Subledger Accounting for Discrete & EAM Cost Accounting:

Product Line and Expense Accounting Made Easy Through SLA

April 10, 2013

Session 11387

Douglas A. Volz
Douglas Volz Consulting
doug@volzconsulting.com
www.volzconsulting.com

COLLABORATE13
TECHNOLOGY AND APPLICATIONS FORUM FOR THE ORACLE COMMUNITY

Helping people using Oracle Applications since 1990

DOUGLAS VOLZ Consulting, Inc.

Doug Volz

Helping people use Oracle since 1990 for Cost Accounting & related Financials, MFG and EAM modules

Professional Summary

- 30+ years of industry, design and consulting experience, specializing in design, implementation and project delivery for Cost Management business solutions
- Specific areas of expertise:
  - Profit in inventory
  - Intercompany
  - A/P accruals
  - WIP analysis
  - Multi-org inventory reporting
  - Inventory reconciliation
  - Product Line & Margin analysis
  - Cost Rollup and Update
- Presenter at Collaborate (OAUG) and UKOUG since 1996
- Multi-national experience in twelve countries

+1 510 755 7050
doug@volzconsulting.com
www.volzconsulting.com

Qualification Summary

- Former co-designer for Oracle Cost Management
- Lead the OAUG Cost Management Special Interest Group
- Prior Accounting and Cost Management industry experience

Douglas Volz Consulting, Inc.

- Douglas Volz Consulting started in 2005 to provide:
  - Cost Accounting Business Solutions
  - Cost Accounting System Designs
  - Procure to Pay Business Improvements
  - Project Management and Advisory Services
  - Cost Reporting Solutions

Sample Project Experience:

MERCURY #1 On The Water

onninen

BECKMAN COULTER

Celgene

PLACON WHEN PACKAGING MATTERS

sds

Learning Points

- Review the business requirements for discrete product line accounting and expense accounting
- Understand how EAM requirements are similar to discrete expense accounting
- Understand basic concepts for Subledger Accounting (SLA)
- Learn how to use SLA for product line accounting for inventory, COGS and variance accounting
- Learn how to use SLA for EAM and Cost Management

Agenda

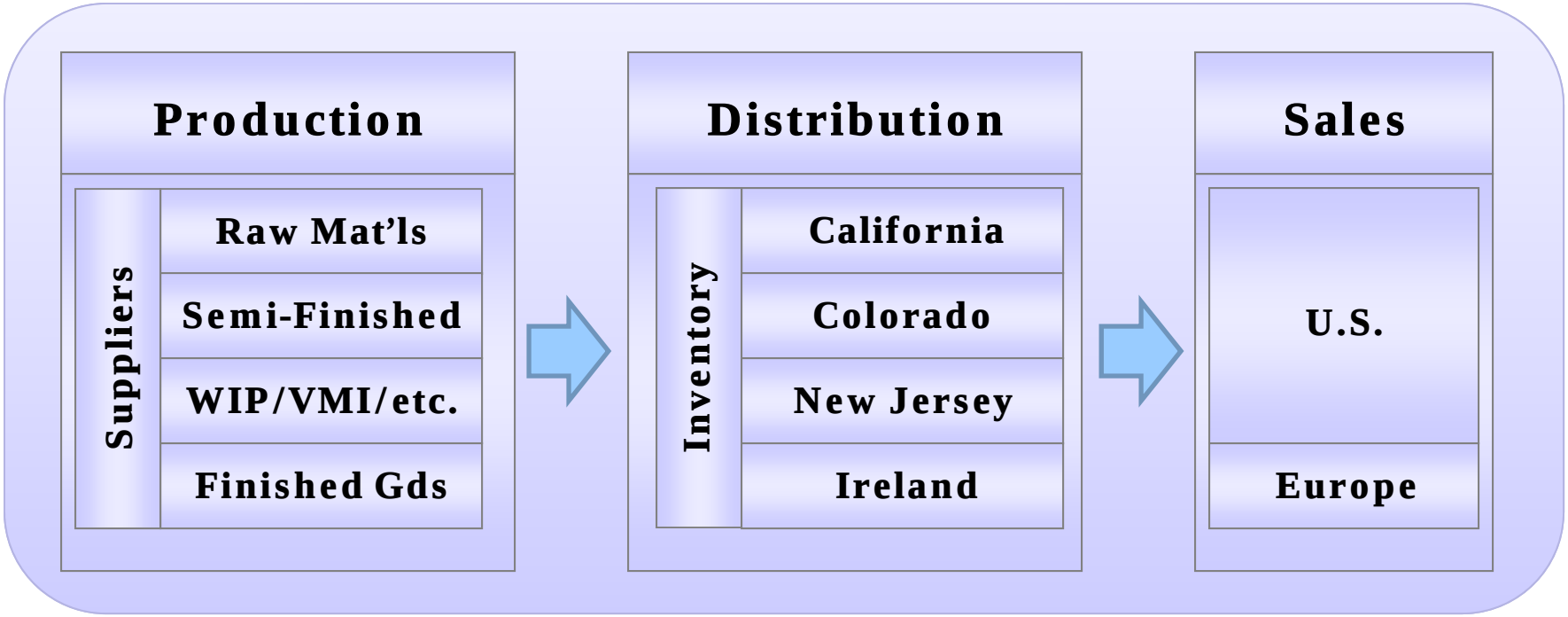
- Overview for business requirements for product line accounting, EAM and expense accounting
- Which SLA approach is best? Mapping sets? Standard sources, custom sources for expenses, inventory and variances? Use of Category Accounts?
- Primer for using Subledger Accounting
- SLA solution for product line accounting
- SLA solutions for EAM & expense accounting
- Appendix

Business Requirements Overview

Product Line Accounting

Product Line Accounting (or PLA)

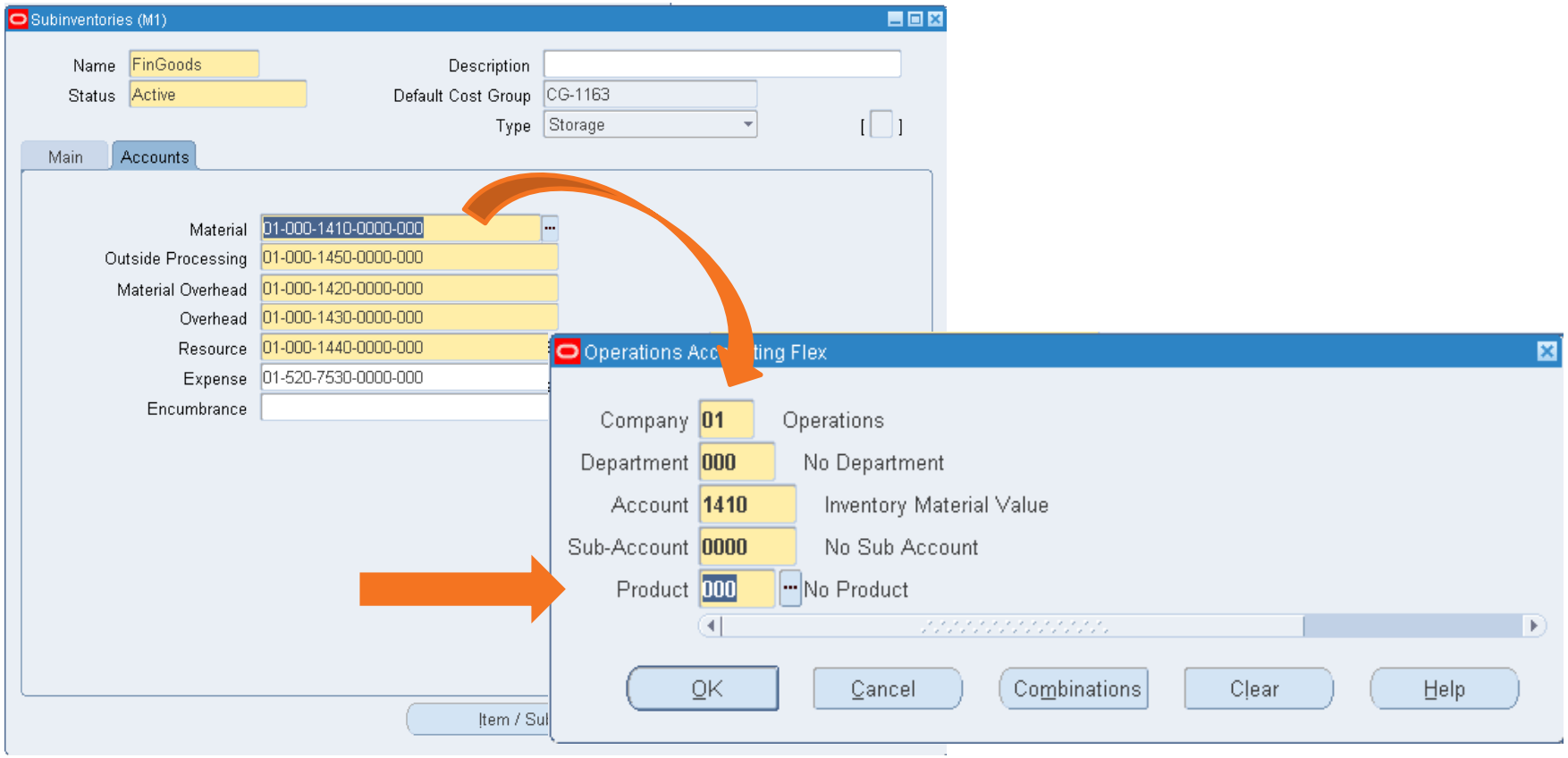
- Suppose you make and sell different types of products
- With subinventory & WIP you can account for inventory location or type



Asset Subinventories

Menu path: Cost Management => Setup => Account Assignments => Subinventories

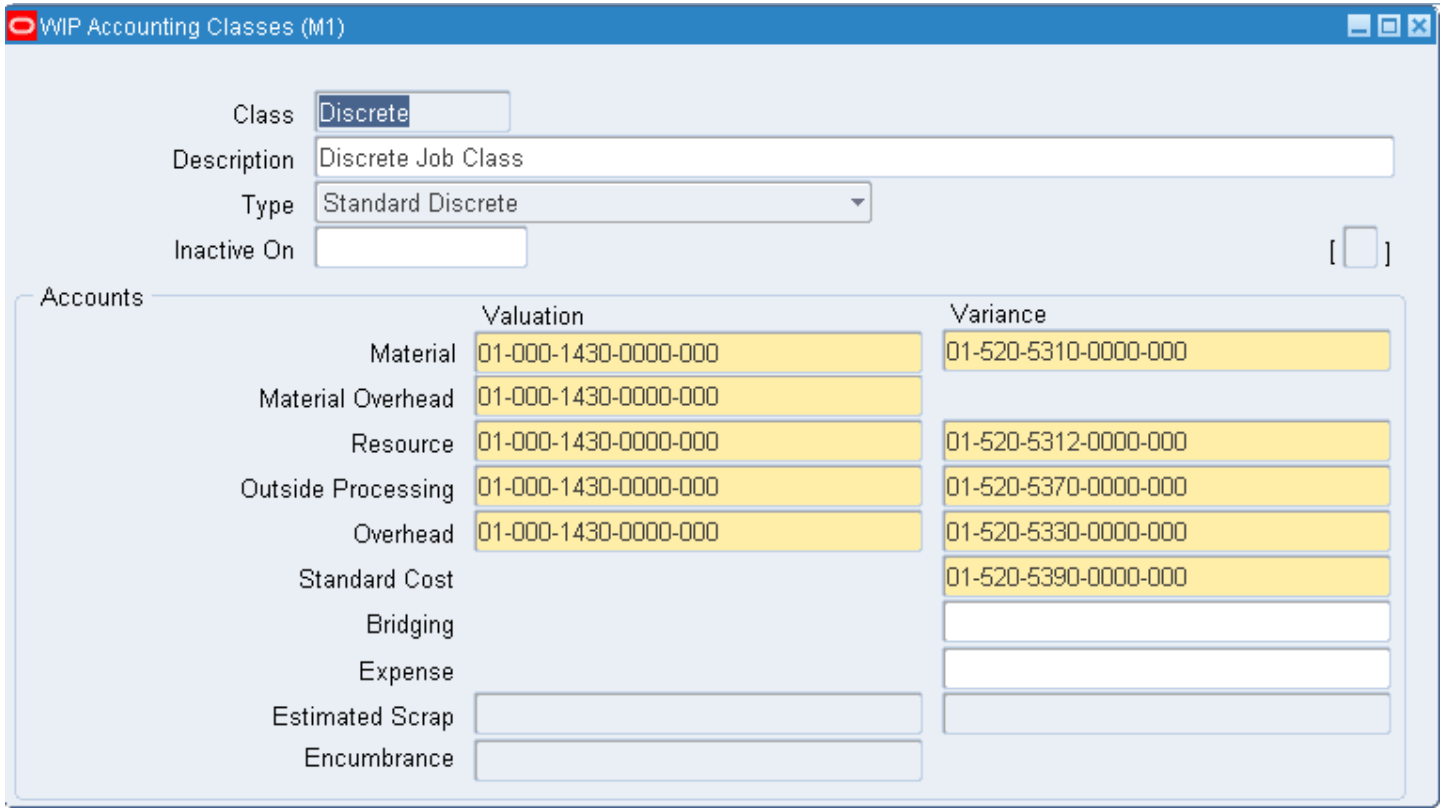
- With subinventories you can account for location or type or product



Asset WIP Classes

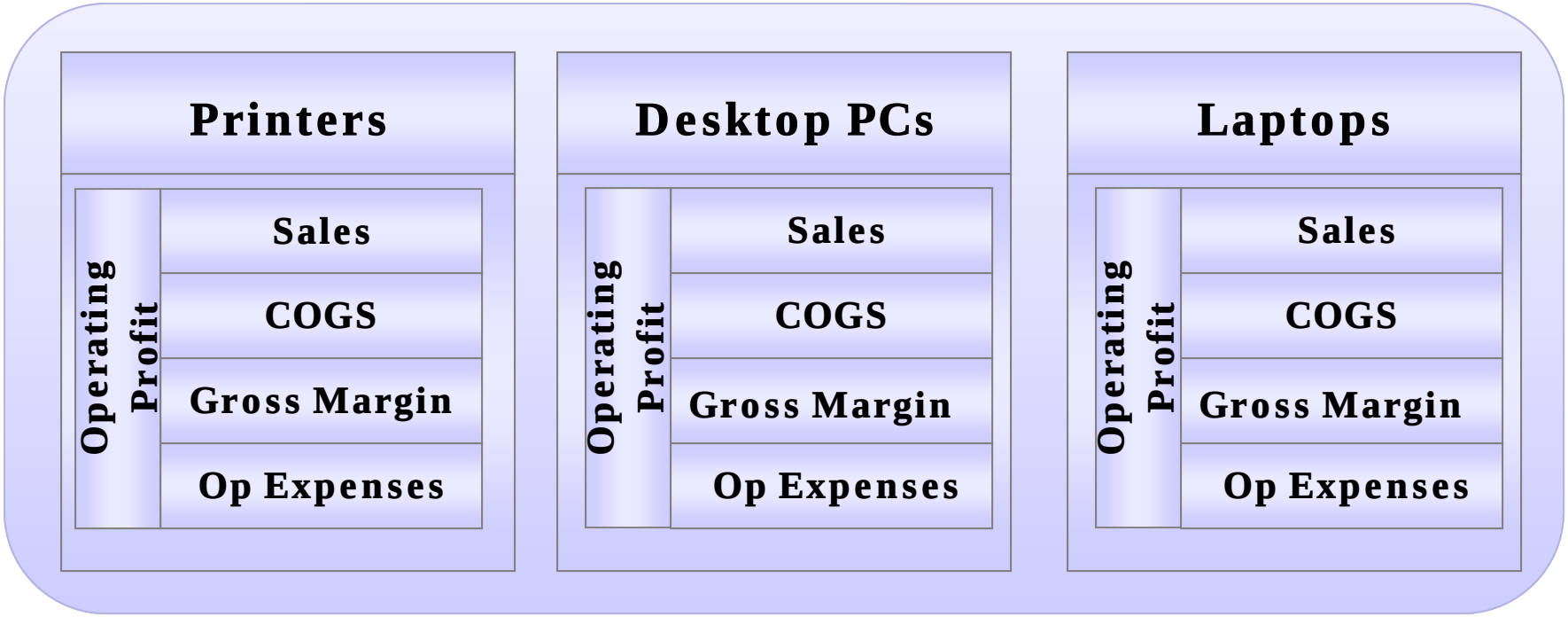
Menu path: Cost Management => Setup => Account Assignments => WIP Accounting Classes

- With WIP you can account for location or type or product – but not all three



But What About?

- Profit and Loss Statements by Product Line with Location and Type?
- Inventory Value by Product Line with Location and Type?



But What About?

- Regional or Country Inventory Value or P&L by Product Line?

Which Approach is Best for Product Line Accounting?

Product Line Inventory Accounting

- Lots of choice but no consistency with standard functionality

Standard Functionality						Custom
Type of Inventory	Workflow (Account Generator)	Auto Acct'g (A/R)	Category Accounts (Std Use)	Cost Hook	SLA Std Source	SLA Custom Source
Receiving				Matl Entries Only	Item Expense Account	
Stores/Subinv					Cat Acct	
WIP						
Intransit					Cat Acct	

If using WMS or PJM you can only account by Cost Group, not by Cost Group and Category or Cost Group and Subinventory

Custom Sources based on one data element: item master COGS account

Product Line Profit & Loss Accounting

- Lots of choice but no consistency with standard functionality

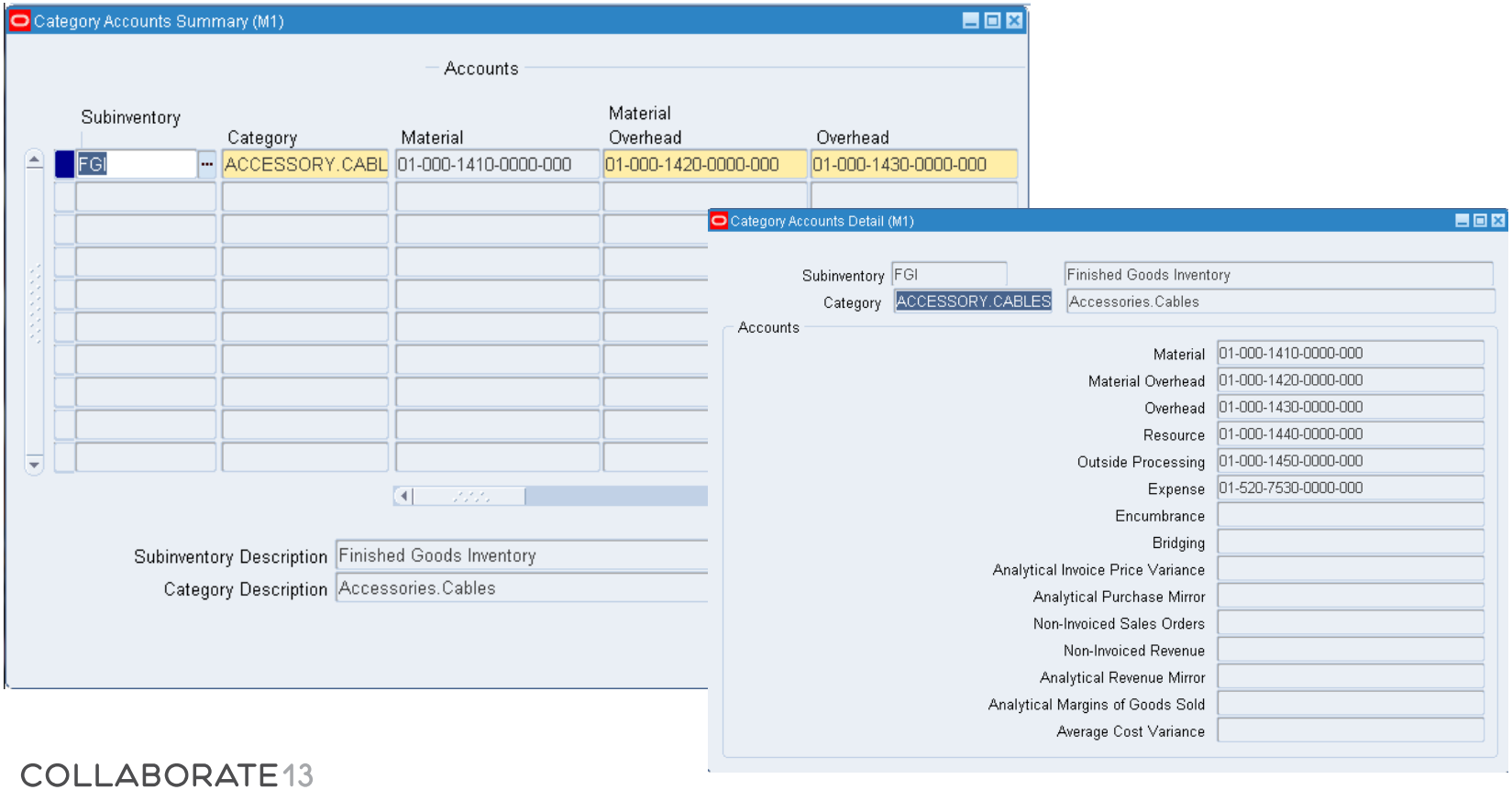
Standard Functionality						Custom
P&L Element	Workflow (Account Generator)	Auto Acct'g (A/R)	Category Accounts (Std Use)	Cost Hook	SLA Std Source (Cat Acct)	SLA Custom Source
Sales Revenue						
COGS					Cat Acct	
PPV					Cat Acct	
IPV						
WIP Scrap					Cat Acct	
WIP Variances						
Acc't Aliases					Cat Acct	

Custom Sources based on item master COGS account

Why Not Use Category Accounts?

Menu path: Cost Management => Setup => Categories => Category Accounts

- Difficult to maintain
  - Must enter both Subinventory & Category information



Why Not Use Category Accounts?

- With SLA and category accounts:
  - Subledger Accounting can use:
    - Category Accounts with category setup and standard sources. For PPV use "Product Line Accounting Category purchase order Mirror Account" on your Account Derivation Rule (ADR)
    - Or use a DFF assigned to a category or item, with a Mapping Set and SLA setups for your Account Derivation Rule (ADR)
    - Collaborate 2009 Presentation
      "Cost Accounting As You Want It - R12 Cost Accounting with SLA"
- But Receiving, WIP Valuation and WIP Variances cannot use Category Accounts with a standard SLA source
- And even worse, Receiving, Inventory and WIP don't share any other standard SLA sources

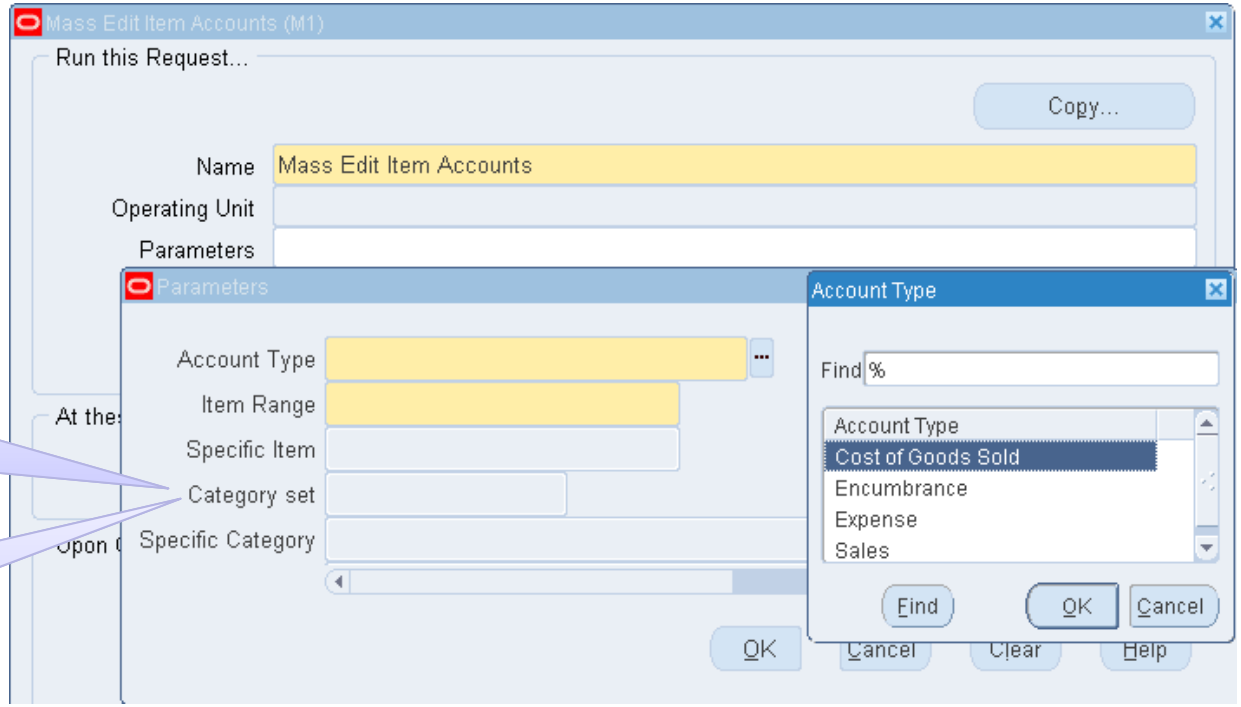
Choose the Easy to Maintain Approach

Menu path: Cost Management => Cost Mass Edits => Mass Edit Item Accounts

- Use item master accounts for product line information
  - Since R10 (1993) you can mass edit the following Item Master Accounts:
    - Cost of Goods Sold
    - Encumbrance
    - Expense
    - Sales

Set your item COGS account by Category

Works best if Category set at Master level



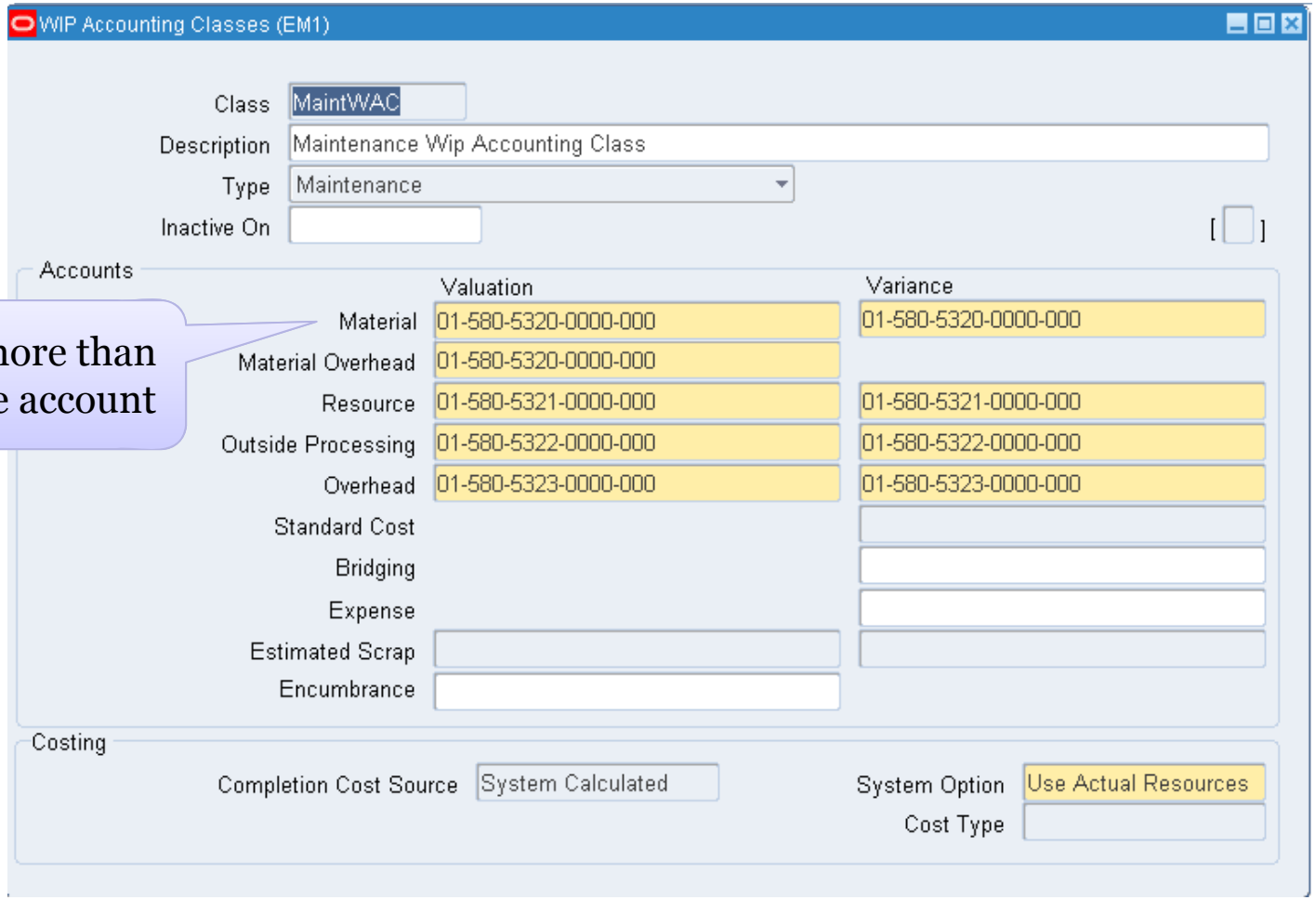
Business Requirements Overview

EAM Expense Accounting

Expense Accounting for EAM

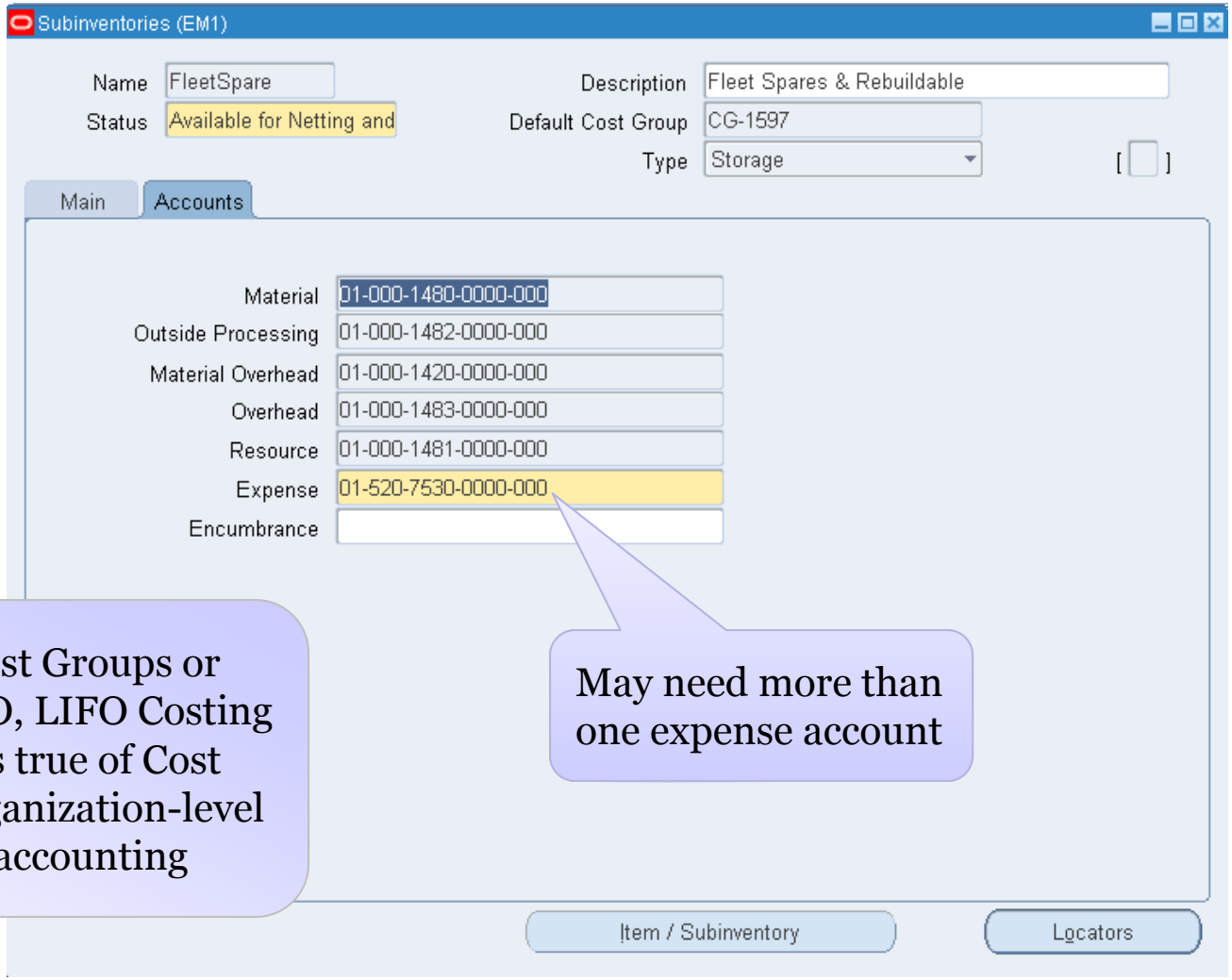
- Maintenance costs are usually expensed
- How? Physical Flow:
  - Issue materials to EAM work orders (which are expense jobs)
  - Receive goods to expense subinventories
  - Issue goods using Inventory Account Aliases
- Challenges
  - One expense account for per subinventory
  - One expense account per Account Alias
  - One account for material usage on EAM work orders
  - Desirable to have centralized maintenance with one EAM org

EAM WIP Accounts



May need more than one expense account

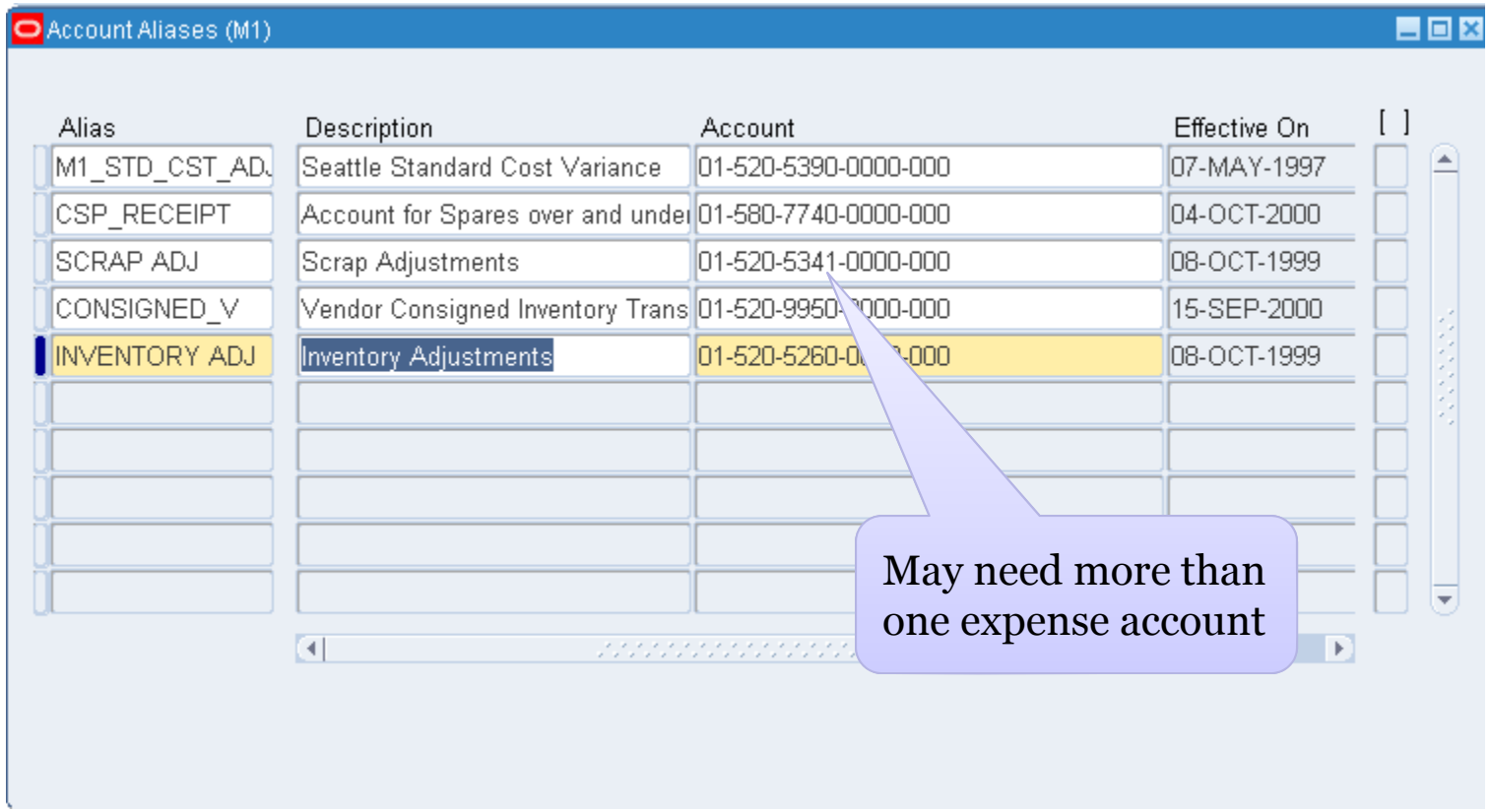
Expense Subinventory Accounting



If using Cost Groups or Average, FIFO, LIFO Costing the same is true of Cost Group or Organization-level expense accounting

May need more than one expense account

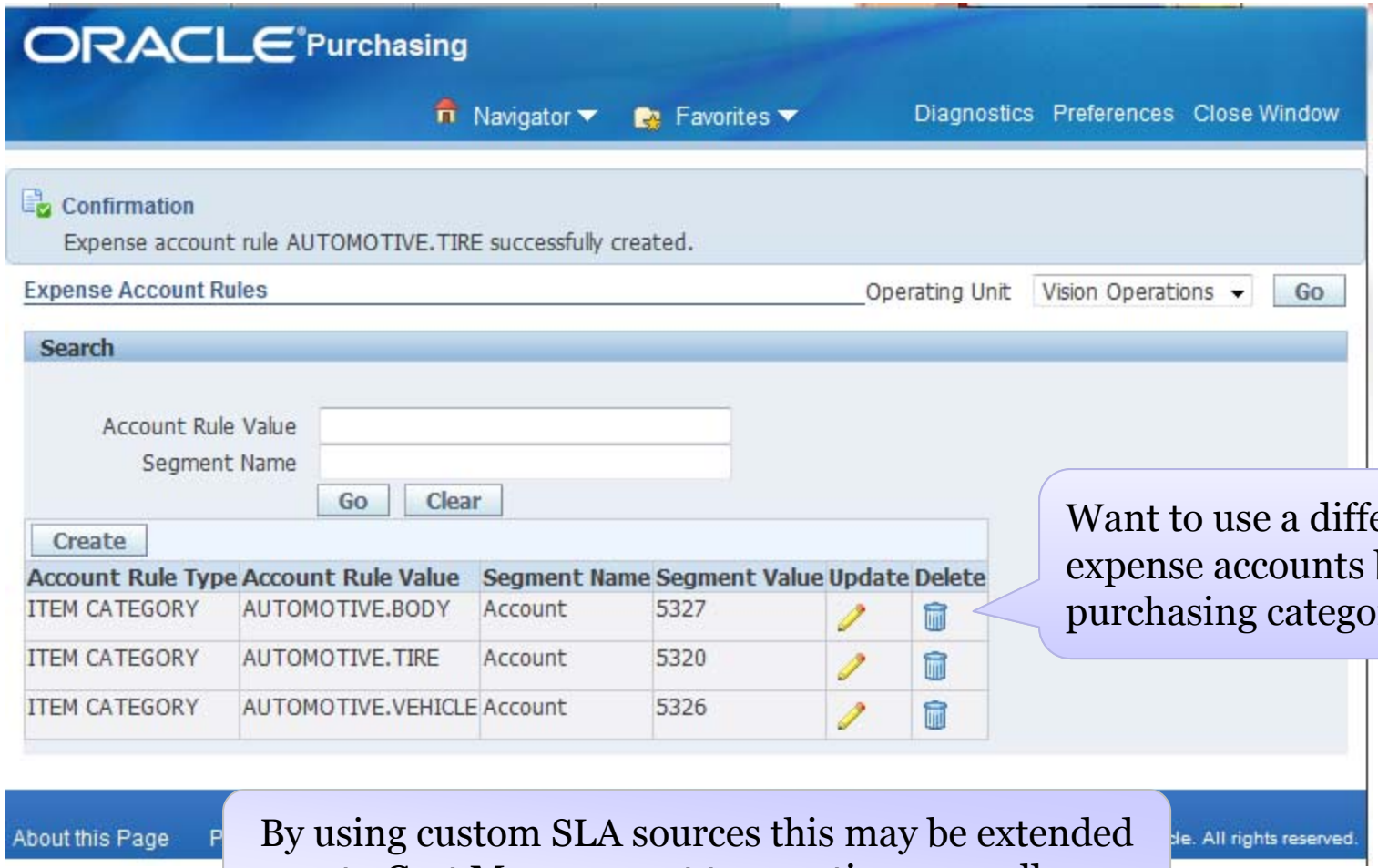
Account Alias Setup



Approach to Consider for Expense Accounting

PO Expense Accounts by Category

Menu path: Purchasing => Setup => Financials => Accounting => Expense Account Rules



Want to use a different expense accounts by purchasing category

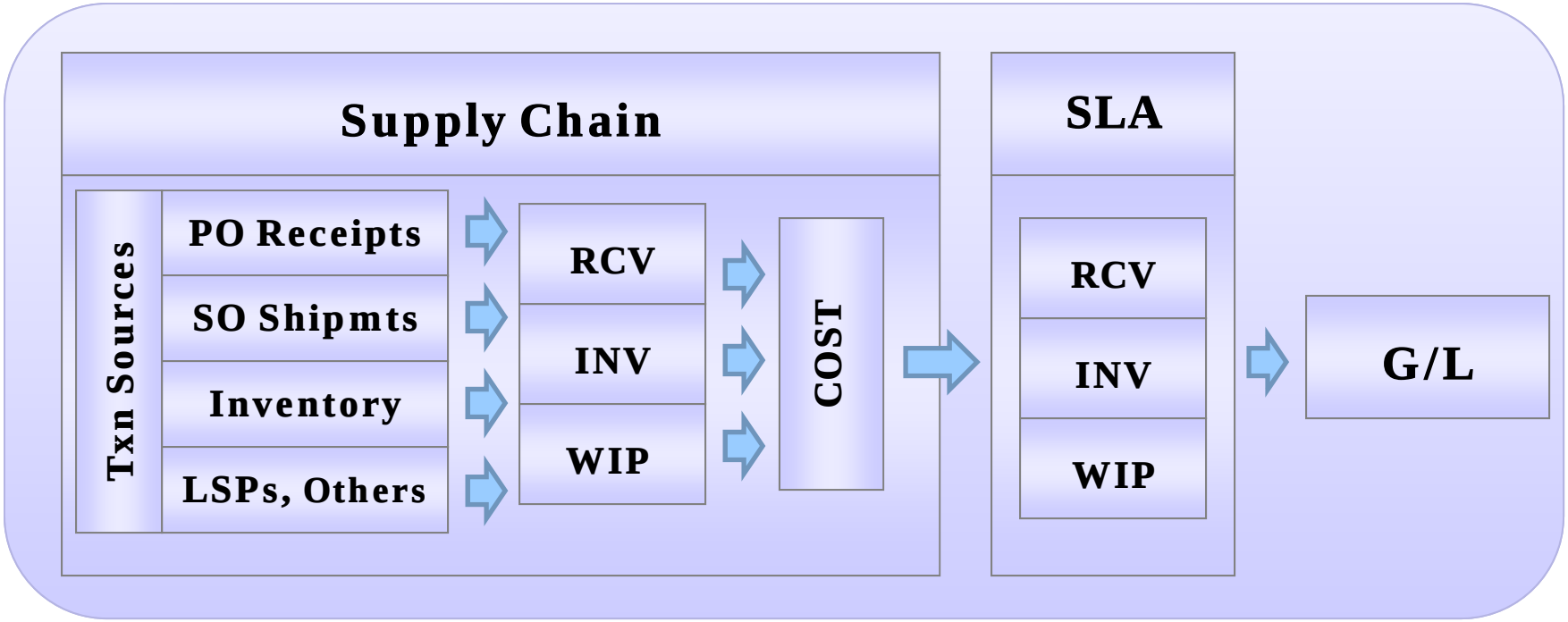
By using custom SLA sources this may be extended to Cost Management transactions as well.

Primer for Using Subledger Accounting

COLLABORATE13
TECHNOLOGY AND APPLICATIONS FORUM FOR THE ORACLE COMMUNITY

Supply Chain Transaction Processing

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

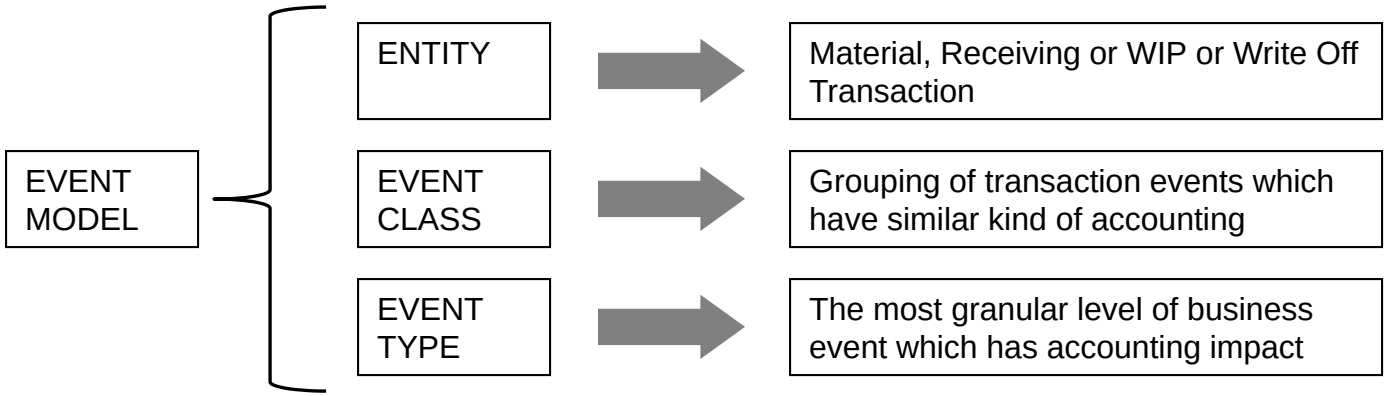


Key Concepts for SLA Transaction Types

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



Source: Oracle Corporation and Douglas Volz Consulting, Inc.

Setup and Process

ADR SETUPS

- Define or Identify ADR Sources

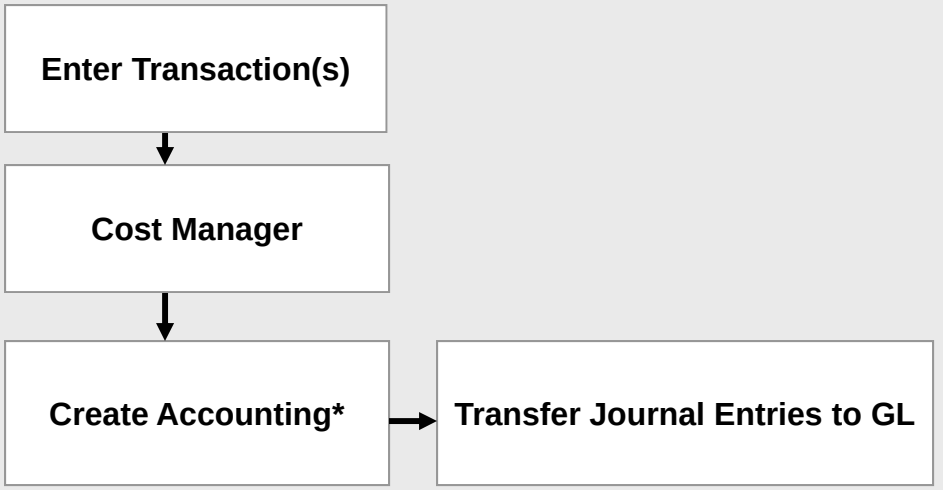
JOURNAL ENTRY SETUPS

- Define/copy and modify account derivation rules
- Define/copy and modify journal line types
- Define/copy and modify descriptions

ASSIGNMENT

- Assign to SLAM and Ledger

PROCESS



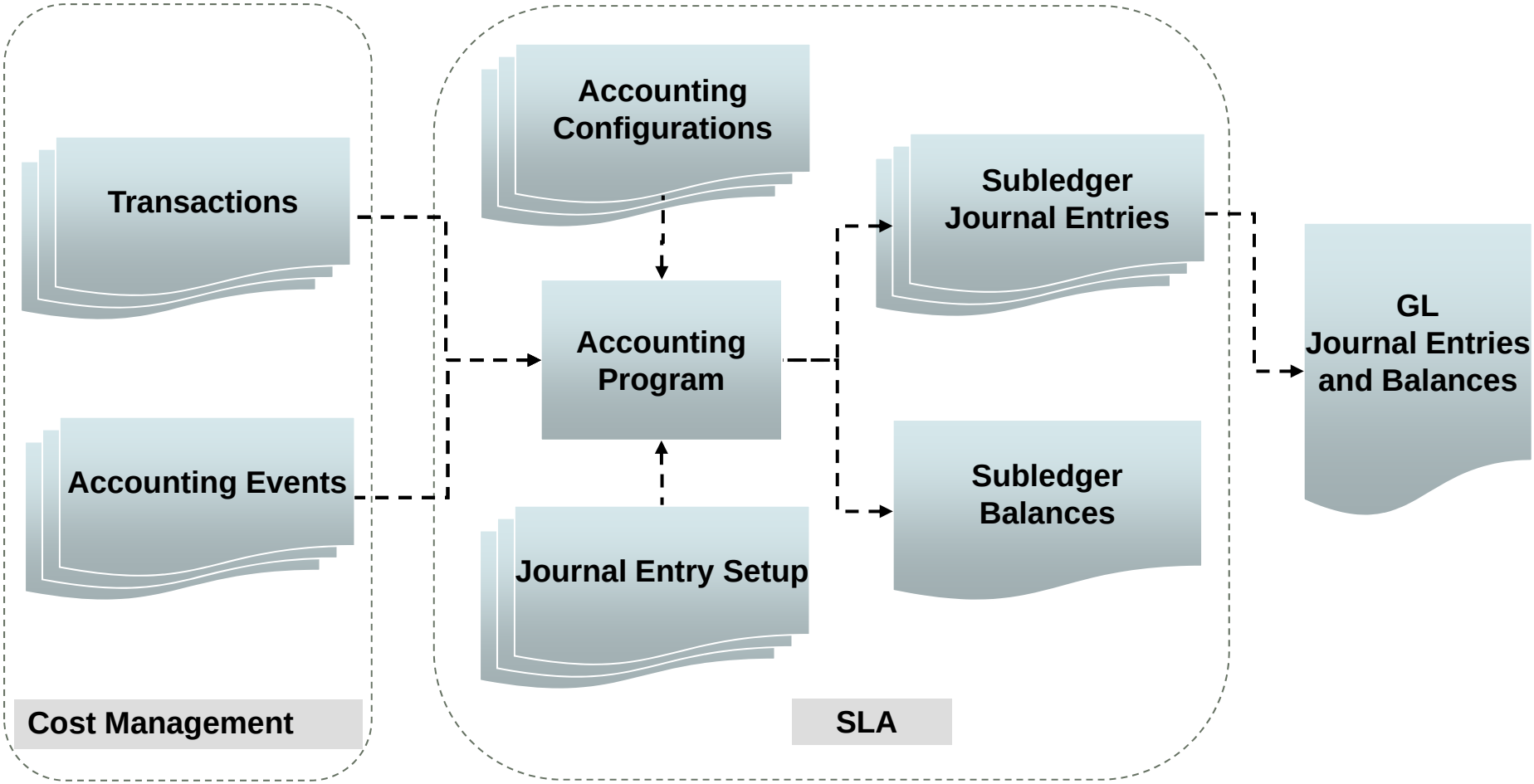
***Run 'Create Accounting – Cost Management' concurrent request for accounting all transactions from the Cost Management – SLA responsibility.

Receiving Accounting can be generated in the Purchasing responsibilities using the 'Create Accounting – Receiving' concurrent request.

These requests have an option to transfer the entries created to General Ledger as well as post at the same time.

Source: Oracle Corporation and Douglas Volz Consulting, Inc.

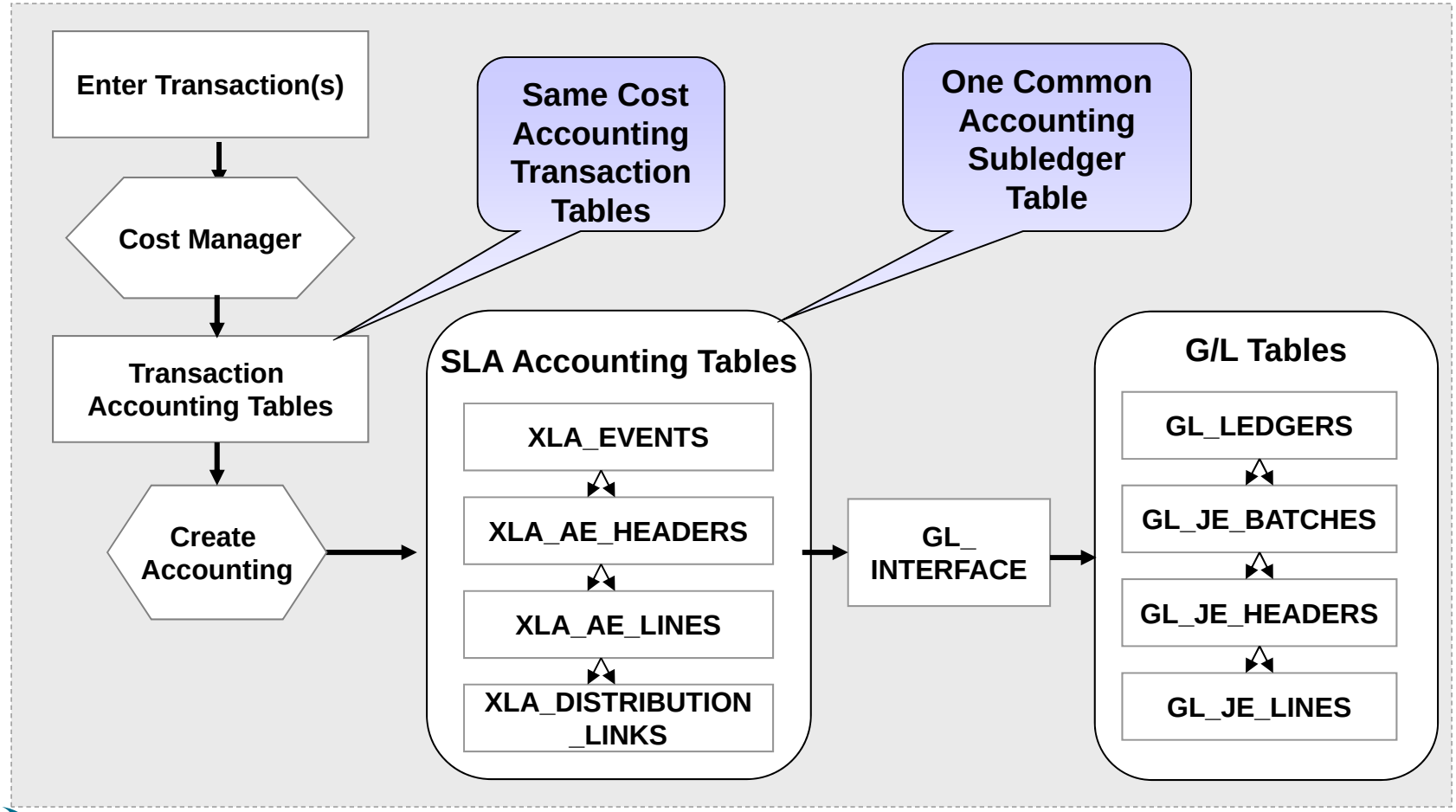
Setup and Process



Source: Oracle Corporation and Douglas Volz Consulting, Inc.

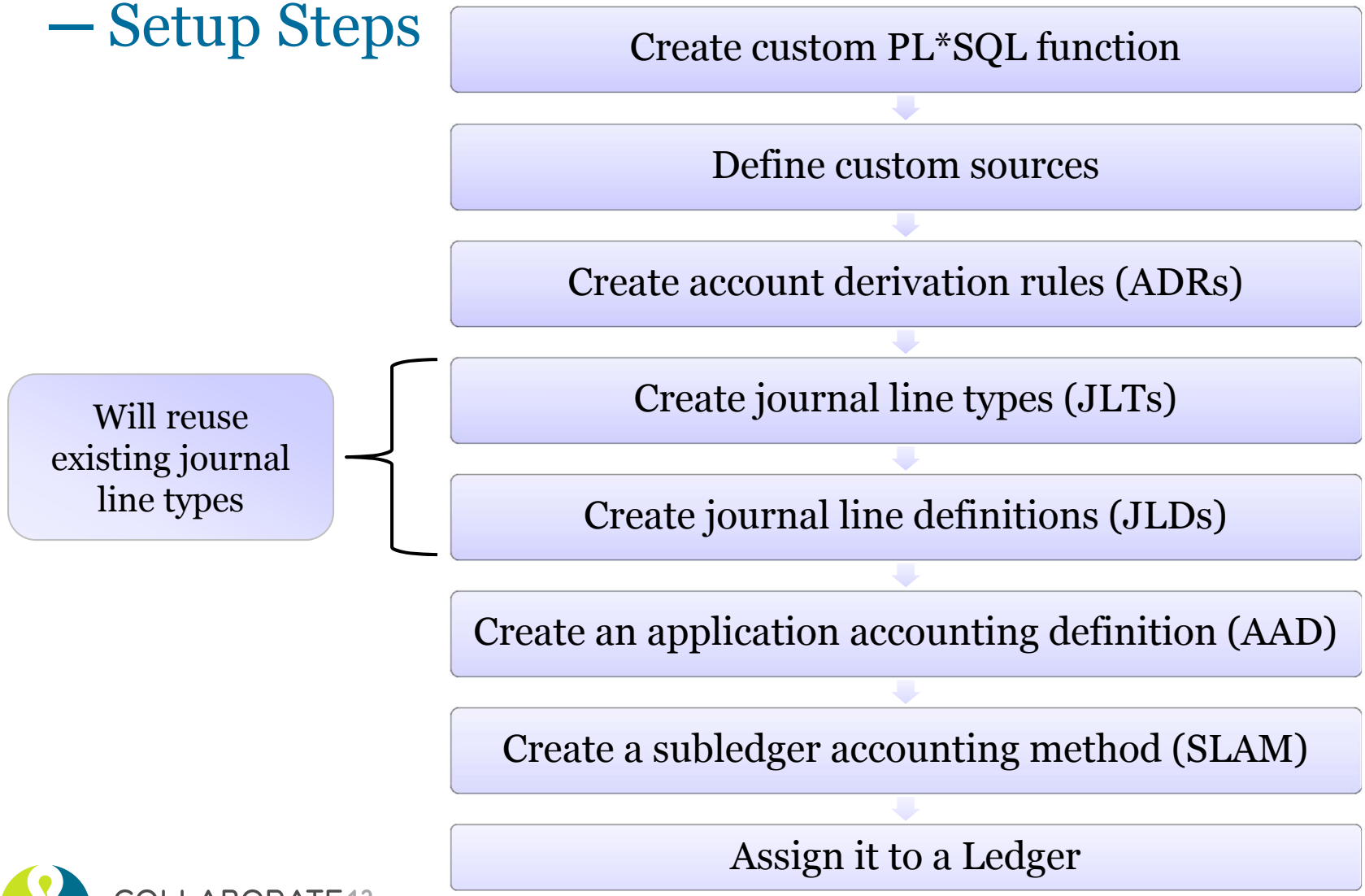
Subledger Accounting Basics

SLA Basic Architecture



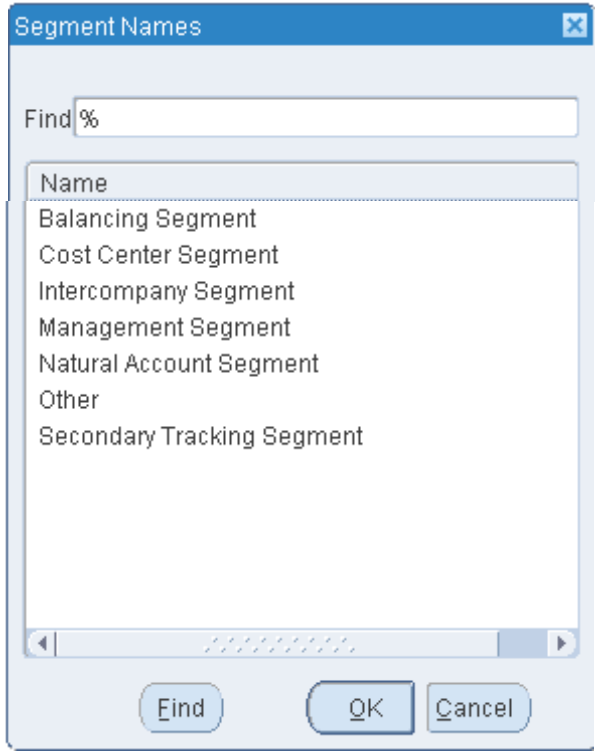
Product Line SLA Setup Steps

Subledger Accounting Method (SLAM) – Setup Steps



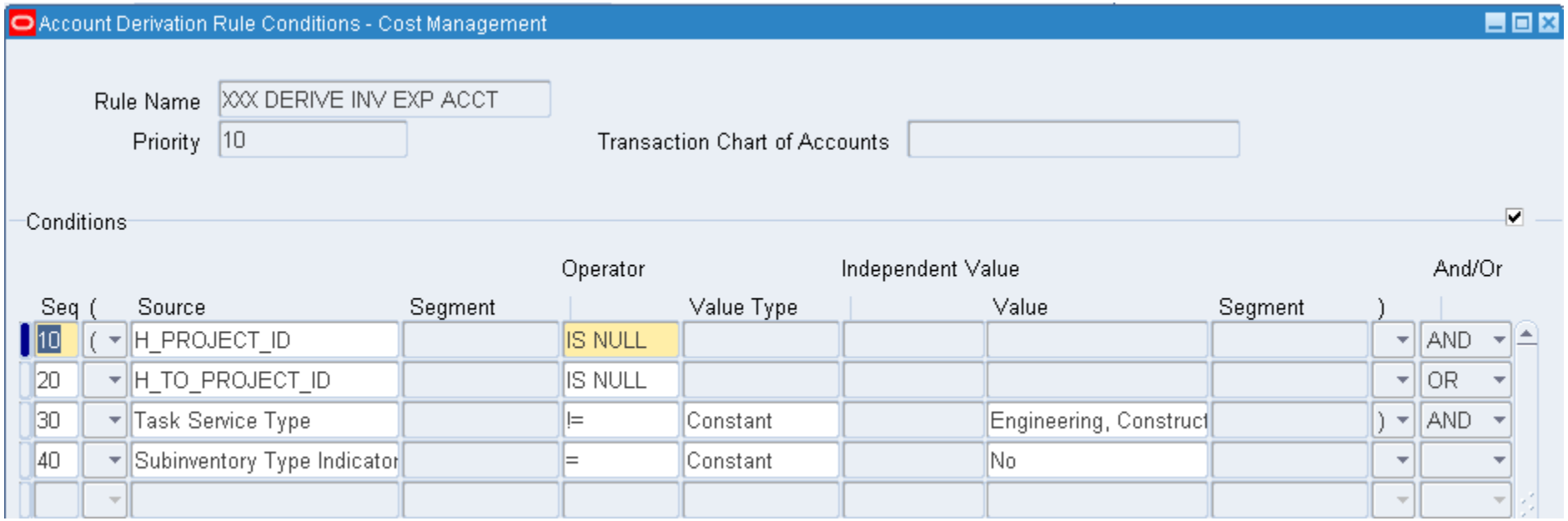
Gotchas: Designing SLA Custom Sources

- Desired COA segment must available for custom SLA sources
- Available COA segments based on G/L qualifiers
- Can only use G/L qualifiers with custom SLA sources
- Application Derivation Rules (ADRs) can use COA segment values or G/L qualifiers
- But the ADR segment type must be the same as the custom SLA source



Gotchas: Designing SLA Custom Sources

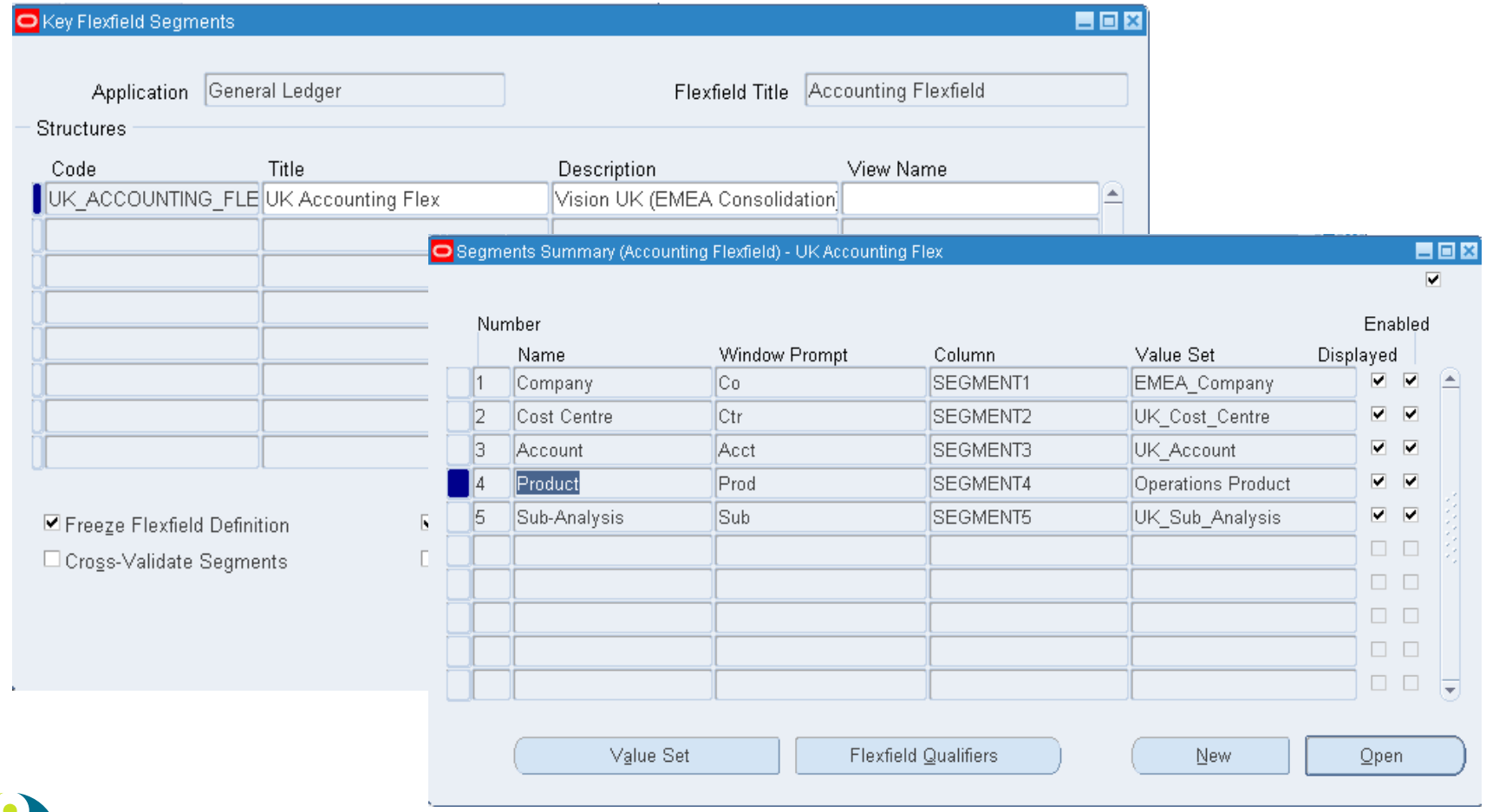
- The PL/SQL for the Custom Source has to return a value
  - If it does not Create Accounting will fail
  - The Custom Source is run first
  - Then ADR conditions are applied



Flexfield Structure Qualifiers

Menu path: General Ledger Super User => Setup => Financials => Flexfield => Key => Segments

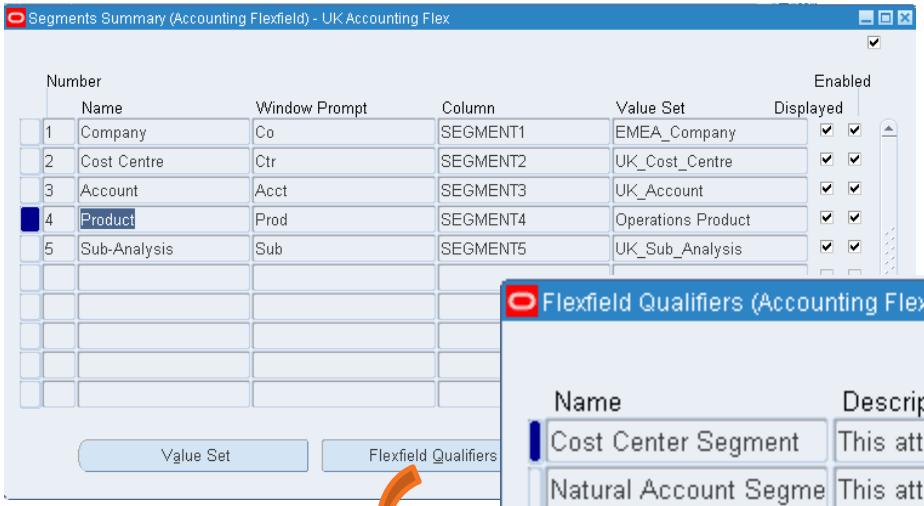
- Use defined G/L qualifiers for custom sources

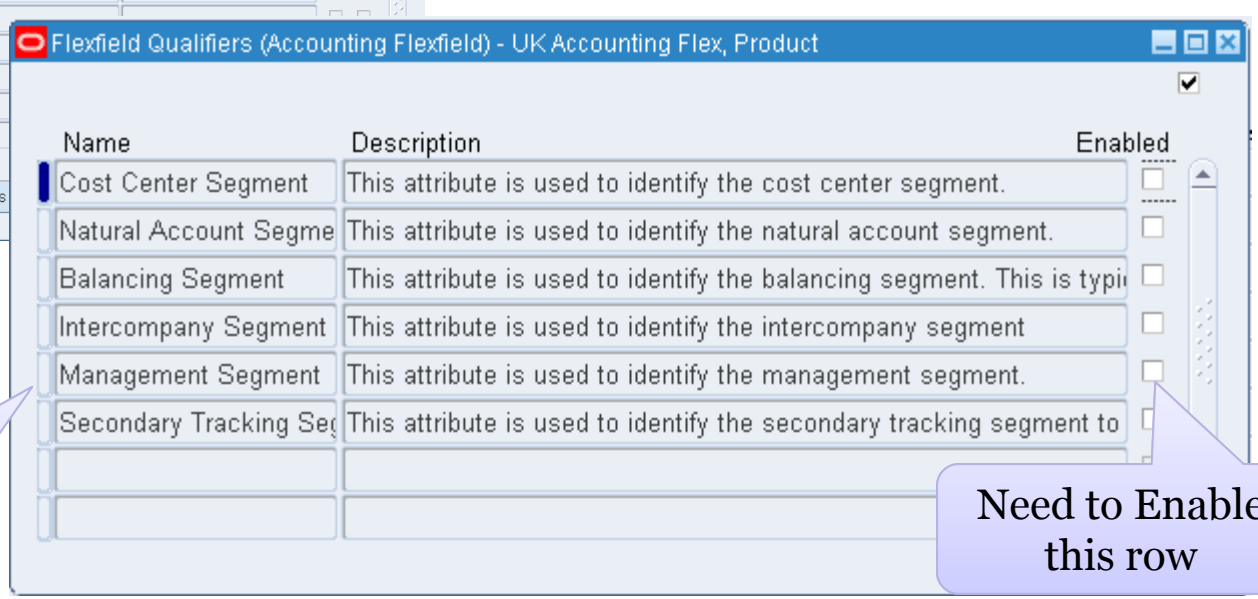


Flexfield Structure Qualifiers

Menu path: General Ledger Super User => Setup => Financials => Flexfield => Key => Segments => Flexfield Qualifiers

- Best to enable Flexfield Qualifiers when defining COA





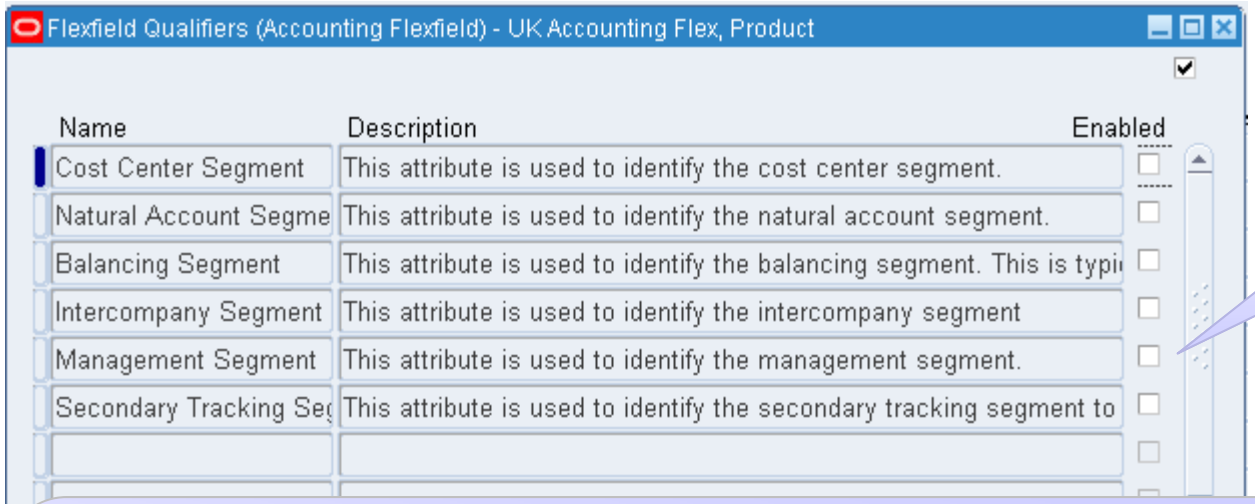
Use the Management Segment as the qualifier for Product Line

Need to Enable this row

Enabling the Management Flexfield Qualifier

Menu path: General Ledger Super User => Setup => Financials => Flexfield => Key => Segments => Flexfield Qualifiers

- Need to run two programs



How to enable this row?

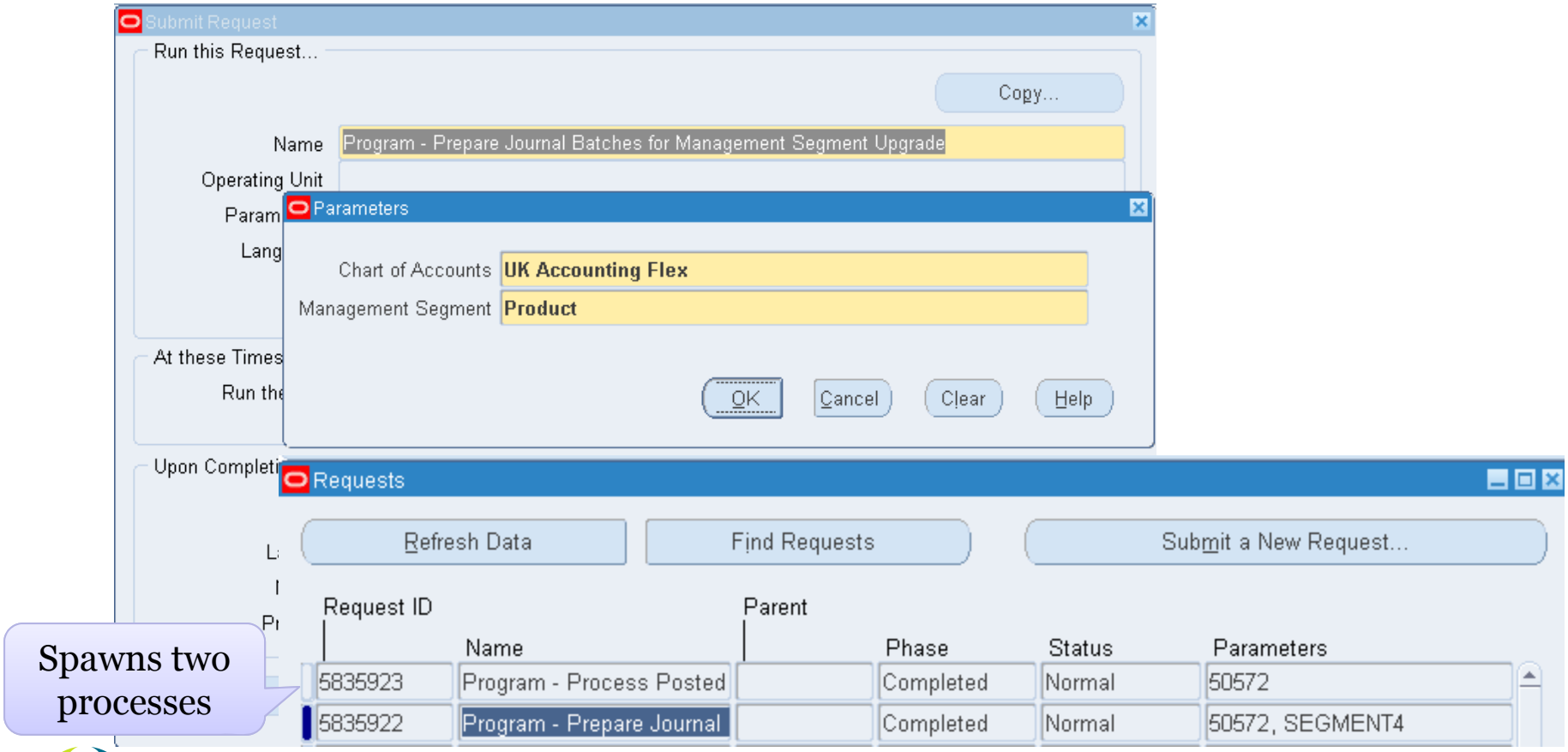
➔ The management segment can be any segment, except the balancing segment or natural account segment. Typically, the management segment is a segment that has management responsibility, such as the department, cost center, or line of business.

➔ You can assign a management segment to an existing chart of accounts at any time by running two programs in sequence: **Program - Prepare Journal Batches for Management Segment Upgrade** and **Program - Complete Management Segment Upgrade**.

Enabling the Management Flexfield Qualifier

Menu path: General Ledger Super User => Other => Report => Run =>
Program - Prepare Journal Batches for Management Segment Upgrade

- Program - Prepare Journal Batches for Management Segment Upgrade

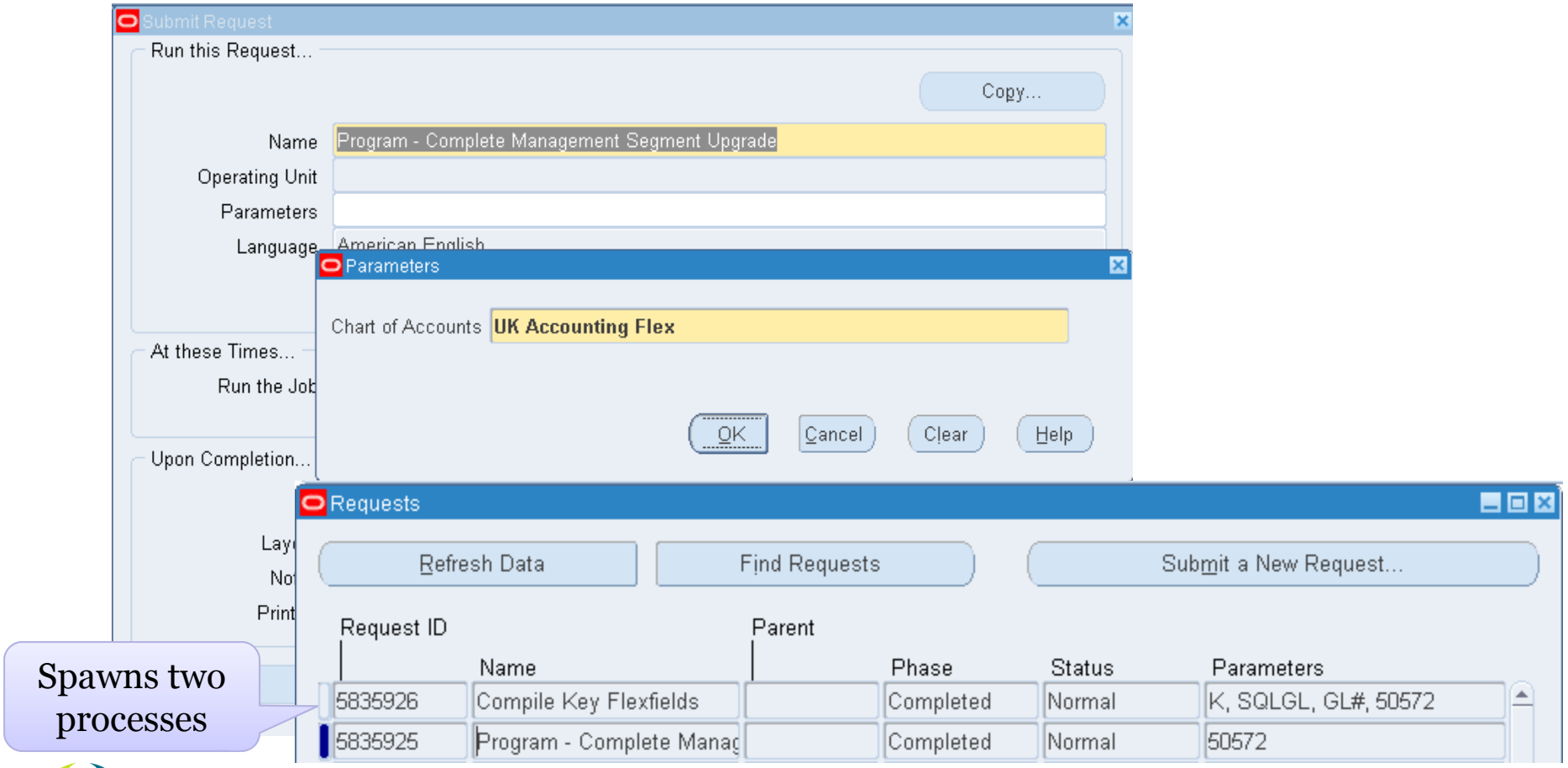


Spawns two processes

Enabling the Management Flexfield Qualifier

Menu path: General Ledger Super User => Other => Report => Run => Program - Complete Management Segment Upgrade

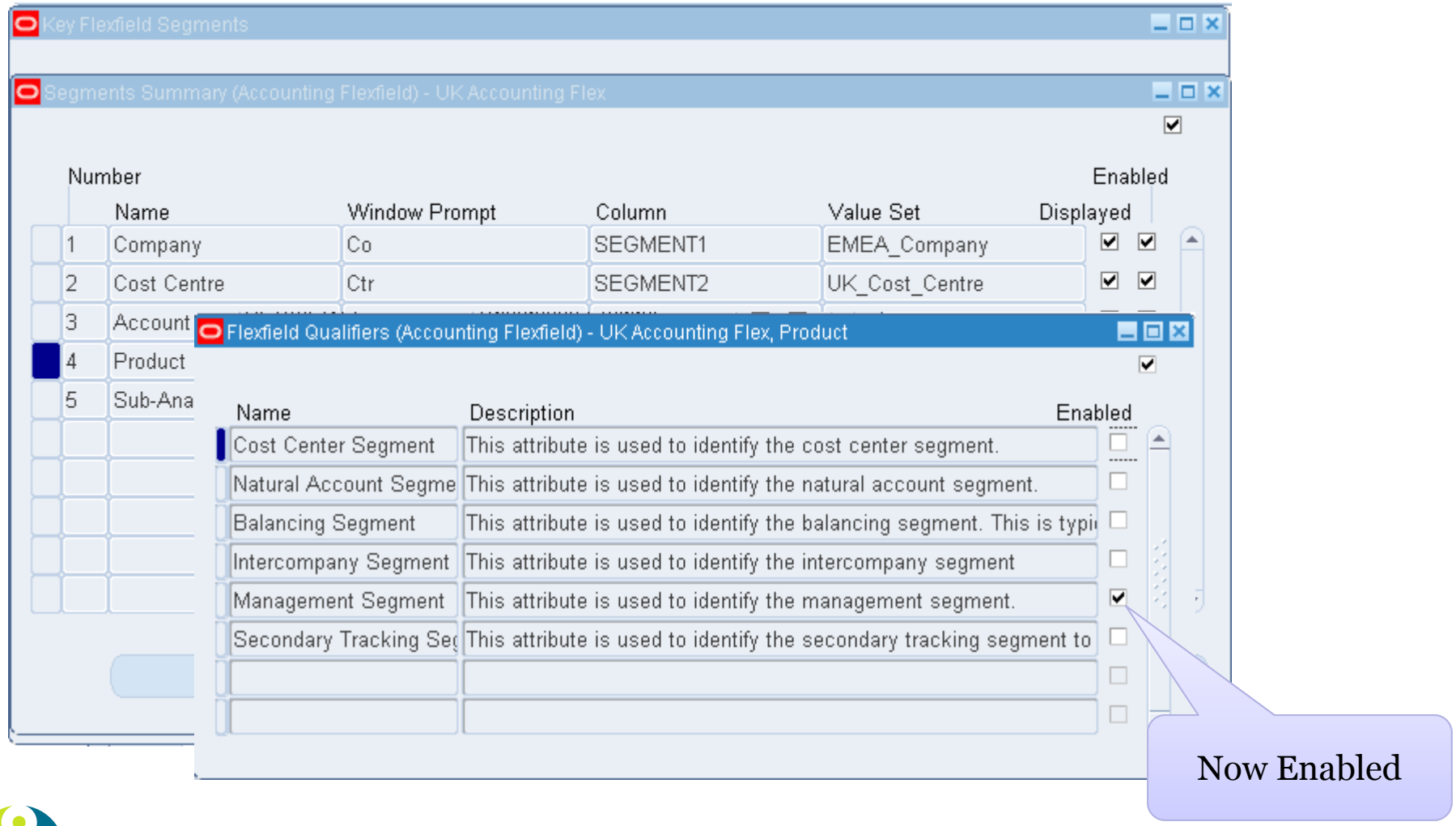
- Program - Complete Management Segment Upgrade



Spawns two processes

Enabling the Management Flexfield Qualifier

Menu path: General Ledger Super User => Setup => Financials => Flexfield => Key => Segments => Flexfield Qualifiers



Designing Your SLA Setup:

- Three Custom SLA sources :

Product Line Custom Sources
▪ Material Transactions ▪ WIP Transactions ▪ Receiving Transactions

- Three Application Derivation Rules (ADRs) :

Product Line ADRs
▪ Material Transactions ▪ WIP Transactions ▪ Receiving Transactions

For Potentially All of These SLA Events:

Material Transactions
▪ Consigned Inventory Ownership ▪ Direct Interorg Receipt ▪ Direct Interorg Shipment ▪ Intransit Interorg Shipment for FOB Receipt ▪ Intraorganization Transfer ▪ Internal Order to Expense ▪ Intransit Interorg Receipt ▪ Logical Intercompany ▪ Material Cost Update ▪ Miscellaneous ▪ PO Delivery into Inventory

Material Transactions
▪ Recipient-side Intransit Interorg Receipt for FOB Receipt ▪ Recipient-side Intransit Interorg Shipment for FOB Shipment ▪ Retroactive Price Adjustment ▪ Sales Order Issue ▪ Sender-side Intransit Interorg Receipt for FOB Receipt ▪ Sender-side Intransit Interorg Shipment for FOB Receipt ▪ WIP Material ▪ WIP Material Lot

And Potentially All of These SLA Events:

WIP Transactions

- Outside Processing
- WIP Absorption
- WIP Cost Update
- WIP Lot
- WIP Variances

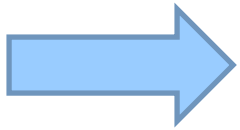
Receiving Transactions

- Receipt into Receiving Inspection
- Delivery to Expense Destinations
- Period End Accrual
- Retroactive Price Adjustment to Receipt

A/P Accruals

- Accrual Write-Off Event
- Delivery to Expense Destinations
- Receiving Transactions
- Period End Accrual
- Retroactive Price Adjustment to Receipt

Which Correspond to the "Real" Transactions



Gotcha: Have to Correlate SLA Events With "Real" Material, Receiving, WIP Transactions

- Example: Inventory Account Alias Transactions

Material Transaction Definition

Material Transaction	Accounting Line Type
▪ Account Alias Issue	▪ Account ▪ Cost Variance ▪ Inv valuation

SLA Event Definition

SLA Event Class Name	Journal Line Type
▪ Miscellaneous	▪ Offset ▪ Cost Variance ▪ Inventory Valuation

➔ The Oracle EBS Supply Chain transactions loosely correlate to the SLA events and journal lines. Can be confusing.

Material Sources and Transaction Types

Txn Source	Txn Name	Txn Description
Account	Account issue	Issue material against account
Account	Account receipt	Receive material against account
Account alias	Account alias issue	Issue material against account alias
Account alias	Account alias receipt	Receive material against account alias
Cycle Count	Cycle Count Adjust	Record cycle count adjustments
Cycle Count	Cycle Count Transfer	Cycle Count Sub Transfer
Internal order	Int Order Direct Ship	Direct transfer between two organizations on a internal order
Internal order	Int Order Intr Ship	Ship to intransit sourced by Internal order
Internal order	Internal Order Pick	Staging transfer on an Internal order
Internal order	Internal Order Xfer	Subinventory transfer sourced by Internal order
Internal order	Internal order issue	Ship Confirm Internal Order: Issue
Internal order	Logical Intransit Shipment	Logical Intransit Shipment
Internal requisition	Int Req Direct Org Xfer	Internal Requisition Direct Org Transfer
Internal requisition	Int Req Intr Rcpt	Delivery of intransit material sourced by Internal requisition
Internal requisition	Int Req Rcpt Adjust	Delivery adjustments on intransit receipt sourced by Internal req.
Internal requisition	Int Req Sub Xfer	Internal Requisition Subinventory Transfer
Internal requisition	Logical Expense Requisition Receipt	Logical Expense Requisition Receipt
Internal requisition	Logical Intransit Receipt	Logical Intransit Receipt
Inventory	Average cost update	Update average cost information
Inventory	Backflush Transfer	Backflush subinventory transfer
Inventory	Direct Org Transfer	Direct transfer between two organizations
Inventory	Intransit Receipt	Receive from intransit
Inventory	Intransit Shipment	Ship to intransit sourced from Inventory
Inventory	Logical Intercompany Procurement Receipt	Logical Intercompany Procurement Receipt
Inventory	Logical Intercompany Procurement Return	Logical Intercompany Procurement Return
Inventory	Logical Intercompany Receipt Return	Logical Intercompany Receipt Return
Inventory	Logical Intercompany Sales Issue	Logical Intercompany Sales Issue
Inventory	Logical Intercompany Sales Return	Logical Intercompany Sales Return
Inventory	Logical Intercompany Shipment Receipt	Logical Intercompany Shipment Receipt
Inventory	Logical Intransit Receipt	Logical Intransit Receipt
Inventory	Logical Intransit Shipment	Logical Intransit Shipment

Material Sources and Transaction Types

Txn Source	Txn Name	Txn Description
Inventory	Miscellaneous issue	Perform miscellaneous issue of material
Inventory	Miscellaneous receipt	Perform miscellaneous receipt of material
Inventory	Shipment Rcpt Adjust	Adjustment to receipt of in-transit delivery
Inventory	Subinventory Transfer	Transfer material between subinventories
Inventory	Transfer to Consigned	Transfer to Consigned
Job or Schedule	WIP Negative Issue	WIP Negative Issue
Job or Schedule	WIP Negative Return	WIP Negative Return
Job or Schedule	WIP Return	WIP Return
Job or Schedule	WIP assembly scrap	Scrap assemblies from WIP
Job or Schedule	WIP cost update	Update cost of a WIP item
Job or Schedule	WIP estimated scrap	WIP estimated scrap transaction
Job or Schedule	WIP return from scrap	Return assemblies scrapped to WIP
Move order	Move Order Issue	Transact Account Issue Move Order
Move order	Move Order Putaway	Move Order Putaway
Move order	Move Order Transfer	Transact Subinventory Transfer Move Order
Physical Inventory	Physical Inv Adjust	Physical Inventory adjustment transactions
Physical Inventory	Physical Inv Transfer	Physical Count Sub Transfer
Purchase order	Logical PO Receipt	Logical PO Receipt
Purchase order	Logical PO Receipt Adjustment	Logical PO Receipt Adjustment
Purchase order	Logical Return to Vendor	Logical Return to Vendor
Purchase order	PO Rcpt Adjust	Delivery adjustments on a Purchase order receipt
Purchase order	PO Receipt	Receive Purchase Order
Purchase order	Retroactive Price Update	Retroactive Price Update
Purchase order	Return to Vendor	Return to vendor from stores
Purchase order	Transfer to Regular	Transfer to Regular
RMA	Logical RMA Receipt	Logical RMA Receipt
RMA	RMA Receipt	Return material authorization
RMA	RMA Return	Return return material authorization
Sales order	COGS Recognition	COGS Recognition
Sales order	Logical Sales Order Issue	Logical Sales Order Issue
Sales order	Sales Order Pick	Staging transfer on a Sales order
Sales order	Sales order issue	Ship Confirm external Sales Order
Standard cost update	Standard cost update	Update standard cost information

WIP, Receiving & A/P Accrual Transactions:

WIP Transactions

- Overhead transaction
- Outside processing
- Cost update
- Period close variance
- Job close variance
- Final completion variance
- WIP Lot Split
- WIP Lot Merge
- WIP Lot Bonus
- WIP Lot Quantity Update
- Estimated Scrap Absorption
- Estimated Scrap Reallocation
- Direct Shopfloor Delivery

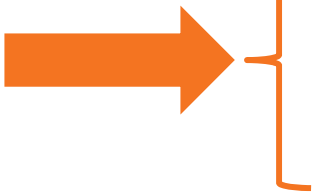
Receiving Transactions

- Correct
- Deliver
- Match
- Receive
- Return to Customer
- Return to Receiving
- Return to Supplier

A/P Accrual Transactions

- A/P Accrual Write-Off
- A/P Write-Off Reversal
- Period End Accrual

Create PL*SQL Functions & Custom SLA Sources



- Create custom PL*SQL function
- Define custom sources
- Create account derivation rules (ADRs)
- Create journal line types (JLTs)
- Create journal line definitions (JLDs)
- Create an application accounting definition (AAD)
- Create a subledger accounting method (SLAM)
- Assign it to a Ledger

Designing Custom SLA Sources
– Product Line Accounting

- SLA Sources for Material Transactions require two inputs:
  - Inventory transaction id
  - Organization id

Material transactions can reference multiple inventory organizations

- Material transactions for product line:
  - Are joined to the item master using:
    - inventory item id
    - organization id
  - To get the item master Cost of Sales Account
  - Which is joined to the COA definition (GL Code Combinations)
  - To output the item's cost of sales product line segment value

Designing Custom SLA Sources – Product Line Accounting

- SLA Sources for WIP Transactions require one input:
  - WIP transaction id
- WIP transactions for product line:
  - Are joined to the WIP job definition using:
    - WIP entity id
  - Which gets you the primary item id
  - And then joined to the item master using:
    - inventory item id
    - organization id
  - To get the item master Cost of Sales Account
  - Which is joined to the COA definition (GL Code Combinations)
  - To output the item's cost of sales product line segment value

Designing Custom SLA Sources – Product Line Accounting

- SLA Sources for Receiving Transactions require one input:
  - Receiving transaction id
- Receiving transactions for product line:
  - Are joined to the Receiving Shipment Line (or PO Line) to:
    - By receiving shipment id or po line id
  - Which gets you the item id
  - And then joined to item master using:
    - inventory item id
    - organization id
  - To get the item master Cost of Sales Account
  - Which is joined to the COA definition (GL Code Combinations)
  - To output the item's cost of sales product line segment value

Create Custom PL*SQL function - INV

- If item COGS account is not valid, defaults to the org's COGS account

```
CREATE OR REPLACE FUNCTION XXX_DERIVE_INV_PL_ACCT (p_transaction_id IN NUMBER, p_organization_id IN NUMBER)
RETURN VARCHAR2 is
l_segment varchar2(20);

BEGIN
            SELECT      nvl(gcc_item_pl.segment4,gcc_org_pl.segment4)  into l_segment
            FROM        inv.mtl_material_transactions mmt,
                        inv.mtl_system_items_b msi,
                        inv.mtl_parameters mp,
                        gl.gl_code_combinations gcc_item_pl,
                        gl.gl_code_combinations gcc_org_pl
            WHERE       mmt.transaction_id            = p_transaction_id
            AND         msi.inventory_item_id         = mmt.inventory_item_id
            AND         msi.organization_id           = p_organization_id
            AND         msi.organization_id           = mp.organization_id
            AND         msi.cost_of_sales_account     = gcc_item_pl.code_combination_id (+)
            AND         mp.cost_of_sales_account      = gcc_org_pl.code_combination_id
            GROUP BY    nvl(gcc_item_pl.segment4,gcc_org_pl.segment4)
            ;
RETURN l_segment;

END XXX_DERIVE_INV_PL_ACCT;
/
```

Need to always return a value

TIP for Custom PL*SQL function - INV

- Include comments in your **CREATE OR REPLACE** statement

```
CREATE OR REPLACE FUNCTION XXX_DERIVE_INV_PL_ACCT (p_transaction_id IN NUMBER, p_organization_id IN
NUMBER) RETURN VARCHAR2 is
-- ============================================================================
-- |  PL*SQL function to derive the desired product line segment value based on the
-- |  item master COGS account. If the product line segment value does not exist get
-- |  the default product line segment value from the organization's COGS account.
-- |  This function may be assigned to any Journal Line Type as desired, for inventory
-- |  as well as PPV and other offset accounts. Using the transaction_id as an input
-- |  parameter, first find inventory_item_id and organization_id from the transaction
-- |  and then join to the item master and code combinations table to fetch the
-- |  desired product line segment value. The item master MTL_SYSTEM_ITEMS_B table
-- |  holds the COGS account in the COST_OF_SALES_ACCOUNT column, which joins to
-- |  GL_CODE_COMBINATIONS.CODE_COMBINATION_ID.  If item's COGS account is invalid
-- |  because of corrupt setup, use the inventory organization's COGS account from
-- |  MTL_PARAMETERS.COST_OF_SALES_ACCOUNT instead.
-- ============================================================================
l_segment varchar2(20);

BEGIN
          SELECT     nvl(gcc_item_cogs.segment4,gcc_org_cogs.segment4)  into l_segment
          FROM       inv.mtl_material_transactions mmt,
```

Create Custom PL*SQL function - WIP

- If item COGS account is not valid, defaults to the WIP job material product line account

```
CREATE OR REPLACE FUNCTION XXX_DERIVE_WIP_PL_ACCT (p_transaction_id IN NUMBER) RETURN VARCHAR2 is
l_segment varchar2(20);

BEGIN
    SELECT  nvl((select gcc_item_pl.segment4
                 from   inv.mtl_system_items_b msi,
                        gl.gl_code_combinations gcc_item_pl
                 where  msi.inventory_item_id = wdj.primary_item_id
                 and    msi.organization_id   = wt.organization_id
                 and    msi.cost_of_sales_account = gcc_item_pl.code_combination_id), gcc_wip_pl.segment4)
                        into l_segment
    FROM    wip.wip_transactions wt,
            wip.wip_discrete_jobs wdj,
            gl.gl_code_combinations gcc_wip_pl
    WHERE   wt.transaction_id               = p_transaction_id
    AND     wt.wip_entity_id                = wdj.wip_entity_id
    AND     wdj.material_account            = gcc_wip_pl.code_combination_id
    ;

RETURN l_segment;

END XXX_DERIVE_WIP_PL_ACCT;
/
```

Need to always return a value

Create Custom PL*SQL function - RCV

- If item COGS account is not valid, defaults to the receiving product line account

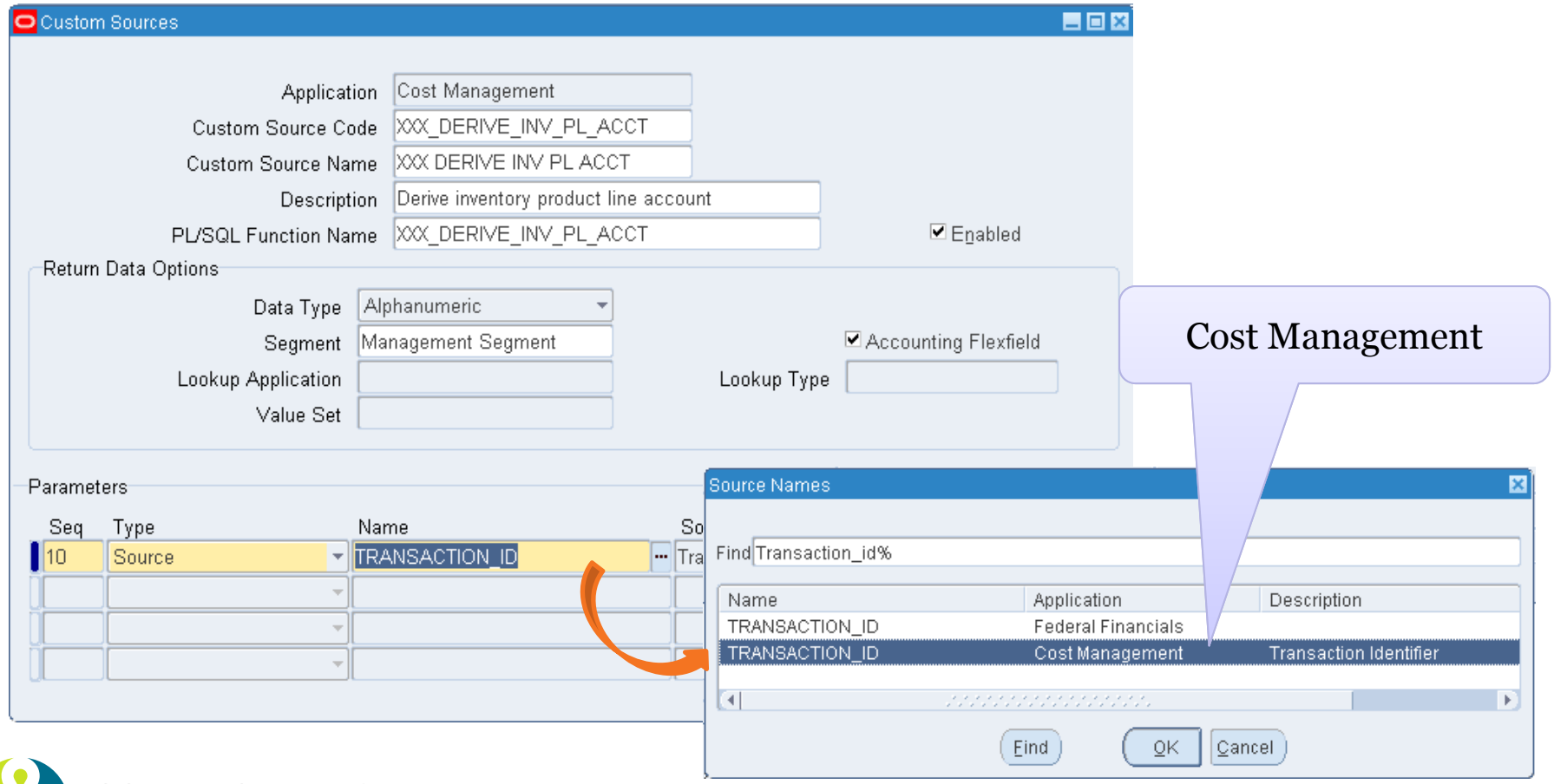
```
CREATE OR REPLACE FUNCTION XXX_DERIVE_WIP_PL_ACCT (p_transaction_id IN NUMBER) RETURN VARCHAR2 is
l_segment varchar2(20);

BEGIN
            SELECT      nvl((       select      gcc_item_pl.segment4
                                    from        inv.mtl_system_items_b msi,
                                                gl.gl_code_combinations gcc_item_pl
                                    where       msi.inventory_item_id = rsl.item_id
                                    and         msi.organization_id   = rp.organization_id
                                    and         msi.cost_of_sales_account =
                                                gcc_item_pl.code_combination_id), gcc_rcv_pl.segment4)
                        into l_segment
            FROM        po.rcv_transactions rt,
                        po.rcv_shipment_lines rsl,
                        po.rcv_parameters rp,
                        gl.gl_code_combinations gcc_rcv_pl
            WHERE       rt.transaction_id               = p_transaction_id
            AND         rp.organization_id              = rt.organization_id
            AND         rt.shipment_line_id             = rsl.shipment_line_id
            AND         rt.organization_id              = rp.organization_id
            AND         rp.receiving_account_id         = gcc_rcv_pl.code_combination_id
            ;
RETURN l_segment;

END XXX_DERIVE_RCV_PL_ACCT;
/
```

Need to always return a value

Define Custom Source – INV Transactions

Menu path: Cost Management SLA => Setup => Accounting Methods Builder => Sources => Custom Sources

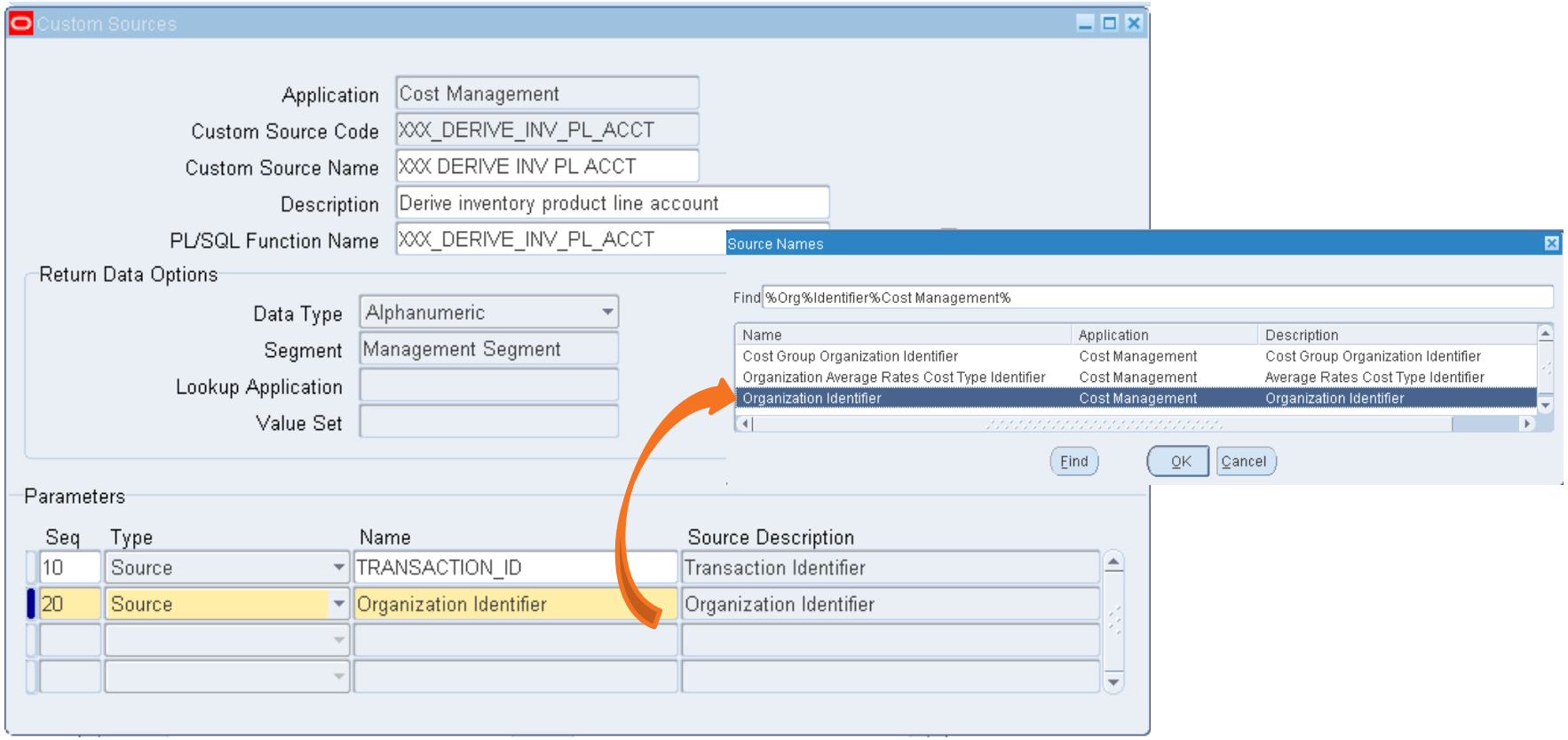
- Need to use the correct parameters for your PL*SQL inputs



Define Custom Source – INV Transactions

Menu path: Cost Management SLA => Setup => Accounting Methods Builder => Sources => Custom Sources

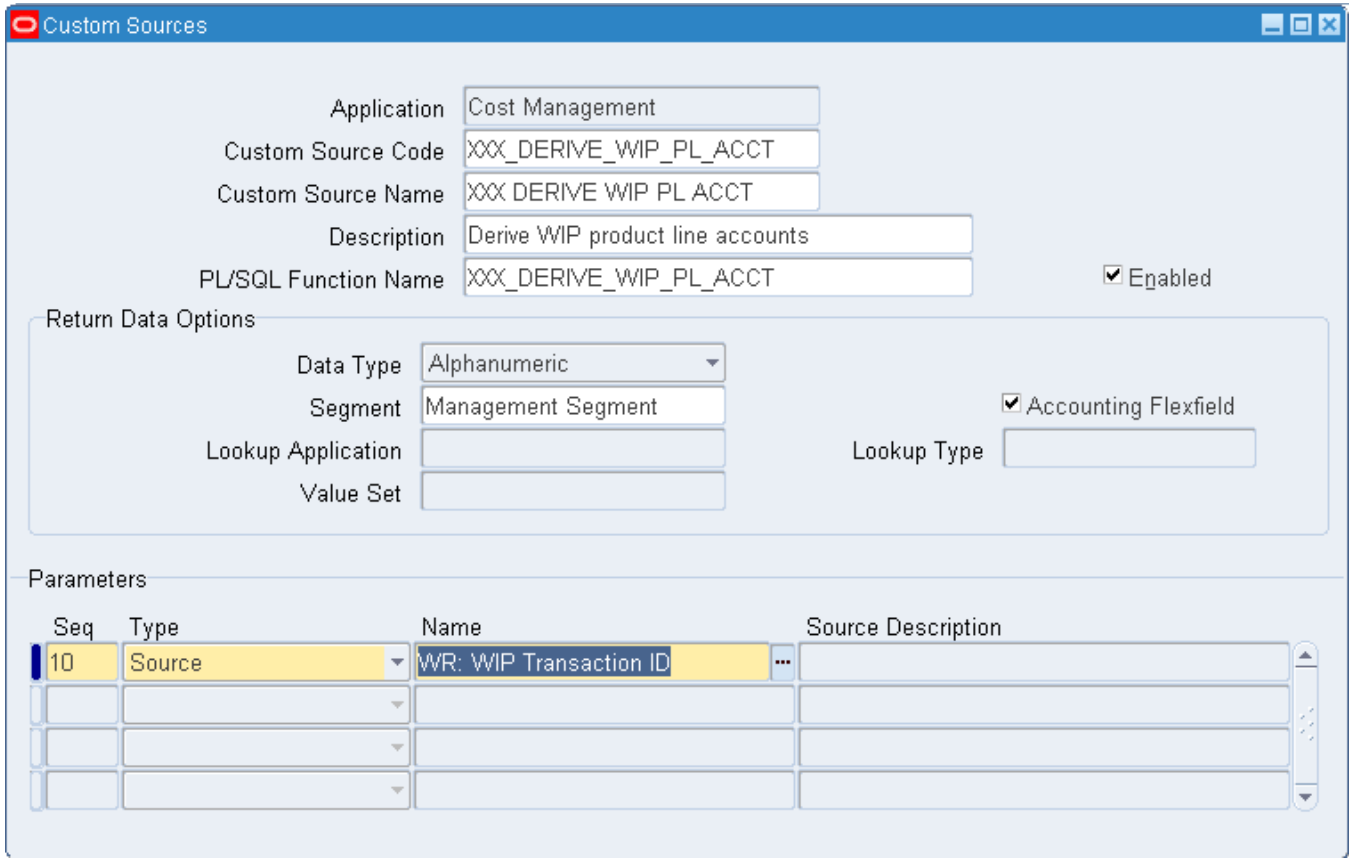
- Need to use the correct parameters for your PL*SQL inputs



Define Custom Source – WIP Transactions

Menu path: Cost Management SLA => Setup => Accounting Methods Builder => Sources => Custom Sources

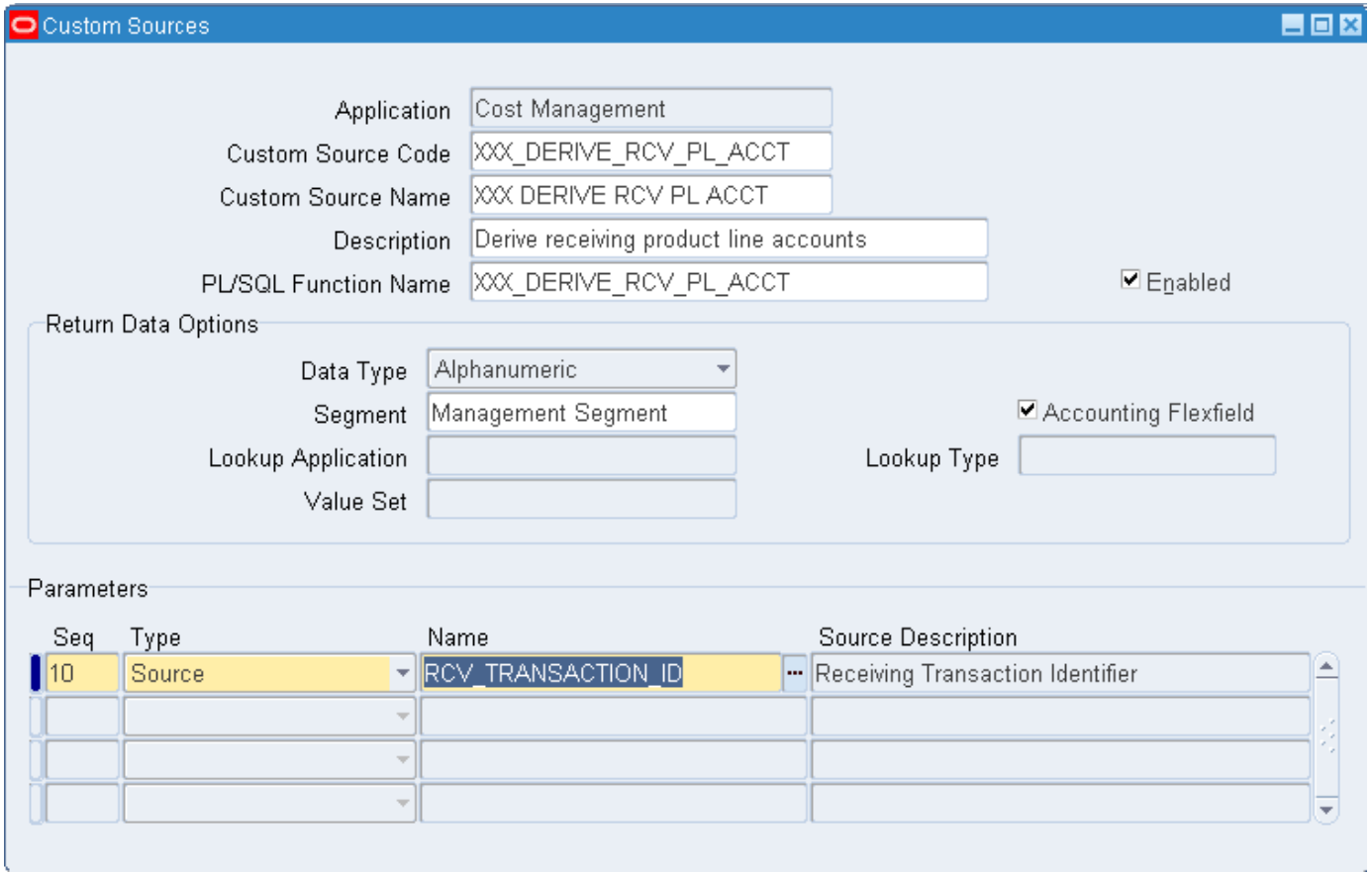
- Need to use the correct parameters for your PL*SQL inputs



Define Custom Source – RCV Transactions

Menu path: Cost Management SLA => Setup => Accounting Methods Builder => Sources => Custom Sources

- Need to use the correct parameters for your PL*SQL inputs



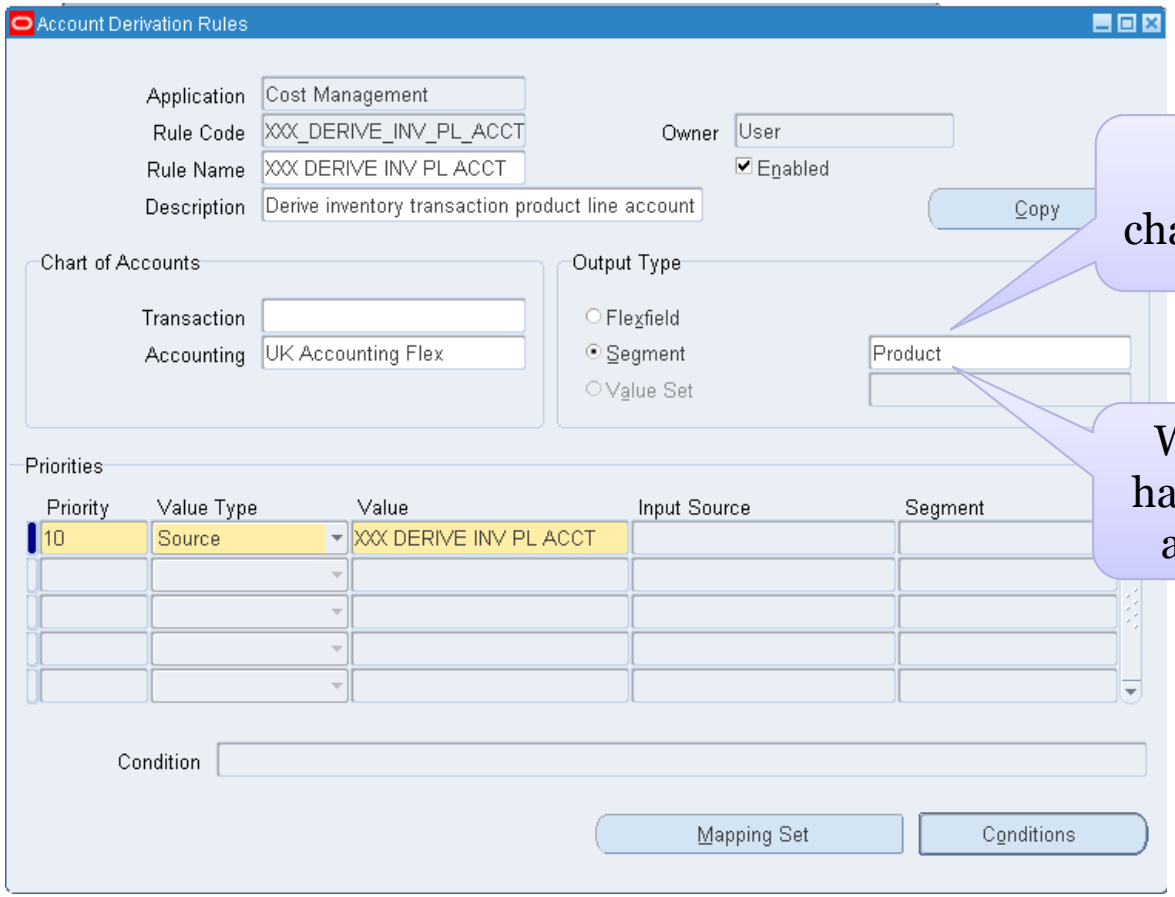
Create Account Derivation Rules

- Create custom PL*SQL function
- Define custom sources
- Create account derivation rules (ADRs)
- Create journal line types (JLTs)
- Create journal line definitions (JLDs)
- Create an application accounting definition (AAD)
- Create a subledger accounting method (SLAM)
- Assign it to a Ledger

1) Create Account Derivation Rules (ADRs)

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Journal Entry Setups => Account Derivation Rules

- If choose the Chart of Accounts Flex Structure:



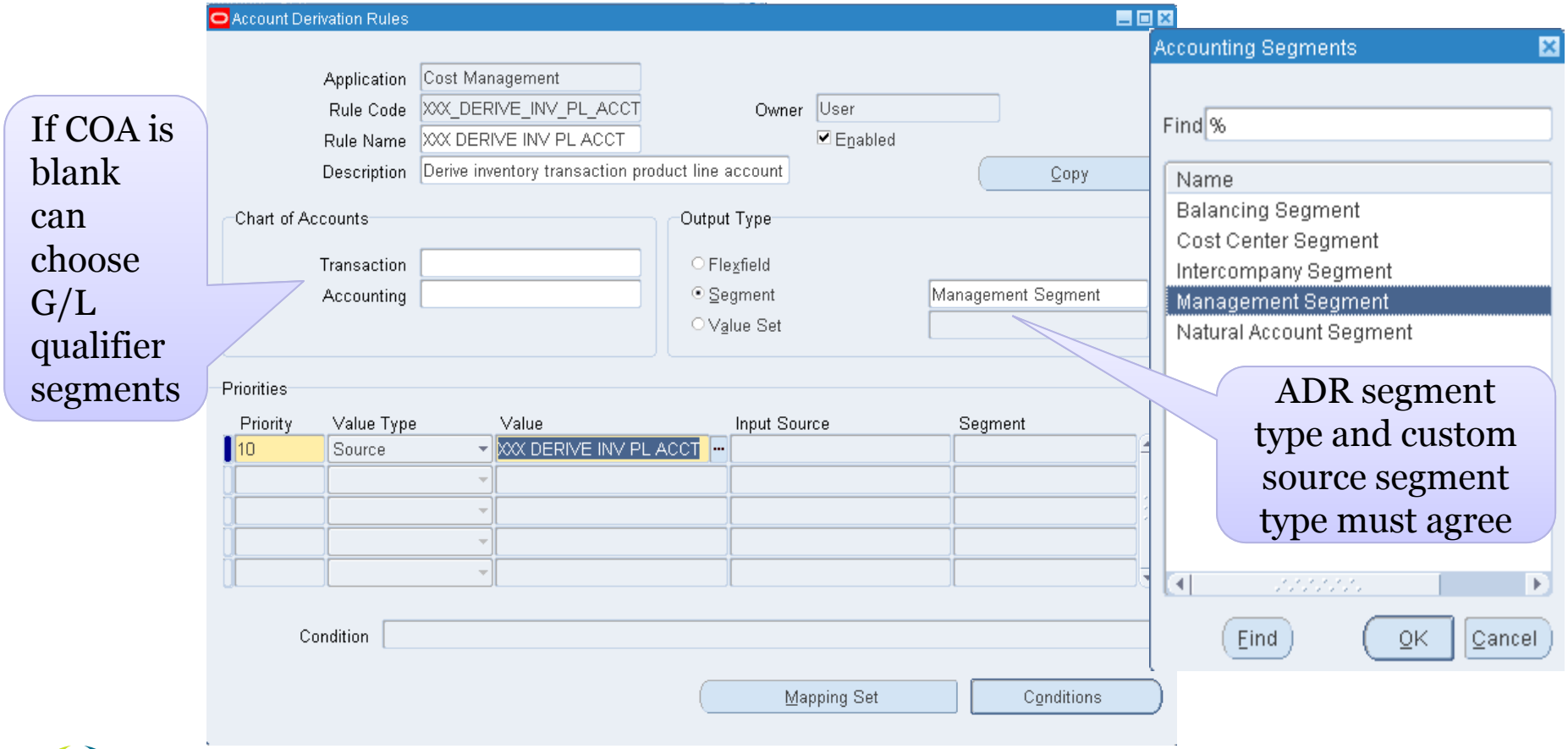
If enter a COA, LOV changes to COA segments

Will not work, need to have same Segment type as the Custom Source

2) Create Account Derivation Rules (ADRs)

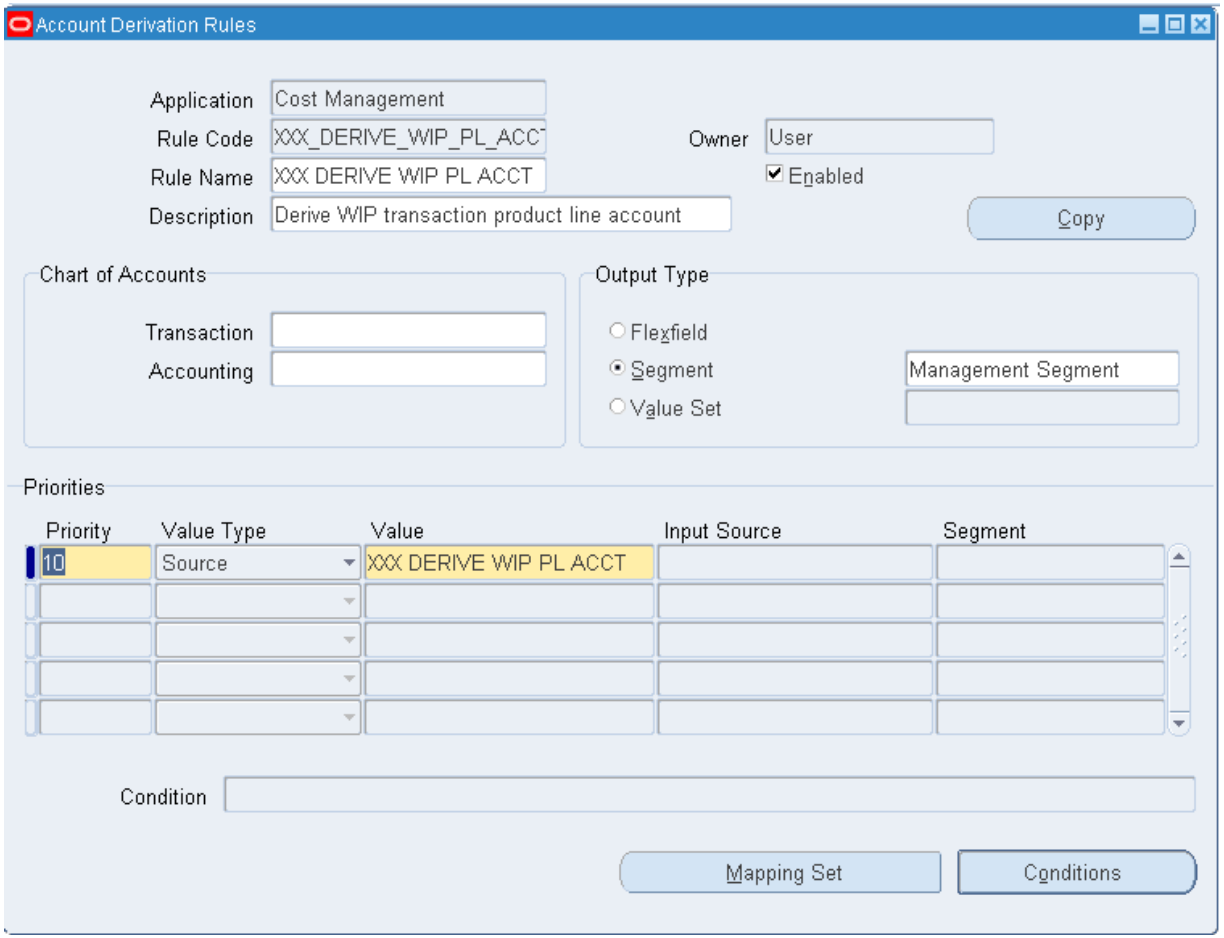
Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Journal Entry Setups => Account Derivation Rules

- Leave Chart of Accounts Flex Structure blank:



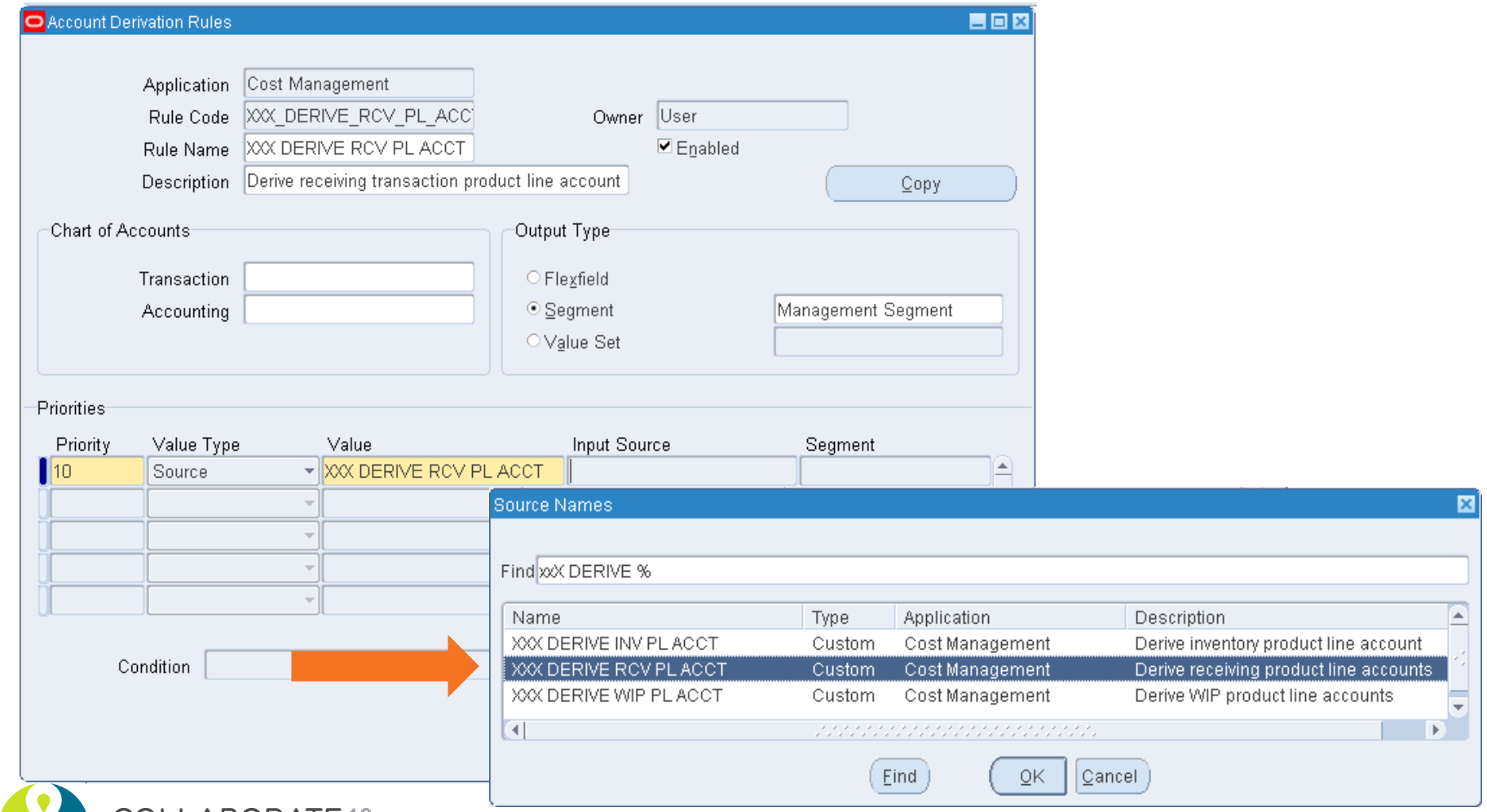
Create WIP Account Derivation Rule

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Journal Entry Setups => Account Derivation Rules



Create Receiving Account Derivation Rule

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Journal Entry Setups => Account Derivation Rules



Create Journal Line Definitions

- Create custom PL*SQL function
- Define custom sources
- Create account derivation rules (ADRs)
- Create journal line types (JLTs)
- Create journal line definitions (JLDs)
- Create an application accounting definition (AAD)
- Create a subledger accounting method (SLAM)
- Assign it to a Ledger

Create Journal Line Types

From Oracle Cost Management User Guide

- Which events and journal lines for product line accounting?

	Cost Management Subledger Acccounting Event Class, Journal Line Type and Event Type Model		
eAM Related	Event Class Name	Journal Line Types	Event Type Name
	Event Entity: Inventory Accounting Events		
YES	PO Delivery into Inventory	Inventory Valuation	Return to Receiving Inspection from Inventory
		Receiving Inspection	PO Delivery into Inventory
		Clearing	PO Delivery Adjustment
		Material Overhead Absorption	
		Purchase Price Variance	
		Cost Variance	Logical PO Delivery into Inventory
		Shikyu Variance	Logical PO Delivery Adjustment
		Offset	Logical PO Delivery into Inventory
			Logical Return to Receiving Inspection from Inventory
YES	Miscellaneous	Inventory Valuation	Move Order Issue
		Offset	Account Alias Issue
		Cost Variance	Account Issue
			Account Receipt
			Account Alias Receipt
			Miscellaneous Issue
			Miscellaneous Receipt
			Project Contract Issue
			Inventory Lot Translate
			Internal Requisition Receipt Adjustment
			Shipment Receipt Adjustment
			Cycle Count Adjustment
			Physical Inventory Adjustment

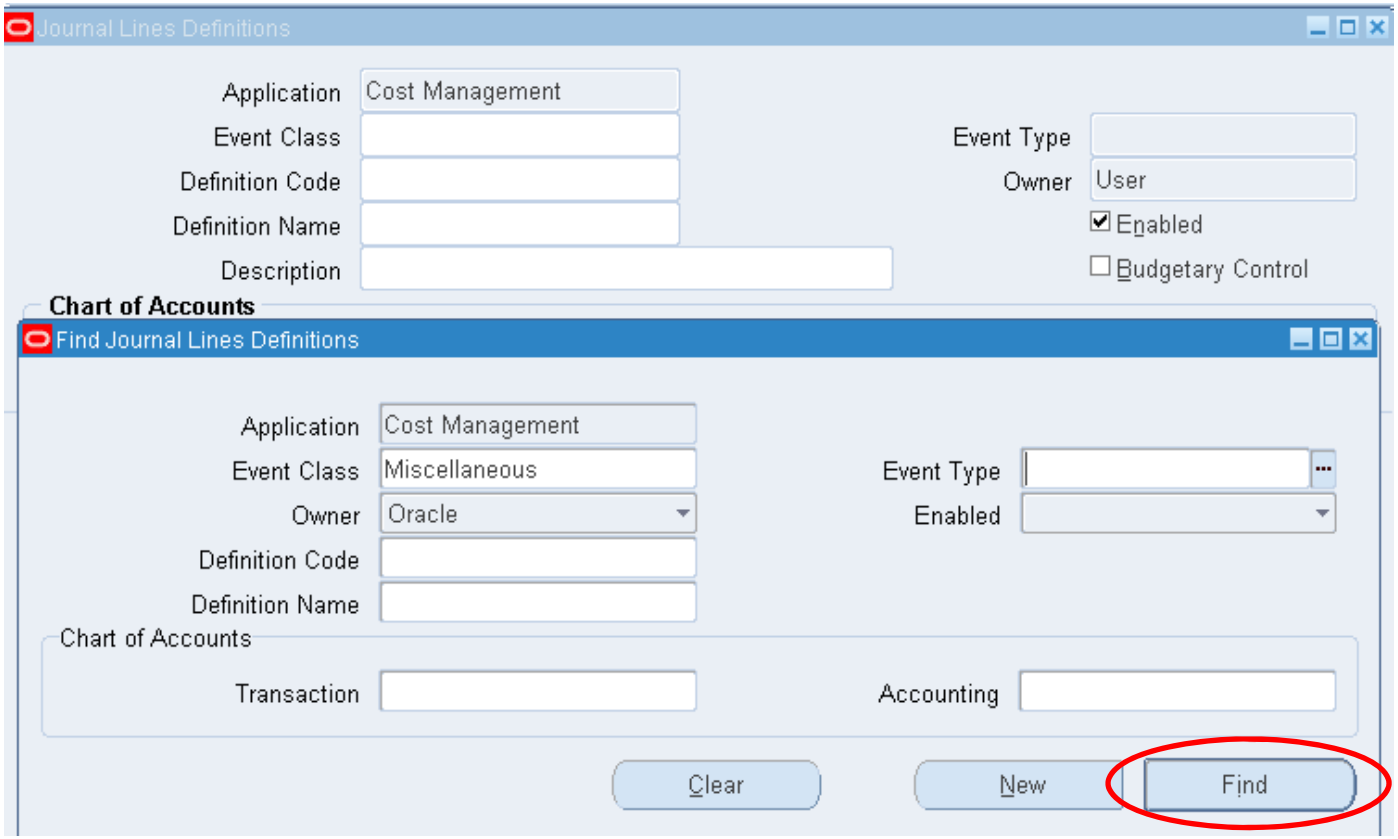
Which Event Class Name (Transaction) are you using?

And for each Transaction which Journal Line Type needs Product Line Accounting?

2) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

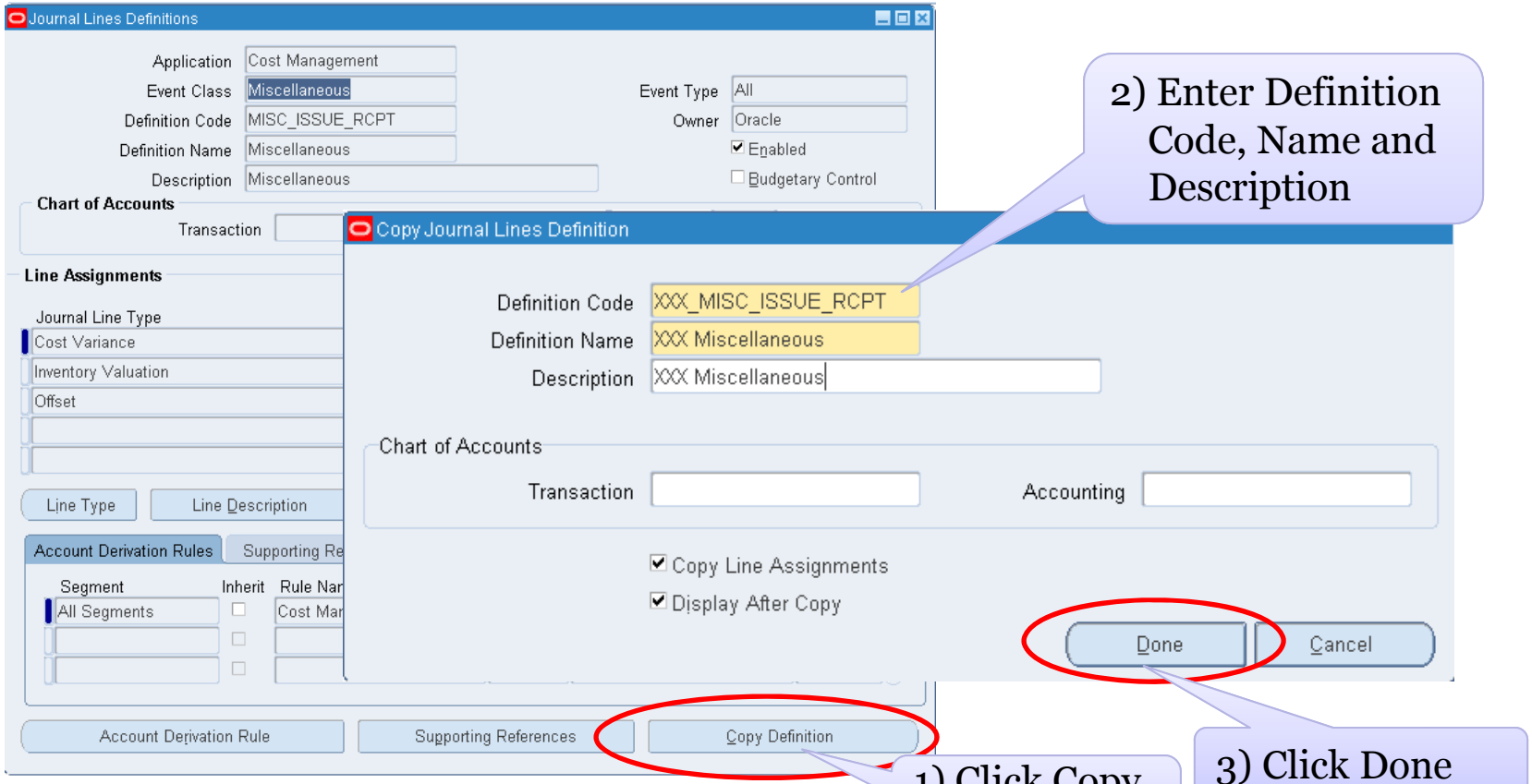
- First, query up the Event Class / Miscellaneous Transaction Example



3) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

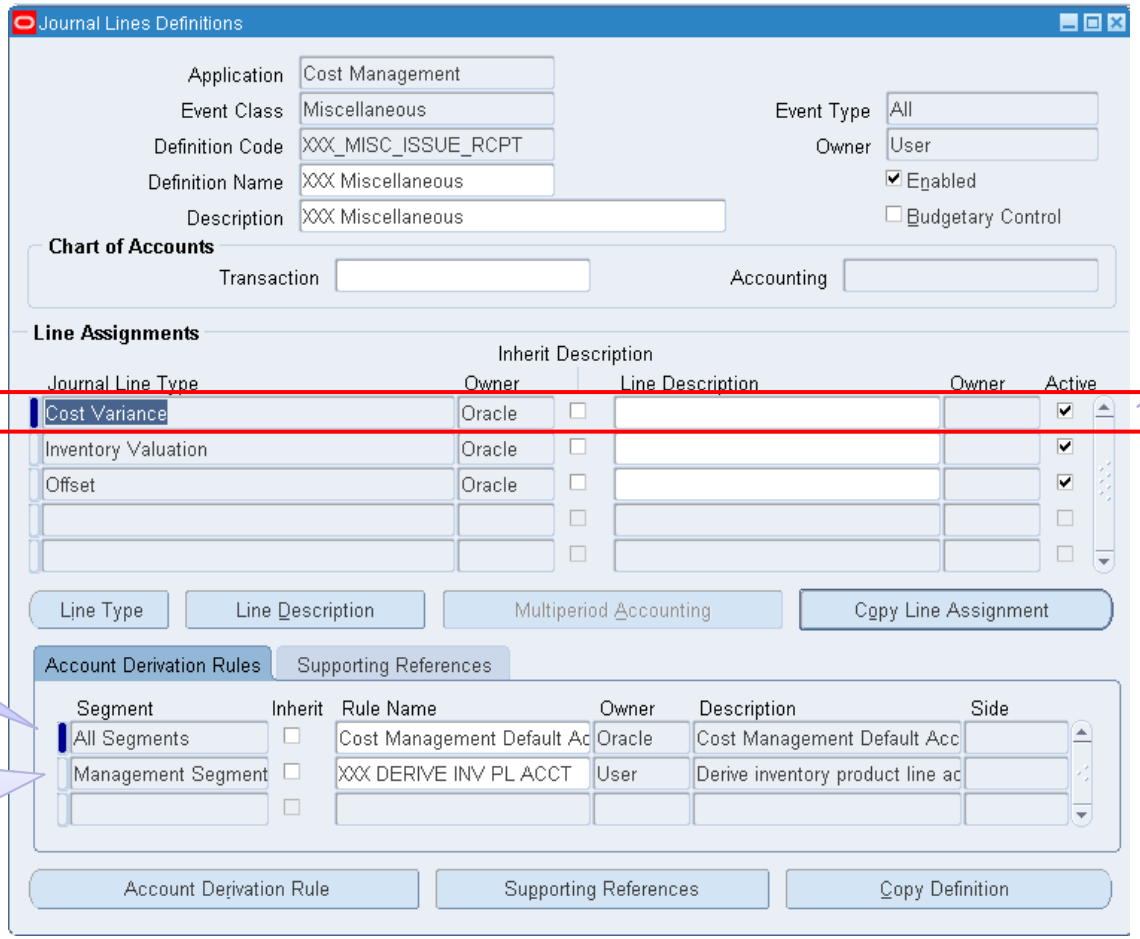
- Next copy to a new journal line definition



5) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Assign new ADRs to new journal definitions – Cost Variance



1) Select the Journal Line Type

2) Keep the existing ADR

3) Override the mgmt (PL) segment

Used for AVG, FIFO, LIFO cost methods

6) Create Journal Line Types

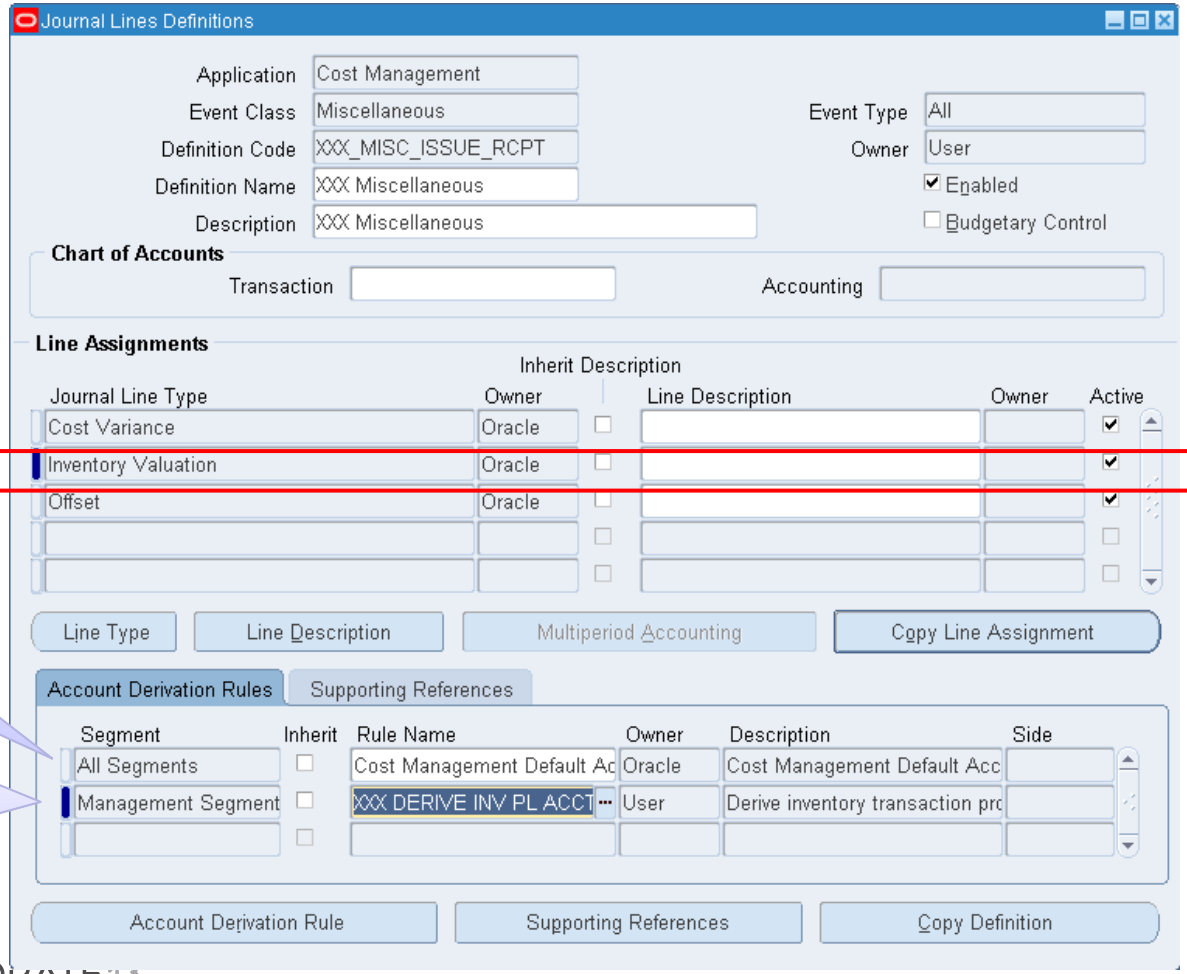
Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Assign new ADRs to new journal definitions – Inventory Valuation

1) Select the Journal Line Type

2) Keep the existing ADR

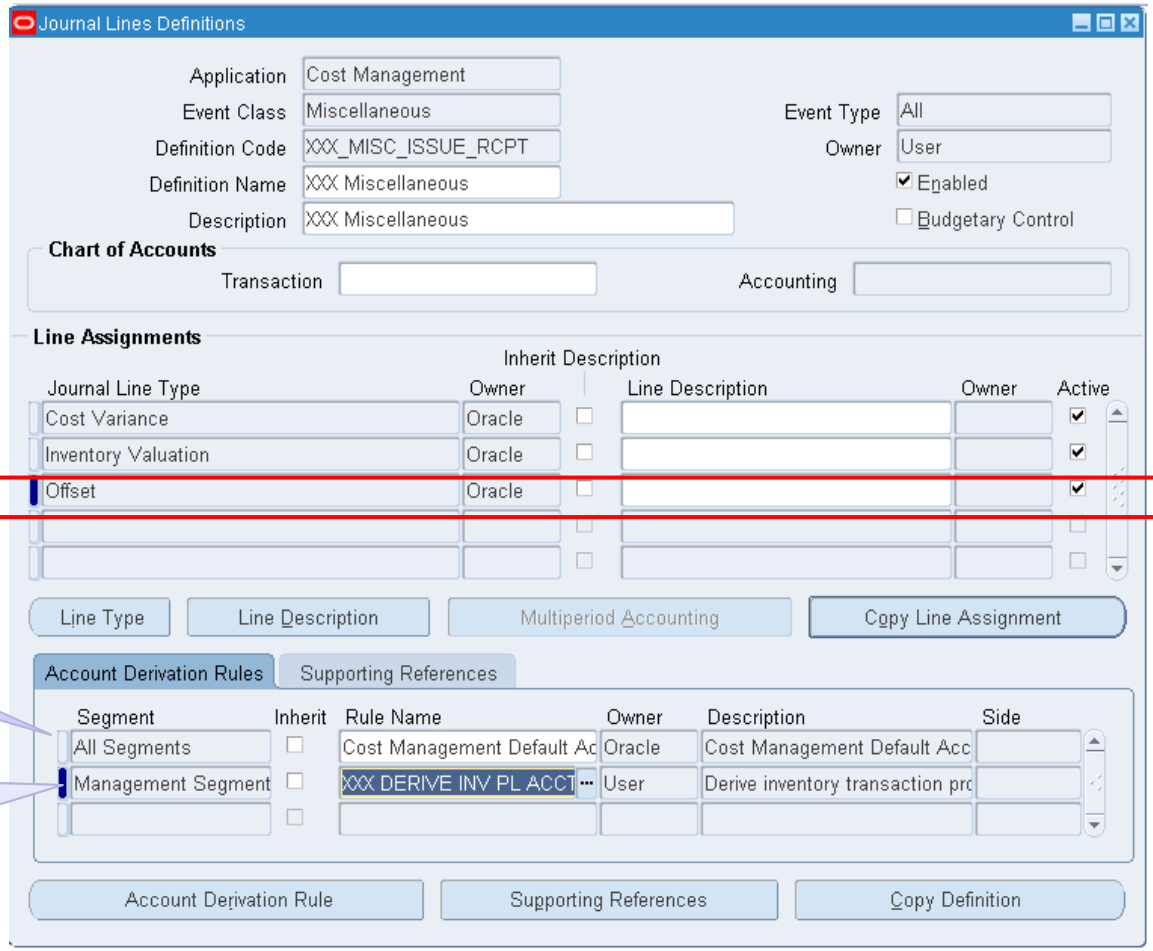
3) Override the mgmt (PL) segment



7) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Assign new ADRs to new journal definitions – Offset



1) Select the Journal Line Type

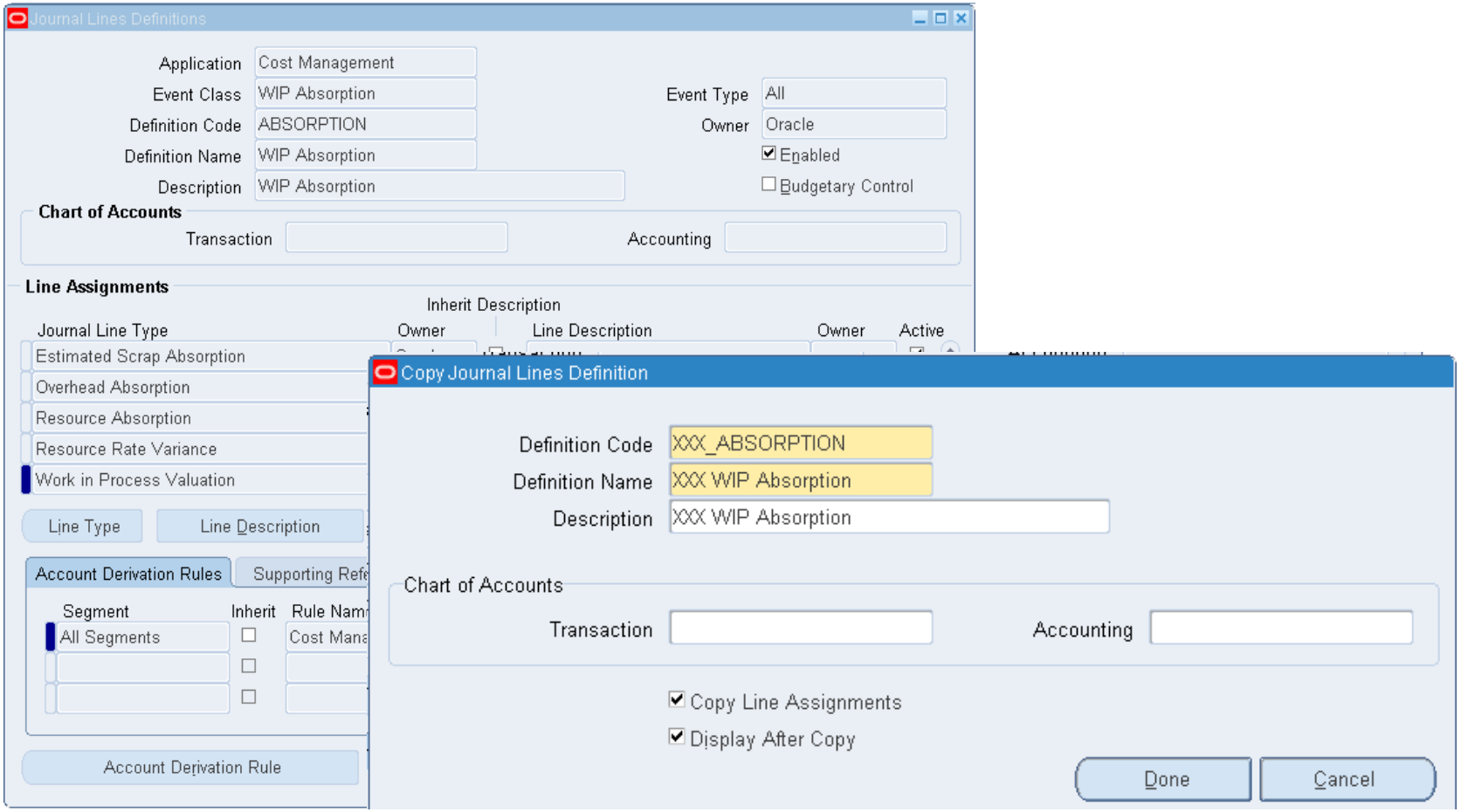
2) Keep the existing ADR

3) Override the mgmt (PL) segment

8) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

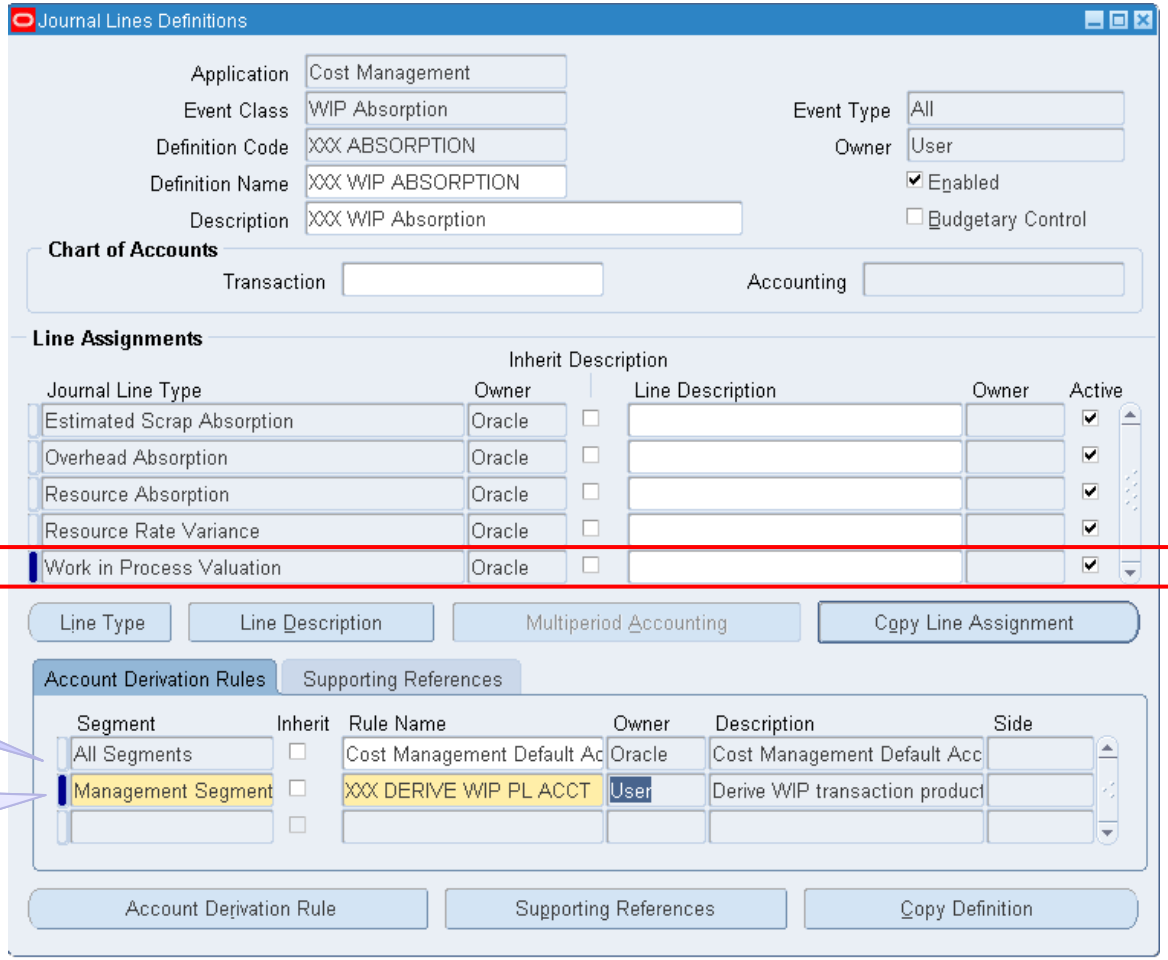
- Copy to a new definition – WIP Absorption



9) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Now assign ADRs to new journal definitions – WIP Absorption



1) Select the Journal Line Type

2) Keep the existing ADR

3) Override the product line segment

Inventory & Shop Floor Destinations
Purchase Order Accounting Accrual Summary by T Account

Transaction	Receiving Value		Inventory A/P Accrual	
PO Receipt (Rcv)	**100**		100	
Delivery to Stock		**100**		
Invoice Match				100

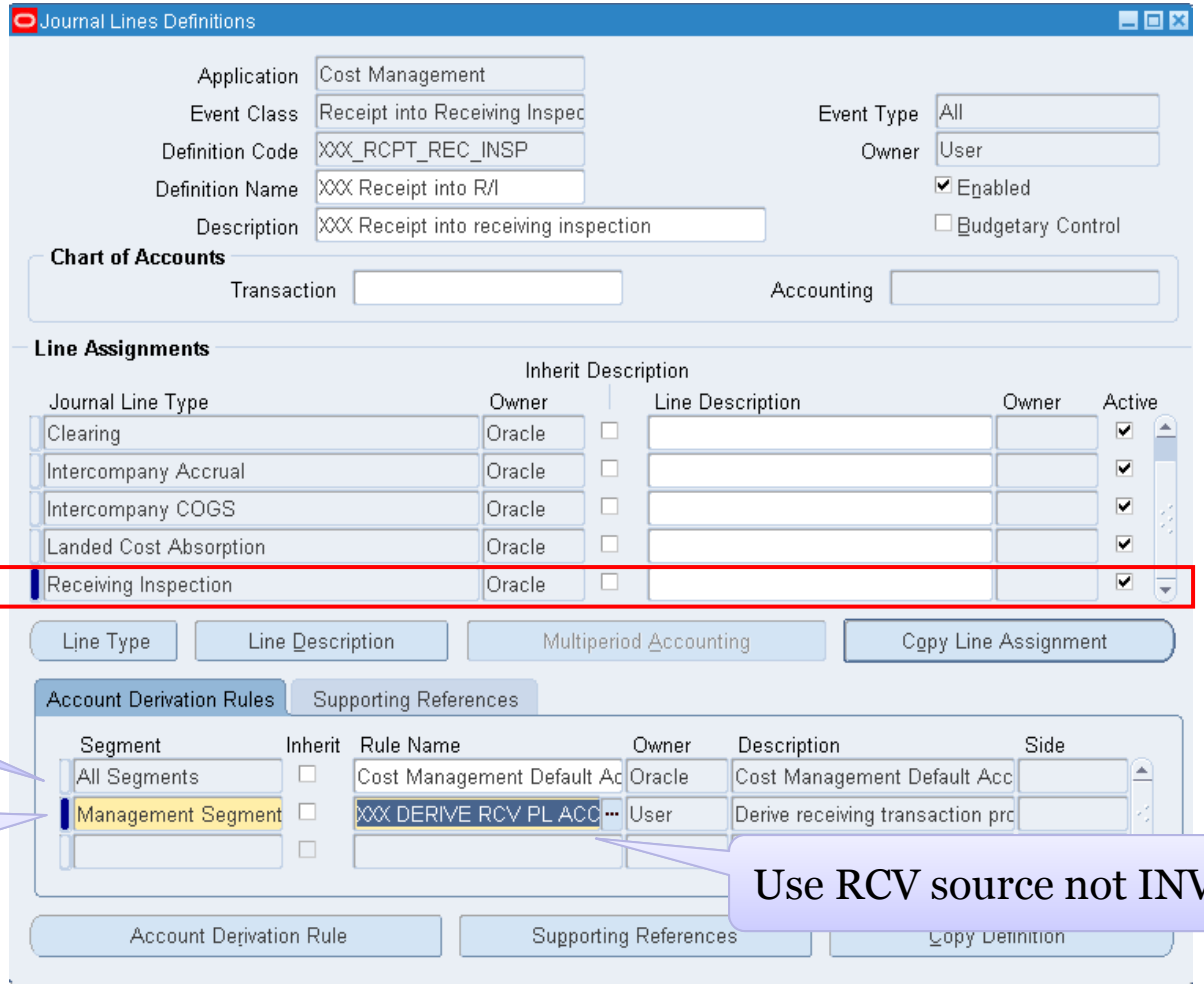
	Inventory/WIP		Trade Payables	
Delivery to Stock	100			
Invoice Match				100

Have to do both parts of the Receiving Inspection Transaction

10) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Now assign to new journal definitions – Receive into R/I



1) Select the Journal Line Type

2) Keep the existing ADR

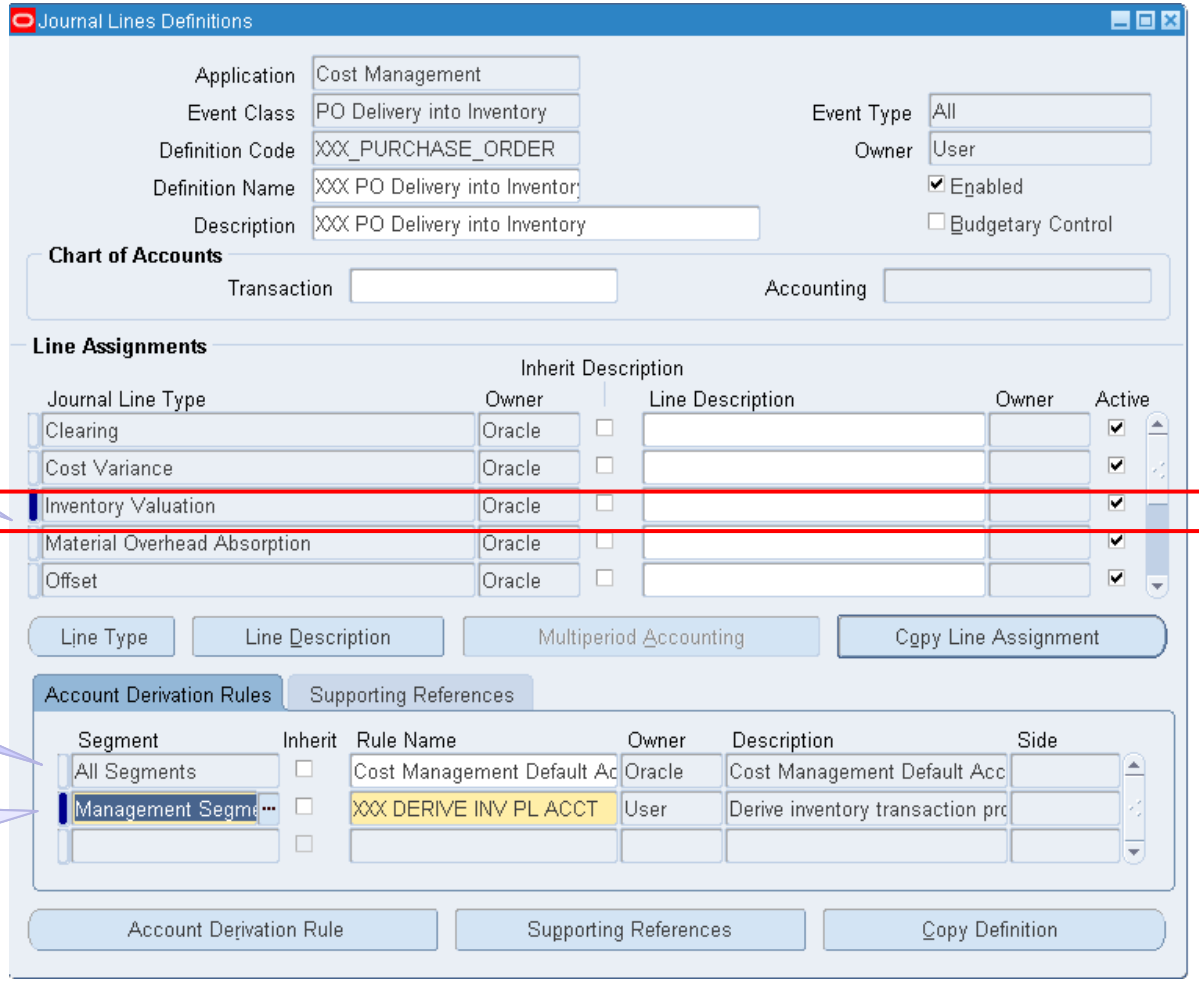
3) Override the product line segment

Use RCV source not INV

11) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Now assign to new journal definitions – Delivery into Receiving



1) Select the Journal Line Type

2) Keep the existing ADR

3) Override the product line segment

12) Create Journal Line Types

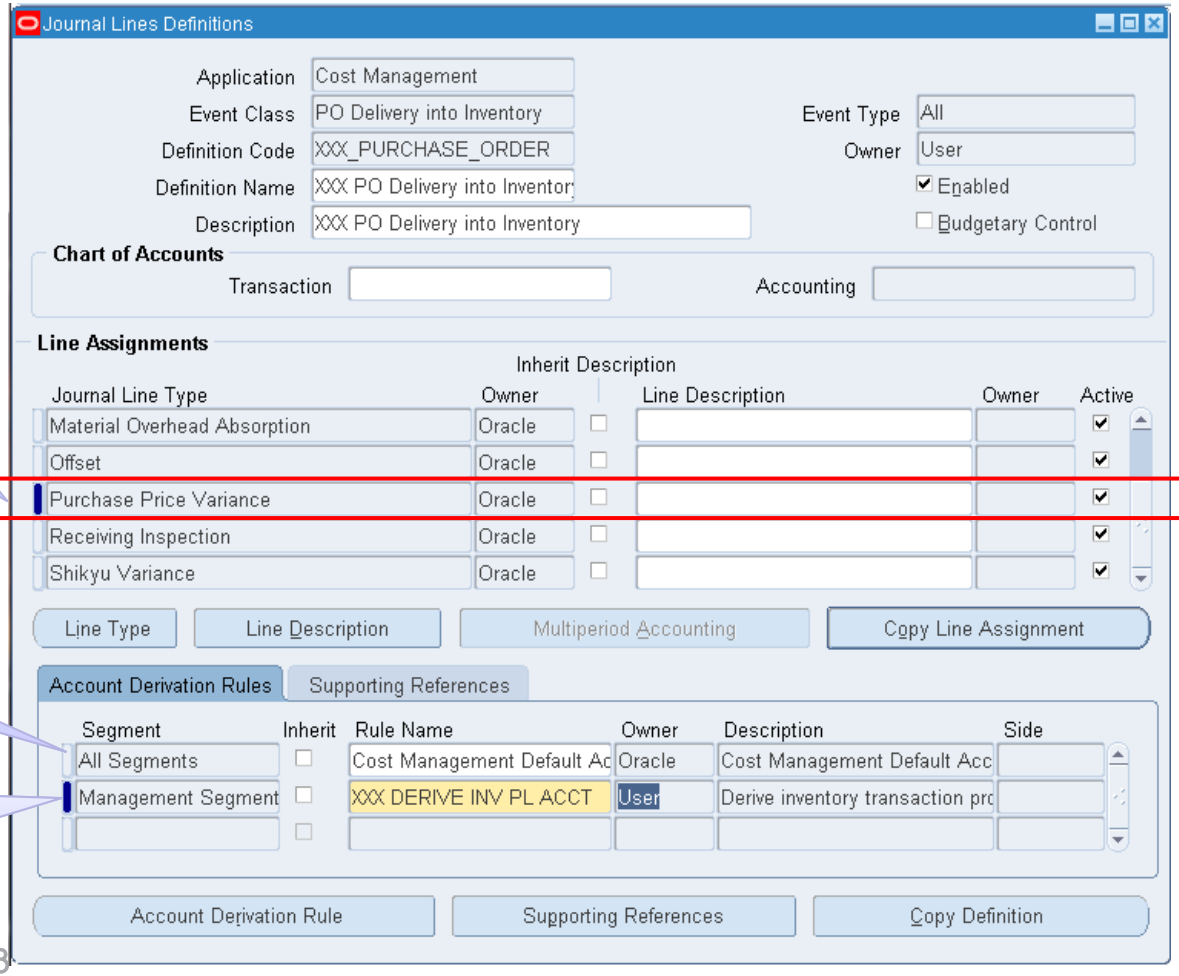
Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Delivery into Receiving – Purchase Price Variance

1) Select the Journal Line Type

2) Keep the existing ADR

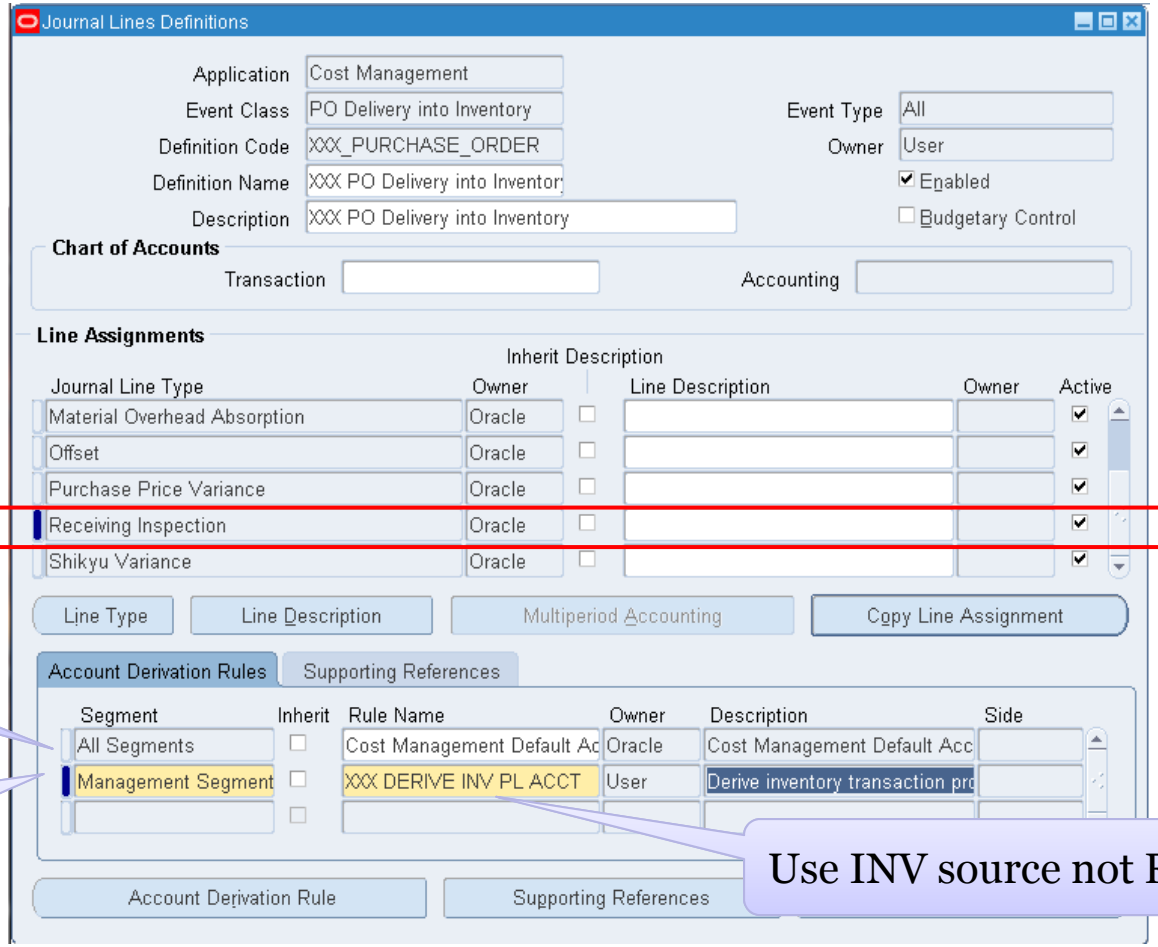
3) Override the product line segment



13) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Delivery into Receiving – Receiving Inspection



1) Select the Journal Line Type

2) Keep the existing ADR

3) Override the product line segment

Use INV source not RCV

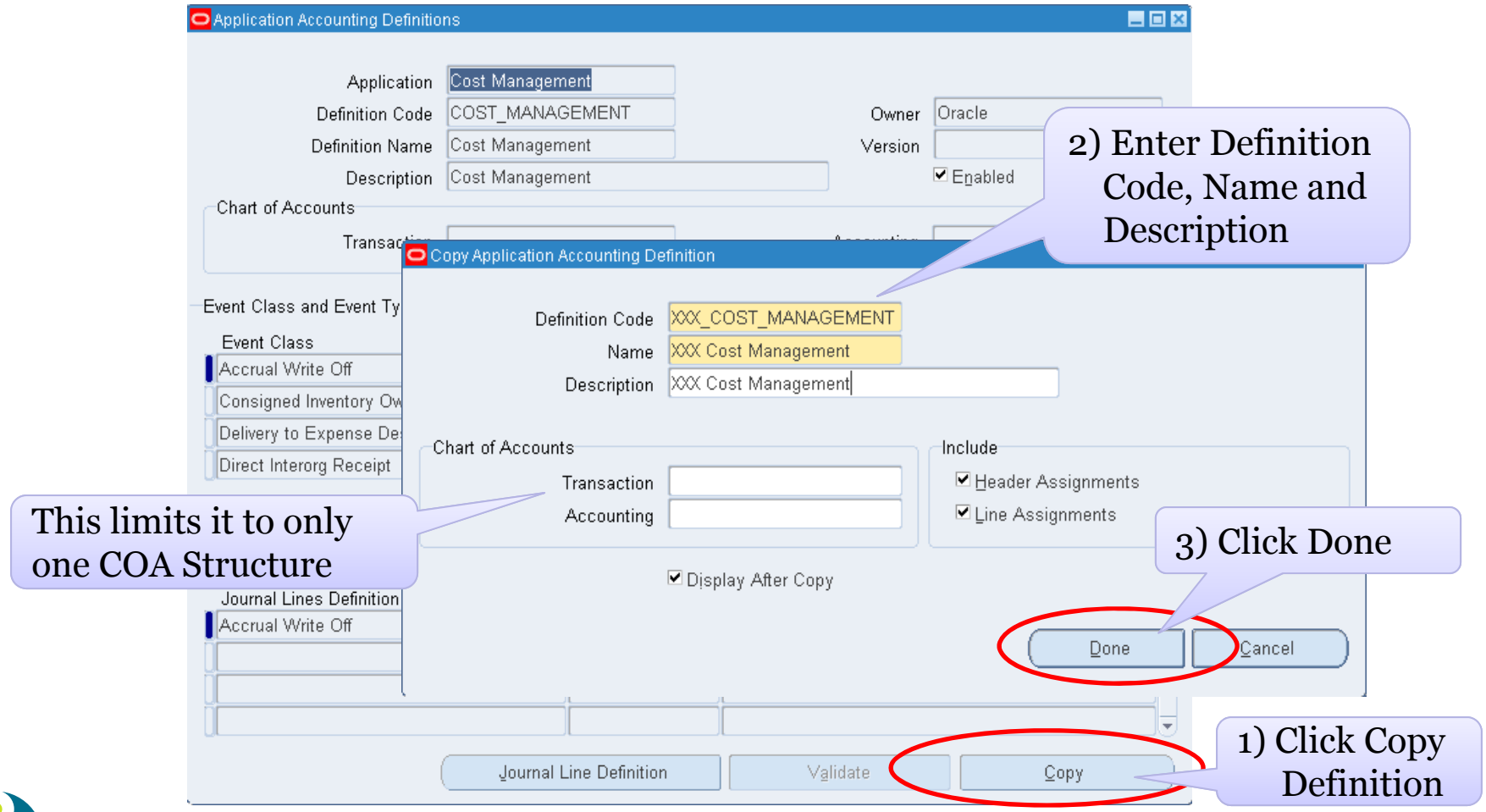
Application Accounting Definition

- Create custom PL*SQL function
- Define custom sources
- Create account derivation rules (ADRs)
- Create journal line types (JLTs)
- Create journal line definitions (JLDs)
- Create an application accounting definition (AAD)
- Create a subledger accounting method (SLAM)
- Assign it to a Ledger

Create Application Accounting Definition

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Application Accounting Definitions

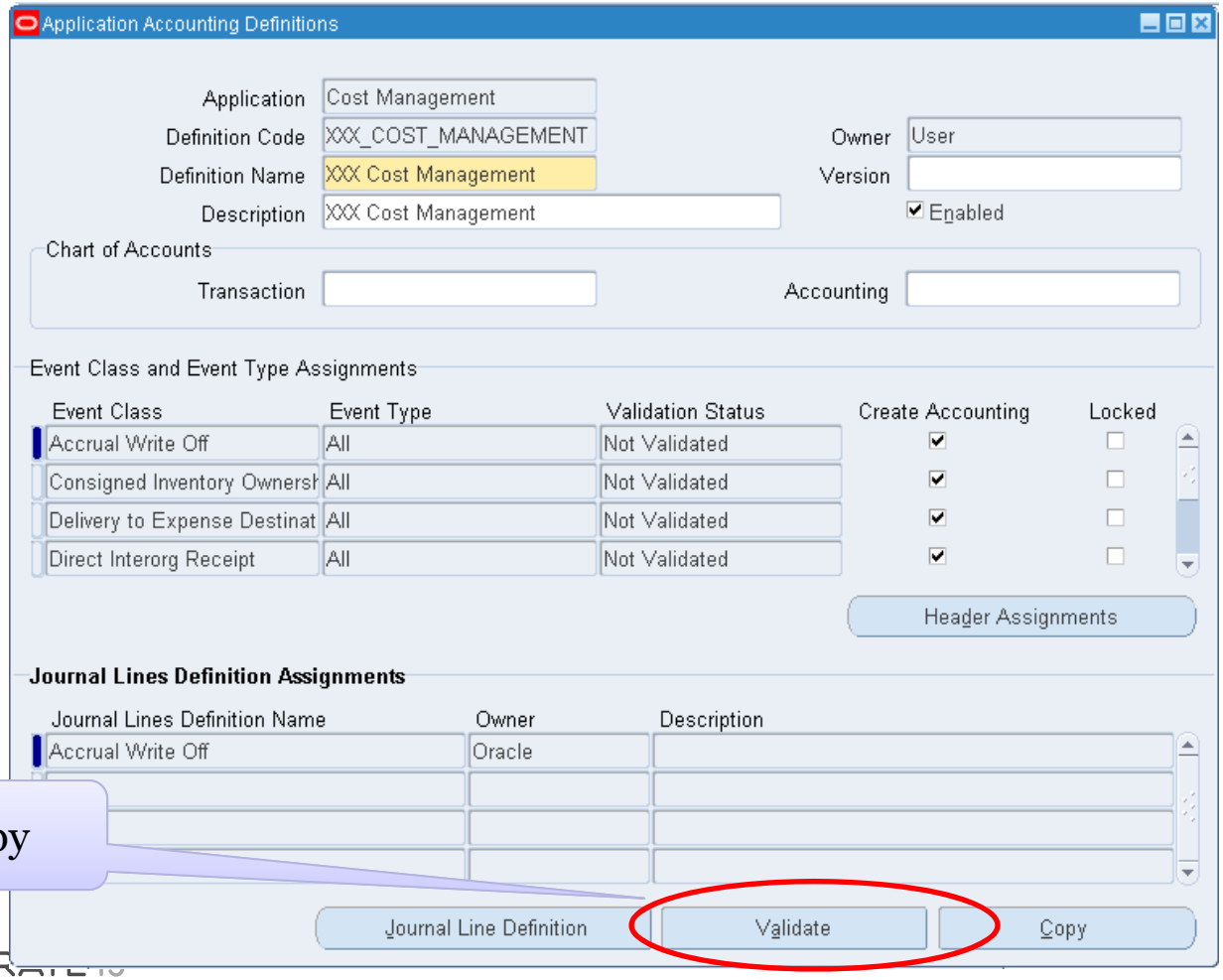
- Copy the standard Oracle Application Accounting Definition



Create Application Accounting Definition

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Application Accounting Definitions

- Copy the standard Oracle Application Accounting Definition



Validate initial copy

Create Application Accounting Definition

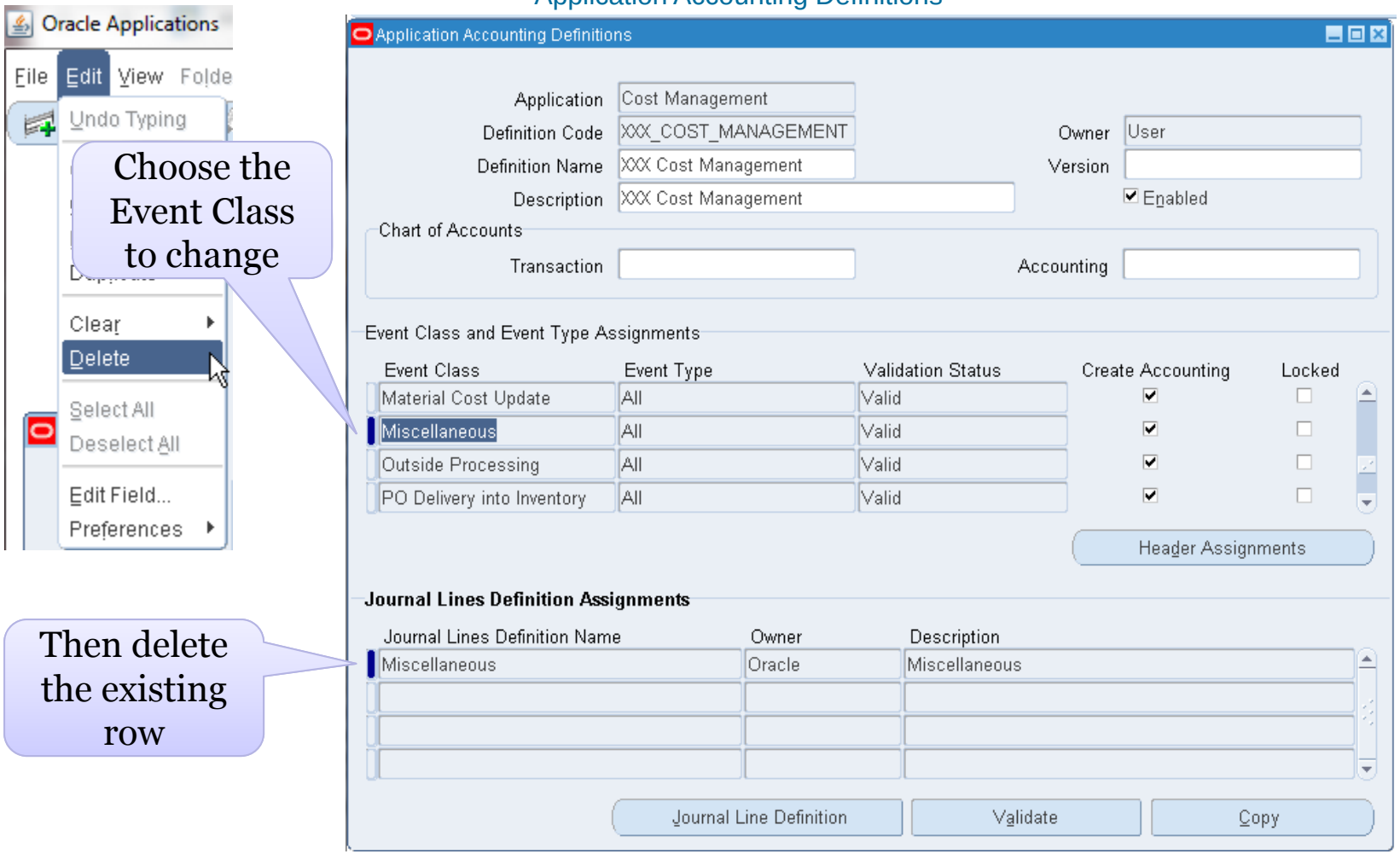
- Now assign new Journal Lines Definition to your Application Accounting Definition:

Product Line Accounting Examples
(in real life may need to do 33 Accounting Transaction Events!)

- Miscellaneous => XXX Miscellaneous
- PO Delivery into Inventory => XXX PO Delivery into Inventory
- Receipt into Receiving Inspection => XXX Receipt into R/I
- WIP Material => XXX WIP Material (not shown)
- WIP Absorption => XXX WIP Absorption

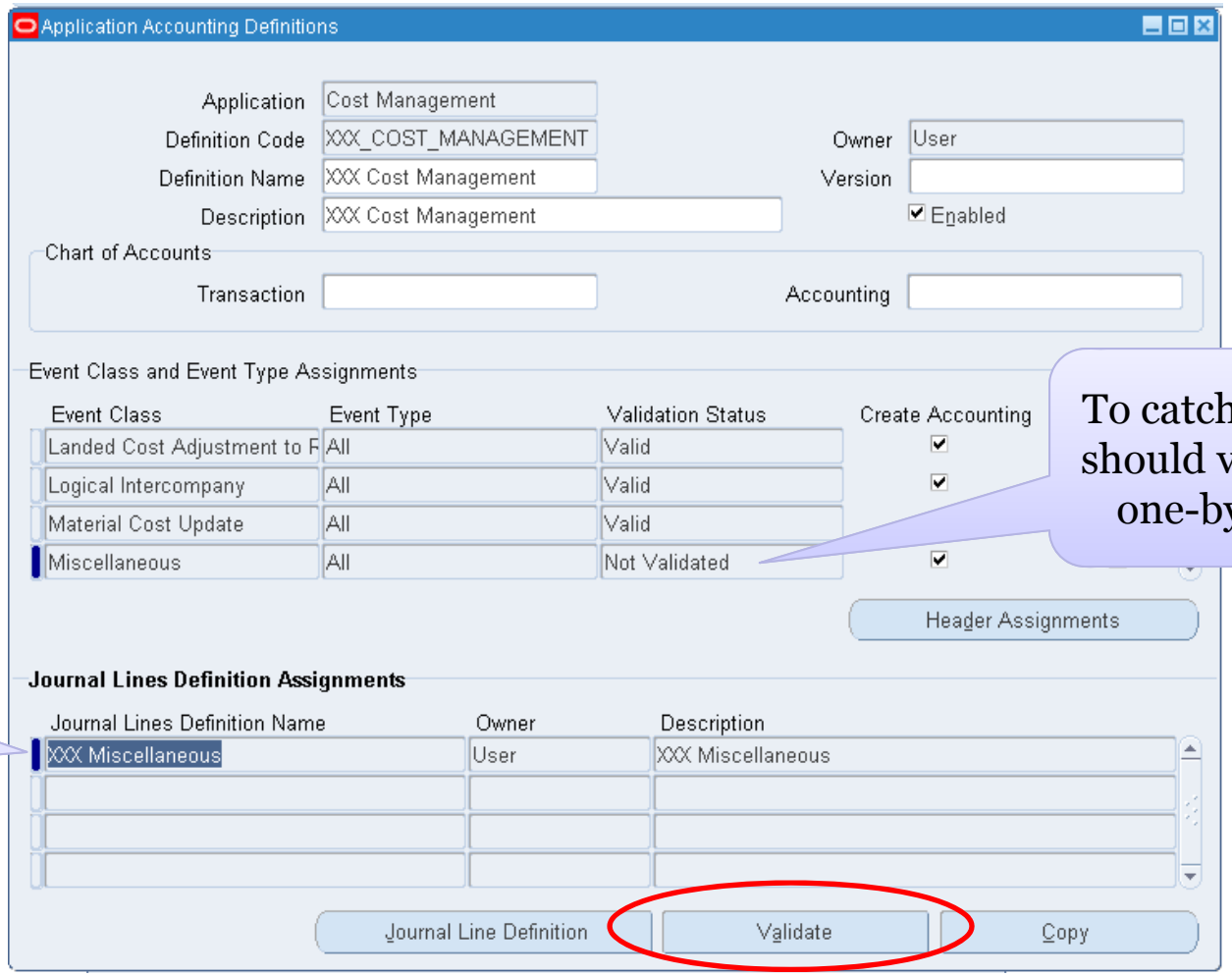
Create Application Accounting Definition

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Application Accounting Definitions



Create Application Accounting Definition

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Application Accounting Definitions

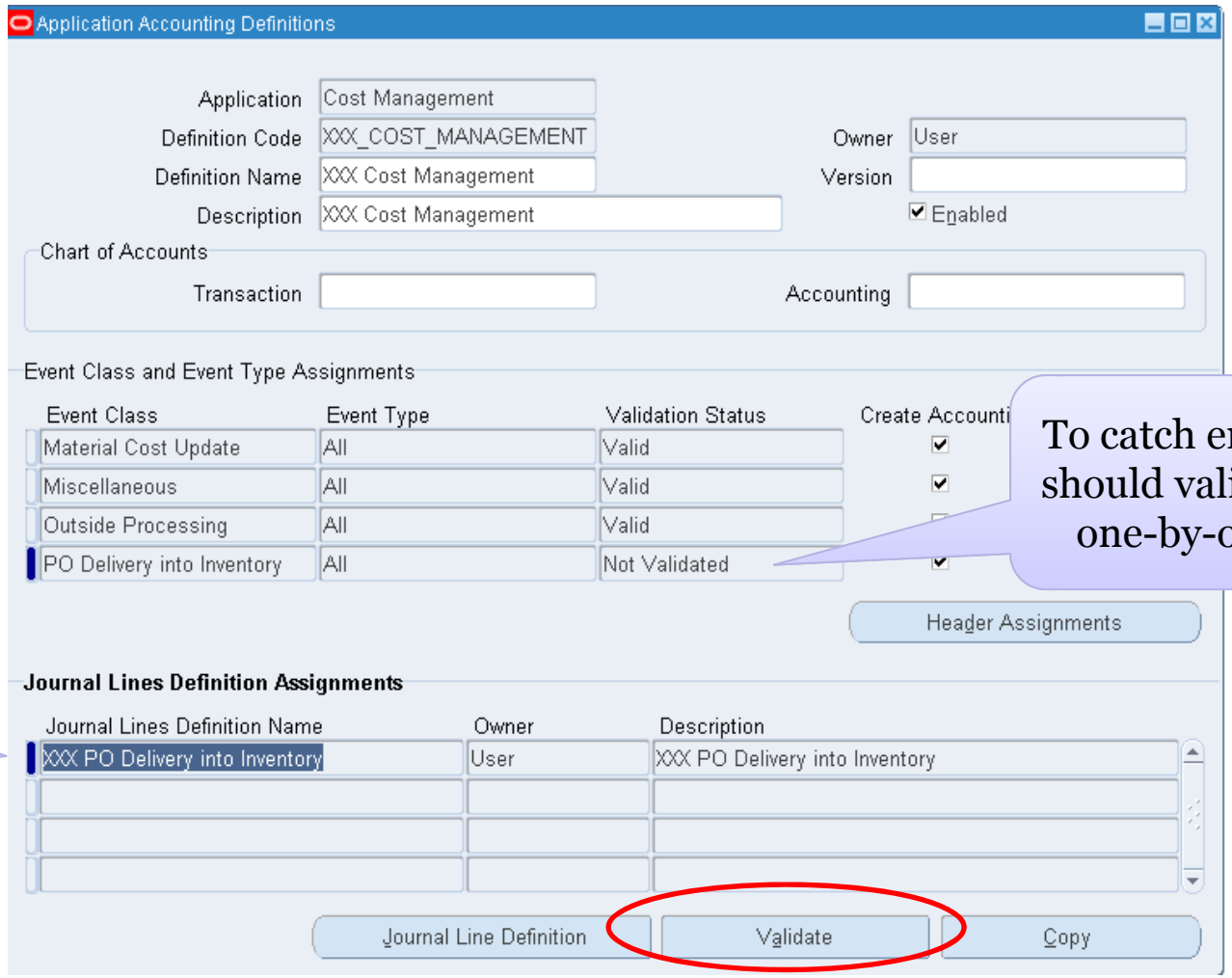


To catch errors should validate one-by-one

And add in new assignment

Create Application Accounting Definition

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Application Accounting Definitions

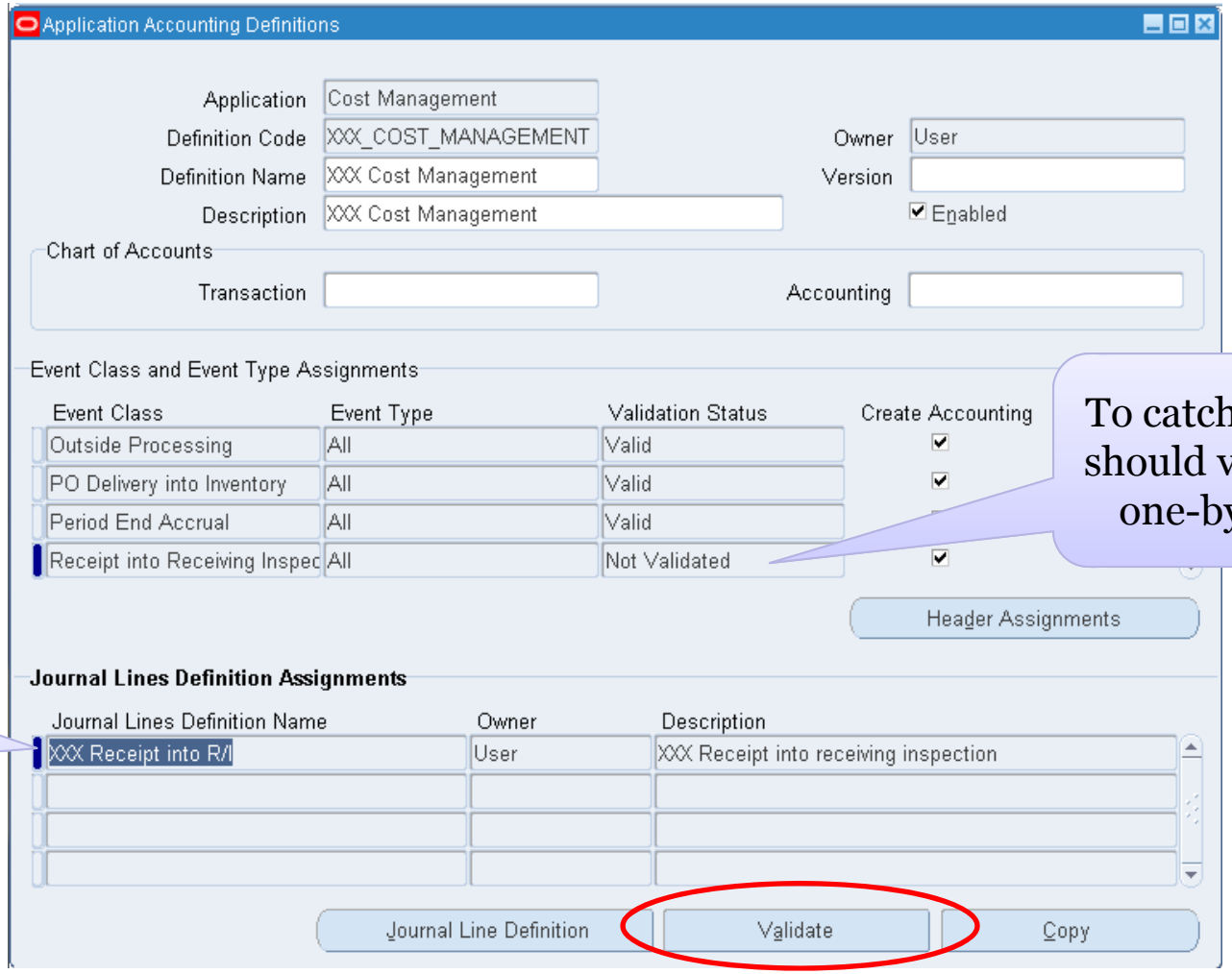


To catch errors should validate one-by-one

And add in new assignment

Create Application Accounting Definition

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Application Accounting Definitions

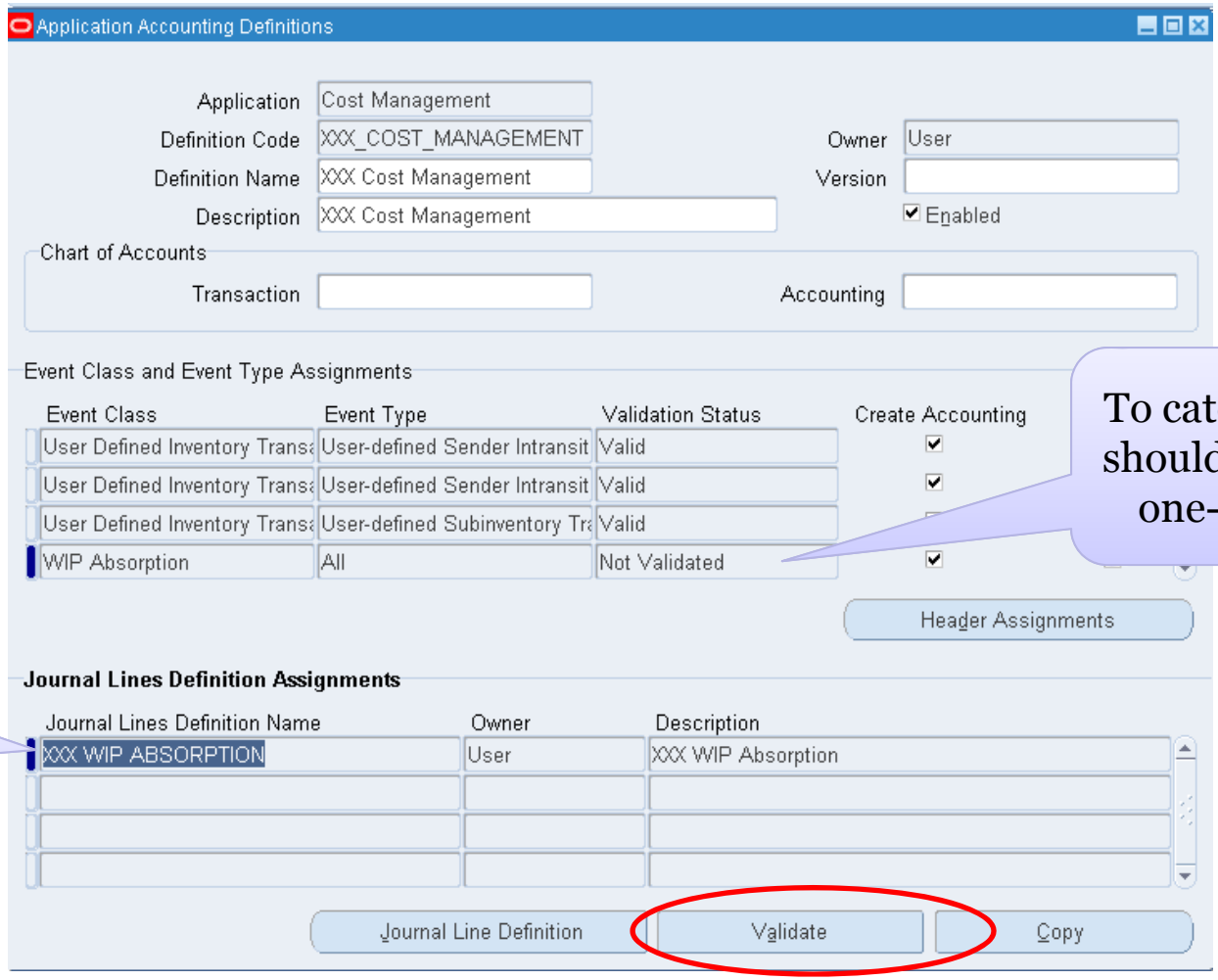


To catch errors should validate one-by-one

And add in new assignment

Create Application Accounting Definition

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Application Accounting Definitions



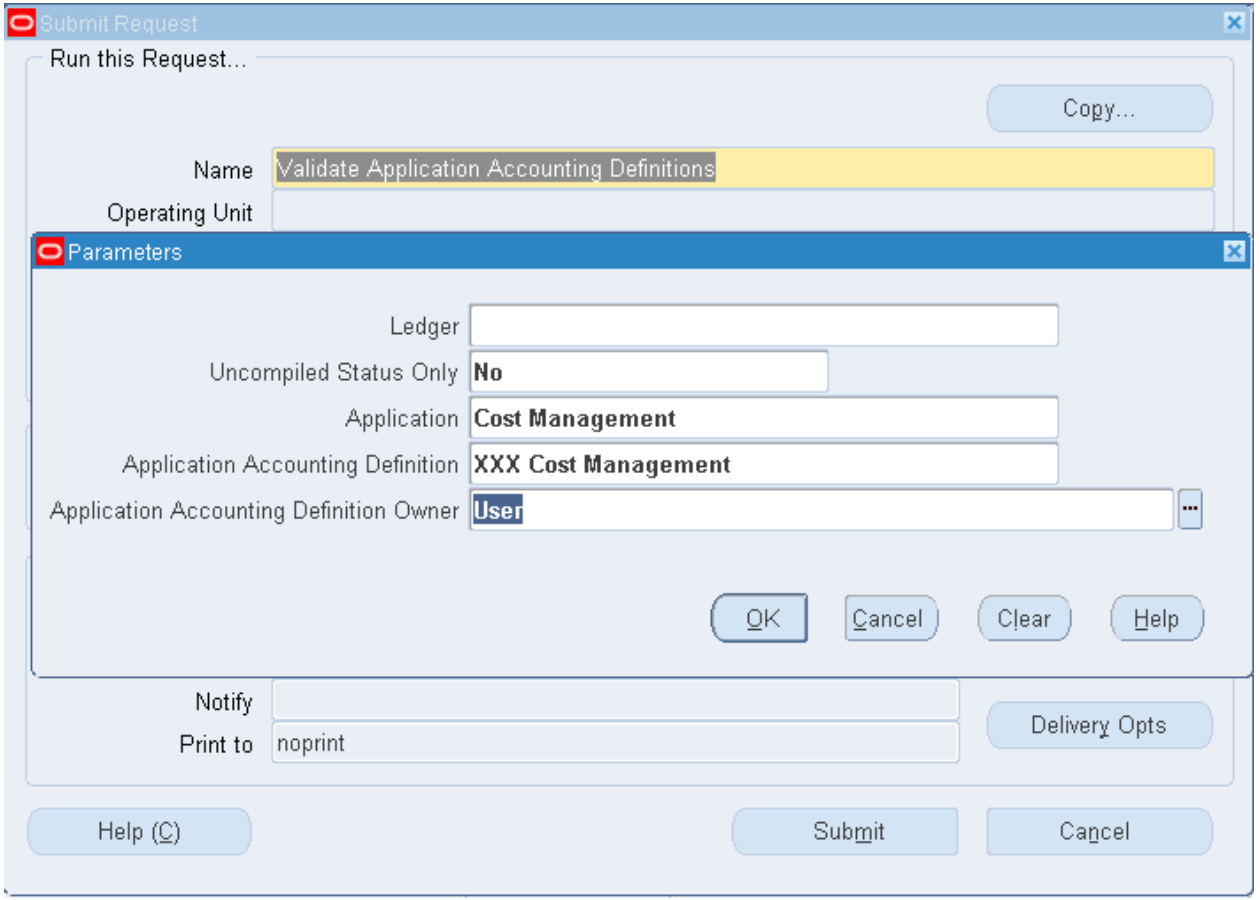
To catch errors should validate one-by-one

And add in new assignment

Create Application Accounting Definition

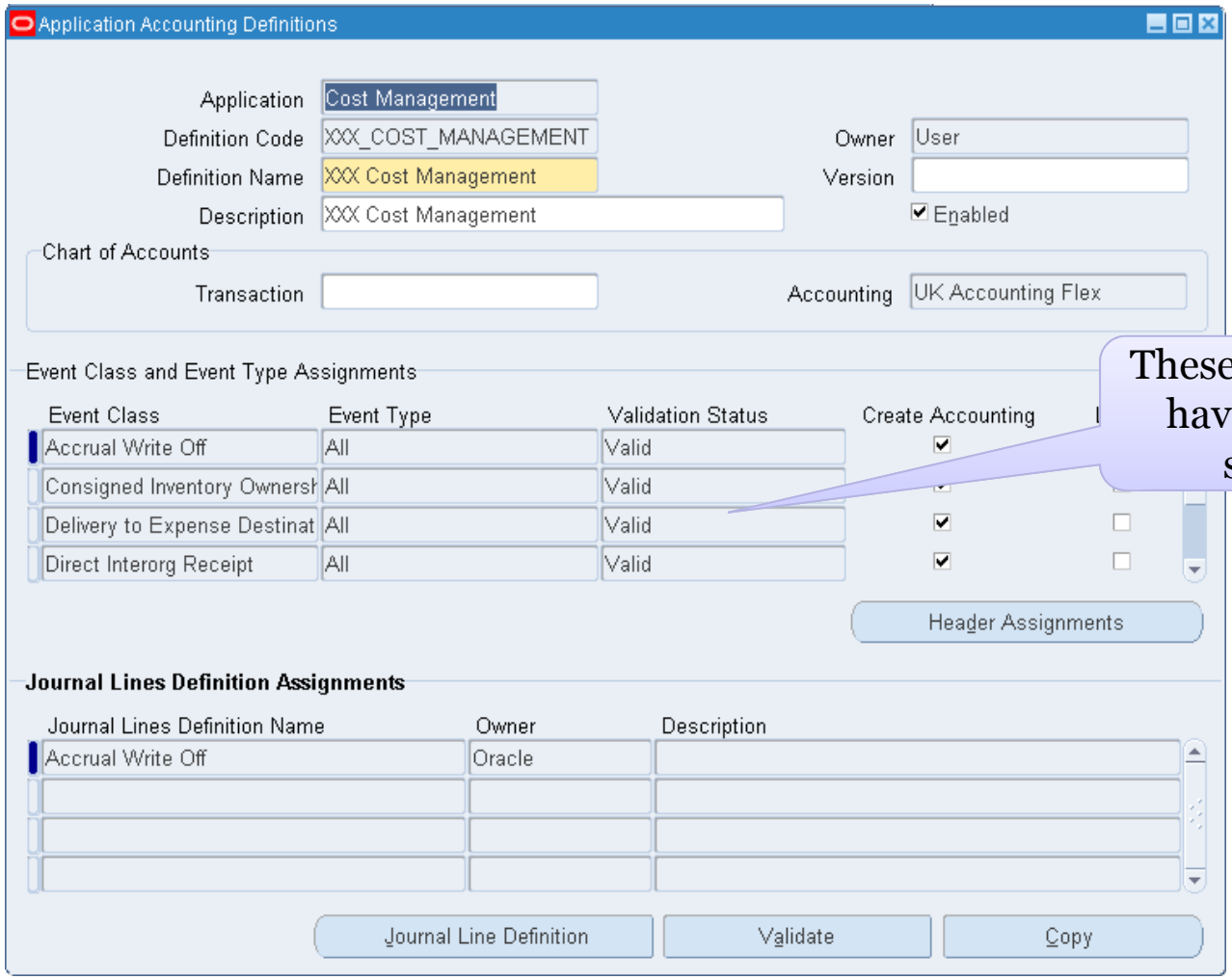
Menu path: Cost Management SLA => Requests => Submit a New Request => Validate Application Accounting Definitions

- Another way to Validate Application Accounting Definitions



Create Application Accounting Definition

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Application Accounting Definitions



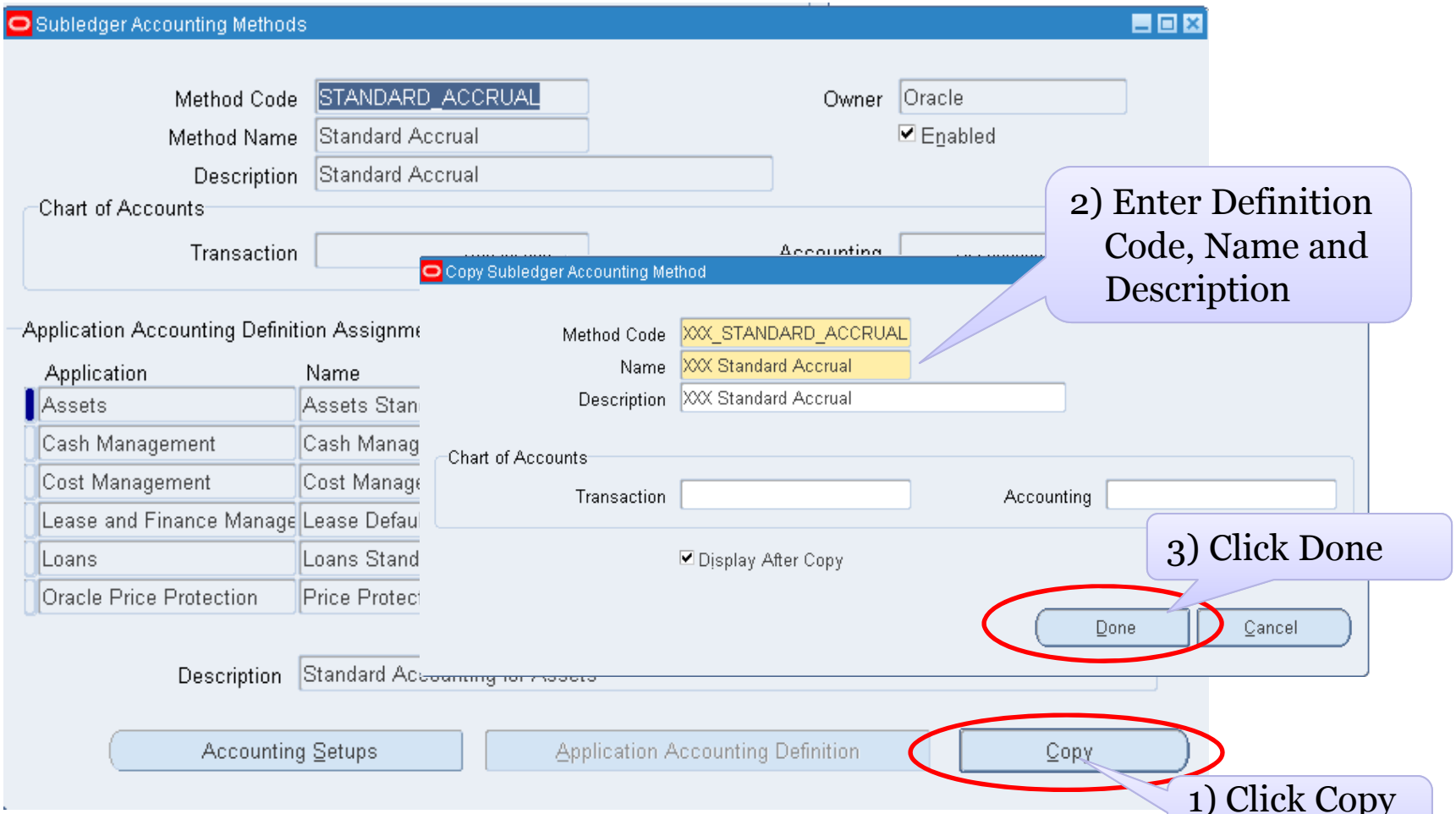
These should all have a Valid status

Subledger Accounting Method

- Create custom PL*SQL function
- Define custom sources
- Create account derivation rules (ADRs)
- Create journal line types (JLTs)
- Create journal line definitions (JLDs)
- Create an application accounting definition (AAD)
- Create a subledger accounting method (SLAM)
- Assign it to a Ledger

Create Subledger Accounting Method

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Subledger Accounting Methods

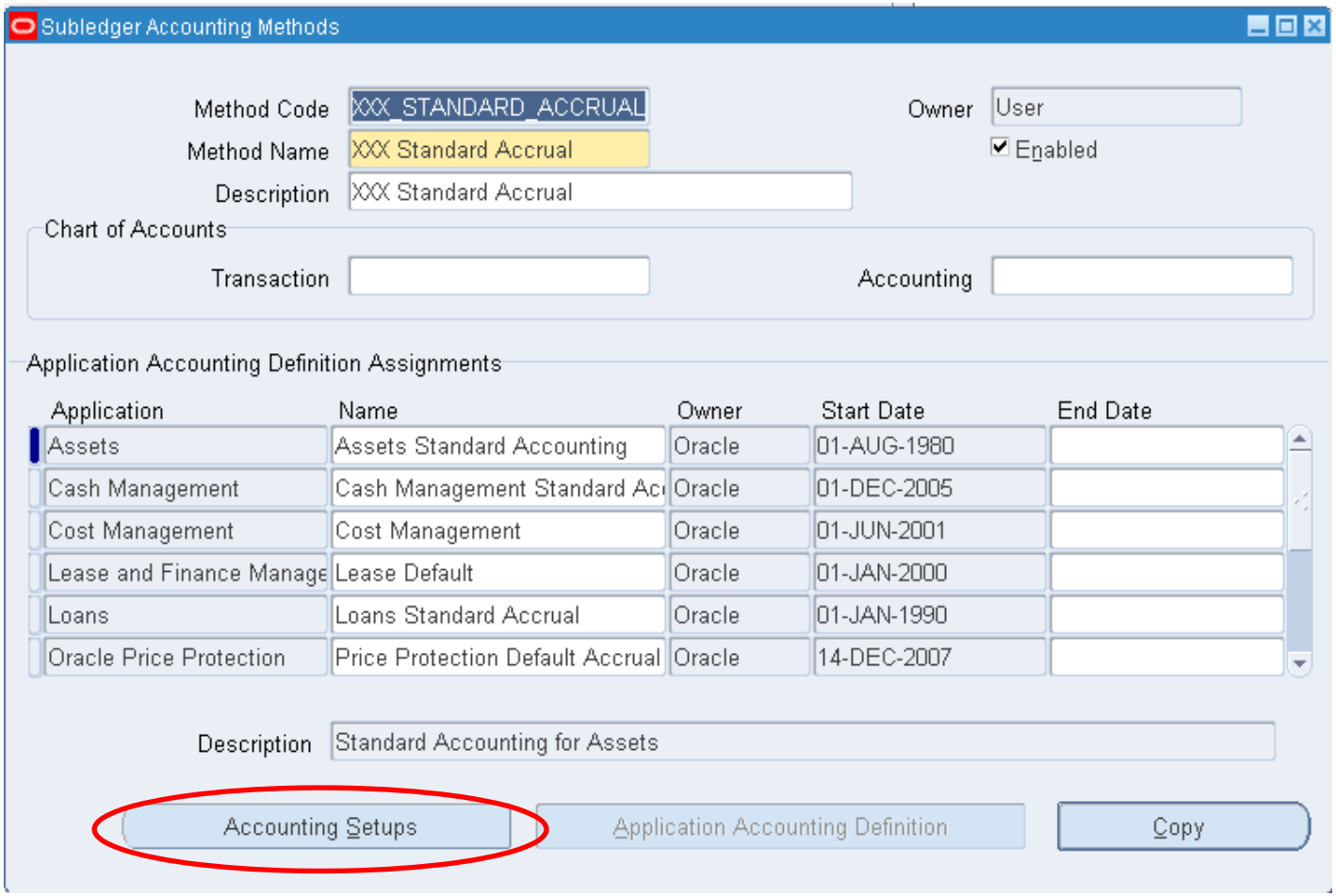


Subledger Accounting Method

- Create custom PL*SQL function
- Define custom sources
- Create account derivation rules (ADRs)
- Create journal line types (JLTs)
- Create journal line definitions (JLDs)
- Create an application accounting definition (AAD)
- Create a subledger accounting method (SLAM)
- Assign it to a Ledger

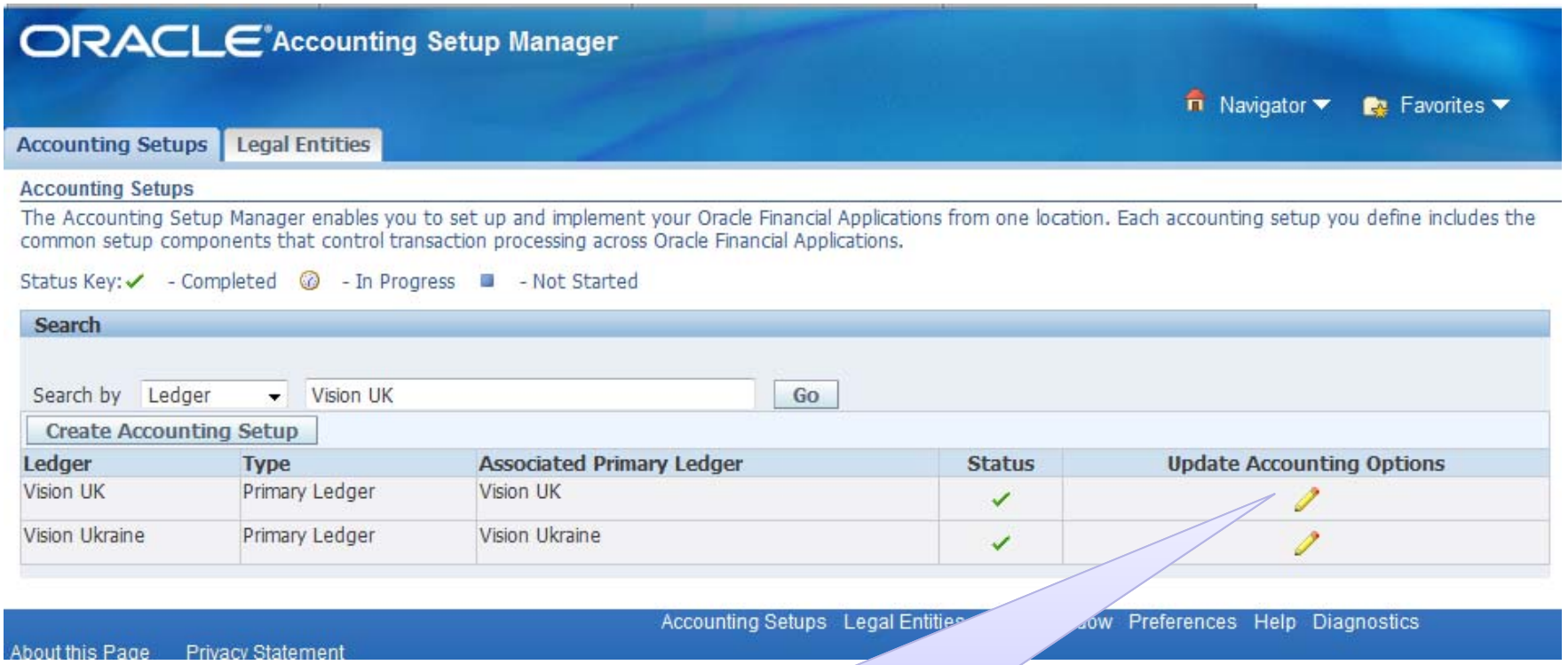
Assign Ledger to SLAM

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Subledger Accounting Methods => Accounting Setups



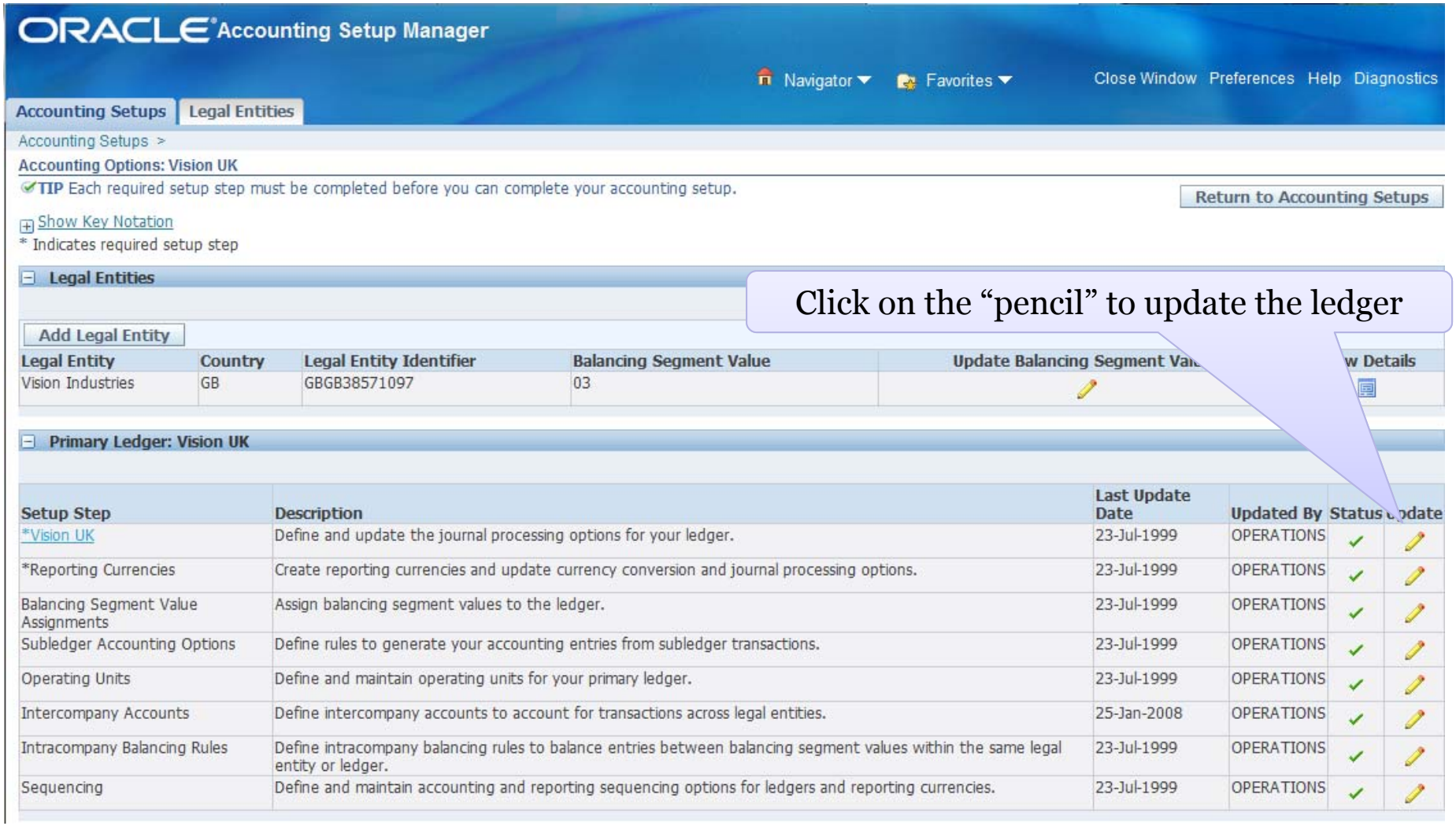
Assign Ledger to SLAM

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Subledger Accounting Methods => Accounting Setup Manager



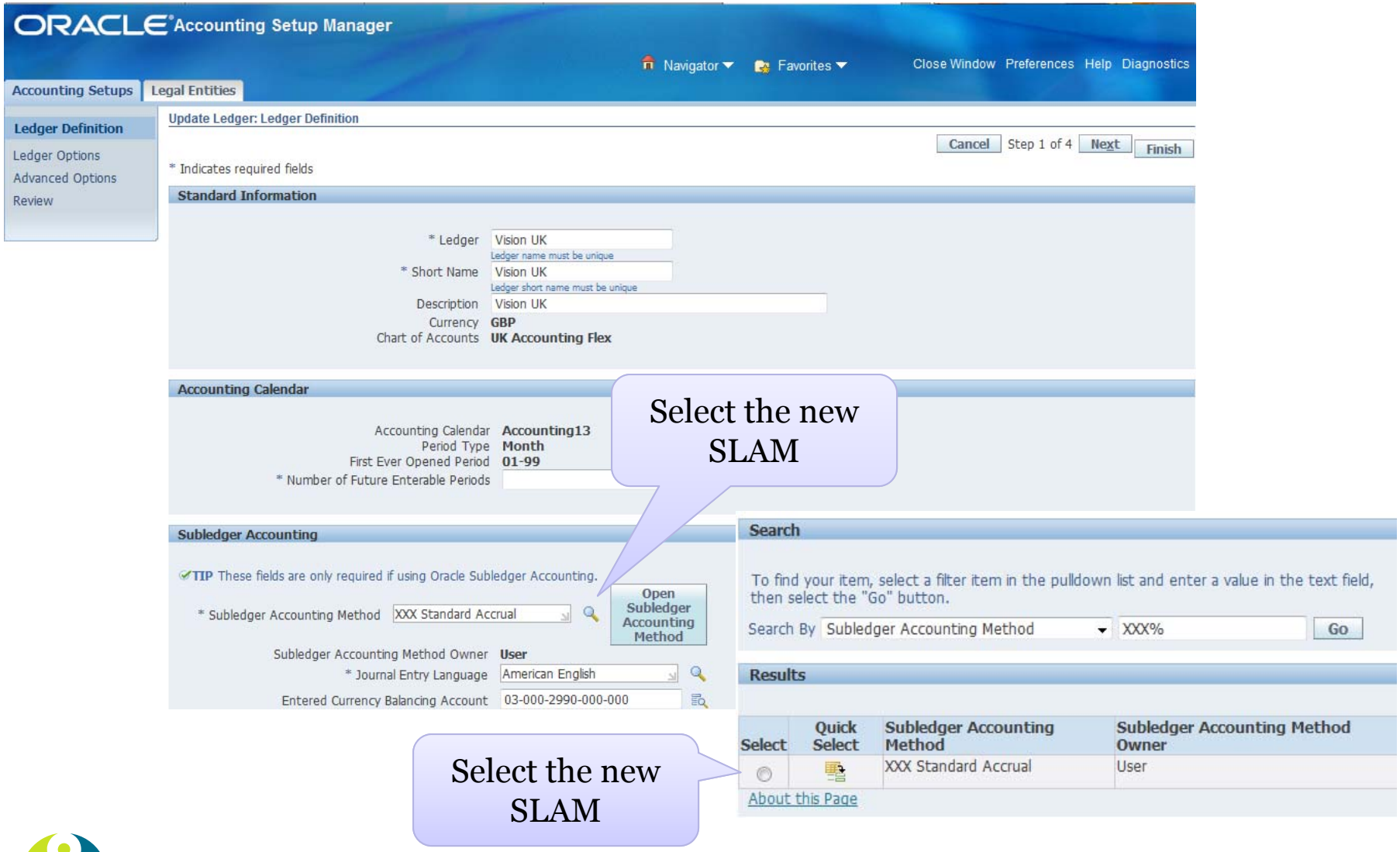
Click on the "pencil" to update the ledger

Assign Ledger to SLAM



Click on the "pencil" to update the ledger

Assign Ledger to SLAM



Testing Your SLA Setups

- Diagnostic Reports to SLA test inputs and outputs
  - Enable profile option “SLA: Enable Diagnostics”
  - Run “Create Accounting”
  - Disable profile option “SLA: Enable Diagnostics”
  - Run “Transaction Objects Diagnostics” report
  - Run “Purge Transaction Objects Diagnostics”

Transaction Objects Diagnostic Output

Request Id 10671253 run at System time: 12-JUN-2012 09:42:17

Search Criteria

Application Name	Cost Management
Ledger Name	_US_Primary_Ledger
Event Class Name	OSP
Event Type Name	EAM_DIRECT_SHOP_FLOOR_DELIVER
Transaction number	3166391
Event Number	
From Distribution Line Number	
To Distribution Line Number	
Accounting Program Request id	
Errors Only	No
Display Source Name	Yes
Display Accounting Attributes	No

Return to the top

Transaction Objects Diagnostics For

Transaction number	3166391
Event Id	6058716
Event Number	1
Event Date	11-JUN-12
Event Class Name	Outside Processing
Event Class Code	OSP
Event Type Name	Shop Floor Delivery for Direct Items
Event Type Code	EAM_DIRECT_SHOP_FLOOR_DELIVER
TRANSACTION_ID	11-JUN-12

Testing Your SLA Setups

- Create Accounting - Subledger Journal Entries Report

ORACLE Subledger Accounting — **Subledger Accounting Program Report** — Report Date **Jan 27, 2013**

Vision Operations (USA) — Page 6 of 6

Event Class **Sales Order Issue** — Event Type **Logical Sales Order Issue**

Event Number **1** — Event Date **Jan 26, 2013**

Ledger **Vision Operations (USA)** — Ledger Currency **USD** — Balance Type **Actual**

Application Accounting Definition **Cost Management** — Version — GL Date **Jan 26, 2013**

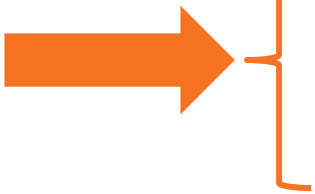
Journal Entry Description

Line	Accounting Class	Account	Entered			Accounted	
			Currency	Debit	Credit	Debit	Credit
1	Deferred Cost of Goods Sold	01-520-1415-0000-000	USD		198.00		198.00
2	Inventory Valuation	01-000-1410-0000-000	USD	198.00		198.00	
					Journal Entry Total	**198.00**	**198.00**

End of Report

EAM & Expense SLA Setup Steps

Create PL*SQL Functions & Custom SLA Sources



- Create custom PL*SQL function
- Define custom sources
- Create account derivation rules (ADRs)
- Create journal line types (JLTs)
- Create journal line definitions (JLDs)
- Create an application accounting definition (AAD)
- Create a subledger accounting method (SLAM)
- Assign it to a Ledger

Designing Your SLA Setup:

- Three Custom SLA sources :

EAM & Expense Custom Sources
▪ Material Transactions ▪ WIP Matl Transactions ▪ WIP OSP Deliveries

- With three Application Derivation Rules (ADRs) :

EAM & Expense ADRs
▪ Material Transactions ▪ WIP Matl Transactions ▪ WIP OSP Deliveries

Designing Custom SLA Sources – Expense Accounting

- SLA Sources for Material Transactions need one or two inputs:
  - Inventory transaction id
  - Organization id

Usually do not use org-to-org transfers for expenses or EAM

- Material transactions for expenses:
  - Are joined to the item master using:
    - inventory item id
    - organization id
  - To get the Purchasing Category information
  - Which is joined to the Purchasing Expense Account Rules
  - To output the item's expense account segment value

Designing Custom SLA Sources – Product Line Accounting

- SLA Sources for PO Deliveries into WIP require one input:
  - WIP transaction id
- WIP transactions for expenses:
  - Are joined to the RCV Receipt transaction using:
    - RCV transaction id
  - Which gets you the receiving shipment line id
  - And then joined to the receiving shipment line
  - To get the purchasing category id for this receipt
  - Which is joined to the Purchasing Expense Account Rules
  - To output the item's expense account segment value

Create Custom PL*SQL function – WIP OSP

- Written for EAM and Expense WIP Jobs
- If cannot find PO Expense Rule it defaults to the WIP material account

```
CREATE OR REPLACE FUNCTION XXX_DERIVE_WIP_EXP_OSP_ACCT (p_transaction_id IN NUMBER) RETURN VARCHAR2 is

l_segment varchar2(20);

BEGIN
            SELECT      nvl(prea.segment_value, gcc.segment3) into l_segment
            FROM        wip.wip_transactions wt,
                        wip.wip_discrete_jobs wdj,
                        po.rcv_transactions rt,
                        po.rcv_shipment_lines rsl,
                        po.po_rule_expense_accounts prea,
                        gl.gl_code_combinations gcc
            WHERE       wt.transaction_id               = p_transaction_id
            -- Only valid for direct shopfloor and OSP deliveries
            AND         wt.transaction_type             in (3,17)
              --  3 Outside processing
              -- 17 Direct shopfloor delivery
            AND         wt.wip_entity_id                = wdj.wip_entity_id
            AND         wdj.material_account            = gcc.code_combination_id
            AND         wt.rcv_transaction_id           = rt.transaction_id
            AND         rt.shipment_line_id             = rsl.shipment_line_id
            AND         rsl.category_id                 = prea.rule_value_id (+)
            ;
RETURN l_segment;

END XXX_DERIVE_WIP_EXP_OSP_ACCT;
/
```

Need to always return a value

Create Custom PL*SQL function – WIP Matl

- If cannot find PO Expense Rule it defaults to the WIP material account

```
CREATE OR REPLACE FUNCTION XXX_DERIVE_WIP_EXP_MTL_ACCT (p_transaction_id IN NUMBER) RETURN VARCHAR2 is
l_segment varchar2(20);

BEGIN
            SELECT      nvl(prea.segment_value, gcc.segment5) into l_segment
            FROM        inv.mtl_material_transactions mmt,
                        wip.wip_discrete_jobs wdj,
                        inv.mtl_system_items_b msi,
                        inv.mtl_default_category_sets mdcs,
                        inv.mtl_item_categories mic,
                        gl.gl_code_combinations gcc,
                        po.po_rule_expense_accounts prea
            WHERE       mmt.transaction_id             = p_transaction_id
            AND         mmt.transaction_source_type_id = 5 -- WIP material transaction
            AND         mmt.transaction_source_id      = wdj.wip_entity_id
            AND         wdj.material_account           = gcc.code_combination_id
            AND         mmt.inventory_item_id          = msi.inventory_item_id
            AND         msi.organization_id            = mmt.organization_id
            AND         mic.category_set_id            = mdcs.category_set_id
            AND         mdcs.functional_area_id        = 2 -- Purchasing
            AND         mic.inventory_item_id          = msi.inventory_item_id
            AND         mic.organization_id            = msi.organization_id
            AND         mic.category_id                = prea.rule_value_id (+)
            ;

RETURN l_segment;

END XXKE_DERIVE_WIP_EXP_MTL_ACCT;
```

Need to always return a value

Create Custom PL*SQL function – Matl Txn

- If cannot find PO Expense Rule it defaults to Org's material account

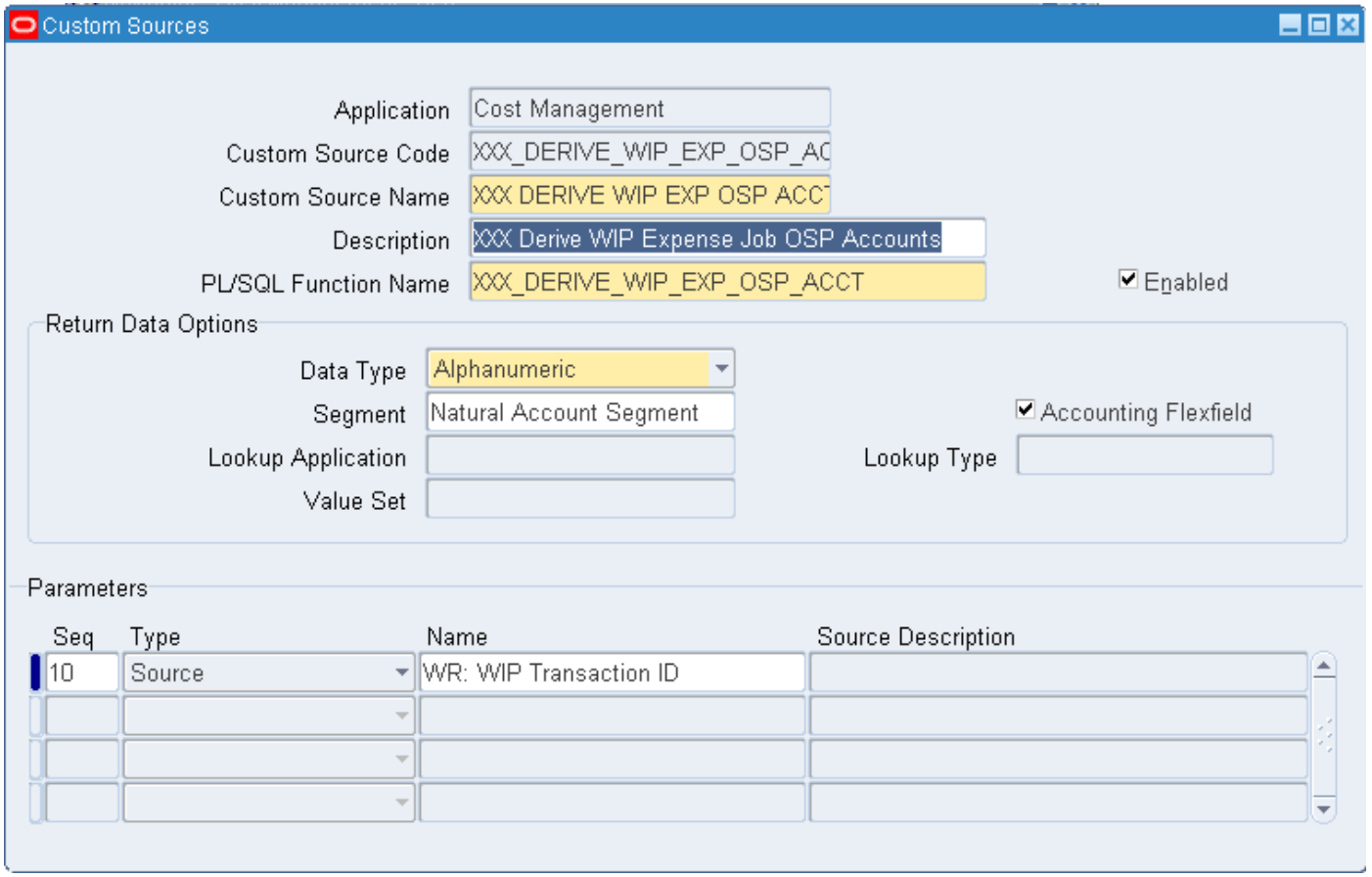
```
CREATE OR REPLACE FUNCTION XXX_DERIVE_INV_EXP_ACCT (p_transaction_id IN NUMBER, p_organization_id IN
NUMBER) RETURN VARCHAR2 is
l_segment varchar2(20);
BEGIN
            SELECT      nvl(prea.segment_value, gcc.segment3)  into l_segment
            FROM        inv.mtl_material_transactions mmt,
                        inv.mtl_system_items_b msi,
                        inv.mtl_parameters mp,
                        inv.mtl_default_category_sets mdcs,
                        inv.mtl_item_categories mic,
                        gl.gl_code_combinations gcc,
                        po.po_rule_expense_accounts prea
            WHERE       mmt.transaction_id              = p_transaction_id
            AND         mmt.transaction_source_type_id <> 5 -- WIP material transaction
            AND         msi.inventory_item_id          = mmt.inventory_item_id
            AND         msi.organization_id            = p_organization_id
            AND         msi.organization_id            = mp.organization_id
            AND         mic.category_set_id            = mdcs.category_set_id
            AND         mdcs.functional_area_id        = 2 -- Purchasing
            AND         mic.inventory_item_id          = msi.inventory_item_id
            AND         mic.organization_id            = msi.organization_id
            AND         mic.category_id                = prea.rule_value_id (+)
            AND         mp.expense_account             = gcc.code_combination_id
            ;

RETURN l_segment;

END XXX_DERIVE_INV_EXP_ACCT;
/
```

Need to always return a value

Define Custom SLA Source – OSP Transactions

Menu path: Cost Management SLA => Setup => Accounting Methods Builder => Sources => Custom Sources

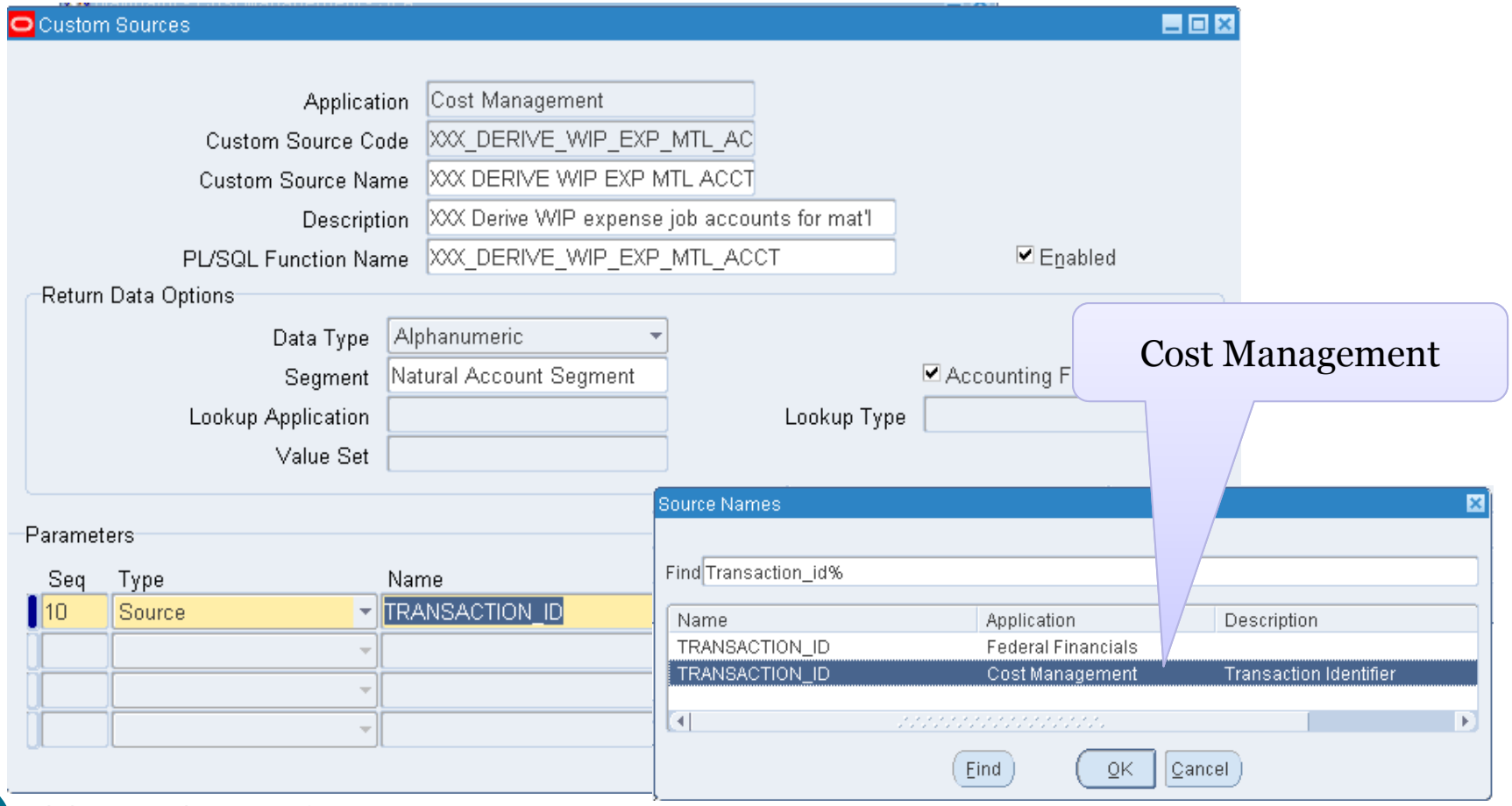
- Need to use the correct parameters for your PL*SQL inputs



Define Custom SLA Source – WIP Matl Txns

Menu path: Cost Management SLA => Setup => Accounting Methods Builder => Sources => Custom Sources

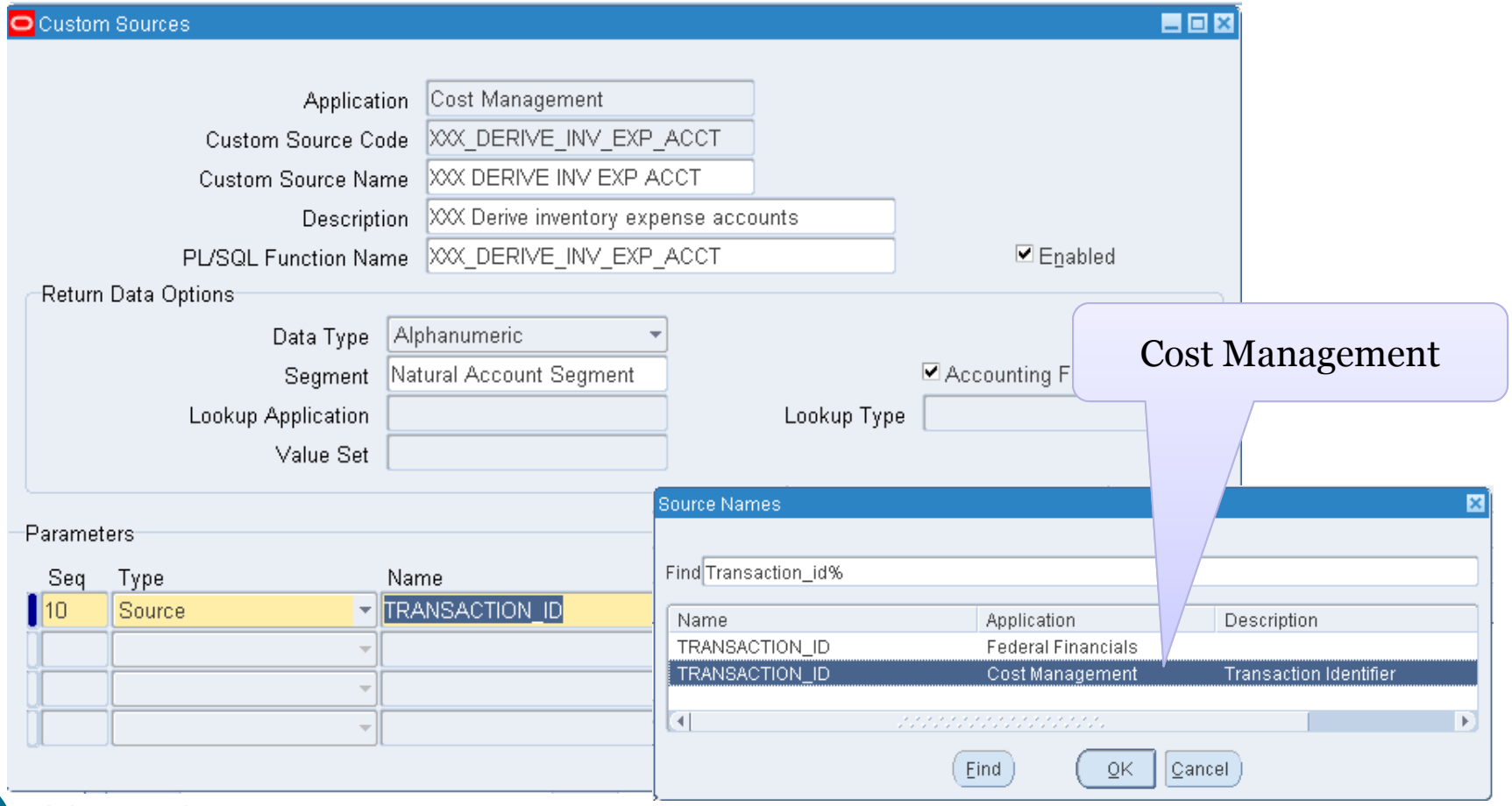
- Need to use the correct parameters for your PL*SQL inputs



Define Custom SLA Source – OSP Transactions

Menu path: Cost Management SLA => Setup => Accounting Methods Builder => Sources => Custom Sources

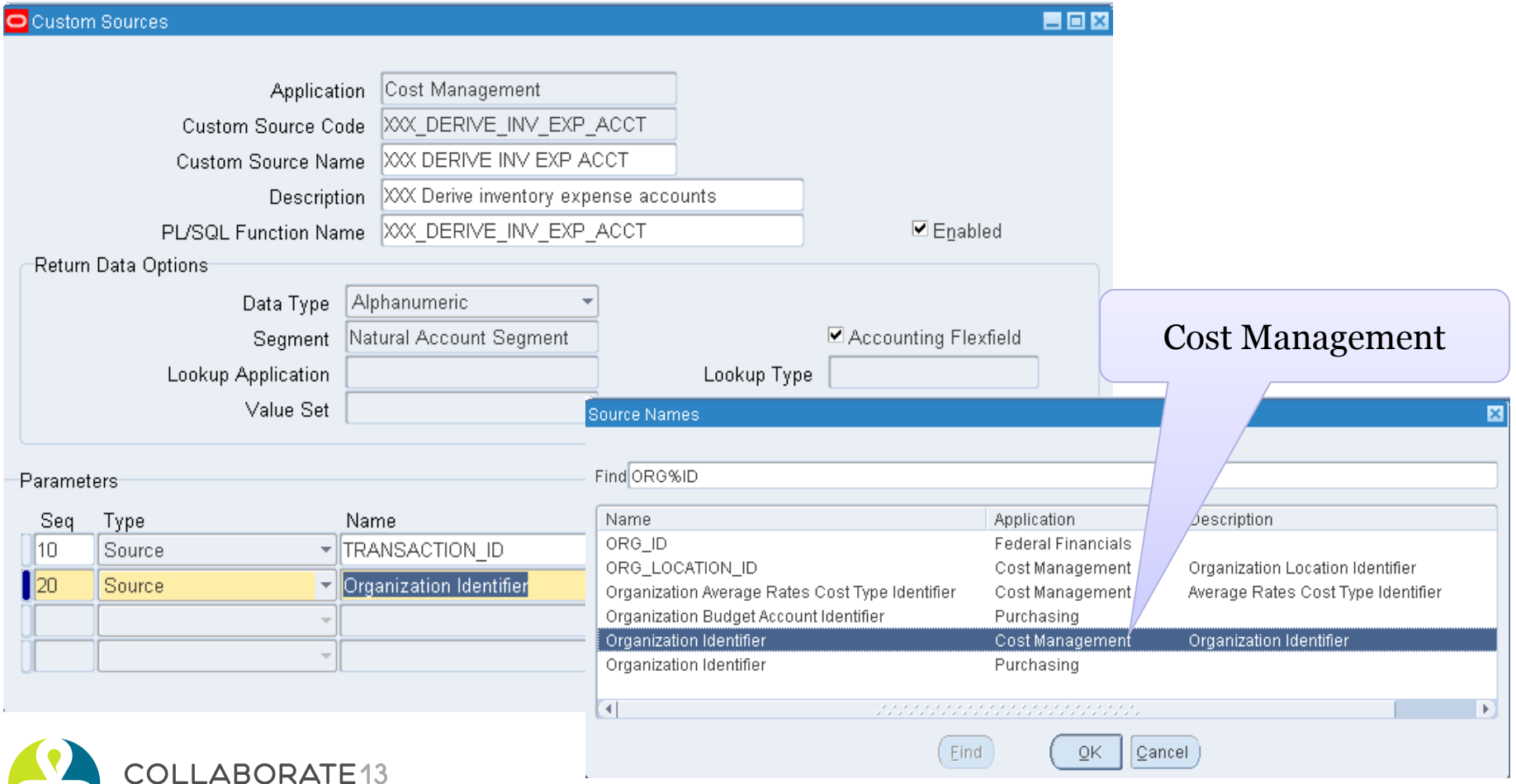
- Need to use the correct parameters for your PL*SQL inputs



Define Custom SLA Source – OSP Transactions

Menu path: Cost Management SLA => Setup => Accounting Methods Builder => Sources => Custom Sources

- Need to use the correct parameters for your PL*SQL inputs

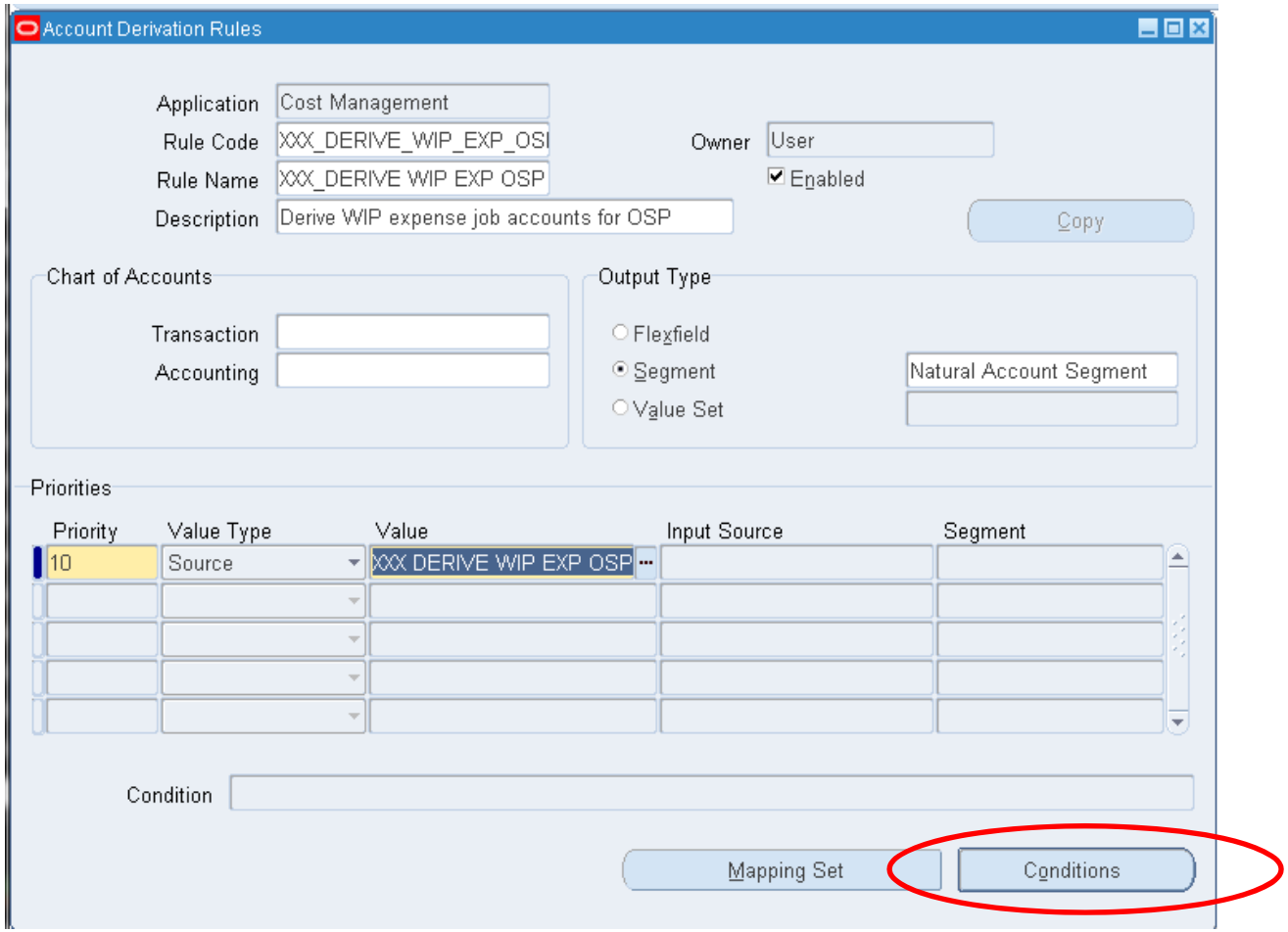


Create Account Derivation Rules

- Create custom PL*SQL function
- Define custom sources
- Create account derivation rules (ADRs)
- Create journal line types (JLTs)
- Create journal line definitions (JLDs)
- Create an application accounting definition (AAD)
- Create a subledger accounting method (SLAM)
- Assign it to a Ledger

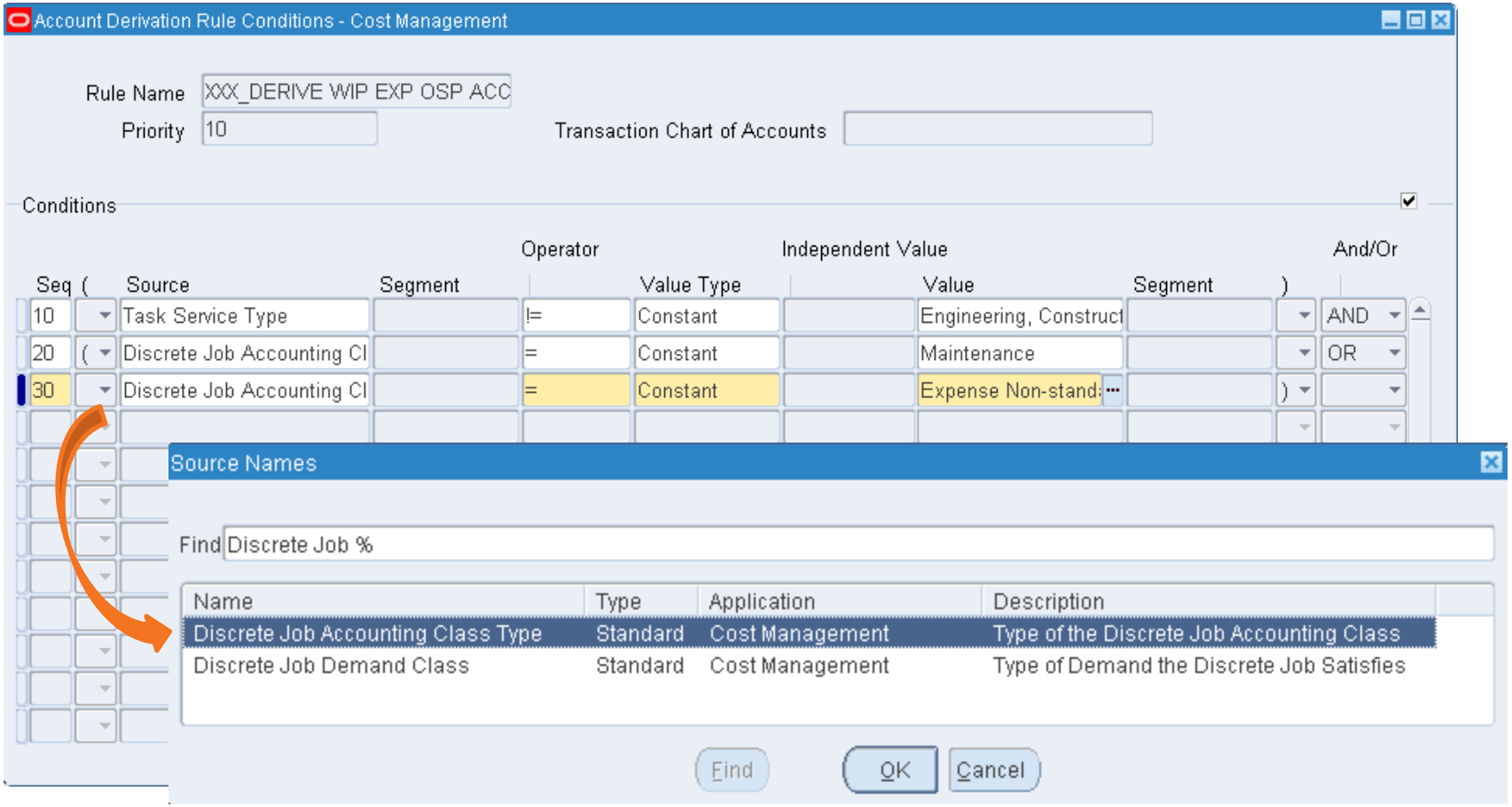
Create Account Derivation Rule

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Journal Entry Setups => Account Derivation Rules



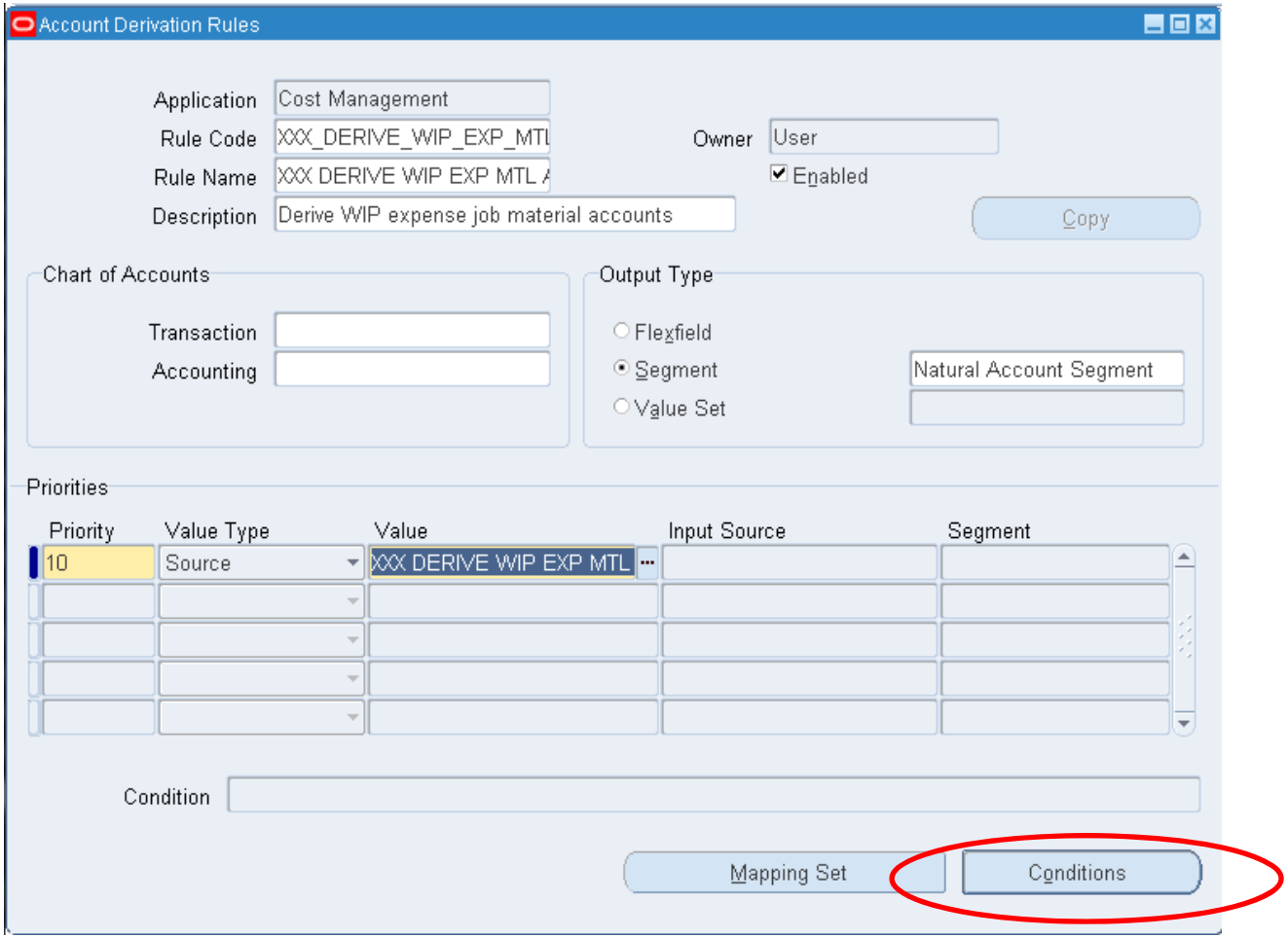
Create Account Derivation Rule

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Journal Entry Setups => Account Derivation Rules => Conditions



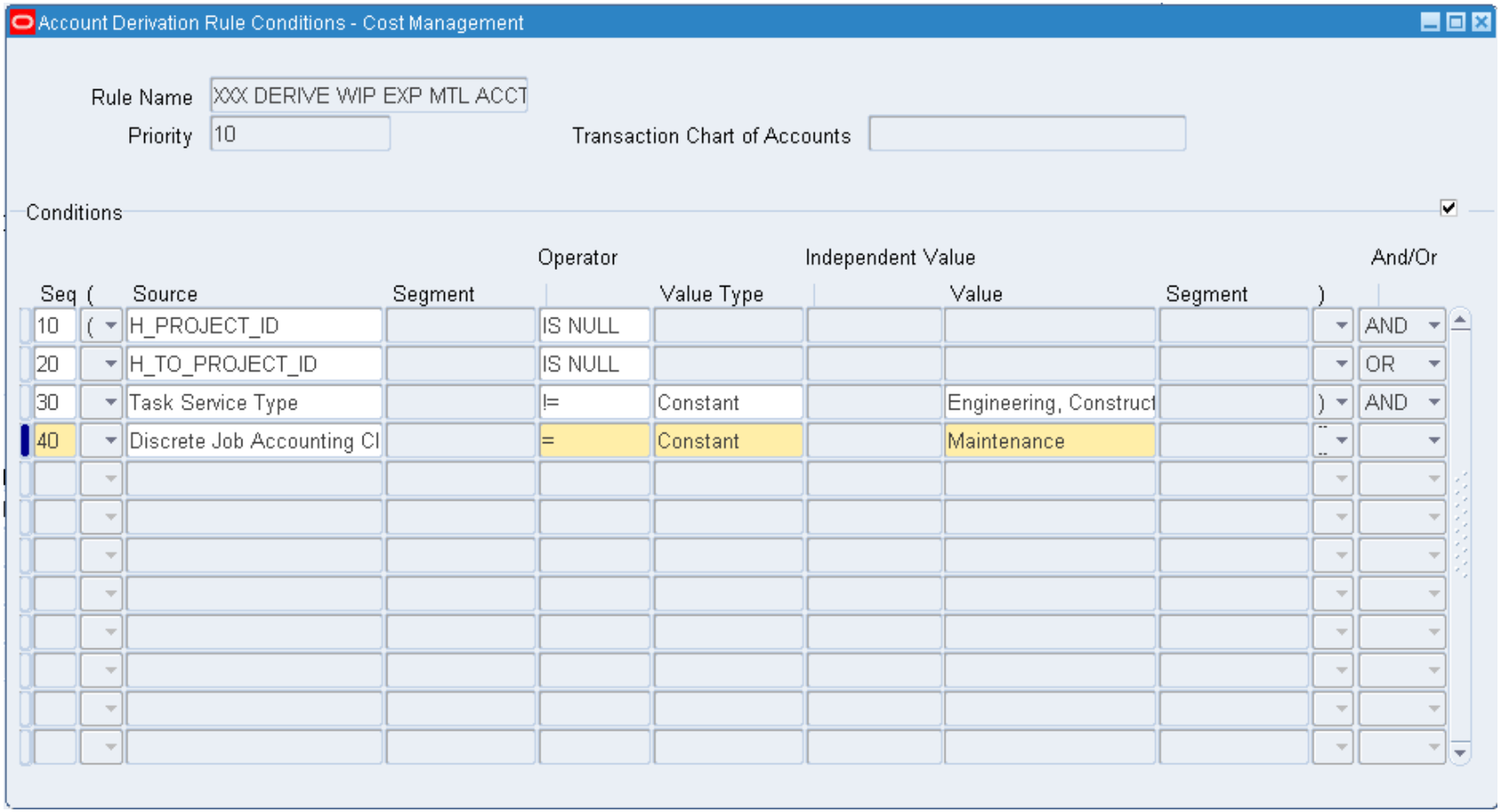
Create Account Derivation Rule

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Journal Entry Setups => Account Derivation Rules



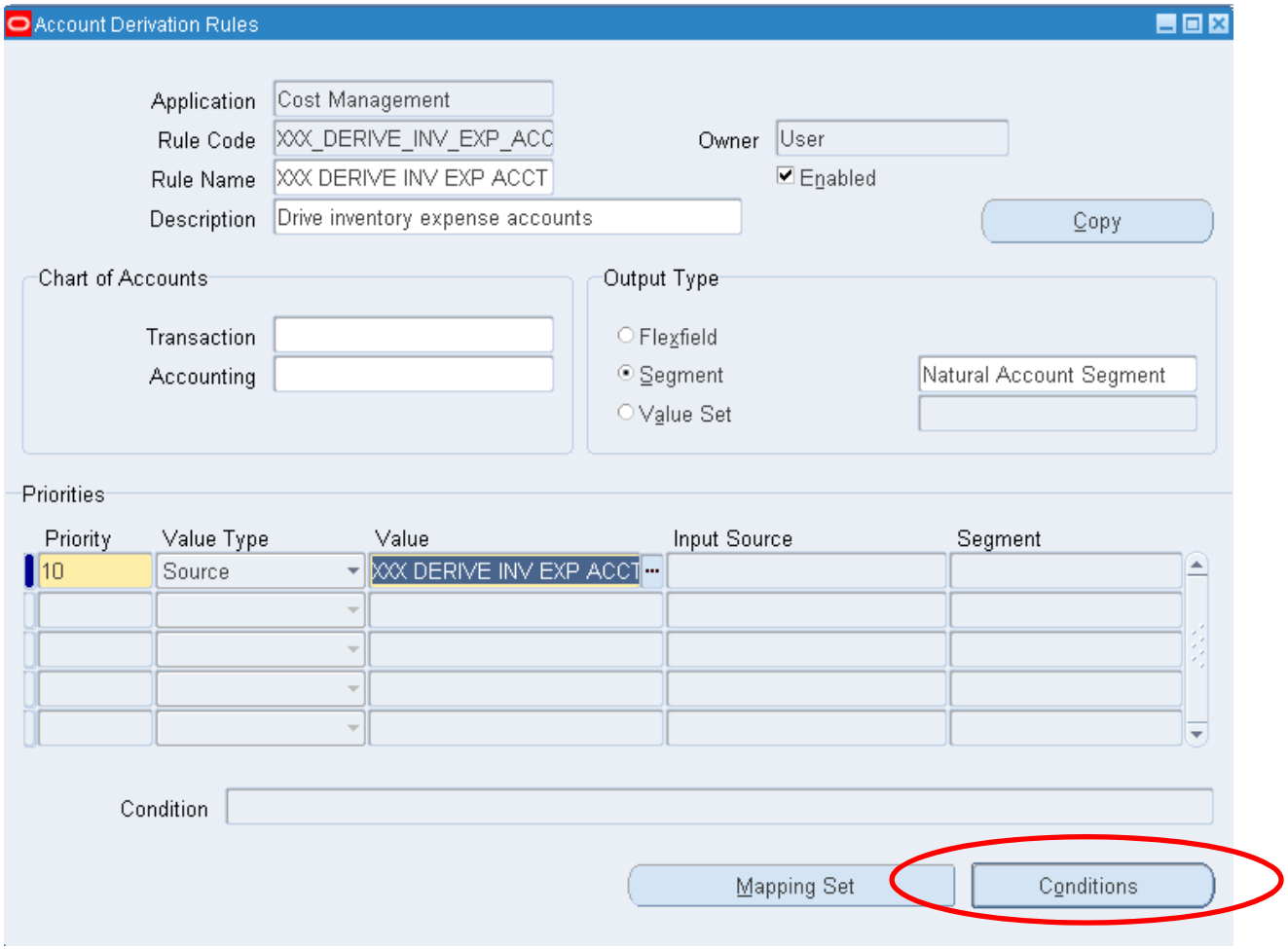
Create Account Derivation Rule

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Journal Entry Setups => Account Derivation Rules => Conditions



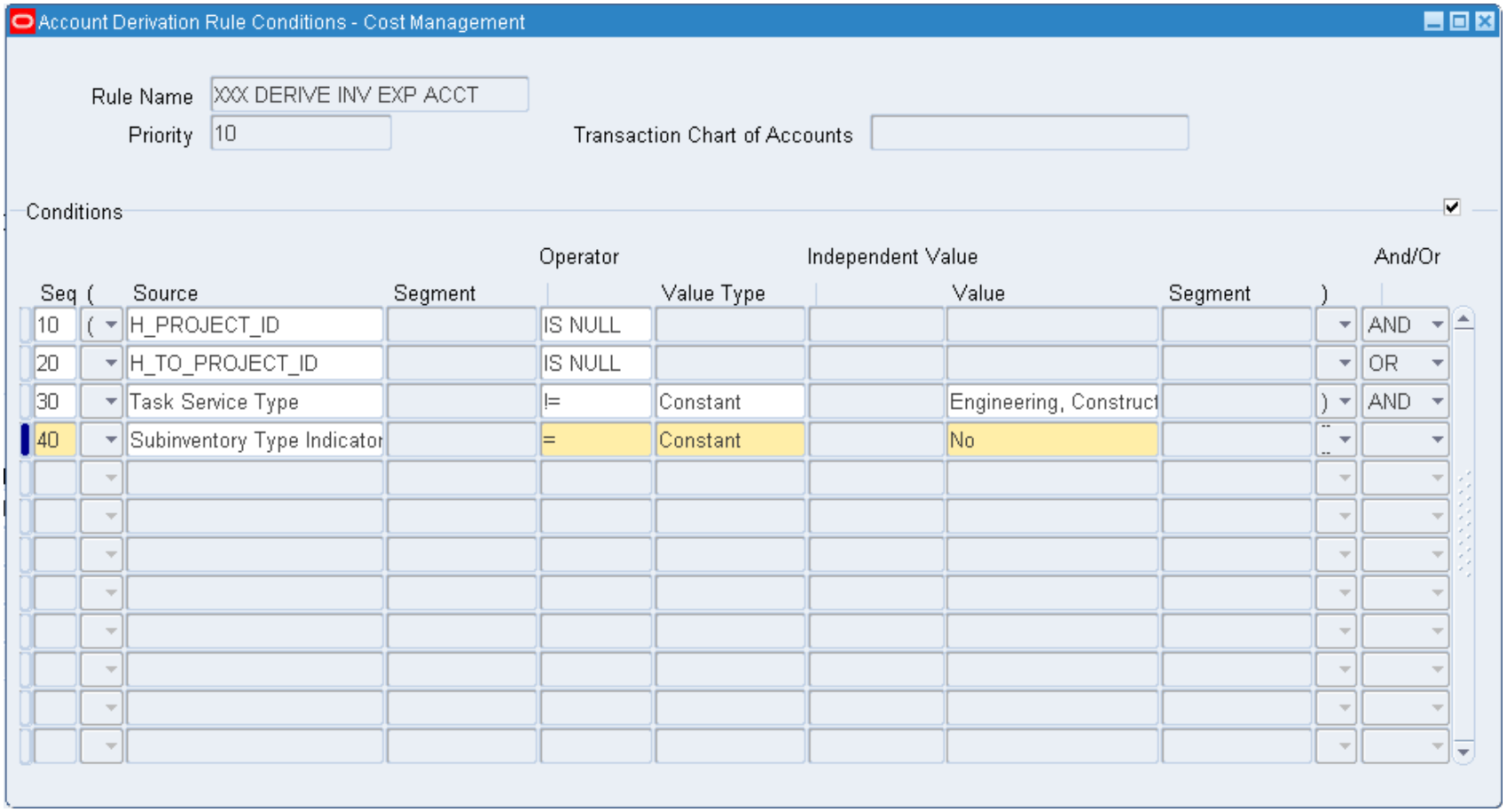
Create Account Derivation Rule

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Journal Entry Setups => Account Derivation Rules



Create Account Derivation Rule

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Journal Entry Setups => Account Derivation Rules => Conditions



Create Journal Line Definitions

- Create custom PL*SQL function
- Define custom sources
- Create account derivation rules (ADRs)
- Create journal line types (JLTs)
- Create journal line definitions (JLDs)
- Create an application accounting definition (AAD)
- Create a subledger accounting method (SLAM)
- Assign it to a Ledger

Create Journal Line Types

From Oracle Cost Management User Guide

- Which events and journal lines for expense accounting?

	Cost Management Subledger Acccounting Event Class, Journal Line Type and Event Type Model		
eAM Related	Event Class Name	Journal Line Types	Event Type Name
	Event Entity: Inventory Accounting Events		
YES	PO Delivery into Inventory	Inventory Valuation	Return to Receiving Inspection from Inventory
		Receiving Inspection	PO Delivery into Inventory
		Clearing	PO Delivery Adjustment
		Material Overhead Absorption	
		Purchase Price Variance	
		Cost Variance	Logical PO Delivery into Inventory
		Shikyu Variance	Logical PO Delivery Adjustment
		Offset	Logical PO Delivery into Inventory
			Logical Return to Receiving Inspection from Inventory
YES	Miscellaneous	Inventory Valuation	Move Order Issue
		Offset	Account Alias Issue
		Cost Variance	Account Issue
			Account Receipt
			Account Alias Receipt
			Miscellaneous Issue
			Miscellaneous Receipt
			Project Contract Issue
			Inventory Lot Translate
			Internal Requisition Receipt Adjustment
			Shipment Receipt Adjustment
			Cycle Count Adjustment
			Physical Inventory Adjustment

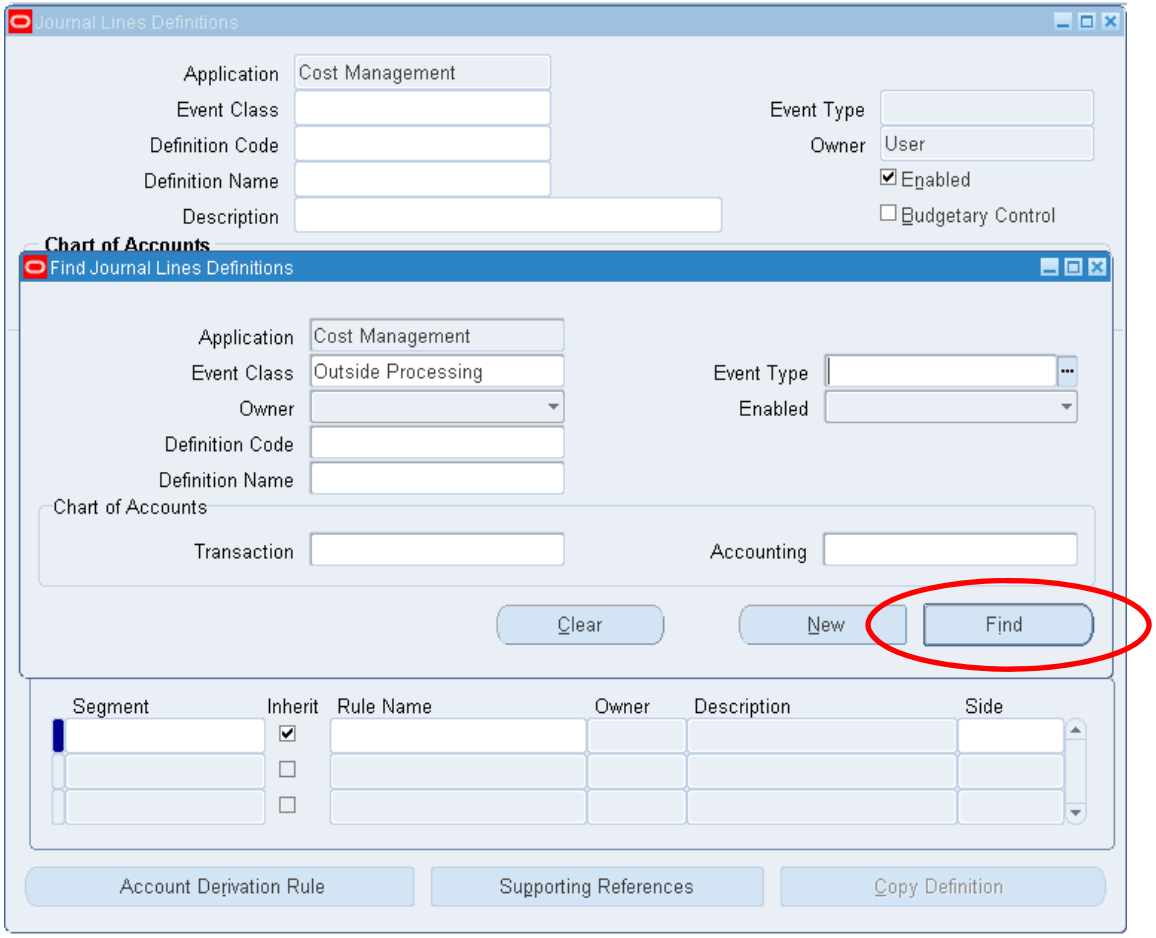
Which Event Class Name (Transaction) are you using?

And for each Transaction which Journal Line Type needs a different account?

2) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

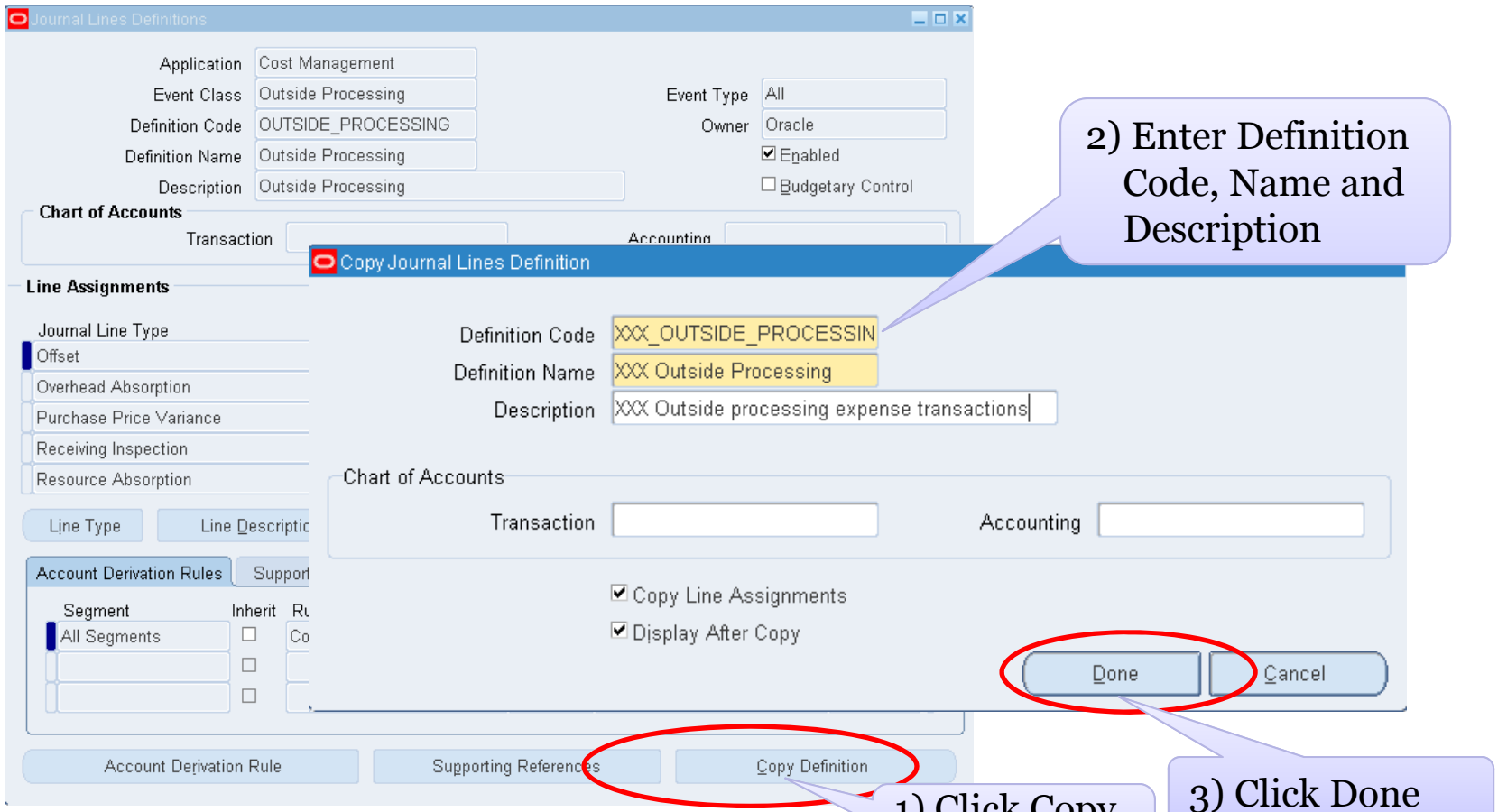
- First, query up the Event Class / Outside Processing Example



3) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Next copy to a new journal line definition



5) Create Journal Line Types

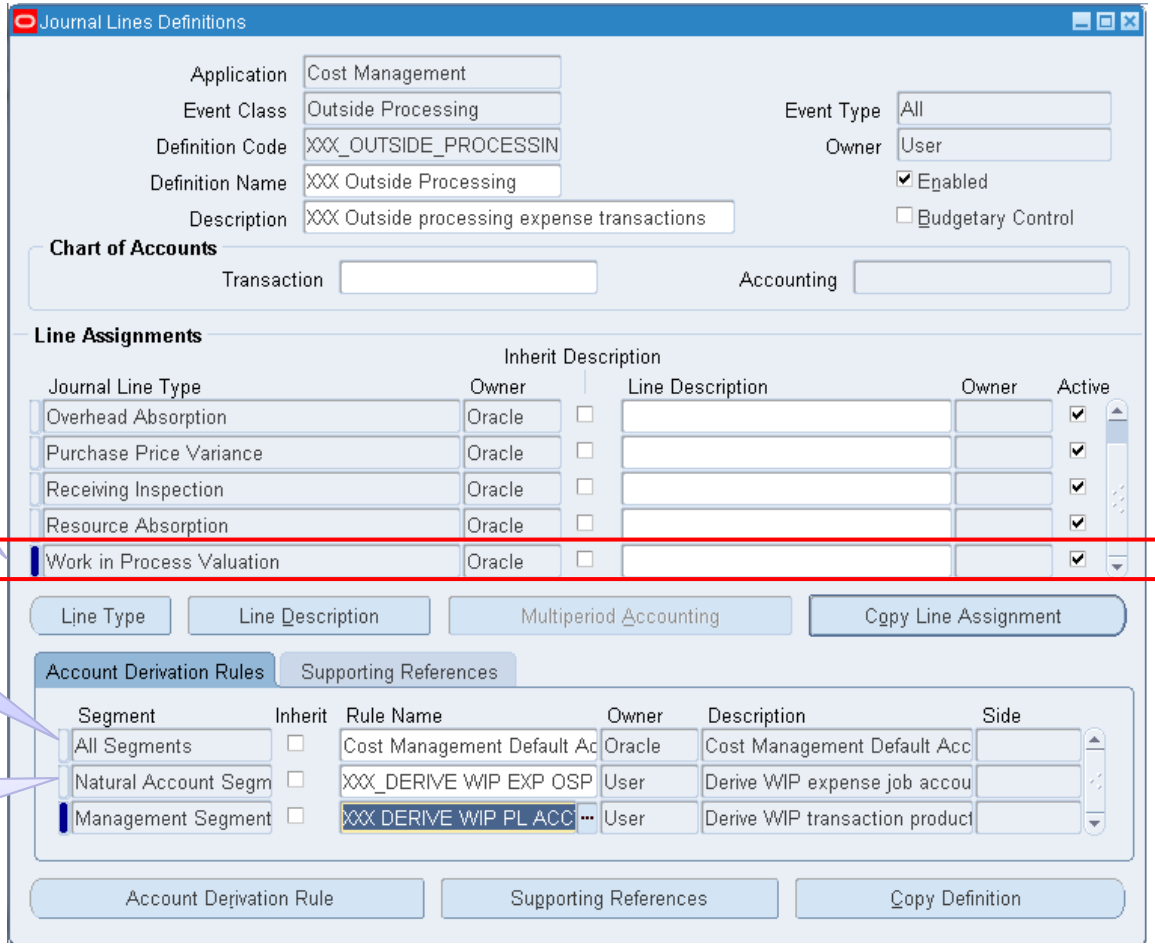
Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Assign new ADRs to new journal definitions – OSP WIP Valuation

1) Select the Journal Line Type

2) Keep the existing ADR

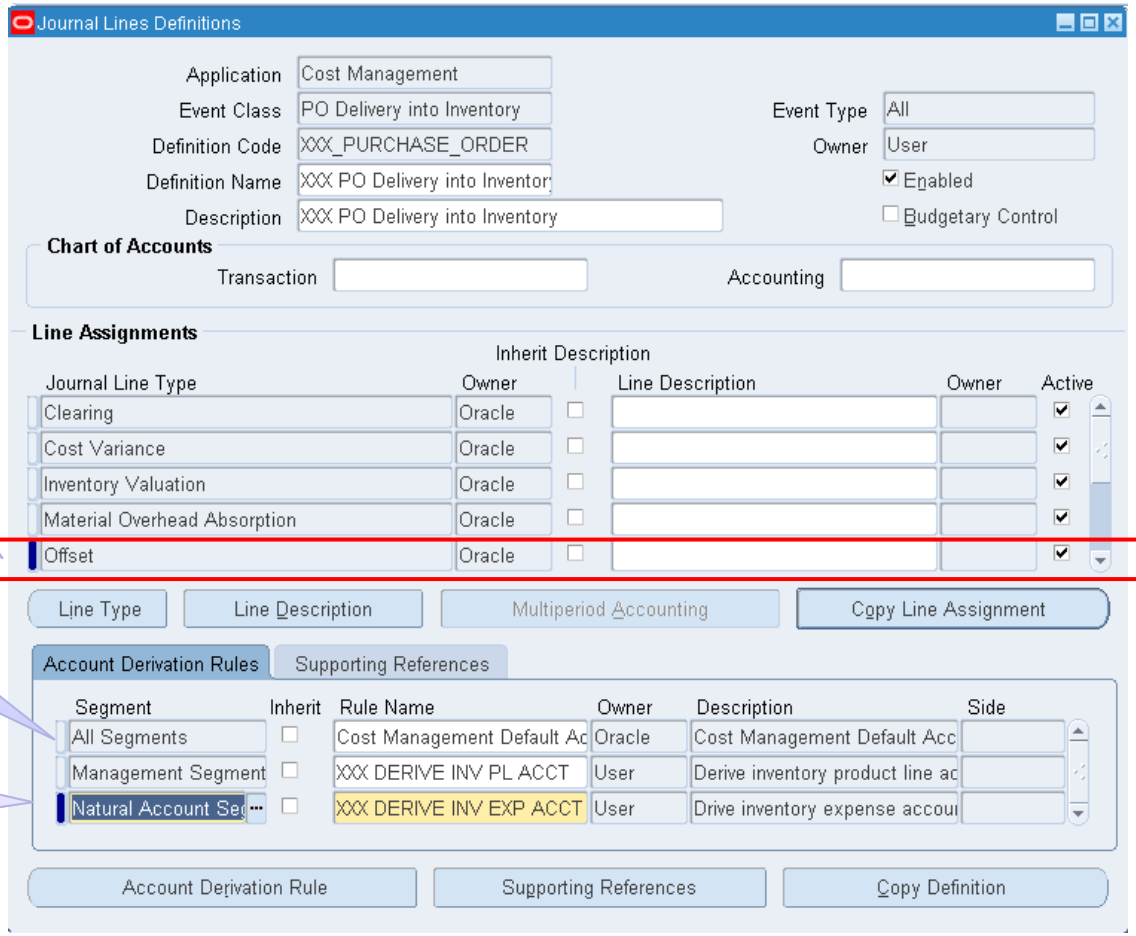
3) Override the account segment



5) Create Journal Line Types

Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Assign new ADRs to new journal definitions – PO Delivery into INV



1) Select the Journal Line Type

2) Keep the existing ADR

3) Override the account segment

5) Create Journal Line Types

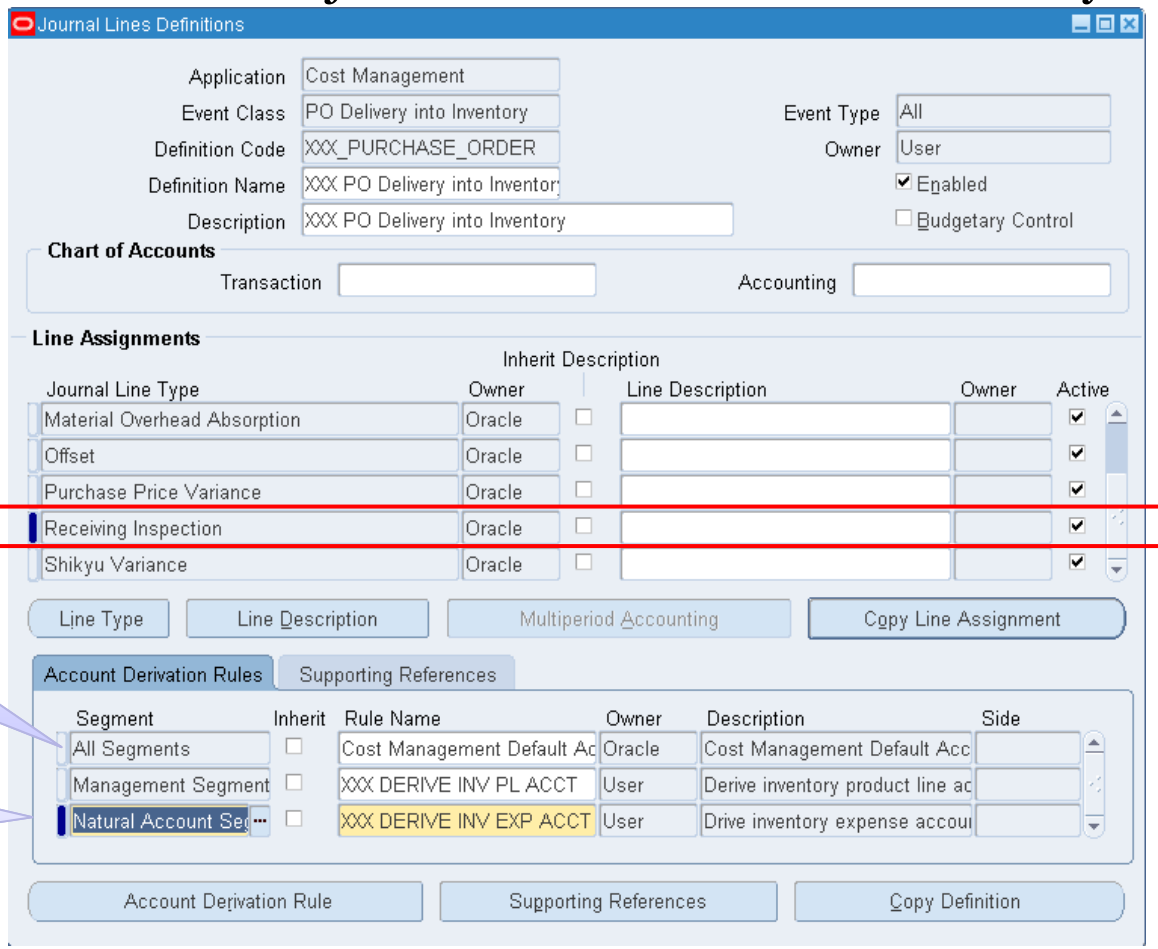
Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Assign new ADRs to new journal definitions – PO Delivery into INV

1) Select the Journal Line Type

2) Keep the existing ADR

3) Override the account segment



5) Create Journal Line Types

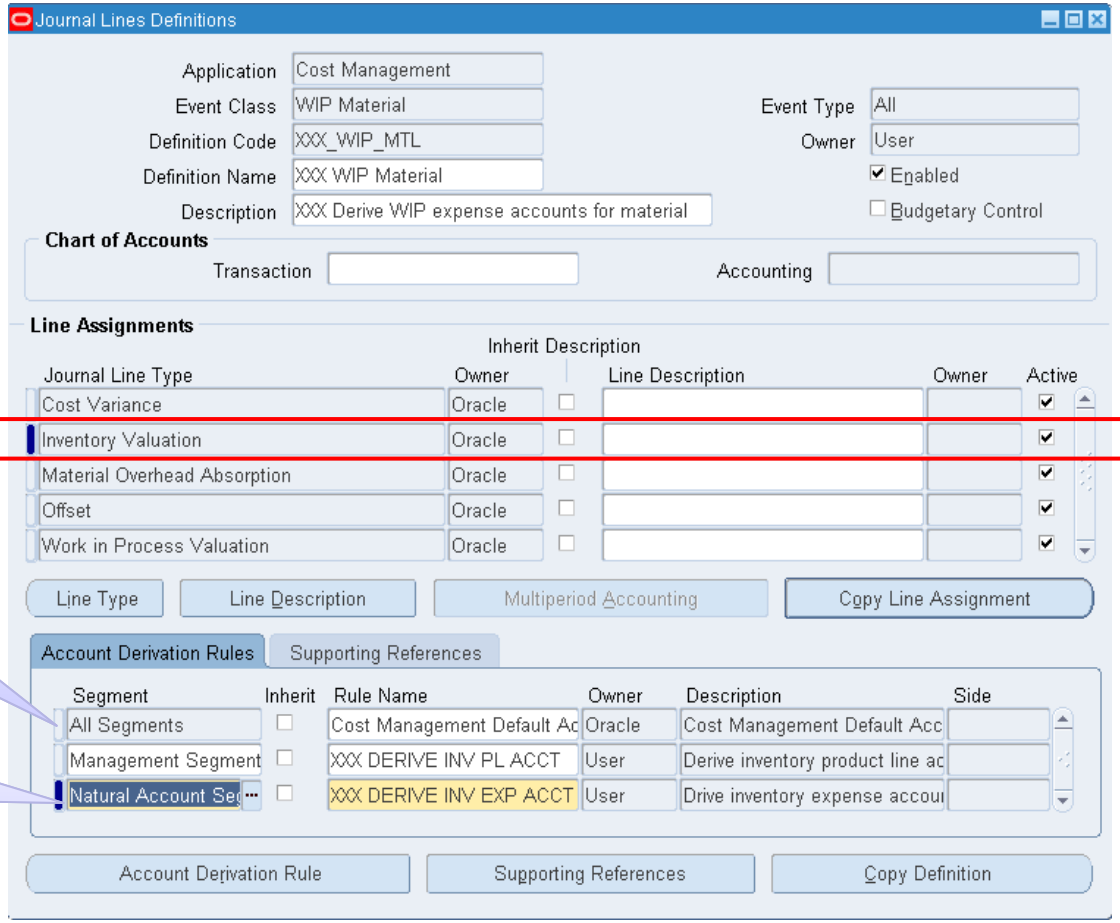
Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Assign new ADRs to new journal definitions – WIP Matl

1) Select the Journal Line Type

2) Keep the existing ADR

3) Override the account segment



5) Create Journal Line Types

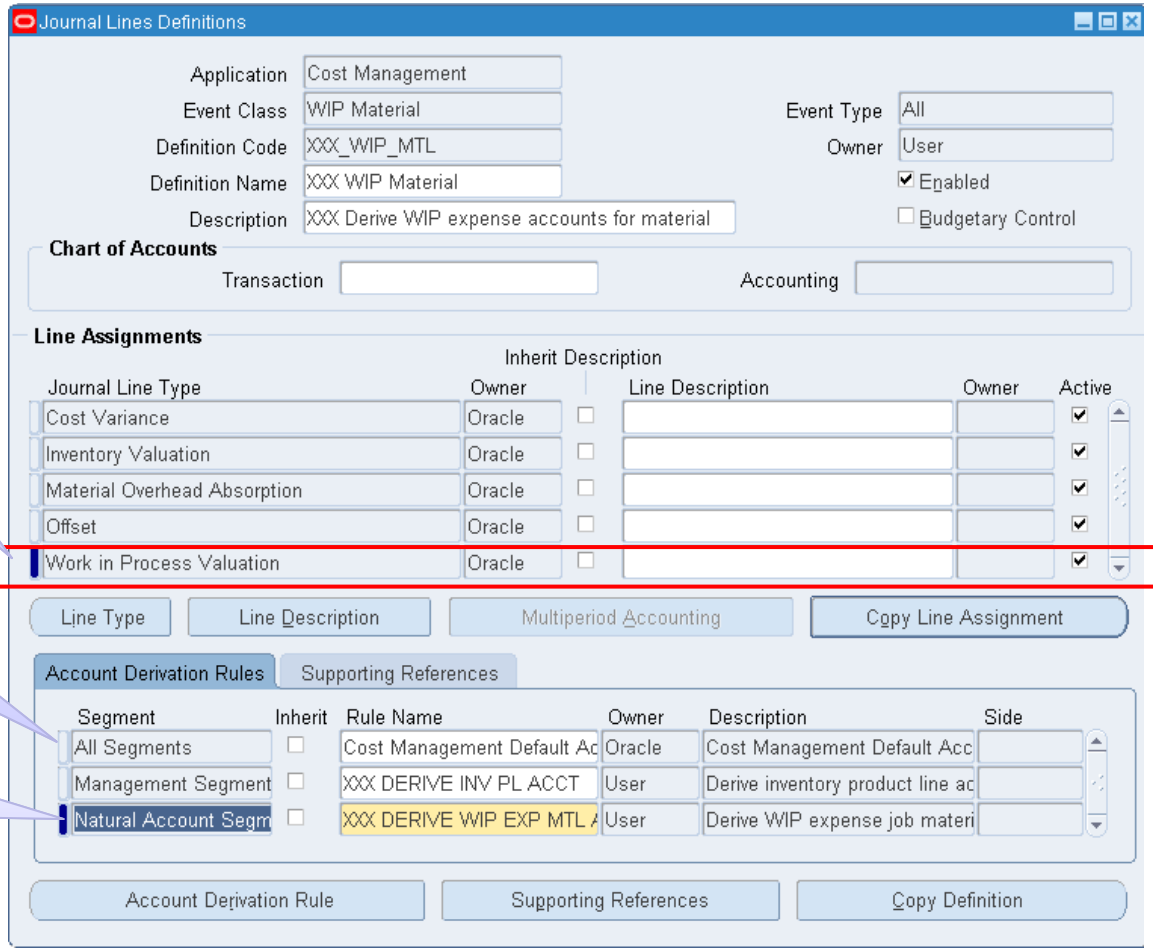
Menu path: Cost Management SLA => Accounting Setup => Accounting Methods Builder => Methods and Definitions => Journal Lines Definitions

- Assign new ADRs to new journal definitions – WIP Matl

1) Select the Journal Line Type

2) Keep the existing ADR

3) Override the account segment



Create Account Derivation Rules

- Create custom PL*SQL function
- Define custom sources
- Create account derivation rules (ADRs)
- Create journal line types (JLTs)
- Create journal line definitions (JLDs)
- Create an application accounting definition (AAD)
- Create a subledger accounting method (SLAM)
- Assign it to a Ledger

Same process as with the Product Line Accounts

Create Application Accounting Definition

- Now assign new Journal Lines Definition to your Application Accounting Definition:

  Expense and EAM Accounting Examples
  - Delivery to Expense Destinations => XXX Delivery to Expense Destinations
  - Outside Processing => XXX Outside Processing
  - PO Delivery into Inventory => XXX PO Delivery into Inventory
  - Receipt into Receiving Inspection => XXX Receipt into Receiving Inspection
  - WIP Material => XXX WIP Material

- Validate your Application Accounting Definition

- Assign Application Accounting Definition to the Ledger

Summary

Caveats:

- Setting up SLA for product line accounting is:
  - A lot of work!
  - Will do at least 20 Accounting Events, maybe up to 33!
- Not quite as bad for EAM and expense processing
- Requires extensive design and analysis
- Requires even more testing
- Maintenance and documentation issues

Send Email Address to Get the Following:

- White paper and code samples
  - Companion white paper to this presentation
    - Has more extensive Subledger Accounting background information
    - Also has the full PL/SQL code samples, with all comments
  - Send email to: doug@volzconsulting.com
- Questions? Informal workshops can be arranged

Acknowledgements

- Don Hobbs & Matt Plyler, GlobalPTM, for generous knowledge sharing of EAM requirements
- Mohan Iyer and John Peters for support of our shared Vision instance
- Samir Othman, Oracle Proactive Support, for SLA patch levels and useful MOS documents
- Veeresha Javli, CSC, for paper review

Additional Information is Available From:

- Collaborate 2009:

  "*Cost Accounting As You Want It - R12 Cost Accounting with SLA*"

  - Douglas Volz, Douglas Volz Consulting (http://www.volzconsulting.com/resources.html)

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

  - Robert J. Flick, Onplan Solutions LLC

- Collaborate 2012:

  "*Let Sub ledger Accounting Custom Sources Release You from Account generator workflows*"

  - Manoj Menon, Principal Consultant, Kbace Technologies Inc.

Additional Information is Available From:

- Oracle Cost Management User Guide, "*SLA Costing Events – Accounting*", Chapter G
- *SUBLEDGER ACCOUNTING Custom Sources Release 12*, Oracle
- Oracle Subledger Accounting Implementation Guide

R12 Patch Information – February 1st, 2013:

- Check file version for cstxlaaad.ldt, should be 120.32.12010000.29 or higher.
- If not, look at patch 14371087:R12.BOM.C

Additional Information is Available From:

- My Oracle Support (Metalink):
  - *Steps to Run Import And Validate AAD (Application Accounting Definition) with troubleshooting*, ID 1406203.1
  - *How To Debug When Validate Application Accounting Definition Fails?*, ID 562763.1.
  - *EBS SLA: Sub Ledger Accounting Cost Management SLA Steps*, ID 873605.1
  - *SLA Cost Management Overview*, ID 471057.1
  - *What is Subledger Accounting for Cost Management?*, ID 466513.1
  - *R12 SLA : How Do You Set Up a Custom Source for Deriving Account Number?*, ID 1078837.1

Appendix

Discrete Cost Management Subledger Accounting Event Class, Journal Line Type and Event Type Model

Discrete Cost Management SLA Model

	Cost Management Subledger Accounting Event Class, Journal Line Type and Event Type Model		
eAM Related	Event Class Name	Journal Line Types	Event Type Name
	Event Entity: WIP Accounting Events		
YES	WIP Absorption	Work in Process Valuation	Resource Absorption
		Estimated Scrap Absorption	
		Overhead Absorption	Resource Overhead Absorption
		Resource Absorption	
		Resource Rate Variance	Estimated Scrap Absorption
YES	Outside Processing	Work in Process Valuation	Outside Processing Transaction
		Resource Absorption	
		Overhead Absorption	Shop Floor Delivery for Direct Items
		Receiving Inspection	IPV Transfer to Work Order
		Purchase Price Variance	
		Offset	
YES	WIP Variance	Work in Process Valuation	Period Close Variance
		Work in Process Variance	Job Close Variance
			Final Completion Variance
	WIP Lot	Work in Process Valuation	WIP Lot Split
		Offset	WIP Lot Merge
			WIP Lot Update Quantity
			WIP Lot Bonus
	WIP Cost Update	Work in Process Valuation	WIP Cost Update
		Cost Update Adjustment	

Discrete Cost Management SLA Model

	Cost Management Subledger Accounting Event Class, Journal Line Type and Event Type Model		
eAM Related	Event Class Name	Journal Line Types	Event Type Name
	Event Entity: Receiving Accounting Events		
YES	Receipt into Receiving Inspection	Accrual	Receipt into Receiving Inspection
		Receiving Inspection	Return to Vendor
		Clearing	Logical Receipt
			Logical Return to Vendor
		Intercompany Accrual	
		Intercompany COGS	
YES	Delivery to Expense Destination	Charge	Delivery to Expense
		Receiving Inspection	Return to Receiving Inspection from Expense
YES	Period End Accrual	Accrual	Period End Accrual
		Charge	
YES	Retroactive Price Adjustment to Receipt	Accrual	Retroactive Price Adjustment to Receipt
		Retroactive Price Adjustment	
		Intercompany Cost of Goods Sold	
		Receiving Inspection	
YES	Retroactive Price Adjustment to Delivery	Retroactive Price Adjustment	Retroactive Price Adjustment to Delivery
		Charge	
		Receiving Inspection	
	Event Entity: Accrual Write-Off Events		
	Accrual Write-Off Event	Accrual	Accrual Write-Off
		Account	
		Offset	
		Exchange Rate Variance	

Discrete Cost Management SLA Model

	Cost Management Subledger Accounting Event Class, Journal Line Type and Event Type Model		
eAM Related	Event Class Name	Journal Line Types	Event Type Name
	Event Entity: Inventory Accounting Events		
YES	PO Delivery into Inventory	Inventory Valuation	Return to Receiving Inspection from Inventory
		Receiving Inspection	PO Delivery into Inventory
		Clearing	PO Delivery Adjustment
		Material Overhead Absorption	
		Purchase Price Variance	
		Cost Variance	Logical PO Delivery into Inventory
		Shikyu Variance	Logical PO Delivery Adjustment
		Offset	Logical PO Delivery into Inventory
			Logical Return to Receiving Inspection from Inventory
	Sales Order Issue	Inventory Valuation	RMA Return
		Cost of Goods Sold	RMA Receipt
		Deferred COGS	Sales Order Issue
		Cost Variance	COGS Recognition
		Cost Update Adjustment	Logical Sales Order Issue
			Logical RMA Receipt
			Backdated COGS Recognition
			COGS Recognition Adjustment
	Internal Order to Expense	Inventory Valuation	Internal Order Issue to Expense
		Offset	Internal Order Receipt into Expense
		Interorg Profit (OPM)	Internal Order Receipt into Expense, no Transfer Pricing
		Interorg Receivables	Internal Order Receipt into Expense, Transfer Pricing
		Interorg Payables	Internal Order Issue to Expense, no Transfer Pricing
			Internal Order Issue to Expense, Transfer Pricing

Discrete Cost Management SLA Model

	Cost Management Subledger Accounting Event Class, Journal Line Type and Event Type Model		
eAM Related	Event Class Name	Journal Line Types	Event Type Name
	Event Entity: Inventory Accounting Events		
YES	WIP Material	Inventory Valuation	WIP Component Issue
		Work in Process Valuation	WIP Negative Component Issue
		Material Overhead Absorption	WIP Component Return
		Cost Variance	WIP Negative Component Return
		Offset	WIP Assembly Completion
			WIP Assembly Return
			WIP Assembly Scrap
			WIP Assembly Scrap Return
	Consigned Inventory Ownershi	Inventory Valuation	Transfer from Consigned to Regular Inventory
		Accrual	Transfer from Regular to Consigned Inventory
		Material Overhead Absorption	
		Purchase Price Variance	
		Cost Variance	
YES	Miscellaneous	Inventory Valuation	Move Order Issue
		Offset	Account Alias Issue
		Cost Variance	Account Issue
			Account Receipt
			Account Alias Receipt
			Miscellaneous Issue
			Miscellaneous Receipt
			Project Contract Issue
			Inventory Lot Translate
			Internal Requisition Receipt Adjustment
			Shipment Receipt Adjustment
			Cycle Count Adjustment
			Physical Inventory Adjustment

Discrete Cost Management SLA Model

	Cost Management Subledger Accounting Event Class, Journal Line Type and Event Type Model		
eAM Related	Event Class Name	Journal Line Types	Event Type Name
	Event Entity: Inventory Accounting Events		
	Intraorganization Transfer	Inventory Valuation	Move Order Transfer
		Cost Variance	Internal Order Transfer
		Offset	Cycle Count Adjustment
			Physical Inventory Adjustment
			Subinventory Transfer
			Cost Group Transfer
			Planning Transfer
			Internal Order Staging Transfer
			Sales Order Staging Transfer
	Direct Interorg Shipment	Inventory Valuation	Direct Interorg Shipment
		Interorg Receivables	Direct Interorg Shipment, No Transfer Price
		Interorg Transfer Credit	Direct Interorg Shipment, Transfer Price
		Interorg Freight Charge	
		Interorg Payables	
		Material Overhead Absorption	
		Offset	
		Purchase Price Variance	
		Interorg Profit (OPM)	
	Direct Interorg Receipt	Inventory Valuation	Direct Interorg Receipt
		Interorg Receivables	Direct Interorg Receipt, No Transfer Price
		Interorg Transfer Credit	Direct Interorg Receipt, Transfer Price
		Interorg Freight Charge	
		Interorg Payables	
		Material Overhead Absorption	
		Offset	
		Purchase Price Variance	
		Cost Variance	

Discrete Cost Management SLA Model

	Cost Management Subledger Accounting Event Class, Journal Line Type and Event Type Model		
eAM Related	Event Class Name	Journal Line Types	Event Type Name
	Event Entity: Inventory Accounting Events		
	Intransit Interorg Shipment for FOB Receipt	Inventory Valuation	Intransit Interorg Shipment for FOB Receipt
		Intransit Valuation	
		Offset	
	Sender-side Intransit Interorg Receipt for FOB Receipt	Intransit Valuation	Sender-side Intransit Interorg Receipt for FOB Receipt without Transfer Pricing
		Interorg Profit (OPM)	Sender-side Intransit Interorg Receipt for FOB Receipt with Transfer Pricing
		Interorg Transfer Credit	
		Interorg Freight Charge	
		Interorg Receivables	
		Cost of Goods Sold	
		Offset	
	Recipient-side Intransit Interorg Receipt for FOB Receipt	Inventory Valuation	Recipient-side Intransit Interorg Receipt for FOB Receipt without Transfer Pricing
		Interorg Payables	Recipient-side Intransit Interorg Receipt for FOB Receipt with Transfer Pricing
		Material Overhead Absorption	
		Purchase Price Variance	
		Intercompany Expense	
		Profit in Inventory	
		Cost Variance	
		Offset	

Discrete Cost Management SLA Model

	Cost Management Subledger Accounting Event Class, Journal Line Type and Event Type Model		
eAM Related	Event Class Name	Journal Line Types	Event Type Name
	Event Entity: Inventory Accounting Events		
	Sender-side Intransit Interorg Shipment for FOB Receipt	Inventory Valuation	Sender-side Intransit Interorg Shipment for FOB Shipment without Transfer Pricing
		Interorg Profit (OPM)	Sender-side Intransit Interorg Shipment for FOB Shipment with Transfer Pricing
		Interorg Transfer Credit	
		Interorg Receivables	
		Cost of Goods Sold	
		Offset	
	Recipient-side Intransit Interorg Shipment for FOB Shipment	Intransit Valuation	Recipient-side Intransit Interorg Shipment for FOB Shipment without Transfer Pricing
		Interorg Payables	Recipient-side Intransit Interorg Shipment for FOB Shipment with Transfer Pricing
		Interorg Freight Charge	
		Material Overhead Absorption	
		Purchase Price Variance	
		Intercompany Expense	
		Profit in Inventory	
		Cost Variance	
		Offset	
	Intransit Interorg Receipt	Inventory Valuation	Intransit Interorg Receipt for FOB Shipment
		Intransit Valuation	
		Offset	

Discrete Cost Management SLA Model

	Cost Management Subledger Accounting Event Class, Journal Line Type and Event Type Model		
eAM Related	Event Class Name	Journal Line Types	Event Type Name
	Event Entity: Inventory Accounting Events		
YES	Material Cost Update	Inventory Valuation	Standard Cost Update
		Cost Variance	Average Cost Update
		Cost Update Adjustment	IPV Transfer to Inventory
		Intransit Valuation	Layer Cost Update
YES	Retroactive Price Adjustment	Accrual	Retroactive Price Adjustment
		Retroactive Price Adjustment	
	Logical Intercompany	Inventory Valuation	Logical Intercompany Sales Issue
		Intercompany Accrual	Logical Intercompany Sales Return
		Intercompany COGS	Logical Intercompany Receipt Return
		Offset	Logical Intercompany Procurement Receipt
			Logical Intercompany Procurement Return
	WIP Material Lot	Work in Process Valuation	Lot Split
		Offset	Lot Merge
			Lot Bonus
			Lot Quantity Update

Douglas Volz (doug@volzconsulting.com)

Professional Background

Doug Volz is a Senior Architect and Advisor for Oracle Application projects, specializing in Cost Management and Intercompany processes. He has 30 years accumulated experience, including 5 years in Oracle Development (co-designing Oracle Cost Management) 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 numerous 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. Countries include US, Mexico, UK, Netherlands, Belgium, Taiwan, P.R.O.C., Norway, Japan, Italy, Switzerland and Germany.

Doug leads the OAUG Cost Management Special Interest Group. He also advises and participates on the Oracle Customer Advisory Board for Fusion Costing and for the SCM Financial Orchestration Functional Forum.

Core Expertise

- Multi-organization, Multi-currency Implementations
- Cost Accounting Processes
- Project Management and Senior Project Advisor
- Core manufacturing & EAM processes
  - Cost Management
  - Intercompany
  - Inventory
  - Bills of Material
  - WIP
- Systems Integration and Data Conversions

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)
  - TCI International (US)
  - Onninen AS (Norway)

Any Questions?

Doug Volz
doug@volzconsulting.com
www.volzconsulting.com
+1 510 755-7050