

# Surviving Assemble-To-Order With Outside Processing

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## Objectives

- Explain the business case that led us to replace a Finished Goods Buy turnkey solution with an Assemble-To-Order (ATO) process
- Walk through the process that combines discrete WIP jobs – created by ATO – with outside processing (OSP) in the E-Business Suite (EBS)
- Share lessons learned, including forms personalizations and workflow notifications that made the solution more palatable

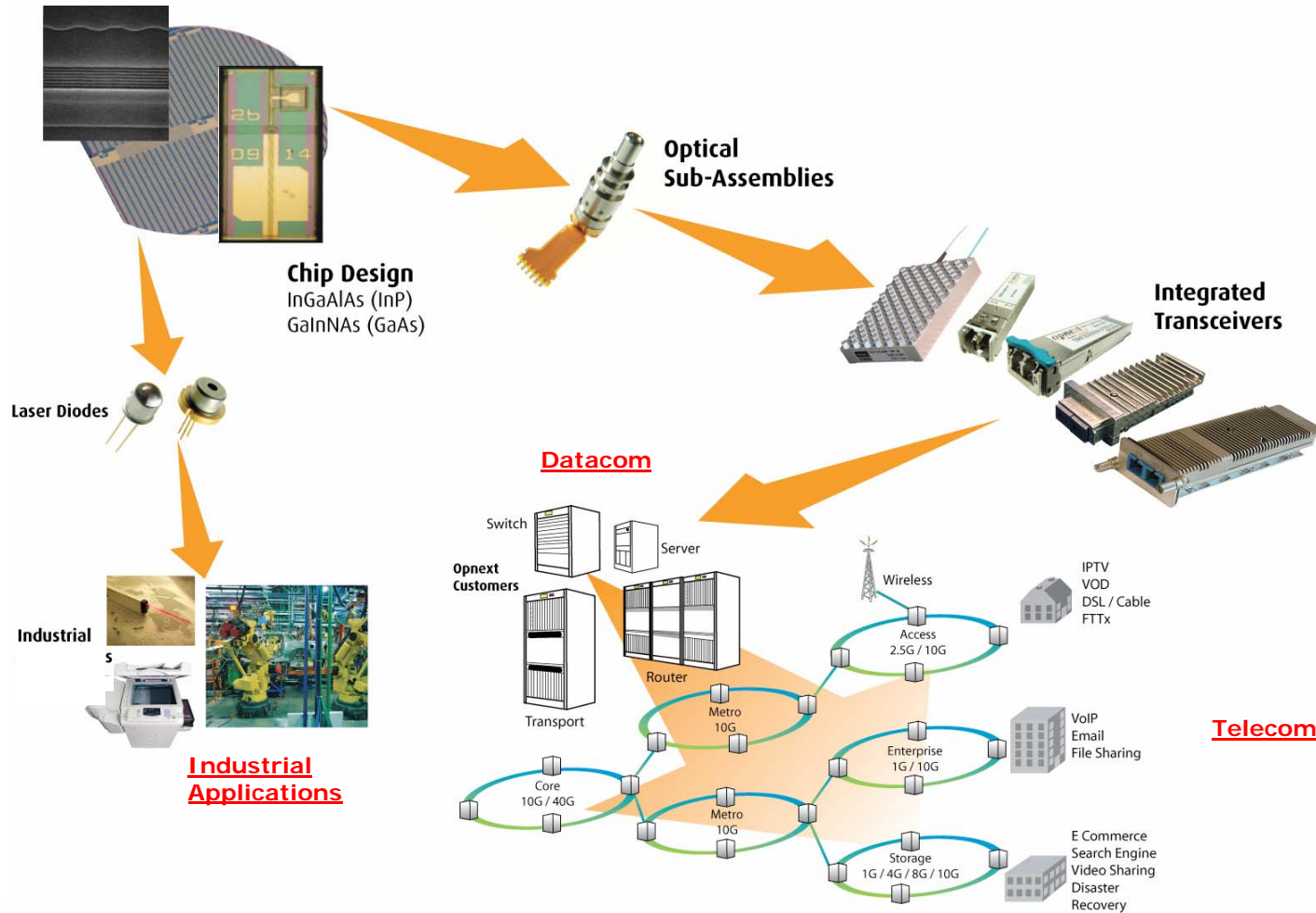
## Scope

- Release Scope
  - EBS 11i functionality presented via 11.5.10.2 examples
  - Should be completely applicable to EBS Release 12
- Out of Scope
  - Step-by-step guide to configure ATO or OSP
  - ATO Buy scenarios
    - Also called Procure-To-Order or back-to-back orders
  - Configure-To-Order using Oracle Configurator
  - Usage of Internal Requisitions / Internal Orders
  - Impact on MRP / Master Scheduling

## Today's Speakers

- **Eric Guether**
  - IT Director at Opnext in Eatontown, NJ
  - Manages Opnext's Oracle EBS 11i system
  - Historically cautious about EBS Outside Processing
- **Matt Dooling**
  - Veteran EBS Business Analyst for Opnext in Eatontown
  - Provides functional and workflow support for 11i Order Mgmt., Shipping, Inventory, Purchasing, and WIP
  - Enthusiastically became the company's expert on ATO

# Opnext Products: *From Chip to Consumer*



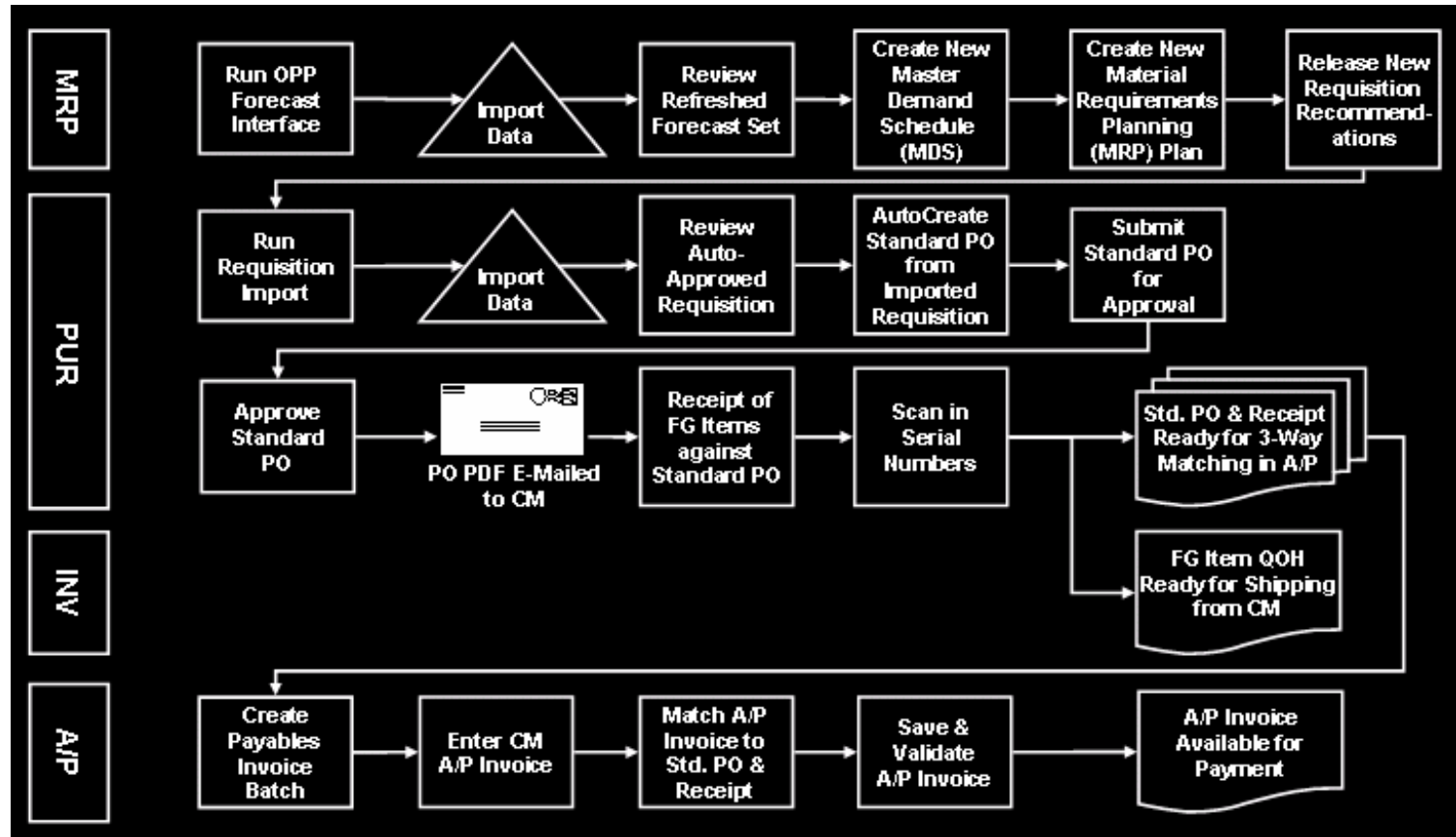
## Background – Original Process

- An existing product line was made by an offshore contract manufacturer (CM) via a turnkey solution
  - Opnext placed POs to the CM for finished goods (FGs) 2 to 6 weeks in advance
  - FGs in this product line had a manufacturing lead time of 16 weeks due to long-lead items
- Opnext provided the CM with 6 month forecasts outside of EBS so the CM could procure long-lead items in advance

## Background (continued)

- Opnext also provided the CM with short-term forecasts of FG products
  - The CM used such short-term forecasts to start most WIP jobs in its own system
  - Opnext's firm customer sales orders (SOs) for this product line were often booked only 2 to 3 weeks before the customer's request date
  - Occasionally, products built from short-term forecasts were not consumed by firm sales orders

# Original Process – Turnkey Solution





## Background – Issues

- Shortages
  - Even if 6-month forecasts were fairly accurate, the existing process did not always provide the CM with enough time to meet customer demand
- Rework
  - The product built from short-term forecast was sometimes slightly different from the ordered item on the subsequent customer SO
  - Incurred undesirable rework costs to transform the assembled product into the ordered item

## Background – Issues (continued)

- **Financial Liability**
  - CM expressed concerns about purchasing long-lead items based on forecasts
  - CM preferred that we have a more formal obligation (for example, a standard PO) to buy and pay for the long-lead items whether or not consumed

## Business Case

- Redesign the business process at the existing contract manufacturer to facilitate the final configuration of FGs using common subassembly (SA) components
  - CM would tweak its process so that one common SA could be used in any FG item within a product group
  - Final configuration lead time = 2 to 3 weeks
  - The common subassembly included the long-lead items
  - The common subassembly represented 90% of the total manufacturing time and cost of the finished good
- Users envisioned a 2-PO model

## 1<sup>st</sup> PO: Order Subassemblies

- Issue a Standard PO to the CM for the common subassembly 12 weeks in advance
- Has nothing to do with ATO functionality
- Driven by MRP planning
  - Planner would upload a 3-month forecast of SAs (based product group forecasts) into the master demand schedule
  - Eliminated the need to provide precise 6-month forecasts of specific products (unique item numbers)
  - The CM would build the SA, bill Opnext, and hold the SA on consignment until consumed
  - The SA would be added to our Oracle Inventory when built

## 2<sup>nd</sup> PO: Assembly of Ordered FG Items

- Issue a PO to the same CM to assemble the FG item once a firm customer SO is booked for the item number
  - Represented an outside processing PO for services to assemble the finished good
- Should be triggered (directly or indirectly) by the booking of a customer SO like ATO functionality
- Completion of assembly services needed to consume the SA (previously ordered & built) from our Oracle Inventory

## System Solution for FG Assembly

- ATO Make Functionality
  - Set up the FG item as an ATO Make item
    - OM Assemble to Order flag = 'Yes' [checked ON]
    - General Planning Make or Buy flag = 'Make'
    - Build in WIP flag = 'Yes' [checked ON]
  - Booking of a SO triggers creation of a discrete WIP job
- Outside Processing
  - Routing on the WIP job for the ATO Make item will have only one step – an OSP step
  - OSP functionality creates the 2<sup>nd</sup> PO for the FG assembly
  - OSP functionality causes the WIP job to consume the SA

# SO - WIP Job - OSP PO Relationship

Oracle9i Discoverer Desktop - [ATO Sales Backlog]

File Edit View Sheet Format Tools Graph Window Help

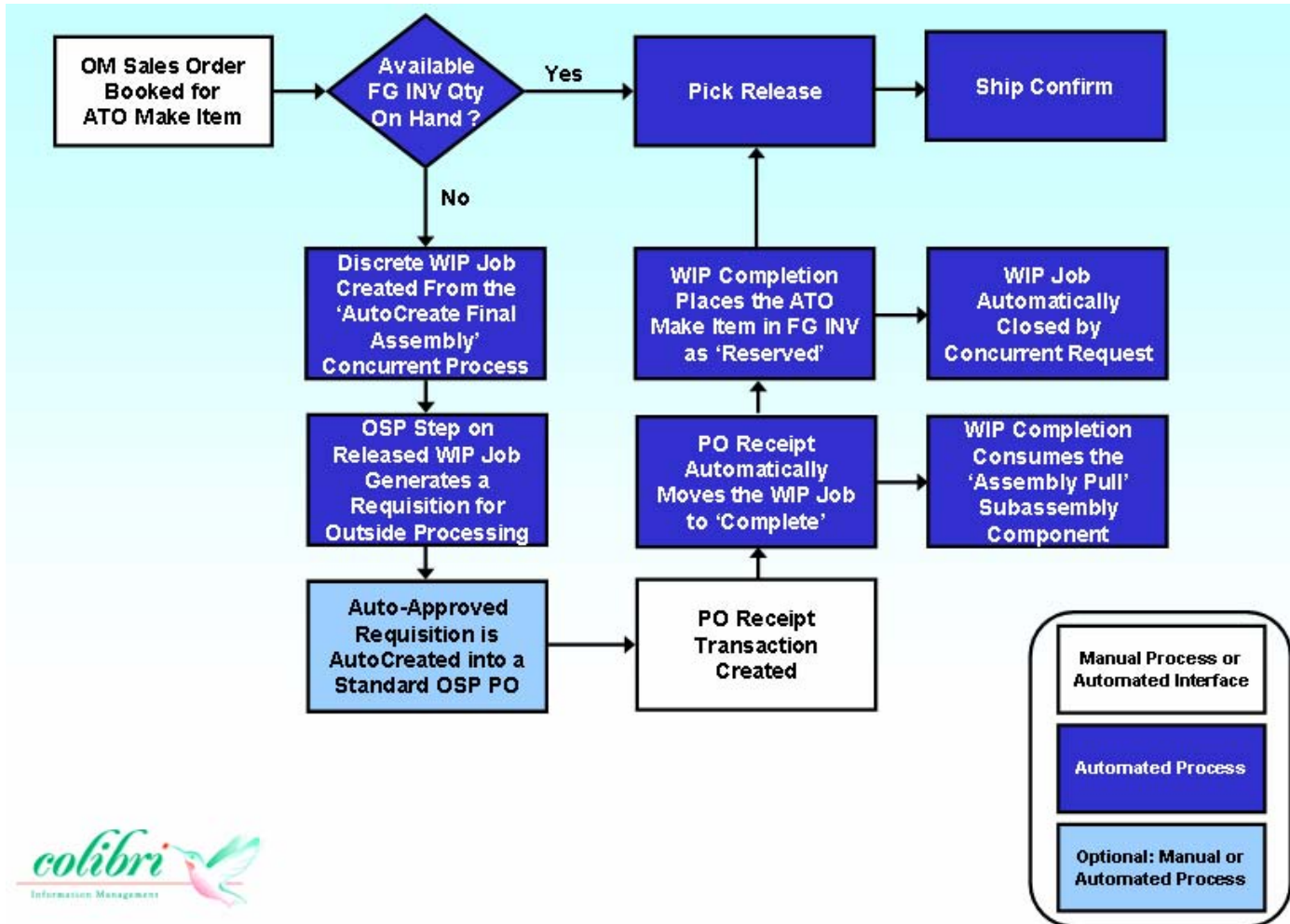
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**Sales Backlog for ATO Make Finished Goods**

Page Items: **Item Type: AI [ATO Item]**

Ordered Item #	Order Type	Sales Order #	SO Line #	ATO Flag on SO Line	Scheduled Ship Date	SO Line Quantity	Line Order Status	WIP Job Name	OSP Req #	OSP Req Line #	OSP PO #	OSP PO Line #	Sub-Assembly on BOM	Cu
<b>LASER123</b>	STD ORD	91002304	3.1	Y	03-MAR-2008	31	SUPPLY_ELIGIBLE						SA999	Ice Teleco
	STD ORD	71003209	1.1	Y	03-MAR-2008	6	SUPPLY_ELIGIBLE						SA999	Flash Gor
	STD ORD	71003203	1.1	Y	07-DEC-2007	30	PRODUCTION_OPEN	366248	53201	1	11294	1	SA999	Charged-L
	STD ORD	71002837	3.1	Y	18-FEB-2008	19	PRODUCTION_OPEN	367454	53215	1	11295	1	SA999	Flash Gor
	STD ORD	71003145	1.1	Y	03-MAR-2008	5	SUPPLY_ELIGIBLE						SA999	Flash Gor
<b>LASER468</b>	STD ORD	91002503	4.1	Y	30-NOV-2007	12	PRODUCTION_PARTIAL	363253	53121	2	11237	1	SA888	Quick Rou
	STD ORD	91002581	2.1	Y	06-DEC-2007	1	PRODUCTION_OPEN	365067	53168	1	11296	1	SA888	XYZ Ltd.
	STD ORD	91002639	1.1	Y	13-DEC-2007	2	PRODUCTION_OPEN	366217	53197	1	11287	1	SA888	Quick Rou
	STD ORD	91002627	1.1	Y	28-DEC-2007	100	PRODUCTION_OPEN	366754	53205	1	11300	2	SA888	Quick Rou
<b>LASER567</b>	STD ORD	91002547	1.1	Y	03-JAN-2008	44	PRODUCTION_PARTIAL	366948	53208	4	11302	1	SA999	Ice Teleco
	STD ORD	91002577	1.1	Y	03-JAN-2008	40	PRODUCTION_OPEN	366949	53208	3	11301	3	SA999	Ice Teleco
	STD ORD	91002548	1.1	Y	04-JAN-2008	43	PRODUCTION_OPEN	366952	53209	4	11304	2	SA999	Ice Teleco
	STD ORD	91002610	2.1	Y	04-JAN-2008	50	PRODUCTION_OPEN	366954	53209	5	11305	1	SA999	Ice Teleco
	STD ORD	91002577	2.1	Y	10-JAN-2008	110	AWAITING_SHIPPING						SA999	Ice Teleco
	STD ORD	91002637	1.1	Y	10-JAN-2008	54	PRODUCTION_OPEN	367149	53212	2	11299	1	SA999	Ice Teleco
	STD ORD	91002637	2.1	Y	17-JAN-2008	120	PRODUCTION_OPEN	367351	53214	4	11298	4	SA999	Ice Teleco
<b>LASER890</b>	STD ORD	91002566	1.1	Y	03-MAR-2008	1	SUPPLY_ELIGIBLE						SA888	XYZ Ltd.
	STD ORD	91002603	1.1	Y	19-DEC-2007	8	PRODUCTION_OPEN	365657	53179	4	11306	1	SA888	XYZ Ltd.
	STD ORD	91002609	2.1	Y	19-DEC-2007	14	PRODUCTION_OPEN	366051	53193	1	11306	1	SA888	Quick Rou

# ATO Make with OSP Process





## Overview of ATO Make Functionality

- Order Mgmt. sales order (SO) workflow (WF) initiates the creation of the discrete WIP job
- Workflow links the SO line to the discrete WIP job
- Completion of the WIP job creates a reservation against the FG inventory for the SO line that spawned the WIP job

# SO Line Workflow Assignment

Transaction Types

Operating Unit: **US Operating Unit**      Transaction Type: **STANDARD ORDER-US I**

Description: **STANDARD ORDER-US I**      Sales Document Type: **Sales Order**

Order Category: **Order**      Transaction Type Code: **ORDER**

Fulfillment Flow: **Order Flow - Generic**      Negotiation Flow:

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Line Workflow Assignments

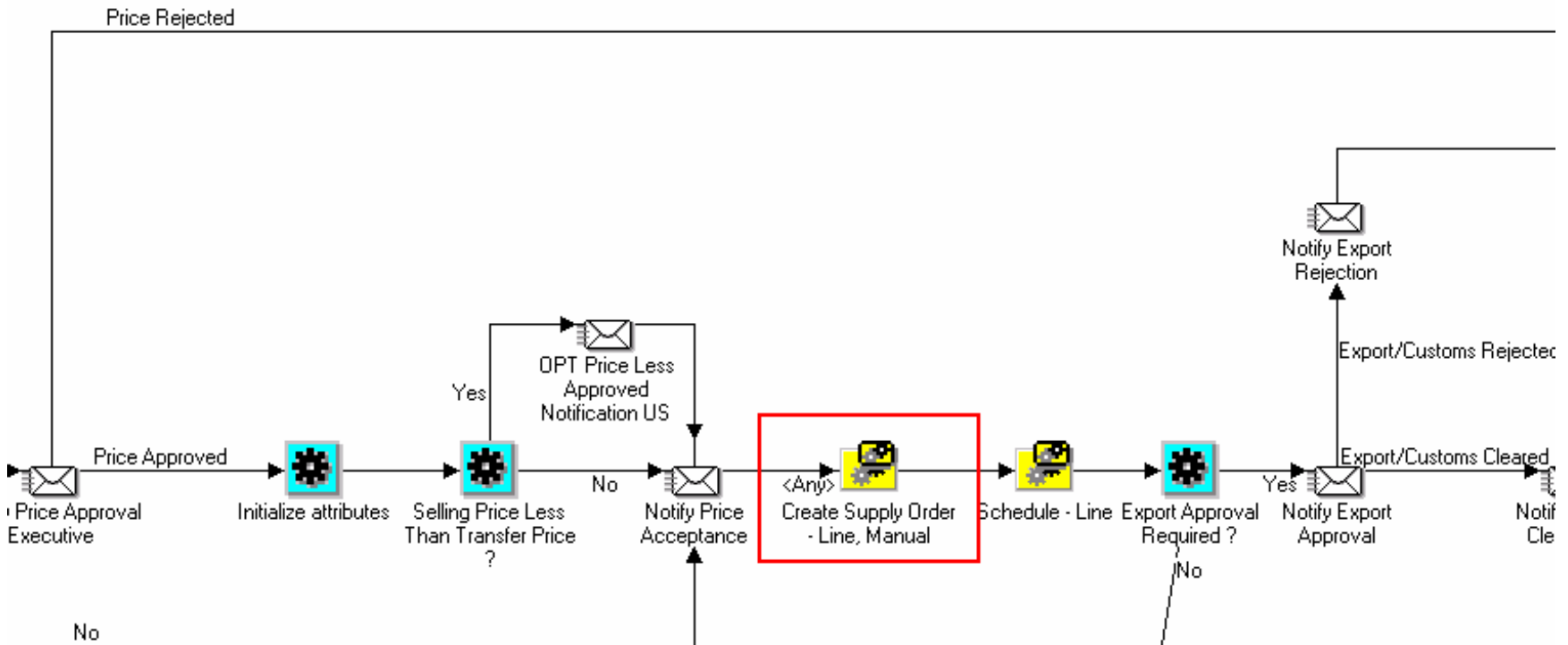
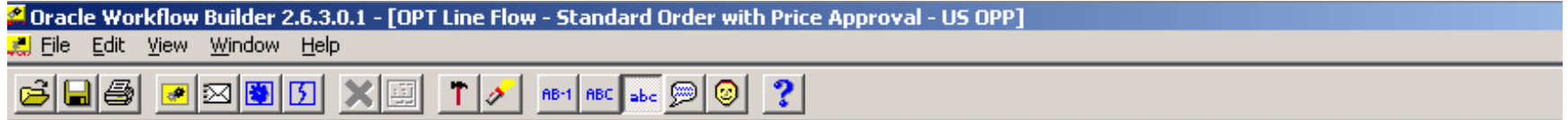
Order Type: **STANDARD ORDER-US PLUGGABLES**

## Seeded ATO WF Assignment

Assign Workflow Processes

Line Type	Item Type	Process Name	Start Date	End Date
STD ORDER LINE-US		OPT Line Flow - Standar	01-OCT-2004	11-JUL-2005
STD ORDER LINE-US		OPT Line Flow - Standar	12-JUL-2005	
STD ORDER LINE-US	ATO Item	Line Flow - ATO Item	28-NOV-2006	

# ATO Sub-Process Added to SO WF



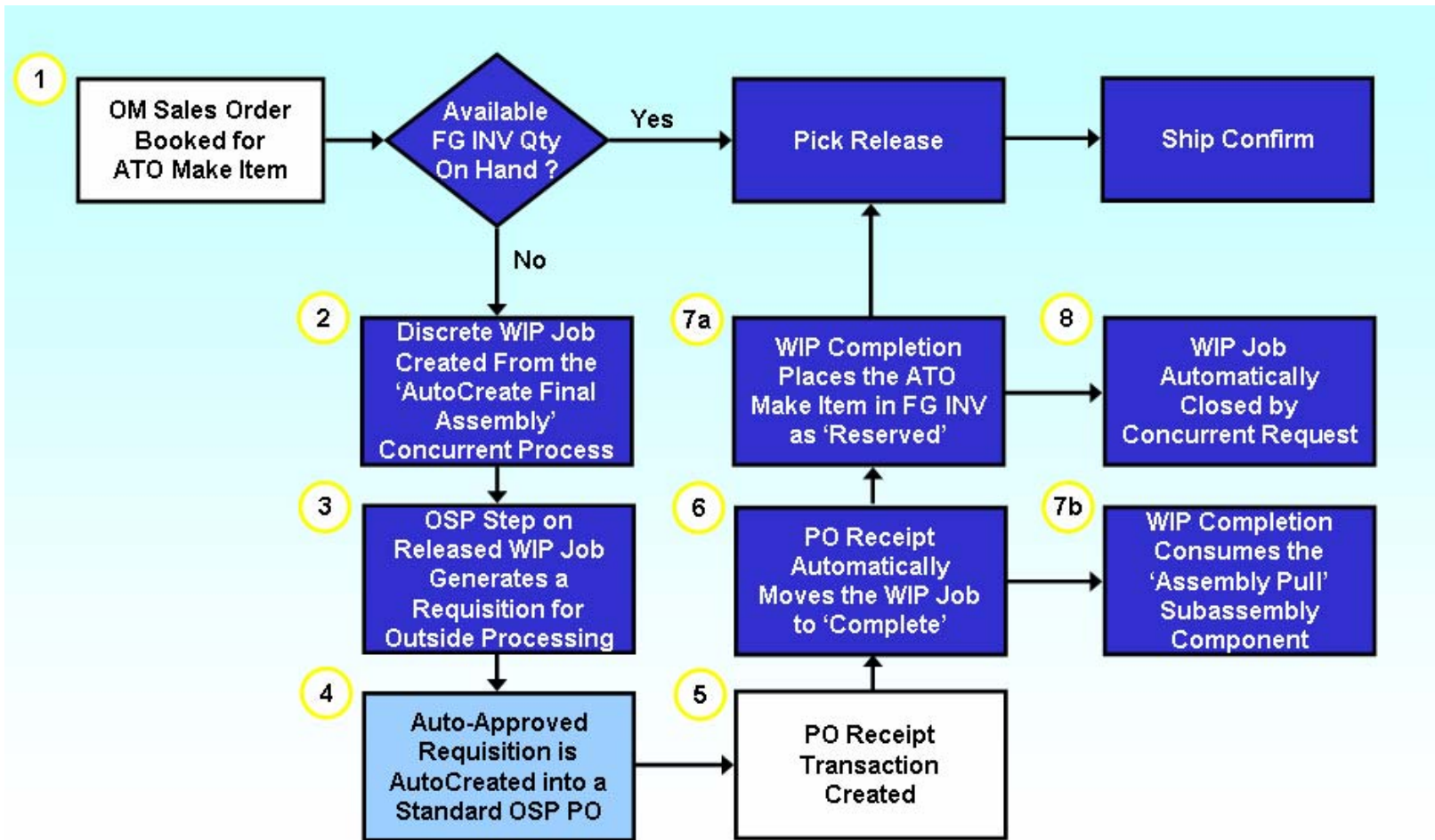
## Overview of OSP Functionality

- WIP module functionality to ship out parts (SA999) for assembly services typically to a 3<sup>rd</sup> party
  - Expect to receive back an assembled item (LASER123) and incur an OSP resource charge
- Ultimately consumes the parts (SA999) shipped out
- Creates PO reqs that generate OSP POs
  - OSP POs are typically sent to supplier providing services
  - Item on PO is a 'fake' (non-physical) OSP services item in your item master, not the assembled item received back
  - PO unit price is the price for OSP services, not the full value of the assembled item to be received back

## Standard Costing

- Standard Cost of ATO Make FG item =  
     Material Cost of Subassembly  
     + Outside Processing Resource Charge
- Example: Standard Cost of LASER123 =  
     \$900      Material Cost of Subassembly  
     + \$100    OSP Resource Charge  
     \$1,000    Rolled-up Std. Cost of LASER123

# Transaction Walkthrough





# Step 2: Discrete WIP Job Created

Navigator - US - WIP | AutoCreate Final Assembly Orders (PCM)

Functions | Docu... | Run this Request...

**AutoCreate Order**

Requests: AutoC... | Name: **AutoCreate Final Assembly Orders**

Parameters

Sales Order:

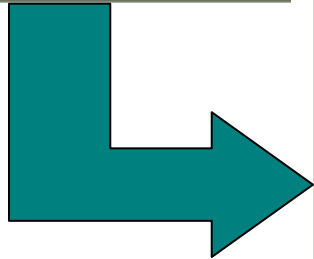
Offset Days:  | 1

Load Type: **Both configured and non-configured Orders**

Status: **Released**

Organization: **PCM** | Pluggables Contract Manufacturing

Class Code: **PRODUCTION**



Discrete Jobs (PCM)

Job: **366248** | Type: **Standard**

Assembly: **TRF7566AVLB200** | **LASER123**

Class: **PRODUCTION** | UOM: **EA**

Status: **Released** |  Firm

**Quantities** | **Dates**

Start: **30** | Start: **07-DEC-2007 23:59:00**

MRP Net: **30** | Completion: **07-DEC-2007 23:59:00**

Bill | Routing | Job History | Schedule Group, Project | Scheduling | More

Demand Class:  | Kanban:

Lot Number:

Description: **Job Mass Loaded on 29-NOV-2007 19:59:33 (server timezone)**

**Overcompletion**

Tolerance Type:  | Tolerance Value:

Serial Numbers | **Sales Orders** | Operations | Component

**Changes the SO line status to 'PRODUCTION\_OPEN'**





# Sales Order Reservation via SO Line Actions

## ORACLE Supply To Order Workbench

### Supplies For Sales Order: 71003203: Line: 1.1

Item	<b>LASER123</b>	Line Status	<b>Production Open</b>
Required Quantity	<b>30</b>	Schedule Ship Date	<b>07-Dec-2007 23:59:00</b>
On Hand Reserved		Supply Type	<b>INTERNAL</b>
Uom	<b>EA</b>	Ship From Warehouse	<b>PCM</b>

#### Active Supply Details

All
  [Work Orders](#)
 [Purchasing Documents](#)

#### Main Supplies

Supply Type	Linked Qty	Document Number	Status	Expected Completion Date
WIP Job	30	366248	Released	07-Dec-2007 23:59:00
<b>Total</b>	<b>30</b>			

All
  [Work Orders](#)
 [Purchasing Documents](#)

[Return To Sales Order Page](#)

# Step 3: OSP Step Generates Requisition

View Resource Requirements (PCM)

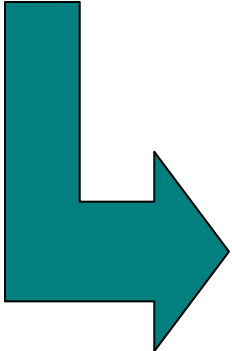
Main Quantities Scheduling Costing Job or Schedule Type, Description

Resource	UOM	Operation Seq		Resource Seq		Rate or Amount		Resource Type	Description
		Department		Basis		Usage	Inverse		
OSP_LSR123	EA	10	OPP_CM	10	Item	1	1	Amount	Outside Processing Charge for LA

Job: 366248 Line:

Assembly: LASER123

Quantity: 30 Start Date: 07-DEC-2007 23:59:00



Requisition Lines Summary (US Pluggables Operating Unit)

Requisition Lines

Req #	Req Ln #	Import Source	WIP Job	Item	Quantity	Need-By
53201	1	WIP	366248	LASER123	30	07-DEC-2007

# Step 4: AutoCreated OSP PO

Purchase Order Summary to Purchase Orders (US Pluggables Operating Unit) - 11294

PO, Rev	11294	1	Type	Standard Purchase Order	Created	22-NOV-2007 09:59:24
Supplier	DILIGENT OPTRONICS LTD.		Site	HONG KONG	Contact	
Ship-To	OPNEXT HONG KONG WAREH		Bill-To	FREMONT PLUGGABLES	Currency	USD
Buyer	Guether, Eric		Status	Approved	Total	3,000.00
Description						

Lines | Price Reference | Reference Documents | More | Agreement

Num	Type	Item	Rev	Category	Description	UOM	Quantity	Price	Promised
1	Outside proc	LASER123		DEFAULT	LASER123	EACH	30	100	

# Step 4: Distribution on AutoCreated OSP PO

Purchase Order Summary to Purchase Orders (US Pluggables Operating Unit) - 11294

Shipments (US Pluggables Operating Unit) - 11294

Distributions (US Pluggables Operating Unit) - 11294

Destination More

Num	Type	Requester	Deliver-To	Subinventory	Quantity	P	[ ]
1	Shop Floor	Junge, Sabine	OPNEXT HONG I		30	14	

Outside Processing (2) - Distribution 1

Job  Line

Assembly

**Operation**

Sequence

Code

Department

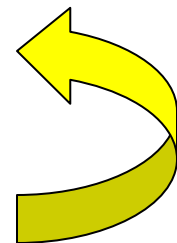
**Resource**

Sequence

UOM

Resource Qty

Unit Type  Assembly Qty



# Step 5: OSP PO Receipt Transaction

Receipts (PCM)

Lines   Details   Currency   Order Information   Outside Services   Shipment Information

Quantity	UOM	Destination Type	Item	Rev	Description	Location
<input checked="" type="checkbox"/> 30	EACH	Shop Floor	LASER123		LASER123	OPNEXT H
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						

Order Type: **Standard**      Order: **11294**

Supplier: **DILIGENT OPTRONICS LTD.**      Due Date: **07-DEC-2007 23:59**

Item Description: **LASER123**      Hazard:

Destination: **OPNEXT HONG KONG WAREHOUSE-J**      UN Number:

Header Receiver Note:       Routing: **Direct Delivery**

# Step 6: WIP Job Automatically Completed

Discrete Jobs (PCM)

Job: 366248      Type: Standard

Assembly: LASER123      LASER123

Class: PRODUCTION      UOM: EA

Status: Complete       Firm

**Quantities**

Start: 30

MRP Net: 30

**Dates**

Start: 07-DEC-2007 23:59:00

Completion: 07-DEC-2007 23:59:00

Bill    Routing    Job History    Schedule Group, Project    Scheduling    More

Reference: \_\_\_\_\_

Alternate: \_\_\_\_\_

Revision: 0      Revision Date: 29-NOV-2007 20:00:00

Supply Type: Based on Bill

Serial Numbers
Sales Orders
Operations
Components

# Step 7: ATO Item Added to Inventory as Reserved / Subassembly Consumed

Material Transactions (PCM)

Location	Intransit	Reason, Reference	Transaction ID	Transaction Type	Consumption Advice
Item	Subinventory	Transaction Quantity	Source Type	WIP Job	Transaction Type
LASER123	SAE_SUB_FG	30	Job or Schedule	366248	WIP Assy Completion
SA999	SAE_CCSA	-30	Job or Schedule	366248	WIP component issue

**Changes the SO line status to 'AWAITING\_SHIPPING'**

Item Reservation window

Default Demand Source: \_\_\_\_\_

Organization: \_\_\_\_\_ Sales Order: \_\_\_\_\_  
Name: \_\_\_\_\_ Line: \_\_\_\_\_

Demand Supply

Organization	Item	Type	Header Number	Need By Date	UOM	Quantity
PCM	LASER123	Sales order	71003203.STAND,...	07-DEC-2007 23:	EA	30

Item Description: LASER123      Ordered Quantity: 30  
On Hand Quantity: 30      Shipping Status: Not Pick Released



# Step 8: WIP Job Closed by Request

The screenshot displays the Oracle WIP interface for running a request. On the left, the 'Run this Request...' dialog is shown with the following configuration:

- Name: **Close Discrete Jobs**
- Parameters: **.....Complete:Yes:Yes:**
- Language: **American English**

A large teal arrow points from this dialog to the main job details window on the right, titled 'Discrete Jobs (PCM)'. The job details are as follows:

Job	366248	Type	Standard
Assembly	LASER123		LASER123
Class	PRODUCTION	UOM	EA
Status	Closed	<input type="checkbox"/> Firm	

Below the job details are two sections: 'Quantities' and 'Dates'.

**Quantities:**

Start	30
MRP Net	30

**Dates:**

Start	07-DEC-2007 23:59:00
Completion	07-DEC-2007 23:59:00

At the bottom of the job details window, there are tabs for 'Bill', 'Routing', 'Job History', 'Schedule Group, Project', 'Scheduling', and 'More'. Below these tabs, there are two more sections: 'Quantities' and 'Dates'.

**Quantities (Bottom):**

Remaining	
Completed	30
Scrapped	

**Dates (Bottom):**

Released	29-NOV-2007 19:59:38
Completed	19-FEB-2008 17:56:05
Closed	21-FEB-2008

## Issue # 1: OSP Functionality

- PO Confusion
  - The OSP PO under the typical EBS OSP set-up showed a 'fake' OSP services item as the ordered item, not the item number of the ATO Make FG item
  - Example: The PO showed an ordered item number of 'OSP\_SERVICES' for services to build item LASER123
  - How would the CM know which FG item to assemble based on the ordered item, 'OSP\_SERVICES' on the OSP PO?

## Issue # 1: OSP Functionality (continued)

- Receiving Confusion
  - Receipts against an OSP PO were recorded against the 'fake' OSP item on the PO even though we were physically receiving the assembled item
  - Example:
    - Physically received assembled item LASER123
    - But the PO receipt transaction was recorded against OSP item OSP\_SERVICES

## Issue # 1 Solution: ATO Item = OSP Item

- Set up the ATO Make FG item also as the outside processing item in lieu of using a 'fake' OSP services item
  - Allowed the OSP PO to show the assembled item (LASER123) as the ordered item
  - Receipts for the OSP PO were made against the physically-received item (LASER123)
- Suggested by our consultant from Colibri
- No Oracle documentation addressed this alternative

# Setting the ATO Make Item as an OSP Item

Master Item (OIM)

Organization: **OIM Opnext Item Master**

Item: **LASER123**

Description: **LASER123** [-N]

Display Attributes:  Master  Org  All

Inventory Bills of Material Asset Management Costing **Purchasing** Receiving Physical Attributes

Purchased  Purchasable  Use Approved Supplier

Allow Description Update (G) RFQ Required: **No**

Outside Processing Item Taxable: **No**

Unit Type: **Assembly** Tax Code: [ ]

**Invoice Matching**

Receipt Required: **Yes**

Inspection Required: [ ]

Default Buyer: **Guether, Eric** Unit of Issue: **EACH**

Receipt Close Tolerance: [ ] % Invoice Close Tolerance: [ ] %

UN Number: [ ] Hazard Class: [ ]

List Price: **100** Market Price: [ ]

Price Tolerance: [ ] % Rounding Factor: [ ]

Encumbrance Account: [ ]

Expense Account: [ ]

Asset Category: [ ]

# Linking the OSP Item to the Resource

**Resources (PCM)**

Resource: **OSP\_LSR123** Inactive On:

Description: **Outside Processing Charge for LASER123 [ref # 2233-6V00]**

Type: **Amount** UOM: **EA**

Charge Type: **PO Move** Basis: **Item**

Expenditure Type:

Supply Subinventory:  Supply Locator:

**Outside Processing**

Item: **LASER123**

**Costed**

Activity: **Move**  **Standard Rate**

Absorption Account: **14-000-000-000-12200-00000-00-00-000**

Variance Account: **14-000-000-000-53168-00000-00-00-000**

Overheads:  Rates:

**Batchable**

**Resource Costs (PCM) - OSP\_LSR123**

Cost Type	Description	Resource Unit Cost
<b>Frozen</b>	<b>Frozen Standard Cost Type</b>	<b>100.00000</b>
<b>Pending</b>	<b>Pending Standard Cost Type</b>	<b>100.00000</b>

# Linking the Resource to the Routing

**Routings (PCM)**

Item **LASER123** **LASER123**

Alternate   Capable To Promise

Revision **0** Date **22-FEB-2008 10:17:58**

Display **Future and Current**  Implemented Only

**Operations**

Main | Date Effectivity | WIP | Operation Yield | ECO | Description

Referenced

Seq	Code	Department	Option Dependent	Lead Time %
<b>10</b>		<b>OPP_CM</b>	<input type="checkbox"/>	

**Operation Resources (PCM) - 10**

Item **LASER123** Alternate

Sequence **10** Effective Date **22-FEB-2008 10:18:36**

**Resources**

Main | Scheduling | Costing

Seq	Resource	Activity	Standard Rate	Charge Type
<b>10</b>	<b>OSP_LSR123</b>	<b>Move</b>	<input checked="" type="checkbox"/>	<b>PO Move</b>

## Issue # 2: Concern over PPV

- Concern: Would using the ATO Make FG item as the OSP item cause an unexpected purchase price variance (PPV) when receiving against the OSP PO?
- Generally,  $PPV = (PO\ Price - Std\ Cost) * Quantity\ Received$
- Example:
  - PO Price for OSP services might be \$100 per unit
  - Standard Cost of FG item LASER123 = \$1,000
  - Would every receipt have  $PPV = (\$100 - \$1,000) * Qty$  ?



## Issue # 2 Solution: No Issue with PPV

- Concerns were unfounded
- PPV for OSP POs =  

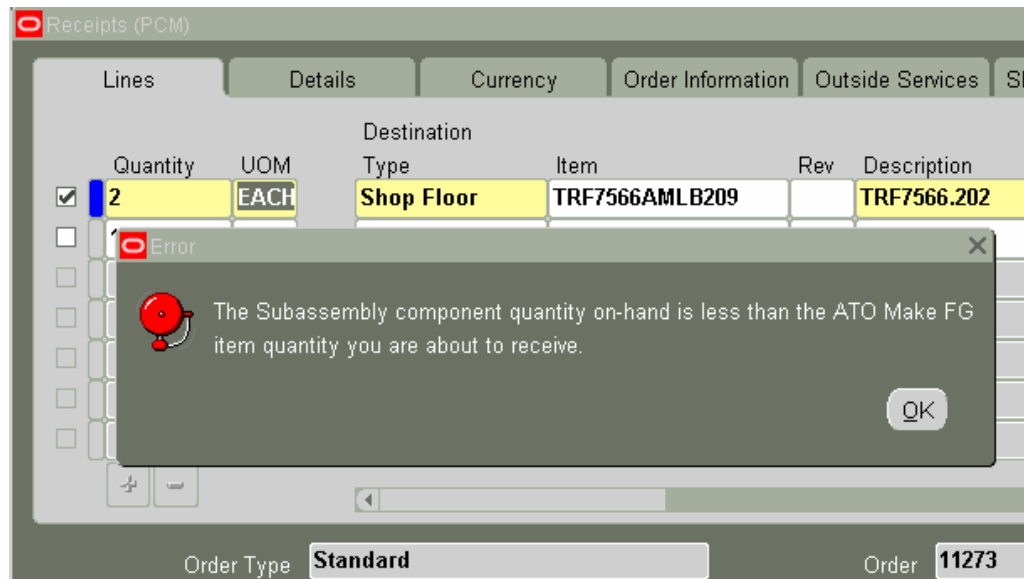
$$(\text{PO Price} - \text{Standard Cost of Resource}) * \text{Quantity Received}$$
- Example:
  - Standard Cost of resource OSP\_LSR123 = \$100
  - $\text{PPV} = (\$100 - \$100) * \text{Quantity Received} = \$0$
- OSP receipts were recorded as expected on receiving transaction accounting reports and the Accrual Reconciliation Report

## Issue # 3: Insufficient Component QOH

- OSP PO receipt recorded even when insufficient SA component qty existed in the supply subinv.
- Impact:
  - WIP job was never completed (remained as 'Released')
  - ATO Make FG item was never added to Inventory
  - No notification of error on WIP\_MOVE\_TXN\_INTERFACE  
[process phase = 'Move processing'; process status = 3 (Error)]
  - OSP PO was closed for receiving if fully received
- Routings had 1 step, the OSP step, to avoid the need for user to record WIP job steps like parts prep
  - SA supply type = 'Assembly Pull' to allow user to substitute

## Issue # 3 Solution: Personalization Control

- Created a Forms Personalization to check for sufficient SA component quantity
- Error condition prevented the recording of the PO Receipt



## Issue # 4: Synching Up SO Changes

- If the quantity or date on an ATO Make SO line changed, or the line was cancelled, the change was not automatically made to the WIP job nor the OSP PO
- EBS provided no functionality to automatically propagate:
  - ATO Make SO line changes to the spawned WIP job
  - WIP job changes to its OSP PO except, possibly, for the WIP request 'Discrete Update OSP Need-by Dates'

## Issue # 4 Solution: SO Change WF E-Mail

- Permanently delegated a user to manually synch up the WIP job and the OSP PO to the modified ATO Make SO line
- To help detect the potential need for manual synching, a WF notification was triggered when an ATO Make SO line changed or had been cancelled
  - Used a seeded EBS OM WF notification designed to notify the planner
  - The ATO Make FG item had to be assigned a Planner code in the ship-from org (warehouse)
  - The assigned Planner code needed to be linked to an employee record

# Issue # 4 Solution: Planners Setup

Organization Item (PCM)

Organization: **PCM** **Pluggables Contract Manufacturing**

Item: **LASER123**

Description: **LASER123** [-N]

Display Attributes:  Master  Org  All

Purchasing Receiving Physical Attributes **General Planning** MPS/MRP Planning Lead Times Work In Process

Inventory Planning Method: **Not Planned** Planner: **CONFIG\_FG**

Make or Buy: **Make**

Min Max Quantity Order Quantity

Planners (PCM)

Name	Description	Employee
<b>CONFIG_FG</b>	OPP Config Model-ATO FG	Guether, Eric
CONFIG_SA	OPP Config Model-9 Digit S	Li, Shelley
TURNKEY	OPP PCL FG Buy Turnkey	Dooling, Matthew

Cost: Order [ ] Carrying [ ] %

Stock: Method **Non-MRP Planned** Bucket Days [ ] Percent [ ]

# Issue # 4 Solution: Seeded WF Notification

From: Oracle Workflow Mailer  
Sent: Tuesday, February 19, 2008 8:30 PM  
To: Guether, Eric

Subject: FYI: Work Flow Notification : Order Number 71003145, line # 1.1 for customer Flash Gordon Electronics Inc. has been modified.

Oracle Workflow Notification (FYI)

---

Changes have been made to the configured Order #71003145, Line Number #1.1.  
Details of the changes are provided below. Please ignore non-applicable (N/A) items.

1. Request Date is changed ----- N/A
2. Scheduled Date is changed ----- N/A
3. Scheduled Arrival Date is changed ----- N/A
4. Quantity is changed ----- 5 TO 30
5. The order Line has been cancelled ----- N/A
6. Configuration has been changed ----- N/A
7. Configuration item has been de-linked from the order line --- N/A
8. Ship From Org has been changed ----- N/A

Please review the impact of these changes on the manufacturing / shipping / procurement process and take appropriate action.

If the configuration item was de-linked, you may need to review the supply (if any) associated to the order line prior to de-link.

Please note that the order may involve multiple configuration and/or sourcing of configuration from different organizations.

This is an FYI notification and you are not required to respond to this notification.

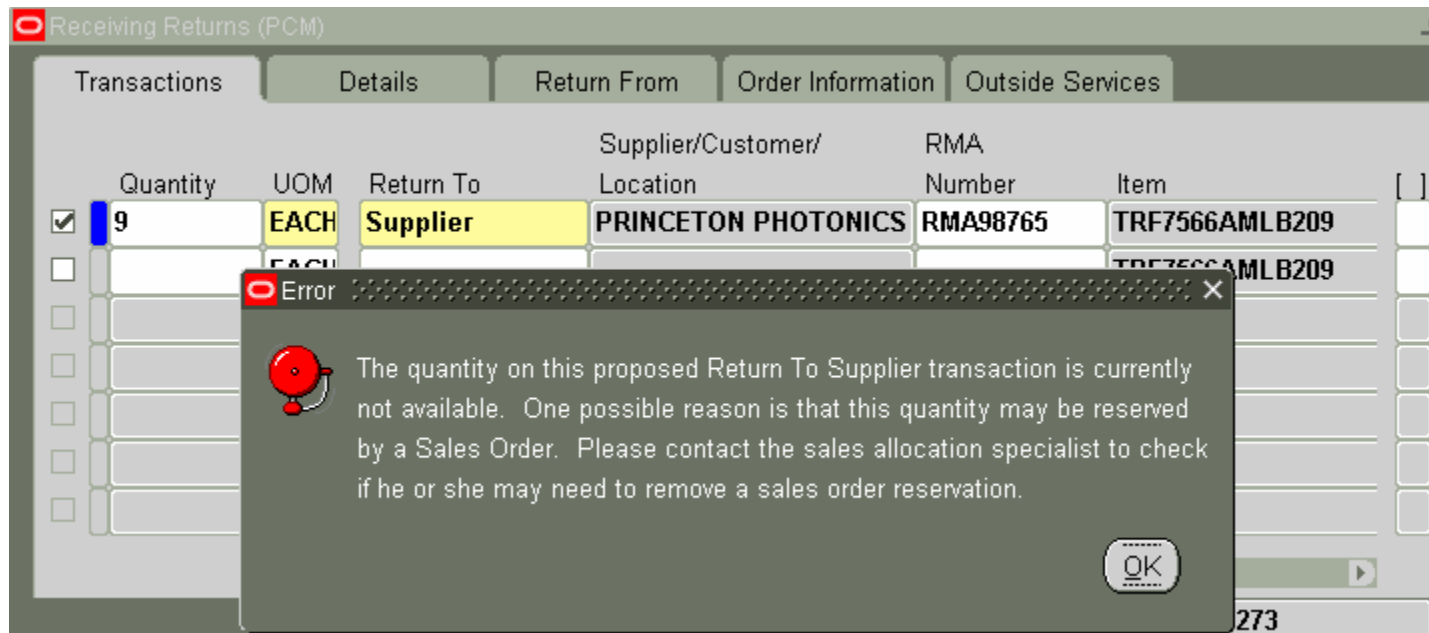
## Issue # 5: Return to Supplier

- User appeared to transact a Return to Supplier (RTS) against the OSP PO receipt when the ATO Make FG quantities were reserved (not available)
  - Quantities usually reserved by the SO reservation created automatically upon WIP job completion
- Impact:
  - ‘Returned’ ATO Make item quantities were never relieved from Inventory
  - No user notification of pending record stuck on the WIP\_MOVE\_TXN\_INTERFACE table  
[process phase = ‘Move validation’; process status = 1 (Pending)]



## Issue # 5 Solution: Personalization Control

- Created a Forms Personalization to check when the return transaction < the available QOH
- Error condition prevented the recording of the RTS



## Conclusion

- ATO Make with Outside Processing is a cost-effective, cross-module solution that addressed the business issues facing Opnext
- The solution can be implemented in an existing EBS 11i or R12 instance most likely using in-house resources only
- Forms Personalizations, workflow notifications, and custom Discoverer queries were needed to assist users in monitoring this solution