

Gotchas with Oracle EBS Release 12 Purchase Price Variances

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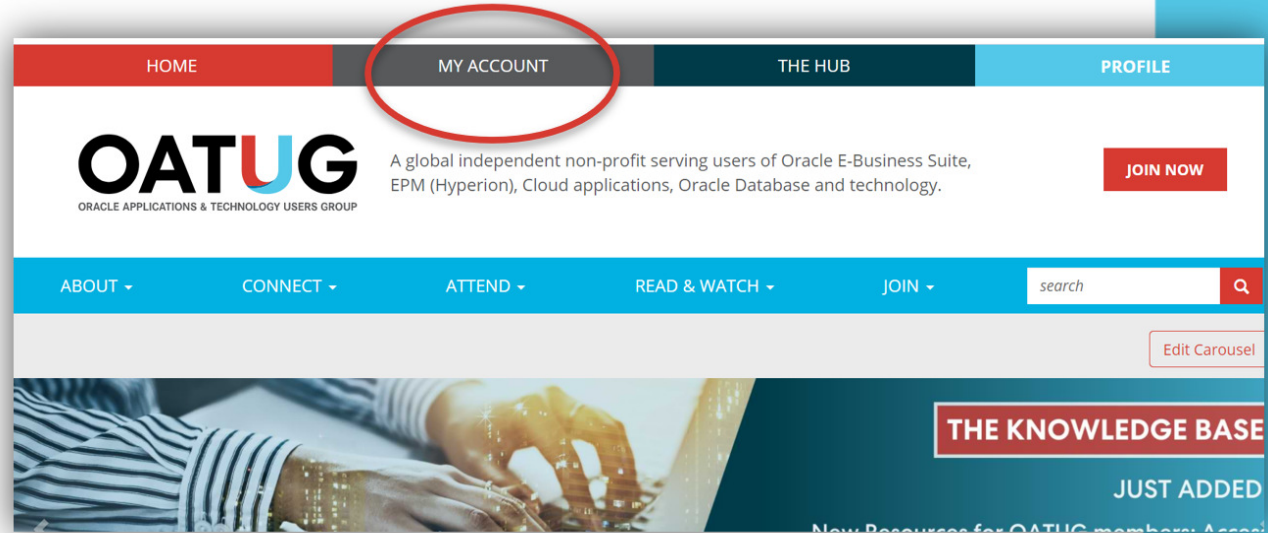
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Learning Points

- ❑ Define Standard Costing and Purchase Price Variances (PPV)
- ❑ Discover how foreign exchange rate changes affect your purchase price variances
- ❑ Find out about Oracle configuration settings which may affect PPV
- ❑ Learn what FASB 830 says about these purchasing variances
- ❑ And find out better ways to track PPV and related exchange rate gyrations

Solutions You Can Use

— <http://www.volzconsulting.com/resources.html>

A/P Accruals: OAUG/Collaborate & UKOUG

1996/2007/2008: (R11i) How to Setup, Use and Balance Your A/P Accrual Accounts
2011: A/P Accruals for Release 12 (OAUG Cost Management SIG)

Cost Management & SLA: OAUG/Collaborate & UKOUG

2009: Cost Accounting As You Want It — EBS R12 Cost Accounting with SLA
2013: Subledger Accounting for Discrete & EAM Cost Accounting: Product Line and Expense Accounting Made Easy
2014: How to Create Shipping Burdens for Oracle Cost Management, in Spite of Subledger Accounting

Changing Cost Methods: OAUG/Collaborate

2016: Who Said Changing Cost Methods With Discrete Costing Can't be Done?

Discrete & Process Cost Accounting Integration: OAUG/Collaborate

2015: We Can Create Combined Oracle Cost Accounting Reports for Both Discrete and Process MFG!

Inventory Reconciliation: OAUG/Collaborate & UKOUG

2010: Can We Actually Reconcile Project MFG to Inventory, WIP, Projects & G/L? What Was I Thinking?
2011: 60 Inventory Orgs? 6 Ledgers? No Worries, Reconcile Your Inventory With Ease!
2014: Reconcile Your Inventory to G/L Balances With Ease, From 1 to 1,000 Inventory Organizations!
2017: Managing Oracle EBS Reconciliation in Manufacturing and Distribution Organizations

Period Close: OAUG/Collaborate & UKOUG

2016: How to Manage the Inventory and Manufacturing Period Close and Remain Sane...

Profit in Inventory Solutions: OAUG/Collaborate

2010: Does Rel. 12 Solve Global Inter-Company Issues for Multiple Ledgers, Profit in Inventory and COGS?
2018: INTL: Cloud and EBS Costing, You Can Track & Eliminate Profit in Inventory (And Still Have a Life!)

Transaction Interfaces for Period Close: OAUG/Collaborate

2012: Egads! How in the Dickens Do I Handle Those Month-End Interfaces? (And Why Can't I Close My Books)

Cost Training Class – Oracle EBS R12

- 1: Cost Management Introduction
- 2: General Oracle Navigation and Training
- 3: Costing Structural Overview
- 4: Costing Security
- 5: Item Costing Setup
- 6: Buy Item Costing for Avg and Std Costing
- 7: More4Apps Item Cost Wizard
- 8: Cost Rollup And Item Cost Review
- 9: Update Average and Standard Costs
- 10: Copying and Editing Costs
- 11: Purging Costs, Cost Rollups and Cost Update History
- 12: Cost Accounting Transactions Setup
- 13: COGS Accounting Solutions
- 14: Intercompany Transactions Setup
- 15: Receiving Accounting Transactions
- 16: Inventory (Avg and Std) Cost Accounting Transactions
- 17: Intercompany Cost Accounting Transactions
- 18: COGS Recognition and Margin Analysis
- 19: Average and Standard Cost Variances
- 20: View Receiving, Inventory and WIP Accounting Transactions
- 21: How to Setup, Transact and Use Outside Processing
- 22: Analyze WIP Variances and Close WIP Jobs
- 23: Review Pending and Uncosted Transactions
- 24: Create Accounting, Period Open & Close
- 25: Inventory Reconciliation and Reporting
- 26: ICP/PII Tracking and Reporting
- 27: A/P Accruals
- 28: Custom/Blitz Reporting
- 29: Cost Accounting Checklists
- 30: Year-End Tasks
- 31: Appendix
- 32: Periodic Costing

Agenda

- Gotchas with Oracle EBS Release 12 Purchase Price Variances
 - What is Purchase Price Variance (PPV) and when is it used?
 - EBS Oracle settings which may affect PPV
 - Recent currency exchange rate gyrations and effect on PPV
 - How does FASB 830 affect the PPV definition and recognition of FX gains and losses
 - Better ways to anticipate, report and record PPV?
 - Summary

Overview for Standard Costing and Purchase Price Variances

Standard Costing

- ❑ The primary objective of standard costing is to provide a performance measurement system
 - Unit costs are set up in advance as an *expected* cost
 - Component costs (material costs) are defined using the projected average acquisition costs, plus any associated indirect costs
 - Assembly costs are rolled up using bills of material and routings
 - Standards are reset periodically, depending on how quickly your costs change
 - All incoming and outgoing inventory transactions costed at standard
- ❑ Standard Costing is NOT GAAP
 - At quarter-end and especially at year-end, need to correct inventory values
 - Adjust inventory balances to reflect “Lower of Cost or Market”

Variances by Costing Method

| Standard Costing | Average/FIFO/LIFO Costing |
|--|--|
| <ul style="list-style-type: none"> ■ Purchase Price Variance ■ Invoice Price Variance ■ Standard Cost Update ■ Material Overhead Over/Under Absorption ■ Resource/Production Overhead Over/Under Absorption ■ Assembly Scrap ■ Material Usage ■ Resource, OSP, & Overhead Efficiency | <ul style="list-style-type: none"> ■ No Purchase Price Variances ■ Invoice Price Variance ■ Average Cost Update ■ Material Overhead Over/Under Absorption ■ Resource/Production Overhead Over/Under Absorption ■ Assembly Scrap ■ Material Usage ■ Resource, OSP, & Overhead Efficiency (optional) |

Purchase Price and Invoice Price Variances

- Both Average and Standard Costing have invoice price variances (IPV)
 - IPV measures the difference between the PO unit price and invoice actual cost
- Only Standard Costing has purchase price variances
 - PPV measures the difference between the PO unit price and the standard cost
- Set these up on the Inventory Parameters:
(Cost Management => Setup => Account Assignments => Organization Parameters)
(Inventory => Setup => Parameters)

Organization Parameters (M1)

Revision, Lot, Serial And LPN ATP, Pick, Item-Sourcing Inter-Org Information Other Accounts [...]

Receiving Accounts

| | | |
|-------------------------|----------------------|-----|
| Purchase Price Variance | 01-520-5210-0000-000 | ... |
| Invoice Price Variance | 01-520-5220-0000-000 | ... |
| Inventory AP Accrual | 01-000-2220-0000-000 | ... |
| Encumbrance | | ... |

Used for inventory purchases

Used for inventory and OSP purchases

Example PO Receipt Accounting Transactions

- Receive one item @ \$100 PO unit price

| <u>Account</u> | <u>Debit</u> | <u>Credit</u> |
|---------------------|--------------|---------------|
| Receiving Account | 100 | |
| A/P Accrual Account | | 100 |

- Delivery to stock inventory (PO Receipt) @ \$110 Material Cost

| <u>Account</u> | <u>Debit</u> | <u>Credit</u> |
|-------------------------|--------------|--|
| Material Subinv Account | 110 | |
| Receiving Account | | 100 |
| PPV | | 10 (100 PO price less 110 material cost) |

- Invoice Match (Payables) @ \$102 Invoice Price

| <u>Account</u> | <u>Debit</u> | <u>Credit</u> |
|---------------------|--------------|---------------------------------------|
| A/P Accrual Account | 100 | |
| Trade Payables | | 102 |
| IPV | 2 | (102 Invoice price less 100 PO price) |

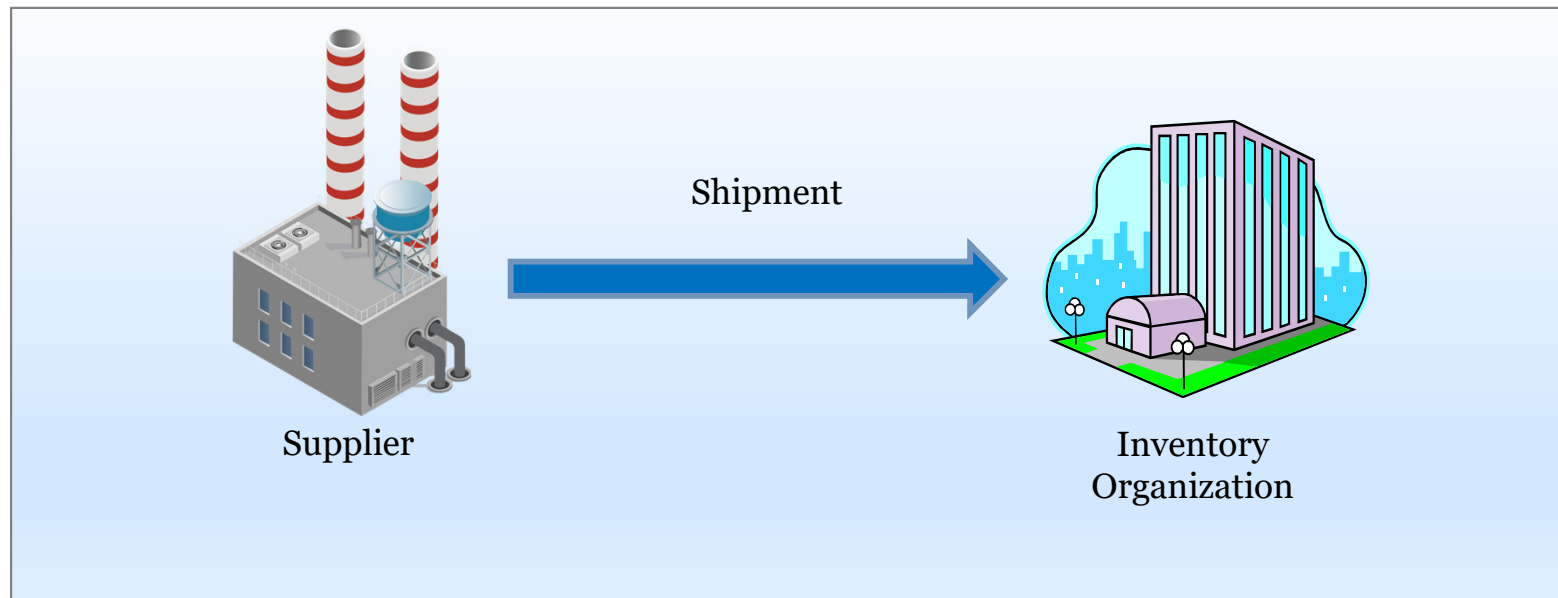
Transaction Examples Which Might Have PPV:

- ❑ Purchase order receipt into Inventory
- ❑ Purchase order receipt into Work in Process (outside processing)
- ❑ Inter-organization Transfers – with or without intransit
- ❑ Internal Requisitions with Internal Sales Orders
- ❑ Internal Requisitions with Internal Sales Orders and Intercompany

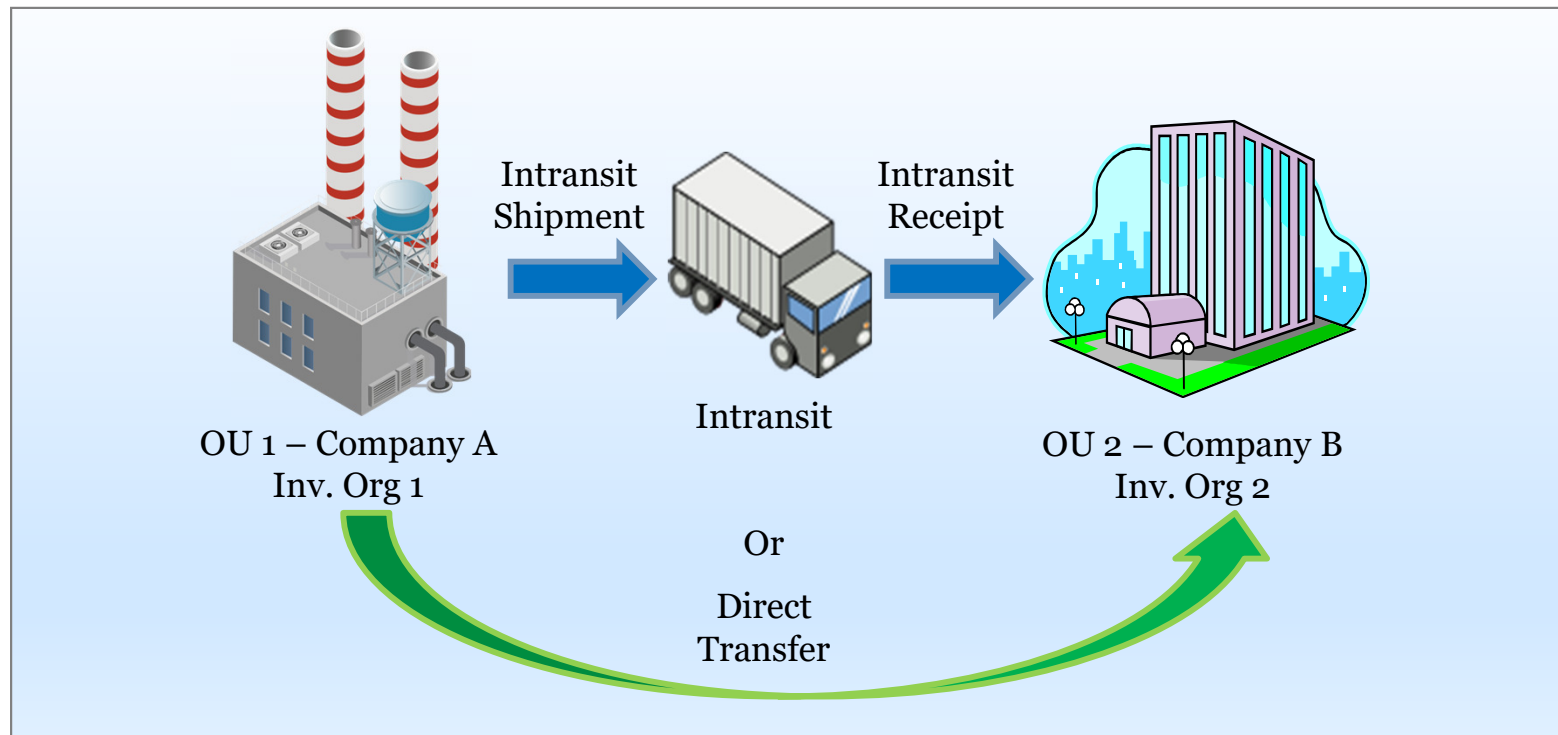
PPV Transactions Which May Have FX Rates:

| Transaction Type | Uses Invoice Match Option | FX Exchange Rate Type |
|---|---------------------------|-------------------------|
| Purchase order receipt into Inventory | Yes | PO Rate or Receipt Date |
| Purchase order receipt into Work in Process | Yes | PO Rate or Receipt Date |
| Inter-organization Transfers | No | Daily FX Rate |
| Internal Requisitions with Internal Sales Orders | No | Daily FX Rate |
| Internal Requisitions with Internal Sales Orders and Intercompany | No | Daily FX Rate |

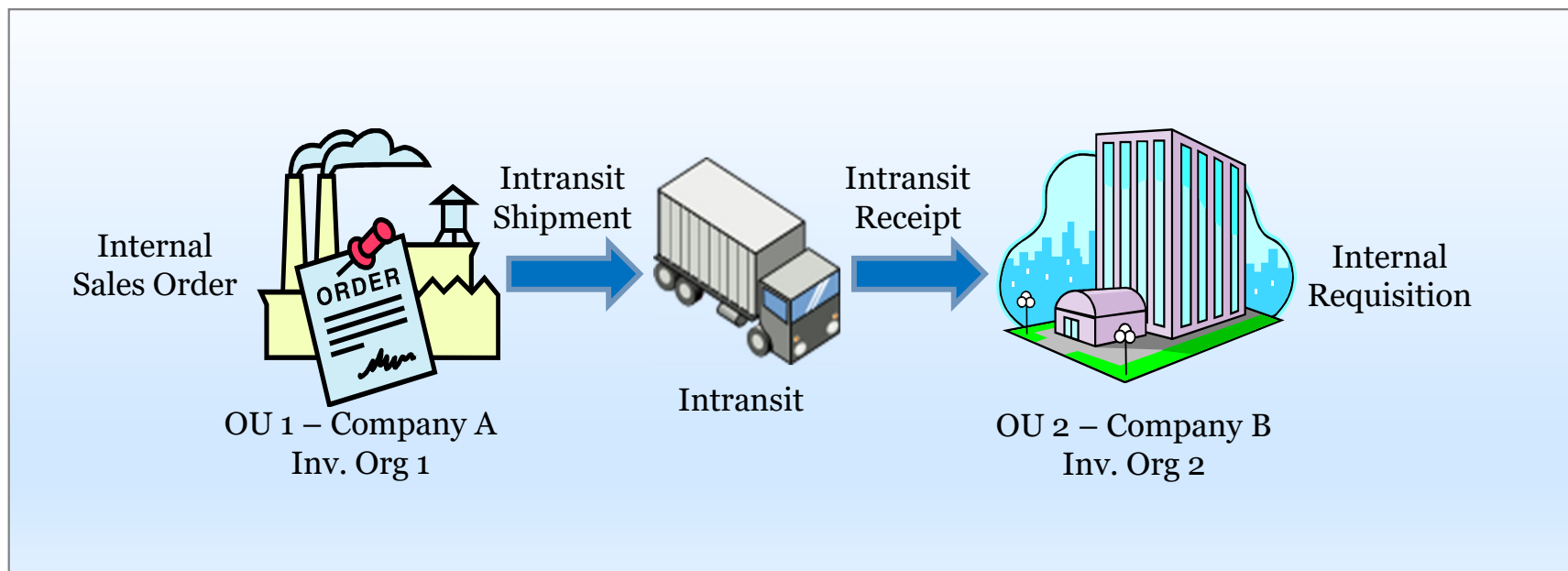
Purchase Order Receipts – External Suppliers



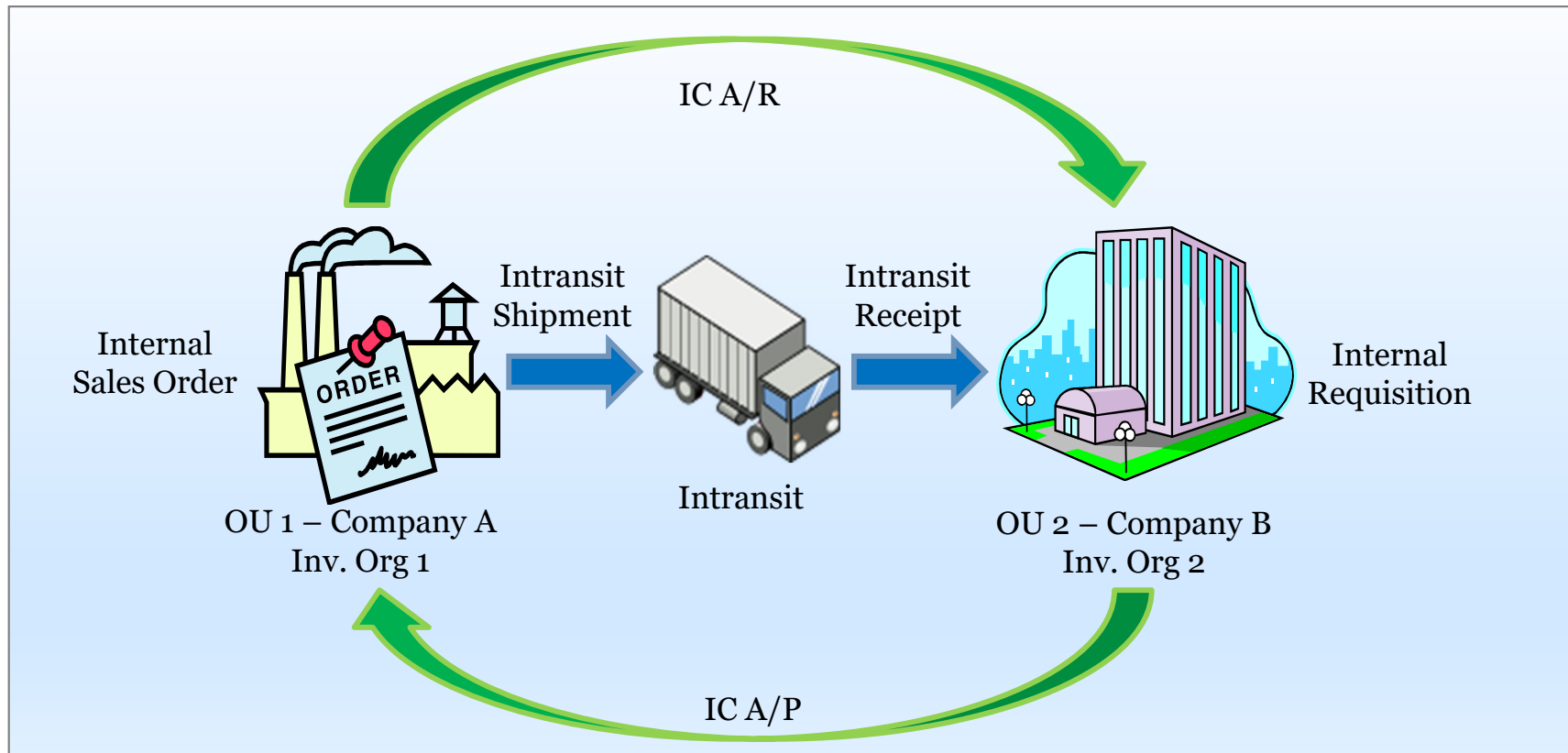
Inter-Organization Transfers



Inter-Organization Transfers with Internal Orders



Intercompany Transfers with Intercompany



Oracle EBS Settings Which May Affect PPV

Settings Which Affect PPV

Payables/Purchasing Invoice Match Option

- Set at the Payables System Setup, Supplier and Supplier Site levels
- Matching logic looks to the Supplier Site first, then the Supplier then the Payables System Setup

Choices and Impact to PPV

- Purchase Order – uses PO exchange rate for calculating PO USD amount
- Receipt – uses PO receipt date exchange rate for calculating PO USD amount

ORACLE Payables

Suppliers > Update Halliburton - 20154: Quick Update

* Indicates required field

* Supplier Name: Halliburton
Supplier Number: 20154
Alternate Supplier Name:
Registry ID: 42684
Inactive Date:
(example: 18-Mar-2023)
Alias:

Supplier Sites

Site Status: Active Site Name: Operating Unit: Go

Key Purchasing Setups Key Payment Setups

Create

| Site Name | Operating Unit | Invoice Amount Limit | Invoice Tolerance | Invoice Match Option | Invoice Currency | Hold from Payment | | |
|-----------|------------------|----------------------|------------------------------|----------------------|------------------|--------------------------|--------------------------|--------------------------|
| | | | | | | All Invoices | Unmatched Invoices | Unvalidated Invoices |
| VOG HAL | Vision Utilities | | Vision Utilities - Tolerance | Purchase Order | US dollar | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Issues with Match on PO and Match on Receipt Setting

❑ Match on Purchase Order Setting

- PPV entry may be distorted with old PO exchange rates
- Supplier invoices usually list only the PO number and line, not the receipt number

❑ Match on Receipt Setting

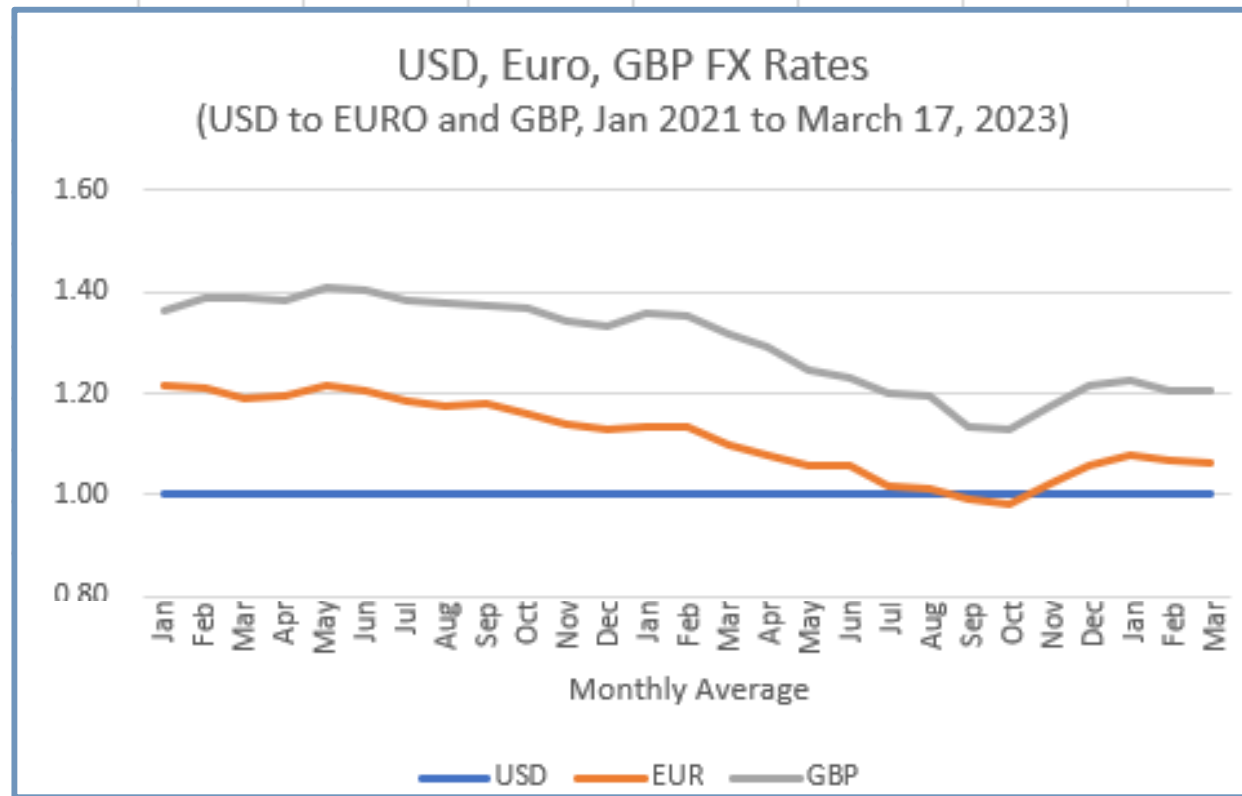
- Payables invoice processing may be delayed while finding the Receipt Number
- Most firms do not use more efficient P2P mechanisms like pay-on-receipt or EDI

❑ Sort of Good News:

- Invoice Price Variances do back out the Match on Purchase Order PPV “distortion”
- Have heard rumors for yet to-be-named patch to allow "Match on PO" to co-exist with choice of rate type for receiving transactions.

Recent Currency Exchange Rate Gyration and Effect on PPV

Recent Exchange Rate Fluctuations



Source: <https://www.ofx.com/en-us/forex-news/historical-exchange-rates/monthly-average-rates/>

Delivery to stock inventory (PO Receipt) Examples

- PO set up in December 2021, 1.216347 USD to 1.000 Euro
- Standard cost set using Dec-2022 FX rate, or 1.059237 USD to 1.000 Euro
- FX rate for March 17th, 2023: 1.066701 USD to 1.000 Euro

□ Receive 10 Units for 100 Euros, Invoice Match Option – Purchase Order

| <u>Account</u> | <u>Debit</u> | <u>Credit</u> |
|-------------------------|--------------|---|
| Material Subinv Account | 105.92 | (100 Euro @ 1.059237) |
| Receiving Account | | 121.63 (100 Euro @ 1.216347) |
| PPV | | 15.71 (121.63 PO price less 105.92 material cost) |

□ Receive 10 Units for 100 Euros, Invoice Match Option – Receipt

| <u>Account</u> | <u>Debit</u> | <u>Credit</u> |
|-------------------------|--------------|---|
| Material Subinv Account | 105.92 | (100 Euro @ 1.059237) |
| Receiving Account | | 106.67 (100 Euro @ 1.066701) |
| PPV | 0.75 | (106.44 PO price less 105.92 material cost) |

How Does FASB 830 Affect PPV Definition and Recognition?

How Does FASB 830 and IAS 21 Affect PPV?

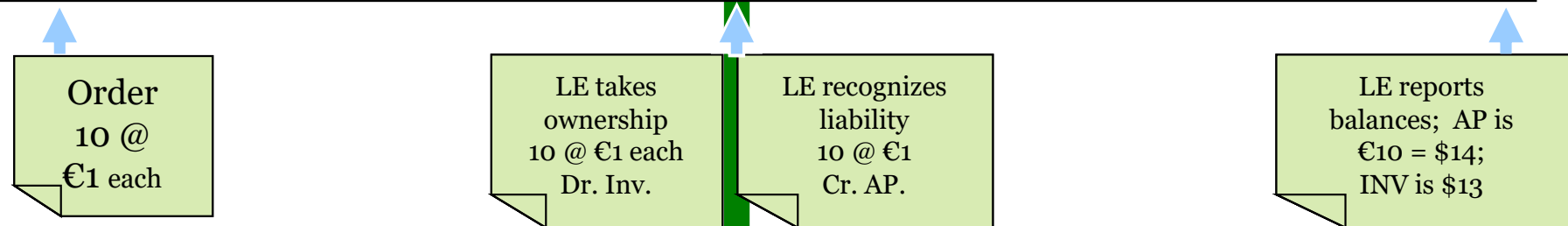
- ❑ Both Standards measure FX gain and loss from date of initial recognition of a monetary asset or liability
 - They measure non-monetary assets at:
 - The date acquired if inventory , in GAAP-functional currency calculated at the rate of the date acquired, and
 - At the date placed in service if Fixed Assets, at the rate of the date placed in service.
 - There is no FX gain or loss on inventory or fixed assets versus GAAP-functional currency.
 - Therefore, there is no FX expense involved in rate changes before the actual acquisition (debit an asset, credit a payable). There is an FX PPV involved, but it is not FX, it is PPV or ERV.

FX Gain or Loss versus Exchange Rate Variances?

- FX Gain or Loss is a function of a monetary balance sheet item denominated in a non-Accounting currency
- To be a monetary balance sheet item it must be AR or AP, etc. on the Balance Sheet: not an order, not a requisition
- So, Purchase or Sales order exchange rate variances (ERV) are not FX Gains or Losses
- And FX variances on POs and Sales Orders are not FX Gains or Losses
- Note that Both Standards define it in Functional Currency, not Accounting Currency, so the FX expense flows to the Functional Currency P&L.
- PPV variances due to currency differences is typically capitalized and amortized (over inventory turns)

The line between ERV and FX Gain / Loss: legal ownership & recognition (IFRS & GAAP, not an option)

Timeline >>



Accounting Currency >> \$

At 1.2 = \$12
Standard

Book inventory at 1.3
= \$13

Book AP At 1.3 =
\$13

Revalue AP (only) At 1.4
= \$14

- ERV = \$1.
- Should be “capitalized” as inventory - GAAP defines cost as \$13;
- OK to account at \$12 & write off \$1 to Cost of Sales (Not G&A FX G/L)

- FX Gain/Loss = \$1.
- Should be recognized in period as FX Gain & Loss (G&A)
- Should not be capitalized in inventory.

Better Ways to Anticipate, Report and Record PPV?

Better Ways to Anticipate, Report and Record PPV?

Compare Last Week's New POs with Standard Costs and FX Rates

- Review potential variances as POs are entered (Blitz Report CAC PO Price vs. Costing Method Comparison):

| Ledger | Operating Unit | Org Code | Supplier | Buyer | Item Number | Item Description | PO Number | PO Line | PO UOM | PO Quantity | PO Quantity Received | PO Currency Code | PO Unit Price |
|-------------------|-------------------|----------|---------------------|----------------|-------------|---------------------|-----------|---------|--------|-------------|----------------------|------------------|---------------|
| Vision Operations | Vision Operations | M1 | Industrial Dressler | Stock, Ms. Pat | AS72111 | Envoy Deluxe Laptop | 5570 | 1 | Ea | 75.0 | 0.0 | USD | 714.83400 |
| Vision Operations | Vision Operations | M1 | Industrial Dressler | Stock, Ms. Pat | AS72111 | Envoy Deluxe Laptop | 5571 | 1 | Ea | 76.0 | 0.0 | USD | 714.83400 |
| Vision Operations | Vision Operations | M1 | Industrial Dressler | Stock, Ms. Pat | AS72111 | Envoy Deluxe Laptop | 5572 | 1 | Ea | 77.0 | 0.0 | USD | 714.83400 |

| Currency Rate Date | PO Exchange Rate | G/L Currency Code | Converted PO Unit Price | PO UOM Conversion Rate | Converted PO At Primary | UOM Code | Cost Type | Unburdened Unit Cost | Unit Cost Difference | Extended Cost Difference |
|--------------------|------------------|-------------------|-------------------------|------------------------|-------------------------|----------|-----------|----------------------|----------------------|--------------------------|
| 8.Mar.07 | 1.00000 | USD | 714.83400 | 1.00000 | 714.83400 | Ea | Frozen | 962.26237 | (247.42837) | (18,557.13) |
| 8.Mar.07 | 1.00000 | USD | 714.83400 | 1.00000 | 714.83400 | Ea | Frozen | 962.26237 | (247.42837) | (18,804.56) |
| 8.Mar.07 | 1.00000 | USD | 714.83400 | 1.00000 | 714.83400 | Ea | Frozen | 962.26237 | (247.42837) | (19,051.98) |

Create a custom report to show both PO rate and daily FX exchange rates

- The Finance can use this report to book a provision in the G/L (Blitz Report CAC Purchase Price Variance)

| Ledger | Ship To Org | Period | Company | Department | Account | Supplier | Item Number | Item Description | P/R or PO Number | Line | Receipt Number | Transaction Type | Transaction Id | Transaction Date | UOM | Received Quantity |
|-------------------|-------------|--------|---------|------------|---------|--------------------------|-------------|------------------|------------------|------|----------------|------------------|----------------|------------------|-----|-------------------|
| Vision Operations | M1 | Apr-04 | 01 | 520 | 5210 | Advanced Network Devices | CM52295 | Power Supply | 4521 | 1 | 11222 | PO Receipt | 13953295 | 8.Apr.04 | Ea | 65.0 |
| Vision Operations | M1 | Apr-04 | 01 | 520 | 5210 | Advanced Network Devices | CM52295 | Power Supply | 4521 | 1 | 11223 | PO Receipt | 13957378 | 8.Apr.04 | Ea | 35.0 |

| PO Currency | PO Unit Price | PO Exchange Rate | Daily Exchange Rate | G/L Curr | Converted PO Unit Price | Standard Unit Cost | Unit Cost Difference | Total Purchase Amount | Total Standard Amount | PPV Cost Amount | PPV FX Amount | Total PPV Amount |
|-------------|---------------|------------------|---------------------|----------|-------------------------|--------------------|----------------------|-----------------------|-----------------------|-----------------|---------------|------------------|
| USD | 109.00000 | 1.00000 | 1.00000 | USD | 109.00000 | 0.00000 | 109.00000 | 7,085.00 | 0.00 | 7,085.00 | 0.00 | 7,085.00 |
| USD | 109.00000 | 1.00000 | 1.00000 | USD | 109.00000 | 0.00000 | 109.00000 | 3,815.00 | 0.00 | 3,815.00 | 0.00 | 3,815.00 |

Summary

Summary

- Purchase price variances only apply to Standard Cost organizations
- Matching on receipt option: better results but harder to manually match (need automated options like pay-on-receipt)
- Matching on receipt option: required in certain countries like India
- Reluctance to update blanket purchase agreements (BPA) with current FX rates
 - Some clients have opted for use of daily rates through customization
 - Other companies use hedging strategies to minimize FX currency differences
- Potentially there may be an Oracle Patch to help with this PPV FX issue
- Reporting is the work-around: consider Blitz Report for better and agile reporting solutions

Where to Get More Information / Acknowledgements

- ❑ Many thanks to John Mulroe and Seamus Moran for their knowledge and guidance
- ❑ Blitz Report: Enginatics, <https://www.enginatics.com/blitz-report/>

Any Questions?

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