Oracle Outside Processing
Release 11i Workshop

An Oracle White Paper
May 2001

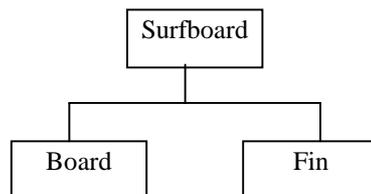# Oracle Outside Processing

OBJECTIVE

The objective of this paper is to provide a detailed analysis of the setup requirements for utilizing Oracle's outside processing functionality. This analysis will be presented in the form of a lab exercise. In addition, this paper will present a list of patches related to OSP issues.

OVERVIEW OF THE MANUFACTURING PROCESS

In this lab, you will build surfboards that require outside processing from a vendor. The components that makeup the surfboard will include a board and fin which will be purchased from outside suppliers.

Manufacture of the surfboards will involve assembly of the fin to the board. The assembled surfboards will then be sent to a vendor for outside processing. The outside processing will consist of painting the unfinished surfboard. Once the vendor has completed the surfboards, they will be shipped back to the manufacturing shop floor. The painted surfboards will then be completed into inventory as finished goods available for sale (See Outside Processing Overview - Pg. 18).
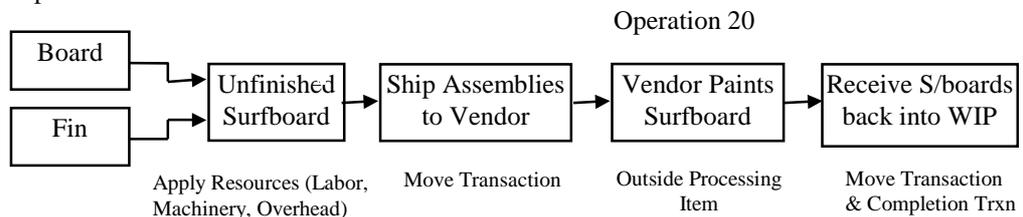
BOM Structure

```
              ┌──────────────┐
              │  Surfboard   │
              └──────┬───────┘
           ┌─────────┴─────────┐
     ┌──────────┐        ┌──────────┐
     │  Board   │        │   Fin    │
     └──────────┘        └──────────┘
```

Routing

Operation 10 - Assemble rudder to board.

Operation 20 - Outside Processing (Paint Surfboard)

Work in Process Flow to Manufacture Surfboards

Operation 10

Operation 20

```
┌──────────┐
│  Board   │──┐    ┌──────────────┐   ┌──────────────┐   ┌──────────────┐   ┌──────────────────┐
└──────────┘  ├───▶│  Unfinished  │──▶│Ship Assemblies│──▶│ Vendor Paints│──▶│ Receive S/boards │
┌──────────┐  │    │  Surfboard   │   │  to Vendor   │   │  Surfboard   │   │  back into WIP   │
│   Fin    │──┘    └──────────────┘   └──────────────┘   └──────────────┘   └──────────────────┘
└──────────┘
```

Apply Resources (Labor, Machinery, Overhead)   Move Transaction   Outside Processing Item   Move Transaction & Completion Trxn

The 5 Cost Elements Used in Oracle Manufacturing

In order to understand how outside processing fits into the manufacturing process it is necessary to discuss the 5 cost elements used by Oracle Manufacturing. Outside processing is actually one of these cost elements. The outside processing cost element (OSP) is very similar to the resource cost element. The only difference is that an OSP cost element involves resources applied from an outside vendor rather than within the company. A detailed discussion of each cost element is provided below:

Material – Direct cost of material. Material charges are earned when an item is received into inventory. Material is charged to WIP when components are manually issued or backflushed to the shop floor.

Material O/H – Indirect costs associated with material. You can base the overhead charge on the number of resource units or percentage of resource value earned in the routing operation. Or you can set up move-based overheads, using Item or Lot basis types, where the rate or amount is charged for each item moved in an operation.

You can base the material overhead charge on a percentage of the total value, which is earned when you receive purchase orders or perform WIP completion transactions.

Resources – Cost of resources applied to manufacture an assembly or finished good. There are two autocharging methods: WIP Move and Manual. Resources will be automatically charged at their standard rate to a job or repetitive schedule when you perform a move transaction using either the Move Transactions window or the Open Move Transaction Interface. When moving assemblies from the Queue or Run intraoperation steps forward to the To move, Reject, or Scrap intraoperation steps, or to the next operation, WIP charges all pre-assigned resources with a charge type of WIP Move at their standard rate.

Overhead – Indirect costs associated with a department or resource. In Move Based Overhead Charging, WIP automatically charges appropriate overhead costs as assemblies are moved through the shop floor. You can charge overheads directly based on move transactions or based on resource charges. For overheads charged based on move transactions with a basis of Item, WIP automatically charges overheads upon completion of each assembly in the operation. WIP automatically reverses these charges during a backward move transaction. For overheads based on move transactions with a basis of Lot, WIP automatically charges overheads upon completion of the first assembly in the operation.

In Resource Based Overhead Charging, WIP automatically charges appropriate overhead costs as you charge resources. You can charge overheads based on resource units or value.

Outside Processing - Cost of resources applied to manufacture an assembly or finished good at a vendor site. Work in Process automatically creates resource transactions at the standard or actual rate for all outside processing resources with an charge type of PO Receipt or PO Move when you receive assemblies from an outside processing operation back into work in process, using the Enter Receipts window in Purchasing. For outside processing resources with an charge type of PO Move, Work in Process automatically moves the assemblies from the Queue or Run intraoperation step of the outside processing operation into the Queue intraoperation step of your next operation.

If the outside processing operation is the last operation on the routing then Work in Process will perform a move transaction to the To move intraoperation step of the outside processing operation. In addition, Work in Process will automatically generate a completion transaction for the quantity moved (*Note: This feature is new for release 11i*). If you do not want this feature activated, then you must assign a No Move status to the To Move intraoperation step of the outside processing operation. This must be set up in the Assign Shop Floor Statuses form (Nav: WIP/Move Transactions/Shop Floor Statuses/Assign Shop Floor Statuses).

If you return assemblies to the supplier, Work in Process automatically reverses the charges to all automatic resources associated with the operation. You must manually reverse all manual resource charges using the Move Transactions window. For outside processing resources with a charge type of PO Move, Work in Process automatically moves the assemblies from the Queue intraoperation step of the operation immediately following the outside processing operation into the Queue intraoperation step of your outside processing operation.

See the WIP Account Distribution and Material Account Distribution Reports and the
WIP Value Summary form for detailed information on cost element charges into WIP.

Outside Processing Flow Example

Figure 1-5
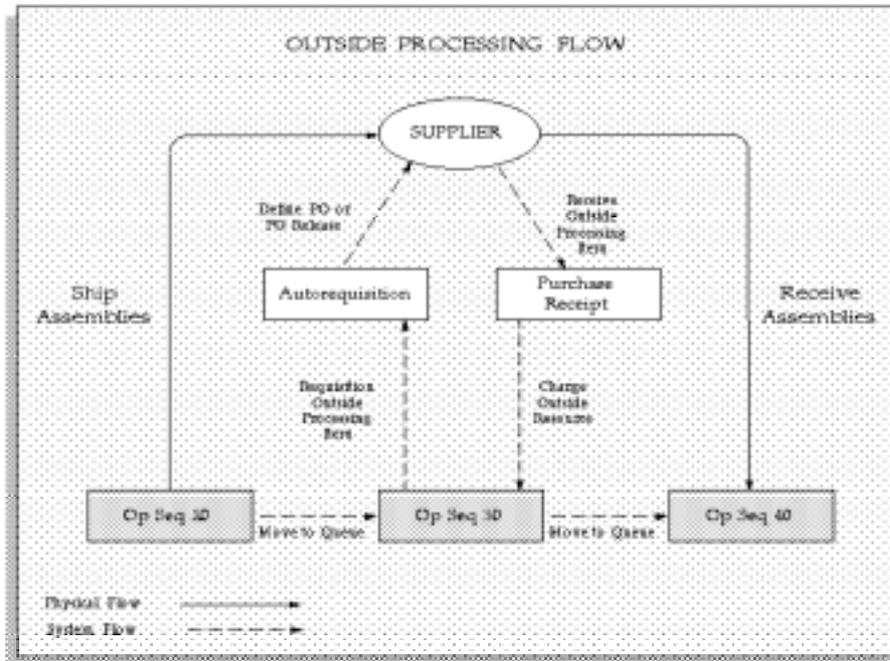
CORE MANUFACTURING SETUP OF OUTSIDE PROCESSING

Inventory Setup

Navigate to Inventory/Items/Master Items/

- Setup finished good item called XX-SURFBOARD. Go to Tools/Copy From/Click
  LOV/Select Finished Good/Click Done/Click OK/Click Apply/Click Done/Save.
  Copy to Seattle (M1) Organization (Select Tools/Org Assignment/Click M1/Save).
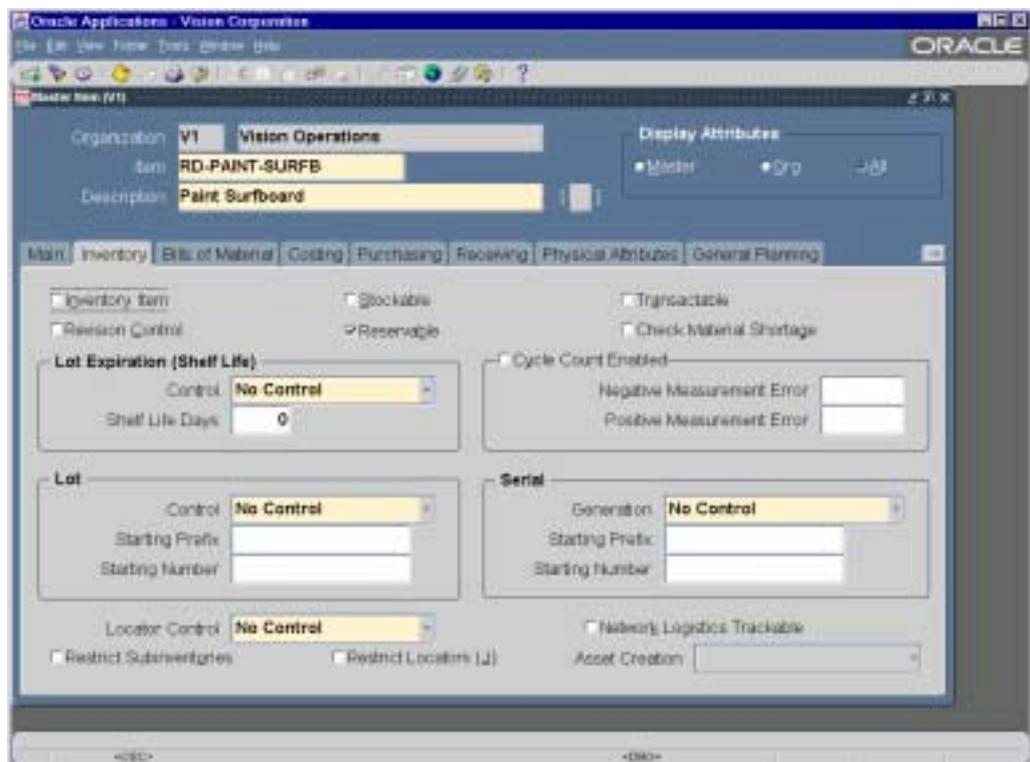
An Outside Processing Item is not normally included as a component on the Bill of Materials since it does not represent material required for assembling the finished good. Costs associated with outside processing are typically charged to the job as part of the resource costs associated with the routing, therefore the outside processing item is setup in the routing and not the BOM.

Outside processing items are not inventory items and as a result are not stockable or transactable in inventory, however they can be purchased and are purchasable, thus allowing requisitions to be generated for the item whenever an assembly is moved into an operation requiring outside processing.
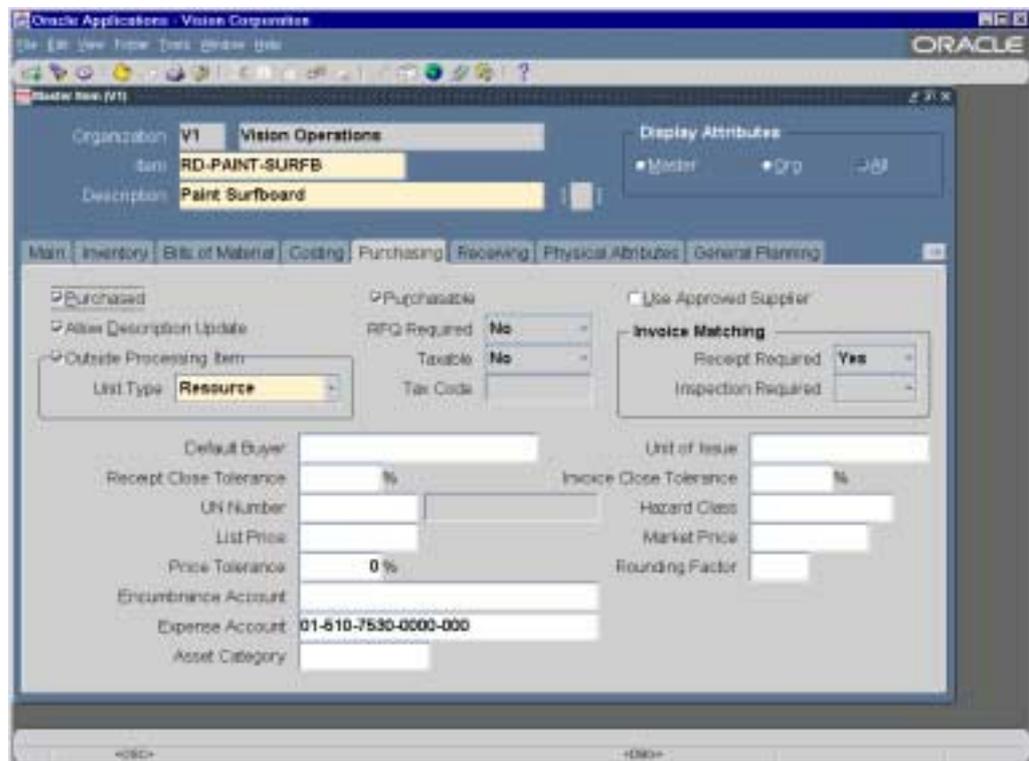
For each outside processing item, you must define the following:

Primary Unit Of Measure (Main Tab)

It is important to set the correct primary unit of measure for an OSP item. In this exercise, set the UOM to 'HRS'.

Outside Processing Item (Purchasing Tab)

Set this attribute to Yes to link an outside processing item with an outside resource and to include an item on an outside processing purchase order line.

Purchasable (Purchasing Tab)

Set this attribute to Yes to include an item on a purchase order line.

Outside Processing Unit Type (Purchasing Tab)

If you want to requisition one outside processing item for each assembly you ship to a supplier, then you should set the Outside Processing Unit Type to Assembly.

If you want to requisition the usage rate or amount of the outside resource for each assembly you move to an outside operation, you should set the Outside Processing Unit Type to Resource.

For this purposes of this exercise select 'Resource'.

Bills of Material Setup

A large amount of the setup required for outside processing occurs in Bills of Material. You must define outside resources and assign them to departments and shifts. You must also define routings that include operations with outside resources.

Define Outside Resources

You must define outside resources and link them to outside processing items in order to automatically generate purchase requisitions for outside processing. When assigning outside resources to a routing you also specify a usage rate or amount that determines the quantity you are requisitioning and/or charging to work in process jobs or repetitive schedules.

Navigate to BOM/Routings/Resources/
Create a resource named XX-OSP-RES

6

- Select Type -> Person
- Select UOM -> HR
- Select Charge Type -> PO Move

This attribute determines how to charge a resource to a job or repetitive schedule. For outside resources you want to automatically requisition, choose either PO Move or PO Receipt. Purchasing charges these resource to jobs and repetitive schedules when you receive against purchase order lines linked to the resources.

In addition, Purchasing enters move transactions when you receive against purchase order lines linked to PO Move resources. Purchasing moves the outside processed assemblies to the Queue of the next operation unless your at the final operation (See Figure 1-5 on Pg. 3). In this case, Purchasing moves the asssemblies to the To Move step of the last operation and then performs a completion transaction. There can only be one PO Move resource per operation.

- Click Enabled and enter XX-PAINT-SURFB for the outside processing item..

This attribute associates an outside resource with the outside processing item you are buying from a supplier.
- Select Basis -> Item.

- Select Activity -> Move

- Click Standard Rate

This attribute controls whether you charge an outside resource to a job or repetitive schedule at the standard rate of the resource or whether you charge the job or repetitive schedule at the actual purchase order line price. If you charge at standard, then Purchasing writes any variance between the purchase order actual and the source standard cost to the purchase price variance account of the resource at purchase order receipt. If you charge at actual, then Work in Process writes any variance to the outside processing elemental variance account associated with the job or repetitive schedule you are charging at job or period close.

Variance account - This account defaults in from the organization's purchase price variance account.

Absorption account - This account defaults from the organization's receiving account, which Purchasing debits when it receives an outside processing item and subsequently credits when it delivers the item to work in process.

- Click the Rates button -> Enter Frozen Cost type and Resource Unit Cost of 20.00.
- In the same screen, enter Pending Cost type and Resource Unit Cost of 20.00.

The resource unit cost defines the standard cost per UOM for a resource. Discrete jobs and repetitive schedules are charged using this cost when you receive outside processing items linked to outside resources that charge at standard.


Define Departments with Delivery Locations
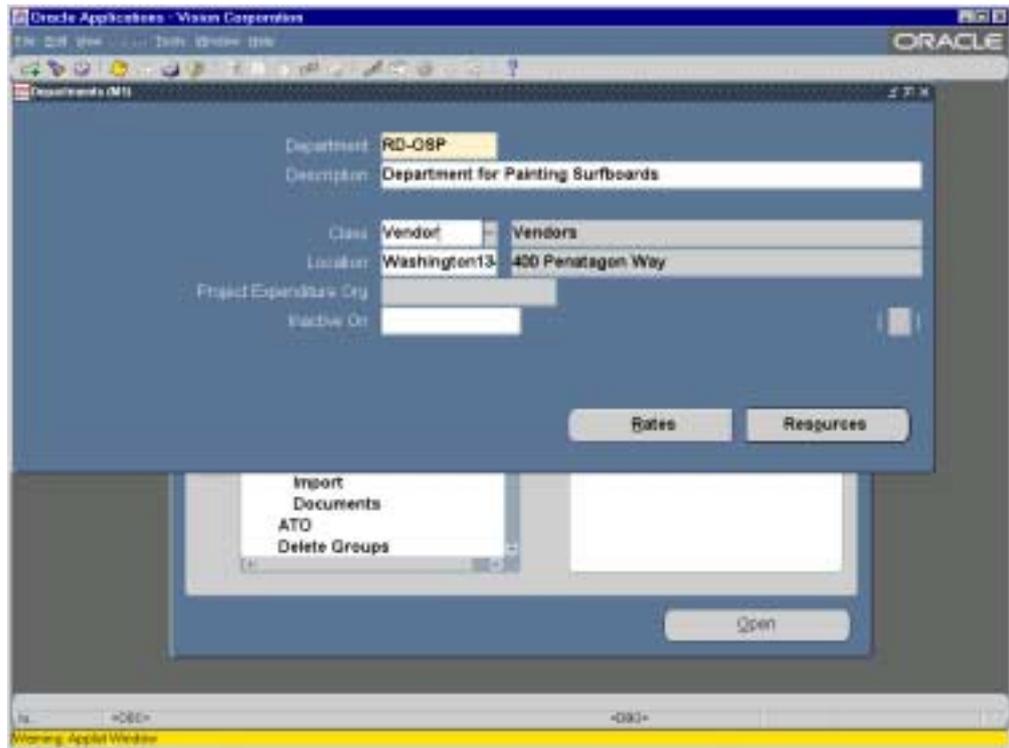
Navigation: BOM/Routings/Departments

- Enter Department -> XX-OSP
- Description -> Department for Painting Surfboards
- Class -> Vendor
- Location -> Select Washington1340 ** Important** This will be the delivery location used in the PO.
- Save
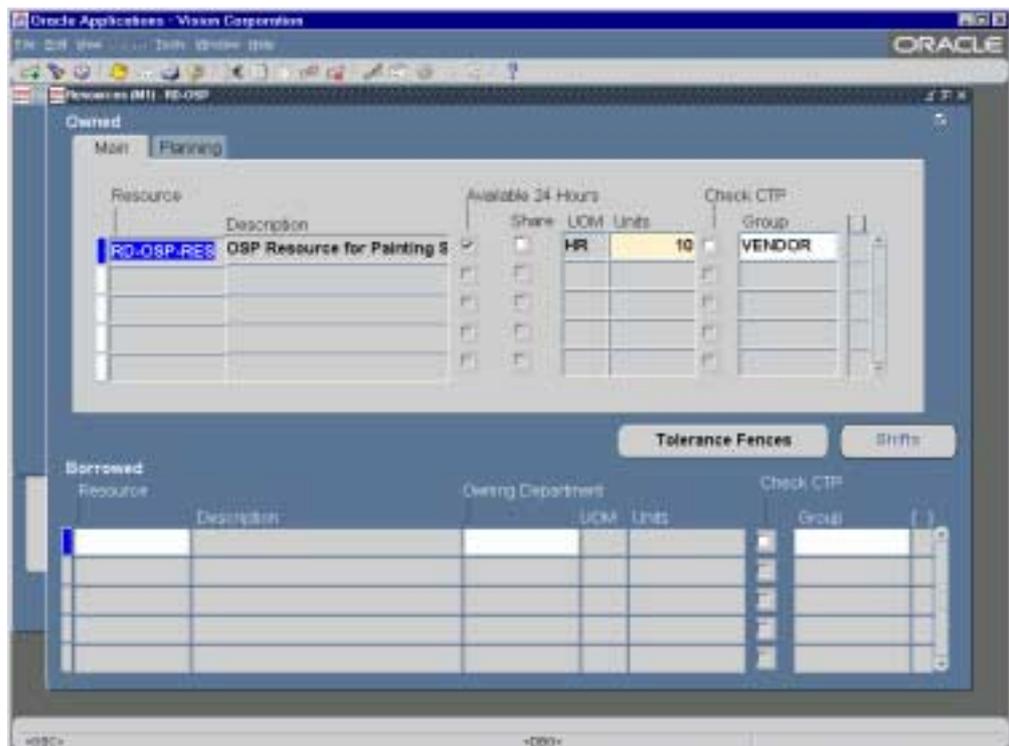
- Click Resource button in Departments form
- Click in Resource field under Owned section
- Select XX-OSP-RES
- Check Available 24 Hours
- UOM -> HR
- Units -> Enter 10
- Group -> Select Vendor
- Exception Set -> Standard
- Save
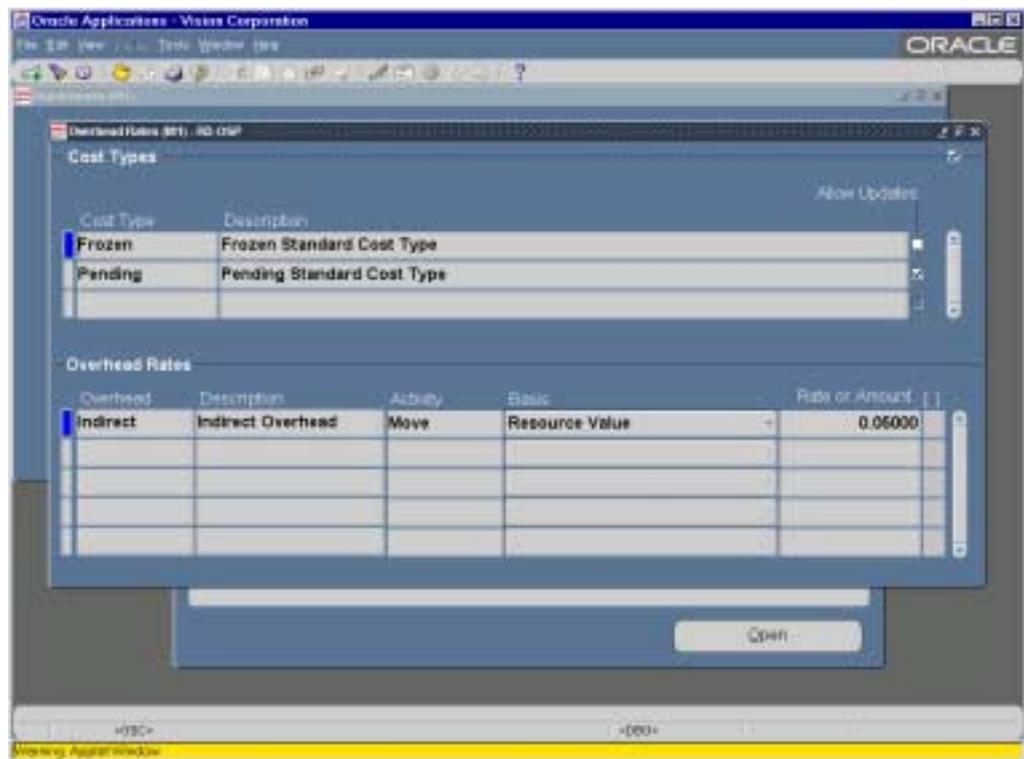
- Click Rates button in the Departments form
- Cost Type -> Select Frozen
- Go to Overhead Rates Section, Overhead -> Select Indirect
- Activity -> Move
- Basis -> Resource Value
- Rate or Amount -> .05

- Go to next line in the Cost Types section
- Cost Type -> Select Pending

- Go to Overhead Rates Section, Overhead -> Select Indirect
- Activity -> Move
- Basis -> Resource Value
- Rate or Amount -> .05
- Save

Define the Bill of Material

Navigation: BOM/Bills/Bills

- Item -> Enter XX-SURFBOARD

Components Region:

First Line
- Item Seq -> 10
- Operation Seq -> 1
- Component -> XX-BOARD
- Quantity -> 1

Second Line
- Item Seq -> 20
- Operation Seq -> 1
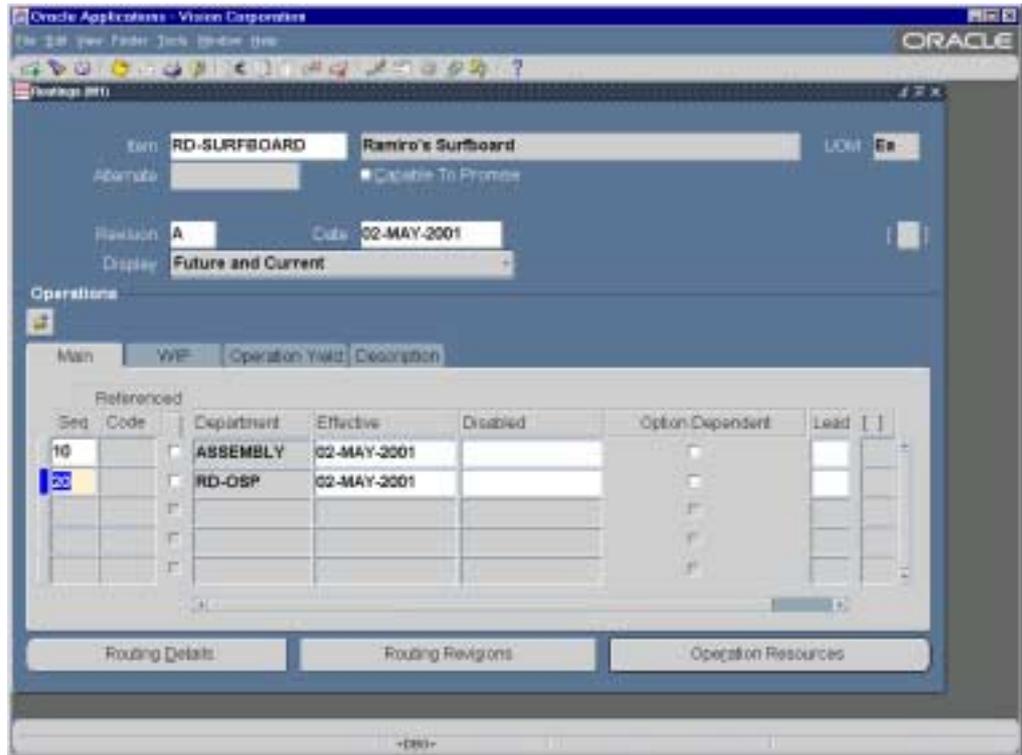- Component -> XX-FIN
- Quantity -> 1

- Save

- Select the Material Control Tab
For each component select the following:

- Supply Type -> Operation Pull
- Subinventory -> Floorstock
- Save your work.

Setup the Routing

Navigate to BOM/Routings/Routings

- Go to the item field and enter XX-SURFBOARD

Go to the Operations section and enter the following:

1st Operation
- Seq -> 1
- Department -> Assembly
- Click on Operation Resources. Go to the Resources section and enter the following:
- Seq -> 10
- Resource -> LBR-ASSY
- UOM should default in with HR
- Basis -> Item
- Usage -> 1, Close Operation Resources form and go back to main Routing form.

2nd Operation
- Seq -> 2
- Department -> XX-OSP
- Click on Operation Resources. Go to the Resources section and enter the following:
- Seq -> 10
- Resource -> XX-OSP-RES
- UOM should default in with HR
- Basis -> Item
- Usage -> 2, Close Operation Resources form and go back to main Routing form.
- Save the Routing.

Costing Setup

<u>Item Cost Setup</u>

Setup component material and material overhead costs.

Navigate to Cost/Item Costs/Item Costs/Query XX-BOARD

- Click on new line below the Frozen cost line
- Enter Item XX-BOARD
- Cost Type -> Pending
- Click Open, then click Costs
- Enter Cost Element -> Material
- Subelement -> Material
- Activity -> Move
- Basis -> Item
- Rate or Amount -> 100
- Go to next line enter Cost Element -> Material Overhead
- Enter subelement -> Mat'l Hndlg
- Activity -> Move
- Basis -> Total Value
- Rate or Amount -> .1
- Save.

Repeat the same steps above for the Frozen cost type.

In the Item Costs form query XX-FIN

- Click on new line below the Frozen cost line
- Enter Item XX-FIN
- Cost Type -> Pending
- Click Open, then click Costs
- Enter Cost Element -> Material
- Subelement -> Material
- Activity -> Move

- Basis -> Item
- Rate or Amount -> 20
- Go to next line enter Cost Element -> Material Overhead
- Enter subelement -> Mat'l Hndlg
- Activity -> Move
- Basis -> Total Value
- Rate or Amount -> .1
- Save.

Repeat the same steps above for the Frozen cost type.

Assembly Cost Rollup
Perform a cost rollup on the surfboard and then a cost update so all costs can be charged to a discrete job at the standard rate. Navigate to Cost/Item Costs/Assembly Cost Rollup

- Click LOV button. Select Cost rollup - print report GUI
- Cost type -> Pending
- Rollup Option -> Full cost rollup
- Range -> Specific Item
- Report Type -> Detailed Indented
- Material Detail -> Yes
- Material O/H Detail -> Yes
- Routing Detail -> Yes
- Report # of Levels -> 10
- Engineering Bills -> No
- Specific Item -> XX-SURFBOARD
- Click on OK and submit request.

Standard Cost Update

Perform the following after the rollup has completed. Navigate to Cost/Item Costs/Standard Cost Update/Update Costs

- Cost Type -> Pending
- Adjustment Account -> Enter an account
- Item Range -> Specific Item
- Update Option -> Overhead, resource, activity and item costs.
- Specific Item -> XX-SURFBOARD
- Click on OK and submit request.

Create the Discrete Job
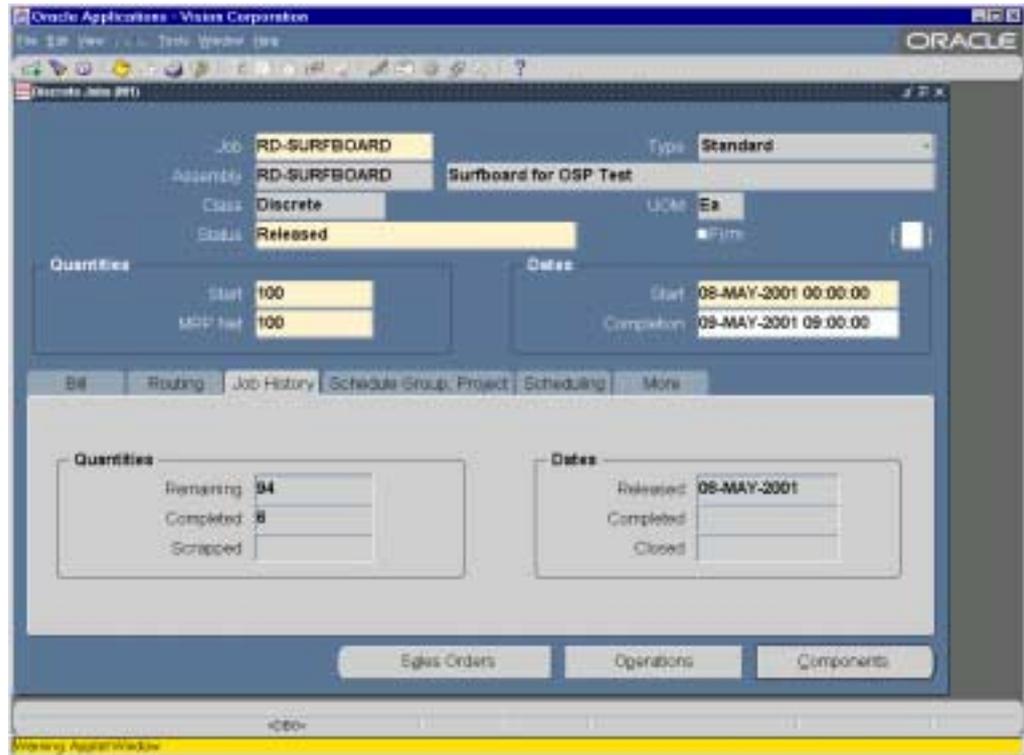
Navigate to WIP responsibility/Discrete/Discrete Jobs

- Enter Job -> XX-SURFBOARD
- Enter Assembly -> XX-SURFBOARD
- Class -> Discrete
- Status -> Released
- Type -> Standard
- Start Quantity -> 100
- Start Date -> Enter today's date.
- Save.

Perform Miscellaneous Receipt for Component Items into Inventory

Navigate to Inventory/Transactions/Miscellaneous Transaction/

- Click in the Type field and select Miscellaneous Receipt, click Transaction Lines
- Enter Item -> XX-BOARD
- Enter Subinventory 'Floorstock'
- Enter Quantity -> 100
- Enter Account

Go to next line

- Enter Item -> XX-FIN
- Enter Subinventory 'Floorstock'
- Enter Quantity -> 100
- Enter Account
- Save Transaction.

Verify receipt of Items into Inventory

Navigate to Inventory/On-Hand Availability/On-Hand Quantities

Query up on-hand quantities for Items XX-BOARD and XX-FIN.

Do the quantities exist in the subinventories selected for a miscellaneous receipt?

SETUP IN PURCHASING

Enter Employee and Link to Applications Users
Purchasing requires an employee for all requisitions/purchase orders to be created
and approved. To support this functionality, you must define employees and link them
to the applications users who enter move transactions.

Switch responsibility to US HRMS Manager. Navigate to People/Enter and Maintain

- Enter Last Name, First, Title, Employee Number, Social Security Number, and
  Birthdate.
- Click the More button/Select Assignment alternate region/
- Enter valid Organization, Position, and Job. Make sure you enter a position that
  will have the approval authority for your purchase orders.
- Save.

Switch responsibility to System Administrator. Navigate to Security/User/Define.

- Query up Username
- Add Employee to Person field.
- Save.

Switch responsibility back to Purchasing. Navigate to Setup/Personnel/Buyers.

- Insert row by clicking green cross in toolbar.
- Add Employee to Buyer field
- Enter Ship-to org of 'M1 –Seattle'
- Save.

Define Sourcing Rules

You can define rules for each outside processing item to help you determine from which supplier to source the item.

Step 1 - Creation of the Standard Quotation
Navigation: RFQ's and Quotations/Quotations
- Choose Quotation Type - Standard Quotation Type
- Enter Supplier – Advanced Networking Devices
- Enter Supplier Site – Santa Clara
- Enter Ship-To as M1 - Seattle
- Enter Effective Date - Today's Date
- Enter Effective Through Date - One Year from now
- Change Status from In-Process to Active
- Choose Item - 'XX-PAINT-SURFB'
- Enter a price of 40.00
- Save - Take note of the Quotation Number

Approved Supplier List

Step 2 - Creation of the Approved Supplier List Entry
Navigation: Supply Base/Approved Supplier List
- Select M1 organization.
- Click in the Item Field and choose the Item created from Step 1 - 'XX-PAINT-SURFB'
- Move to the bottom section of the form - Choose Direct for the 'Business' field.
- Enter 'Advanced Networking Devices' in the Supplier field since it was used on the quotation.
- Enter the Supplier Site 'SANTA CLARA' that was used in this test.
- Change the status field from NEW to APPROVED.

- Switch the tab from 'KEY ATTRIBUTES' to 'RECORD DETAILS'
- Update Global Field selection from No to Yes - we are making this entry Global for all Organizations.
- Save your work.

Within the same form it is now time to setup the Attributes section.
- Select the attributes button.
- Choose Release Method Field and enter 'Release Using Autocreate'
- Do not enter any values for the Price Update Tolerance
- Do not enter any values for the Purchasing UOM
- Choose the bottom portion of the form - in the field TYPE - Enter 'Quotation'
- Choose the Number field - Hit the List of Values - Choose the Quotation Number for the document created in step 1.
- Choose the Line field and select the number 1 for the line.
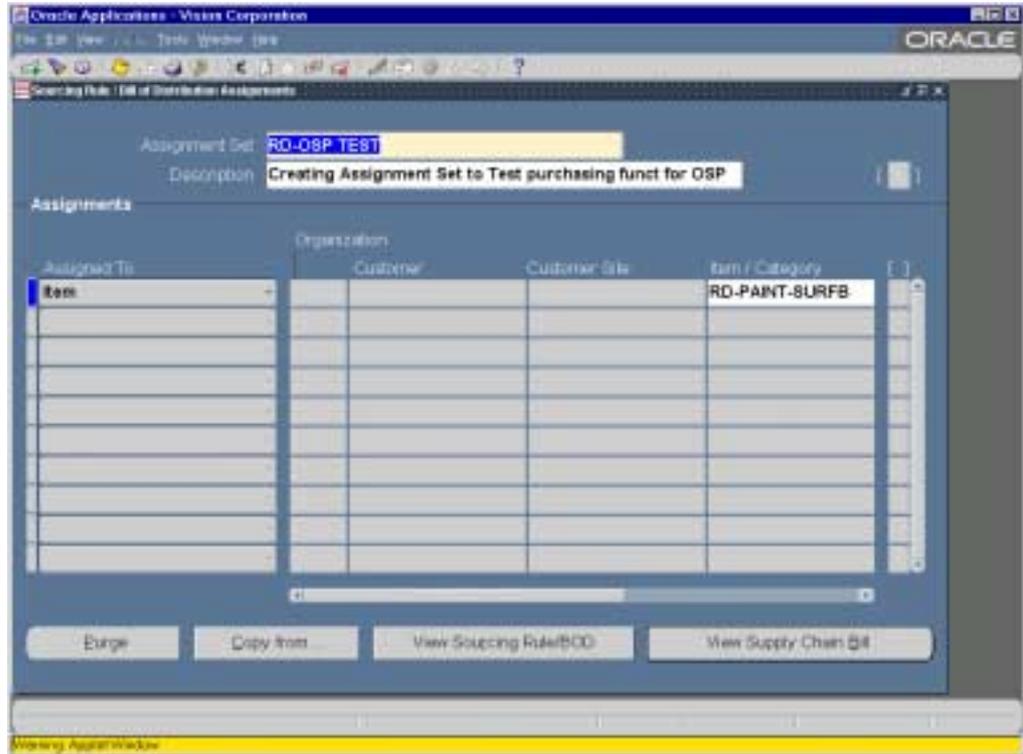- Save your work

Sourcing Rule

Step 3 - Creation of Sourcing Rule
Purchasing Super user Responsibility
Navigation: Supply Base/Sourcing Rules
- Choose Sourcing Rule Name field - 'XX-Advanced Networking Source'
- Choose Description field and enter - 'Sourcing Rule for Quotation to Req to PO'
- Select the 'ALL ORGS' radio button to the right of the above two fields
- Select Effect Date field - enter first portion of the effective date - todays date drops in
- Select lower section of screen - Type field - Choose 'BUY FROM'
- Skip the Org Field
- Move to the Supplier Field - select 'Advanced Networking Devices'
- Move to the Supplier Site field - select 'SANTA CLARA - Vision operations'
- Enter Allocation field - set this to 100%
- Select the Rank field - insert a value of 1
- Save your work

Sourcing Rule Assignment Set

Step 4 - Creation and Explanation of a Sourcing Rule Assignment Set
Purchasing Super User Responsibility
Navigation: Supply Base/Assign Sourcing Rules
- Enter the field Assignment Set - enter value 'XX-OSP TEST'
- Description - 'Creating Assignment Set to test funct for OSP'
- Click underneath the 'Assigned To' box - Choose Item
- Select field 'Item/Category' select the Item 'XX-PAINT-SURFB'
- Choose field TYPE - select 'Sourcing Rule'
- Choose field SOURCING RULE/BoD - Hit the List of Values and select the
  sourcing rule which was created in Step 3 - 'XX-Advanced Networking Source'
- Save your work

Step 5 - Sourcing Rule Assignment Profile Setup and Logic:
Responsibility: Purchasing Super User
Navigation: Personal Profiles
- Query on the profile option MRP: Default Sourcing Rule Assignment Set
- Click in the 'User Value' section
- Select the newly created assignment Set – XX-OSP TEST
- Save your work
YOUR SETUP IS COMPLETE!!!

We will now perform a WIP MOVE Transaction to see if a requisition is generated in
Purchasing.

For purposes of this test, set the Requisition Creation Time to 'Manual'. This will allow
us to check to see if records are getting placed in the
PO_REQUISITIONS_INTERFACE_ALL table. To set this parameter navigate to WIP
responsibility/Setup/Parameters/select the Outside Processing tab/select 'Manual' for
Requisition Creation Time.
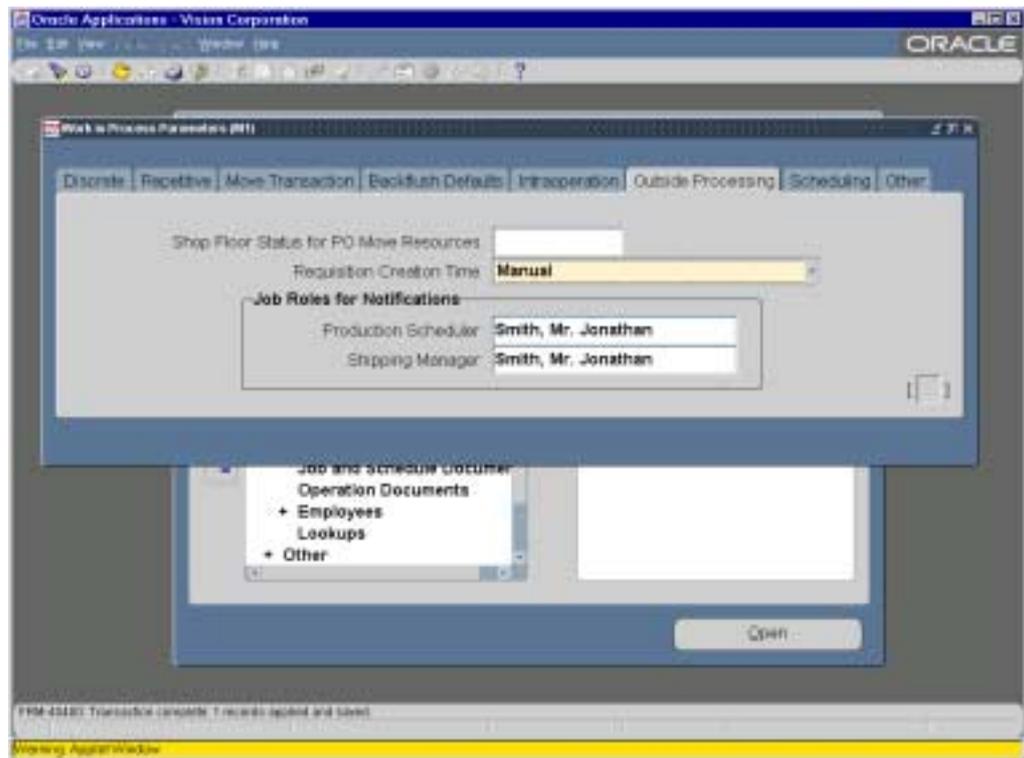
If you want requisitions to be automatically imported into Purchasing immediately upon performing a WIP Move transaction, then set this parameter to 'At Operation'. This will automatically trigger the Requisition Import process immediately after the WIP Move transaction has completed. *The Requisition Creation Time parameter is new for release 11i.*

Perform a WIP Move Transaction to the OSP Step
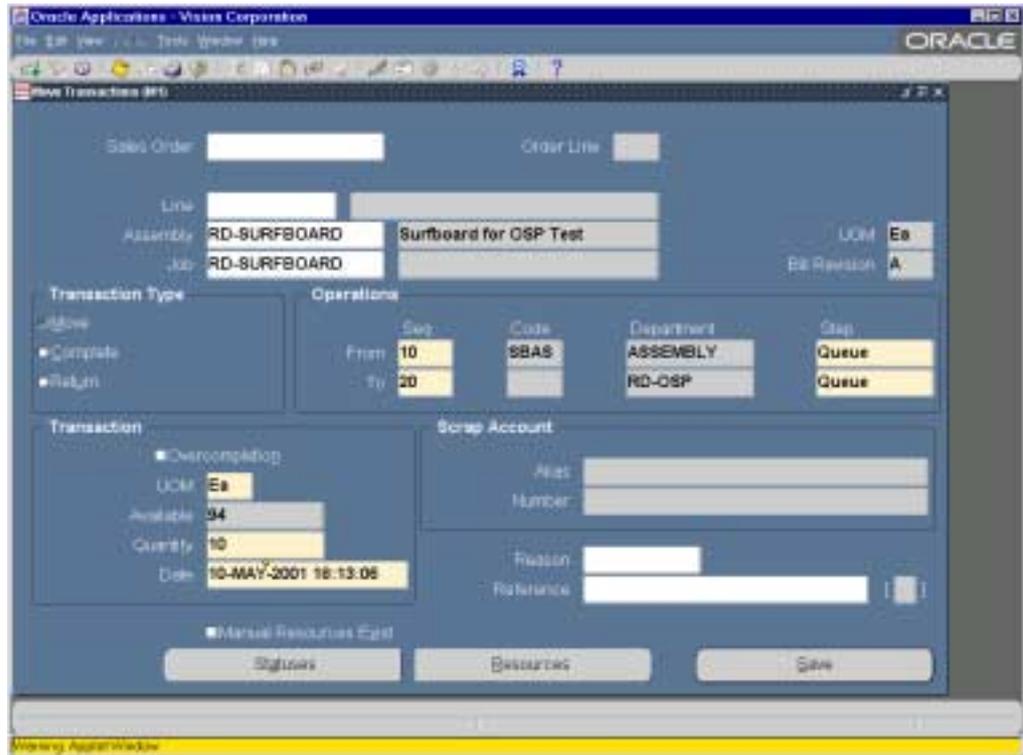
Switch responsibility to Manufacturing Manager. Navigate to WIP/Move Transactions/Move Transactions

- Select Job -> XX-SURFBOARD
- Go to Operations section and click on the Seq field in the From row. Select the first operation 10 from the list of values.
- Go to the Step field and select Queue.
- Go to the next row labeled To
- Click on the Seq field and select OSP operation 20 from the list of values.
- Go to the Step field and select Queue* (See below).

- Go to the Quantity field in the Transaction section.
- Enter quantity -> 10.
- Click on the Transact button. A record will now be inserted into the PO_REQUISITIONS_INTERFACE_ALL table.

* In order to have Work in Process automatically create a pending requisition in the PO_REQUISITIONS_INTERFACE_ALL table for an outside processing item you must move assemblies into the Queue of an operation with an outside processing resource.

Verifying that a record was inserted into the PO_REQUISITIONS_INTERFACE_ALL table.

Run the following script after performing the move transaction:

Select count(*)
from po_requisitions_interface
where item_id = (select inventory_item_id from mtl_system_items
where segment1 = '&item' and organization_id = (select organization_id
from mtl_parameters where organization_code = '&org_code'))
and wip_entity_id = (select wip_entity_id from wip_entities
where organization_id = (select organization_id

```
from mtl_parameters where organization_code = '&org_code')
and wip_entity_name = '&job_number');
```

You will be prompted to enter the item number, organization code (twice), and the discrete job.

If you do not find a record, verify that the Move Transaction Manager is active.

- Navigate to Inventory/Setup/Transactions/Interface Managers/ - the status of the Move Transaction Manager should be active.

After the manager has processed the move transaction, run the select script again. The count should be 1. If so, then a record was inserted into the interface table.

Alternatively, you can run a select count(*) on the PO_REQUISITIONS_INTERFACE_ALL table before and after the Move Transaction Manager has run to see if the count increases by 1. Note that this will not work if there are other currently active users releasing requisitions into this interface table.

Importing the Requisition
Change responsibility to Purchasing Superuser.
Navigate to Purchasing/Reports/Run/ - Select Requisition Import

- Enter the following parameters:
- Import Source -> WIP
- Group By -> Item
- Multiple Distributions -> No
- Initiate Approval After Req Import -> Yes
- Click O.K.
- Submit the Request.

Verifying that the record was processed successfully
Run the above script after the Requisition Import process is complete:

The count should now be 0. If the record was not processed then run the Requisition Import Exceptions Report to determine the cause of the error.

Autocreate the Purchase Order

Since the Approved Supplier List was setup using a Release Method of 'Release Using Autocreate' the approved requisition will automatically get created into a purchase order.

If you choose not to have this setting on the Approved Supplier List then you will have to perform the following. Otherwise, you can skip the rest of the Autocreate section.

Nav: Purchasing/Autocreate

- Click Clear
- Enter 'XX-PAINT-SURFB' in the Item, Rev field under the Item alternate region.
- Click Find

An Autocreate Documents window will appear.
- Click on the line of the requisition that was created, then press ctrl and click line again to highlight in blue.
- Make sure Action is set to 'Create'
- Set Document type to 'Standard PO'
- Set Grouping to 'Default'
- Click on Automatic

A 'New Document' window will appear.
- Click Create. ** Note the document number.
- Click O.K.

The Purchase Order will now appear.

Approve the Purchase Order

Nav: Purchasing/Purchase Orders/Purchase Orders
**Note that you will not have to navigate here if you are continuing from section above.

- Enter a Description.
- Click the Shipments button.
- Click the Distributions button.
**Note the destination type, requestor, and deliver-to location.
- Click the Outside Processing button.
** Note the reference to the job, sequence, department, and quantity.
Go back to the Purchase Orders main form.
- Click Approve.
- Click O.K. in the 'Approve Document' form.

Your Purchase Order should now be approved.

The Supplier Portal for Outside Processing

If you have Oracle Supplier Management Portal installed on your system, you can provide your outside processing suppliers with access to all of their outside processing purchase orders. You must set up an Oracle Applications user ID for the supplier, which gives them access to the specific purchase orders that you want them to view. Once their user ID is set up, all the supplier needs is a browser, the user ID, and the Internet address or URL for Oracle Self-Service Web Applications.

Setup of the Supplier User ID

Change responsibility to System Administrator
Navigation: Security/User/Define

- Enter Username, description and password
- Go to the Supplier field and select a supplier with Advanced Network Devices
- In the Responsibility section select Supplier Services (by Supplier) and Supplier Registration.

Log onto the Supplier Portal

1. View Outside Processing Orders

- Connect to the URL for your Oracle Self-Service Web Applications home page.
- Select the responsibility Supplier Services (by Supplier)
- Select View Outside Processing Orders
- Select Item Number and enter 'XX-PAINT-SURFB' in the contains field.
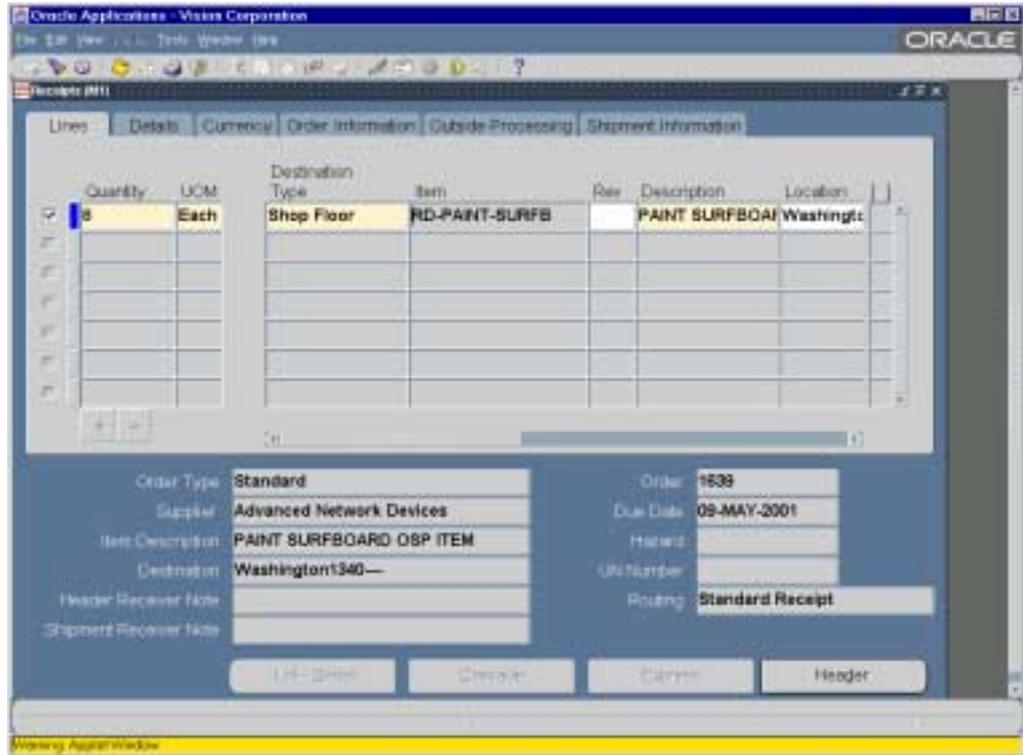- Click Search
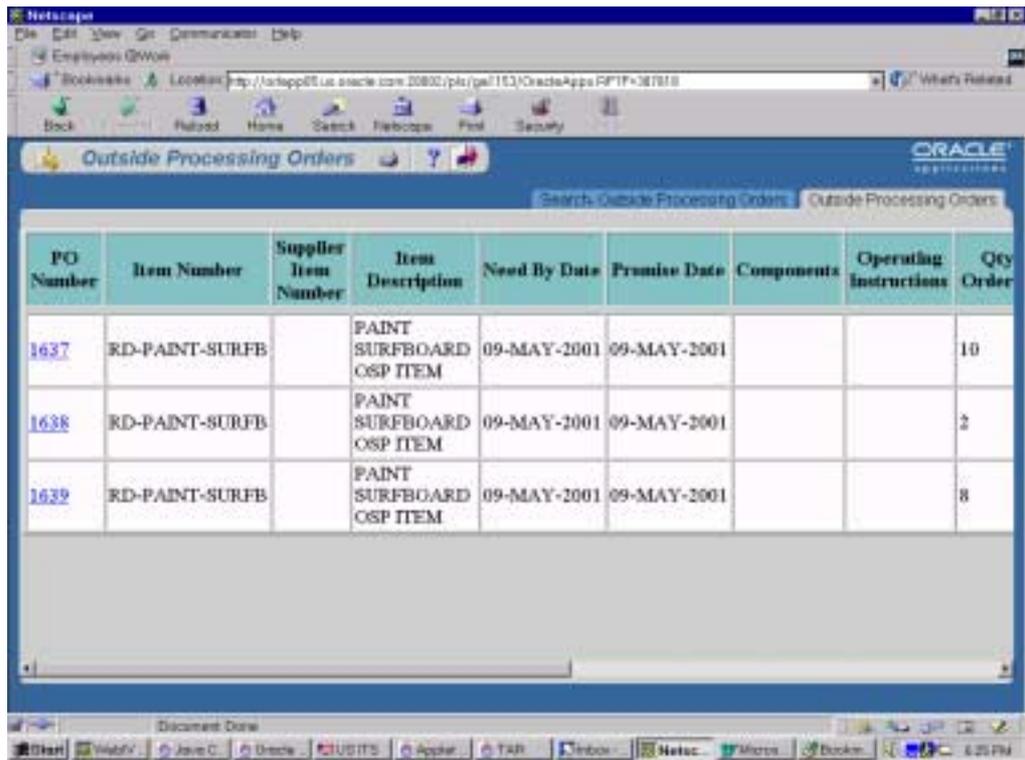
2. Outside Processing Workbench

- From the Supplier Services (by Supplier) Main menu select Outside Processing Workbench
- Select Item Number and enter 'XX-PAINT-SURFB' in the contains field.
- Click Search
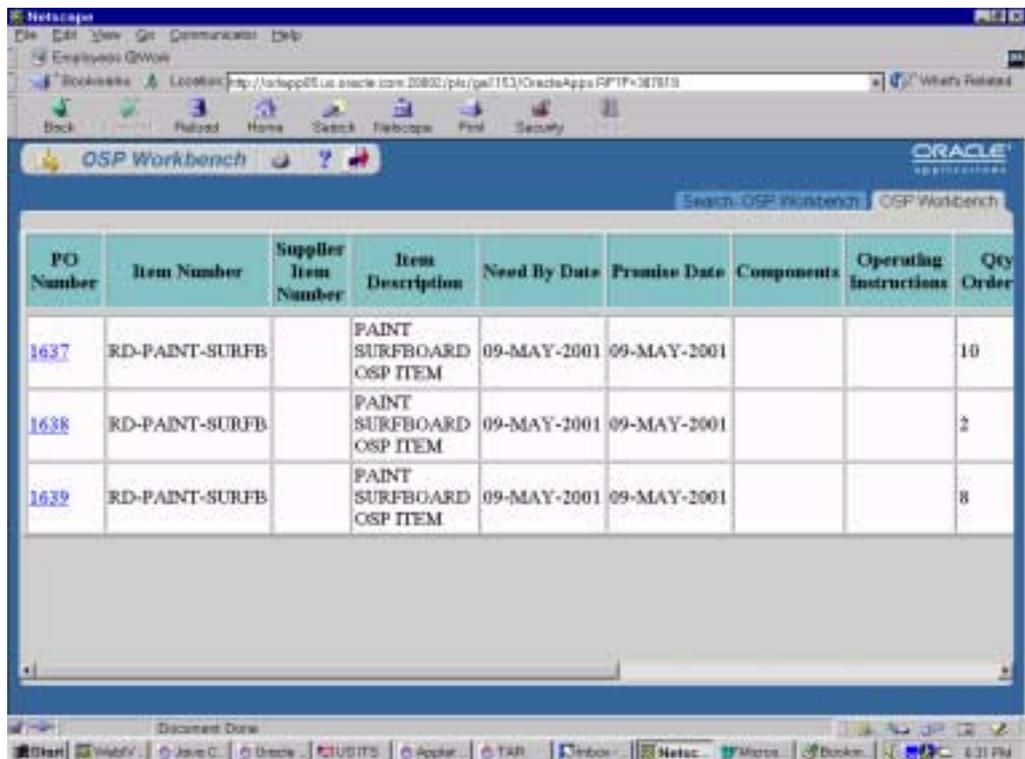
Receiving the items back to the Shopfloor

Nav: Purchasing/Receiving/Receipts

- Enter the PO# in the Purchase Order field of the 'Find Expected Receipts' form.
- Go to the Receipts form and click the checkbox to the left of the line item.
- Select Destination Type -> Shop Floor
- Save.

** Note the receipt number in the 'Receipt Header' form.

Purchasing will now create a Pending Move Transaction in WIP_MOVE_TXN_INTERFACE to move the surfboards from the 'Queue' of the OSP step to the 'To Move'. Once the WIP Move transaction has completed, a Completion transaction will be automatically triggered to move the assemblies into Inventory.

** Note that the quantity will not be moved to the queue of the next step since the OSP step is the last operation in the routing. The quantity will be moved to the To Move step of the OSP operation and then completed into Inventory.

Verifying that the WIP Move Transaction has been processed.

Nav: WIP/Move Transactions/Pending Move Transactions

- Select a date range of today.
- Click Find.

A record should show up for 'XX-SURFBOARD'. When the receipt was committed Purchasing triggered a WIP Move transaction by inserting a record into the WIP_MOVE_TXN_INTERFACE table. This record is waiting to be processed by the Move Transaction Interface manager.**

** Note that you will not see the record in the interface table if you are processing move transactions in 'ON-LINE' processing mode. Check the setting of the profile option TP:WIP MOVE TRANSACTION.

Next, a completion transaction will be automatically triggered since the OSP step is the last operation on the routing. A record will be inserted into the MTL_MATERIAL_TRANSACTIONS_TEMP table. Once the record has been processed, it will get inserted into MTL_MATERIAL_TRANSACTIONS and will be purged from MTL_MATERIAL_TRANSACTIONS.

You can verify completion of the assemblies by navigating to WIP/Discrete/View Discrete Jobs/Query up the job 'XX-SURFBOARD'/Select the Job History tab.
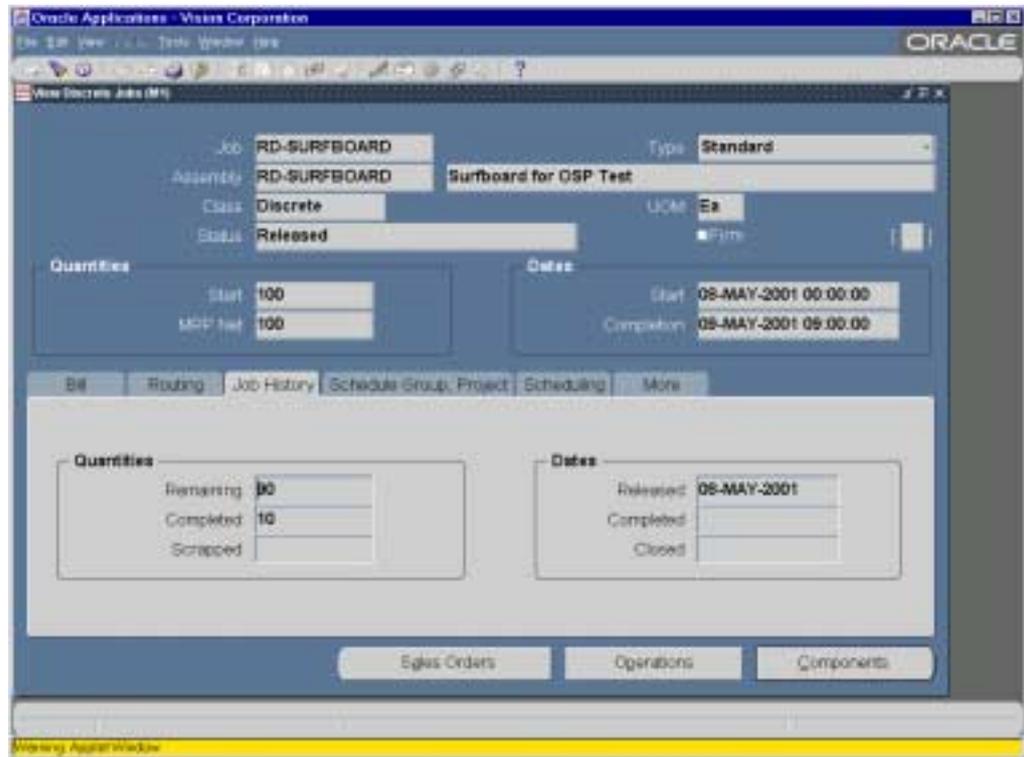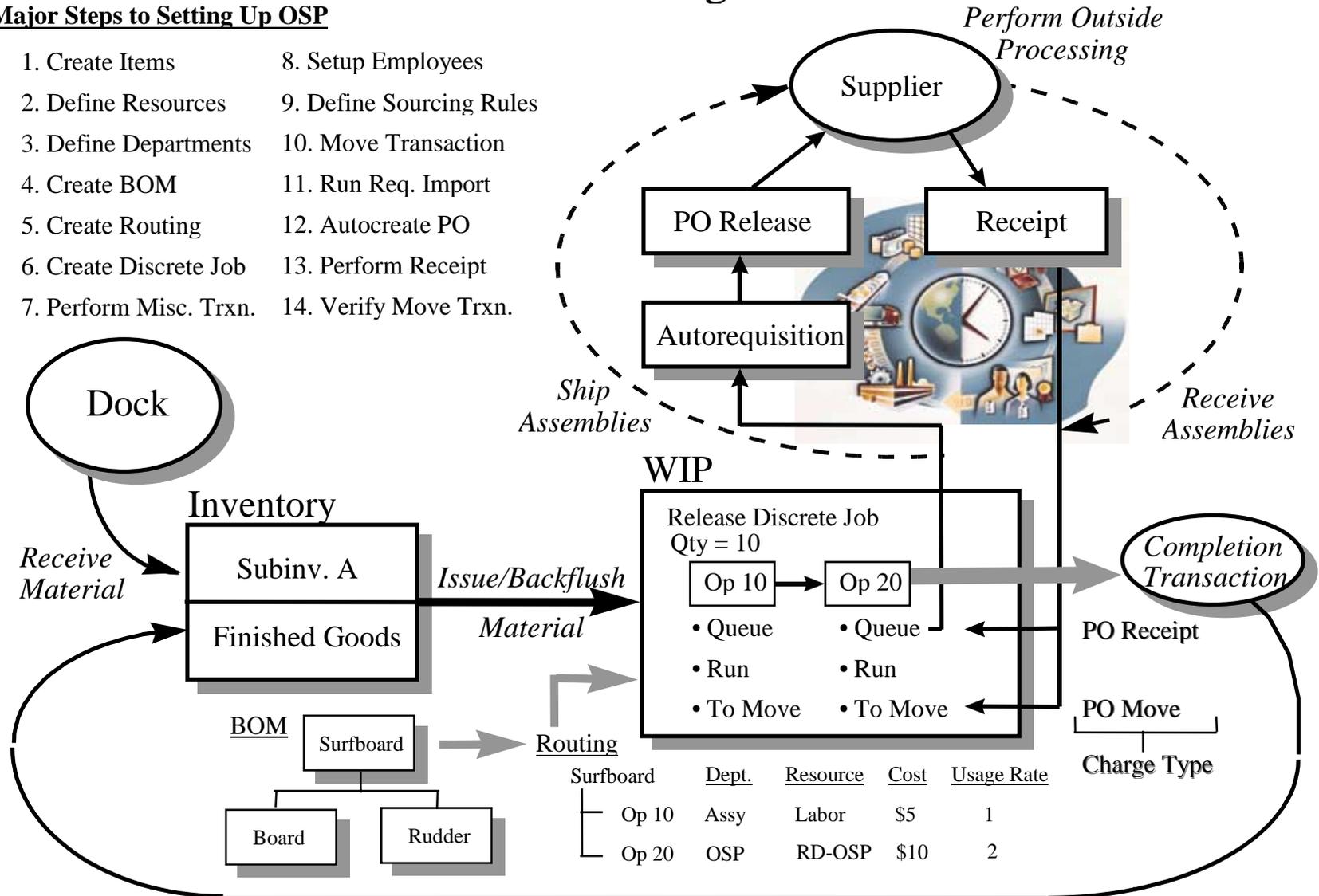

You have now completed the entire lifecycle of Outside Processing!!!

An overview depicting the major steps involved in the Outside Processing lifecycle has been provided below.

Outside Processing Overview

Major Steps to Setting Up OSP

1. Create Items
2. Define Resources
3. Define Departments
4. Create BOM
5. Create Routing
6. Create Discrete Job
7. Perform Misc. Trxn.

8. Setup Employees
9. Define Sourcing Rules
10. Move Transaction
11. Run Req. Import
12. Autocreate PO
13. Perform Receipt
14. Verify Move Trxn.

Perform Outside Processing

Supplier

PO Release

Receipt

Autorequisition

Ship Assemblies

Receive Assemblies

Dock

Receive Material

Inventory

Subinv. A

Finished Goods

Issue/Backflush Material

WIP

Release Discrete Job
Qty = 10

| Op 10 | → | Op 20 |

- Queue • Queue
- Run • Run
- To Move • To Move

Completion Transaction

PO Receipt

PO Move

Charge Type

BOM

Surfboard

Board   Rudder

Routing

Surfboard	Dept.	Resource	Cost	Usage Rate
Op 10	Assy	Labor	$5	1
Op 20	OSP	RD-OSP	$10	2

Existing Bugs

1750502 - THE RESOURCE_RATE FIELD IN THE WCTI TABLE IS NULL FOR OSP TRANSACTIONS

1207135 - E11I 36328 FOR OSP REQUISITION IMPORT REQUEST FAILS

1156431 - POXPOEPO: OUTSIDE PROCESSING INFO NOT SAVING WHEN JOB EXCEEDS 15 CHARACTERS

1146348 - POXPOEPO: OUTSIDE PROCESSING INFO NOT SAVING WHEN JOB EXCEEDS 15 CHARACTERS

1122364 - POXPOEPO: OSP TYPE LOV FOR JOB IS TOO SHORT

1095676 - OSP UOM CONVERSION NOT DONE ON UNIT COST

1021887 - ALTHOUGH REQUISITIONS ARE INITIALLY CREATED FOR OUTSIDE PROCESSING WIP JOBS, REQUISITIONS ARE NOT CREATED WHEN THE WIP JOB QUANTITY IS INCREASED.

997696 - CURRENCY TRANSACTION VALUE DOES NOT POPULATE TO WIP

995326 - OSP : RECEIPT OF QTYS GREATER THAN IN THE QUEUE OF OSP OPERATION

993323 - OUTSIDE PROCESSING REQUISITION NOT CREATED WHEN WIP JOB QUANTITY IS INCREASED

955534 - UI & FUNCTIONALITY = RECEIVING RETURNS FORM. CAN'T TAB KEY THROUGH TO ORDER INFORMATION & OUTSIDE PROCESSING.

918701 - REQ IMPORT IS NOT SOURCING FROM WIP REQUISTIONS

913629 - REJECTING PO WITH OUTSIDE-PROCESS ITEM (FROM NOTIFICATION) DOES NOT UNRESERVE

903921 - CURRENCY CONVERSION DATES ARE WRONG

867480 - IN BOM,ROUTING,RES CHARGE TYPE=PO MOVE WILL NOT ALLOW YOU TO ENABLE OSP IF SAVED

862574 - RCVTXERT ERRORS FRM-40105 APP-14142 ON OUTSIDE PROCESSING TYPE

858437 - WIP OUTSIDE PROCESSING IS NOT BEING POSTED TO THE JOB

856335 - OSP MOVE TRANSACTION ERRORS IN INTERFACE WITH APP-988, ORA-2108 IN WITVEVA

820859/851832 - RCVTXERT ERRORS FRM-40105 APP-14142 ON OUTSIDE PROCESSING TYPE

819188 - OUTSIDE PROCESSING UOM CONVERSION NOT DONE ON UNIT COST

785173 - OSP SUPPLIER NOT DEFAULTING WHEN REQS CREATED

774578 - ROUNDING PROBLEM WITH OUTSIDE PROCESSING HAVING 30+ DECIMAL POINTS

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