

EAM Item Costing

Item Costing Setup Overview



Organization Costing Refresher

- ❑ One Costing Method per Inventory Organization:
 - An exception to this is Project Manufacturing or PJM
 - PJM allows separate costs by Cost Group

- ❑ Inventory Organization Definition Sets up:
 - Inventory Controls
 - Costing method
 - Many default accounts

- ❑ Cost Setup is by Inventory Organization

- ❑ Typically only use Average Costing

EAM Functionality and Costing by Item Types

Oracle Item Types

- Asset Activity
- Asset Group
- ATO Option Class
- ATO Model
- FG Finished Good
- Inventory Type
- Kit
- Model
- Option Class
- Outside Operation
- Outside Processing Item

Oracle Item Types

- Purchased item
- Product Family
- Phantom item
- Planning
- PTO Option Class
- PTO model
- Reference item
- Rebuildable
- Subassembly
- Supply item

Cost Integration with Other Modules

□ EAM Costing (and Oracle Cost Mgmt) Share and Use:

Enterprise Financial Model

- Ledgers
- Legal Entities
- Accounting periods
- Currencies / Exchange Rates
- Operating units
- Chart of Accounts (COA)

G/L Controls and Setup

- Cross-Validation Rules
- Security Rules
- Workflow and Sub-Ledger Accounting Rules

Supply Chain Model

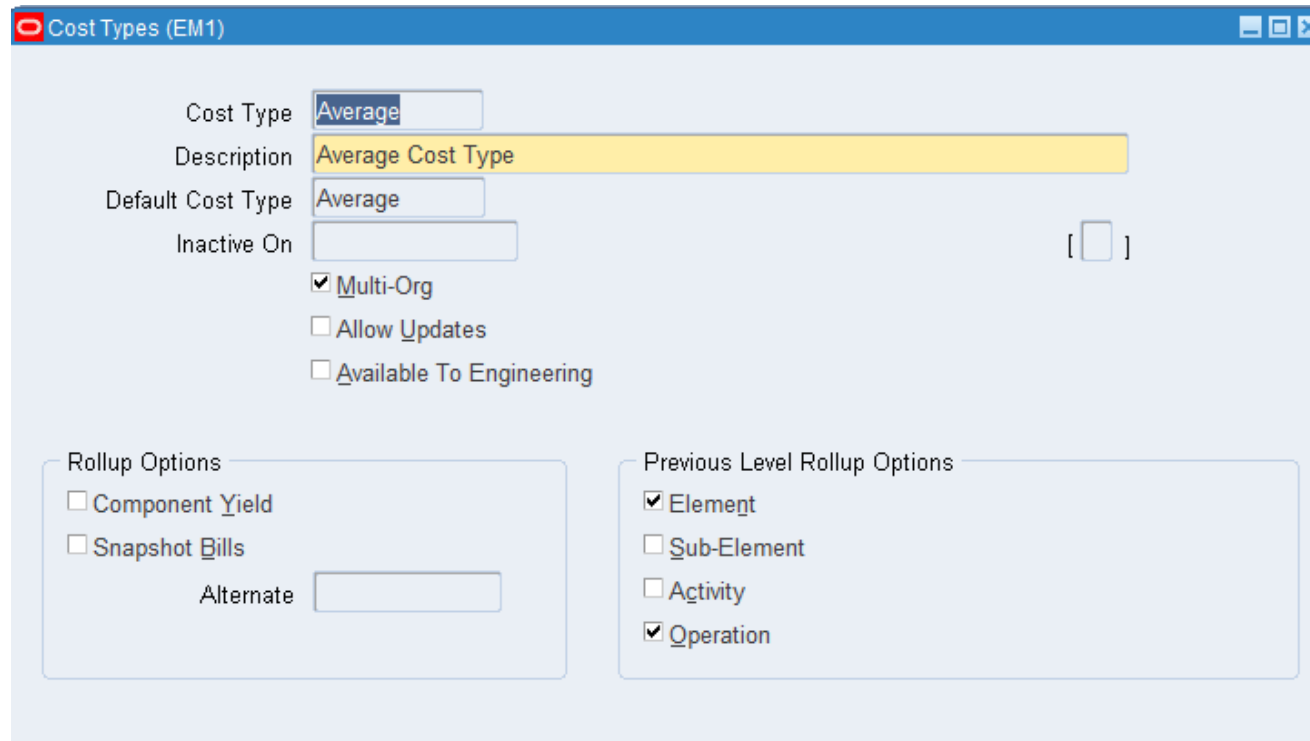
- Inventory organizations
- Items
- BOMS and routings
- WIP jobs
- Suppliers
- Purchase orders

Financial Information

- Payables invoices
- Projects Billing and Costing
- Employees

EAM Cost Types

Enterprise Asset Management => Cost Definition => Setup => Cost Types



Cost Types (EM1)

Cost Type: Average

Description: Average Cost Type

Default Cost Type: Average

Inactive On: []

Multi-Org

Allow Updates

Available To Engineering

Rollup Options

Component Yield

Snapshot Bills

Alternate: []

Previous Level Rollup Options

Element

Sub-Element

Activity

Operation

- Choose Multi-Org so all inventory organizations can share the name
- “Inactive On” controls date availability for various forms and lookups
- Average cost type used for Average Costing

EAM Cost Types

Seeded Cost Types – Determined by Costing Method

COST TYPE	COSTING METHOD	COMMENTS
FROZEN (Standard)	Standard	Not recommended for EAM
AVERAGE	Average	Recommended for EAM
PENDING	Standard	Seeded, not in use
FIFO	FIFO	Is the complexity worth it?
LIFO	LIFO	Seeded, not recommended
CTO (Configure to Order)	Standard	Seeded, not applicable

Cost Elements for EAM vs. Discrete Costing

- EAM and Discrete Cost Elements for Inventory / Onhand Values
 - Material
 - Material Overhead
 - Resources
 - Outside Processing
 - Overheads (Production Overheads)

Yes, the same cost elements for onhand goods in a subinventory

Cost Elements for EAM vs. Discrete Costing

□ EAM Cost Elements for Maintenance Jobs

- Equipment
- Labor
- Materials

The EAM WIP Balances are held in
WIP_EAM_PERIOD_BALANCES
Estimated EAM WIP Charges are held in
CST_EAM_BALANCE_BY_ACCOUNTS

□ Discrete Costing for Non-Maintenance Jobs or Work Orders (i.e. factory production accounting, distribution or warehousing accounting)

- Material
- Material Overhead
- Resources
- Outside Processing
- Overheads (Production Overheads)

The Discrete WIP Balances are held in
WIP_PERIOD_BALANCES

Cost elements are different for EAM vs. Discrete work orders

EAM Cost Sub-Elements for Maintenance Jobs

Cost Elements	Sub-Elements	Setup?
Equipment	Equipment	No setup needed
Labor	Resource Sub-Elements	Use the Define Resource form
Material	Material	No setup needed

Sub-Elements – Material Overhead

Enterprise Asset Management => Cost Definition => Setup => Sub-Elements => Overhead

Overheads (EM1)

Overhead Proc

Cost Element Material Overhead

Description Procurement Overhead

Absorption Account 01-000-5270-0000-000

Default Basis Item

Default Activity

Expenditure Type []

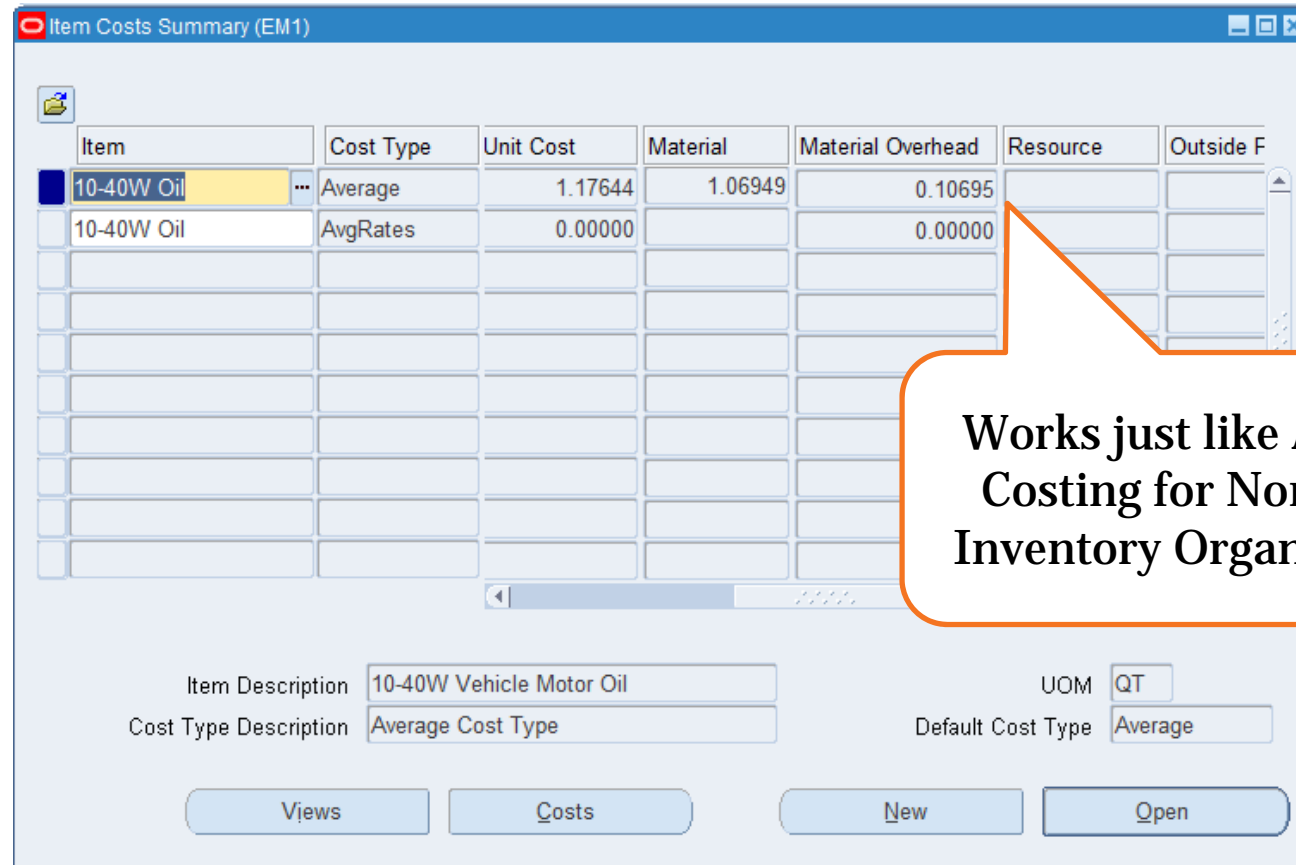
Inactive On []

Resources Rates

Are material overheads used
by EAM?

Sub-Elements – Material Overhead

Enterprise Asset Management => Cost Definition => Item Costs => Item Costs



Item	Cost Type	Unit Cost	Material	Material Overhead	Resource	Outside F
10-40W Oil	Average	1.17644	1.06949	0.10695		
10-40W Oil	AvgRates	0.00000		0.00000		

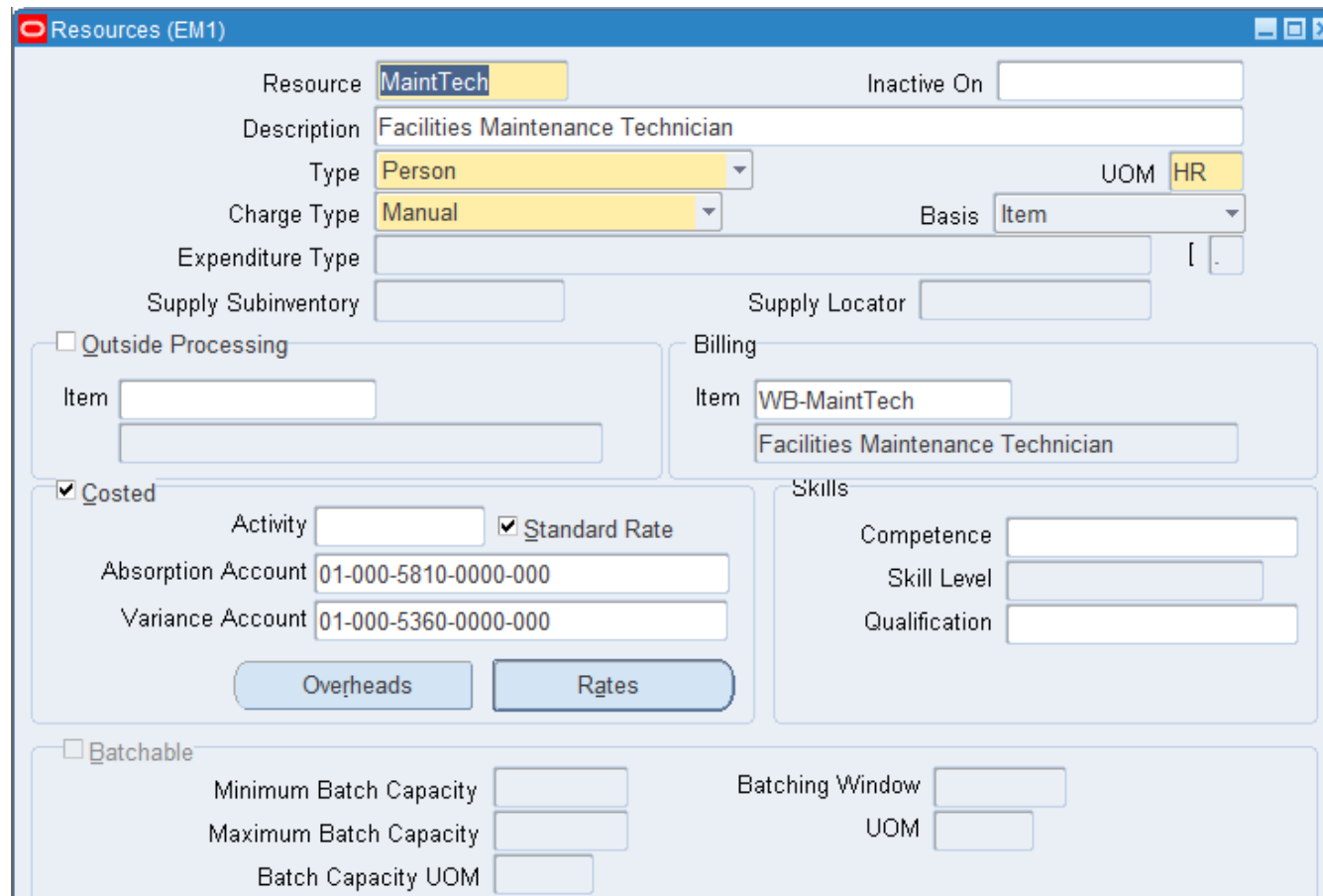
Item Description: 10-40W Vehicle Motor Oil
 Cost Type Description: Average Cost Type
 UOM: QT
 Default Cost Type: Average

Views Costs New Open

Works just like Average Costing for Non-EAM Inventory Organizations

Sub-Elements – Resource

Enterprise Asset Management => Cost Definition => Setup => Sub-Elements => Resources



The screenshot shows the Oracle Resources (EM1) form with the following fields and values:

- Resource: MaintTech
- Inactive On: [Empty]
- Description: Facilities Maintenance Technician
- Type: Person
- UOM: HR
- Charge Type: Manual
- Basis: Item
- Expenditure Type: [Empty]
- Supply Subinventory: [Empty]
- Supply Locator: [Empty]
- Outside Processing
 - Item: [Empty]
- Costed
 - Activity: [Empty]
 - Standard Rate
 - Absorption Account: 01-000-5810-0000-000
 - Variance Account: 01-000-5360-0000-000
 - Buttons: Overheads, Rates
- Batchable
 - Minimum Batch Capacity: [Empty]
 - Maximum Batch Capacity: [Empty]
 - Batch Capacity UOM: [Empty]
 - Batching Window: [Empty]
 - UOM: [Empty]
- Billing
 - Item: WB-MaintTech
 - Facilities Maintenance Technician
- Skills
 - Competence: [Empty]
 - Skill Level: [Empty]
 - Qualification: [Empty]

For this example, charge actual hours at “standard” rate

Sub-Elements – Resource

Enterprise Asset Management => Cost Definition => Setup => Sub-Elements => Resources

The screenshot shows the Oracle EAM 'Resources (EM1)' window. The resource is named 'MaintTech' with a description of 'Facilities Maintenance Technician'. The type is 'Person' and the unit of measure (UOM) is 'HR'. The charge type is 'Manual' and the basis is 'Item'. The 'Costed' checkbox is checked, and the 'Standard Rate' checkbox is also checked. The absorption account is '01-000-5810-0000-000' and the variance account is '01-000-5360-0000-000'. The 'Rates' button is highlighted with a yellow arrow pointing to the 'Resource Costs (EM1) - MaintTech' window.

The 'Resource Costs (EM1) - MaintTech' window displays a table with the following data:

Cost Type	Description	Resource Unit Cost []
AvgRates	Resource & Overhead Rates used under	25.00000

Use the AvgRates Cost Type to hold your rates

Sub-Elements – Resource

Enterprise Asset Management => Cost Definition => Setup => Sub-Elements => Resources

Resources (EM1)

Resource: **MaintTech** Inactive On:

Description: Facilities Maintenance Technician

Type: **Person** UOM: **HR**

Charge Type: **Manual** Basis: **Item**

Expenditure Type:

Supply Subinventory: Supply Locator:

Outside Processing

Item:

Billing Item: **WB-MaintTech**
 Facilities Maintenance Technician

Costed

Activity: Standard Rate

Absorption Account: **01-000-5810-0000-000**

Variance Account: **01-000-5360-0000-000**

Batchable

Minimum Batch Capacity: Batchin:

Maximum Batch Capacity:

Batch Capacity UOM:

Employees (EM1)

Resource: **MaintTech**

Description: Facilities Maintenance Technician

Employees

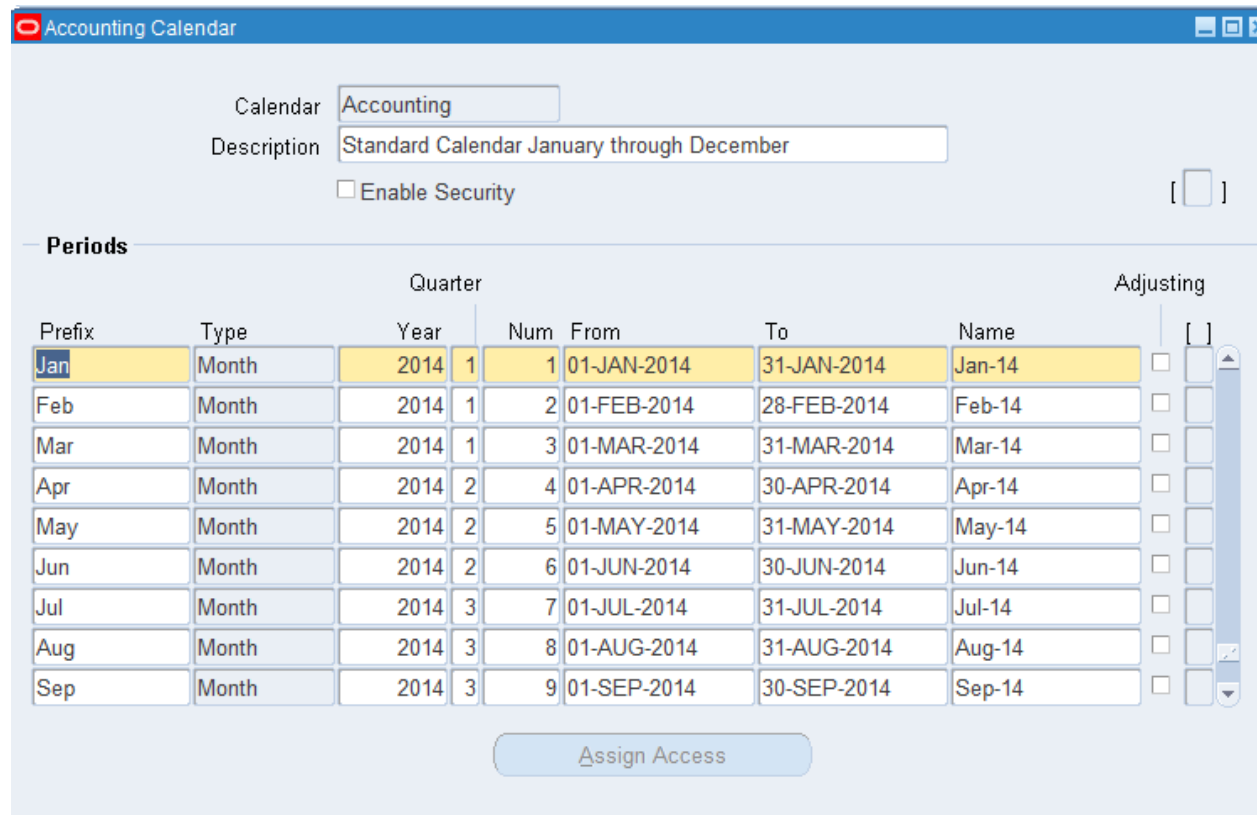
Employee	Name	Type	Interleave
947	Moll, Mr. Joe	Employee	<input type="checkbox"/>
1221	Keeper, Mr. Greg	Employee	<input type="checkbox"/>
1222	Super, Mr. Bob	Employee	<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

Can also assign employees

EAM Calendar, Organization and Accounts Setup

Share the Same G/L Calendar Definition

General Ledger Super User => Setup => Financials => Calendar => Accounting

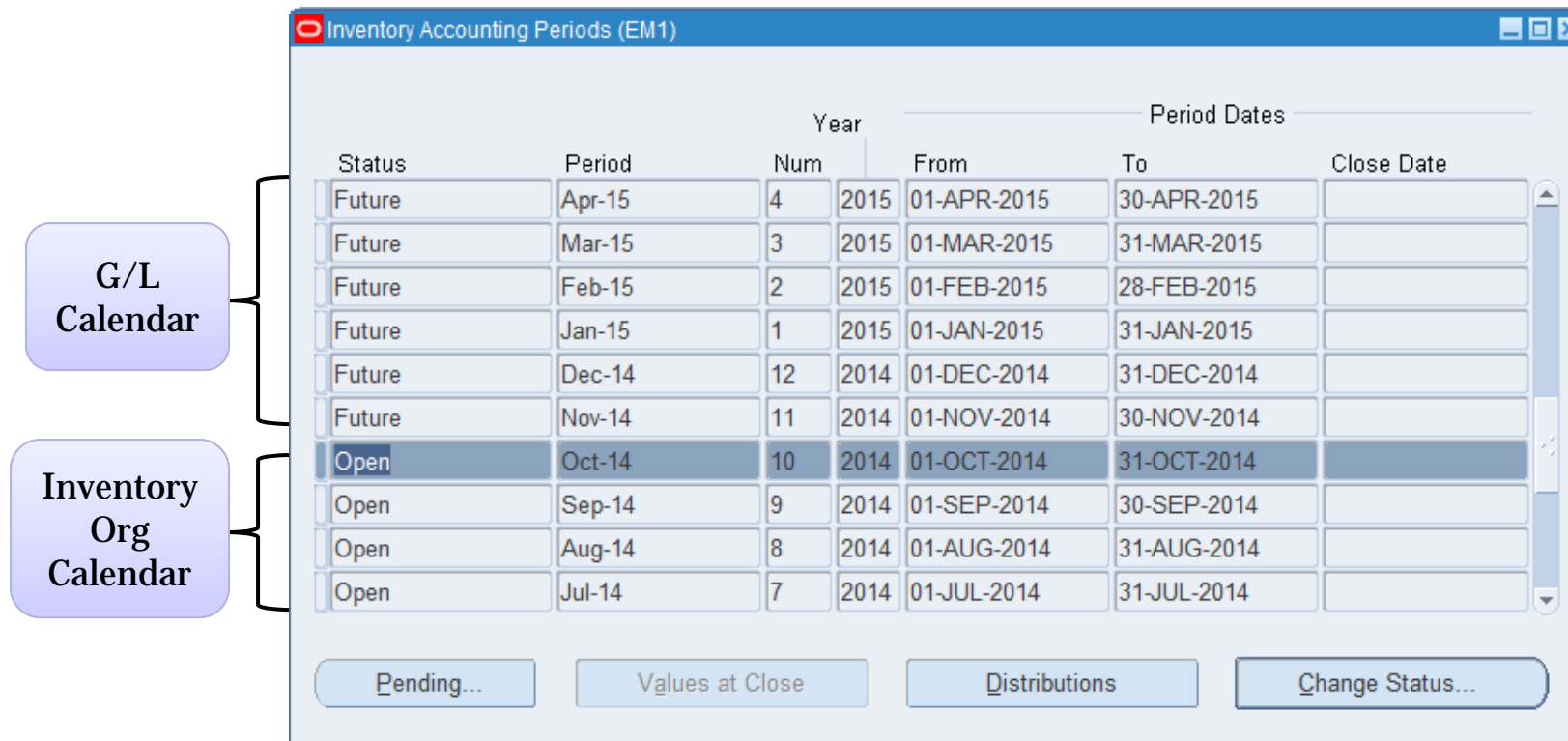


Prefix	Type	Year	Quarter	Num	From	To	Name	Adjusting
Jan	Month	2014	1	1	01-JAN-2014	31-JAN-2014	Jan-14	<input type="checkbox"/>
Feb	Month	2014	1	2	01-FEB-2014	28-FEB-2014	Feb-14	<input type="checkbox"/>
Mar	Month	2014	1	3	01-MAR-2014	31-MAR-2014	Mar-14	<input type="checkbox"/>
Apr	Month	2014	2	4	01-APR-2014	30-APR-2014	Apr-14	<input type="checkbox"/>
May	Month	2014	2	5	01-MAY-2014	31-MAY-2014	May-14	<input type="checkbox"/>
Jun	Month	2014	2	6	01-JUN-2014	30-JUN-2014	Jun-14	<input type="checkbox"/>
Jul	Month	2014	3	7	01-JUL-2014	31-JUL-2014	Jul-14	<input type="checkbox"/>
Aug	Month	2014	3	8	01-AUG-2014	31-AUG-2014	Aug-14	<input type="checkbox"/>
Sep	Month	2014	3	9	01-SEP-2014	30-SEP-2014	Sep-14	<input type="checkbox"/>

- Cost Management and EAM uses **Month** calendar types
- Other calendar types include week, quarter, year or adjusting periods

Inventory Calendar Definition

Enterprise Asset Management => Cost Definition => Accounting Close Cycle => Inventory Accounting Periods



Status	Period	Num	Year	From	To	Close Date
Future	Apr-15	4	2015	01-APR-2015	30-APR-2015	
Future	Mar-15	3	2015	01-MAR-2015	31-MAR-2015	
Future	Feb-15	2	2015	01-FEB-2015	28-FEB-2015	
Future	Jan-15	1	2015	01-JAN-2015	31-JAN-2015	
Future	Dec-14	12	2014	01-DEC-2014	31-DEC-2014	
Future	Nov-14	11	2014	01-NOV-2014	30-NOV-2014	
Open	Oct-14	10	2014	01-OCT-2014	31-OCT-2014	
Open	Sep-14	9	2014	01-SEP-2014	30-SEP-2014	
Open	Aug-14	8	2014	01-AUG-2014	31-AUG-2014	
Open	Jul-14	7	2014	01-JUL-2014	31-JUL-2014	

Buttons: Pending..., Values at Close, Distributions, Change Status...

- Each inventory organization has its own financial calendar
- When you open an org's accounting period it makes a copy from the G/L calendar and puts it into the inventory org's calendar

Sub-Element Item Cost Defaults

Enterprise Asset Management => Cost Definition => Setup => Sub-Elements => Defaults

Material Overhead Defaults

Material Overhead	Item Type	Activity	Basis	Rate or Amount
Proc	Buy items		Total Value	.1

Works just like Average Costing for Non-EAM Inventory Organizations

EAM Parameters

Enterprise Asset Management => Setup => Parameters

Enterprise Asset Management Parameters (EM1)

Asset Number Defaults
 Asset Serial Number Auto Generation Event Log Controls

Cost Defaults
 Cost Element Cost Category

Preventive Maintenance
 Implement From Horizon Start Date

Work Request
 Auto Approve Extended Log
 Default Asset from Employee Location Asset Number Mandatory

Work Order Defaults
 WIP Accounting Class Maintenance Wip Accounting Clas
 Work Order Prefix
 PM Work Order Prefix
 Default Department

Enable Workflow for Workorders Invoice Billable Items Only
 Enable Workflow for Safety Auto Firm on Release
 Enable Material Issue Requests Auto Firm On Create
 Value Rebuildables At Zero Cost

Account Defaults
 Maintenance Offset

Asset Move Defaults
 Intermediate Subinventory Intermediate Locator

EAM Organization Parameters

Enterprise Asset Management => Setup => Organization Parameters

Organization Parameters (EM1)

Inventory Parameters Costing Information Revision, Lot, Serial And LPN ATP, Pick, Item-Sourcing

Organization Code: EM1

Item Master Organization: Vision Operations

Calendar: Vision01

Demand Class: []

Move Order Timeout Period: []

Move Order Timeout Action: Approve automatically

Locator Control: Determined at Subinventory level

Default On-Hand Material Status: []

Enforce Locator Alias Uniqueness

Quality Skipping Inspection Control

Allow Negative Balances

Auto Delete Allocations at Move Order Cancel

Enabled Products & Features

Manufacturing Partner Organization

EAM Enabled

Process Manufacturing Enabled

WMS Enabled

WCS Enabled

LCM Enabled

EAM Organization: EM1 Seattle Maintenance

Capacity

Load Weight: [] UOM: []

Volume: [] UOM: []

EAM Organization Parameters

Enterprise Asset Management => Setup => Organization Parameters

Organization Parameters (EM1)

Inventory Parameters Costing Information Revision, Lot, Serial And LPN ATP, Pick, Item-Sourcing

Costing Organization: Seattle Maintenance

Costing Method: Average

Rates Cost Type: AvgRates

Transfer to GL: Yes

Reverse Encumbrance

Project Cost Collect. Enabled

Defer Logical Transactions

Cost Cutoff Date:

Default Material Sub-Element: Material

Material Overhead Sub-Element: Proc

Default Cost Group: CG-1597

Valuation Accounts

Material	01-000-1480-0000-000
Outside Processing	01-000-1482-0000-000
Material Overhead	01-000-1420-0000-000
Overhead	01-000-1483-0000-000
Resource	01-000-1481-0000-000
Expense	01-520-7530-0000-000

This example has separate accounts by cost element

Default Cost Accounts

Enterprise Asset Management => Setup => Organization Parameters

Used for PO and Shop Floor Deliveries

Used for Project Cost Collection

Shipping Network Organization Defaults

Enterprise Asset Management => Setup => Organization Parameters

The screenshot shows the 'Organization Parameters (EM1)' window with the 'Inter-Org Information' tab selected. The form contains the following sections:

- Inter-organization Transfer Charge:**
 - None
 - Predefined percent [] %
 - Requested value
 - Requested percent
- Inter-organization Transfer Accounts:**
 - Transfer Credit: []
 - Purchase Price Variance: []
 - Receivable: []
 - Payable: []
 - Intransit Inventory: 01-000-1480-0000-000

Defaults to the Shipping Network setup form

Shipping Network

Enterprise Asset Management => Inventory => Setup => Organizations => Shipping Networks

The screenshot displays the Oracle Shipping Networks (EM1) interface. The main window shows a search for Organization 'EM1' (Seattle Maintenance) and a table of shipping networks. The 'Other Accounts' dialog box is open, showing a table with columns for From, To, Intransit Inventory, and Profit In Inventory.

From	To	Transfer Type	FOB	Elemental Visibility Enabled	Manual Receipt at Expense Destination	Internal Order Required	Receipt Routing
EM1	FAC	Direct					
FAC	EM1	Direct					

From	To	Intransit Inventory	Profit In Inventory
EM1	FAC	01-000-1480-0000-000	
FAC	EM1	01-000-1480-0000-000	

EAM Subinventory Definition

Enterprise Asset Management => Inventory => Setup => Organizations => Subinventories

Main
tab

Expense
subinventory
example

EAM Subinventory Definition

Enterprise Asset Management => Setup => Subinventory

The screenshot shows the 'Subinventories Summary (EM1)' window with a list of subinventories on the left. The 'Bat Rchrg' subinventory is selected. The 'Subinventories (EM1)' window is open, showing details for 'Bat Rchrg' with a description of 'Fork Lift Battery Recharging Station'. The 'Accounts' tab is active, displaying a list of accounts:

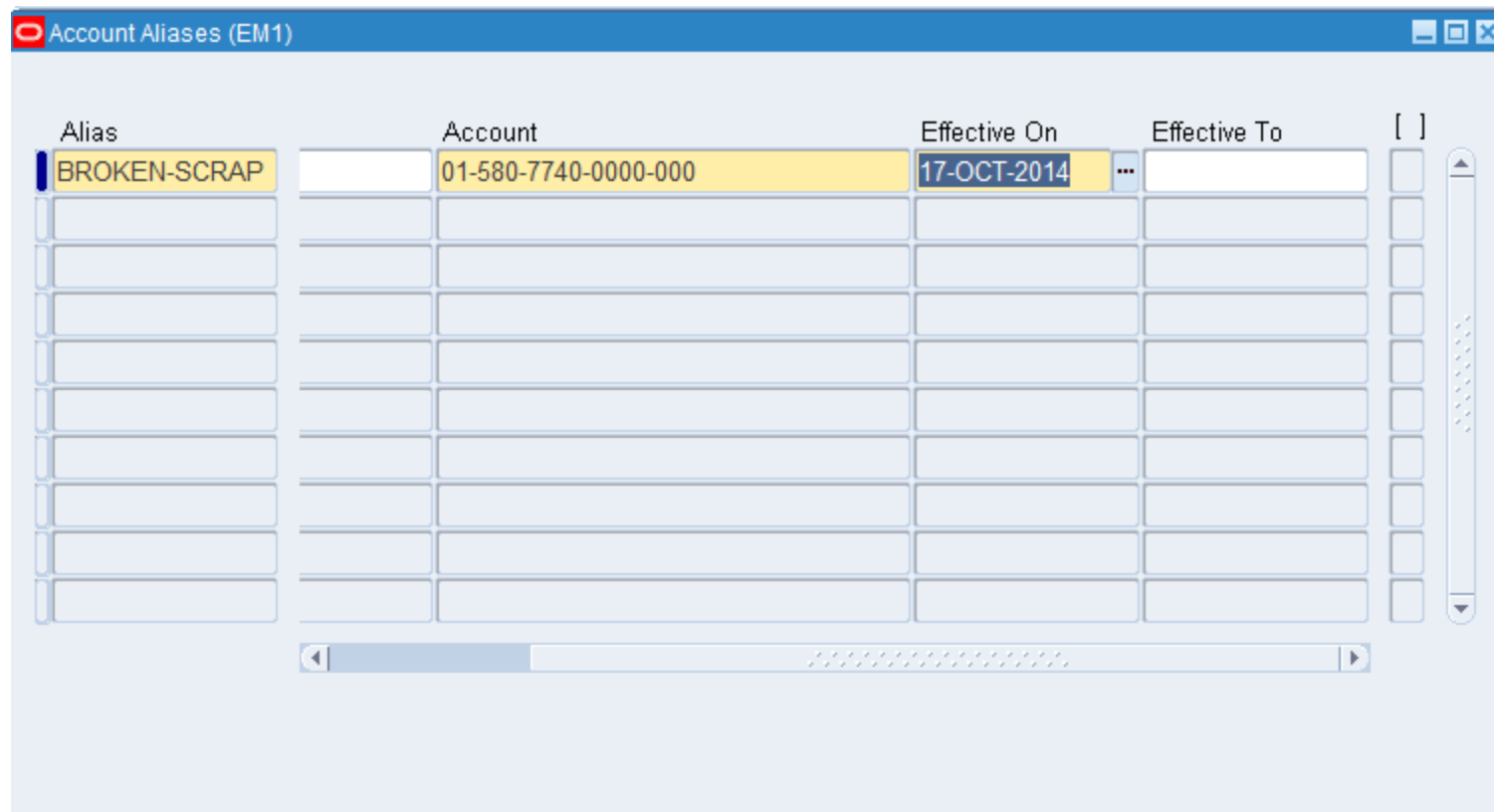
Material	01-000-1480-0000-000
Outside Processing	01-000-1482-0000-000
Material Overhead	01-000-1420-0000-000
Overhead	01-000-1483-0000-000
Resource	01-000-1481-0000-000
Expense	01-520-7530-0000-000
Encumbrance	

Annotations on the screenshot:

- A bracket groups the Material, Outside Processing, Material Overhead, and Overhead accounts, with a callout box stating: "Not used with Average Costing".
- The Expense account is highlighted in yellow, with a callout box stating: "Used for expense subinventories".

Accounting Setup – Account Aliases

Enterprise Asset Management => Inventory => Setup => Account Aliases



Alias	Account	Effective On	Effective To
BROKEN-SCRAP	01-580-7740-0000-000	17-OCT-2014	

These accounts are used for your inventory account alias transactions, as the Supply Chain/Warehouse staff choose the Account Alias and it supplies the correct accounts

Accounting Setup – Purchasing Options

Enterprise Asset Management => Inventory => Setup => Organizations => Purchasing Parameters

ORACLE Purchasing

Navigator Favorites Preferences Close Window

Purchasing Options Operating Unit Vision Operations

* Indicates required field

Document Control

Price Tolerance (%) 10

Price Tolerance Amount (USD)

Enforce Full Lot Quantity Advisory

Receipt Close Point Received

Cancel Requisitions Optionally

SBI Buying Company Identifier

Output Format PDF

Maximum Attachment Size (in MB) 2

Email Attachment Filename Attachments.zip

Enforce Price Tolerance (%)

Enforce Price Tolerance Amount

Display Disposition Messages

Notify if Blanket PO exists

Allow Item Description Update

Enforce Buyer Name

Enforce Supplier Hold

Gapless Invoice Numbering

RFQ Required

Group Shipments

Document Defaults

Requisition Import Group-By Item

Internal Requisition Order Type Mixed

Internal Requisition Order Source Internal

Receipt Close Tolerance (%) 0

Invoice Close Tolerance (%) 0

Quote Warning Delay 7

Line Type Goods

Rate Type Corporate

Match Approval Level 3 Way

Price Break Type Cumulative

Price Type Variable

Minimum Release Amount (USD) 1.00

Set up your
 Expense
 A/P
 Accrual
 Account

Receipt Accounting

Accrue Expense Items Period End

Accrue Inventory Items At Receipt

Automatic Offset Method None

* Expense AP Accrual Account 01-000-2220-0000-000

Company-Department-Account-Sub-Account-Product

Accounting Setup – Receiving Options

Enterprise Asset Management => Inventory => Setup => Organizations => Receiving Parameters

ORACLE Navigator Favorites Preferences Help Close Window

Inventory Organization: Seattle Maintenance

* Indicates required field

Enforce Ship-To: None
 ASN Control Action: None
 * Receipt Days Early: 10
 * Receipt Days Late: 10
 Receipt Days Exceed-Action: None
 * Over Receipt Tolerance (%): 10
 Over Receipt Action: None
 RMA Receipt Routing: Direct Delivery
 Receipt Routing: Direct Delivery
 Allow Substitute Receipts

Allow Unordered Receipts
 Allow Express Transactions
 Allow Cascade Transactions
 Allow Blind Receiving
 Validate Serial Numbers on RMA Receipts

Receipt Number Generation: Automatic
 Receipt Number Type: Numeric
 * Next Receipt Number: 2050
 Validate Lots on RMA Receipts: Restricted

Accounting

* Receiving Inventory Account: 01-000-2215-0000-000
Company-Department-Account-Sub-Account-Product

Retroactive Price Adjustment Account:
Company-Department-Account-Sub-Account-Product

* Clearing Account: 01-000-2215-0000-000
Company-Department-Account-Sub-Account-Product

Cost Factors

Interface to Advanced Pricing
 Interface to Transportation Execution

Set up your Receiving Inspection Account

Accounting Setup – WIP Accounting Classes

Enterprise Asset Management => Setup => WIP => WIP Accounting Classes

WIP Accounting Classes (EM1)

Class:

Description:

Type:

Inactive On:

Accounts

	Valuation	Variance
Material	<input type="text" value="01-580-5320-0000-000"/>	<input type="text" value="01-580-5320-0000-000"/>
Material Overhead	<input type="text" value="01-580-5320-0000-000"/>	
Resource	<input type="text" value="01-580-5321-0000-000"/>	<input type="text" value="01-580-5321-0000-000"/>
Outside Processing	<input type="text" value="01-580-5322-0000-000"/>	<input type="text" value="01-580-5322-0000-000"/>
Overhead	<input type="text" value="01-580-5323-0000-000"/>	<input type="text" value="01-580-5323-0000-000"/>
Standard Cost		
Bridging		
Expense		
Estimated Scrap	<input type="text" value=""/>	
Encumbrance	<input type="text" value=""/>	

Costing

Completion Cost Source:

System Option:

Cost Type:

Typically for EAM both Valuation and Variance Accounts are set to expense accounts

EAM Accounting Flows

Basic Accounting for EAM – PO Receipt

– Matl & Matl Ovhd Sub-Elements

<u>Transaction</u>	Receiving Value	Inventory A/P Accrual
PO Receipt	100	100
Delivery to Stock	100	
Delivery to Stock	120	
Mat'l Ovhd Absorption		20

Basic Accounting for EAM

– Issue Materials for Repair

<u>Transaction</u>	<u>Parts Storeroom</u>	<u>WIP Job Accounts</u>
Issue Materials	120	120

Basic Accounting for EAM

– Earn Labor for Repair

<u>Transaction</u>	<u>WIP Job Accounts</u>	<u>Resource Absorption</u>
Res. Absorption	100	100
Resource Ovhd (50% dept. Rate)	50	
Dept. Overhead Absorption		
	<u>Dept. Ovhd Absorption</u>	
		50

Basic Accounting for EAM

– Completed Repair

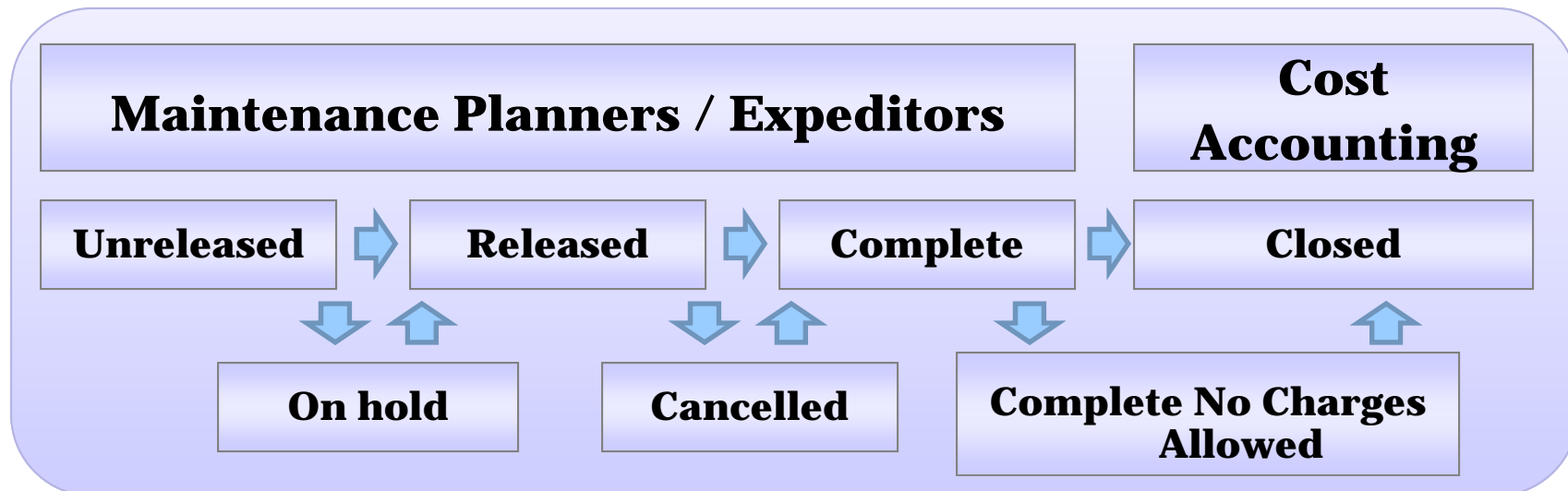
<u>Transaction</u>	<u>Spares Storeroom</u>	<u>WIP Job Accounts</u>
Complete Repaired Unit	370	370

Source	Amount
Issue Materials	120
Earn Labor	150
Receive Services to WIP	<u>100</u>
Total:	370

EAM WIP Job Costing

Work Order Statuses and Transactions

- WIP discrete jobs goes through the following steps or statuses:



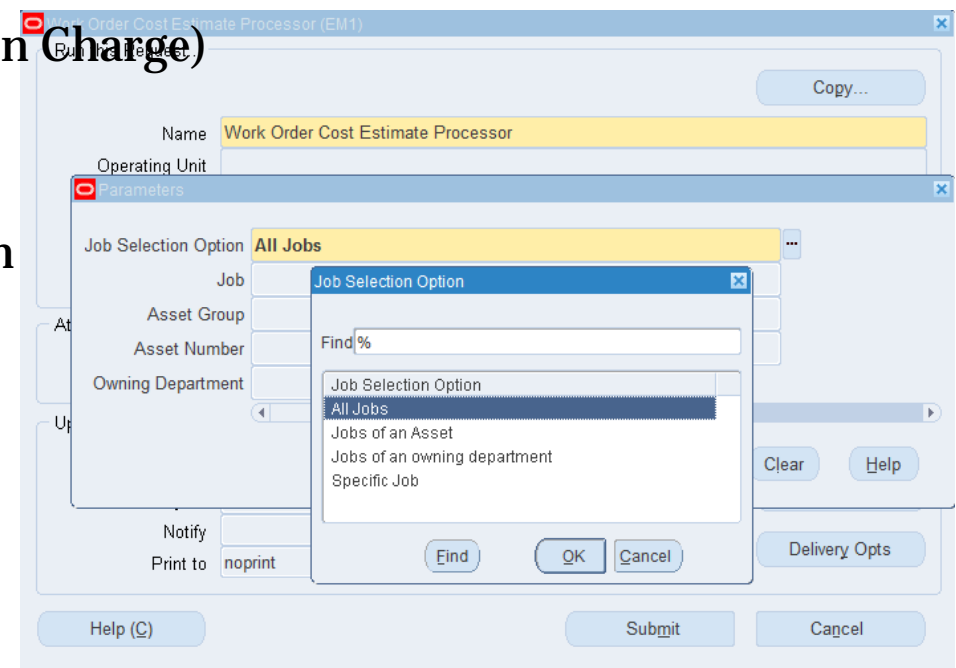
- Materials, labor, requisitions may be charged if the work order is Released
- Complete No Charges Allowed** is sometimes used as well
- If a formal Cost Accounting group exist they typically close the jobs once the status reaches **Complete** or **Complete No Charges Allowed**

Work Order Cost Estimates for EAM

Enterprise Asset Management => Cost => Work Order Cost Estimate

□ Work Order Definition – Cost Estimates for:

- Materials (Stock)
- Materials (Direct Requisitions)
- Routing (Work Operations)
 - Internal Labor
 - Internal Equipment (Non Charge)
 - Vendor Labor
 - Vendor Equipment
- Recalculate Estimates Option



Work Order Cost Estimates for EAM

Enterprise Asset Management => Cost => Work Order Value Summary

Work Order Cost Estimate and Valuation (forms or self-service)

Maintenance Work Orders (EM1)

Select & Estimate	Work Order	Estimation Status	Asset Activity	Asset Group	Asset Number	Rebuild Item	Rebuild Asset N
<input type="checkbox"/>	57888	Complete	Change Fork Lift B;	Fork Lifts	FL1030		
<input type="checkbox"/>	57874	Complete	Change Fork Lift B;	Fork Lifts	FL1030		
<input type="checkbox"/>	EM181742	Complete	Change Fork Lift B;	Fork Lifts	FL1030		
<input checked="" type="checkbox"/>	207564	Complete	Change Fork Lift B;	Fork Lifts	FL1020		
<input type="checkbox"/>	57861	Complete	Change Fork Lift B;	Fork Lifts	FL1020		
<input type="checkbox"/>	57860	Complete	Change Fork Lift B;	Fork Lifts	FL1020		
<input type="checkbox"/>	57854	Complete	Change Fork Lift B;	Fork Lifts	FL1020		
<input type="checkbox"/>	57853	Complete	Change Fork Lift B;	Fork Lifts	FL1020		

Description: Department:
 Class: Status:

Accounting Information by Period
 From Period: To Period:

Buttons: Select All, Re-estimate Work Order, Value Summary (circled in red)

Work Order Cost Estimates for EAM

Enterprise Asset Management => Cost => Work Order Value Summary

Work Order Actual Costs (forms or self-service)

Maintenance Work Order Value Summary (EM1) - 207564

Period From: 01-DEC-2005 Period To: 31-OCT-2014 Refresh

Asset Group	Fork Lifts	Completion Date	07-DEC-2005 11:35:48		
Asset Number	FL1020	Work Order Status	Complete		
Asset Activity	Change Fork Lift Battery	Parent Work Order			
Rebuild Item		Estimation Status	Complete		
Rebuild Asset Number		Last Estimate Id	-1		
Owning Department	W-Maint	Last Estimate Date	08-DEC-2005 15:42:54		

Actual Costs Estimates Variances

Cost Category	Total	Material	Labor	Equipment
Maintenance	20.10	0.10	12.50	7.50
Job Total	20.10	0.10	12.50	7.50

Details

Work Order Cost Estimates for EAM

Enterprise Asset Management => Cost => Work Order Value Summary

Work Order Estimated Costs (forms or self-service)

Maintenance Work Order Value Summary (EM1) - 207564

Period From: 01-DEC-2005 Period To: 31-OCT-2014 Refresh

Asset Group	Fork Lifts	Completion Date	07-DEC-2005 11:35:48
Asset Number	FL1020	Work Order Status	Complete
Asset Activity	Change Fork Lift Battery	Parent Work Order	
Rebuild Item		Estimation Status	Complete
Rebuild Asset Number		Last Estimate Id	-1
Owning Department	W-Maint	Last Estimate Date	08-DEC-2005 15:42:54

Actual Costs Estimates Variances

Cost Category	Total	Material	Labor	Equipment
Maintenance	17.60	0.10	10.00	7.50
Job Total	17.60	0.10	10.00	7.50

Details

Work Order Cost Estimates for EAM

Enterprise Asset Management => Cost => Work Order Value Summary

Work Order Actuals vs. Estimated Costs (forms or self-service)

Maintenance Work Order Value Summary (EM1) - 207564

Period From: 01-DEC-2005 Period To: 31-OCT-2014 Refresh

Asset Group	Fork Lifts	Completion Date	07-DEC-2005 11:35:48
Asset Number	FL1020	Work Order Status	Complete
Asset Activity	Change Fork Lift Battery	Parent Work Order	
Rebuild Item		Estimation Status	Complete
Rebuild Asset Number		Last Estimate Id	-1
Owning Department	W-Maint	Last Estimate Date	08-DEC-2005 15:42:54

Actual Costs Estimates **Variances**

Cost Category	Total	Material	Labor	Equipment
Maintenance	<2.50>	0.00	<2.50>	0.00
Job Total	<2.50>	0.00	<2.50>	0.00

Details

Work Order Cost Details for EAM

Enterprise Asset Management => Cost => Work Order Value Summary

□ Work Order Cost Details (form or self service)

Cost Details By Operation (EM1) - 207564, Maintenance

Asset Group	Fork Lifts	Estimation Status	Complete
Asset Number	FL1020	Completion Date	07-DEC-2005 11:35:48
Asset Activity	Change Fork Lift Battery	Owning Department	W-Maint
Rebuild Item		Work Order Status	Complete
Rebuild Asset Number		Parent Work Order	
Period From	01-DEC-2005	Period To	31-OCT-2014

Actual Costs		Estimates	Variances		
Department Code	Operation Sequence Number	Total	Material	Labor	Equipment
W-Maint	20	0.00	0.00	0.00	0.00
W-Maint	40	0.00	0.00	0.00	0.00
W-Maint	10	20.10	0.10	12.50	7.50
W-Maint	30	0.00	0.00	0.00	0.00
	Total	20.10	0.10	12.50	7.50

Work Order Cost Distributions for EAM

Enterprise Asset Management => Cost => Work Order Value Summary

Work Order Cost Distributions (form or self service)

WIP Transaction Distributions (EM1) - 207564, 10

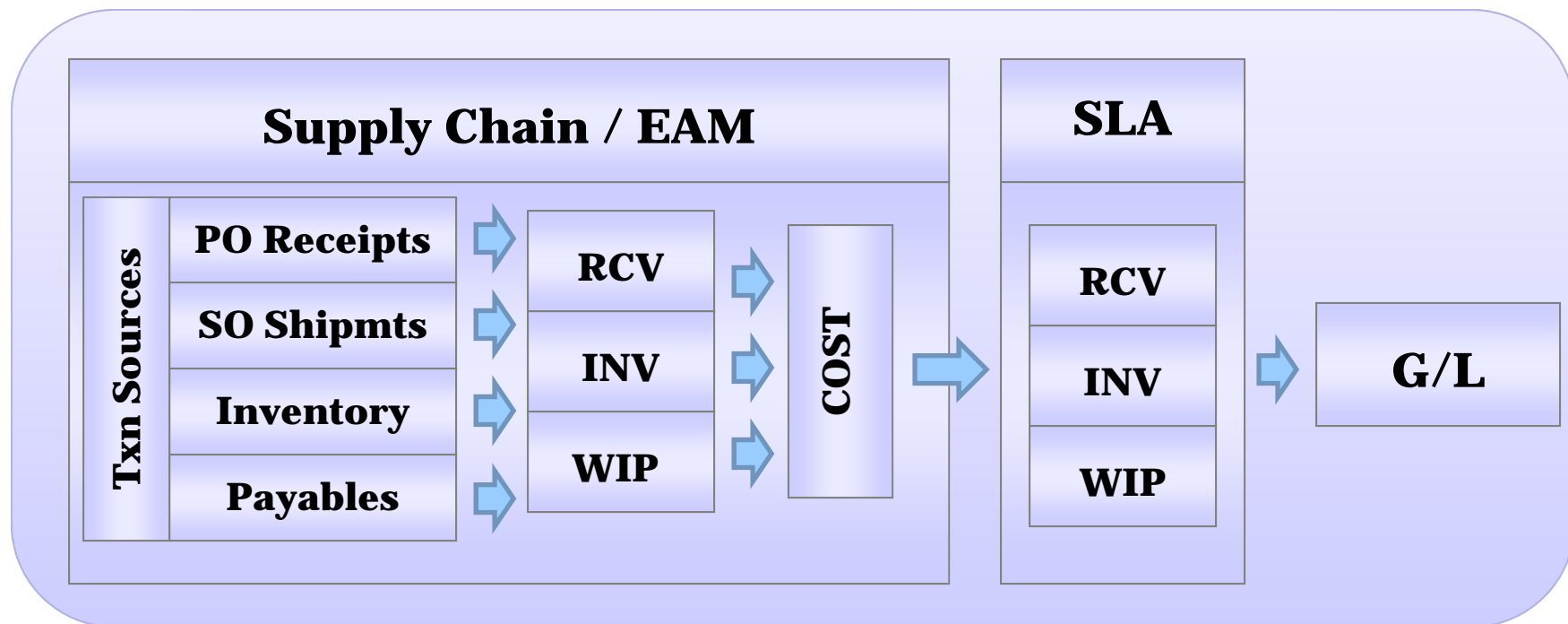
Transaction Date	Account	Transaction Value	Item / Sub Element	Revision	Transaction Type
08-DEC-2005 15:5	01-580-5321-0000-000	7.50	FKTK		Resource transaction
08-DEC-2005 15:5	01-580-5810-0000-000	<7.50>	FKTK		Resource transaction
08-DEC-2005 15:5	01-580-5321-0000-000	12.50	FliftMech		Resource transaction
08-DEC-2005 15:5	01-000-5810-0000-000	<12.50>	FliftMech		Resource transaction
08-DEC-2005 15:4	01-580-5320-0000-000	0.10	Shop Rags		WIP Issue
08-DEC-2005 15:4	01-000-1480-0000-000	<0.10>	Shop Rags		WIP Issue

Work Order	207564	Item/Sub Element	FKTK	UOM	HR
Asset Group	Fork Lifts	Revision		Quantity	1
Asset Number	FL1020	Basis	Item	Unit Cost	7.50000
Account	01-580-5321-0000-000			Value	7.50

Subledger Accounting

Subledger Accounting & Transaction Processing

- Release 12 has two transaction models
 - RCV, INV, WIP Transactions
 - SLA transactions – “Mirror image” of the original transactions

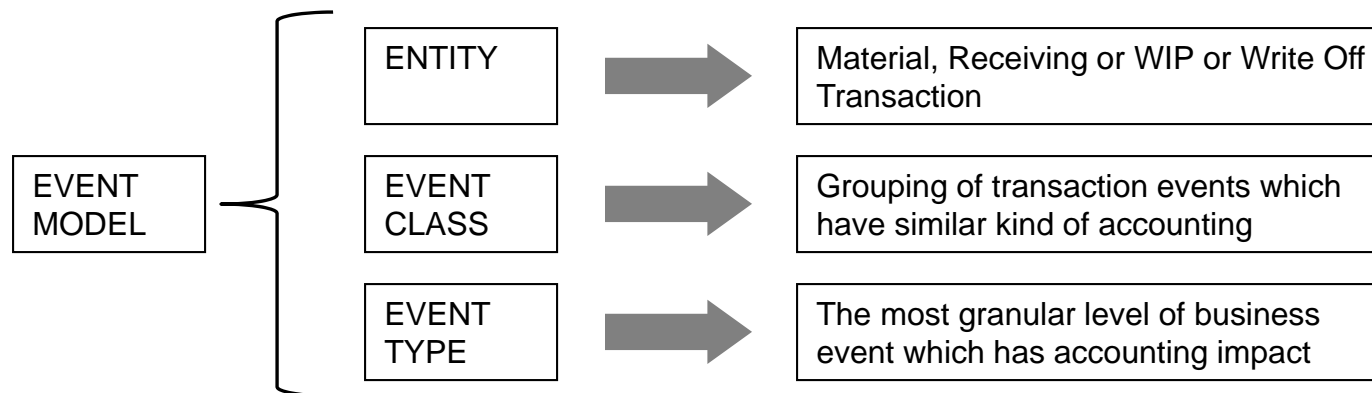


Key Concepts for SLA Transaction Types

Event Model:

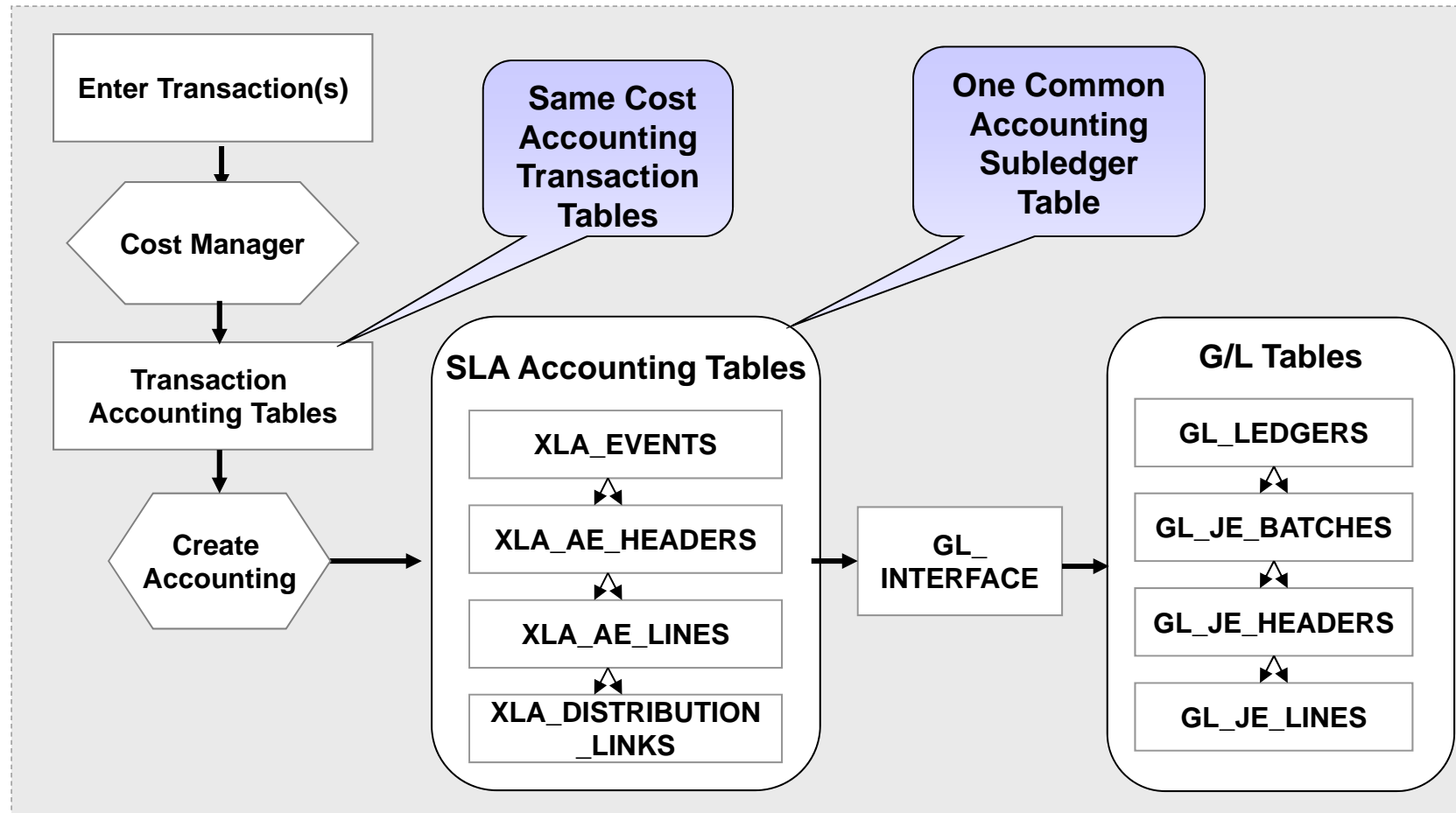
A set of subledger transaction types with common characteristics

- Entity : Denotes the transaction source
- Event Class: Classifies transaction types by accounting rule
- Event Type: for each transaction type, defines possible actions with accounting significance



Subledger Accounting Basics

SLA Basic Architecture



Common EAM SLA Solutions

- **Use a Common EAM Inventory Org and:**
 - Use SLA Rules to drive the company number, based on Asset or Asset Location information

- **Charge Maintenance expenses based on the item's PO Category by using PO Expense Account Rules:**
 - Corrects the default accounts coming from the WIP Accounting Class
 - SLA custom sources with user-defined ADRs and journal line definitions

- **Charge Maintenance expenses based on the purpose of the expense or task:**
 - Use the description in the Standard Operations to hold the Accounts
 - SLA custom sources with user-defined ADRs and journal line definitions

Recommended Papers for EAM SLA Solutions

Douglas Volz, Douglas Volz Consulting

(<http://www.volzconsulting.com/resources.html>)

- *“Subledger Accounting for Discrete & EAM Cost Accounting: Product Line and Expense Accounting Made Easy Through SLA”*
(Collaborate13)

Robert J. Flick, Onplan Solutions LLC

- *“Simplify Enterprise Asset Management Product Line Accounting Using E-Business Suite Release 12 Subledger Accounting”*

Summary – EAM Costing

- Cost Elements
 - Five for items in inventory, three different ones for EAM jobs
- Uses same cost processors for inventory and WIP transactions
- EAM WIP has an additional Shop Floor Delivery transaction
- Best to use EAM Oracle Responsibilities (not Cost responsibilities)
- Do try to keep Account Charging as easy to use as possible
- SLA can be your friend for EAM

Any Questions?



Doug Volz

doug@volzconsulting.com

www.volzconsulting.com

+1 510 755-7050

Douglas Volz (doug@volzconsulting.com)

Professional Background

Doug Volz is a Senior Architect and Business Advisor for Oracle EBS projects, specializing in Cost Management and Intercompany processes. He has over 35 years accumulated experience, including 5 years in Oracle Development (co-designing Oracle Cost Management), 19 years implementing Oracle EBS in multiple countries and 12 years in industry for Cost and Accounting Management positions. His Manufacturing and Cost systems experience covers project management, software design/development, delivery and consulting services, for both Oracle Corporation and multiple international consulting firms. Prior to his systems career, Mr. Volz also held management accounting positions for telecommunications, defense and electronics companies.

In his consulting roles, Doug has served over 100 clients. Many of these were multi-org, multi-currency with global footprints and intercompany accounting requirements. Countries include US, Mexico, UK, Netherlands, Belgium, Taiwan, PRC, Norway, Japan, Italy, Switzerland and Germany.

Doug has been recognized as the 2014 OAUG Member of the Year. He leads the OAUG Cost Management Special Interest Group and freely gives out valued business advice to his SIG members and to the Oracle community at large. Doug also presents at OAUG Collaborate, UKOUG and Oracle OpenWorld conferences. In addition he advises and participates on Oracle Customer Advisory Boards and frequently meets with the Oracle Cost Development team.

Core Expertise

- ▣ Multi-organization, Multi-currency Global Implementations
- ▣ Cost Accounting Business Solutions
- ▣ Project Management and Senior Project Advisor
- ▣ Core manufacturing and distribution processes
 - ▶ Cost Management
 - ▶ Inventory
 - ▶ Bills of Material
 - ▶ WIP

Experience

- ▣ Sample of clients served:
 - Beckman Coulter (US)
 - Celgene (US, Switzerland)
 - Garlock Sealing Tech. (US, Germany)
 - Logitech (US, Taiwan, P.R.C.)
 - Matsushita (UK, Mexico)
 - NTL (UK, now Virgin Media)
 - Onninen AS (Norway)

End of Presentation