

R12 Workstation Enhancements – Discrete, Flow and OPM

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Agenda

- Introduction
- Flow Workstation Enhancements
- Discrete Workstation Enhancements
- Process Manufacturing Workstation Enhancements
- Wrap-up and Questions

Workstations – Shop Floor Execution - MES

- This presentation will review the new R12 functionality
 - Flow Workstation
 - Discrete Workstation
 - OPM Workstation
- Setup of the Workstations
- Shop Floor use of the Workstations
- Some possible “gotcha’s”
- Compare and contrast the 3 Workstations

Flow Workstation 11i/10 – Past History

- Flow HTML Workstation First Released 11i10
 - Flow Sequencing - New Attributes and Constraints
 - Setting Up Constraints, Grouping Constraints Into Rules
 - Solves the Sequencing Problem – Daily
 - Assembly Sequence is Output Using Your Rules
- Attachments – Displayed
 - Standard Events
 - Line Operations,
 - Sales Orders
 - Items
- Kanban Replenishment
- ECO Notification
- Update Production – Back to Forms to Complete Schedule

R12 Flow Workstation Enhancements

- **Record Actual Material Usage**
 - Actual component usage can be entered at each operation
 - Previous version only at Flow Schedule completion
 - Component substitutions at operation
 - Component lot /serial information entered at operation
- **Flow Schedule Update At Operation**
 - Scheduled Quantity
 - Build Sequence
 - Revision Information
- **Flow Schedule Completion – (Without going back to the forms)**
 - Total completion of a Flow a schedule directly within the Workstation is now possible
 - Express completion which requires no additional input from the user
 - Normal completion where the assembly and component information can be reviewed and/or updated

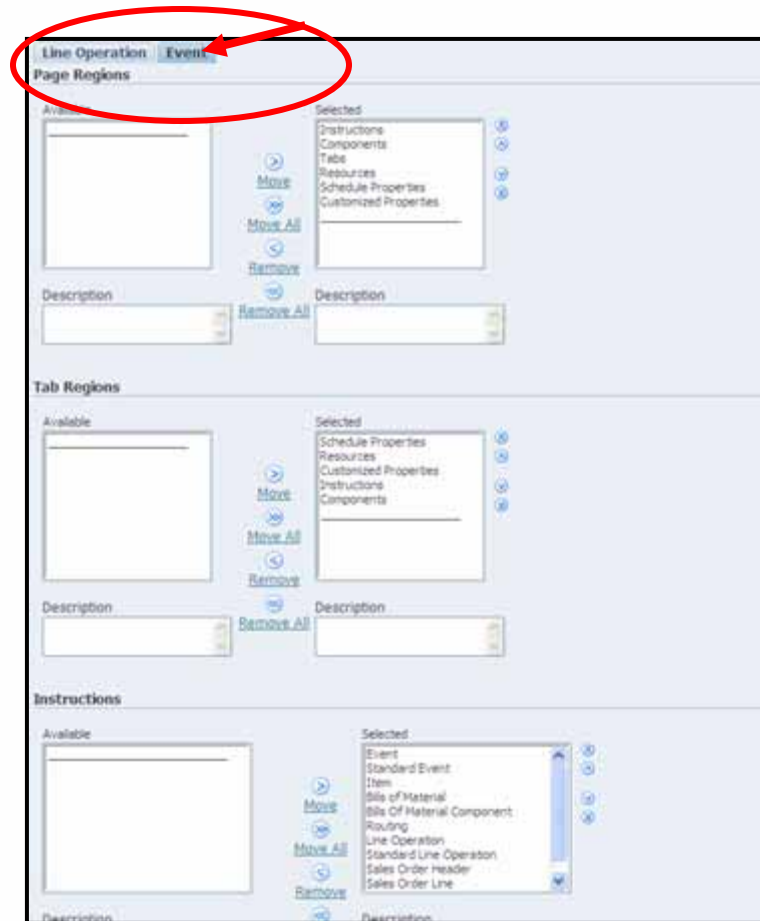
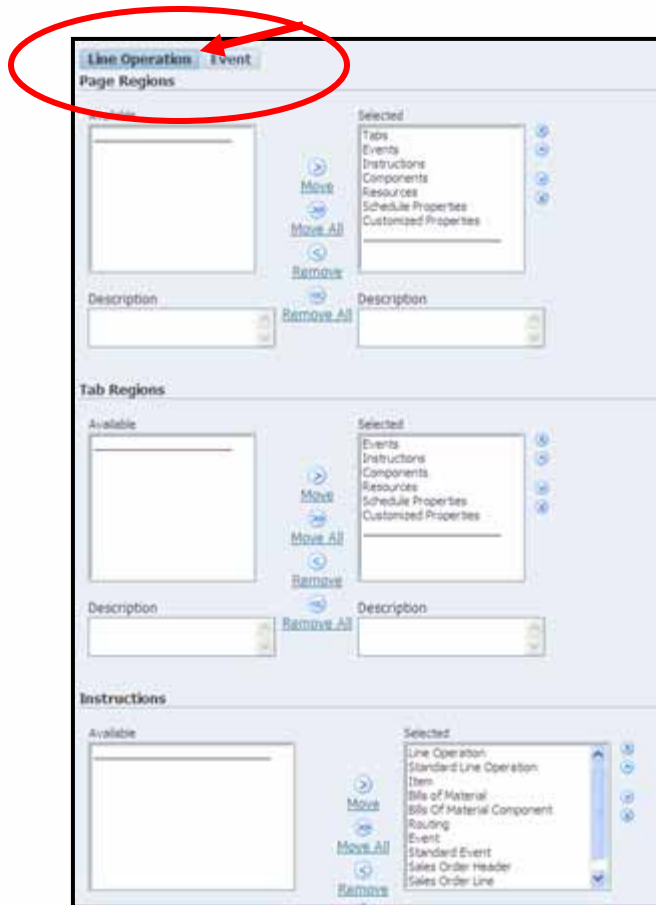
R12 Flow Workstation Enhancements

- **Built In Quality Collection**
 - Flow Operation Completions
 - Flow Schedule Completions
- **Non-Unit Schedule Support**
 - Support partial completion of non-unit quantities
 - View all uncompleted schedules at any operation
- **Backflush Option**
 - Determine if all components for an event should be backflushed

Flow Workstation Setup

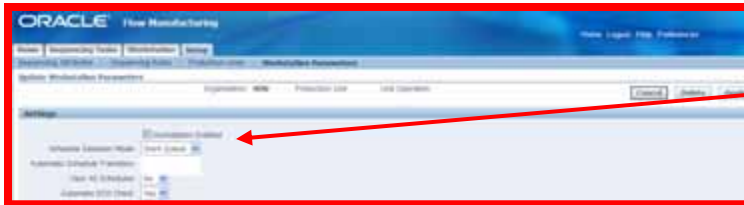
The screenshot shows the Oracle Flow Manufacturing 'Workstation Parameters' setup screen. A red circle highlights the 'Setup' tab and the 'Workstation Parameters' link in the navigation menu. An arrow points from the 'Responsibilities' dialog box to the 'Workstation Parameters' link. The 'Responsibilities' dialog box is open, showing a search field with 'Find%' and a list of responsibilities: 'Flow Execution Workstation', 'Flow Manufacturing', 'Flow Sequencing and Execution', and 'Inventory'. The 'Flow Sequencing and Execution' responsibility is selected. Below the dialog box, the 'Update Workstation Parameters' section shows 'Organization HOU', 'Production Line', and 'Line Operation' fields, with 'Cancel' and 'Apply' buttons. The 'Settings' section includes a 'Workstation Enabled' checkbox (checked), 'Schedule Selection Mode' set to 'Work Queue', 'Automatic Schedule Transition' set to 'No', 'View All Schedules' set to 'No', 'Automatic ECO Check' set to 'No', 'ECO Days Prior' and 'ECO Days After' both set to '0', 'Backflush Option' set to 'Actual / Primary Path', and 'Instruction Frame Height' set to '800'. At the bottom, there are 'Line Operation' and 'Event' tabs, and 'Page Regions' text.

Flow Workstation Setup

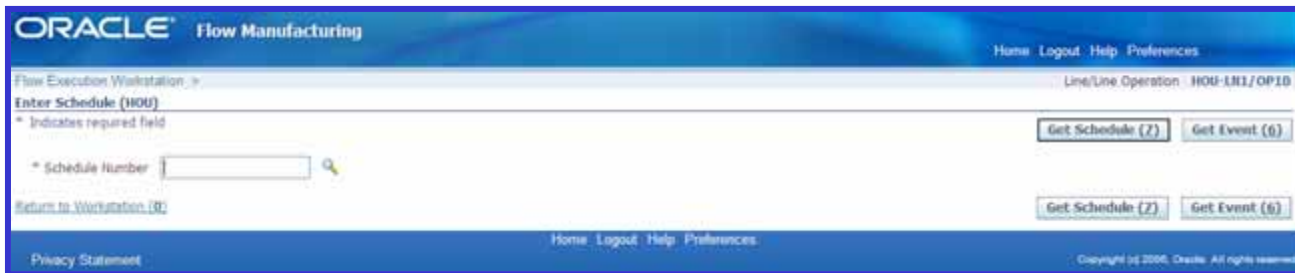


A Line Operation Region and an Event Region choices are available for customizing per your organization's needs.

Flow Workstation Enhancements



The setup of the schedule selection mode can yield two different ways to enter the Workstation.



Flow Workstation Enhancements

ORACLE Flow Manufacturing Close Window Help Preferences

Home Sequencing Tasks Workstation Setup

Workstation: > Line/Line Operation: HOU-LN1/OP10

Work Queue (HOU)

Flow Schedules

Select Schedule: Act

Select Schedule Number	Assembly	Assembly Description	Build Seq	Planned Quantity	Completion Date
<input checked="" type="radio"/> 913	FLM-Assembly1	Flow Assembly 1			25 30-Jan-2008 2
<input type="radio"/> 914	FLM-Assembly1	Flow Assembly 1			25 31-Jan-2008 2

Events: 915

Event Seq	Code	Description	Department
11	EV01	Standard Event 1	FLOW-1

[Return to Workstation \(0\)](#)

Home Sequencing Tasks Workstation Setup Close Window Help Preferences Copyright (c) 2006, Oracle. All rights reserved.

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When you enter the Workstation Flow Schedules are presented for either Operation or Schedule completion.

Flow Workstation Enhancements

The screenshot displays the Oracle Flow Manufacturing workstation interface. At the top, it shows the 'ORACLE Flow Manufacturing' header with navigation tabs for 'Home', 'Sequencing Tasks', 'Workstation', and 'Setup'. The current workstation is identified as 'HOU-LR1/OP10'. Below this, there are buttons for 'Express Complete Line Operation (5)', 'Complete Line Operation (9)', 'Complete Schedule (3)', and 'Express Complete Schedule (4)', along with an 'Action' dropdown set to 'Scrap Assembly' and a 'Go' button. Key data points include Schedule Number 915, Assembly FLM-Assembly1, and Scheduled Qty 25. The 'Event Description' section shows 'Standard Event 1'. A table for 'Components' is currently empty, displaying columns for Event Seq, Item Seq, Component, Description, Ref, Revision, Basis, UOM, Qty, Effectivity Date, Disable Date, and Kanban. The 'Instructions' section is active, showing a 'View All Instructions' button and a toolbar with options like 'Save a Copy', 'Search', and 'Select'. The main content area displays a 'DFT Prototype Method Sheet FAPS' for 'Step 10' of 'DFT'. The sheet includes a photograph of a device with red and yellow wires, and a legend with symbols for TQC (red triangle), Work Content (yellow square), and Verify (green circle). A specific instruction '1. Affix a tie mount' is visible at the bottom of the sheet.

The Event Display in this screen shot shows the attached instructions. The type and amount of attachments is really unlimited.

Flow Workstation Enhancements

ORACLE Flow Manufacturing

Close Window Help Preferences

Home Sequencing Tasks Workstation Setup

Workstation: > Work Queue (HOU) > Schedule: 914 (HOU) > Line/Line Operation: HOU-LR1/OP10

Complete Line Operation: 914 (HOU)

Schedule Number **914** Assembly **FLM-Assembly1** Scheduled Qty **25**
Build Sequence Assembly Description **Flow Assembly 1** Open Qty **25**

Applicable Quality Plans

Plan Name	Information	Mandatory	Completed	Attachments	Duplicate	Update	Delete	Add Child Data
No applicable plans.								

Completion Destination

Choose Destination: OP20(FLOW-1) - Primary(100.0%)

Home Sequencing Tasks Workstation Setup Close Window Help Preferences

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Completing a Line Operation is fast and easy.

Flow Workstation Enhancements

Collection Plan: FLOW LINE QUALITY
 Description: Flow Line Quality Collection Plan
 Effective: 04-FEB-2008
 Plan Type: WIP Inspection
 Record Option: Per Row
 Buttons: Copy Elements, Transactions, Specifications

Name	Seq	Prompt	Mandatory	Enabled	Read-Only	Displayed
Quantity	50	Quantity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
UOM	60	UOM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
From Op Seq Number	70	From Op Seq Number	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Department	110	Department	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	120	Comments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Quality Setup is performed in Quality Forms using the Collection Transactions – Triggers for a Flow Operation Completion.

Quality Collection Transactions

Transaction Description	Workbench Layout	Mandatory	Background	Enabled
Line Operation Completion (Flow Manufacturing Workstation)	Multiple Row	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Collection Triggers (all conditions must be met for data collection)

Trigger Name	Condition	From	To
Item	equals (=)	FLM-Lot-Control1	

Flow Workstation Enhancements

ORACLE Flow Manufacturing Home Logout Help Preferences

Home Sequencing Tasks Workstation Setup

Workstation > Work Queue (HOU) > Schedule: 957 (HOU) > Line/Line Operation: HOU-LN1/OP10

Information
Mandatory QA plans must be completed before operation completion.

Complete Line Operation: 957 (HOU)

Schedule Number	957	Assembly	FLM-Lot-Control1	Scheduled Qty	5	Cancel Apply
Build Sequence	20	Assembly Description	Flow Lot Assembly 1	Open Qty	5	

Applicable Quality Plans

Expand All | Collapse All

Focus Plan Name	Information	Mandatory	Completed	Attachments	Duplicate	Update	Delete	Add Child Data
FLOW LINE QUALITY	Flow Line Quality Collection Plan	Yes	✗					+

Completion Destination

Choose Destination OP20(FLOW-1) - Primary(100.0%)

Entry of Quality data is handled entirely in the Workstation once the setup is done.

ORACLE Flow Manufacturing Home Logout Preferences

Home Sequencing Tasks Workstation Setup

Workstation > Work Queue (HOU) > Complete Line Operation: 958 (HOU) >

Add Data: Enter Results Cancel Apply

* Indicates a Required Field

Plan Name	FLOW LINE QUALITY	Plan Type	WIP Inspection
Description	Flow Line Quality Collection Plan	Plan Attachments	None
Prod Line	HOU-LN1	Item	FLM-Lot-Control1
Quantity	5	UOM	EA
Schedule Number	958	Line Operation	OP10

Details	*Defect Code	*Qty Defect	*Department	Comments	Attachments
Hide	Metallurgy		FLOW-1	Surface Def	+
Detailed Description		The finish show some det and will be within specifications but should be monitored by QA.			

Flow Workstation Enhancements

ORACLE Flow Manufacturing Home Logout Help Preferences

Home | Sequencing Tasks | **Workstation** | Setup

Workstation > Work Queue (HOU) > Line/Line Operation: HOU-LN1/OP10

Complete Line Operation: 958 (HOU)

Schedule Number 958 Assembly **FLM-Lot-Control1** Scheduled Qty 5
 Build Sequence 23 Assembly Description **Flow Lot Assembly 1** Open Qty 5

Applicable Quality Plans

[Expand All](#) | [Collapse All](#)

Focus	Plan Name	Information	Mandatory	Completed	Attachments	Duplicate	Update	Delete	Add Child Data
	FLOW LINE QUALITY	Flow Line Quality Collection Plan	Yes	✓					+
	FLOW LINE QUALITY			✓					

Completion Destination

Choose Destination OP20(FLOW-1) - Primary(100.0%)

Once the Quality info is complete the user can duplicate or update the entry.

Flow Workstation Enhancements

ORACLE Flow Manufacturing Home Logout Help Preferences

Home Sequencing Tasks Workstation Setup

Workstation > Line/Line Operation: H0U-LH1/OP10

Work Queue (H0U)

Flow Schedules

Select Schedule: [Express Complete Line Operation \(5\)](#) [Complete Line Operation \(9\)](#) [Complete Schedule \(3\)](#) [Express Complete Schedule \(4\)](#) [Get Event \(6\)](#) [Get Schedule \(Z\)](#) Action

Select Schedule Number	Assembly	Assembly Description	Build Seq	Pl
<input type="radio"/> 957	FLM-Lot-Control1	Flow Lot Assembly 1	20	
<input checked="" type="radio"/> 959	FLM-Lot-Control1	Flow Lot Assembly 1	25	
<input type="radio"/> 960	FLM-Lot-Control1	Flow Lot Assembly 1	27	
<input type="radio"/> 961	FLM-Lot-Control1	Flow Lot Assembly 1	29	
<input type="radio"/> 962	FLM-Lot-Control1	Flow Lot Assembly 1	31	

Events: 959

Event Seq	Code	Description	Departm
11	EV01	Standard Event 1	FLOW-1

[Return to Workstation \(0\)](#)

Home Sequencing Tasks Workstation Setup Home Logout Help Preferences

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Completing a Flow Schedules is fast and easy.

Flow Workstation Enhancements

ORACLE Flow Manufacturing Close Window Preferences

Flow Execution Workstation > Work Queue (HOU) > Schedule: 920 (HOU) > Line/Line Operation HOU-LN1/OP10

Update Schedule (HOU)

Schedule Number	920	Assembly	FLM-Lot-Control1	Scheduled Qty	5	<input type="button" value="Cancel"/> <input type="button" value="Apply"/>
Build Sequence		Assembly Description	Flow Lot Assembly 1	Open Qty	5	

* Indicates required field

Schedule Details

* Scheduled Qty	<input type="text" value="5"/>	Alternate Routing	<input type="text"/>	<input type="button" value="Find"/>
Build Sequence	<input type="text"/>	Sales Order	10000036-Standard Ord	<input type="button" value="Find"/>
Subinventory	<input type="text"/>	Order Line	2.1	<input type="button" value="Find"/>
BOM Revision	0	Schedule Group	<input type="text"/>	<input type="button" value="Find"/>
BOM Revision Date	31-Jan-2008 23:59:00	Kanban Card	<input type="text"/>	
	<small>(example: 26-Jan-2008 19:45:00)</small>			
Routing Revision	0			
Routing Revision Date	31-Jan-2008 23:59:00			
Alternate BOM	<input type="text"/>			

Assembly Lot

Select Lot Entry:

Lot	Attributes Qty
<input type="text" value="FLM00002"/> <input type="button" value="Find"/>	<input type="text" value="5"/>
<input type="button" value="Add Another Row"/>	

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Updating of the Flow Schedule can be done from the Workstation.

Flow Workstation Enhancements

ORACLE Flow Manufacturing Home Logout Help Preferences

Home Sequencing Tasks **Workstation** Setup

Workstation > Work Queue (HOU) > Event: EV01 (HOU) > Line/Line Operation: HOU-LN1/OP10

Update Components (HOU)

Schedule Number 959 Assembly FLM-Lot-Control1 Scheduled Qty 5
 Build Sequence 25 Assembly Description Flow Lot Assembly 1 Open Qty 5

Backflush Components

Select Component:

Select Op Seq Component	Subinventory	Locator	Qty	UOM	Lot Number	From	To	Parent	Serial
<input type="radio"/> 11	100*00001-HOTRO	RAW	250	LB					

Home Sequencing Tasks Workstation Setup Home Logout Help Preferences

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Issuing of material to Flow Schedules is handled inside the Workstation and Lot and/or Serial information can be added.

Flow Workstation Enhancements

ORACLE Flow Manufacturing Home Logout Preferences

Home Sequencing Tasks Workstation Setup

Workstation > Work Queue (HOU) > Event: EV01 (HOU) > Line/Line Operation HOU-LN1/OP10

Complete Schedule: Assembly Details (HOU)

Schedule Number 959 Assembly FLM-Lot-Control1 Scheduled Qty 5
 Build Sequence 25 Assembly Description Flow Lot Assembly 1 Open Qty 5

* Indicates required field

Assembly Details

* Quantity 5
 * UOM EA
 * Subinventory FGI
 BOM Revision 0
 BOM Revision Date 04-Feb-2008 23:59:00
 Routing Revision 0
 Routing Revision Date 04-Feb-2008 23:59:00
 Alternate BOM

Alternate Routing
 Sales Order 10000037-Standard Ord
 Order Line 1.1
 Reserved
 Reason
 Comment

Assembly Lot and Serial

Lot
 Select Lot Lot Details Actions Generate Lot Number Go

Select Lot	Lot	Parent Lot	Qty	Avail	UOM
<input checked="" type="radio"/>	FLM00002		3		EA
<input type="radio"/>	FLM00003		2		EA
<input type="radio"/>					EA
<input type="radio"/>					EA
<input type="radio"/>					EA

Add 5 Rows Re Calculate Total 0

Flow Schedule Completion is done totally in the Workstation and the Assembly Lot or Serial information entered.

Discrete MES in R12 - Background

- Newly introduced in Release 12
- Objectives:
 - Eliminate or greatly reduce the need to navigate to numerous screens to obtain job information and report progress and consumption
 - Streamline some cumbersome data entry tasks
 - Include some related enhancement requests
- Overriding assumption: workers interact with Oracle
 - Workers need access to a computer
 - Machines are not the data reporters

What Type Manufacturing Environment Can Benefit the Most?

- In-house manufacturing or assembly
- Transaction-heavy environment
- High volume of discrete jobs
- Currently using or considering purchasing a standalone MES package

Major Features – most noteworthy

- Operator and supervisor layouts
- Dispatch lists
- Clock in/out
- Compound transactions
- Inline lot and serial entry
- Streamlined quality data collection including parent/child
- Numerous configuration parameters

Parameter Settings

...specific to Discrete MES

- They control: UI, behavior, content, security
- A few of the most valuable are:



- *Dispatch list working order & content*
- *Job actions and global actions*
 - *Button or choice list*
- *Ready status criteria*
- *Time entry mode*

- Set at various levels: site, role, org, department

Operator and Supervisor Layouts

- **Operator – MES Workstation**
 - The tasks your shop workers perform today
 - Context: organization, department, resource
- **Supervisor – MES Supervisor Workbench**
 - Activities typically supervisory in nature

The starting point for shop floor workers

Dispatch List

Dispatch List is a tabular listing of job operations in the work queue of a resource or department.

**Highly
configurable**

- What job operations are shown (timeframe, status)
- How they are ordered, grouped
- What operation data columns are shown / hidden
- How the system behaves w.r.t. working order
- Whether time is displayed in date fields

Dispatch List

Dispatch List displaying a job queue for the current shift

ORACLE MES Workstation

Close Window Help Preferences Startup

Logged In As: Gray, Mr. Larry (HOU, ASSY, LBR-1a)

MES Workstation

Last Updated 10-Feb-2008 13:07:59 - Shift 1 (07:00:00 - 16:00:00)

* Indicates required field

Printable Page Actions Print Discrete Job Routing Go

View Options

Department: ASSY
Resource: LBR-1a
Instance: All

Dispatch List: Current
From Date:
To Date: 11-Feb-2008 16:00:00

More Options

RED = some of the new features in MES Release 12

Dispatch List

Select Job Op: Bodge Move Assembly (4) Actions View Work Content Go Reorder list Express Move

Select Job Op	Ready	Clock In/Out		Start Date	Assembly	Total Qty			Customer	Shift	Resource		Express Move Qty	
		Action	Name			Op	Prior UOM	Exception			Usage	Availability	Complete	Scrap
<input checked="" type="radio"/> bk-job1:10	✗			11-Feb-2008 07:00:00	Assy-No-Control1	1	EA	Component		1	0.5	8.5	<input type="text"/>	<input type="text"/>
<input type="radio"/> bk-job2:10	✓		Gray, Mr. Larry	11-Feb-2008 07:00:00	Assy-No-Control1	2	EA			1	1	7.5	<input type="text"/> 1	<input type="text"/> 1
<input type="radio"/> bk-job4:10	✓			11-Feb-2008 09:00:00	Assy-No-Control1	2	EA			1	1	6.5	<input type="text"/> 2	<input type="text"/>
<input type="radio"/> bk-job3:10	✓			11-Feb-2008 10:00:00	Assy-No-Control1	5	EA			1	2.5	4	<input type="text"/>	<input type="text"/>
<input type="radio"/> bk-job6:10	✓			11-Feb-2008 12:00:00	Assy-No-Control1	10	EA			1	5	-1	<input type="text"/>	<input type="text"/>
<input type="radio"/> bk-job5:10	✓			11-Feb-2008 13:00:00	Assy-No-Control1	8	EA			1	4	-5	<input type="text"/>	<input type="text"/>

Dispatch List Details

- **Types: Schedule or Actual**
- **Newly visible features/information:**
 - **Operation readiness- assemblies in Queue/Run**
 - **Job-on, for when multiple employees could possibly choose the same operation**
 - **Running resource availability**
- **Actions dropdown list enables single-click for numerous activities and access to additional data**
- **Drilldown to work content – component requirements, attachments, more (*see later slide*)**

configurable

configurable

Dispatch List

...conditions for Optimum Benefit

- Jobs have routings
- Operations have resources, time-based are best
- Move transactions are processed online
- Moves are performed for every operation



- *There is an alternative to the dispatch list... a job search function. Intended for operations that work on whatever job comes to them.*

Shop Floor Time Entry

- Three workstation parameters apply here:
 - Time entry mode: use clocks or not (next slide)
 - Create resource transactions at clock time
 - Combine job-on and clock-in buttons
- Supports one or multiple employees working on an operation

NOTE:

- Every worker charging direct labor must be defined as an instance of at least one resource

Clock In and Out

If you enable this...

- Records the operation Actual Start Time
 - Enables calculating projected completion time
 - Assists APS scheduling of operations in progress
- Provides visibility to who is working on a job

Supervisor
Dashboard

Supervisor
Dashboard

Additional Information:

- If multiple operators, they must all clock in
- Resource validation through Departmental Access parameter

Work Content Drilldown

All the Operation Related Details

configurable

- View requirements, work instructions, operators clocked in
- Perform transactions through use of dropdown list
 - Do many of the same things here and in the dispatch list in context of a single job operation
- View sales order / customer, if job tied to sales order
- Enter operation notes in free form text

Work Content is all the information required to perform work on an operation. It includes component and resource requirements, work instructions, attachments, job properties, and more.

Work Content Page

Employees clocked in

Attachments

MES Workstation > Logged In As: Gray, Mr. Larry (HOU, ASSY, LBR-16)

Work Content: BK-Job2:10

Badge: Clock In (0) Clock Out (9) Move Assembly (4) Complete Assembly (6) Actions: Reject Assembly

Current Working Employees

Employee	Start Date
Gray, Mr. Larry	10-Feb-2008 12:47:42

Components

Component	Description	Date Required	Basis	Per Assembly	Quantity			Available On-Hand	UOM	Type	Supply		Instructions
					Required	Issued	Open				Subinv	Locator	
Comp-No-Control	Component1	11-Feb-2008 07:00:00	Item	2	4	0	4		0 EA	Operation Pull	STK		⬆
Comp-Lot-Control	Lot Component 1	11-Feb-2008 07:00:00	Item	2	4	0	4		0 EA	Push			⬆
Comp-Serial1	Serial Component 1	11-Feb-2008 07:00:00	Item	1	2	0	2		0 EA	Push			⬆

Attachments

Source Name: Discrete Operation 09 Attach Seq: 10 Description:

Cosmo3D: Camera

- Ortho: "blueprint" mode
- Perspective: "realty" mode

Transaction Efficiency

- **Compound transactions - move/complete + scrap/reject**
- **Badge # requirement for moves and completions**
- **Lot/serial dynamic fields and inline entry**
- **Express Move: Report completion on multiple job operations in a single pass**

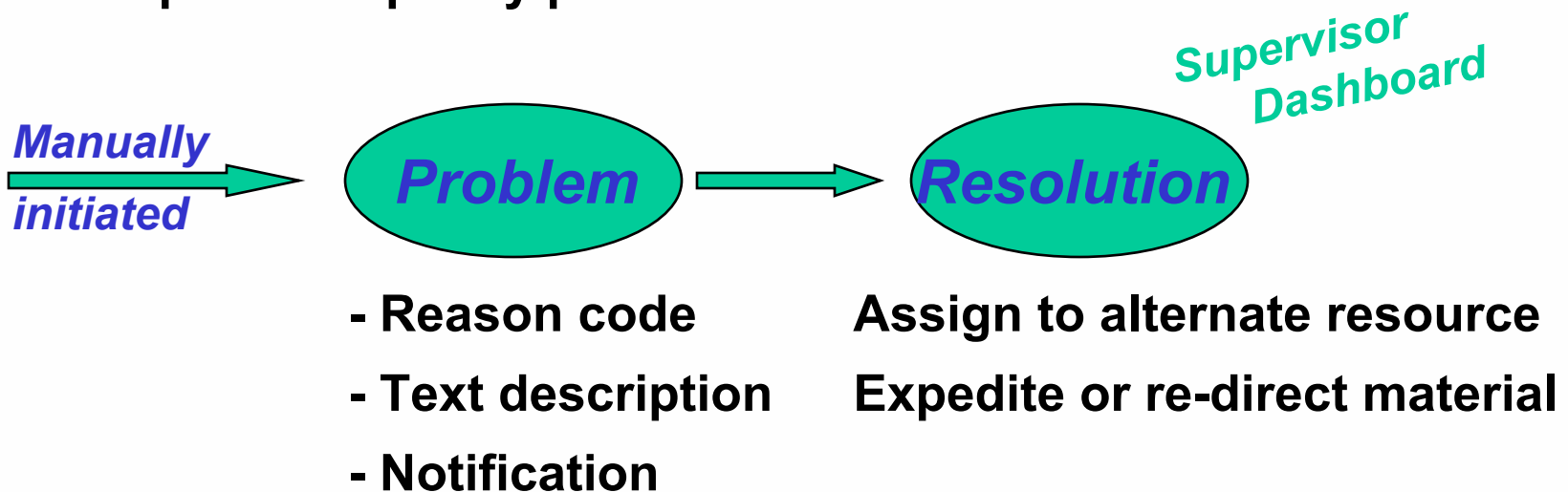


- *Assembly quantity all in one step*
- *Default move intra-operation step*
- *No mandatory quality data collection*
- *No lot or serial number entry*

Shop Floor Exceptions

...used to communicate information about abnormal occurrences on the shop floor that prevent completion of an operation

- Components or assembly missing
- Resource issues
- In-process quality problems



*** Can see other jobs that are or may be impacted

MES Supervisor Workbench

- 1) Dashboard and 2) Supervisor Workstation
- 1) Dashboard:
 - Shop floor status and progress
 - Views: anticipated capacity shortages, current state of shop floor, job progress
- Exception management
 - See other jobs that may be impacted
 - Assign alternate resources, reschedule, hold

configurable

MES Dashboard

ORACLE MES Supervisor Workbench

Close Window Help Preferences Startup

Dashboard Supervisor Workstation

Logged In As: Gray, Mr. Larry (HOU, ASSY)

Dashboard

Actions: Launch Resource Workbench Go

Exceptions Summary: HOU (ASSY)

Type	Number of Exceptions
All	1
Component	1
Comp-No-Control	1

Reported Exceptions: HOU (ASSY)

Open Closed

Number of Exceptions Reported

Days in the past

Shopfloor Progress: HOU (ASSY)

Capacity Shortages Current State

View: All Go

Resource	Department	Job Op	Assembly	Operator	Actual Start Date	Projected Completion Date	Qty Scrapped	Qty Rejected	Dispatch List
LBR-1a	ASSY	bk-job2:10	Assy-No-Control	Gray, Mr. Larry	10-Feb-2008 12:47:42	11-Feb-2008 08:00:00	0	0	

Actions: Launch Resource Workbench Go

Dashboard Supervisor Workstation Close Window Help Preferences Startup

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Manage exceptions

View current state of shop resources

MES Supervisor Workbench (cont.)

- **2) Supervisor Workstation**
 - Dispatch list, configurable actions and information
- **Other actions**
 - Job transaction history, access to Gantt scheduling workbenches and manufacturing intelligence

Supervisor Workbench

- Anticipate problems on the shop floor
 - Track work running behind
 - Reschedule or expedite work
 - Plan for next day or shift

OPM Workstation R12 Enhancements

- Operator Workbench
- Process Instructions
- Dispensing Pre-Weigh Functionality
- Electronic Master and Batch Control Record*
- Non Conformance Management*
- Labeling Device Integration*

**These topics will not be discussed in this presentation.*

Setting Up OPM Operator Workbench

- Run the Concurrent Program to Enable the MES for Process Manufacturing [*GMO: MES for Process Manufacturing Enabled*]
- Check That The Profile Options – Is Yes
- Setup the Receipts
- Define the Process Instructions
- Setup the Electronic Signatures if Needed

Setting Up The OPM Workstation



There is a new Responsibility – MES for Process Manufacturing Administrator that can perform the setup for setting up the Workstation and other functionality.

Setting Up The OPM Workstation

Profile Option Name	Site	Application	Responsibility	User
GMO: Control Batch Recording Enabled				
GMO: Device Integration Mode	Both			
GMO: Device Measure Response Comp				
GMO: Device Read Interval (MilliSeconds)				
GMO: Device Read Timeout (Seconds)	10			
GMO: Device UOM Response Component				
GMO: Label Print Mode				
GMO: MES for Process Manufacturing is	Yes			
GMO: Operator Certificate for Process M:				

To Enable the MES Process for Manufacturing functionality a concurrent request need to be run from the MES Process Manufacturing Administrators responsibility to turn it on – GMO: MES for Process Manufacturing = Yes.

Process Instructions Enabled

The screenshot shows the 'Recipe Details (Y00)' window. The 'Enhanced Process Instructions' checkbox is checked and circled in red. Other fields include Recipe ID (RC-BP-1006-CM-000009), Version (1), Status (Approved for General Use), Product (BP-1006-CM-000009), Quantity (1.00000), UOM (LB), and Owner (RNATHAN). The 'Recipe Type' is set to 'Site'. The 'Calculate Step Qty' checkbox is unchecked. The 'Total Output Qty' is 1.00000. The 'Theoretical Process Loss' and 'Planned Process Loss' fields are empty. The 'Contiguous' checkbox is unchecked. The 'UOM' is 'LB'.

Organization	Organization Name	Type	Process Loss	Contiguous
Y00	Y00 - Yorkville	Plant	.00000	<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>

Note; That in R12 that changes to Process Instructions make a change in the Receipt so this can be an new version.

Creating The Operation Instructions

ORACLE MES for Process Manufacturing Preferences Help Close Window

Logged In As **GLAWRENCE**

Confirmation
Instruction Set updated successfully.

Instruction Set: Operation-10 : BD-PICKLE Change Context **Operation-10 : BD-PICKLE**

Routing **RT-BP-1006-DR-000001** Owner Organization **Y00**
 Version **1** Step **10**
 Description **RT-BP-1006-DR-000001** Operation **BD-PICKLE**

Instruction Set	Description	Instruction Type	SOP Update	Delete
BP-1006-DR-000001	Operation Instruction -- Please make sure that all of the safety equipment required for your operation is available. Safety equipment can be checked out from the central stores and disposable equipment must be charged to your department. Notify your supervisor that the operation has been started and the equipment has been properly setup. Setup that require special tools require that the fixtures be withdrawn from the central storeroom.	Process		

Preferences Help Close Window

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OPM Workbench Dispensing Functionality

- Dispensing as know as “pre-weigh” is a key requirement in:
 - Pharmaceutical
 - Biotechnology
 - Food and Beverage
 - Chemical Manufacturing
- Dispensing process controls; measurement, labeling, within the specific quality requirements and the dispensing of the right materials at the right batch step
- All stages of the material process is tracked from the issue from inventory to the delivery to the batch
- On-line access to Standard Operating Procedures
- Weigh scale integration is provided

OPM Workbench Dispensing Functionality

- Three modes of dispensing are supported:
 - Full Container
 - Source Container
 - Target Container
- Materials may also be dispensed for the process - like filters
- Dispensed materials may only be used in the batch they were issued to

Dispensing Requires That a Device Be Setup

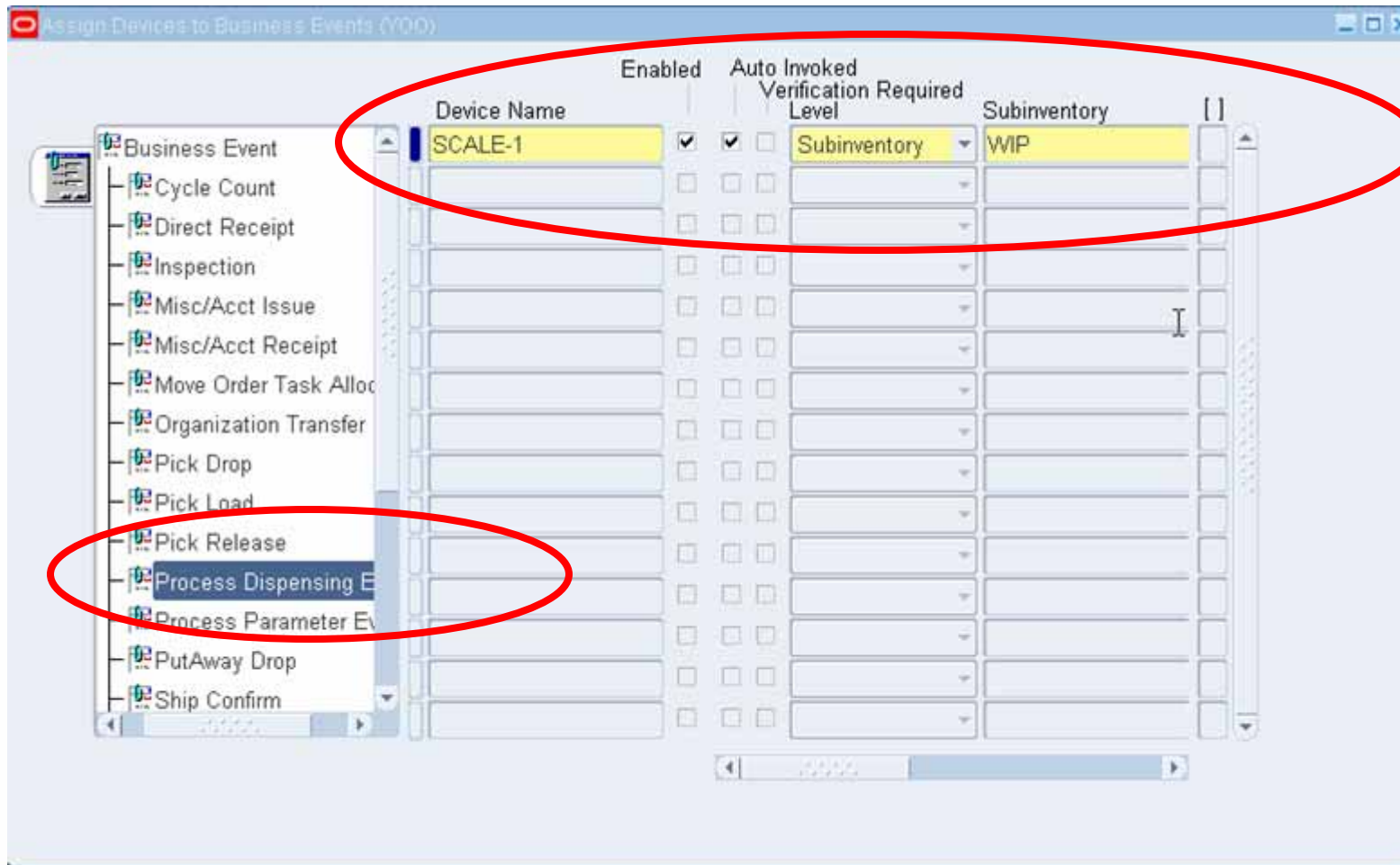
The screenshot shows the 'Define Devices' window with a table containing the following data:

Name	Description	Org	Subinventory	Locator	Output Method
SCALE-1	Scale #1 Yorkville	Y00			API

An 'Output Method' dialog box is open, showing a search field 'Find %' and a list of output methods: XML, API (selected), and CSV. Buttons for 'Find', 'OK', and 'Cancel' are visible at the bottom of the dialog.

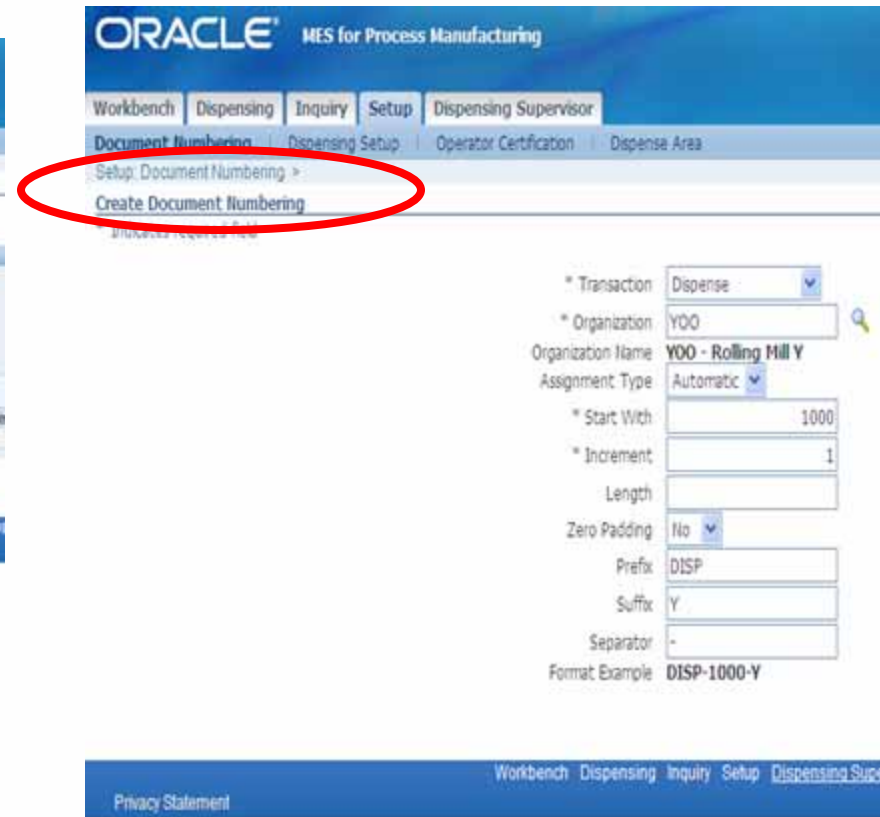
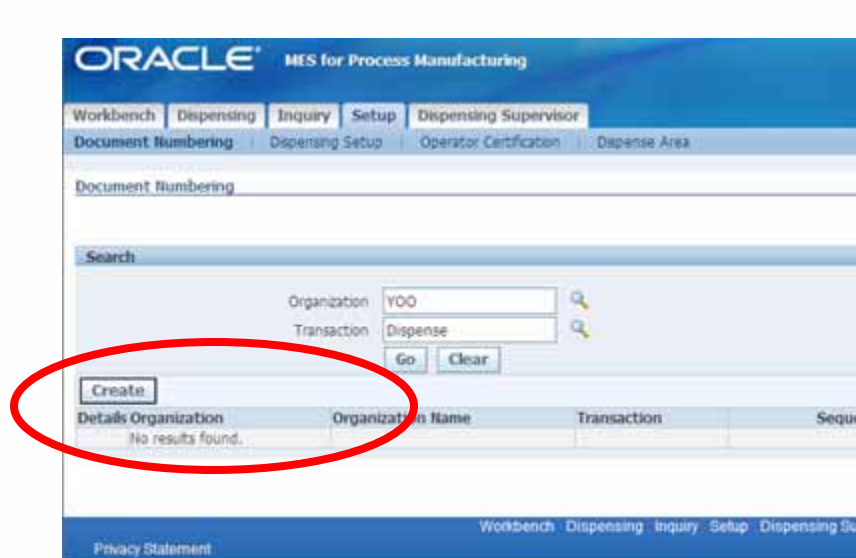
To setup the dispensing functionality a device will need to be setup and the output method of the device will have to be entered.

The Device Must Be Associated With an Event

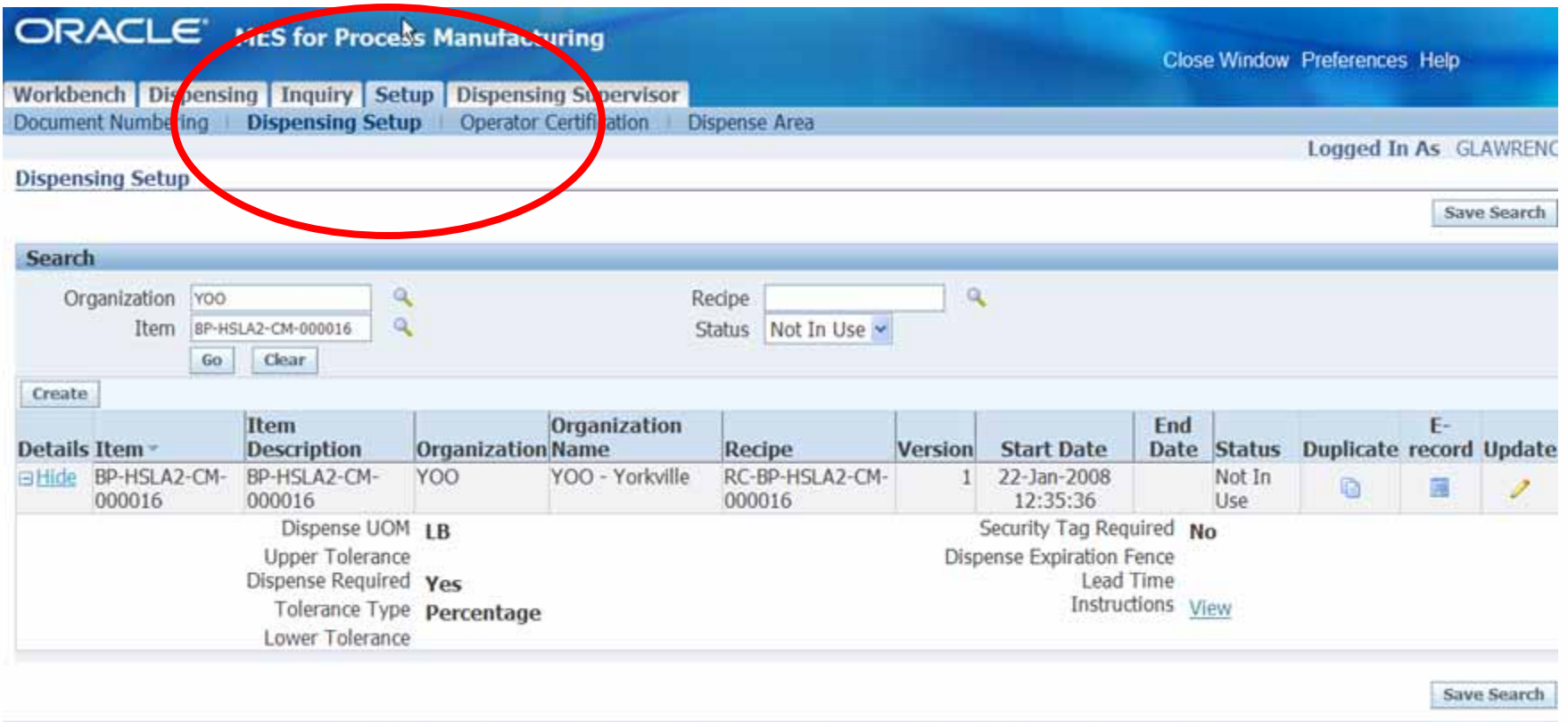


The Business Event and the Device need to be linked.

The Document Numbering



The Dispensing Setup



ORACLE MES for Process Manufacturing

Close Window Preferences Help

Workbench | **Dispensing** | Inquiry | Setup | Dispensing Supervisor

Document Numbering | **Dispensing Setup** | Operator Certification | Dispense Area

Logged In As: GLAWRENC

Dispensing Setup Save Search

Search

Organization: YOO

Item: BP-HSLA2-CM-000016

Recipe:

Status: Not In Use

Details	Item	Item Description	Organization	Organization Name	Recipe	Version	Start Date	End Date	Status	Duplicate	E-record	Update
<input type="checkbox"/> Hide	BP-HSLA2-CM-000016	BP-HSLA2-CM-000016	YOO	YOO - Yorkville	RC-BP-HSLA2-CM-000016	1	22-Jan-2008 12:35:36		Not In Use	<input type="button" value="Duplicate"/>	<input type="button" value="E-record"/>	<input type="button" value="Update"/>
Dispense UOM			LB			Security Tag Required			No			
Upper Tolerance						Dispense Expiration Fence						
Dispense Required			Yes			Lead Time						
Tolerance Type			Percentage			Instructions			View			
Lower Tolerance												

Save Search

The Dispensing Setup is for an Item – Security can be required for the Dispense.

The Dispensing Setup

ORACLE MES for Process Manufacturing Home Logout Help Preferences

Workbench | **Dispensing** | Inquiry | Setup | Dispensing Supervisor

Document Numbering | **Dispensing Setup** | Operator Certification | Dispose Area

Setup: Dispensing Setup > Logged In As: GLAWRENC

Create Dispensing Setup

Define dispensing setup for an item-organization or a combination of item, organization and recipe.

* Indicates required field

Organization: Y00
 Organization Name: Y00 - Rolling Mill Y
 Recipe: RC-BP-1008A-CM-00001
 Tolerance Type: Percentage
 Upper Tolerance:
 * Start Date: 20-Feb-2008 14:56:55
 Security Tag Required: No

* Item: HR-1008A-460012
 Description: HR-1008A-460012
 * Dispense UCM: LB
 Dispense Required: Yes
 Lower Tolerance:
 End Date:
 Dispense Expiration Fence:
 Lead Time:

Instruction Set

Update Instructions

Select Instruction Set	Description	Instruction Type	SOP
BP-TEST	Please weigh and measure before dispensing and use a metric scale.	Dispense	

BP-TEST: Instructions

Details Instruction Num	Instruction Text
Instructions Not Available	

The locator control for the Dispensing Subinventory needs to be setup.

The Dispensing Setup

ORACLE MES for Process Manufacturing

Workbench | Dispensing | **Inquiry** | Setup | Dispensing Supervisor

Document Numbering | Dispensing Setup | Operator Certification | Dispense Area

Create Dispense Area
* Indicates required field

* Organization: YOO
* Dispense Area: Dispense1
* Description: Dispensing Area 1
* Subinventory: DISPENSE
* Max Number of Tasks per Day: 100
 Default Area Indicator

Dispensing Booths			
*Dispense Booth	*Description	*Locator	Delete
Dispense1	Dispense Booth 1	1.1.1	
<input type="button" value="Add Another Row"/>			

Storage Locations			
*Type	*Subinventory	Delete	
Both	DISPENSE		
<input type="button" value="Add Another Row"/>			

Area Human Resources			
*Name	Description	*Max Number of Tasks per Day	Delete
Lawrence, Gary	Lawrence, Mr. Gary	100	

The locator control for the Dispensing Subinventory needs to be setup.

The Dispensing Setup

Main Additional Information

Document: 92
 Recipe: RC-BP-1008A-CM-000012
 Recipe Version: 1
 Planned Start: 21-FEB-2008 13:37:19
 Planned Completion: 21-FEB-2008 14:55:19
 Required Completion: 21-FEB-2008 14:55:19

Status: WIP
 Terminate Reason:
 Parent Batch:
 Actual Start: 21-FEB-2008 13:37:50
 Actual Completion:
 Batch Close:

Step:
 Terminated
 Phantom
 Laboratory Batch
 Update Inventory

Ingredients Products By-Products

Line	Item	Item Description	Revision	Planned Qty	WIP Plan Qty	Actual Qty	Reserved Qty	UOM
1	HR-1008A-460012	HR-1008A-460012		13000.00000	13000.00000	.00000	.00000	LB

Item Reservation window

Default Demand Source: Job or Schedule
 Organization: YOC Header Number: 92 Job Type: Process batch
 Name: Line: 1

Demand Supply

Organization	Serial	Item	Revision	Lot	Subinv	Crossdock	Need By Date	UOM	Quantity	Reserv
YOC		HR-1008A-460012		CLD00006	RAW	No	21-FEB-2008 13:00	LB	13000	Serial C

When the Batch is released the Reservation has to be done by the Production Supervisor to reserve the correct lot for dispensing.

The Dispensing Setup

ORACLE MES for Process Manufacturing

Home Logout Help Preferences

Workbench **Dispensing** Inquiry Setup Dispensing Supervisor

Workbench > Logged In As: GLAWRENCE

Batch Operation: 92-10-BD-PICKLE

Organization: Y00
Description: Y00 - Rolling Mill Y

Product: BP-1008A-CM-000012
Description: BP-1008A-CM-000012

Operation Execution **Batch Details**

Actions:

Batch Materials

Item	Description	Type	Dispense Required	WIP Plan Quantity	Reserved Quantity	Dispensed Quantity	Actual Quantity UOM
HR-1008A-460012	HR-1008A-460012	Ingredient	Yes	13000	0	0	0 LB
BP-1008A-CM-000012	BP-1008A-CM-000012	Product	No	13000	0	0	0 LB

Operations

Select Step:

Select Step	Operation	Planned Start Date	Planned Completion Date	Actual Start Date	Actual Completion Date	Status
<input checked="" type="radio"/>	10 - BD-PICKLE	21-Feb-2008 13:37:19	21-Feb-2008 14:55:19			<input type="button" value="View Details"/>
<input type="radio"/>	20 - BD-TANDEM	21-Feb-2008 13:37:19	21-Feb-2008 14:55:19			<input type="button" value="View Details"/>
<input type="radio"/>	30 - BD-AIRNEAL	21-Feb-2008 13:37:19	21-Feb-2008 14:55:19			<input type="button" value="View Details"/>
<input type="radio"/>	40 - BD-TEMPER	21-Feb-2008 13:37:19	21-Feb-2008 14:55:19			<input type="button" value="View Details"/>

10-BD-PICKLE: Materials

Select Item	Description	Type	Dispense Required	WIP Plan Quantity	Reserved Quantity	Dispensed Quantity	Actual Quantity UOM
No results found.							

10-BD-PICKLE: Activities

Select Activity:

The locator control for the Dispensing Subinventory needs to be setup.

Wrap Up

- The Good the Bad and the Ugly
- Flow Workstation Enhancements
- Discrete Workstation Enhancements
- Process Manufacturing Workstation Enhancements
- Questions?