Cloud and EBS Costing, You Can Track & Eliminate Profit in Inventory

OATUG Cost Management SIG Webinar
June 15, 2021

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Agenda

- Background
  - Background and Definitions
  - Example Flows
- Overall Approach
  - Overall Solution to ICP Tracking and Elimination
- Compare EBS vs. Cloud Cost ICP Solutions
  - Similarities and Differences
- EBS ICP Cost Setups
  - Transfer Pricing Profile Option
  - Shipping Network
  - Intercompany Relationships
  - ICP Item Cost Setup & Entry

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Agenda

- Cloud ICP Costing Setups (SCFO)
  - Quick Cloud Costing Overview
  - Cloud Interorganization UI (Shipping Network)
  - Supply Chain Financial Orchestration
- Lessons Learned
  - Profit in Inventory Affects COA Structure
  - Don't Test in Production
  - Everybody in Finance Has a Role
  - Don't Overcomplicate

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ABOUT THE SPEAKER

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About the Speaker **Doug Volz**

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Helping people use Oracle since 1990

Professional Summary

- 35+ years industry, design and consulting and "firefighting" experience
- Specializing in Cost Management business solutions
- Awarded 2014 OAUG Member of the Year
- Co-designed Oracle Cost Management at Oracle
- Implementations with international consulting firms, in twelve countries
- Led the Oracle Applications User Group for Cost Management since 2007
- Presenter at Collaborate (OAUG) and UKOUG since 1996
- Prior industry positions for General and Cost Accounting management

Business Solutions

- Change cost methods
- Inventory reconciliation
- Profit in inventory
- Intercompany
- A/P accruals
- Fix system account setups
- Multi-org cost accounting reports
- Product Line & Margin analysis
- Cost Rollup and Update
- Cost accounting training

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Business Solutions – Over 30 Presentations

– http://oaug.org/communities/webinars#cost-management-sig
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Start with the Summary Presentation:

- How to Manage the Inventory and Manufacturing Period Close and Remain Sane…
  - Start here, concise summary for these 30+ presentations
  - Plus nifty SQL Open/Close Period Status Report, works across all your inventory organizations and operating units (in the white paper)

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A/P Accruals:

- (R11i) How to Setup, Use and Balance Your A/P Accrual Accounts
- (R12) A/P Accruals for Release 12 (OAUG Cost Management SIG)
- (R12) Resolve Your Inventory A/P Accruals Issues Now! Even for Intercompany Internal Orders and Consignment!

Change Your Cost Methods Without Re-implementing:

- Who Said Changing Cost Methods With Discrete Costing Can't be Done?

Costing Tips and Tricks:

- Make Cost Management Work for You!
- Oracle Cost Management Features and Workarounds

Cost Management & Subledger Accounting (SLA):

- Cost Accounting As You Want It — EBS R12 Cost Accounting with SLA
- Subledger Accounting for Discrete & EAM Cost Accounting: Product Line and Expense Accounting Made Easy
- How to Create Shipping Burdens for Oracle Cost Management, in Spite of Subledger Accounting

Discrete & Process Cost Accounting Integration:

- We Can Create Combined Oracle Cost Accounting Reports for Both Discrete and Process Manufacturing

Inventory Reconciliation, Interfaces and Period Close Tips:

- Can We Actually Reconcile Project MFG to Inventory, WIP, Projects & G/L? What Was I Thinking?
- Reconcile Your Inventory to G/L Balances With Ease, From 1 to 1,000 Inventory Organizations!
- How in the Dickens Do I Handle Those Month-End Interfaces? (And Why Can't I Close My Books?)

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Periodic Costing:

- Want to Know Your Average Costs? Run Periodic Costing Alongside Your Costing Method!

Profit in Inventory Solutions:

- Does Rel. 12 Solve Global Inter-Company Issues for Multiple Ledgers, Profit in Inventory and COGS?
- INTL: Cloud and EBS Costing, You Can Track & Eliminate Profit in Inventory (and still have a life!)

Transactions and Variances:

- eAM Costing, How Is It Different from Oracle MFG Costing?
- How to Setup, Transact and Use Outside Processing
- InterCompany – Fulfillment Delivery Options - an Oracle DropShip Example
- Manufacturing Variances for Oracle EBS
- Overview of Oracle Discrete Costing for Manufacturing
- Receiving as it Relates to Oracle Cost Management
- Ship to Invoicing Oracle Transaction Flows: Tracing a Sale Through Inventory

Other Related Presentations:

- Cost Allocations: Different Ways to Use Oracle EBS Cost Elements, Sub-Elements and Cost Allocation Methods
- Change Management is So Important!
- Don't Forget Your Business Processes! Oracle Can't Do it All for You
- Major Tables & Relationships for Oracle EBS Costing
- What's New in Oracle Release 12 – the Changes that Matter
- Why Upgrade to Oracle Release 12 Costing - What's In it for Me?

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BACKGROUND AND EXAMPLES

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There Has to be an Easier Way !!

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Background and Examples

- Implemented profit in inventory solutions at:
  - Pharmaceutical companies
  - Medical instruments
  - Hi-Tech and Electronics and many other firms
- Discrete and Process Costing with multiple inventory orgs, currencies, operating units and ledgers
- With internal transfers across most organizations, using multiple primary and secondary ledgers
- Inter-company pricing with profit in inventory and month-end elimination issues

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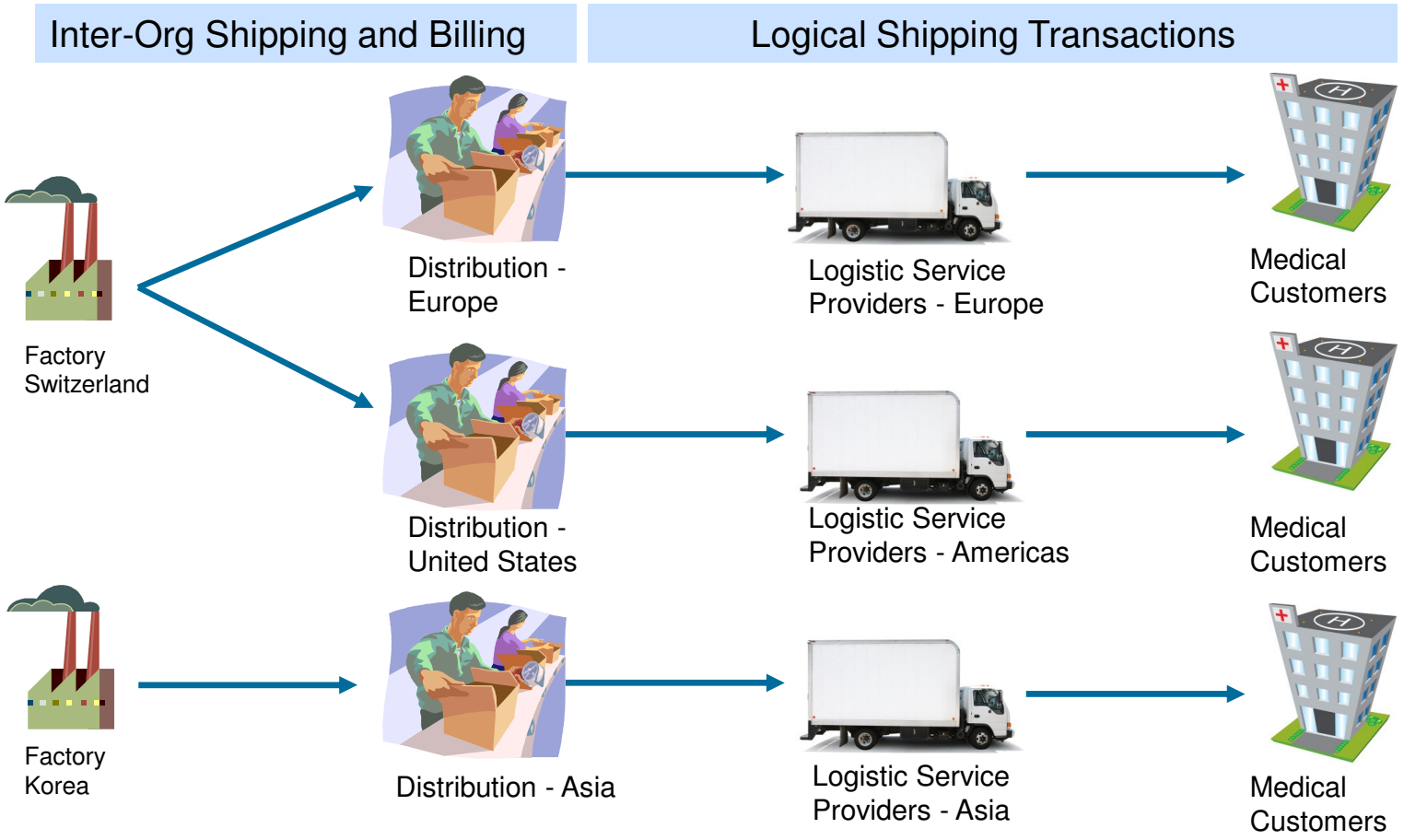
Supply Chain Example



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Profit in Inventory - Terms

- Two commonly used terms for profit in inventory
  - ICP – **I**nter**c**ompany **P**rofit
  - PII – **P**rofit **i**n **I**nventory

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Profit in Inventory

- Represents profit based on sales to related parties
- Intercompany profit is the artificial gain or profit recorded when one internal organization sells to another internal organization, and the receiving org's cost is different from the sending org's transfer price
- At month-end, this artificial profit must be "eliminated" or removed from the corporation's results
- Intercompany profit is only consumed or removed from inventory with:
  - Customer sales
  - Destruction or scrap or other form of loss
  - Internal consumption or use

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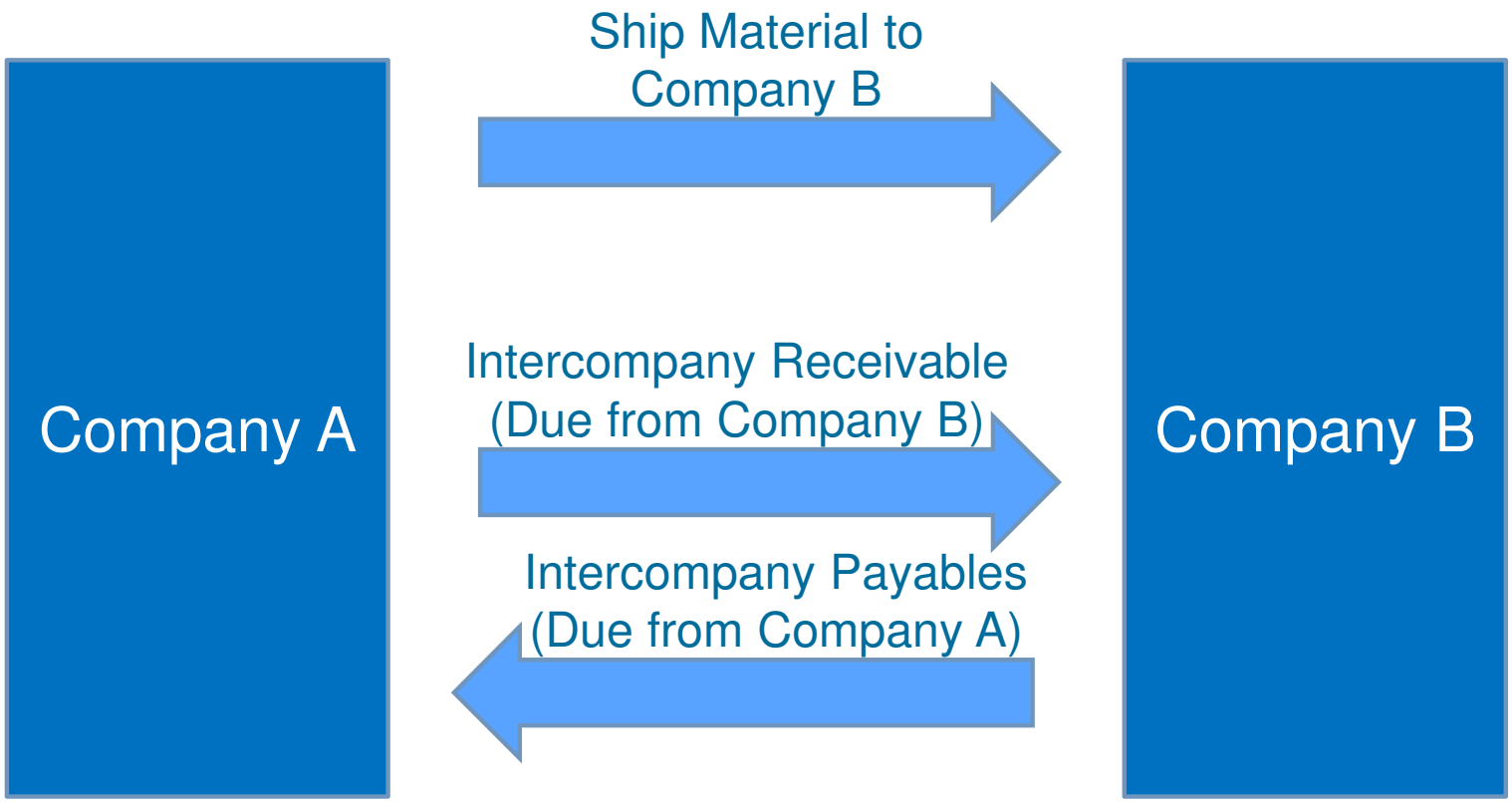
Intercompany Example (One Hop)



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Intercompany Example (Continued)

Transaction	Company A Debit	Company A Credit	Company B Debit	Company B Credit
Ship Material to Company B	I/C COGS		INVENTORY	
		INVENTORY		ACCRUAL
Issue I/C Invoice (Due from Company B)	I/C A/R			
		I/C REVENUE		
Issue I/C Payable (Due from Company A)			ACCRUAL	
				I/C A/P

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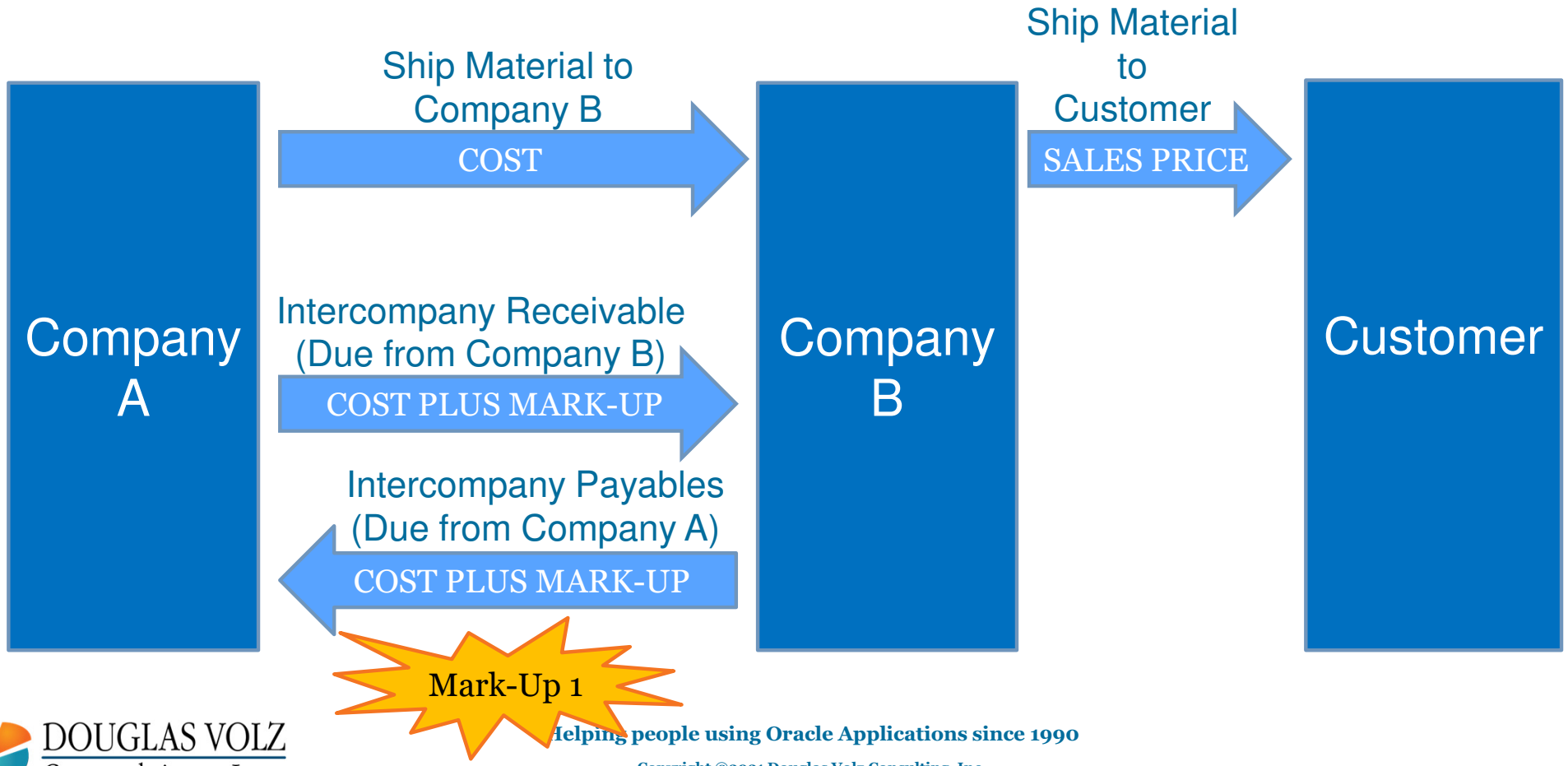
Intercompany Example with Customer Shipment



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Intercompany Example (With COGS)

	Company A		Company B (Includes ICP/PII)	
Transaction	Debit	Credit	Debit	Credit
Ship Material to Company B	I/C COGS	INVENTORY	INVENTORY	ACCRUAL
Issue I/C Invoice (Due from Company B)	I/C A/R	I/C REVENUE		
Issue I/C Payable (Due from Company A)			ACCRUAL	I/C A/P
Sale to Customer (Company B)			COGS	INVENTORY

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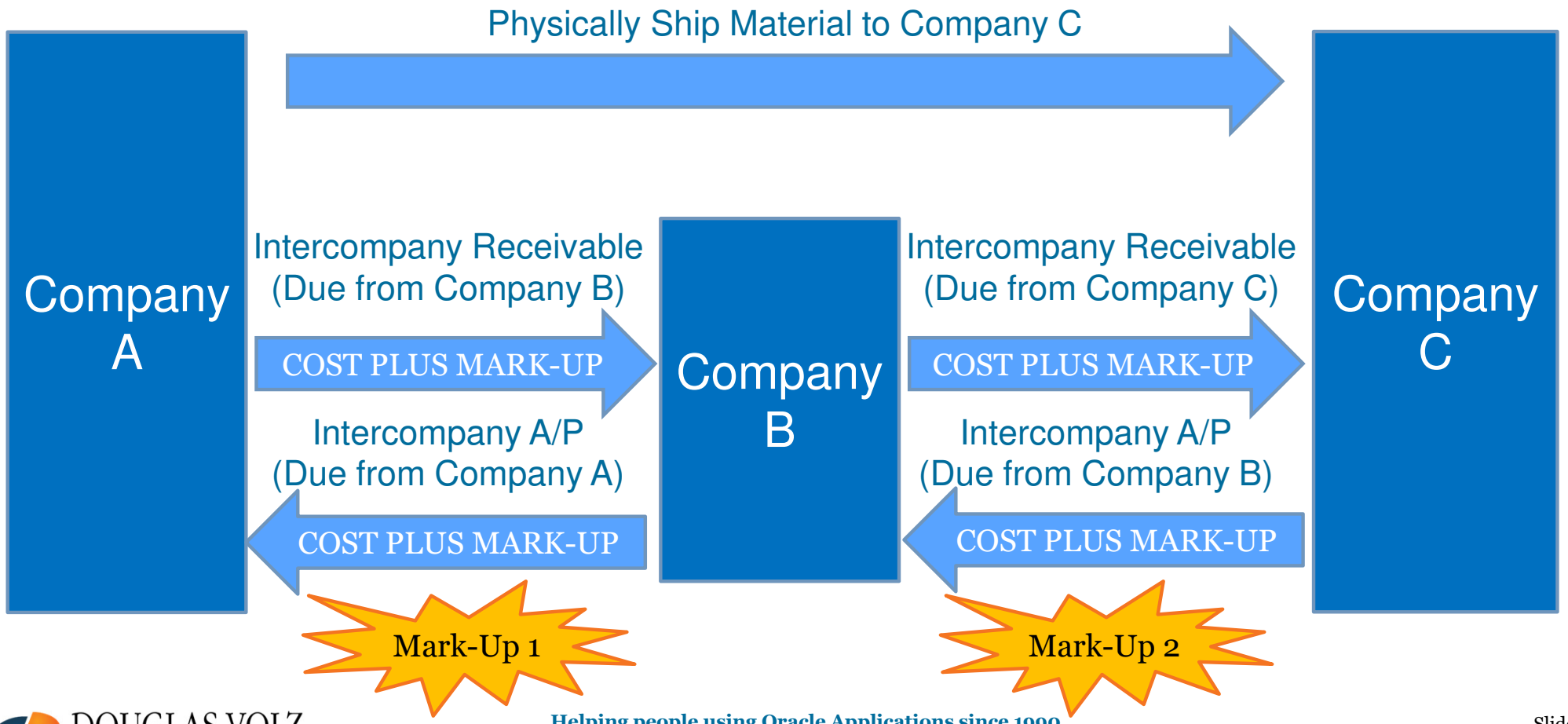
Another Intercompany Example (Two Hops)



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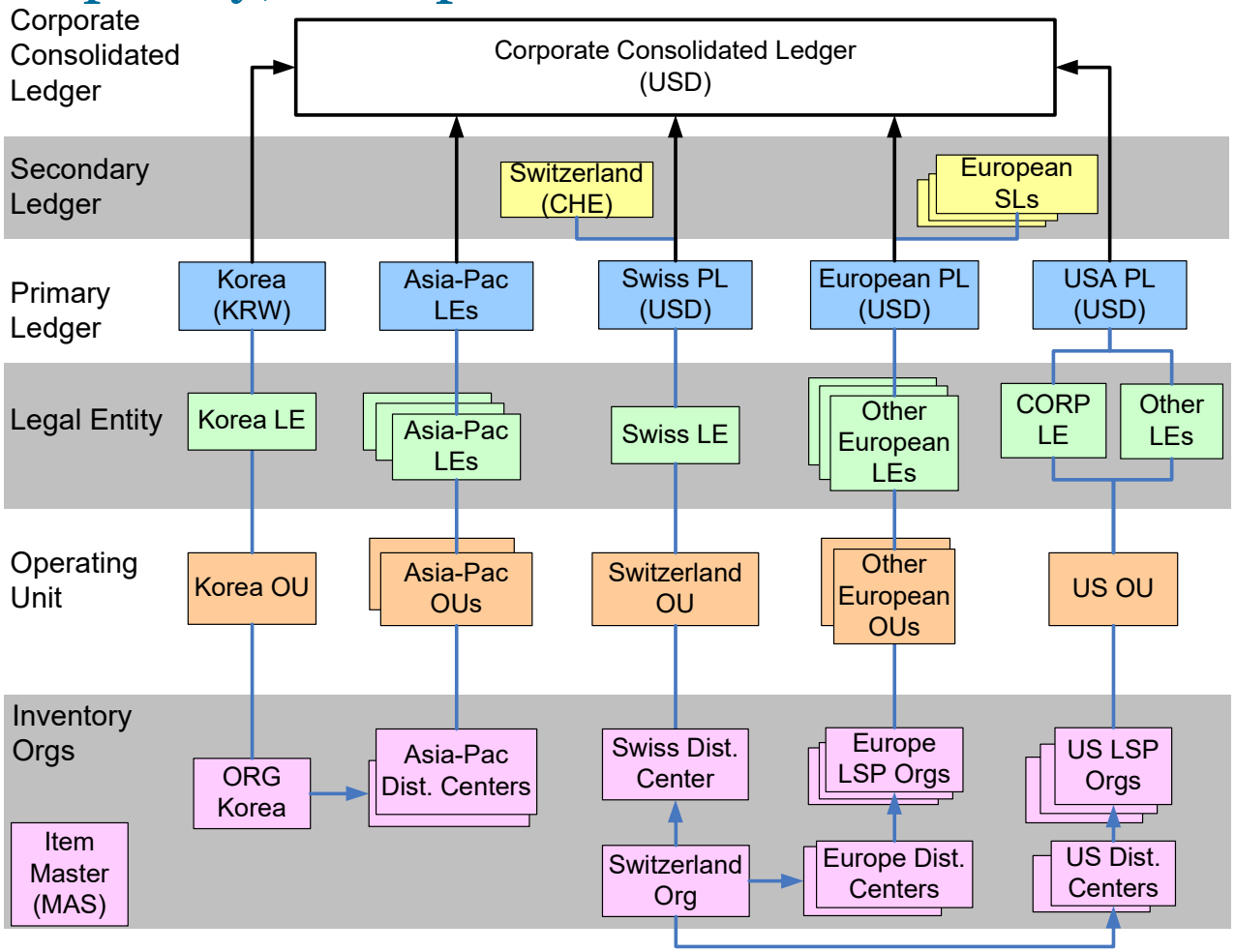
Lots of Complexity, Multiple Financial Entities



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OVERALL APPROACH TO PROFIT IN INVENTORY

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Profit in Inventory – Basic Business Needs

- Two overall scenarios:
  - Profit in inventory adjusted in local books (eliminate in local books)
  - Profit in inventory adjusted in consolidation ledger (eliminate in consolidation books)

- Usually eliminate in consolidated books, keep local books grossed up with profit in inventory
- But you still need to be able to isolate the amount of ICP, for reporting purposes)

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Profit in Inventory – Report in Consolidated Books

- Requirements
  - Don't want local tax authorities to see "real" margins
  - Keep profit in inventory in the (Local) Margin Analysis Report
  - Eliminate in the consolidated ledger using summary journals
  - Requires end of month Profit in Inventory Valuation Reports
  - Require the ability to support the consolidated entry with material transaction history and month-end inventory value reporting

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Profit in Inventory – Which Costing Method?

- Standard Costing is Easier Than Average Costing
  - For EBS Average Costing, for the end-of-month profit in inventory value report you need to calculate the average ICP item cost for each month
  - For Cloud Costing Average Costing, it calculates the ICP item cost for you
  - But if using Average Costing, each month's average ICP item cost may be different **and may be different for each account (Inventory, COGS, Scrap, R&D, etc.)**
    - Average Costing has a constantly moving Perpetual Average Cost and may have a constantly moving ICP amount
    - Whereas with Standard Costing you can predetermine the Cost, Price and ICP relationships into a Cost Model
  - You accumulate ICP by organization by item for the month
  - Store it in a cost type (EBS) or by Cost Book and Day (Cloud Costing)

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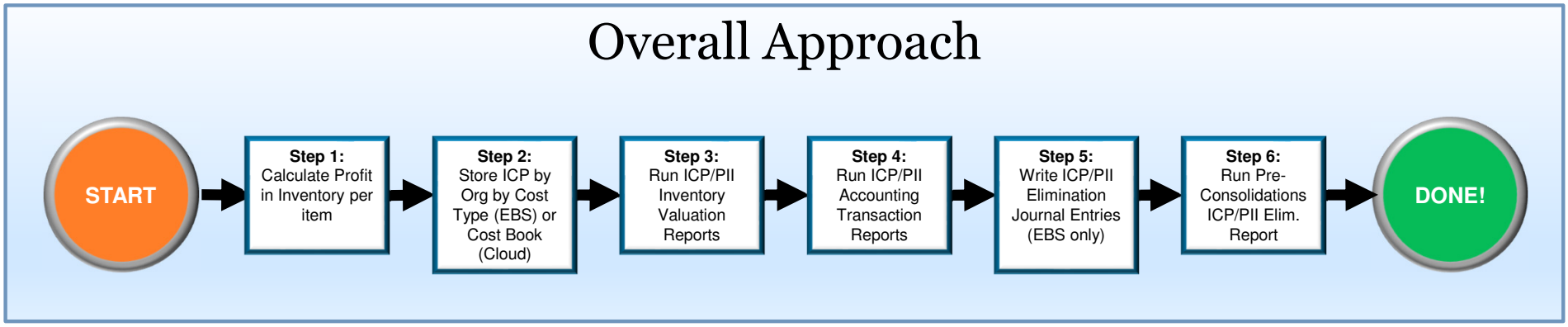
Profit in Inventory Solutions



Unlike EBS, Cloud Costing writes ICP entries when goods are shipped (see slides 56-59). But you still have to ensure that (1) the local books are at the fully loaded cost and that (2) the ICP entries are written off or eliminated in the ICP Ledger.

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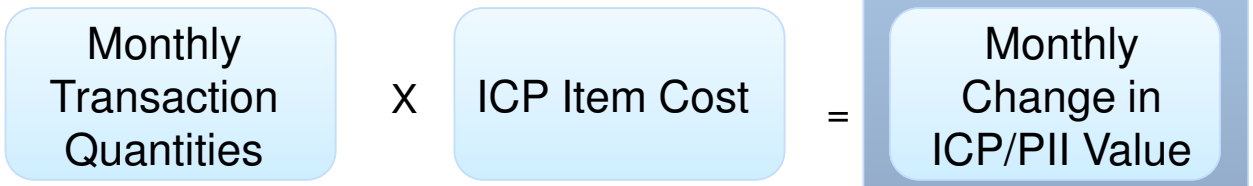
Underlying ICP/PII Elimination Principles

- Inventory Value Reports

- Transaction Reports



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COMPARE EBS VS. CLOUD COST ICP SOLUTIONS

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Compare EBS vs. Cloud Costing

Legend: Custom reporting solution

This Month's ICP Inventory Value Reports – Last Month's ICP Inventory Value Reports = Monthly Change in ICP/PII Value

Solution	EBS Approach	Cloud Costing Approach
Primary Data Source	Month-End Snapshot table: CST_PERIOD_CLOSE_SUMMARY	ICP Costs by Cost Book X Calculated Qtys
Store ICP Values	By Cost Type, by ICP Sub-Element	By Cost Book, by ICP Cost Element
Store Uplift Factors	Diff. between Sales Price and Cost	Implicit Transfer Price Mark-Up Factors
Journal Entries	Month-end manual elimination entries.	Automated ICP journals with each transaction.
Calculate Month-End Onhand and Intransit ICP Values	Multiply the stored ICP costs by the Month-End Snapshot	Possibly modify existing Inventory Value Report to include ICP values?
Calculate Month-End Receiving ICP Values	Multiply the cost type by the calculated quantities for Receiving	Multiply the stored ICP costs by the calculated quantities for Receiving
Calculate Month-End WIP ICP Values	Multiply the cost type by the calculated quantities for WIP components	Multiply the stored ICP costs by the calculated quantities for components in WIP

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EBS ICP COST SETUPS

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EBS ICP Cost Setups

- CST: Transfer Pricing Profile Option
- Shipping Networks
- Intercompany Relations
- ICP Item Costs by Sub-Element

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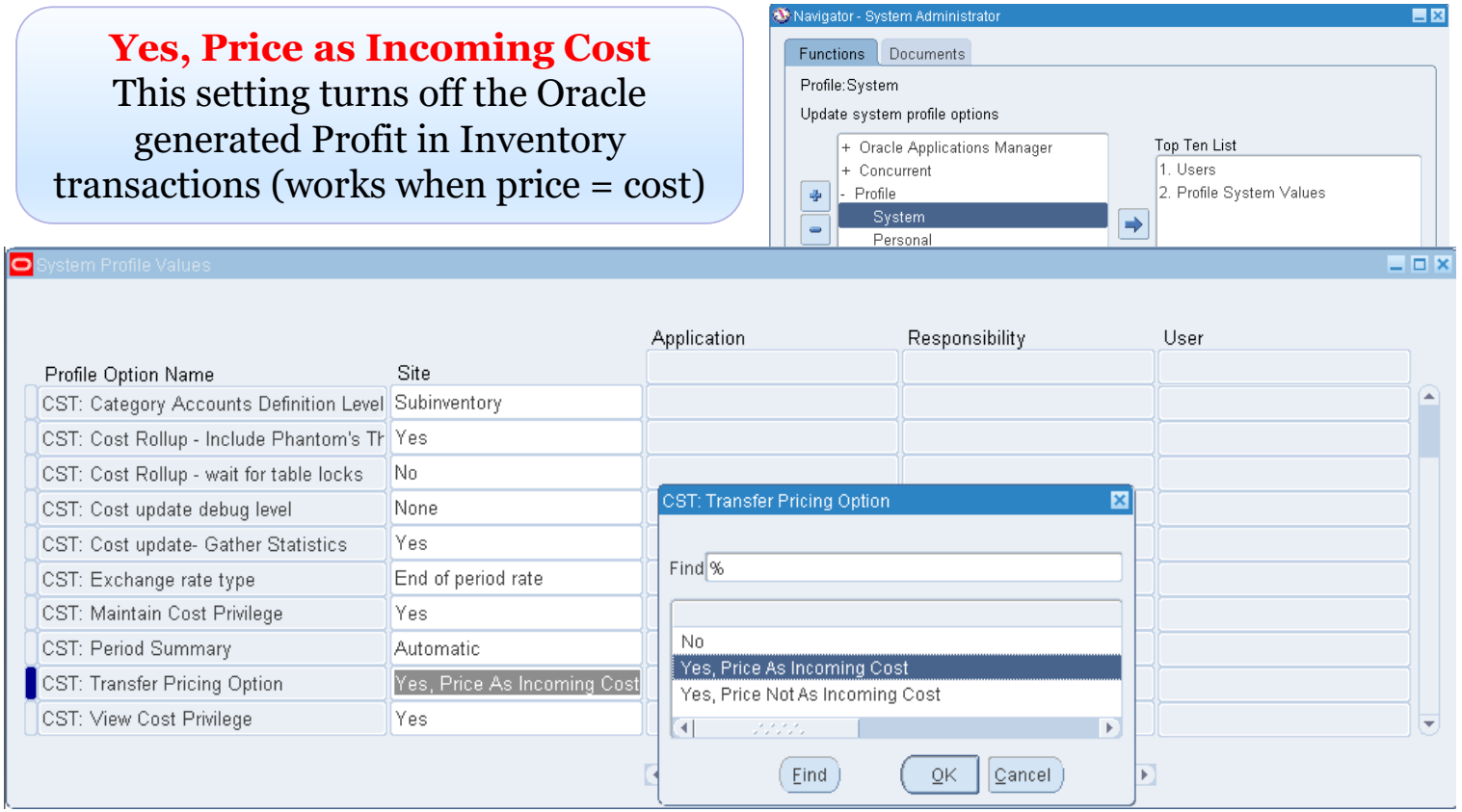
EBS: CST: Transfer Pricing Profile Option

Yes, Price as Incoming Cost
This setting turns off the Oracle generated Profit in Inventory transactions (works when price = cost)



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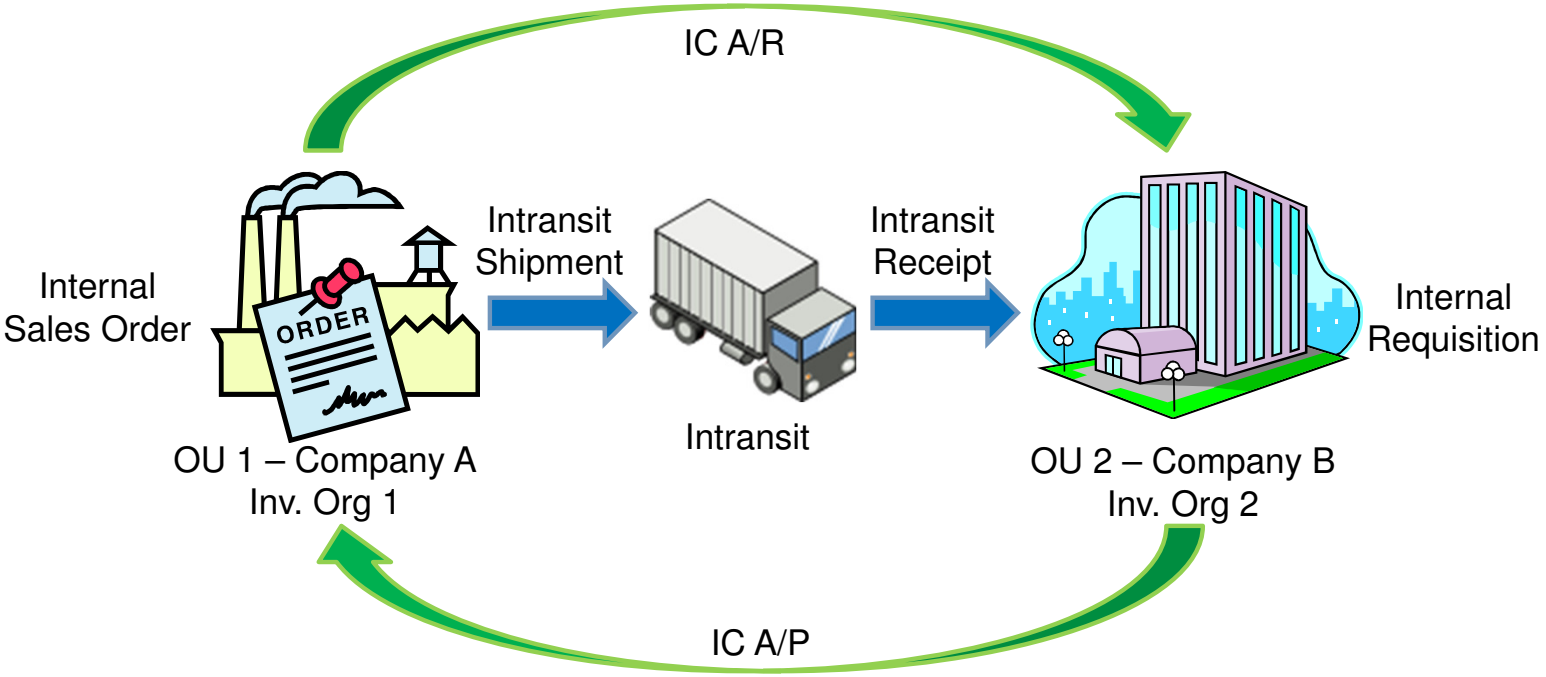
Internal Sales: IR/ISO



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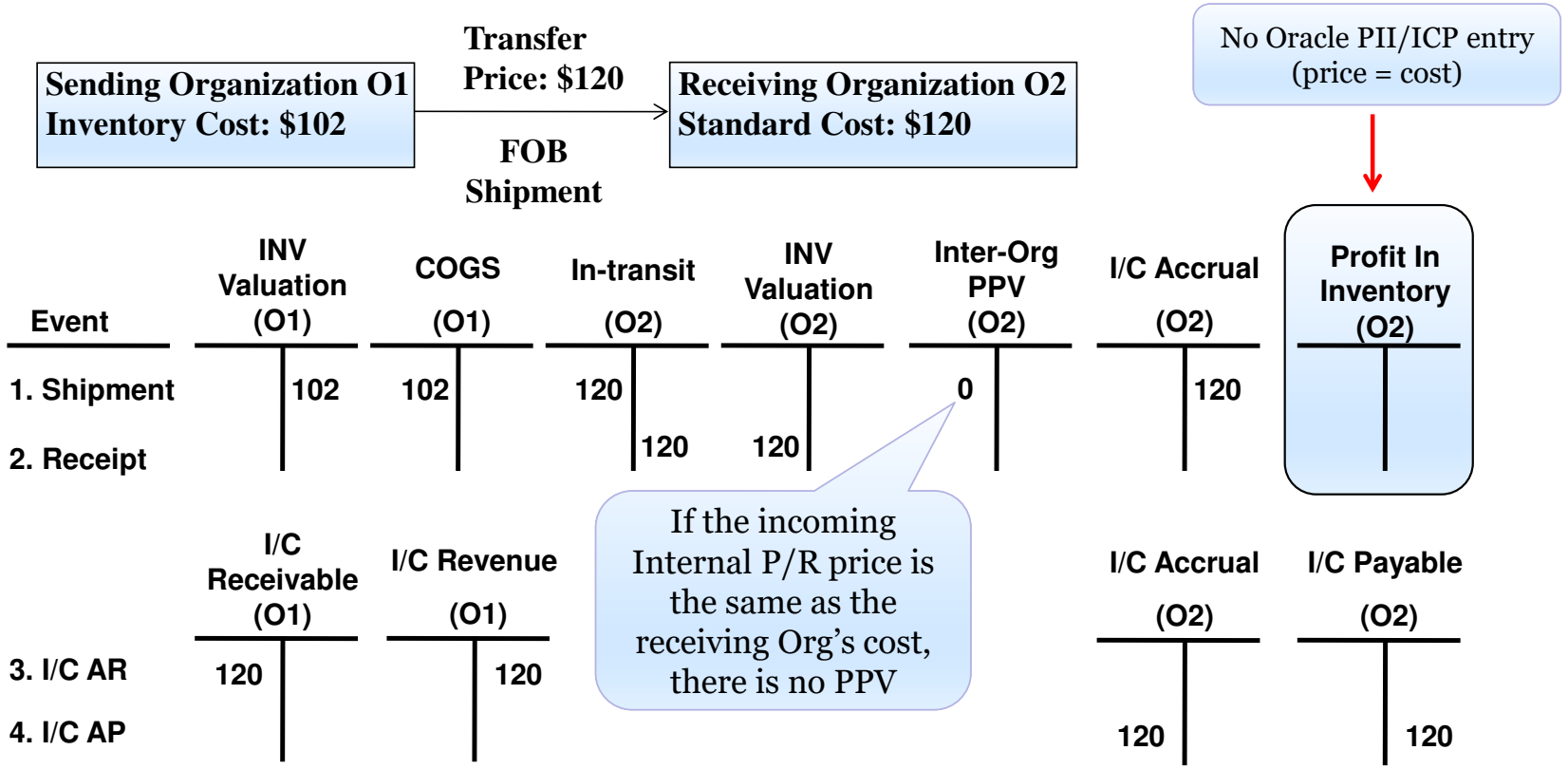
Profit in Inventory – EBS Features

(FOB Ship Example / CST: Transfer Price Option: Price as Incoming Cost)



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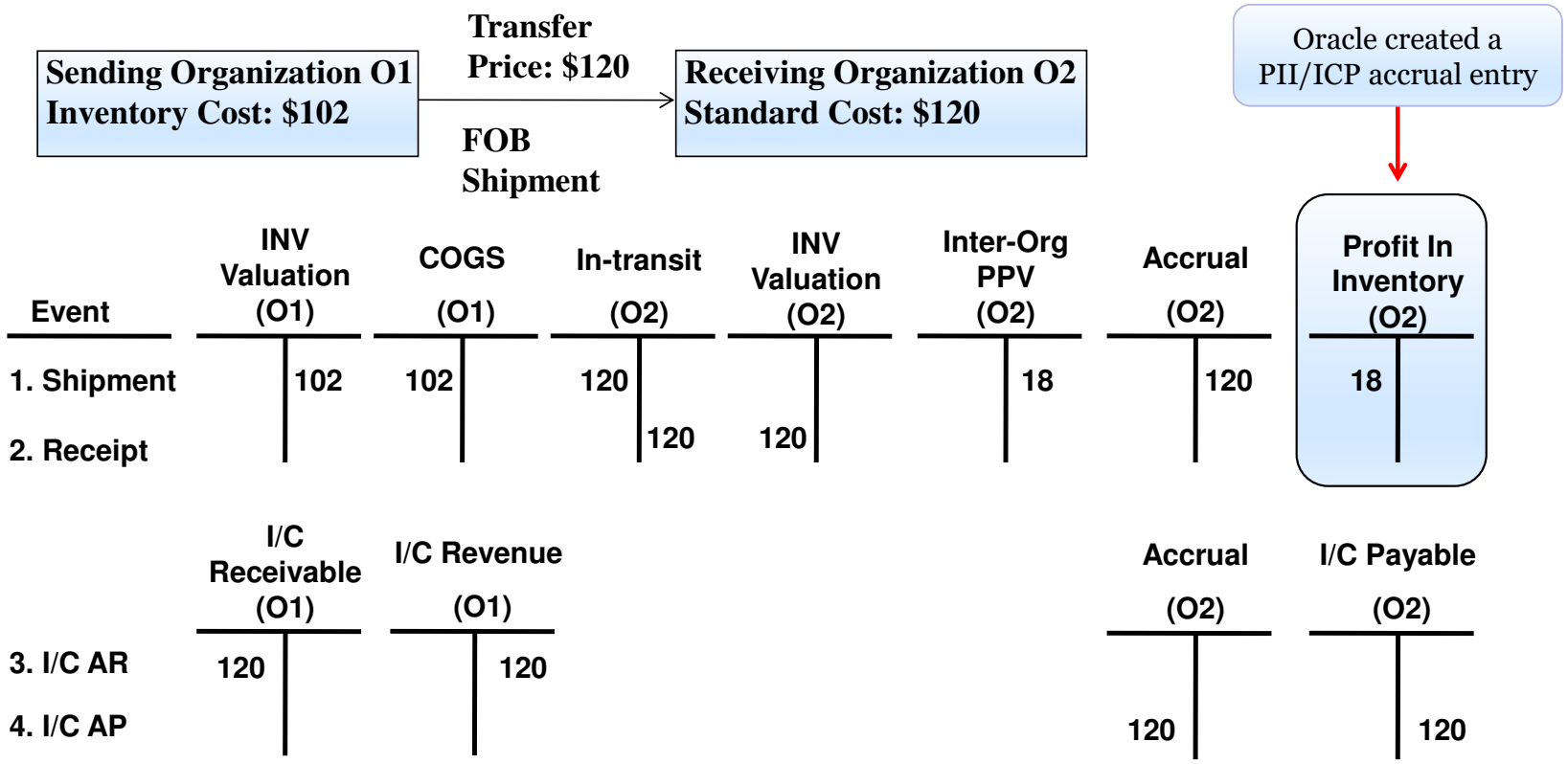
Profit in Inventory – EBS Features

(FOB Ship Example / CST: Transfer Price Option: Price Not as Incoming Cost)



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Profit in Inventory – Alternate: "Price Not as Incoming Cost"

- By using "Price Not as Incoming Cost" profit in inventory can be earned with the intransit shipment or receipt transaction (depending on FOB setting)
- But it is not relieved during subsequent transfers out of inventory
- And you do not have a Profit in Inventory Value Report

EBS Recommendations:

1) Turn off the standard Oracle PII/ICP accounting entries, by setting the profile from "Price Not as Incoming Cost" to "Price as Incoming Cost"
2) Ensure your internal prices equals the standard costs in your receiving organization.

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EBS: Profit in Inventory & Internal Requisition Challenges

- Have to configure your item price logic for internal requisitions
- Out-of-the-box: internal requisition price equals the sending organization's item cost
- You want the internal requisition price based on the receiving organization's item cost, just like any external purchase order
- See: FAQ for Using Source Inventory Org Cost + Margin As Intercompany AR Transfer Price In An Internal Order Using Intercompany or Using it for the Internal Requisition Price (Doc ID 1356460.1)

Many thanks to Rufus Moses (Overhead Door Company) for this P/R clarification

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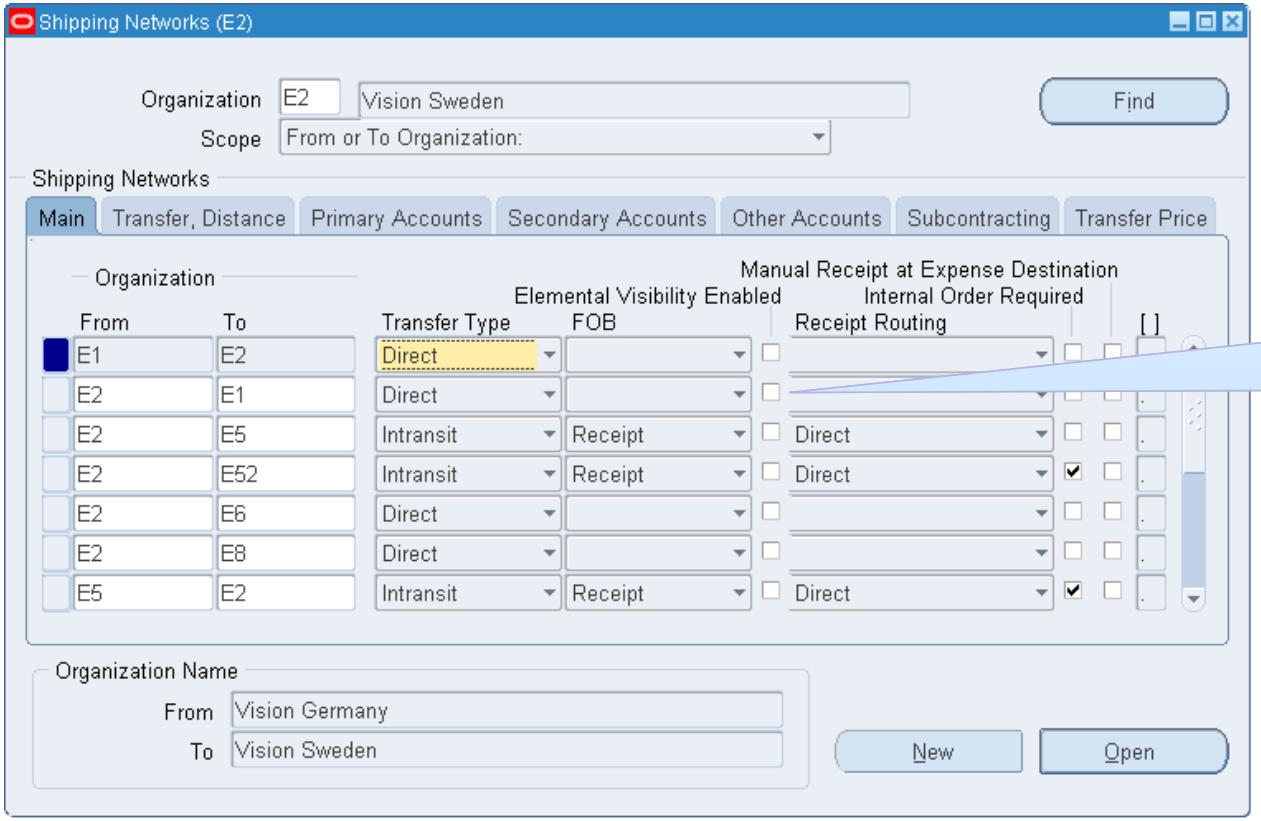
Shipping Network: Inventory Org to Org Relationships

Menu Path: Cost Management – SLA => Setup => Account Assignment => Shipping Network



Leave Elemental Visibility unchecked to transfer as "Material" costs

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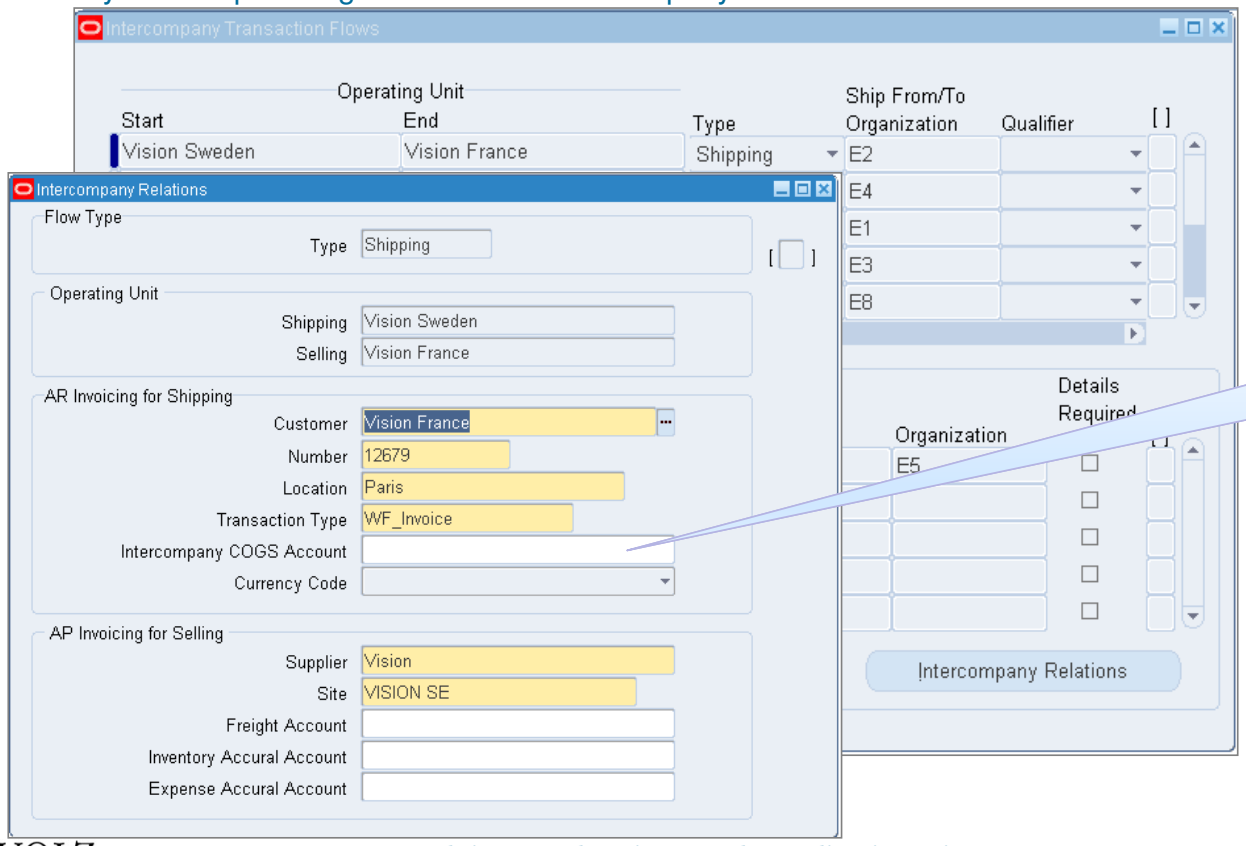
Intercompany Transaction Flows: Relationships Between OUs

Menu Path: Inventory => Setup => Organizations => Intercompany Transaction Flows



This account is not used for IR/ISO transactions

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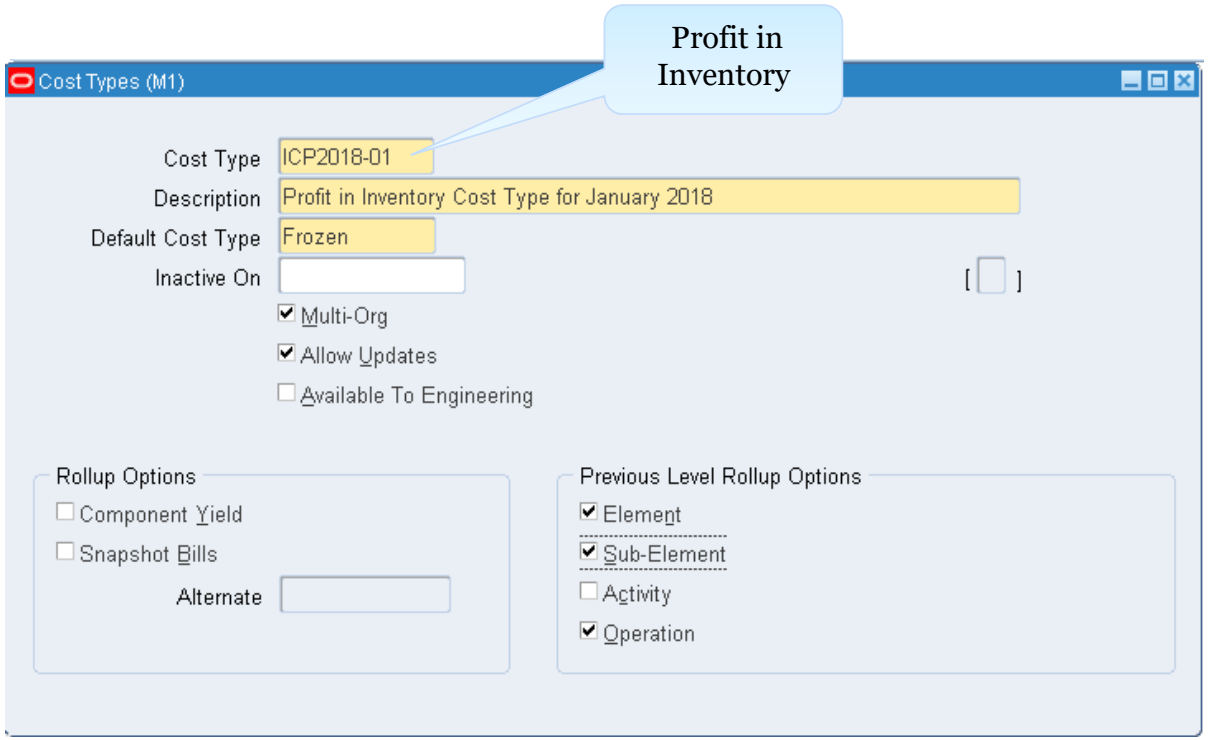
EBS Item Costing: Set Up ICP Cost Type

Menu Path: Cost Management – SLA => Setup => Cost Type



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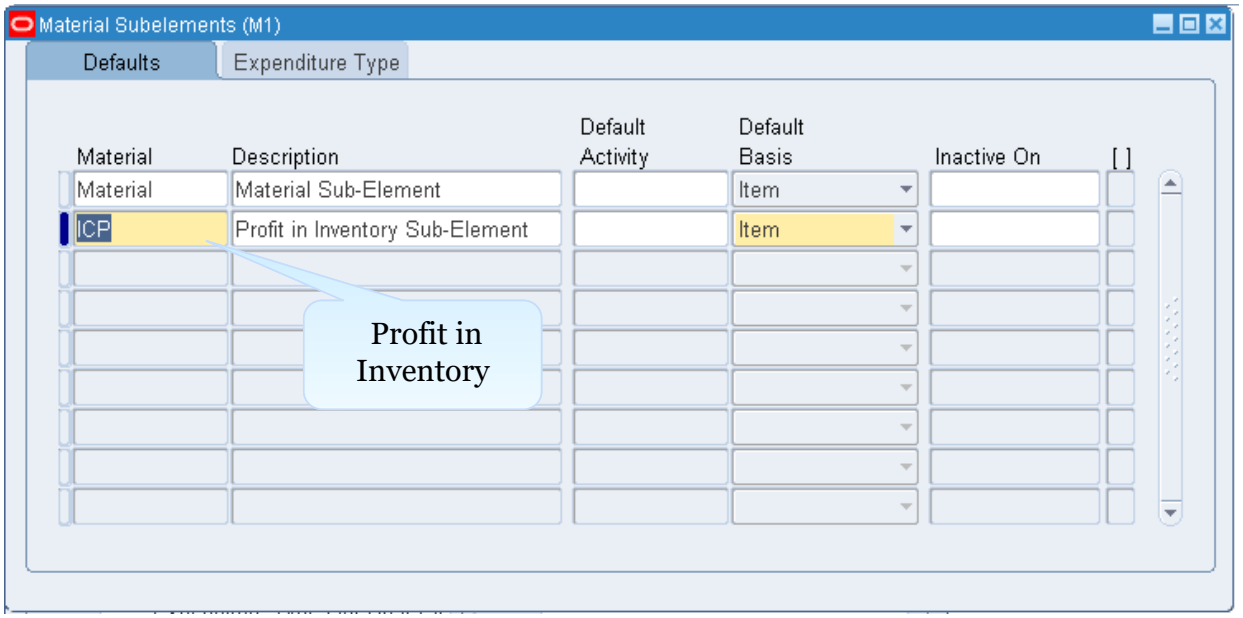
EBS Item Costing: Set Up ICP Sub-Element

Menu Path: Cost Management – SLA => Setup => Sub Element => Material



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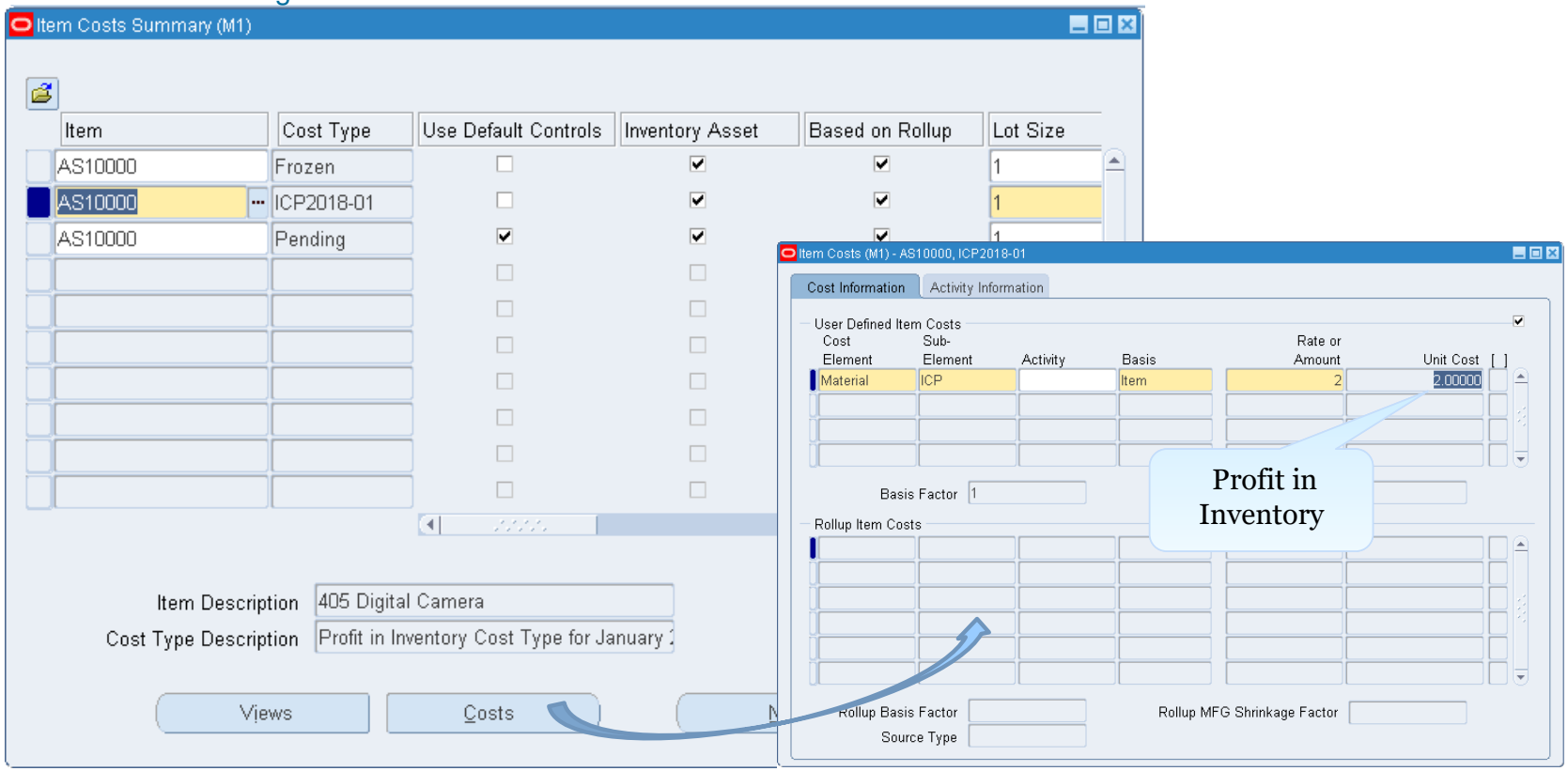
EBS Item Costing: Set Up ICP Item Costs by Sub-Element

Menu Path: Cost Management – SLA => Item Costs => Item Costs



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CLOUD ICP COST SETUPS

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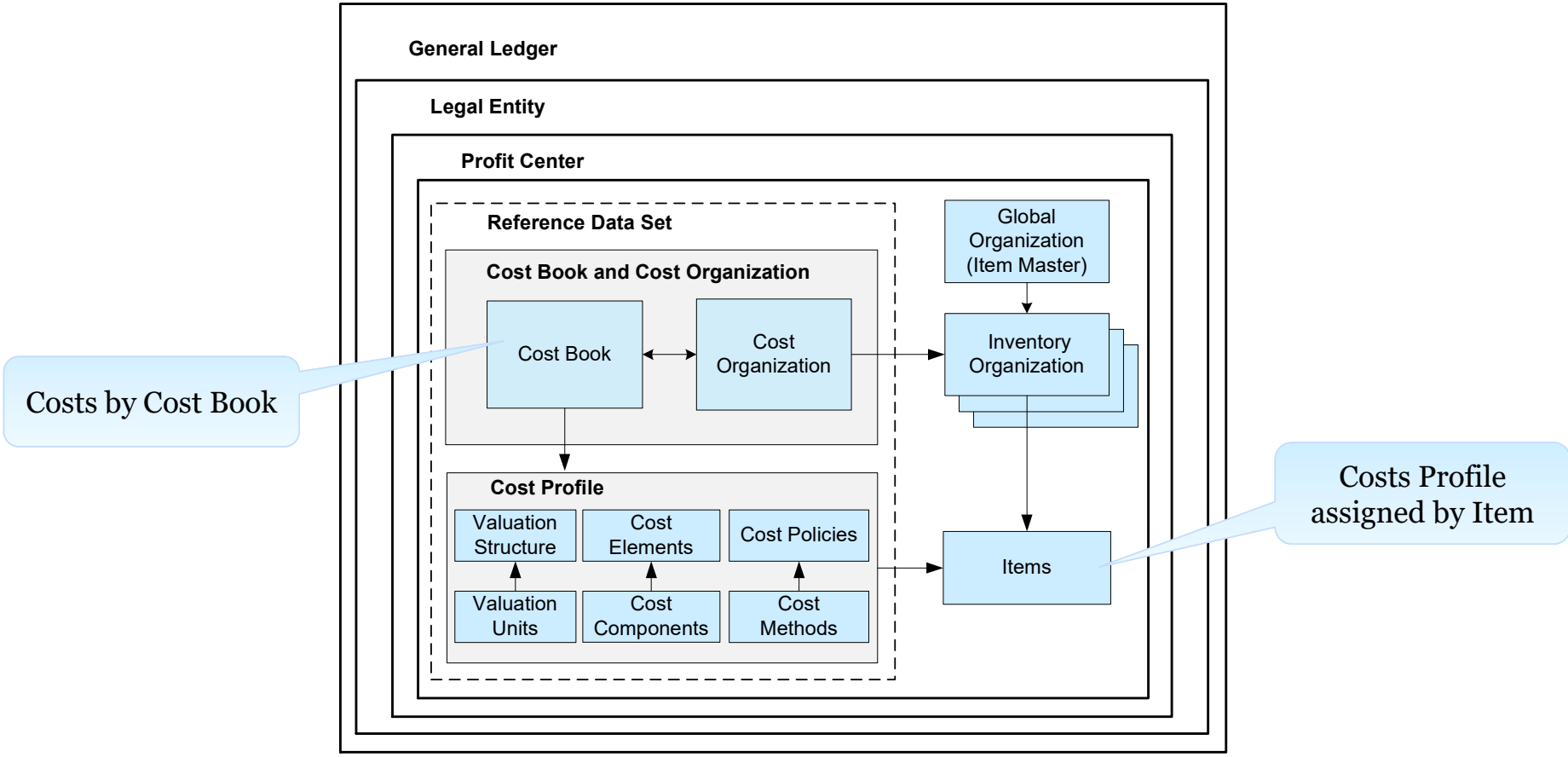
Cloud Costing (Very Quick!) Overview



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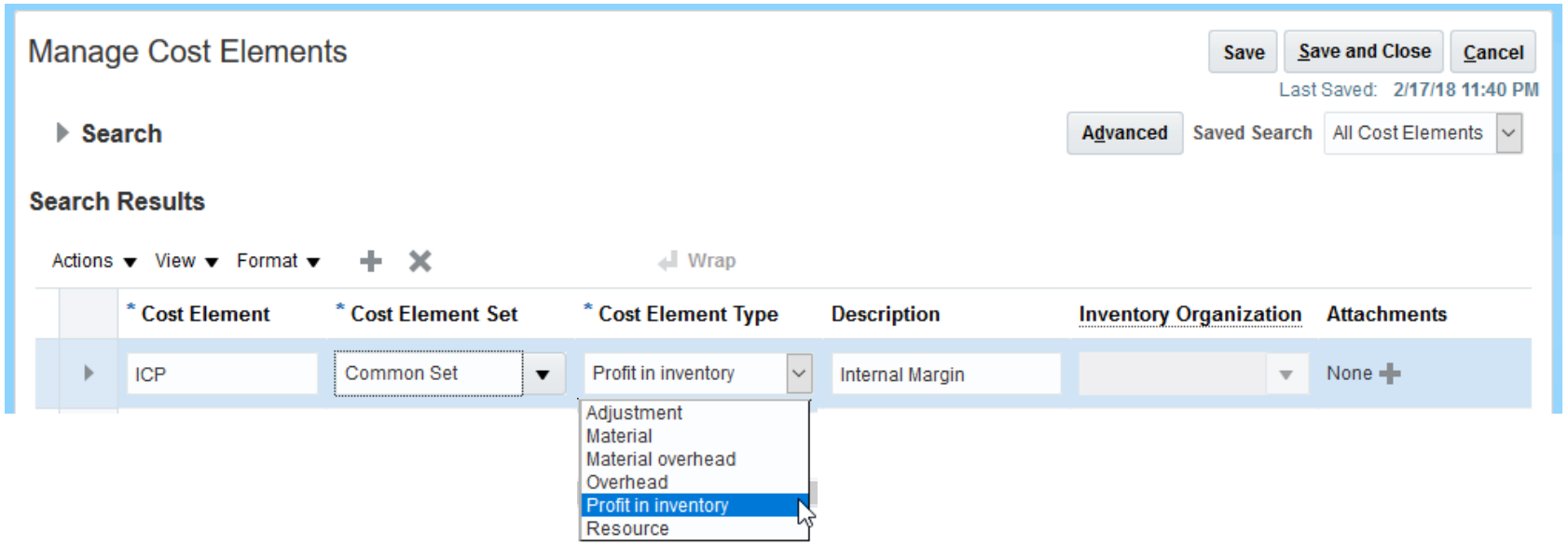
Cloud Costing has Unlimited Cost Elements

- Cloud Costing has six Cost Element Types: Adjustment, Material, Material Overhead, Overhead, Profit in Inventory and Resource
- You can set up any number of Cost Elements by Type

  Menu Path: Setup and Maintenance => Supply Chain and Supply Chain Materials Management => Cost Accounting => Manage Cost Elements



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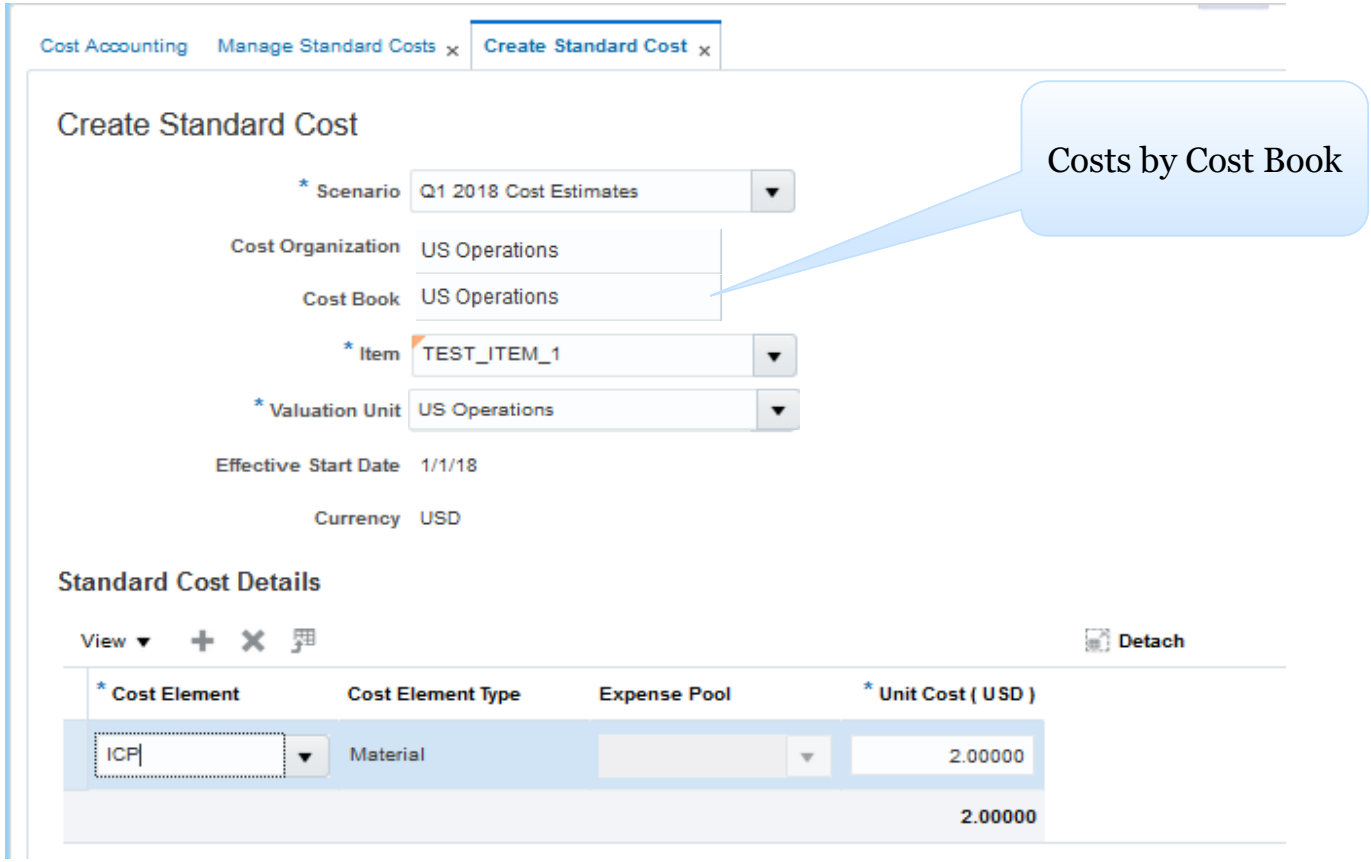
Cloud Costing: Standard Cost Example

Menu Path: Supply Chain Execution => Cost Accounting => Manage Standard Costs



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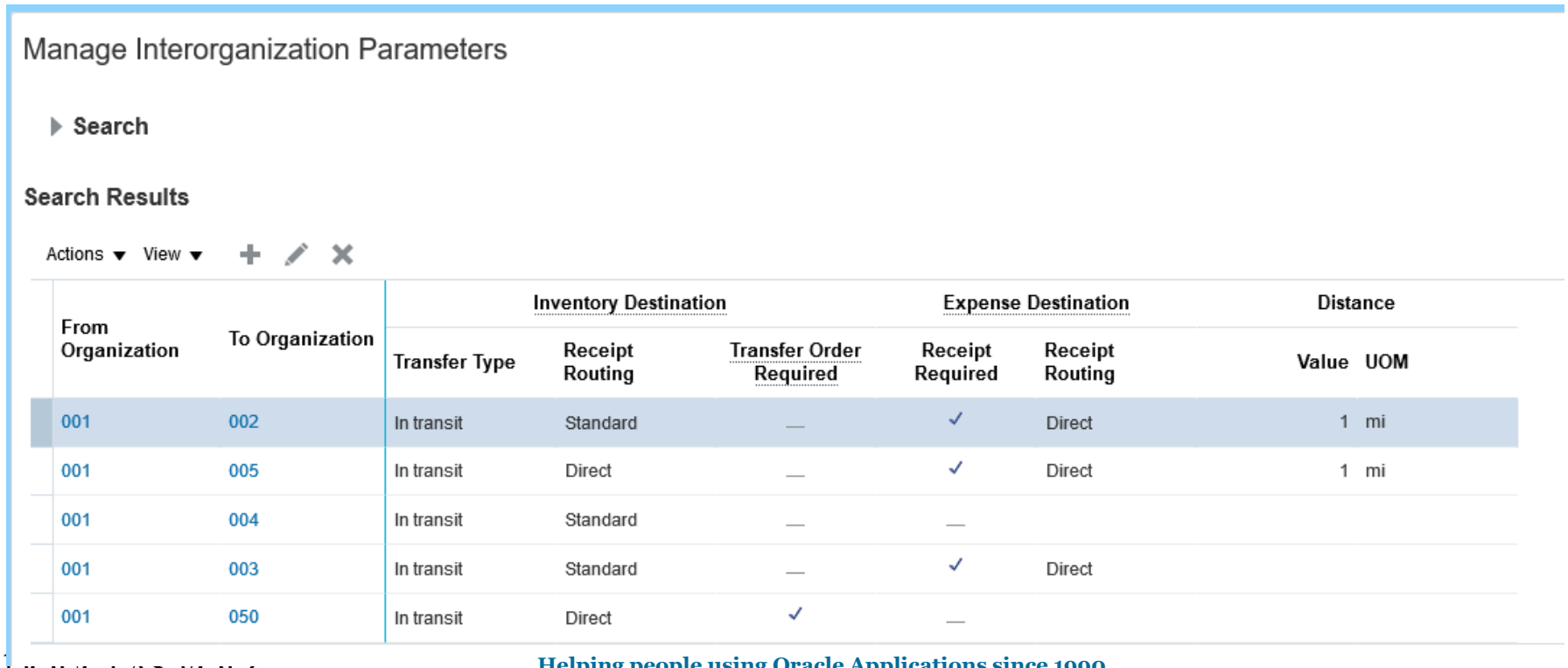
No Accounts or Mark-Up Factors on Shipping Network

Menu Path: Setup and Maintenance => Manufacturing and Supply Chain Materials Management => Inventory Management => Manage Interorganization Parameters

- Interorganization Parameters (formerly EBS Shipping Network)



Manage Interorganization Parameters

▶ Search

Search Results

Actions ▾ View ▾ + ✎ ✕

From Organization	To Organization	Inventory Destination			Expense Destination		Distance	
		Transfer Type	Receipt Routing	Transfer Order Required	Receipt Required	Receipt Routing	Value	UOM
001	002	In transit	Standard	—	✓	Direct	1	mi
001	005	In transit	Direct	—	✓	Direct	1	mi
001	004	In transit	Standard	—	—			
001	003	In transit	Standard	—	✓	Direct		
001	050	In transit	Direct	✓	—			

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Brave New World – Supply Chain Financial Orchestration

- Supply Chain Financial Orchestration Features

Model Supply Chain Financial Flow	▪ Define configurable transfer pricing ▪ Define intercompany documentation and ownership xfer points ▪ Create multi-node financial routes
Separate Physical Transactions from Financial Transactions	▪ Automate financial accounting
Monitor and report	▪ Monitor and audit financial transactions

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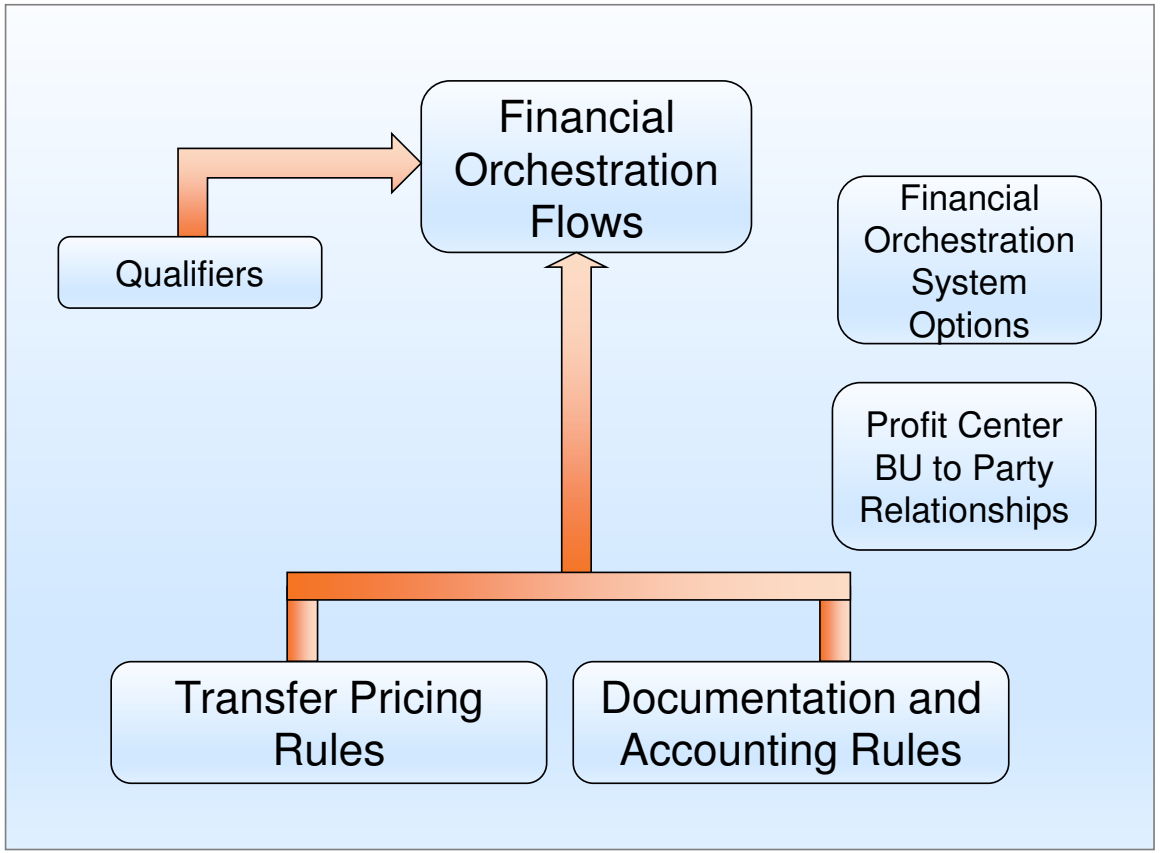
SCFO: Model Financial Flows

- Model Financial Relationships
- Define Transfer Pricing Rules
- Establish Documentation and Accounting Rules
- Build Rules to Match Events to the financial Route
- Associate Business Units with Customers and Suppliers



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Brave New World – Supply Chain Financial Orchestration

- Supply Chain Financial Orchestration Features

Model Supply Chain Financial Flow

- Define configurable transfer pricing
- Define intercompany documentation and ownership xfer points
- Create multi-node financial routes
- Unlike EBS, creates profit in inventory accounting entries, even for the customer shipment transactions

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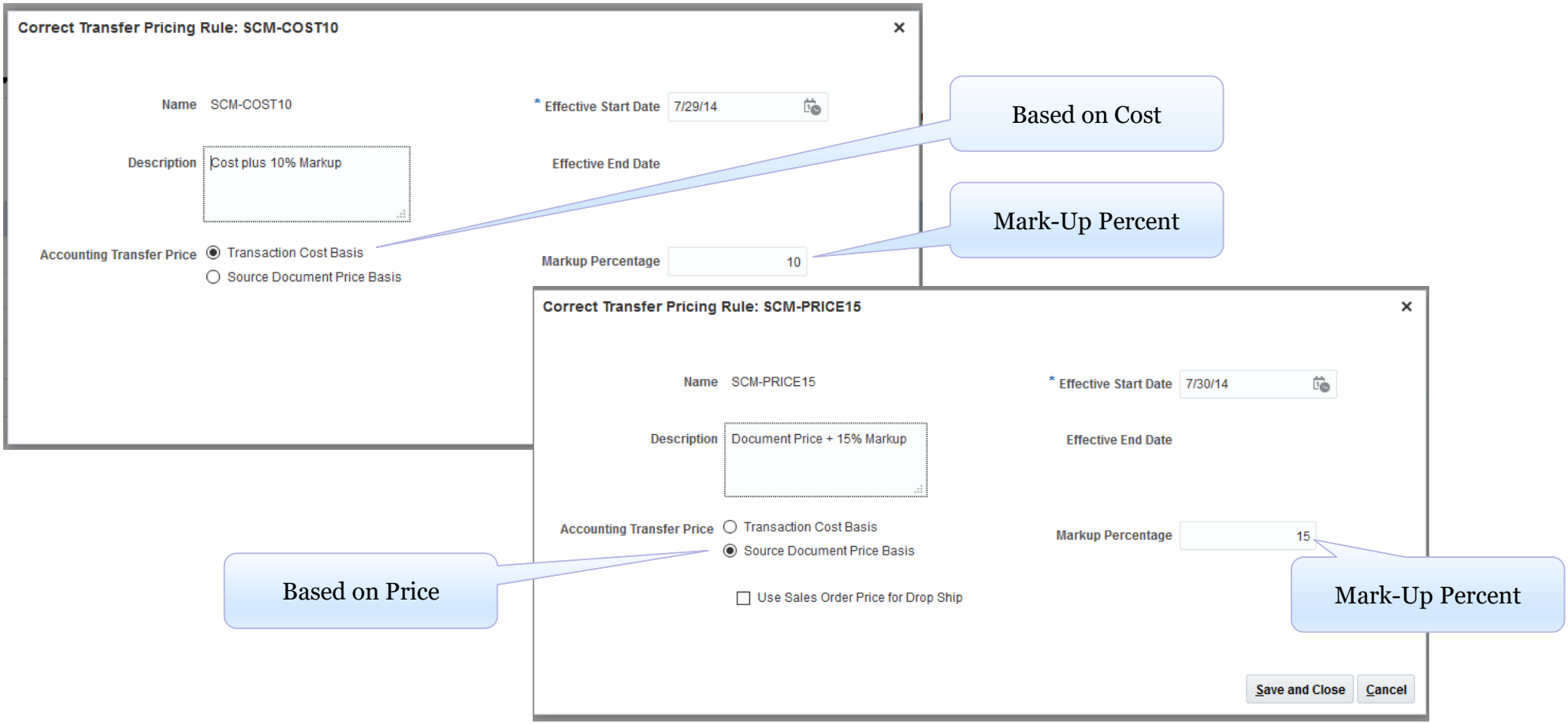
SCFO: Transfer Pricing Rules Setup

Menu Path: Setup and Maintenance => Manufacturing and Supply Chain Materials Management => Supply Chain Financial Flows => Manage Supply Chain Financial Orchestration Transfer Pricing Rules



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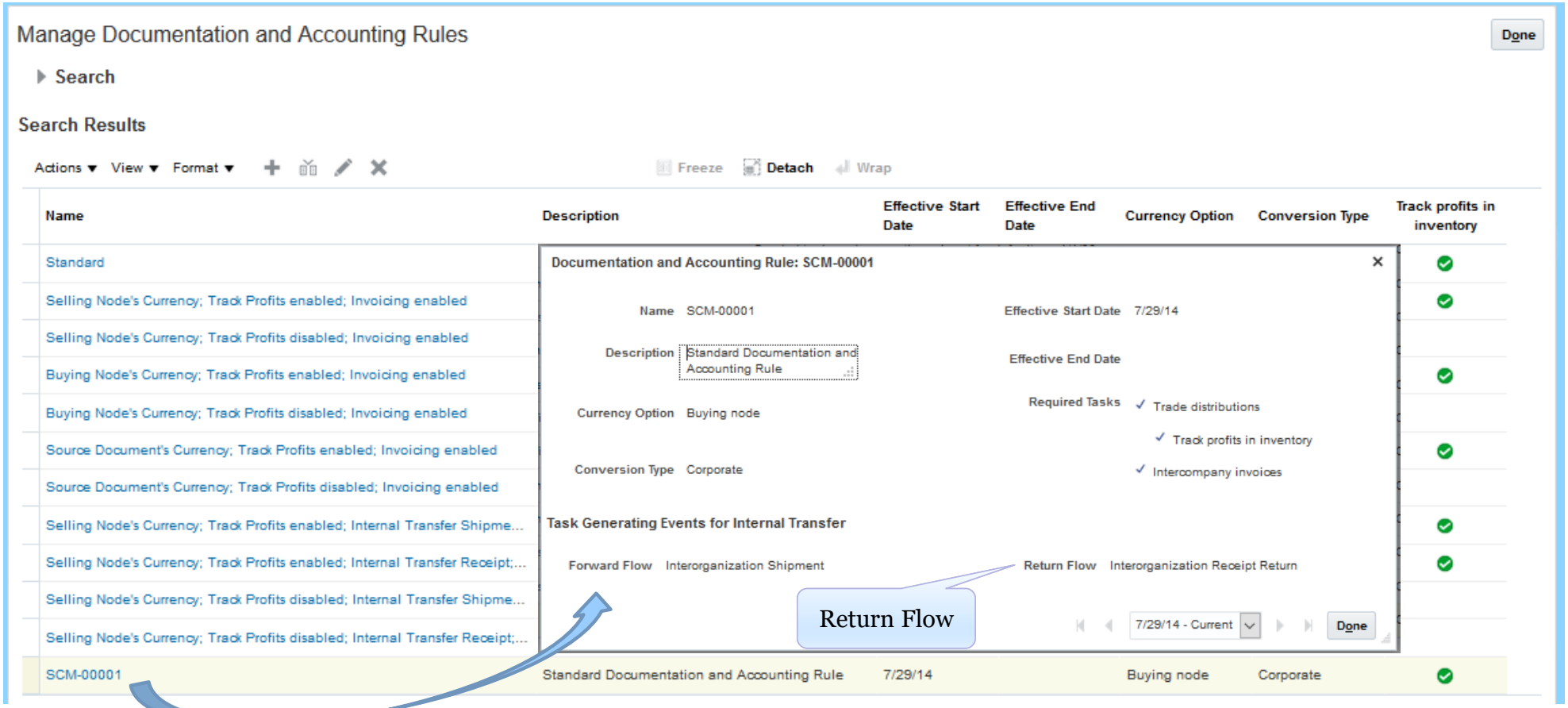
SCFO: Manage Documentation and Accounting Rules

Menu Path: Setup and Maintenance => Manufacturing and Supply Chain Materials Management => Supply Chain Financial Flows => Manage Supply Chain Financial Orchestration Documentation and Accounting Rules



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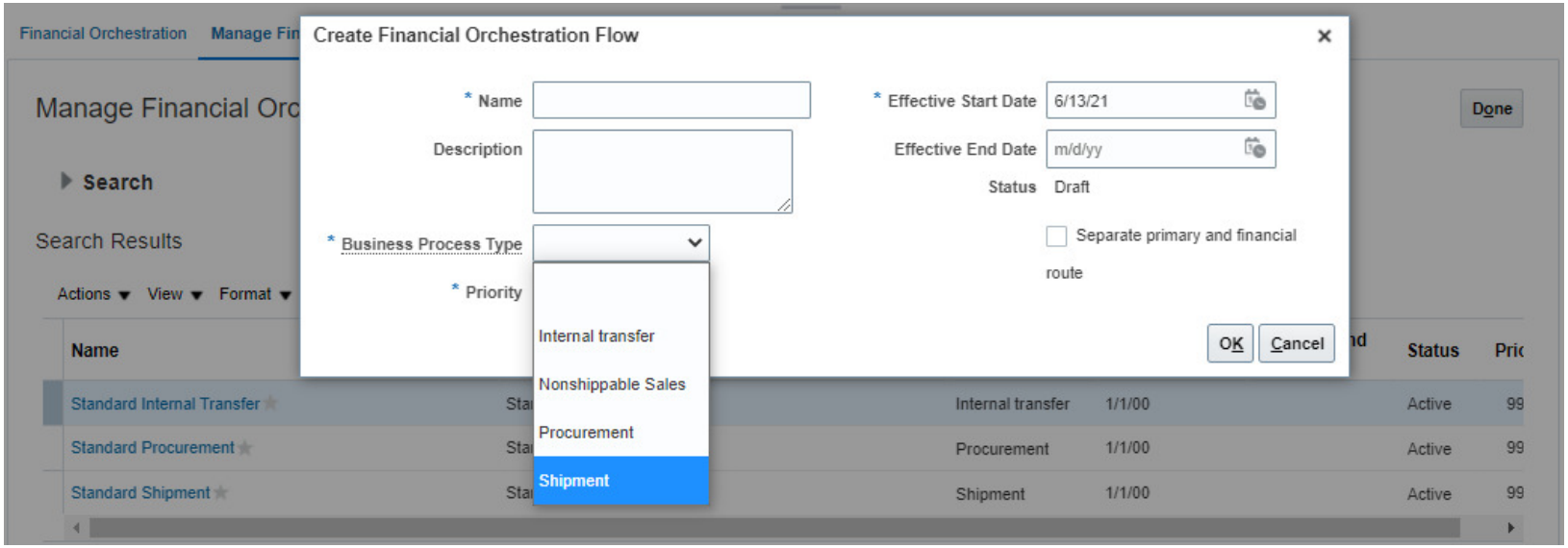
Types of Financial Orchestration Flows

Menu Path: Supply Chain Execution => Financial Orchestration => Cost Accounting => Manage Financial Orchestration Flows

Business Process Type	Start Business Unit	End Business Unit
Procurement	Sold to Business Unit	Receiving Business Unit
Shipment	Shipping Business Unit	Selling Business Unit (to final customer)
Internal Transfer	Shipping Business Unit	Receiving Business Unit
Nonshippable Sales	Fulfillment Business Unit	Selling Business Unit (to final customer)



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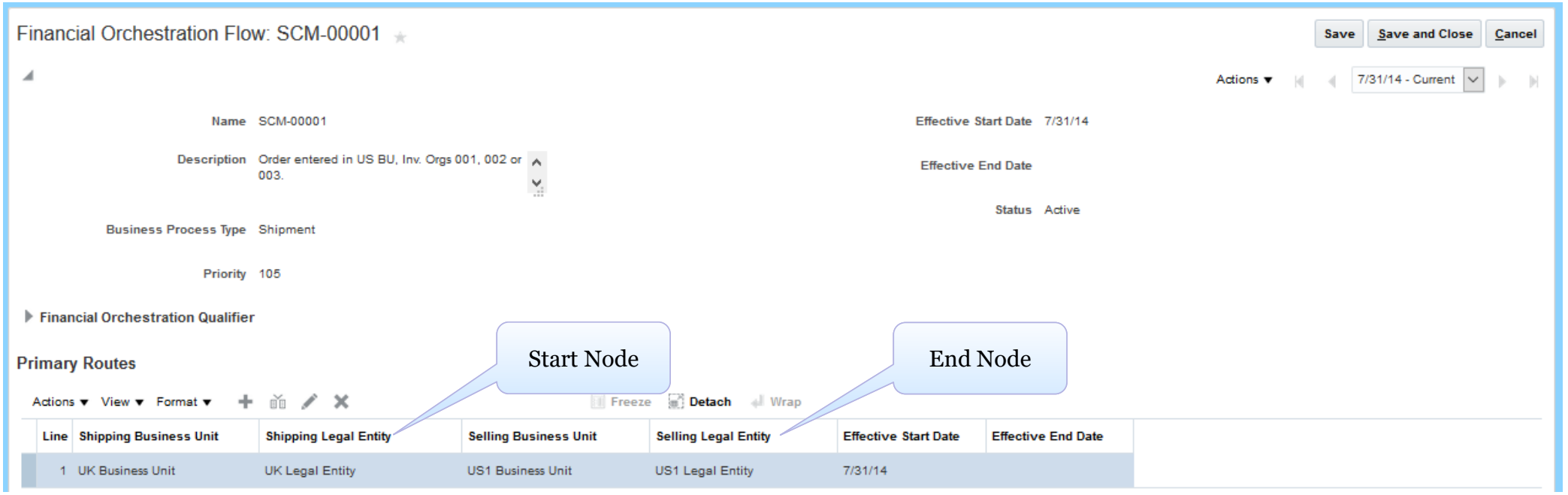
Financial Orchestration Flows: Shipment Example

Menu Path: Supply Chain Execution => Financial Orchestration => Cost Accounting => Manage Financial Orchestration Flows

- Primary Route Example: UK Ship, US Selling (to final customer)



"A primary route indicates an agreement to transact goods and services between the two primary profit center business units. The start node represents the internal seller and end node represents the internal buyer."
— from Oracle SCFO documentation

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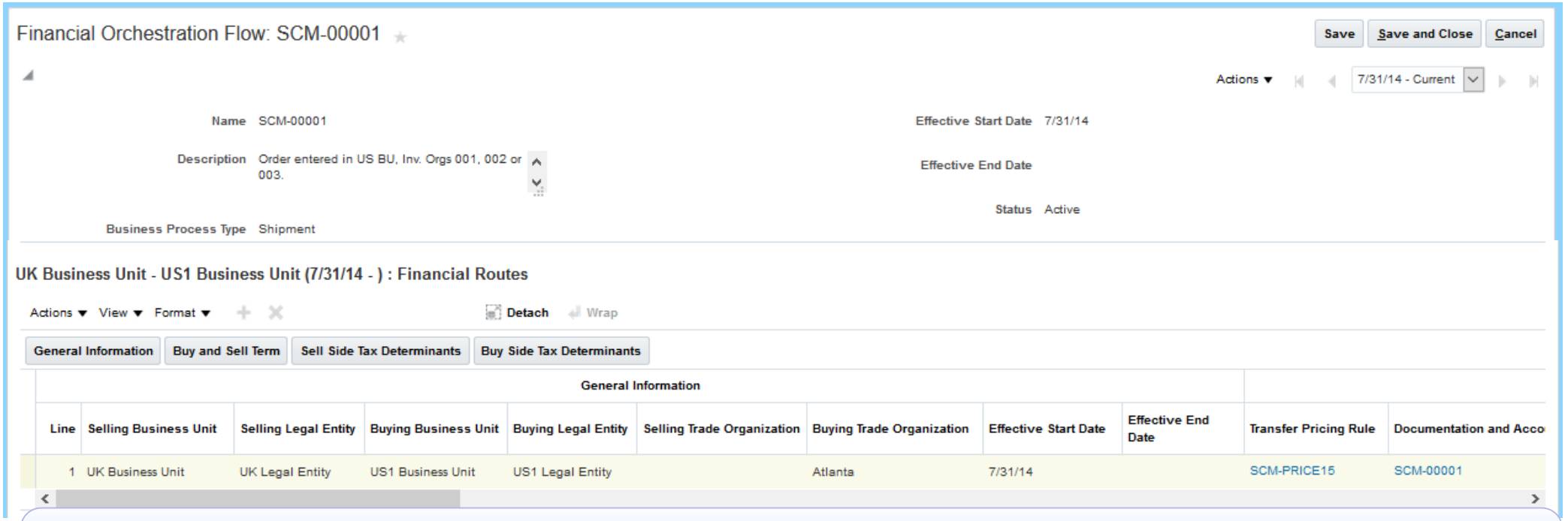
Financial Orchestration Flows: Shipment Example

- Financial Route Example: UK BU to US1 BU



"A financial route contains the terms and conditions that determine the nature of the intercompany transaction, such as the documentation, accounting and pricing rule to use and so on. Each primary route must have at least one financial route; and may have multiple financial routes." — from Oracle SCFO documentation

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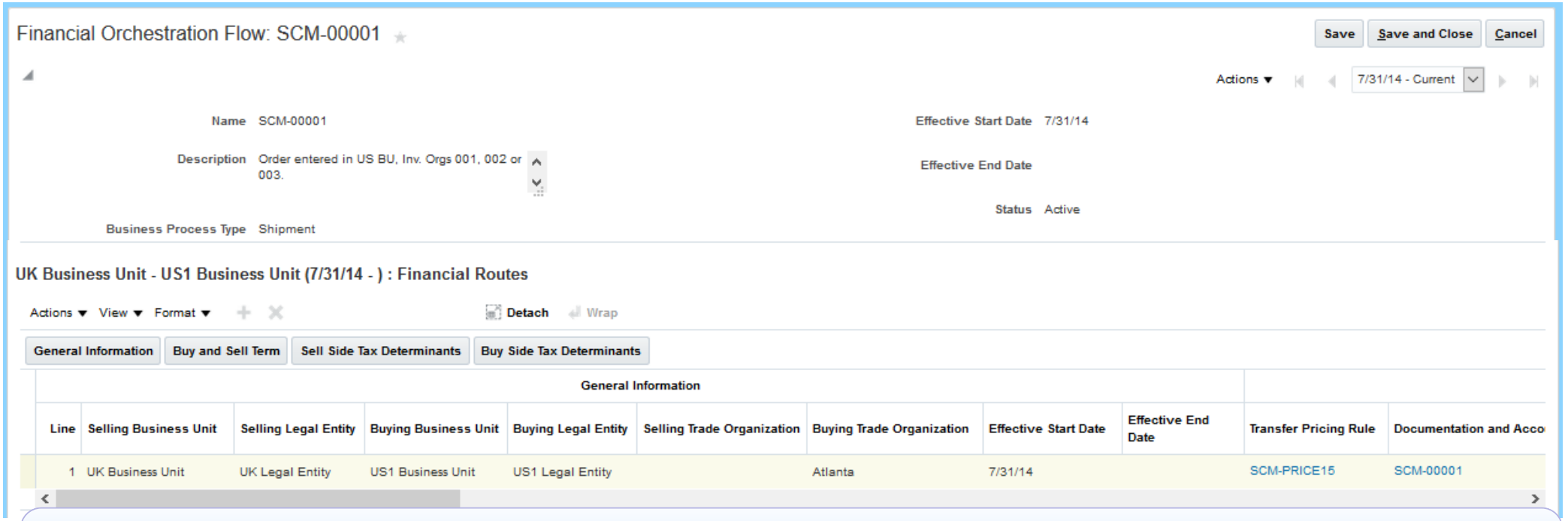
Financial Orchestration Accounting Flows

- Financial Route Example: UK BU to US1 BU



"A financial route contains the terms and conditions that determine the nature of the intercompany transaction, such as the documentation, accounting and pricing rule to use and so on. Each primary route must have at least one financial route; and may have multiple financial routes." — from Oracle SCFO documentation

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Cloud Internal Drop ship Flow - Accounting

Sales Order Issue

Dr Trade In-Transit (Material) $50
Dr Trade In-Transit (OVH) $10
Cr Inventory (Material) $50
Cr Inventory (OVH) $10

Trade In-transit Issue

Dr IC COGS(Material) $50
Dr IC COGS(OVH) $10
Cr Trade In-Transit (Material) $50
Cr Trade In-Transit (OVH) $10

IC AR invoice

Dr IC Receivable $100
Cr IC Revenue $100

Trade Receipt Accrual

Dr Trade Clearing $100
Cr IC Accrual $100

Trade In-transit Receipt

Dr Trade In-Transit (Material) $50
Dr Trade In-Transit (OVH) $10
Dr Trade In-Transit (GR-Profit) $40
Cr Trade Clearing $100

IC AP Invoice

Dr IC Accrual $100
Cr IC Liability $100

Trade In-Transit Shipment

Dr IC COGS (Material) $50
Dr IC COGS (OVH) $10
Dr IC COGS (GR-Profit) $40
Cr Trade In-Transit (Material) $50
Cr Trade In-Transit (OVH) $10
Cr Trade In-Transit (CH-Profit) $40

IC AR invoice

Dr IC Receivable $120
Cr IC Revenue $120

Trade Receipt Accrual

Dr Trade Clearing $120
Cr IC Accrual $120

Trade In-transit Receipt

Dr Trade In-Transit (Material) $50
Dr Trade In-Transit (OVH) $10
Dr Trade In-Transit (GR-Profit) $40
Dr Trade In-Transit (IR-Profit) $20
Cr Trade Clearing $120

IC AP Invoice

Dr IC Accrual $120
Cr IC Liability $120

Trade Sales Issue

Dr DCOGS (Material) $50
Dr DCOGS (OVH) $10
Dr DCOGS(GR-Profit) $40
Dr DCOGS (IR-Profit) $20
Cr Trade In-Transit (Material) $50
Cr Trade In-Transit (OVH) $10
Cr Trade In-Transit (CH-Profit) $40
Cr Trade In-Transit (SG-Profit) $20

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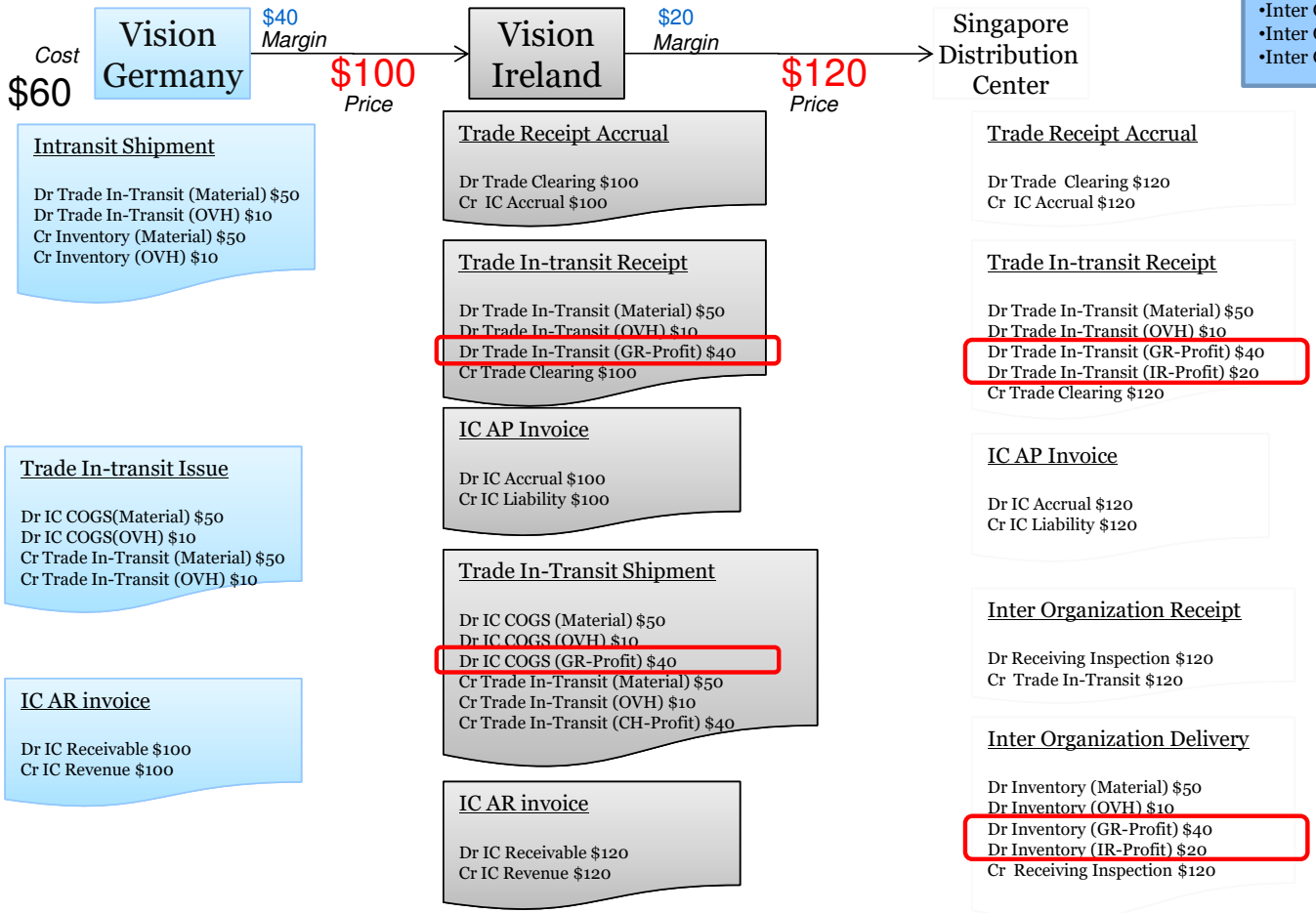
Cloud Internal Transfers Flow - Accounting



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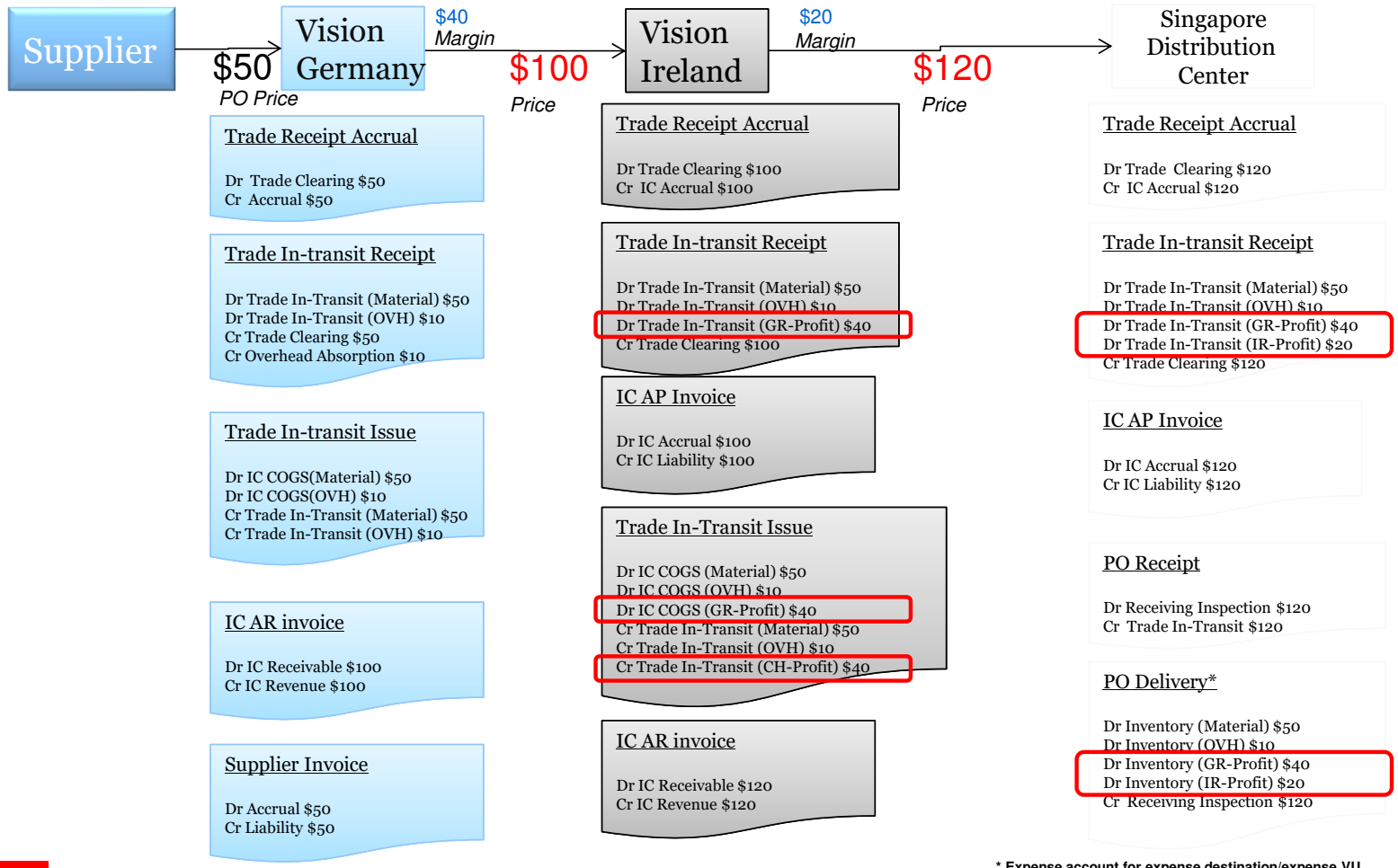
Cloud Global Procurement Flow - Accounting



*** Expense account for expense destination/expense VU**

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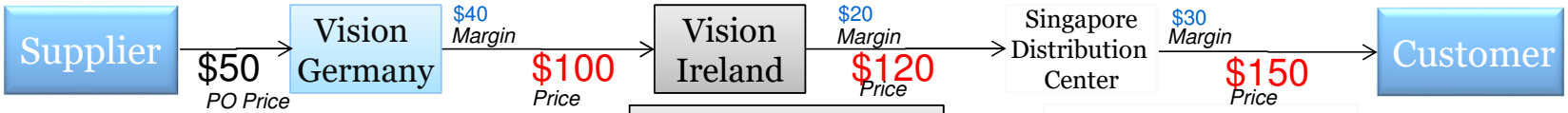
Cloud Customer Drop Ship Flow - Accounting



Trade Receipt Accrual

Dr Trade Clearing $50
Cr Accrual $50

Trade In-transit Receipt

Dr Trade In-Transit (Material) $50
Dr Trade In-Transit (OVH) $10
Cr Trade Clearing $50
Cr Overhead Absorption $10

Trade In-transit Issue

Dr IC COGS(Material) $50
Dr IC COGS(OVH) $10
Cr Trade In-Transit (Material) $50
Cr Trade In-Transit (OVH) $10

IC AR invoice

Dr IC Receivable $100
Cr IC Revenue $100

Supplier Invoice

Dr Accrual $50
Cr Liability $50

Trade Receipt Accrual

Dr Trade Clearing $100
Cr IC Accrual $100

Trade In-transit Receipt

Dr Trade In-Transit (Material) $50
Dr Trade In-Transit (OVH) $10
Dr Trade In-Transit (GR-Profit) $40
Cr Trade Clearing $100

IC AP Invoice

Dr IC Accrual $100
Cr IC Liability $100

Trade In-Transit Issue

Dr IC COGS (Material) $50
Dr IC COGS (OVH) $10
Dr IC COGS (GR-Profit) $40
Cr Trade In-Transit (Material) $50
Cr Trade In-Transit (OVH) $10
Cr Trade In-Transit (CH-Profit) $40

IC AR invoice

Dr IC Receivable $120
Cr IC Revenue $120

Trade Receipt Accrual

Dr Trade Clearing $120
Cr IC Accrual $120

Trade In-transit Receipt

Dr Trade In-Transit (Material) $50
Dr Trade In-Transit (OVH) $10
Dr Trade In-Transit (GR-Profit) $40
Dr Trade In-Transit (IR-Profit) $20
Cr Trade Clearing $120

IC AP Invoice

Dr IC Accrual $120
Cr IC Liability $120

Drop Ship PO Receipt

Dr Receiving Inspection $120
Cr Trade In-Transit $120

Drop Ship PO Delivery

Dr Drop Ship Inventory (Material) $50
Dr Drop Ship Inventory (OVH) $10
Dr Drop Ship Inventory (GR-Profit) $40
Dr Drop Ship Inventory (IR-Profit) $20
Cr Receiving Inspection $120

Trade Sales Issue

Dr DCOGS (Material) $50
Dr DCOGS (OVH) $10
Dr DCOGS(GR-Profit) $40
Dr DCOGS (IR-Profit) $20
Cr Drop Ship Inventory (Material) $50
Cr Drop Ship Inventory (OVH) $10
Cr Drop Ship Inventory (CH-Profit) $40
Cr Drop Ship Inventory (SG-Profit) $20

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LESSONS LEARNED

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Lessons Learned – Impact to COA Design

- Profit in Inventory affects the Chart of Account Structure (COA) design
- ICP/PII does not reconcile by the Inter-Company Segment
  - Trade COGS not journaled by Inter-Co Segment yet has ICP
  - COGS quantities may be sourced from multiple internal organizations
  - Scrap and Other COGS not journaled by Inter-Co Segment yet has ICP
  - Does not work like AGIS (Global Intercompany System journals)
- Should have the following additional COA segments:
  - **Sub-Account:** to reclass COGS, Inventory, etc. for ICP
  - **Product Line:** to help reconcile the ICP elimination

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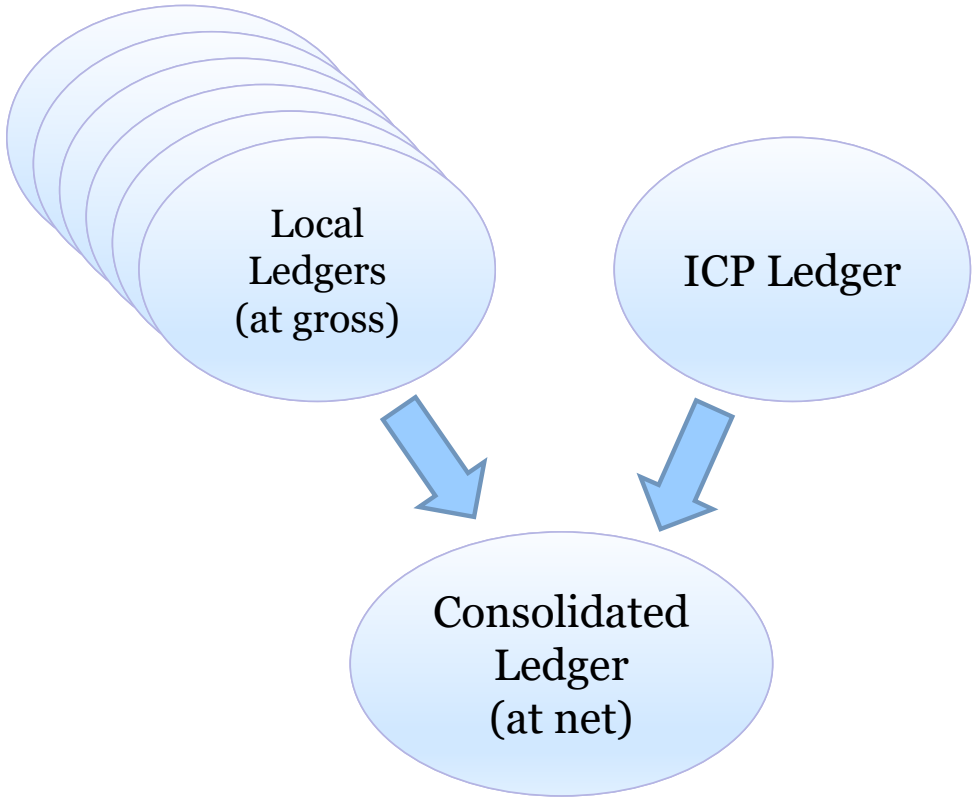
Lessons Learned – Impact to Ledger Design

- Keep local books and even HQ non-consolidated books at gross
- Useful practice:
  - Create an ICP Ledger for elimination journals
  - Allows use of same company numbers on the elimination journal
  - And keeps the manual elimination journal out of the Consolidated Ledger



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Lessons Learned – Don't Test in Production!

- By CRP2 – test your:
  - ICP Elimination/Reclass Journals
  - For all related receiving, inventory and WIP transactions
  - All G/L Intercompany Eliminations across your global financials
- Test your ICP Elimination/Reclass Journal:
  - EBS: Based on custom ICP Material Transaction Summary Report
  - EBS: Create pivot table in MS Excel
  - EBS: Record manual journal entry into the ICP Ledger, using a sub-account to reclass
  - Cloud: Test the automated ICP journal entries
- For EBS and Cloud: ICP G/L Reconciliation Report
  - Add up all related G/L journals for ICP intercompany accounts and ICP sub-accounts and see if they net to zero, **before consolidation**

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Lessons Learned – Everyone in Finance Has A Role!

- Cost Accounting:
  - Maintains ICP Item Costs and the "Cost Model"
  - Creates the ICP elimination/reclass journal entry
  - Runs pre-consolidation ICP OOB Report
  - Reconciles ICP out-of-balances (NOT overall intercompany OOBs)
- Receivables:
  - Ensures all intercompany invoices are processed in same month as shipped (see the Internal Margin Shipment Report in Appendix)
- Payables:
  - Coordinates with Cost Accounting and as needed reclasses ICP out of A/P Accruals
- G/L Finance: eliminates all intercompany balances during Consolidations

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EBS Lessons Learned – Don't Overcomplicate

- Unless your ICP is simple to follow, for EBS prefer offline Cost Type
  - EBS Open Item Cost Interface removes any rolled-up costs (have to re-roll each time after importing your item costs)
  - May be better to only keep ICP costs in an offline ICP Cost Type
  - As an alternative you can try using the Cost Rollup Hook to include Mark-Up factors in your Supply Chain Cost Rollup, but watch-out, as it puts the Mark-Up into the Material Overhead Cost Element
- For EBS, using multiple cost elements for "downstream" distribution organizations can cause report writing difficulties
  - At one client, for the ICP Material Account Summary Report, the SQL code went from 500 lines of code to 3,200 lines of code
  - Why? To ensure the calculated quantities were correct, as: Qty X ICP item costs = ICP transaction Amounts (multiple material accounting entries by cost element can cross join with material transactions causing 2X, 3X, 4X … quantities)

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Profit in Inventory – Other Lessons

- Wise to use spreadsheet tools to speed ICP item cost data entry:
  - EBS: consider More4Apps Item Cost Wizard or API Wizard
  - Cloud Costing: use built-in Oracle CSV file item cost loads (or when available, consider More4Apps Item Cost Toolbox)
- Currency changes will cause inaccuracies
  - (i.e. Standard cost based on 1.2 USD/Euro, but inter-org transfers use the current daily transaction rate of 1.1)
- Transfer price changes will cause inaccuracies
  - Cost Model must be consistent
  - With transfer price changes need to revalue your ICP amounts
  - In the ideal world, store the ICP item costs:
    - by item, org
    - keep track of the monthly ICP item costs and original currency rate

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Acknowledgements

- Jade Global and Mohan Iyer, for gracious access to their Cloud Environment
- Valerie Dubois, Oracle (for many tips on Supply Chain Financial Orchestration)
- Hans Kolbe, lead for OAUG Multi-Org SIG (numerous discussions!)
- Gordon Ralph, project manager (and eliminations expert!)
- Rufus Moses (Overhead Door Company) for his P/R pricing tips
- Iulia Maria Rusa (Deloitte), Shyamsundar Santhanam (Oracle) and Kaushik Sivakumar (Oracle) for corrections on Cloud PII Costing
- Past and present friends and clients

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Where to Get More Information:

- Cloud Costing Release 21B:
  https://docs.oracle.com/en/cloud/saas/supply-chain-management/21b/faims/cost-accounting.html#FAIMS1921204

- Supply Chain Financial Orchestration Release 21B:
  https://docs.oracle.com/en/cloud/saas/supply-chain-management/21b/faims/supply-chain-financial-orchestration.html#FAIMS14871387

- Oracle Help Center for Oracle Documentation:
  https://docs.oracle.com/en/

- Oracle EBS Intercompany Transactions and Setup:
  NCOAUG 2009: Intercompany Flow, by Ravi Sagaram

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APPENDIX:

ICP COST REPORT SAMPLES

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Compare EBS vs. Cloud Costing

Legend: Custom reporting solution

This Month's ICP Inventory Value Reports – Last Month's ICP Inventory Value Reports = Monthly Change in ICP/PII Value

Solution	EBS Approach	Cloud Costing Approach
Primary Data Source	Month-End Snapshot table: CST_PERIOD_CLOSE_SUMMARY	ICP Costs by Cost Book X Calculated Qtys
Store ICP Values	By Cost Type, by ICP Sub-Element	By Cost Book, by ICP Cost Element, by Day
Stored Uplift Factors	Diff. between Sales Price and Cost	Implicit Transfer Price Mark-Up Factors
Calculate Month-End Onhand and Intransit ICP Values	Multiply the stored ICP costs by the Month-End Snapshot	Automatically stored by day
Calculate Month-End Receiving ICP Values	Multiply the cost type by the calculated quantities for Receiving	Multiply the stored ICP costs by the calculated quantities for Receiving
Calculate Month-End WIP ICP Values	Multiply the cost type by the calculated quantities for WIP components	Multiply the stored ICP costs by the calculated quantities for components in WIP

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Compare EBS vs. Cloud Costing

Legend: Custom reporting solution

This Month's ICP Inventory Value Reports – Last Month's ICP Inventory Value Reports = Monthly Change in ICP/PII Value

Solution	EBS Approach	Cloud Costing Approach
Primary Data Source	Month-End Snapshot table: CST_PERIOD_CLOSE_SUMMARY	ICP Costs by Cost Book X Calculated Qtys
Store ICP Values	By Cost Type, by ICP Sub-Element	By Cost Book, by ICP Cost Element
Store Uplift Factors	Diff. between Sales Price and Cost	Implicit Transfer Price Mark-Up Factors
Journal Entries	Month-end manual elimination entries.	Automated ICP journals with each transaction.
Calculate Month-End Onhand and Intransit ICP Values	Multiply the stored ICP costs by the Month-End Snapshot	Possibly modify existing Inventory Value Report to include ICP values?
Calculate Month-End Receiving ICP Values	Multiply the cost type by the calculated quantities for Receiving	Multiply the stored ICP costs by the calculated quantities for Receiving
Calculate Month-End WIP ICP Values	Multiply the cost type by the calculated quantities for WIP components	Multiply the stored ICP costs by the calculated quantities for components in WIP

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Profit in Inventory – Sample Reports (sample data only)

ICP Item Costs Based on Sourcing Rules

Item Number	Src Org	Assignmt Set	Src Curr Code	Src Item Cost	Curr Conv Rate	Conv Src Item Cost	To Org	To Curr Code	To Org Item Cost	Calc. ICP To Org	ICP Percent	PROD ICP Item Cost
900990	200	Main	EUR	2.31492	1.29594	3.00000	203	USD	4.00000	(1.00000)	(25.0)	(1.00000)
100200	203	Main	EUR	10.00000	1.29594	12.95940	101	USD	15.00000	(2.04060)	(13.6)	(2.04060)
100300	204	Main	EUR	7.00000	1.29594	9.07158	305	USD	25.00000	(15.92842)	(63.7)	(15.92842)
100300	204	Main	EUR	7.00000	1.29594	9.07158	309	USD	25.00000	(15.92842)	(63.7)	(15.92842)
100300	204	Main	EUR	7.00000	1.29594	9.07158	316	USD	25.00000	(15.92842)	(63.7)	(15.92842)

Notes: 1 EUR of the ICP for item 100300 comes from Organization 200,
In Organization 203, in WIP, the component 900990 is used to make 100300.

Onhand Inventory ICP Value Report

Month-End Snapshot (quantities) are from October 2017

Period Name	Org Code	Co	Acct	Prod Grp	Item Number	Curr	Gross Item Cost	ICP Item Cost	Net Item Cost	UOM	Qty	Inv. Onhand Value	Total ICP Onhand Value	Total Net Onhand Value
2009-10	203	1012	1301	1110	100300	EUR	10.00000	(1.00000)	9.00000	EA	2,450	24,500.00	(2,450.00)	22,050.00
2009-10	305	1048	1330	1172	100300	USD	25.00000	(15.92842)	4.56319	CTN	483	12,075.00	(7,693.43)	4,381.57
2009-10	309	1048	1330	1172	100300	USD	25.00000	(15.92842)	4.56319	CTN	649	16,225.00	(10,337.54)	5,887.46
2009-10	316	1048	1330	1172	100300	USD	25.00000	(15.92842)	4.56319	CTN	1,445	36,125.00	(23,016.57)	13,108.43
2009-10	316	1048	1350	1172	100300	USD	25.00000	(15.92842)	4.56319	CTN	4	100.00	(63.71)	36.29

Note: FG Product 2, 100300, has 1.29595 USD (1 EUR) ICP from organization 200 and the balance from organization 203

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Profit in Inventory – Sample Reports (sample data only)

ICP Item Costs Based on Sourcing Rules

Item Number	Src Org	Assignmt Set	Src Curr Code	Src Item Cost	Curr Conv Rate	Conv Src Item Cost	To Org	To Curr Code	To Org Item Cost	Calc. ICP To Org	ICP Percent	PROD ICP Item Cost
900990	200	Main	EUR	2.31492	1.29594	3.00000	203	USD	4.00000	(1.00000)	(25.0)	(1.00000)
100200	203	Main	EUR	10.00000	1.29594	12.95940	101	USD	15.00000	(2.04060)	(13.6)	(2.04060)
100300	204	Main	EUR	7.00000	1.29594	9.07158	305	USD	25.00000	(15.92842)	(63.7)	(15.92842)
100300	204	Main	EUR	7.00000	1.29594	9.07158	309	USD	25.00000	(15.92842)	(63.7)	(15.92842)
100300	204	Main	EUR	7.00000	1.29594	9.07158	316	USD	25.00000	(15.92842)	(63.7)	(15.92842)

Notes: 1 EUR of the ICP for item 100300 comes from Organization 200,
In Organization 203, in WIP, the component 900990 is used to make 100300.

WIP ICP Value Report

Notes: Only includes jobs with a Status of: Released, Complete, Complete - No charges, On hold, or Pending scheduled.
Only includes jobs where the FG Scheduled Qty > FG Qty Completed

Org Code	Co	Acct	Prod Grp	WIP Class	WIP Job	Status	FG Qty Completed	FG Item Number	Com-ponent Number	Curr	ICP Item Cost	Qty Per FG	Total Req Qty	Qty Issued	Est. Qty Left in WIP	ICP in WIP
203	1012	1315	1110	PROD	12345	Complete	2,304	100300	900990	EUR	(1.00000)	3	6,912	6,984	72	(72.00)
203	1012	1315	1110	PROD	12346	Complete	529	100300	900990	EUR	(1.00000)	3	1,587	1,632	45	(45.00)
203	1012	1315	1110	PROD	34567	Complete	1,070	100300	900990	EUR	(1.00000)	3	3,210	3,264	54	(54.00)
203	1012	1315	1110	PROD	49505	Released	1,639	100300	900990	EUR	(1.00000)	3	4,917	4,995	78	(78.00)

Note: Component 900990 comes from another internal organization, 200, with an ICP amount of 1 EUR per unit

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Profit in Inventory – Sample Reports (sample data only)

Monthly Transaction Quantities **X** ICP Item Cost **=** Monthly Change in ICP/PII Value

ICP Material Transactions Report for October 2017 (Oct 1 - 31, 2017)

Org Code	Co	Acct	Prod Grp	Item Number	Transaction Name	Curr	Gross Item Cost	ICP Item Cost	UOM	Qty	Inventory Value Change	ICP Value Change	Net Inventory Change
204	1012	1330	1172	100300	Intransit Shipment	EUR	7.00000	(1.00000)	CTN	-8,224.0	(57,568.00)	8,224.00	(49,344.00)
204	1012	1330	1172	100300	WIP Completion	EUR	7.00000	(1.00000)	CTN	8,224.0	57,568.00	(8,224.00)	49,344.00
224	1012	1320	1172	100300	Intransit Receipt	EUR	7.00000	(1.00000)	CTN	-8,224.0	(57,568.00)	8,224.00	(49,344.00)
305	1048	1330	1172	100300	Sales Order Pick	USD	25.00000	(15.92842)	CTN	-120.0	(3,000.00)	1,911.41	(1,088.59)
305	1048	1330	1172	100300	Sales Order Pick	USD	25.00000	(15.92842)	CTN	8.0	200.00	(127.43)	72.57
305	1048	1330	1172	100300	Sales Order Pick	USD	25.00000	(15.92842)	CTN	3.0	75.00	(47.79)	27.21
305	1048	1330	1172	100300	Sales Order Pick	USD	25.00000	(15.92842)	CTN	10.0	250.00	(159.28)	90.72
305	1048	1330	1172	100300	Sales Order Pick	USD	25.00000	(15.92842)	CTN	20.0	500.00	(318.57)	181.43
305	1048	1330	1172	100300	Sales Order Pick	USD	25.00000	(15.92842)	CTN	15.0	375.00	(238.93)	136.07
305	1048	1330	1172	100300	Sales Order Pick	USD	25.00000	(15.92842)	CTN	120.0	3,000.00	(1,911.41)	1,088.59
305	1048	1330	1172	100300	Sales order issue	USD	25.00000	(15.92842)	CTN	-160.0	(4,000.00)	2,548.55	(1,451.45)
305	1048	1330	1172	100300	Sales order issue	USD	25.00000	(15.92842)	CTN	-15.0	(375.00)	238.93	(136.07)

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Profit in Inventory – Sample Reports (sample data only)

- ICP Material Transaction Report – Offset Accounts
  - Most ICP is offset by Inter-Company COGS, but you also have
  - Misc. account issues/receipts, scrap and other transactions

ICP Material Transactions Report for October 2017 (Oct 1 - 31, 2017)

(Non-Inventory Entries Only)

Org Code	Co	Acct	Sub-Acct	Prod Grp	Item Number	Transaction Name	Curr	Qty	Inventory Value Change	ICP Value Change	Net Inventory Change
910	1021	5001	4201	1000	100248	COGS Recognition	EUR	-4	(21,816.64)	40.00	(21,776.64)
910	1021	5001	4201	1000	100248	COGS Recognition	EUR	-6	(32,724.96)	60.00	(32,664.96)
910	1021	5001	4201	1000	100248	COGS Recognition	EUR	-34	(185,441.44)	340.00	(185,101.44)
910	1021	5001	4201	1000	100248	COGS Recognition	EUR	-572	(3,120,827.21)	5,720.00	(3,115,107.21)
910	1021	5001	4201	1000	100248	Logical Sales Order Issue	EUR	572	3,120,827.21	(5,720.00)	3,115,107.21
910	1021	5001	4201	1000	100248	Logical Sales Order Issue	EUR	34	185,441.44	(340.00)	185,101.44
910	1021	5001	4201	1000	100248	Logical Sales Order Issue	EUR	6	32,724.96	(60.00)	32,664.96
910	1021	5001	4201	1000	100248	Logical Sales Order Issue	EUR	4	21,816.64	(40.00)	21,776.64

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Profit in Inventory – Sample Reports (sample data only))

- WIP Component ICP Variance Report
  - Estimate the amount of ICP included in your WIP Variances
  - Your WIP variances may be overstated by the ICP

WIP ICP Variance Report

Notes: Only includes jobs closed in the current accounting period

Org Code	Co	Cost Ctr	Acct	Prod Grp	WIP Class	WIP Job	FG Qty Completed	Component Number	Curr	ICP Item Cost	Qty Per FG	Total Req Qty	Actual Qty Issued	Est. Qty in WIP Variances	ICP in WIP Variances
203	1012	9900	1315	1110	PROD	12342	1,800.0	900990	EUR	(1.00000)	3.0	5,400.0	5,700.0	300.0	(300.00)
203	1012	9900	1315	1110	PROD	12344	1,100.0	900990	EUR	(1.00000)	3.0	3,300.0	3,500.0	200.0	(200.00)
203	1012	9900	1315	1110	PROD	40620	1,000.0	900990	EUR	(1.00000)	3.0	3,000.0	3,000.0	0.0	0.00
203	1012	9900	1315	1110	PROD	40621	1,000.0	900990	EUR	(1.00000)	3.0	3,000.0	3,200.0	200.0	(200.00)
203	1012	9900	1315	1110	PROD	40622	1,000.0	900990	EUR	(1.00000)	3.0	3,000.0	3,000.0	0.0	0.00

Note: Component 900990 comes from another internal organization, 200, with an ICP amount of 1 EUR per unit

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Profit in Inventory – Sample Reports (sample data only)

- Internal Margin Shipment Report
  - Verify your ICP/PII Cost Model:
    Internal SO Price – Sending Org Unit Cost – ICP = 0
  - Confirm that you invoiced all your internal shipments

Internal Shipment Margin Report				Parameters:	Ledger:	%	Transaction Date From:			01-Oct-2017	
Run Date: 01-Nov-2017 15:20					ICP Cost Type: ICP		Transaction Date To:			31-Oct-2017	
Ledger	Operating Unit	Ship From Org	Ship To Org	Item Number	Customer	Customer Number	SO Number	SO Line	P/R Number	Transaction Type	Txn Id
Vision Operations	Vision Operation	M1	W1	FS54888	Vision	1021	66140	1	14280	Int Order Intr Ship	22434327
Vision Operations	Vision Operation	M1	W1	FS54888	Vision	1021	66139	1	14281	Int Order Intr Ship	23336435
Vision Operations	Vision Operation	M1	W1	FS54888	Vision	1021	64358	1	14050	Int Order Intr Ship	22446409

Txn Date	Txn Cost	List Price	Unit Margin	UOM Code	Quantity	COGS Amount	Price List Amount	Margin Amount	Margin Percent	ICP Item Cost	ICP Amount	Margin Less ICP
11-Oct-17	64.1800	274.1300	(209.9500)	EA	9,050.0	580,829.00	(2,480,876.50)	(1,900,047.50)	76.6	(209.9500)	(1,900,047.50)	0.00
13-Oct-17	64.1800	274.1300	(209.9500)	EA	8,166.0	524,093.88	(2,238,545.58)	(1,714,451.70)	76.6	(209.9500)	(1,714,451.70)	0.00
17-Oct-17	64.1800	274.1300	(209.9500)	EA	8,039.0	515,943.02	(2,203,731.07)	(1,687,788.05)	76.6	(209.9500)	(1,687,788.05)	0.00

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Any Questions?

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