

*Comprehensive &
easy to use workbook*

Implementing
Oracle JDE
Manufacturing
Applications -
Tips & Tricks

MATT RAVIKUMAR

Dedication:

All the JDE solution experts and analysts
who guided me in multiple implementations.

The book cover shows a bike!
JDE users will recognize/remember the bike data in all demo junior data models

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Disclaimer:

The content on the book came from years of industry & software experience.

Users are strongly advised to test the concepts in non-production system with written Business scenarios, validate and then implement in a live system since software goes through constant changes & upgrades.

Screen-shots of JDE applications come from different implementations.

No customer-specific data is exposed for security and confidentiality.

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Preface

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Preface

This book is about implementing Oracle's JD Edward's (popularly known as JDE) Manufacturing ERP software applications. This is not a typical user guide but provides insight into key applications and configurations. The book includes case studies and FAQs. The intended audience is the end-user in the JDE community who need more guidance and functional support. The book will help entry-level consultants and/or consultants moving from non-manufacturing applications into manufacturing suite.

As an author, I have spent close to 20 years in JDE products area. I was a employee in the consulting division of JD Edwards prior to Oracle's acquisition. I worked as Business Analyst for many companies in industrial segments and pharma industry. During last five years, I have worked in multiple manufacturing implementations as independent consultant. All my case studies are published in Linked-in, at the end of each major implementations.

JDE has it's dominance in ERP industry especially in manufacturing sector companies. No week goes by where I found something new or learn a different interpretation to something I already know. That's the power of the JDE software. It's so flexible and configurable that changing business process can be adopted so easily in the software applications

The book is not about replacing regular Oracle's user guide or knowledge available in Oracle support site. This does not replace training needs nor work as a training document. The goal is to make use of the best in the software, guiding the users in configuring the software during CRP times. As in any software implementations, any configuration changes need to be completely understood first. That is achieved only by testing the configuration in a non-production environment. As always, build your own scenarios and script for your formal testing process.

These days, a brand-new JDE manufacturing implementation can be achieved in three months with the support of strong leadership and active user participation in training/testing. This book helps to handle that process with key touch-points and critical factors in various applications. The case studies will give perspectives to factors not necessarily relating to software configurations. Most of the configurations and setups are from EnterpriseOne 9.1 release onward.

The tips and tricks are in two different sections. They cover a wide range of areas but mostly in manufacturing implementations.

This is a hand-on manual to make your implementation right and successful. Your feedback and comments are welcome!

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SECTION - 1

Stocking type K for kits

If you are using kits (stocking type K), there is a specific field in item master (not in item branch) which controls on the pricing of the products. The values 1 or 2 also dictates how the price is calculated on the sales orders. This value is stored only item master- F4101 table.

The screenshot shows the 'Item Branch/Plant - Item Master Revisions' form. The 'Additional Info' tab is selected, displaying various item attributes. The 'Inventory Cost Level' is set to 2, and the 'Kit/Configurator Pricing Method' is set to 1. A 'Select User Define Code' dialog is open, showing a grid with the following data:

Code	Description
<input checked="" type="radio"/>	Non Kit Item
<input type="radio"/>	1 Total Components List Prices
<input type="radio"/>	2 List Price of Final Kit
<input type="radio"/>	3 Configured Family Price
<input type="radio"/>	4 Components Discounted Prices

Another quick tip: Look at the inventory cost level. During conversion or any PDM to JDE interfaces, ensure the value of 2 is populated. It's very difficult to make changes after go-live if the inventory cost transactions got entered in item/branch/lot level. There is a batch program that can fix this error but it's risky and time-consuming.

Lot vs non-lot-controlled items

In a non-lot-controlled environment, it may be okay to use lot process type as 'blank'.

But in a lot controlled environment, if there are products/items that are not lot-controlled, JDE suggests to use 0-lots are optional instead of blanks. This will ensure lot tracking to work seamlessly across the product hierarchy.

It has been reported that using blank in lot-controlled products break the trace/track functionality and the continuity is lost in inventory or workorder transactions.

The screenshot shows the 'Item Branch/Plant - Item Master Revisions' form. The 'Item Number' field contains '73871'. The 'Additional Info' tab is active, displaying various lot-related settings. The 'Select User Define Code' section is also visible, showing 'Product Code' as 'H41' and 'User Defined Codes' as 'SR'. A grid of records is shown at the bottom right, with 'Lots are Optional' selected.

Code	Description
<input checked="" type="radio"/>	Lots are Optional
<input type="radio"/>	0 Lots are Optional
<input type="radio"/>	1 Lots Assigned using Date
<input type="radio"/>	2 Lots Assigned with Next Number
<input type="radio"/>	3 Lots must be Assigned Manually
<input type="radio"/>	4 Serial No Optional
<input type="radio"/>	5 Serial No Assigned Using Date

Employee Address-Book for time entry

Employee address book numbers in super-backflush process and/or time entry. You need to enter/maintain this 31/ER UDC after creating address book records. System may insist preceding zeros, if the configuration length is 8 numeric.

This configuration is maintained in the Form exit. You may need it to align with AB# on new implementations but do not change this configuration mid-stream in a live environment

This rate is not linked to payroll. There are clients who like to keep different rates in this table and suppress the view on the individual time entry application. That helps help to compare the productivity of the experience personnel vs new-hires.

Enter Generic Message/Rates

Product Code *Shop Floor Control*
 User Defined Codes

Records 1 - 30

[Customize Grid](#)

<input type="checkbox"/>	<input type="checkbox"/>	Code	Description	Rate
<input checked="" type="radio"/>	<input type="checkbox"/>	00020751 <input type="button" value="X"/>	Burtis Rolland	
<input type="radio"/>	<input type="checkbox"/>	00021682	Vasbinder Bryan	
<input type="radio"/>	<input type="checkbox"/>	00021875	Jackson Ronald H	
<input type="radio"/>	<input type="checkbox"/>	00022476	Shearmire Steve D	

Enter Generic Message/Rate Types

Product Code *Shop Floor Control*

Records 1 - 2

<input type="checkbox"/>	<input type="checkbox"/>	Product Code	Us Cd	Description	Code Length	Code Num (Y/N)
<input checked="" type="radio"/>	<input type="checkbox"/>	31 <input type="button" value="Search"/>	ER	Employee Rates	8	Y

Purging Workcenter messages

As a power user or business analyst, you review message logs in Work Center. Many times, it gets over crowded with genuine or informational messages. And you have time or patience to clear them one by one. If you have access to BV, you can run the purge job for your address book number quickly.

Configure Manufacturing and Distribution AAI's

Save Cancel

Find Delete

Records 1 - 44 Customize Grid

<input type="checkbox"/>	<input type="checkbox"/>	AAI Number *	AAI Number Description	Co	Do Ty	Doc Type Description	G/L Cat	Description G/L	Or Ty	Order Type Description	Cost Type	Branch Plant	Obj *	Acct	Su
<input type="checkbox"/>	<input type="checkbox"/>	3110	Inventory/Raw Material	00001	IM	Material Charged To ...	****		WO	Real (firm) Work Orders	A1			131010	
<input type="checkbox"/>	<input type="checkbox"/>	3110	Inventory/Raw Material	00001	IS	Scrapped W.O.'s To ...	****		WO	Real (firm) Work Orders	A1			131010	
<input type="checkbox"/>	<input type="checkbox"/>	3120	Work in Process	00001			****		WO	Real (firm) Work Orders	A1	9020		131010	20
<input type="checkbox"/>	<input type="checkbox"/>	3120	Work in Process	00001			****		WO	Real (firm) Work Orders	B1	9020		131010	20
<input type="checkbox"/>	<input type="checkbox"/>	3120	Work in Process	00001			****		WO	Real (firm) Work Orders	C4	9020		131010	20
<input type="checkbox"/>	<input type="checkbox"/>	3120	Work in Process	00001			****		WO	Real (firm) Work Orders	X1	9020		131010	20
<input type="checkbox"/>	<input type="checkbox"/>	3120	Work in Process	00001			****		WO	Real (firm) Work Orders	X3	9020		131010	20
<input type="checkbox"/>	<input type="checkbox"/>	3120	Work in Process	00001			****		WO	Real (firm) Work Orders	X6	9020		131010	20

Floor stock in manufacturing operations

Issue type= Floor stock (F)

One of the often missed feature in E1. Companies keep literature items, guides, tools, etc. in the bill of materials for the costing purposes and, they want to be shown in the workorder partlist. But these are commodity type items and no issued physically in the manufacturing process. Most of the time, these are expensed items. Instead of making fake issues and/or adjusting negative inventory periodically, the best practice is to make them floor stock.

WO super backflush will not prompt for material issues so there are no unwanted cardex entries. No need to correct the negative inventory for such items

Item Branch/Plant - Additional System Information

Item Number (Short) 409302
Item Number 73871

Manufacturing Data | **Grade and Potency** | **Service/Warra**

Order Policy Code 1 *Lot for Lot, As Required*
Value Order Policy
Planning Code 3 *Planned by MRP with forecast*
Planning Fence Rule
Planning Fence
Freeze Fence
Message Display Fence 300
 Suppress MRP Messages

Accounting Cost Qty 1.0000
Issue Type Code **F** *Floor Stock (no issues)*
Round to Whole Number *Do Not Round*
Issue and Receipt 0 *No Action Taken*
Replenishment Hours
 Active Ingredient
 Kanban Item

Select User Define Code

Product Code 41 *Inventory Management*
User Defined Codes IT *Issue Type Code*
Description

Records 1 - 7 [Customize Grid](#)

Code	Description
<input checked="" type="radio"/>	Shippable end item
<input type="radio"/>	B Backflush when Complete
<input type="radio"/>	F Floor Stock (no issues)
<input type="radio"/>	I Manual Issue
<input type="radio"/>	P Preflush with Parts List
<input type="radio"/>	S Subcontract Item
<input type="radio"/>	U Backflush at Pay Point

Freezing Work Center rates before Cost rollups

JDE suggests freezing workcenter rates before cost rollups. Many times, cost accountants forget to do that after making changes to simulated rates for the work centers. The catch-all at the R30835 processing option to update work center rates will do the same job for you behind the scenes.

R30835 Processing Options

Processing Options

OK Cancel

Default Processing Process Mfg G/L Versions Print

1. Update Costs X
 Blank = Proof Mode
 1 = Final Mode

2. Single Level
 Blank = Complete Update
 1 = Single Level Update

3. Update Work Center Rates
 Blank = Do Not Update
 1 = Updates all rates in all work centers across all companies and all branch plants
 2 = Updates all work centers associated with items being frozen

4. Use Flex Accounting
 Blank = Do Not Use Flex Accounting
 1 = Use Flex Accounting

5. WIP Revaluation
 Blank = Do not Invoke WIP Revaluation
 1 = Invoke WIP Revaluation for Work Orders
 2 = Invoke WIP Revaluation for Lean Manufacturing

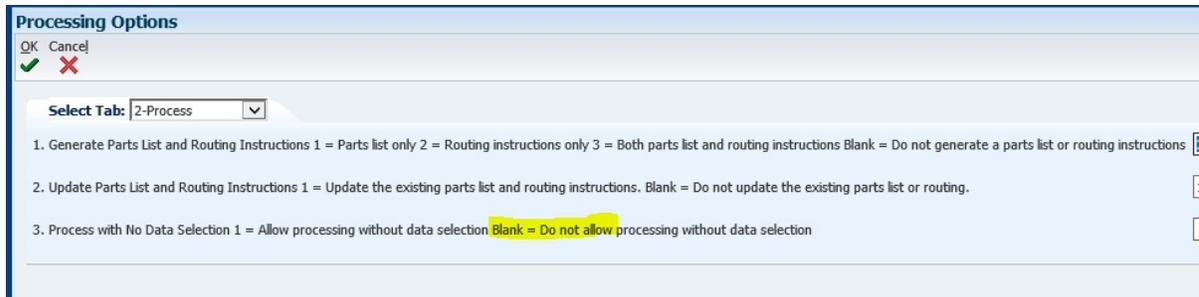
6. Use Cache or Work File for Calculations
 Blank = Cache
 1 = Work File

Stop re-opening workorders by user(s)

If you are a consultant, you would have seen multiple times when planner or shop-floor user ran R31410 (Attach parts list/routing) wide open removing all data selection and/or making incorrect data selection values. Even with DS security, one user entered doc#>1 in her batch job to open up all the work-orders in the system on a Friday evening.

But there is a new processing option control to limit people from deleting the data selection rows. Ensure you have not granted processing option prompt for this UBE at the user level roles

R31410 Processing Options



Using Blanket purchase orders

Generating blanket orders and releasing purchase orders from the blanket could be done as a stand-alone basis (OR) from the MRP message processing. The field 4. Quantity update on the P4310 processing option on the blanket order version is critical to make the entire process work seamlessly.

In many implementations, companies stop after regular purchase order transactions. The purchase orders for outside operations, volume discounts, releasing PO from blankets, PO Generation tool (not MRP) are often not implemented due to lack of time & resources.

P4310 – Blanket order version

Processing Options

OK Cancel

Select Tab: 3-Interfaces

1. Business Unit Validation
 Blank = Business Unit Master table
 1 = Inventory Constants table

2. PBCO Warning
 Blank = Issue warning
 1 = Do not issue warning

3. PACO Warning
 Blank = Issue warning
 1 = Do not issue warning

4. Quantity Update
 Blank = Quantity on PO
 1 = Quantity on Other POs

5. Supplier Analysis
 Blank = Do not capture
 1 = Capture

6. Edit Supplier Master
 Blank = Do not edit
 1 = Edit

7. Financial AAIs
 Blank = Do not validate
 1 = Validate

Auto generate item branch record in ST/OT

ST/OT process. If you don't want unwarranted material movements within a plant, there is a processing option on the P4310 side which decides whether to create a new item branch record if one does not exist. I have seen companies turning this to '1-do not create item branch record' and give error to the person moving materials from one branch to another. This can control products/items moved into unnecessary branches impacting cycle count and costing issues.

P4310 Transfer Order entry PO side version

Processing Options

OK Cancel
 

Select Tab: 17-Transfer Order 

1. Create Item Branch Record if one does not exist for the receiving B/P when Entering a Transfer Order

Blank = Create Item Branch Record
 1 = Do not Create Item Branch Record

2. Project Transfer Order Line Type

S&D inclusion rules for workorder types

If your system has multiple work-order types under manufacturing process (like WO, WR, WE, WM) you may get error when entering S&D inclusion rules. There is a one-field processing option in the version which decides what order types are valid. This field is maintained without any commas.

Work With Supply/Demand Inclusion Rules

     Tools

Rule Version *MRP Resource Rules* Selected

Skip to Order Type

Records 1 - 67 [Customize Grid](#) 

<input type="checkbox"/>		Included	Order Type	Line Type	Line Status	Status Description	Rule Version
<input type="checkbox"/>		0	WO			WARN Default	MRP
<input type="checkbox"/>		0	WO		01	Claim Submitted	MRP
<input type="checkbox"/>		0	WO		02	Replace to Cust-Pending Rcpt	MRP
<input type="checkbox"/>		0	WO		03	Received	MRP
<input type="checkbox"/>		0	WO		04	In Evaluation	MRP
<input type="checkbox"/>		0	WO		05	WARN W.O. safety check	MRP
<input type="checkbox"/>		0	WO		06	Awaiting Repair	MRP

Processing Options

OK Cancel

WO Types

1. Enter the WO document types for the Inclusion rules. These can be stacked up one after another for multiple document types. If left blank, "WO" will be used.

Work Order Document Types

Auto replace of components in bill of materials.

In a manufacturing business, where bills of materials go through constant changes and universal replacements, there is a very powerful UBE which can make this activity very simple.

If you replacing comp1 of quantity of 1 with comp2 with quantity of 2 across multiple bills, the UBE will update the bills in PROOF and FINAL mode. Comp1 will get previous effective end-date and Comp2 will be made active. There is also an option to remove Comp1 altogether, if the business wants that way.

As usual, this has to be tested by user in non-production environment first and security granted only to certain roles.

R30520 Where used Bill of materials update

Processing Options

OK Cancel

Defaults 1 Defaults 2 Process Edits

1. Enter the Branch/Plant location to select for Bill of Material changes. This is a required field; if left blank, no processing will be performed.

Branch/Plant

2. Enter the new Component Item number. If left blank, no change will be made to the Component Item number.

New Component Item Number

3. Enter the new Quantity Per amount. If left blank, no change will be made to the Quantity Per amount.

New Quantity Per

4. Enter the new Quantity Per Unit of Measure. If left blank, no change will be made to the Quantity Per Unit of Measure.

New Unit of Measure

Processing Options

OK Cancel
 

Defaults 1 Defaults 2 Process Edits

1. Enter the new Effective From Date. If left blank, today's date will be used.

New Effective From

2. Enter the new Effective Thru Date. If left blank, no change will be made to the Effective Thru Date

New Effective Thru Date

3. Enter the new Issue Type Code. If left blank, no change will be made to the Issue Type Code.

New Issue Type Code

Processing Options

OK Cancel
 

Defaults 1 Defaults 2 Process Edits

1. Enter a "1" if this is to be run in Final Mode. If left blank, the program will be run in Proof Mode.

Final Mode

2. Enter a "1" to DELETE the existing record(s) from the BOM file. No updating will be performed when Delete is selected

Delete Mode

Processing Options

OK Cancel
 

Defaults 1 Defaults 2 Process Edits

1. Enter a "1" to validate the new component against the Item Branch file (F4102). If left blank, the new item will not be validated

Item Branch Validation

Locking Work order transaction after certain WO status.

In discrete workorder based manufacturing operations, users will come back with additional changes to material issues and/or labor AFTER workorder hits 95 (as an example). Or some times when the WO is at 96 or 97 status.

The best practice is to control them from entering any date by this processing option. Users will get error while trying to complete any transaction after certain point in the WO steps.

P31114 processing option

Processing Options

OK Cancel

Select Tab: 3-WO Status

1. Partial Work Order Status Code 45

2. Completed Status Code 90

3. Completion Threshold 100.00

4. Enter the Status Code from which Shop Floor Activity cannot be entered 95

Item Help - Internet Explorer

Item Help

Work Order Status Code Limit

Alias: S3111421

Use this processing option to choose the work order status code at or beyond which completions the system cannot process. If you leave this field blank, the system processes work orders at any status. For example, if inventory completions is set at 95 and the work order is at 95 or greater, then the system displays an error.

Linking Sales orders to Workorders

The most powerful and at the same time risky processing option on WO completions.

If you have sales orders creating work orders (line type W), work order completion can update the sales order status automatically. In a lot controlled environment it can even commit the location/lot to the sales order.

While this works perfected in full completion WO process, partial completion pose

dangers of sales order status code accuracy. Also, if CSR has capability to re-prioritize and re-commit sales orders from another lot/location, completing the original workorder will mess up the sales order status codes. If the sales order has moved past 580, system will through error. If the sales order is among valid status codes, WO completing will automatically update the SO status putting distribution in confused state!

P31114 WO completions

The screenshot shows a 'Processing Options' dialog box with a title bar containing 'OK' and 'Cancel' buttons. Below the title bar is a 'Select Tab:' dropdown menu set to '5-Sales Orders'. The main area contains six numbered sections, each with a list of options and a corresponding input field:

- 1. Work Order Lot and Location Defaults** (input field with a close button 'x'):
 - 1 = Use SO number as lot number
 - 2 = Use SO number as location, and SO line number as lot number
 - 3 = Use WO number as the lot number
 - 4 = Use Production Number as the lot number
- 2. Sales Order Lot and Location** (input field):
 - Blank = Do not update sales order
 - 1 = Updates sales order with lot and location
- 3. Update Sales Order Next Status** (input field):
 - Blank = Next status is not updated
 - 1 = Next status is updated
- 4. Override Next Status** (input field)
- 5. Display Back Order Release Form** (input field):
 - Blank = Do not display form
 - 1 = Display form
- 6. Memo Lot Field Defaults** (input field):
 - Blank = Do not use Production Number on Memo Lot1
 - 1 = Use Production Number on Memo Lot1

Generate Work order Shortage at anytime

The standard shortage report R31418 is generated along with R31410-Attach partslist and routing. But planners would like to know the shortages are more frequent levels. This is more applicable where you attach partslist and routing irrespective of the shortages to keep the production floor busy.

You can run this report stand-alone manually or in the scheduler with data selection of WO status code at range like ≥ 40 and ≤ 92 . These status code depends on your specific WO configurations

This report gives all shortages against each workorders and also a summary of the

item-level shortages on the last page(s).

Batch Versions - Work With Batch Versions - Available Versions

✓ 📄 + 🗑️ ✖️ 📄 Row 📄 Form 🛠️ Tools

Batch Application: W. O. Component Shortage List Web and Client

Read Only Report (Y/N):

Records 1 - 1

<input type="checkbox"/>	Version	Version Title	User	Last Modified	Security
<input type="checkbox"/>	XJDE0001	Work Order Component Shortage Report	JDE	09/09/02	1

Copying cost from one branch to another
R30890 cost copy

Processing Options

OK Cancel
 

Process

COPY FROM INFORMATION:

1. Enter a '1' to copy simulated costs or a '2' to copy frozen costs.

Simulated or Frozen

2. Enter the Branch/Plant and Cost Method to copy.

Branch/Plant to copy:

Cost Method to copy:

COPY TO INFORMATION:

3. Enter the Branch/Plant and Cost Method to update.

Branch/Plant to update

Cost Method to update:

In a multi-branch manufacturing environment, this is a very powerful UBE to copy costs. User(s) trained with hands-on execution of the reports, preferable with a sample data set. If you have virtual branch plants to complete service or non-manufacturing activities, you may copy frozen costs from the source plant to destination branch.

In a DRP environment, you will simulate & freeze the cost in the main manufacturing plant (where bills and routings are maintained). You will then copy the simulated cost to DRP branches. You will complete cost freeze at those DRP branches separately to get the inventory impact.

This batch creates records in F30026 table and NOT in F4105 table. If you need to copy costs in F4105 table directly (in different cost method) there are two options. You may configure new cost method and run this batch program. Or, using Z-file processor for F4105 to cut and paste the different cost methods for historical analysis and reference in that table

Creating item branches copy ASAP
R41826 ITEM BRANCH COPY

Processing Options

OK Cancel
 

Defaults 1 Defaults 2 **Process** Matrix Process

1. Enter a '1' next to each file to duplicate. If left blank, the file will not be duplicated.

Cost Ledger File (F4105)	<input type="text" value="1"/>
Base Price File (F4106)	<input type="text" value="1"/>
UOM Conversion Factors (F41002)	<input type="text" value="1"/>
Bulk Depot/Product Information (F41022)	<input type="text" value="1"/>
Item Profile (F46010)	<input type="text" value="1"/>
Item Unit of Measure Description (F46011)	<input type="text" value="1"/>
Item Branch Master-Service/Warranty Extension (F41171)	<input type="text"/>

Very powerful tool to copy item branch records from one branch to multiple branches. If the record does not exist in the destination branch this batch will create one. We have seen this on scheduler nightly to keep adding new parts into other branches from the main branch plant.

Adding new lines to cost components
P30026 COST COMPONENTS

Work With Cost Components

Simulated
 Manufactured
 Branch/Plant:

Item Number:
 CABLE ASSY,8 GA.,32in,BLACK

Unit of Measure:
 Each
 Simulated:

Cost Method:
 Standard
 Frozen:

Stocking Type:
 Mfg. Assembly or Sub-Assembly
 Cost Ledger:

Records 1 - 5 [Customize Grid](#)

Cost Type	Description	Simulated Net Added	Simulated Total	Sim Fac Code	Simulated Factor	Simulated Rate Code	Simulated Rate
<input checked="" type="radio"/> A1	Material		.9105				
<input type="radio"/> B1	Direct Labor	.1056	.1056				
<input type="radio"/> C4	Labor Overhead	.1610	.1610				
<input type="radio"/> X3	Transportation In		.0181				
<input type="radio"/> X6	Purchased FG OH		.0242				

Cost accountant love to maintain X-costs but will stay back when the manual data maintenance is involved.

A simple custom UBE can make entries into the F30026 table for X* cost types with factors. (Use processing options to enable multiple cost types). The UBE can run only for purchased items (stocking type=P) to build-up the additional costs. Cost types at manufacturing parts will get added during the cost simulation process.

Inventory transactions: who, what, when?

The typical troubleshooting during cycle count or workorder variance calculations involve analyzing inventory transaction. If there are multiple transactions of the components against the same work order (due to incorrect WO status), the easiest way is available on the row exit.

Highlight the data row and go to row exit for transaction details. This is much easier than running multiple reports or asking IT for data dump. Row transaction will give GL details, if there are Inventory to GL integrity issues.

Inventory Audit - CARDEX (Item Ledger Inquiry) - Work With Item Ledger

Row Tools

Item Number: 62938 TUBING, SQ, 2X2X.120, 1010-20
 Branch/Plant:
 Location: * Transaction Date: * - *
 Lot/Serial: * Document Type: *
 Quantity On Hand: 192.4242 FT Value: 408.92
 Secondary On Hand: FT

Records 1 - 30

<input type="checkbox"/>	Document Number	Document Number Desc	Doc Type	Doc Co	Transaction Date	Branch/Plant	Quantity
<input type="checkbox"/>	860643		OV	00001	12/18/17	CR	
<input checked="" type="checkbox"/>	860643		OV	00001	12/18/17	CR	43.
<input type="checkbox"/>	999644		IM	00001	12/18/17	CR	25.7

Row>Detail

Inventory Audit - CARDEX (Item Ledger Inquiry) - Transaction Information

Tools

Work With Item Ledger **Transaction Information**

Trans. Date: 12/18/17 Reason Code:
 Creation Date: 12/18/17 Reference:
 Time Of Day: 08:09:43 Explanation: Inventory Receipt
 User ID: U2597 Supplier: 106228
 Work Station ID: JDE-ENTPRO Supplier Lot:
 Program ID: EP4312

Row>Transaction

Inventory Audit - CARDEX (Item Ledger Inquiry) - Item Ledger Detail

Work With Item Ledger **Item Ledger Detail**

✕ Form < > Tools

Branch/Plant: CR

Item Number: 62938 TUBING, SQ, 2X2X.120, 1010-20

Location: FAB-DOOR22 -DZ Lot/Serial:

Quantity	43.0000	Document	860643	OV	00001
Secondary Quantity		J/E Line No.	1.0		
Unit Cost	1.9100	G/L Date	12/18/17		
Extended Cost	82.13	Batch Number	4181153		
Lot Status Code		Document Number	235715	OP	00001
Approved		Line Number	18.000		
Lot Potency	.000				
Lot Grade					

Automate lot holds

When the product lot expires, system put the expiry dates. User(s) would like to get these items go on a auto hold for quick reporting and re-mediation fixes. Otherwise, the inventory availability will show these quantities as not available with no explicit holds.

Use the R41082 to place your custom hold codes when the lots get expired. This job can run nightly basis. You can also a valid reason code. For initial implementation run the batch on proof mode to know the inventory impact or any data issues.

Processing Options

OK Cancel
 

Defaults **Process**

1. Enter a '1' to process in final mode. If left blank, processing will be in proof mode only.

Proof/Final Mode

2. Enter a '1' to generate a report. If left blank, no report will be produced.

Print Mode

Tips & Tricks

SECTION - 2

How to fix WO if the status got moved to 40 by user-error?

Intro: WO PL/Rtg attachment UBE (R31410) updated WOs with partslist (from Bill) and Routing (from product routing structures) and update the order status to 40 (from 10). This can be reversed manually. The data selection in this UBE has lot of controls so that not ALL orders are taken to 40 status by mistake. User should never remove these data selection line and also pay full attention when entering the values. See below

In 9.1 onward, there is a processing option which controls whether this report can be executed without any data selection. Always invoke that option!

	Operator	Left Operand	Comparison	Right Operand
<input checked="" type="checkbox"/>	Where	Branch (F4801) (MMCU) [BC]	is equal to	" COL, FNT, TRH"
<input type="checkbox"/>	And	Document (Order No, Invoice, etc.) (F4801) (DOCO) [BC]	is equal to	"12345"
<input type="checkbox"/>	And	Status Code W.O. (F4801) (SRST) [BC]	is less than or equal to	"40"
<input type="checkbox"/>	And			

On the second line, Doc number (which is WO#) should be keyed in. Do not change it to value >0.

The last line, ensures only orders <=40 are picked up

See below for user's mistake

Condition	Field	Operator	Value
IF	CostCenterAlt (F4801)(MMCU)[String]	==	Literal: FNT
AND	DocumentOrderInvoiceE (F4801)(DOCO)[MATH_NUMERIC]	>	Literal: 0
AND	StatusCodeWo (F4801)(SRST)[String]	<=	Literal: 40

If you are not sure what data-selection you modified, you can cancel the jobs at the PRINT option screen. The UBE will not start unless you click OK in the final PRINT screen.

Step 1: How to find these orders?

Export the entire data to excel for reference. Analyze by project# and requested date to see whether any orders need to be reverted back to status 10.

Work With Manufacturing Work Orders Layout: (No Layout) Query: All Records

✓ 🔍 + 📄 ✖ 🔄 Form ⏪ ⏩ ⚙️ Tools 🔄 One View

Skip to Order Number Branch/Plant

Records 1 - 200 of 679

Related SO No	Order No	Type	2nd Item Number	Status	Reference	Request Date	Item UOM	Order Date	Branch/Plant	WO Description
	10325	WO	7064468	40	0631-591 2190.000857	10/03/2016	EA	10/02/2016	FNT	PS 43.750" .220" 25'-0" WDBA
	10327	WO	7064468	40	0631-592 2190.000857	10/03/2016	EA	10/02/2016	FNT	PS 43.750" .220" 25'-0" WDBA
00000025	10330	WO	7064468	40	0631-163 2190.000857	10/03/2016	EA	10/02/2016	FNT	PS 43.750" .220" 25'-0" WDBA
00000025	10336	WO	7064511	40	0631-581 2165.011107	10/03/2016	EA	10/02/2016	FNT	PS 43.750" .220" 25'-0" WB WS
	10339	WO	7064511	40	0631-534 2165.011107	10/03/2016	EA	10/02/2016	FNT	PS 43.750" .220" 25'-0" WB WS

2 Reverted back the status 10. This is two step process: (1) remove PL and Rtg from each workorder manually. There is a WO repost program that run every night which clears these soft commitments across all items so that inventory availability looks reasonable (2) put back the WO status to 10. This can be done manually. Or there is a batch process which can move status to 10 on a 'range' of orders. (example: 10325 to 11178)

3 Removing partslist. Open WO Entry application and locate your order. Go to row exit and open partslist. Highlight all lines by clicking the top box. Press delete.

Work Order Parts List

✓ 📄 ✖ 🔄 Form ⏪ ⏩ ⚙️ Tools

Order Number WO

Item Number

Production Number

Records 1 - 7

Component Item Number	Description	Order Quantity	Issued Quantity	Location	Lot Serial Number	Is Cd	UM	Secondary Qty Ordered
0720034	CYLINDER 43.750" .220"	5000		.		I	EA	
0070958	SAND FOR CEMENT LIN...	2572.4...		.		B	LB	
0740883	CEMENT PORTLAND AS...	1286.1...		.		B	LB	
0751343	PAINT CARBOLINE 777 ...	3.5680		.		I	GA	
0751344	PAINT CARBOLINE 777 ...	3.5680		.		I	GA	
0740000	PLUG PIPE SQHD 1/4 N...	1.0000		.		I	EA	

4 Removing routing. Open WO Entry application and locate your order. Go to row exit and open routing. Highlight all lines by clicking the top box. Press delete.

Work Order Routing

✓  ✕  Form  Row  Tools

Order Number: 10325 WO PS 43.750" .220" 25'-0" WDBA
 Item Number: 7064468 PS 43.750" .220" 25'-0" WDBA
 Production Number:

Records 1 - 12

<input type="checkbox"/>		Work Center	Operation Sequence	R A	Operation Status	Operation Status Desc	Request Date	Operation Description	Machine Run Hours
<input type="checkbox"/>		0220	120.00	0	80	Operation Complete	07/20/2016	HYDROTES	
<input type="checkbox"/>		0240	145.00	0	80	Operation Complete	07/27/2016	EXPAND BE...	
<input type="checkbox"/>		0210	190.00	0	80	Operation Complete	08/04/2016	PIPE CLEA...	
<input type="checkbox"/>		0505	220.00	0	80	Operation Complete	08/11/2016	STICH CUT...	
<input type="checkbox"/>		0310	240.00	0	80	Operation Complete	08/19/2016	CEMENT LI...	

5 Updating WO status. Locate your order and select. (don't go row exit). Update WO status to 10 and press save.

Work Order Details

✓ ✕  Form  Tools

Order No/Type: 10325 WO Branch/Plant: FNT
 WO Desc: PS 43.750" .220" 25'-0" WDBA W.O. Scheduling
 Item Number: 7064468

Dates & Qty's **Status & Type** Cat Codes People Addl Details 1 Addl Details 2 Attachment

Sts Comm.

Bill Type: M Standard Manufacturing Bill
 Rtg. Type: M Standard Manufacturing Routing
 Status: 40 PL and Routing Attached
 Type: S Shop Order
 Freeze Code: N Do not freeze the order.

How to append template as text attachment to WO?

Business need: Lot of quality data like test date, some values (not in test result entry) need to be captured and stored in the system. Without adding a formal test result entry for each type of data capture, there is an option to add a standard template and add it to WO transactions. This template is stored as text attachment to the workorder. This could be added to any other type of transaction as well (example: test result entry)

1 Open the WO transactions

Work With Manufacturing Work Orders Layout: (No Layout) Query

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Skip to Order Number Branch/Plant

Records 1 - 10 > ⌂

<input type="checkbox"/>	<input type="checkbox"/>	Related SO No	Order No	Type	2nd Item Number	Status	Reference	Request Date	Item UOM	Order Date	Branch/Plant	WO Desc
<input type="checkbox"/>	<input type="checkbox"/>	00000011	10000	WO	7064379	40	4842-98 2913.28517	10/03/2016	EA	10/01/2016		COL PS 49.750"
<input type="checkbox"/>	<input type="checkbox"/>	00000011	10001	WO	7064380	40	4842-101 5529.36657	10/03/2016	EA	10/01/2016		COL PI 49.750"
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	00000011	10002	WO	7064396	40	4842-193 4741.79285	10/03/2016	EA	10/01/2016		COL PO 49.750"
<input type="checkbox"/>	<input type="checkbox"/>	00000011	10003	WO	7064400	40	4842-210 4336.74007	10/03/2016	EA	10/01/2016		COL P2 49.750"
<input type="checkbox"/>	<input type="checkbox"/>	00000011	10004	WO	7064404	40	4842-251 7911.42934	10/03/2016	EA	10/01/2016		COL PT 49.750"

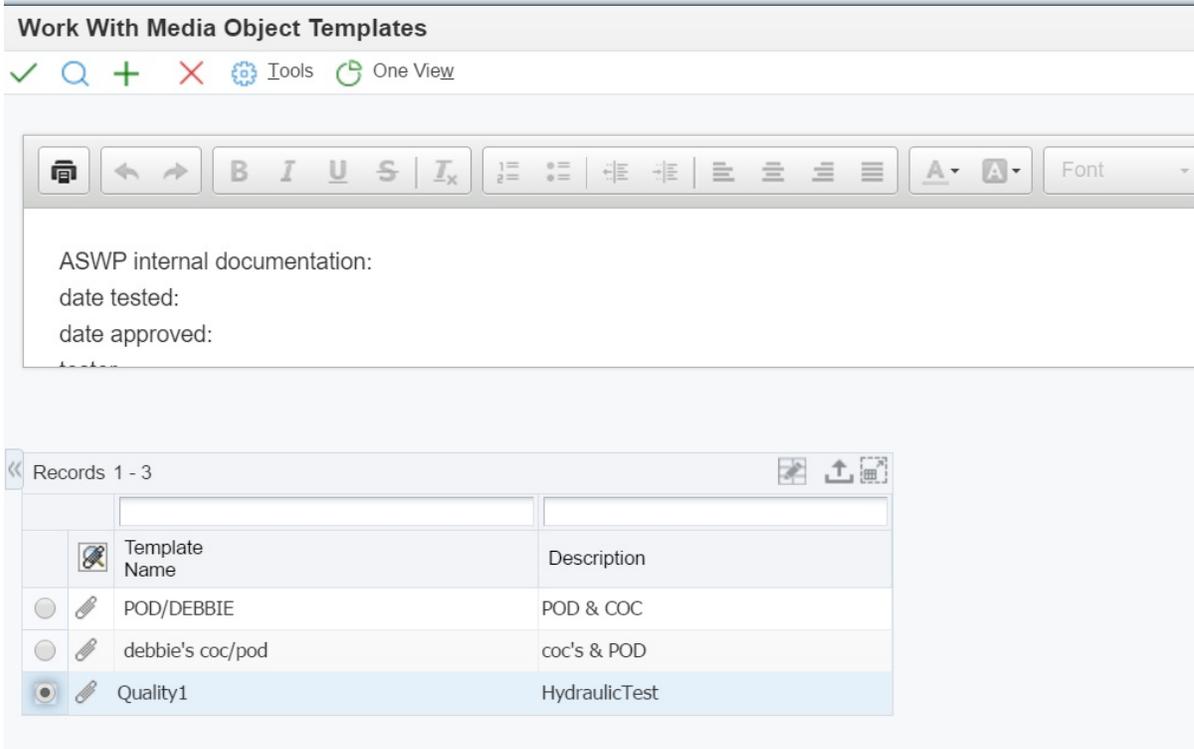
Go to row exit>attachment click on the templates

Media Object Viewer

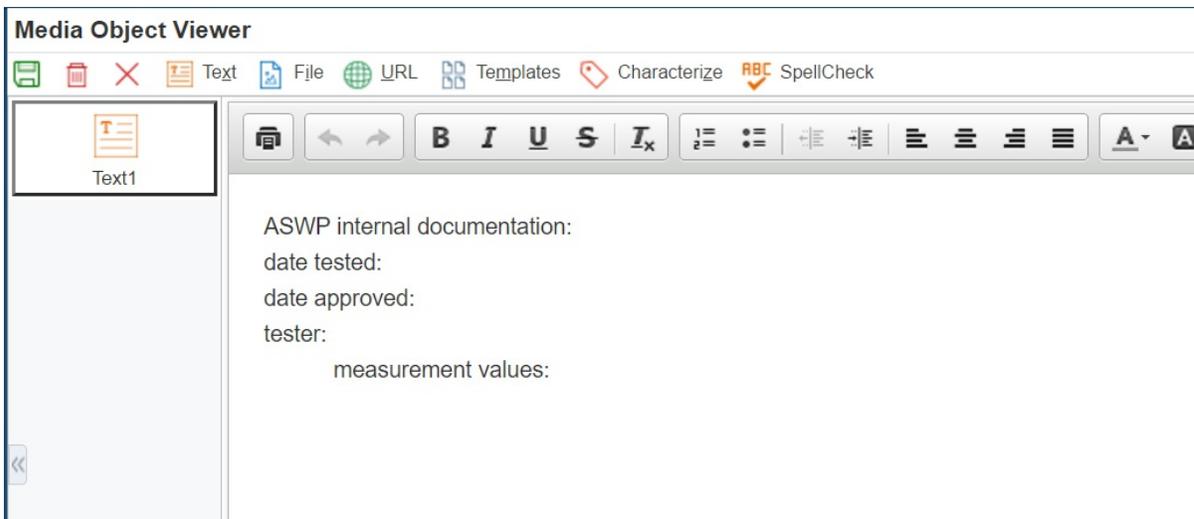
📄 🗑️ ✖ 📄 Text 📄 File 🌐 URL 📄 Templates 🏷️ Characterize

Click on templates

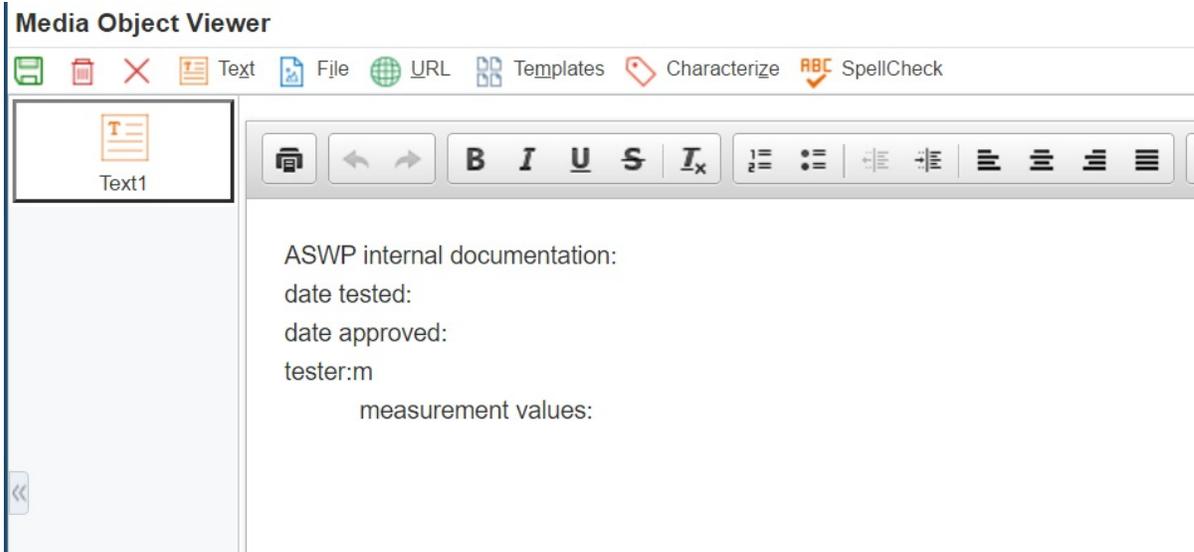
2 Press find to get existing templates. There could be other functional area templates like PO or SO, ensure you select the right template



Click select, the format comes into the WO as text1 attachment. Press save button



Enter some value (see example below: tester=m). add more content and press save. Any other user can come back to this screen; add more content or update content. This template can be updated/revised by ONE PERSON for the functional group to make the content standardized.



Once you save, the order will show with ‘paperclip’ icon. This is an indication that some attachment exist for that record

Work With Manufacturing Work Orders

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Skip to Order Number

Records 1 - 10 > ⌂

	Related SO No	Order No	Type	2nd Item Number	Status	Reference	Request Date	Item UOM	O D
<input type="checkbox"/>	 00000011	10000	WO	7064379	40	4842-98 2913.28517	10/03/2016	EA	
<input type="checkbox"/>	00000011	10001	WO	7064380	40	4842-101 5529.36657	10/03/2016	EA	
<input type="checkbox"/>	00000011	10002	WO	7064396	40	4842-193 4741.79285	10/03/2016	EA	

Running planning bills

Following example show how to configure planning bills.

If you have forecast at product family level, JDE can build the detailed SKU level forecast based on the planning bills. MRP (separate batch run) can update forecast table with SKU level forecasts.

Processing Options

OK Cancel



2-Parameters ▼

1. Generation Mode 1 = net change 2 = gross regeneration	<input type="text" value="2"/>
2. Generation Type 1 = single level MPS/DRP 2 = planning bill 3 = multi-level MPS 4 = MRP with or without MPS 5 = MRP with frozen MPS	<input type="text" value="2"/>
3. UDC Type	<input type="text" value="QT"/>
4. Version of Supply/Demand Inclusion Rules	<input type="text" value="MRP"/>

Run a version of R3483 with planning bills

The batch will generate detailed forecast entries for the sub-levels in P3460 (Forecast entry application)

How WIP gets generated and cleared?

Create a WO and attach partslist. Make material issues.

Report completion using superbackflush (in this case only labor hours are back flushed)

Run manufacturing accounting final after material issues and after WO completion (assuming there is delay between these two steps)

Use OneView inquiry tools:

Screen shot after material issues. Look at actual units and actuals amounts

Implementing Oracle JDE Manufacturing Tips & Tricks

One View Work Order cost Analysis - One View Work Order Cost Analysis Inquiry Query: All Records ▼

Item Number: *

Records 1 - 13 Customize Grid DEMO

Cost Type	Cost Type Description	Standard Units	Standard Amount	Comp Units	Completed Amount	Actual Units	Actual Amount	WO U Meast	Current Units	Current Amount	Calculated Planned V	Calculated Engineering	Calculated Actual Variance	Calculated Other Variance	Run L Actua	Run Labc
A1	Material	1.0000	9,486.0709				9,486.0709	EA	1.0000	9,486.0709				9,486.0709		
B1	Direct Labor	1.0000	18.7044					EA	.6600	18.7044			18.7044-	18.7044		
C3	Labor Varia...	1.0000	56.1132					EA	.6600	56.1132			56.1132-	56.1132		
X2	Extra overh...	1.0000						EA								
	...					1.0000	5.2250	EA	1.0000	5.2250						
	...					1.0000	14.2450	EA	1.0000	14.2450						
	...					1.0000	37.4000	EA	1.0000	37.4000						
	...							EA	1.0000							
	...							EA	1.0000							
	...							EA	1.0000							
	...					1.0000	1.3860	EA	1.0000	1.3860						
	...					1.0000	9,427.8149	EA	1.0000	9,427.8149						
	...							EA								

All the material issues \$ goes into WIP account.

Account Ledger Inquiry - Work With Account Ledger

Account: 80.160101.13 *WIP-Parts*

Ledger Type 1: AA USD *General Ledger*

Type/Subledger: *

From Date: 06/08/2017

Thru Date: 06/08/2017

Currency Code: *

Cumulative: 15,679.09

YTD: 1,444.48

Records 1 - 9 Custo

Batch Number	Batch Date	Do Ty	Document Type	Doc Number	Doc Co	Sub-ledger	G/L Date	Explanation-Remark-	Units	LT 1 Amount	LT 1 Debit
1170050	06/08/2017	IM	Material Charged ...	136187	00080	00131984	06/08/2017	00411-000	1.00	5.23	5.23
1170050	06/08/2017	IM	Material Charged ...	136187	00080	00131984	06/08/2017	11585-000	1.00	14.25	14.25
1170050	06/08/2017	IM	Material Charged ...	136187	00080	00131984	06/08/2017	13632-045	1.00	37.40	37.40
1170050	06/08/2017	IM	Material Charged ...	136187	00080	00131984	06/08/2017	14607-000	1.00	1.39	1.39
1170050	06/08/2017	IM	Material Charged ...	136187	00080	00131984	06/08/2017	18402-18000	1.00	9,427.81	9,427.81
									5.00	9,486.08	9,486.08
									5.00	9,486.08	9,486.08
									5.00	9,486.08	9,486.08

Refresh OneView after WO completion & mfg accounting final.

Completed amount and completion units gets updated (including labor hours).

Superbackflush does not require labor hours update process.

Technically, the different between completed amount and actual amount is the WIP amount.

One View Work Order cost Analysis - One View Work Order Cost Analysis Inquiry Query: All Records

Item Number: *

Records 1 - 13 Customize Grid DEMO

Cost Type	Cost Type Description	Standard Units	Standard Amount	Complete Units	Completed Amount	Actual Units	Actual Amount	WO U Measu	Current Units	Current Amount	Calculated Planned Var	Calculated Engineerin	Calculated Actual Variance	Calculated Other Vari	Run Le Actual	Run Labor
A1	Material	1.0000	9,486.0709	1.0000	9,486.0709	1.0000	9,486.0709	EA	1.0000	9,486.0709						
B1	Direct Labor	1.0000	18.7044	1.0000	18.7044	.6600	18.7000	EA	.6600	18.7044			.0044-			
C3	Labor Varia...	1.0000	56.1132	1.0000	56.1132	.6600	56.1132	EA	.6600	56.1132						
X2	Extra overh...	1.0000		1.0000		1.0000		EA								
	...					1.0000	5.2250	EA	1.0000	5.2250						
	...					1.0000	14.2450	EA	1.0000	14.2450						
	...					1.0000	37.4000	EA	1.0000	37.4000						
	...							EA	1.0000							
	...							EA	1.0000							
	...							EA	1.0000							
	...					1.0000	1.3860	EA	1.0000	1.3860						
	...					1.0000	9,427.8149	EA	1.0000	9,427.8149						
	...							EA							.66	.66

WIP account gets credit for the completion for this WO.

Account Ledger Inquiry - Work With Account Ledger Query

Account: 80.160101.13 *WIP-Parts*

Ledger Type 1: AA *USD* *General Ledger*

Type/Subledger: * *General Ledger*

From Date: 06/08/2017

Thru Date: 06/08/2017

Currency Code: *

Cumulative: 15,679.09

YTD: 1,444.48

Records 1 - 10 Customize Grid

Batch Number	Batch Date	Do Ty	Document Type	Doc Number	Doc Co	Sub-ledger	G/L Date	Explanation -Remark-	Units	LT 1 Amount	LT 1 Debit	LT 1 Credit
1170053	06/08/2017	IC	Completed W.O. ...	136190	00080	00131984	06/08/2017	17213-18000	1.00	9,486.07-		9,486.07
1170050	06/08/2017	IM	Material Charged ...	136187	00080	00131984	06/08/2017	00411-000	1.00	5.23	5.23	
1170050	06/08/2017	IM	Material Charged ...	136187	00080	00131984	06/08/2017	11585-000	1.00	14.25	14.25	
1170050	06/08/2017	IM	Material Charged ...	136187	00080	00131984	06/08/2017	13632-045	1.00	37.40	37.40	
1170050	06/08/2017	IM	Material Charged ...	136187	00080	00131984	06/08/2017	14607-000	1.00	1.39	1.39	
1170050	06/08/2017	IM	Material Charged ...	136187	00080	00131984	06/08/2017	18402-18000	1.00	9,427.81	9,427.81	
									6.00	.01	9,486.08	9,486.07
									6.00	.01	.01	

How to update floor stock items

Purpose: To define items as 'floor stock' or 'free stock' so that items show up in bills and WO partslist but **DO NOT** get issued at the Warehouse

The screen shots below show the change to fields AFTER floor stock condition

- 1 Open item branch. Go to additional system info

item Branch/Plant - Work With Item Branch

Item Number: 00242-000 SCR,SEM,6-32X1/4,PCR,PHM,ZNST

Records 1 - 2

Branch/Plant	Item Number	Stocking Type	Description	Description 2	Search Text	Supplier Number	Line Type
800	00242-000	P	SCR,SEM,6-32X1/4,PCR,PHM,ZNS...	SCR,SEM,6-32X1/4,PCR,PHM,ZN...	00242000	142520	S
801	00242-000	P	SCR,SEM,6-32X1/4,PCR,PHM,ZNS...	SCR,SEM,6-32X1/4,PCR,PHM,ZN...	00242000	142520	S

2 Issue type code should be F..(normal default code is I- manual issues)..The screen below also highlights where the item revision level is stored

item Branch/Plant - Additional System Info

Branch/Plant: 800 Item Number: 00242-000 SCR,SEM,6-32X1/4,PCR,PHM,ZNST

Plant Manufacturing Grade and Potency Service/Warranty Depot/Product Info. Supply Chain Planning Blend Management Demand Flow®

Order Policy Code	1	Lot for Lot, As Required	Accounting Cost Qty	1.0000	
Value Order Policy			Issue Type Code	F	Floor Stock
Planning Code	2	Planned by MRP	Time Basis	U	Unit Rate
Planning Fence Rule	C	Customer Demand	Item Revision Level		
Planning Fence	1		Shrink Factor		
Freeze Fence	1		Shrink Factor Method	%	
Message Display Fence	90		Leadtime Level	60	
Setup Labor			Leadtime Manufacturing		
Move / Queue Hours			Leadtime Cumulative		
<input type="checkbox"/> Suppress MRP Messages					

3 Open bills of materials for the parent part (which has floor stock item)

Enter/Change Bill - Work with Bill of Material

Item Number: 00217-000 KIT,RETRO-FIT,MV5/MV10

Type of Bill: *

As of Date: 05/10/2017

Records 1 - 1

Item / Branch / Batch / Type	2nd Item Number
00217-000 / 800 / 0.0000 EA / M	00217-000

4 Issue code F is populated from item branch. If the item is originally set to "I", then user need to change the item branch and open ALL the bills to update the issue code again. Because, system takes default value of "I" and updated the bills at the

Product Costing

Adding additional cost method for historical analysis.

You have 2017 cost at the end of the year. You simulate/freeze ALL costs for 2018. Now you want to have historical reference in JDE for 2017 vs 2018 compare analysis. Since JDE does not keep as of cost details, the easiest way is to copy back 2017 cost back in P4105 (unit cost) table.

You will add new cost methods in a UDC first. See example below

Add your unique code in 40/CM udc. Do not use anything in 00-55 range, they are hard-coded.

In this example, 6A means 2016 actuals and desc2 can have your details

User Defined Codes - Work With User Defined Codes

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Product Code *Inventory/OP Base*

User Defined Codes *Cost Method*

Records 1 - 1

	6A		
<input type="checkbox"/>	<input type="checkbox"/>	Codes	Description 01 Description 02
<input type="checkbox"/>	6A	ACIPCO 2016 act	ACIPCO code

Cost revision before addition

Cost Revisions

✓ 🗑️ ✖️ ⚙️ Tools

Item Number **Costing Methods**

Branch/Plant Sales/Inventory 🔍

Purchasing

Records 1 - 3

	<input type="checkbox"/>	Cost Method	Description	Unit Cost
<input checked="" type="radio"/>	<input type="checkbox"/>	02	Weighted Average	4,932.9045
<input type="radio"/>	<input type="checkbox"/>	07	Standard	4,932.9045

Open Unit cost application, P4101 and add the 06A value to it. No transaction is impacted in GL

Cost Revisions

✓ 🗑️ ✖️ ⚙️ Tools

Item Number: 7105525
 Branch/Plant: COL

Costing Methods

Sales/Inventory: 07
 Purchasing: 07

Records 1 - 4

	Cost Method	Description	Unit Cost
<input type="radio"/>	02	Weighted Average	4,932.9045
<input type="radio"/>	07	Standard	4,932.9045
<input type="radio"/>	6A	ACIPCO 2016 act	4,000.0000
<input checked="" type="radio"/>			

You can also ask IT to add this by using a batch upload utility. Please ask them to load in PY first, verify and then approve for PD. You can build up history like 6A, 7A etc and also make budgets like 7B, 8B etc.

FAQ:

What happens if there is no cost rollup done and user starts workorder.

JDE give warning with a big window (not the traditional yellow soft warnings) but user can still proceed with the work order entry.

1-Enter/Change WorkOrder - Work Order Details

✓ ✖️ ⚙️ Eorm Tools

Order No/Type: WO Branch/Plant: 800

WO Desc: Item Number: On

1-Enter/Change WorkOrder - Missing Standard Frozen Costs

This item is setup for Standard Costing and there is no Frozen Cost record in the Item Cost Ledger (F4105). An F4105 has been automatically generated.

OK

Dates & Qty

Dates

Requester: EA

Planned E: Attachment

Start: Work Order: 06/08/2017 Canceled: Completed:

ShopFloor

Operation Dispatch

Dispatch Inquiry is a powerful tool often unused. In a discrete workshop type of manufacturing environment, there is always need to monitor activities going on against a workcenter. JDE can accomplish the need without the need for any other software tools.

Basic dispatch inquiry lack any controls that can be added to the application logic.

There is a scope for simple customization where you can bring sales order information and show only open workorders in specific work centers. The operation status code is used to control the definition of open work orders. Time entry is a must to track the labor usage and the user can enter the operation status at the time of the work activity completion

Custom Operation Dispatch

Work With Operation Dispatch Layout: (No Layout) Query: All Records

Row Tools One View

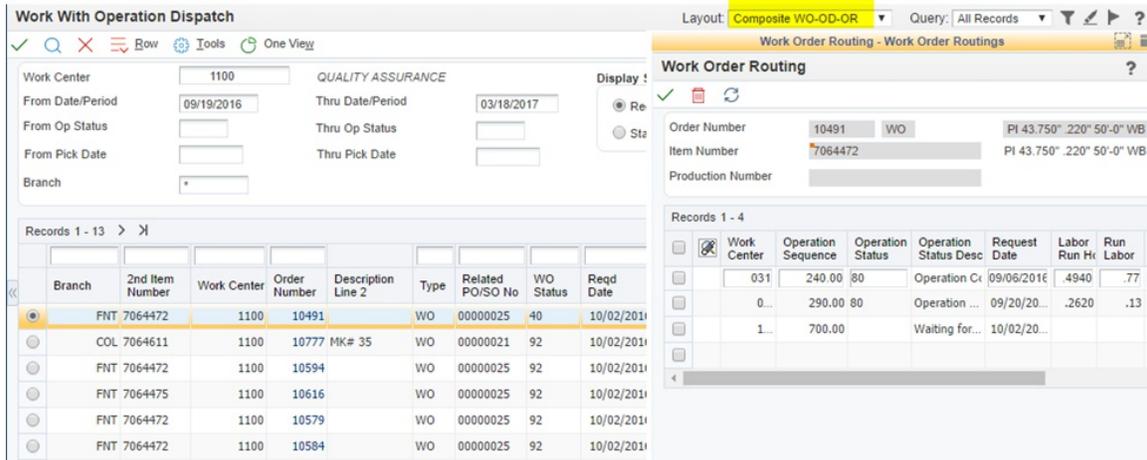
Work Center: 1100 QUALITY ASSURANCE
 From Date/Period: 09/19/2016 Thru Date/Period: 03/18/2017
 From Op Status: Thru Op Status:
 From Pick Date: Thru Pick Date:
 Branch: *

Display Sequence
 Requested Date
 Start Date

Records 1 - 13 > | matt

Branch	2nd Item Number	Work Center	Order Number	Description Line 2	Type	Related PO/SO No	WO Status	Reqd Date	Sched Pick	Description	Priority	Dispatch Group	Job Typ
FNT 7064472		1100	10491		WO	00000025	40	10/02/2016		PI 43.750" .22...		73115	73115
COL 7064611		1100	10777	MK# 35	WO	00000021	92	10/02/2016	11/28/2016	PI 37.500" .75...	1	73110	73110
FNT 7064472		1100	10594		WO	00000025	92	10/02/2016		PI 43.750" .22...		73115	73115
FNT 7064475		1100	10616		WO	00000025	92	10/02/2016		PI 43.750" .22...		73115	73115
FNT 7064472		1100	10579		WO	00000025	92	10/02/2016		PI 43.750" .22...		73115	73115
FNT 7064472		1100	10584		WO	00000025	92	10/02/2016		PI 43.750" .22...		73115	73115
FNT 7064472		1100	10593		WO	00000025	92	10/02/2016		PI 43.750" .22...		73115	73115

Custom Operation Dispatch with cafe1 link to WO Routing



Work Orders from Sales Orders

Items with line type W can trigger workorder automatically as you enter the sales order for the customer. The work order completion can update the Sales order status and also hard-commit the inventory. This is very useful feature on make-to-order environment where 1-1 relationship with SO and WO is required. Both sales and work order tables captures the other side of the information.

However, at many instances, this feature need to disabled after few weeks of going live.

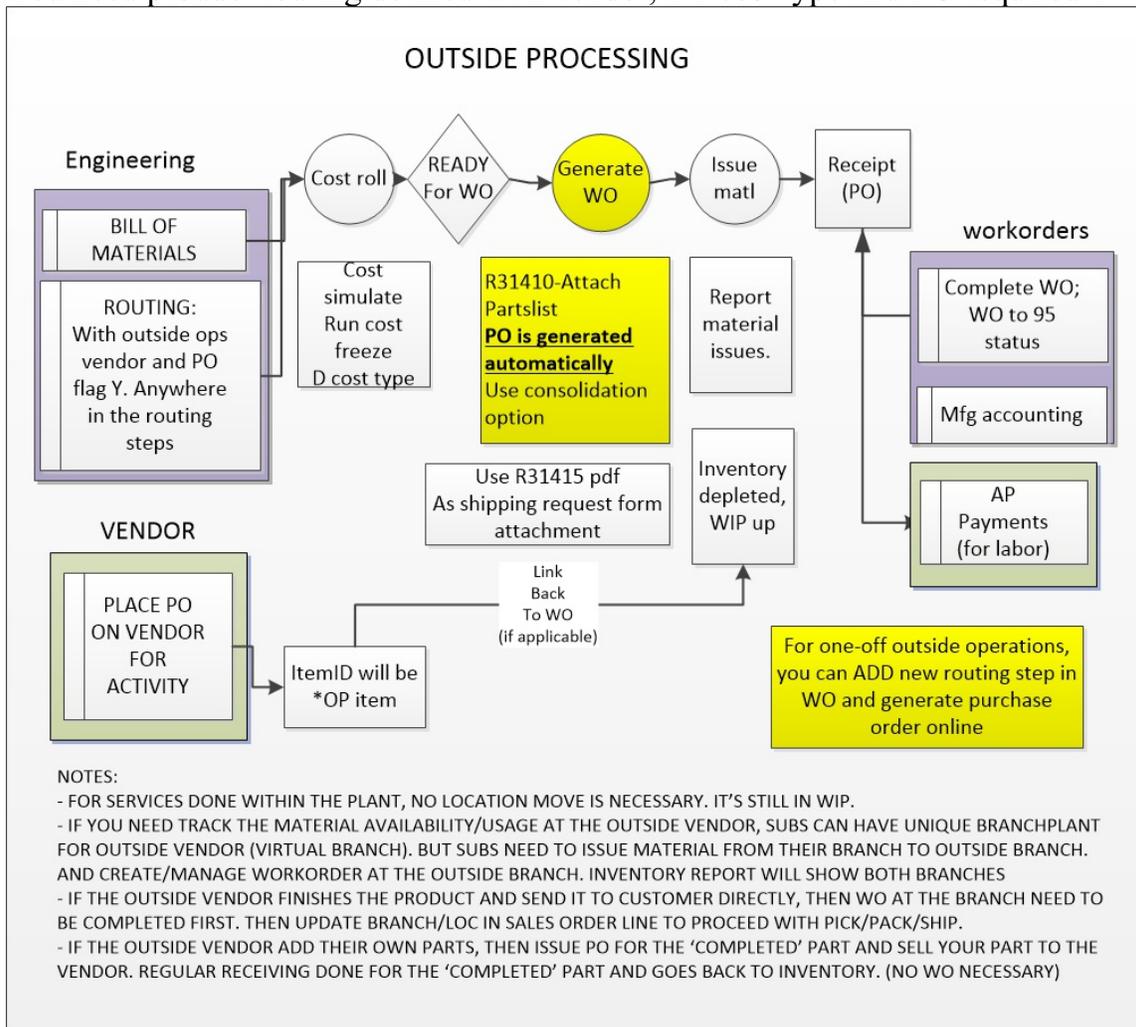
The major reasons are,

- * WO updating the SO status. If the sales order got picked and moved further in the status codes, JDE will throw error. If the sales order is brought back to lower status, JDE will automatically update the status. This pose confusion at CSR levels
- * Due to SO-WO link, an existing workorder cannot be committed to another priority customer
- * Combining multiple workorders for batch size manufacturing environment is not possible
- * If the sales order is canceled or pick date got changed, it will not reflect on the work order which is already in progress. This pose lot of WIP inventory and customer is not ready to pick the items

How to generate OutsideOps PO from WO routing

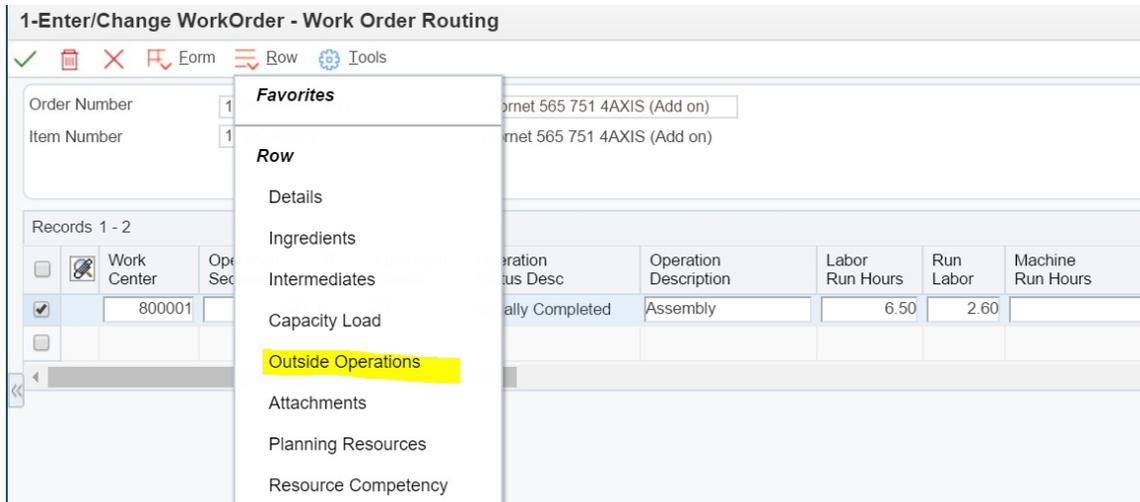
JDE generates outside operations purchase order automatically from the WO Print R31410 UBE

You need product routing defined with vendor, D1 cost type and PO required Y flag.

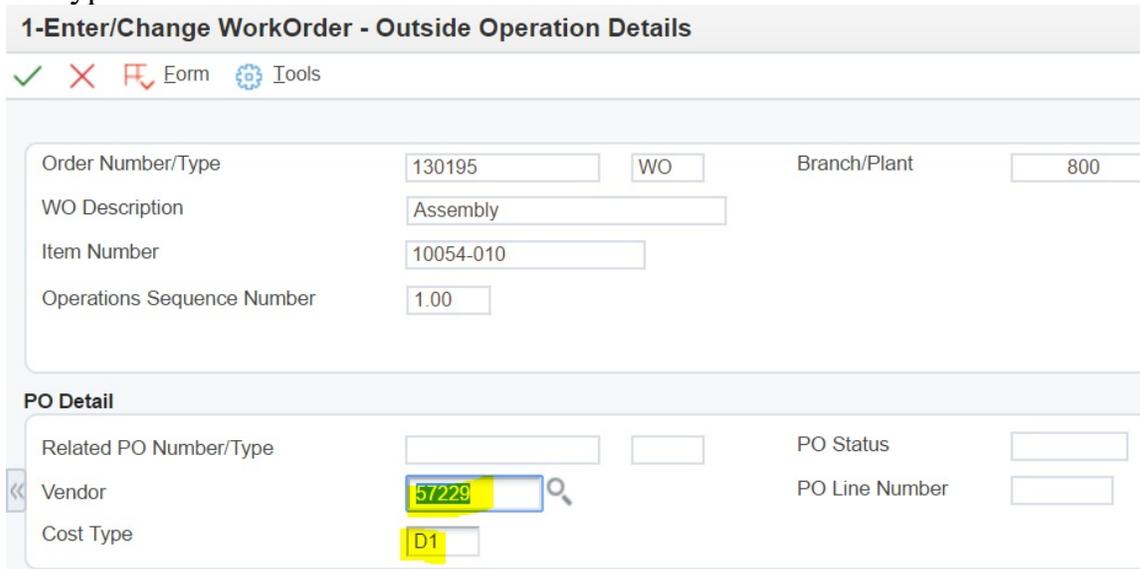


But there instances where product routing does not call for outside operation steps. Planner to send out materials due to scheduling needs and there is a way they can create this step manually in the work order.

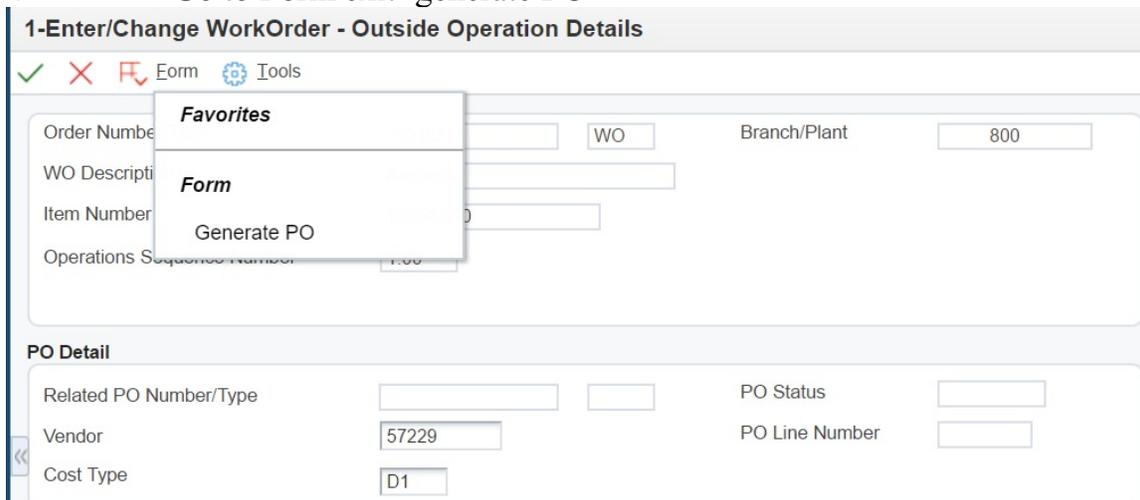
- 1 Open existing workorder. Go to WO routing
- 2 Got to row exit>outside operations



3 Enter vendor# (you can find the vendor from search button) and use D1 as cost type



4 Go to Form exit>generate PO



5 PO number gets generation. The type of PO (whether OP or OO) comes from configurations.

Press OK to save this. This step is critical. If you have made mistake you can cancel out now.

1-Enter/Change WorkOrder - Outside Operation Details

✓ ✗ ↶ Form ⚙ Tools

Order Number/Type	<input type="text" value="130195"/>	<input type="text" value="WO"/>	Branch/Plant	<input type="text" value="800"/>
WO Description	<input type="text" value="Assembly"/>			
Item Number	<input type="text" value="10054-010"/>			
Operations Sequence Number	<input type="text" value="1.00"/>			

PO Detail

Related PO Number/Type	<input type="text" value="00928600"/>	<input type="text" value="OP"/>	PO Status	<input type="text" value="220"/>
Vendor	<input type="text" value="57229"/>			
Cost Type	<input type="text" value="D1"/>			

Manufacturing Accounting

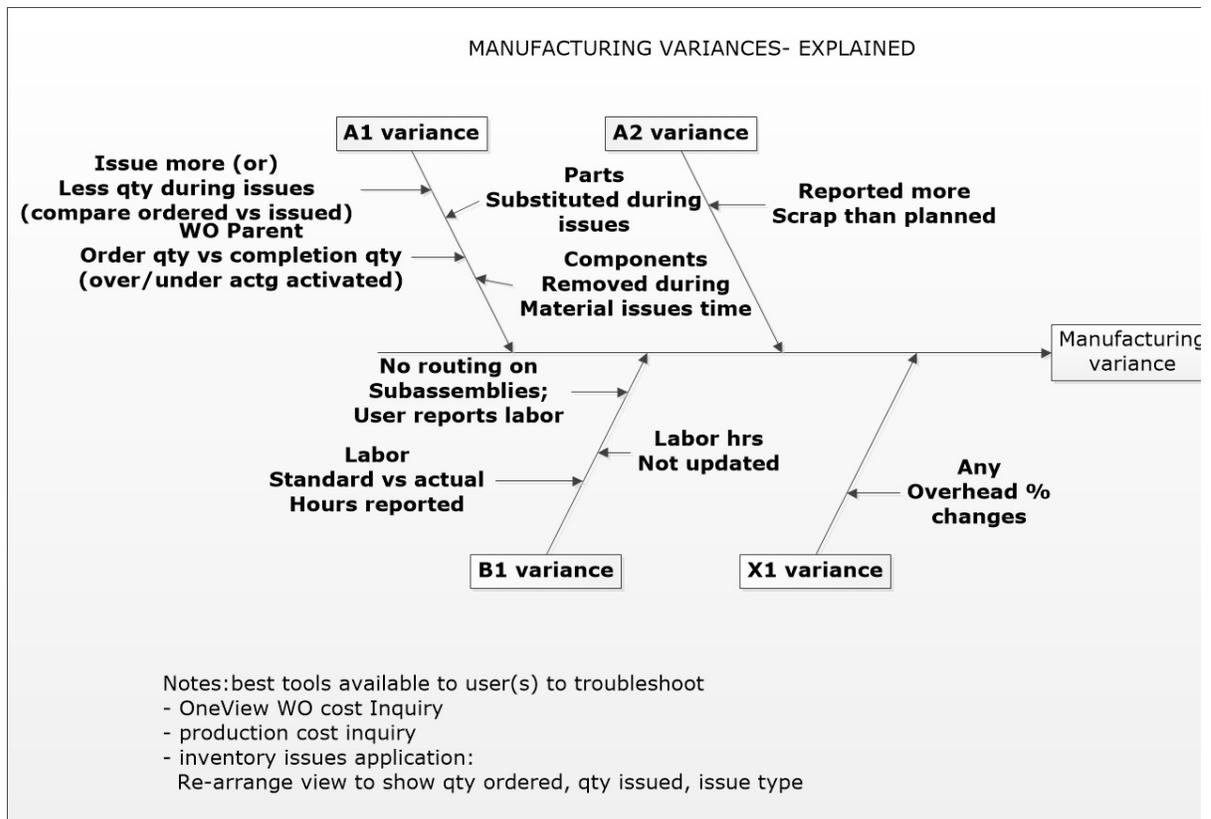
Simple Tips:

* Always run a blind version of R31802A (in scheduler overnight) without status update on WO status like 45(material issued) to WO complete (95). This will update GLDate in Cardex and also generate WIP entries. Users always assume there is a need to 'close' workorders completely for the month-end process. This blind version syncs perpetual to GL on a daily basis.

Manufacturing Accounting troubleshooting

Like MRP message processing, WO manufacturing accounting in Standard Cost environment takes few weeks to stabilize. Operations may issue less or more components to Work orders, report over completion, etc. These changes create major \$ impact to manufacturing accounting. Finance need to set the threshold values for variances per order or per period basis. That will help in focusing on major dollar impact rather than on penny differences. One View WO Cost Inquiry is the best available tool to compare the WO costs. It tells you 'calculated' variances without running variance accounting programs. (see chapter on OneView Inquiries)

Chart below will give various check points on variance calculations



Case Study 1

Implementing E1 manufacturing in industrial automation company

The purpose of this whitepaper is to explain the uniqueness of the JDE manufacturing modules implementation and share the lessons learned during the project. The document explains the major business benefits gained from another Tier-1 system to JDEdwards (JDE) E1 system

The client is a leader in industrial automation products. This company got acquired by a world-wide company and they decided to merge to the corporate system. The manufacturing implementation was the first in the new world-wide organization.

The implementation started in Nov 2016 and got completed in May 2017. Manufacturing modules includes PDM, planning (MRP), shop floor management, product costing & manufacturing accounting. Forecasting was limited to user upload of data into the system on monthly basis.

Major business benefits

- The business is mostly sales order driven. There were daily excel files updated and shared for production meetings. Users spent lot of time in preparation of these files. JDE helped to present the data in Cafe1 view showing customer orders with inventory & WO progress. Production meetings were short and productive!
- In their previous system, WIP was a physical location and that enabled lot of cycle count issues. JDE helped them in moving away from a WIP location but still monitor the WIP \$ correctly. WO parts issue and completion were not systematic previously. JDE brought the discipline and visibility across all users so that duplication efforts are minimized. WO variance in very huge dollars became manageable overnight!
- Doing rework or de-kitting a product was a time-consuming process previously. Simple repair workorder process made their tasks easier. There was no need for closing all open work orders at the month-end for accounting reconciliation.
- The product structure has multiple levels and phantoms was not implemented in the previous system. To avoid generating multiple workorders for each sub-assembly, phantoms are being introduced progressively.
- Floor stock. There was no consistent identification in the previous system and hence some were having real inventory in the books. Adopting floor stock in item branch and bills (issue type code=F) enabled WH to pick the right materials quicker.

Implementation Challenges

PDM: Extracting data from PLM software had resource constraints and time delays. The cut-over criteria were kept changing, like how many years of past sales data, inventory positions and defining current bills. A component from vendor showed up on the go-live date, which was considered obsolete in the cutover. There was wrong assumption that all uom were each. Adding different UOM after conversion posed challenge in the bills, since it has already taken the item master properties. That also initiated continuous addition of uom conversions. On the bills, some of the critical sub-assemblies were dropped for no reason only to be found during cost-rollups. In their

previous system, make part can't be placed on PO so there was constant changing of stocking types.

Costing: Standard costing was used in the implementation. That required lot of data cleanup on the item master cost data since there were not accurate. The inaccurate bills showed up quickly on cost analysis. There was X1 factor added for material burden and that required more testing & validation.

JDE Security: This plant joined the corporate system so the security roles were just assigned in the beginning itself. But the plant users had multiple roles like CS manager responsible for planning function, Cost accountant role which includes WO to cycle count, etc. This required lot of repetitive changes to the security access to their required applications/reports. Finally, a new role was added just for cost accountant since it is not the same as regular finance role.

User Experience

Conference Room Pilots: (CRP) Two CRPs were executed to verify/validate the data upload, transaction processing and user hands-on experience. There were two rounds of UATs as well to re-define some business processes with full converted data.

Training and Documentation: User training was done predominantly during CRP execution. Additional sessions were conducted to walk thru the process and clarify any functional issues. Since the super users were conducting CRP tests it was helpful with the knowledge transfer and faster learning.

Typical user feedback after training:

- Lots of concepts and areas. User learning and absorption is time consuming
- Lots of screens and applications to inquire basic data.
- Confusion between form exit and row exit options.
- Why more order numbers cannot be inserted in the data selection field.
- Status flows in SO, PO and WO transactions. Why some reports update them and others do not?
- There are lots of configurations needed in every module and users underestimated the learning curve.

Next Phases:

There are several potential areas for continuous improvement and system utilization:

Bar codes are already printed in the workorder documentation. Next stage of the project will implement bar code scanners on mfg and inventory

Receipt routing: based on the inspection requirement, the items (coming from purchase order or thru workorder) go into receipt routing for QA clearance. This is a changed process, where QA report WO completions so that inventory gets updated after their approvals.

OneView enhancements: Ability to see shortages with scheduled PO delivery dates; quick metrics on time spent on workorders from release to completion; Zero cost components alerts, etc are some of the enhancements planned during support period.

MRP enhancements: The basic model MRP was rolled-out in this short implementation time frame. There are potential opportunities to bring in forecast

consumption (including customer specific forecasts), using period of supply concepts and lead time rollups.

WO completions: Current model is the use of manual WO material issues (ITC=I) but super backflush so that product routing standard hours are captured as actuals. (PFBF=B). Once the system stabilizes, superbackflush may include consuming hard-committed inventory and routing labor. Additional labor can be reported from stand-alone time entry.

KEY STATISTICS

Number of WO released in a week: 50

Number of quality specs: not used

Total customer AB#: 25+

Total vendor AB#: 500+

Number of JDE users: 60

E1 System 9.1 release, toolset 9.1.5

Oneview, Cafe1, watchlist, UPK used.

Case Study 2

IMPLEMENTING E1 MANUFACTURING IN HEAVY ENGINEERING COMPANY

The purpose of this whitepaper is to explain the uniqueness of the JDE manufacturing modules implementation and share the lessons learned during the project. The document explains the major business benefits from the transition of legacy system to JDEdwards (JDE) E1 system

The client is a large heavy metal products manufacturer and this first phase was at a smaller facility. Their legacy system was outdated technologically and they decided to adopt tier-1 ERP system.

The implementation started in March 2016 and got completed in Oct 2016. Manufacturing modules includes PDM, planning (MRP), shop floor management, product costing, manufacturing accounting and quality management. Forecasting not used since this plant is ETO type of industry.

Major business benefits

- There was disconnect between sales orders and manufacturing orders. Using line type W, there was workorders generated for each sales order line. To assist with field-level installation, each product has quantity of one in every sales order line. Activating WO completions to update back SO helped in better operations monitoring.
- Manufacturing operations goes through multiple routing steps and there could be hold-ups at each operation. JDE's dispatch inquiry was not enough to track the workorders. This was modified to show open routings, after labor entry updates the operation status to 80. Updating WO request date manually helped to clear the backlog

visually in the inquiry application. The inquiry linked the SO pick date so that CSRs and Planners are on the same page all the time!

- One of the sub-assembly level product was kept in FT in the old system. This posed challenges in the physical count and in usage. The UOM was changed to EA and this necessitated all the changes to bills. This was a major conceptual change and it took a while for adoption in the system.
 - The product is serial number driven but there was a need for a fractional quantity and the barcode interface was not reading the serial number table. Hence all the products were lot controlled. Lot trace/track is a critical piece like any other industry.
 - Simple DRP/MRP usage. Some sales orders can be placed for pick at the DC and hence the need for DRP. Most of the finished goods have their unique itemids for each project and product structures were built for that project.
- Implementation Challenges

Bills/routing: Legacy system had lot of past inaccurate data. The data was not updated frequently and operations had their own way of running the manufacturing. There was lot of data clean-up (like removing phantom lines) and deciding the cut-off point for conversion was a challenge given the fast-moving business model. Used the JDE Z-file process to upload converted data. There was flex-accounting turned-on and need to use routing filed job-type to enable correct account posting of labor.

Costing: Standard costing was used in the new implementation. That required lot of data cleanup on the item master cost data. The outside operation as a part of normal routing was not managed well and had to bring those costs upfront for the cost roll-up. WIP was never correct in their legacy system. JDE enabled a correct visibility of WIP at WO level

Time Entry: This is a discrete manufacturing shop environment. Capturing and monitoring labor time was a major focus. This was not done in legacy system. Also, management wanted to capture idle time due to tools, downtime, rework time, etc. The client expected a simple clock-in and clock-out application, which is not available in JDE. Regular JDE time entry was adopted with minimal data entry. When the operation was completed from labor side, a manual ops status update to 80 was done to refresh the dispatch list

Quality Module: JDE does not provide data upload functionality in the quality module tables. A custom data upload utility was built for them.

Next phases

There are several potential areas for continuous improvement and system utilization:
Bar codes are printed in the workorder documentation. Next stage of the project will implement bar code scanners on mfg and inventory

Capacity planning and workorder scheduling. Production scheduling is identified as the next project step. JDE does not provide the routing attributes capabilities (example:

Machine 1 can handle only certain diameter products). Constraint based production scheduling software is a must for the shop management.

Receipt routing: based on the inspection requirement, the items (coming from purchase order or thru workorder) go into receipt routing for QA clearance. This is a changed process, where QA report WO completions so that inventory gets updated after their approvals.

Multi-level S&D inquiry. Single item S&D inquiry does not give total project level analysis. Custom inquiry is being built to bring all project related products into one visible screen for the management review. This could be used in their daily shop floor stand-up meetings as well to prioritize orders.

MRP enhancements: The basic model MRP was rolled-out in this short implementation time frame. There are potential opportunities to bring in product forecasts (including customer specific forecasts, replacing early order material list), using period of supply concepts and lead time rollups.

Super backflush: Backflush was used in the initial implementation since many items are manually issued anyway. There are places where super backflush can be used but that require revamping the product structures.

KEY STATISTICS

Number of WO released in a week: 200

Total quality records: TBD

Number of quality specs: not used

Number of quality test-ids: 14 to start with

Total customer AB#: 25+

Total vendor AB#: 500+

Number of JDE users: 150

E1 System 9.2 release, toolset 9.2

Oneview, Cafe1, watchlist, UPK used.

Case Study 3

IMPLEMENTING E1 MANUFACTURING IN OIL & GAS INDUSTRY

The purpose of this whitepaper is to explain the uniqueness of the JDE manufacturing modules implementation and share the lessons learned during the project. The document explains the major business benefits from the transition of legacy system to JDEdwards (JDE) E1 system

The client is \$25million family owned company in the Oil & gas industry manufacturing gas sampling equipment. The support on their legacy system was ending and they decided to adopt tier-1 ERP system.

The implementation started in June 2015 and got completed in Oct 2015. Manufacturing modules includes PDM, planning (MRP), shop floor management, product costing, manufacturing accounting and quality management. Forecasting not

used since the data was still at family level.

Major business benefits

- Legacy system was used with re-order point. In E1, safety stock concept was used. Client moved to demand-driven planning from static ROP levels. Long-lead time system orders gave visibility to combine procurement process ahead. Using fixed order quantity in workorders helped them to avoid multiple change-overs in machine shop.
 - No paper based logs. Orders having engineering or estimation issues were noted and kept in a log book. There were more than 25 workorder priority codes and these were constantly changed on daily basis. Usage of media attachment and remark fields made the transactions transparent to any user.
 - Outside operations. Besides the outside operations defined in the master routing, operations can send items out if in-house capacity is not available. This was completely manual process with no visibility. Using JDE WOs generating outside operations purchase orders gave visibility and control to operations, purchasing and accounting.
 - Lot/Serial number. Client has major needs on customer certification and the need to capture quality testing data. Quality module was implemented along with workorders to capture test results. Serial numbers are generated upfront during WO entry and monitored along the mfg process.
 - Operations were capturing labor hours used in inventory transactions as a part of routing step. If the inventory is short, there were multiple routing steps to go back and forth. Using WO inventory commitment and shortage analysis removed multiple routing steps and release the order only when all the materials are available.
- Implementation Challenges

Combined bills/routing: Legacy system has one single table for bills and routing with lot of text lines. The data was not updated frequently and operations had their own way of running the manufacturing. Splitting the data into bills, routing and routing attachment was challenging with multiple uploads in CRPs. Client's tech team developed in-house process to append all text lines into item master notes.

Costing: Company was using average costing and the variation on the finished goods cost was very high due to labor skills used. This also resulted in lack of margin visibility. Standard costing was used in the new implementation. That required lot of data cleanup on the 'time-basis' on the routing. The outside operation as a part of normal routing was not managed well and we have to bring those costs upfront for the cost roll-up.

Time Entry: This is a machine shop environment. Capturing and monitoring labor time was a major focus. Operations had the concept of 'labor balancing' to account the entire time spent by an operator on work-order or non-productive work. The client expected a simple clock-in and clock-out application. Regular JDE time entry was adopted with minimal data entry. Labor balancing concept was removed since WO time

and payroll time need not match each other.

Quality Module: JDE does not provide data upload functionality in the quality module tables. Client did the table conversion using SQL from the spreadsheets and that needed lot of front-end testing

Next phases

Capacity planning and workorder scheduling. Production scheduling is identified as the next project step. JDE does not provide the routing attributes capabilities (example: SAW machine 1 can handle only certain diameter products). Constraint based production scheduling software is a must for the machine shop management.

Receipt routing: based on the inspection requirement, the items (coming from purchase order or thru workorder) go into receipt routing for QA clearance. This is a changed process, where QC can review the lot dates and enter the country of origin (COO) in the lots. The COO gets printed in the shipping documents for customs.

Dispatch list enhancement. Custom changes proposed to check whether the last operation is complete or not. Shop floor operators need dispatch list to monitor the job status and hence this is a critical requirement.

MRP enhancements: The basic model MRP was rolled-out in this short implementation time frame. There are potential opportunities to bring in product forecasts (including customer specific forecasts), using period of supply concepts and lead time rollups.

Usage of phantoms: The average bill has five levels and many of intermediate products can be configured as phantoms. Since those items can be sold as well, the decision has been deferred for after go-live phase

KEY STATISTICS

Number of WO released in a week: 150

Total quality records: 9375

Number of quality specs: 54

Number of quality test-ids: 137

Total customer AB#: 4900

Total vendor AB#: 930

Number of JDE users: 70

E1 System 9.1 release, toolset 9.1

Oneview, watchlist, UPK used.

OneView Inquiries:

How to interpret OneView Work Order Cost Analysis?

In discrete manufacturing environment, Operations & Cost Accounting need a tool to see how the WO costs are progressing. The days of doing Journal Entries after period close are over!. This Oneview Inquiry is the best tool and it deserves it's own chapter since this is very powerful

This is somewhat replica of F3102 table where advanced users build their queries. In most implementations there are custom reports written on that table. This oneview inquiry replaces those needs. Since this is an inquiry tool, all users can have access and the data gets updated as the work order gets processed.

Running manufacturing accounting final is the obvious need to get \$\$ values in the grid. The tool gives the calculated variances even if the work order is not yet complete.

Manufacturing variance often happens to a set of products due to it's bills or routing accuracy issues. Using this tool, Managers can analysis a specific product across multiple weeks range. This is not possible using regular Production Cost Inquiry.

One View Work Order cost Analysis - One View Work Order Cost Analysis Inquiry

Item Number: *

Records 1 - 6

Work Order Branch/Plant	WO Order Type	WO Order Number	2nd Item Number	Component 2# Number	Item Description	WO Start Date	WO Request Date	Date WO Completed	WO Quantity Ordered	WO Quantity Completed	WO St	Referenc
800 WO		125462	17201-36000		BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004
800 WO		125462	17201-36000		BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004
800 WO		125462	17201-36000		BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004
800 WO		125462	17201-36000		BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004
800 WO		125462	17201-36000	17200-36000	BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004
800 WO		125462	17201-36000		BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004

One View Work Order cost Analysis - One View Work Order Cost Analysis Inquiry

Item Number: *

Records 1 - 6

Query: All Records

Customize Grid DEMO

Parent Child	Cost Type	Cost Type Description	Standard Units	Standard Amount	Complete Units	Completed Amount	Actual Units	Actual Amount	WO U Measu	Current Units	Current Amount	Calculated Planned Variance	Calculated Engineering Variance	Calculated Actual Variance	Calculated Other Variance	Run La Actual
P	A1	Material	1.0000	14,920.4390	1.0000	14,922.6390	1.0000	29,845.2780	EA	1.0000	14,883.0302	39.6088	37.4088-	14,922.6390	2.2000-	
P	B1	Direct Labor	1.0000	16.4372	1.0000	16.4372			EA	.5800	16.4372			16.4372-		
P	C3	Labor Variable O...	1.0000	49.3116	1.0000	49.3116			EA	.5800	49.3116			49.3116-		
P	X2	Extra overhead 2	1.0000		1.0000		1.0000		EA							
C							2.0000	29,845.2780	EA	1.0000	14,883.0302					
									EA							

How to interpret OneView Work Order Cost Analysis

Implementing Oracle JDE Manufacturing Tips & Tricks

One View Work Order cost Analysis - One View Work Order Cost Analysis Inquiry

Item Number: *

Records 1 - 6

Work Order Branch/Plant	WO Order Type	WO Order Number	2nd Item Number	Component 2# Number	Item Description	WO Start Date	WO Request Date	Date WO Completed	WO Quantity Ordered	WO Quantity Completed	WO St	Referen
800 WO		125462	17201-36000		BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004
800 WO		125462	17201-36000		BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004
800 WO		125462	17201-36000		BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004
800 WO		125462	17201-36000		BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004
800 WO		125462	17201-36000	17200-36000	BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004
800 WO		125462	17201-36000		BUNDLE,VIPER 650,E...	04/24/2017	04/24/2017	04/19/2017	1.0000	1.0000	99	OK004

One View Work Order cost Analysis - One View Work Order Cost Analysis Inquiry

Item Number: *

Records 1 - 6

Customize Grid: DEMO

Parent Child	Cost Type	Cost Type Description	Standard Units	Standard Amount	Complete Units	Completed Amount	Actual Units	Actual Amount	WO U. Measu.	Current Units	Current Amount	Calculated Planned Variance	Calculated Engineering Variance	Calculated Actual Variance	Calculated Other Variance	Run Lab Actual
P	A1	Material	1.0000	14,920.4390	1.0000	14,922.6390	1.0000	29,845.2780	EA	1.0000	14,883.0302	39.6088	37.4088-	14,922.6390	2.2000-	
P	B1	Direct Labor	1.0000	16.4372	1.0000	16.4372			EA	.5800	16.4372			16.4372-		
P	C3	Labor Variable O...	1.0000	49.3116	1.0000	49.3116			EA	.5800	49.3116			49.3116-		
P	X2	Extra overhead 2	1.0000		1.0000		1.0000		EA							
C							2.0000	29,845.2780	EA	1.0000	14,883.0302					

One View Work Order cost Analysis - One View Work Order Cost Analysis Inquiry

Item Number: *

Records 1 - 6

Customize Grid: DEMO

Parent Child	Cost Type	Cost Type Description	Standard Units	Standard Amount	Complete Units	Completed Amount	Actual Units	Actual Amount	WO U. Measu.	Current Units	Current Amount	Calculated Planned Variance	Calculated Engineering Variance	Calculated Actual Variance	Calculated Other Variance	Run Lab Actual
P	A1	Material	1.0000	14,920.4390	1.0000	14,922.6390	1.0000	29,845.2780	EA	1.0000	14,883.0302	39.6088	37.4088-	14,922.6390	2.2000-	
P	B1	Direct Labor	1.0000	16.4372	1.0000	16.4372			EA	.5800	16.4372			16.4372-		
P	C3	Labor Variable O...	1.0000	49.3116	1.0000	49.3116			EA	.5800	49.3116			49.3116-		
P	X2	Extra overhead 2	1.0000		1.0000		1.0000		EA							
C							2.0000	29,845.2780	EA	1.0000	14,883.0302					

Create **WO:std** value from F30026 added

Report WO completion

Component issues: \$ gets updated after mfg accounting

Attach **PL/Rtg:** **component** values are added

\$ diff FG bills vs partslist

\$ diff FG WO vs recent cost roll

\$ diff partslist vs **comp** issues

\$ diff between planned vs **Engg**

Another useful Oneview inquiry is the Oneview Inventory Inquiry (P41271)

About the Author:

Mathur (matt) Ravikumar holds a bachelor of engineering degree and have done post-diploma work in management/accounting. He has worked in manufacturing and information technology field for more than three decades.

He has written business white papers, newspaper articles and published content in professional magazine ‘Performance Advantage’ by APICS (Association for Operations Management- with 30000 industry professionals). He has presented paper two times in the world-wide Oracle User conference Collaborate.

He was a speech-writer to a company CEO and still love to hear great speeches. The acquired and published material content are available at his website. He frequently blogs at blogger websites and also in linked-in.

He is a regular meditator and trekked to Himalayas (Mount Kailash) towards a spiritual journey in 2016. His publications are available in Amazon.com and in kobobooks. (Search: matt ravikumar) He lives near San Francisco/California and can be reached by email, matravikumar@gmail.com (or) matt@enterpriseprojects.com

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