

All About Inventory – Part II

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PLANTSCAN CORPORATION

- Cycle Counting
- Landed Costs
- Assembly / Serialized Assembly Items
 - Anatomy of an Assembly Item
 - Legacy BOMs (Bill of Materials)
 - Advanced BOMs (Bill of Materials)
 - Creating Assembly Builds
- Work Orders vs Assembly Builds
 - Creating Work Orders from 3 sources
 - Planned vs Released Work Orders
 - Building Work Orders
- Useful Pages/Reports (bonus material)



What We're Covering Today

Advanced Inventory Module

- Landed Cost
- Serialized Assembly Items
- Bill of Materials / Advanced Bill of Materials
- Work Orders
- Cycle Counting
- Matrix items
- Auto calculate re-order points for inventory
- Bin/Lot management
- Inbound Shipment Management


Supply Chain Management Bundle

- Engineering Change Management - used in conjunction with Advanced BOM
- Estimated landed costs – auto calculate estimated landed costs with templates
- Customer Part Number - set up and use customer part numbers when adding orders to your transaction
- Supply Chain Management reports

But First ...

A Couple Tips & Tricks Used Today

- When you are working in a sandbox or release preview (RP) change the Color Theme.

Set Preferences > Appearance tab * COLOR THEME Basic : Red 

- Can have production account and Release Preview (RP) account open simultaneously. Great for testing!
 - Login to production account
 - Login to RP
 - Log back into production account

Enable Features

Cycle Counting, Landed Cost, Assembly Items, Work Orders

Setup > Company > Enable Features > Item & Inventory tab

Inventory

TRACK INVENTORY FOR MULTIPLE LOCATIONS. MAINTAIN A TOTAL COUNT AND PER-LOCATION COUNT FOR INVENTORY ITEMS.

ASSEMBLY ITEMS

ALLOW BUILDING AND STOCKING OF ASSEMBLY ITEMS FROM COMPONENTS.

ADVANCED BILL OF MATERIALS

ENABLES A STAND-ALONE RECORD FOR BILL OF MATERIALS, INDEPENDENT TO ITEM.

WORK ORDERS

CREATE AND TRACK WORK ORDERS.

SERIALIZED INVENTORY

ALLOW PURCHASE AND SALE OF INVENTORY USING UNIQUE SERIAL NUMBERS.

LANDED COST

TRACK EXPENSES (SUCH AS SHIPPING OR DUTIES) RELATED TO THE PURCHASE OF GOODS ON A PER-ITEM BASIS.

INVENTORY COUNT

CONFIGURE AND EXECUTE INVENTORY COUNTS TO ENSURE ACCURACY.

Cycle
Counting

Cycle Counting

Improves inventory management

- Benefits of Cycle Counting
 - Create regular periodic counts of items
 - e.g. finished products, electronic components, hardware parts, components of product, ...
 - Ease of Adjust Inventory Worksheet but generates Inventory Adjustments so no impact on the average cost of an item
 - Even if you don't care about Cycle Counting use to create Inventory Adjustments with less human error

Cycle Counting

3 New Item Fields

Cycle counts defined on item records (by location)

LOCATION	QUANTITY ON HAND	QUANTITY ON HAND (BASE UNIT)	VALUE
<u>Aspen</u>	300	300	417.14 1

QUANTITY COMMITTED	QUANTITY BACK ORDERED	LAST COUNT DATE	NEXT COUNT DATE	COUNT INTERVAL
300	259	9/14/2019	10/14/2019	30

NS provides this

You enter initial date and NS updates it

You enter this (in days)

NS uses above fields to calculate when a count is required. When a new count is due to be recorded, it shows in the list on the Create Inventory Count page.

- Note: If *COUNT INTERVAL* and *NEXT COUNT DATE* are not set only entering each item individually on the Enter Inventory Count form will work.
- Set Count Interval to 1 day if you don't want to schedule counts for items, but want to have a great way to do inventory adjustments.

Cycle Counting Setup

1. Enable Inventory Count feature

- Setup > Company > Enable Features > Items & Inventory tab
- *INVENTORY COUNT* = checked

2. Define default account for the inventory adjustments (optional)

- Setup > Accounting > Accounting Preferences > Items/Transactions tab
- In the *DEFAULT INVENTORY COUNT ACCOUNT* field, choose the expense account to post inventory count variances to (ie. account you set for inventory adjustments)

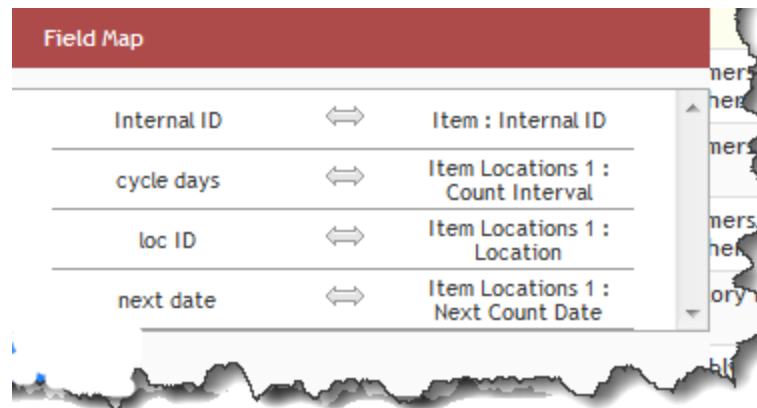
3. Update item records:

- Go to the **Locations subtab** and for each location
- *NEXT COUNT DATE* = date of the next planned inventory count for this item. NetSuite will use this date to calculate when a count is suggested and update it after a cycle count
- *COUNT INTERVAL* = total number of days between counts

Cycle Counting

OR Item Setup Using CSV Import

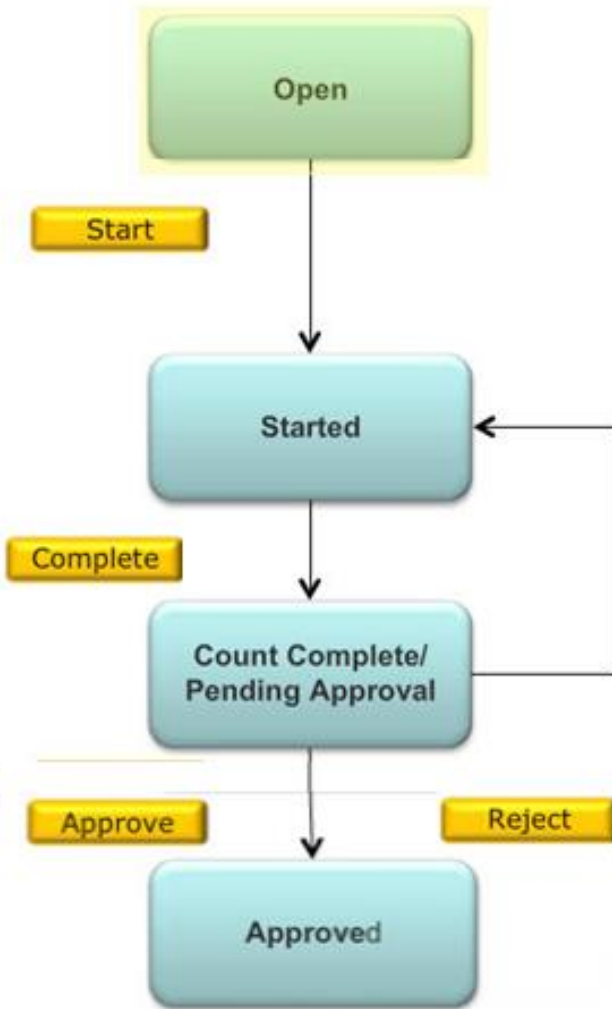
1. Create saved search to export desired records
2. Export items to get the internal ID (automatically included)
3. Save as CSV file
4. Modify CSV file to add the following fields (or set in NS mapping)
 - Cycle Days – can be set in import map instead
 - Next Date – can be set import map instead
5. **CSV Import:**
 - Setup > Import/Export > Import CSV records
 - Remember to import the different inventory types separately
 - Update records
 - Mapping:



The screenshot shows a 'Field Map' dialog box with a red header. It contains a table with four rows, each representing a mapping between a source field and a target field. The source fields are 'Internal ID', 'cycle days', 'loc ID', and 'next date'. The target fields are 'Item : Internal ID', 'Item Locations 1 : Count Interval', 'Item Locations 1 : Location', and 'Item Locations 1 : Next Count Date'. Each mapping is indicated by a double-headed arrow between the source and target fields.

Source Field	Target Field
Internal ID	Item : Internal ID
cycle days	Item Locations 1 : Count Interval
loc ID	Item Locations 1 : Location
next date	Item Locations 1 : Next Count Date

Let's Get



Status: Open - Create Inventory Count (auto) or Enter Inventory Count (manual item entry). Check boxes for former and add items for latter. Submit or Save. Tip: customize to filter on other fields.

Action: Pressing Start – NS takes snapshot of on-hand count. Go to transactions > Management > Supply Chain Management to print Inventory Count Sheet (or create saved search to create your own) to record quantities. Status changed to Started.

Status: Started – In edit mode enter the quantity, rate (if incrementing inventory), and memo.

Action: Pressing Complete – NS calculates the differences and displays them for approval . Approval changes status to Count Complete/Pending Approval.

Action: Pressing Reject – Status changed back to Started

Action: Pressing Approve – status changed to approved. Inventory adjustment transactions created.



CAUTION: Don't modify inventory (or run transactions that will modify the inventory) between the Start and the Approve dates. Regardless of when count is started or completed the inventory adjustment date is posted on date it is approved and quantity changes are applied to the current count, not the count from you start or completed date.

Cycle Counting

Understanding Count Start / End Date

Refers to Next
Count Date. If
blank selects all.

Refers to Last
Count Date. If
blank selects all.

Create Inventory Count

Submit

* LOCATION

COUNT START DATE

COUNT END DATE

CLASSIFICATION

* COMPONENT OF

ELECTRONIC PART

COUNT BY
Z
SOR

Customize

Mark All

Unmark All

SELECT	ITEM	NEXT COUNT DATE ▼	LAST COUNT DATE
<input type="checkbox"/>	Nose Cone Black	10/14/2019	9/14/2019
<input type="checkbox"/>	Slide Cover	10/14/2019	9/14/2019
<input type="checkbox"/>	Battery Door - Blue	10/11/2019	9/11/2019
<input type="checkbox"/>	Sensor Horn, (M6) 69-0000-0100	9/16/2019	
<input type="checkbox"/>	PSI/GN M6 Blue UPPER Case drilled	9/16/2019	

Standard Inventory Adjustment vs Inventory Adjustment via Cycle Count

Standard Inventory Adjustment	Inventory Adjustment from Cycle Count
User must do the math to calculate +/- to determine the resulting quantity	NetSuite does the math
Changing date changes inventory quantity as it is a snapshot point in time based on date of transaction	The snapshot is taken when the user enters start regardless of date so pre-dating has zero effect
Allows multiple locations on one transaction. Requires user to enter location for each line item	Limited to a single location
User must enter the adjustment account	Default value for adjustment account via global setting
One inventory adjustment for increments and decrements	Cycle count auto generates 2 inventory adjustments with the same transaction id – one for items that incremented in value and one for those that decremented in value



Understanding Landed Costs

What does the item really cost?

What is your real profit per item you sell?

How do you determine the price for your item?

Examples of landed costs:

- Shipping charges
- Handling charges
- Import/duty fees
- Insurance
- Taxes
- Vendor setup fees you want included in value of item

Impacts inventory value, impacts average cost

Locations • Vendors					
LOCATION	QUANTITY ON HAND	QUANTITY ON HAND (BASE UNIT)	VALUE	AVERAGE COST	LAST PURCHASE PRICE
Aspen	290	290	401.49	1.38444828	1.35

Landed Cost Example

Item Receipt & GL Impact

Item Receipt

3465-2017 DPP

Save **Cancel** **Reset** | **Actions** | **StickyNotes** New: ■ ■ ■

* CUSTOM FORM **RAD Item Receipt** | IMP NOTES (TRX)

CUSTOMER **DPP** | IMP BILL NOTES

CREATED FROM **Purchase Order #05-2101-2017** | MEMO **receipt date AEM - vibs cap**

* DATE **5/16/2017** | BILL CUSTOMER

POSTING PERIOD **May 2017**

REF. NO. **3465-2017**

Items & Expenses **Landed Cost** **History** **Workflow** **Custom** **Warranties**

* COST ALLOCATION METHOD **Quantity**

SHIPPING **50.00**

DUTY CHARGE

HANDLING CHARGE

2ND SHIPPING CHARGE

GL Impact

ACCOUNT	AMOUNT (DEBIT)	AMOUNT (CREDIT)
2002 Inventory Received Not Billed		\$2.77
1200-300 Finished Product	\$2.77	
1200-300 Finished Product	\$5.00	
7000-500 Landed Costs		\$5.00

Landed Cost Categories
The "Queues"

Landed Cost Example

Bill for Item Receipt & GL Impact

Bill → List Search

DPP **OPEN**

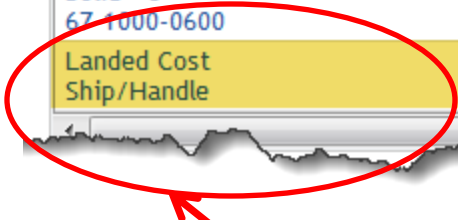
Edit Back Credit Make Payment Action here. Click for more options

VENDOR DPP DISC. AMT. REQUIRED DATE (TEXT)
DATE 9/17/2019 APPROVAL STATUS ENDING FEDEX BILL - SHIP

Expenses & Items Billing Enter Cases Assoc. AEM Bill Enter Case History Vendor Prep

product release sublist item receipts Expense 0.00 **Items 7.77**

ITEM	VENDOR NAME	QUANTITY	UNITS	DESCRIPTION	RATE	LANDED COST CATEGORY
Touch Probe Solid - 6" 67-1000-0600		1		Touch Probe Solid - 6"	2.77	
Landed Cost Ship/Handle		1		Shipping/Handling	5.00	Shipping



Landed Cost Item

GL Impact

ACCOUNT	AMOUNT (DEBIT)	AMOUNT (CREDIT)
2000 Accounts Payable		57.77
2002 Inventory Received Not Billed	52.77	
7000-500 Landed Costs	55.00	

Landed Cost Setup

Requires Advanced Inventory module

1. Enable feature

- Setup > Company > Enable Features > Items & Inventory tab
- Check the *LANDED COST* field

2. Create landed cost account(s) in the chart of accounts

- Expense account(s)
- Set up special expense accounts separate from regular expense accounts for auditing

3. Create landed cost categories (without them the landed cost tab won't display on Item Receipt or Bill)



Caution: creation = display order on Landed Cost tab

Setup > Accounting > Accounting Lists

- Select Type = *Cost Category*
- Add landed cost categories assoc. with new expense accounts

4. Create Landed Cost Items - 1 or more for each expense account from step 3

Lists > Accounting > Items > new

- Create Other Charge type item(s)
- Match the expense account to the one in the corresponding Landed Cost Category

5. Select inventory items that will use landed costs

- Check the *TRACK LANDED COST* box on the Purchasing/Inventory tab
- Can use direct list editing, mass updates, or CSV import

Relationship: Landed Cost Categories to Item Records

Accounting Lists

[New](#)

PlantScan

DESCRIPTION	INTERNAL ID
Duty Charge	5
Handling Charge	6
Shipping Cost	10
Special Landed Cost - NRE Art	9

Cost Category

NAME Shipping Cost

EXPENSE ACCOUNT 7000-500 Landed Costs

COST TYPE Landed

Cost Category

NAME Duty Charge

EXPENSE ACCOUNT 7000-500 Landed Costs

COST TYPE Landed

Other Charge for Purchase

Landed Cost Ship/Handle

ITEM NAME/NUMBER Landed Cost Ship/Handle

[Transactions](#) [Purchasing](#) [Accounting](#) [Comm](#)

Accounts

EXPENSE ACCOUNT 7000-500 Landed Costs

Transactions tab will show all related bills to Shipping

Other Charge for Purchase

Landed Cost Duty

ITEM NAME/NUMBER Landed Cost Duty

Primary Information

[Transactions](#) [Purchasing](#) [Accounting](#) [Communi](#)

Accounts

EXPENSE ACCOUNT 7000-500 Landed Costs

Transactions tab will show all related bills to Duty even though it goes to same expense account in COA

- Item Receipt - creates entries on the Landed Cost tab on the Item Receipt (required)
- Bill – adds to a category queue (optional)
- From the item receipt it creates a credit in the COA
- Bill – entered as item line
- Bill – creates transactions under the item
- From the Bill it creates a debit entry in the COA (reversing the item receipt credit)

Lists > Accounting > Items > new (Other Charge)

Setup > Accounting > Accounting Lists > Cost Category

Applying Landed Costs

- Works with Advanced Receiving checked/unchecked
 - PO > item receipt > Bill
 - PO > Bill
 - Bill only
- Landed costs can be billed together / separate / combo
 - Landed costs and items are billed together on the invoice
 - Landed cost charges are billed 3rd party (e.g. UPS, Fedex, ...)
 - Mixed – some on invoice(handling) and some 3rd party (shipping)
- 2 Methods to apply Landed Cost



Caution: Must know at item receipt which method as it can't be changed after saving

- Landed costs are applied per transaction
 - Uses Landed Cost tab
 - Can associate 3rd party bills directly using “Other Transaction”
- Landed costs are applied per line item in transaction
 - Uses line item
 - Landed Cost tab is greyed out
 - Can't associate 3rd party billing directly using “Other Transaction”



If items have already been sold, the COGS impact on the fulfillments will be updated to include the new value

Landed Cost

Cost Allocation Methods

Transaction level

- Applies to Item Receipt or Bill

Allocation Method	Calculation for Cost Per Eligible Line Item
Weight	$(\text{Weight of Item} / \text{Total Weight of Eligible Items}) * \text{Total Landed Cost}$ If the item has no weight entered, NetSuite will display an error message
Quantity	$(\text{Total Landed Cost} / \text{Number of Eligible Items}) * \text{Line Item Quantity}$
Value	$(\text{Value of Each Item} / \text{Total Value of Eligible Items}) * \text{Total Landed Cost}$

Line level

- Applies to Item Receipt or Bill
- Only Quantity applies

Landed Cost

Standard Cost Item



- When Landed Costs are associated to Item Receipts or Vendor Bills, they are not capitalized as part of Inventory Asset but are rather charged to Variance Account.
- To capitalize Landed Cost, incorporate/add it in the Planned Standard Cost Record then revalue the Standard Cost Inventory Item.

Landed Costs

Closed Periods



- Inventory Worksheet using current date
 - To associate a landed cost to an item receipt posted in a closed period use the Adjust Inventory Worksheet.
 - Enter the *New Value* and the *New Quantity* of the item. The new value must include the landed cost amount. Use the account used in the landed cost bill as an adjustment account.
Note: Sales made between the time of item receipt and the date of adjustment do not consider the landed cost in COGS computation.
- Inventory Worksheet or Inventory Adjustments using current date
 - Adj1 – Adjust the available quantity down
 - Adj2 – Adjust the quantity up with the new average cost. The offset account should show as the landed cost expense account.
- Posting to a closed period
 - Does not work even if you have checked box to allow non-G/L changes for that period.
- Reopening period and entering landed cost on item receipt
 - Seems that this would also impact the books. Not recommended.

Landed Cost Example

Landed Cost at Item Level

Item Receipt
3912-2019

Save
Cancel
Reset

* CUSTOM FORM RAD Item Receipt

CUSTOMER DPP

CREATED FROM Purchase Order #05-2220-2018

Items & Expenses
Landed Cost
History
Workflow
Custom

LANDED COST PER LINE

Items • Expense
Mark All
Unmark All

RECEIVE	#	ITEM	VENDOR NAME	LOCATION	QUANTITY	RATE	LANDED COST	DESCRIPTION
<input checked="" type="checkbox"/>	1	Nose Cone Gold		Aspen	300	1.35		Nose C Release
<input checked="" type="checkbox"/>	2	Nose Cone Black		Aspen	250	1.35		Nose C Release

OK
Close

ITEM Nose Cone Gold TOTAL 0.00

Add Multiple
Clear All Lines

COST CATEGORY *	AMOUNT *
<div style="border: 1px solid gray; padding: 2px; display: flex; justify-content: space-between;"> Duty Charge Insert Remove </div> <div style="border: 1px solid gray; padding: 2px; display: flex; justify-content: space-between;"> Handling Charge Insert Remove </div> <div style="border: 1px solid gray; padding: 2px; display: flex; justify-content: space-between;"> Shipping Cost Insert Remove </div> <div style="border: 1px solid gray; padding: 2px; display: flex; justify-content: space-between;"> Special Landed Cost - NRE Art Insert Remove </div>	

Landed Cost Flow Example

PO > Item Receipt > Bill (shipping included)

1. Enter PO – enter nothing for landed cost unless you know it
2. Receive Item – enter nothing for landed cost (waiting on vendor bill)
 - a. Select line level landed cost if you know it's going to be processed that way
3. When Bill arrives
 - a. Go to Bill Purchase Orders and find bill (note no landed cost tab on Bill)
 - b. Add Landed Cost line items for with cost category entered
 - Cost Category adds to the category queue
 - Landed Cost line item creates an entry to the expense COA (-)
4. Edit Item Receipt
 - a. Go to Landed Cost tab
 - b. Enter Cost Allocation Method – quantity or value
 - c. Find appropriate category – same cost category from above
 - d. Enter Source as Other Transaction
 - e. Search for transaction by vendor name or invoice #
 - Cost Category removes entry from the category queue
 - Amount entered on Landed Cost tab creates a reversing entry to expense COA (+)



Landed Cost

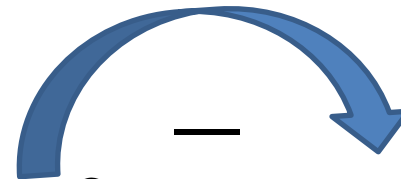
Cautionary Tale – Landed Cost Queues

Bill

Using a Landed Cost Category on a Bill adds entries to that queue

ITEM RECEIPT

Referencing that same Landed Cost Category on the Item Receipt via Other Transaction removes it from that queue



Shipping – Landed Cost Category Queue

TRANSACTION	TYPE	DATE	VENDOR	AMOUNT
00001529AY379	Bill	9/14/2019	UPS RAD 1529AY	12.71
0041823-IN	Bill	12/23/2011	Golden Pacific	8.99
0044313-IN	Bill	9/13/2016	Dempsey	17.88
0110209-IN	Bill	4/27/2014	Rocket Seals	12.33
0119340-IN	Bill	8/12/2015	Rocket Seals	12.72
05-1971-2015 (2nd shipment)	Bill	11/1/2015	TCF Technology	45
05-1976-2015	Bill	9/18/2015	TCF Technology	95
0691961	Bill	2/11/2014	David Clark	27.36
113433	Bill	12/21/2012	Plano	120.15

- If you put the Landed Cost Category on the Bill then ALWAYS use Other Transaction on the Item Receipt and search for the Bill/Vendor instead of manually entering cost
- If you manually enter the cost on the item receipt then do NOT put anything in Landed Cost Category on the Bill

If these don't balance then your queue becomes a messy nightmare





Assembly Item Explored

- Primary difference between an Inventory Item and Assembly Item is the BOM
 - Legacy BOM – since the beginning of NS time
 - Advanced BOM – since version 2018.1
- Difference between non-serialized and serialized Assembly Item
 - Costing Method
 - Non-serialized is whatever you have set up (Average, LIFO, ...)
 - Serialized = Specific (associates by serial number)
 - Serialized Assemblies have Inventory Detail tab
 - Shows what's in stock and what's been sold
- Assembly items can be purchased
 - **Setup > Accounting > Accounting Preferences > Order Management** tab
 - check *Allow Purchase of Assembly Items*

Tips:

- If Assembly Item is not to be sold remove it from drop down list on SO
 - *INCOME ACCOUNT* = empty
- Cannot convert or copy from serialized to non-serialized item or vice versa
 - Advanced BOM gets around this limitation
- Unbuild an Assembly – proceed with **caution**



Assembly Item

Regular assembly vs Serialized

Available Member Items

New Item

ITEM TYPE

Assembly/Bill of Materials

Serialized

Description

Discount

Inventory Item

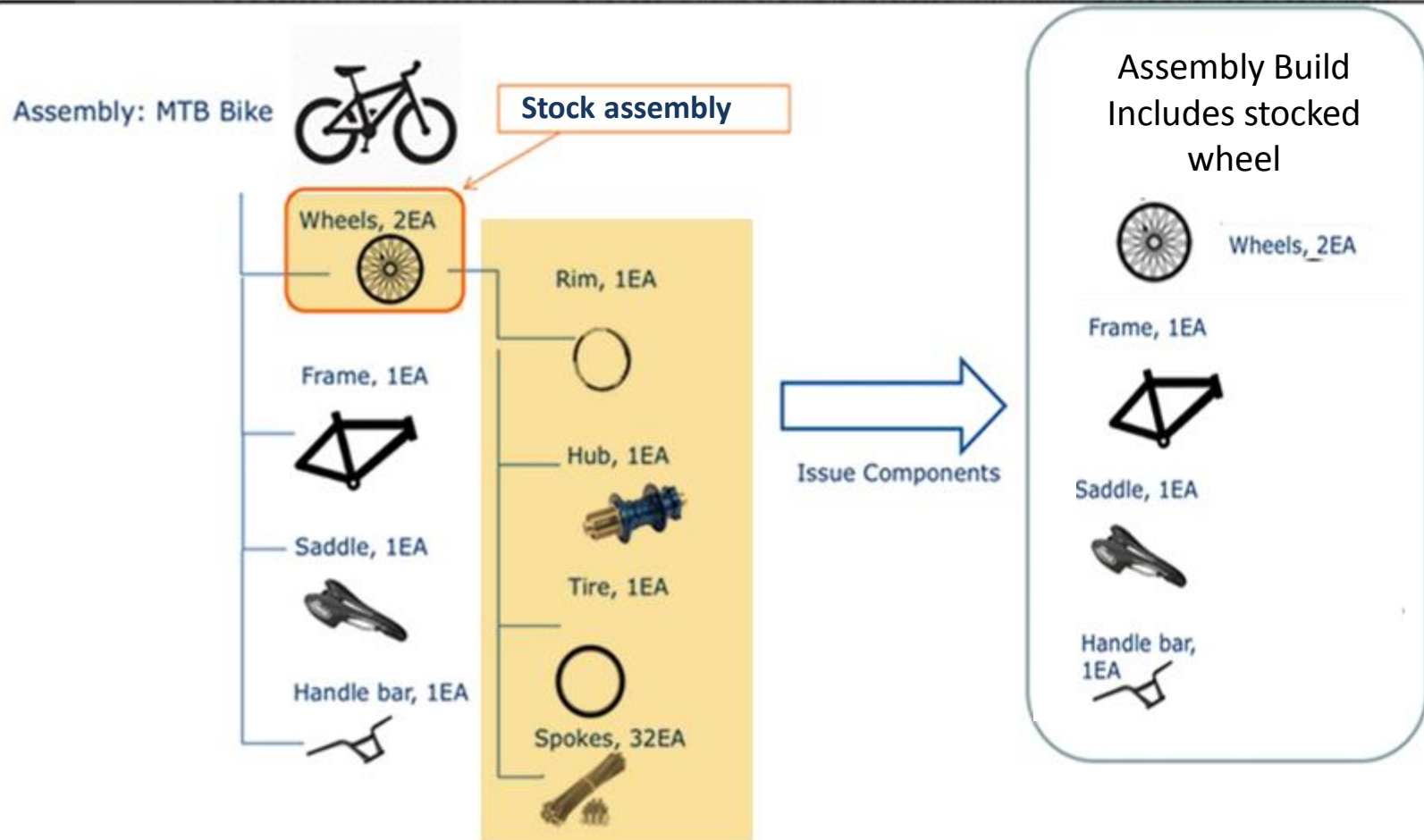
Regular Inventory Assembly	Serial or Lot Numbered Inventory
Inventory	Inventory
Non-Inventory	Serialized Inventory
Other Charge	Lot Numbered Inventory
Service	Non-Inventory
Regular Assemblies	Other Charge
	Service
	Regular Assemblies
	Serialized Assemblies
	Lot Numbered Assemblies

Highlights in yellow = differences

Terminology in Assembly Items

Stock vs Phantom

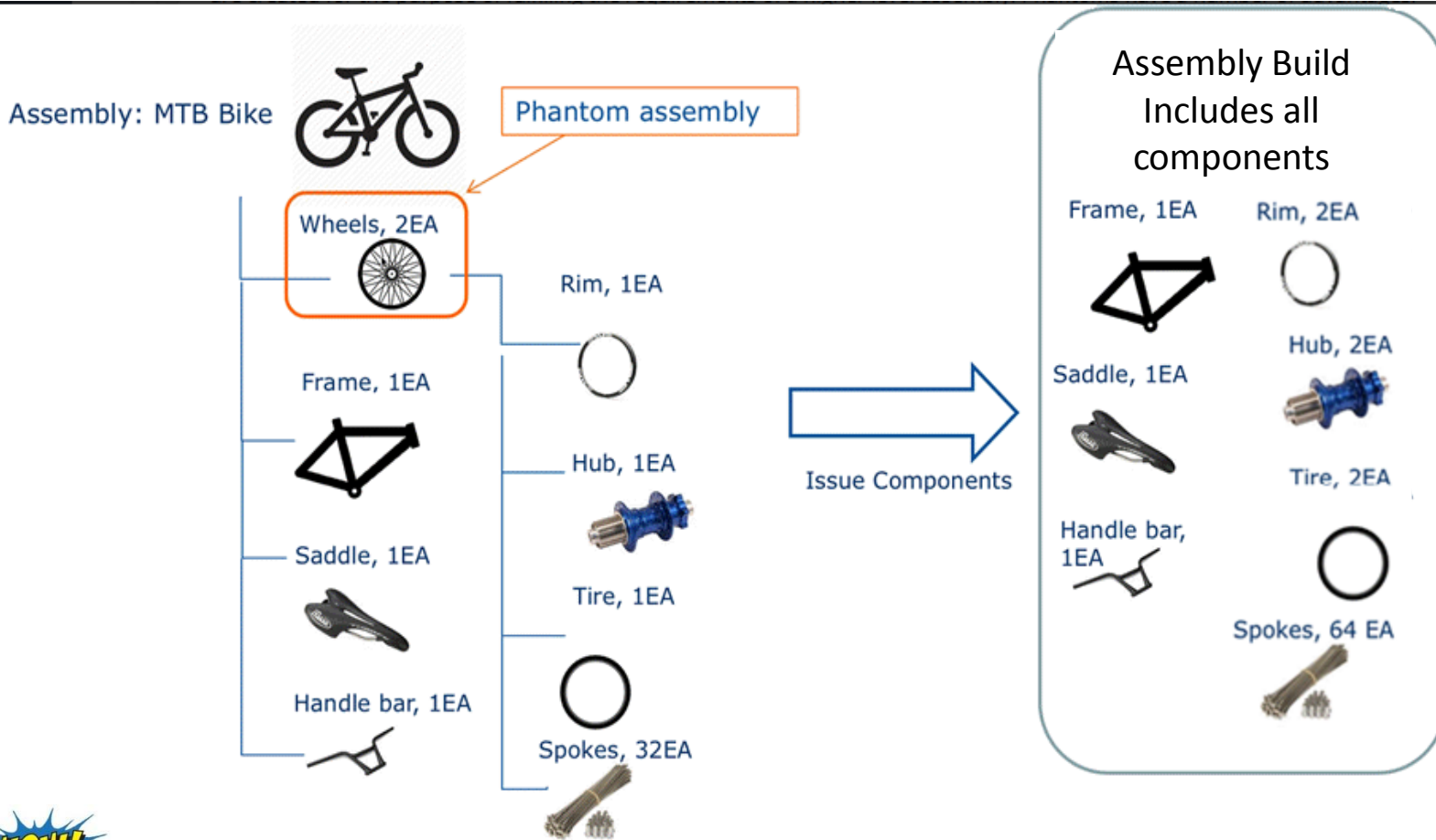
Stock – Prebuilt and stocked prior to Bike Assembly



Terminology in Assembly Items

Stock vs Phantom

Phantom (available in 2016.2) – use components when Bike Assembled



Reusable sub-assemblies – create once and use in multiple assembly items

Anatomy of an Assembly Item

Inventory Item vs Assembly Item

SA Airborne Sensleeve RevB

Buttons: Edit, Back, Actions, StickyNotes, New: [Red], [Yellow], [Green]

Drop files here. Click for more options

Primary Information

INTERNAL ID 1180
ITEM NAME/NUMBER SA Airborne Sensleeve

Check to auto-check 'Create WO' checkbox on SO

Check to mark the sub-assemblies of this item as phantom when used in other assemblies

Check to mark this assembly as phantom when used in other assemblies

MARK SUB-ASSEMBLIES PHANTOM
PHANTOM

EFFECTIVE BOM CONTROL Effective Date
ROUND UP QUANTITY AS COMPONENT

SPECIAL WORK ORDER ITEM

TRANSFER SHIP PRICE

Locations • **Components** • Vendors

DISPLAY COMPONENTS ON TRANSACTIONS USE COMPONENT YIELD

ITEM	DESCRIPTION	COMPONENT YIELD	BOM QUANTITY	ITEM SOURCE	QUANTITY	UNITS	EFFECTIVE DATE	OB DATE
RM MP : airsen h 67-1000-0800 67-1000-0800	Airborne Sensor Housing (sleeve)			Stock	1			
RM Sensors : Sensor AirXducer 11-3000-0000	Sensor PS-i 11-3000-0000			Stock	1			

Legacy BOM

Assembly Item With Advanced BOM

Manufacturing tab instead of Components tab

SA Airborne Sensleeve RevB

Edit Back Actions StickyNotes New: ■ ■ ■ More options.

Primary Information

INTERNAL ID 1180
ITEM NAME/NUMBER SA Airborne Sensleeve RevB

History Pricing Accounting Inventory Matrix Store Comm **Manufacturing**

Bills of Materials

BILL OF MATERIALS	CURRENT REVISION	MASTER DEFAULT
SA : SA Airborne Sensleeve RevB Bom	Revision 1	Yes

Bill of Materials

Edit Back Actions StickyNotes New: ■ ■ ■ Drop

NAME SA : SA Airborne Sensleeve RevB Bom AVAILABLE FOR ALL LOCATIONS

MEMO

USE COMPONENT YIELD RESTRICT TO LOCATIONS INACTIVE

AVAILABLE FOR ALL ASSEMBLIES LEGACY BOM FOR ASSEMBLY SA Airborne Sensleeve RevB

RESTRICT TO ASSEMBLIES SA : SA Airborne Sensleeve RevB

Revisions Assemblies System Notes Communication

VIEW Default View

Create New Revision Customize View

EDIT	NAME	INACTIVE	MEMO	EFFECTIVE START DATE
<a>Edit	Revision 1	No		

Bill of Materials Revision

Edit Cancel Actions StickyNotes New: ■ ■ ■

NAME Revision 1

MEMO

BILL OF MATERIALS SA : SA Airborne Sensleeve RevB Bom

EFFECTIVE START DATE

EFFECTIVE END DATE

Components Communication System Notes

ITEM	DESCRIPTION	COMPONENT YIELD	BOM QUANTITY	QUANTITY	UNITS	ITEM SOURCE
RM MP : airsen h 67-1000-0800 67-1000-0800	Airborne Sensor Housing (sleeve)	100.0%	1	1		Stock
RM Sensors : Sensor AirXducer 11-3000-0000 11-3000-0000	Sensor PS-i 11-3000-0000	100.0%	1	1		Stock
RM Hardware : Screw ss 0-80 X 3/16 60-1100-1001	Screw, Stainless, Socket Cap Head, UNF 0-80, 3/16 Long	100.0%	2	2		Stock
RM Circuit Boards : PWB PSn Front Airsenh 58-0000-0040	PWB PSn Airsenh	100.0%	1	1		Stock

Advanced BOMs (since 2017.2)

The Good, the Bad, and the Ugly

- The good
 - It's the right way – build BOMs first and then products to use those BOMS
 - Breaks BOMs out from an item so can copy existing BOMs and revisions
 - Engineering Change Order support (part of SCM bundle) and tracking of changes
 - Way to look at all your BOMs in one place without having to go into the item records
 - Provides easy way to track revisions and identify a build with a revision
 - Can define yield at the component level on a revision record
 - Can limit BOMs to certain assemblies and locations and subsidiaries
 - Can apply BOM to both non-serialized and serialized assemblies
 - Can have multiple BOMs for 1 item with a default selected
 - Edit Legacy BOMs (2019.1)
 - CSV import (2019.1)
- The bad
 - A lot of layers if converting from legacy BOMs
 - Not fully baked
 - Undefined results in assembly builds (not from WO) when fields not entered in a specific sequence
 - Some converted BOMs have components that were obsolete showing for the new BOMs
 - No global search on BOMs (Enhancement #488300)
 - A BOM cannot contain a BOM component – nice for those BOMs that are always phantom but reused in multiple assemblies
 - Manufacturing subtab not visible in form edit mode so can't move it from far off on right – must use standard form
- The ugly
 - You have to either create all new BOMs or convert your legacy BOMs to advanced to modify them. **NO GOING BACK!**
 - When you move to advanced BOMs all effective dates create a new version, so lose the history of which components changed
 - If you convert some revisions include the obsolete items and must be cleaned up: It's messy to convert because each legacy BOM creates a BOM which may have to be fixed; if you use hierarchies for products then each parent also becomes a BOM

Great for new implementations and for products that share multiple components, or components change often, or different BOMs for the same item in different locations!!



Caution: test in RP or sandbox before converting

Advanced BOM

View/Edit/Add BOM

ORACLE NETSUITE | RELEASE PREVIEW PLANTSCAN | Search

Activities Search/Reporty by Category Transactions Lists ...

Bills of Materials

VIEW Default Customize View New Bill of Materials

+ FILTERS

NEW INACTIVES

New Search

EDIT VIEW	INTERNAL ID	NAME ▲	MEM
Edit View	238	Product : PS-1100 Kit Bom	
Edit View	240	Product : PS-2100 Kit Bom	Yes
Edit View	390	Product : PS-2200L Laser Kit Bom	Yes
Edit View	228	Product : PS-i Kit Bom	Yes
Edit View	291	Product : PS-i-HD Kit Bom	Yes
Edit View	292	Product : PS-i100 Kit Bom	Yes
Edit View	293	Product : PS-i100-HD Kit Bom	Yes

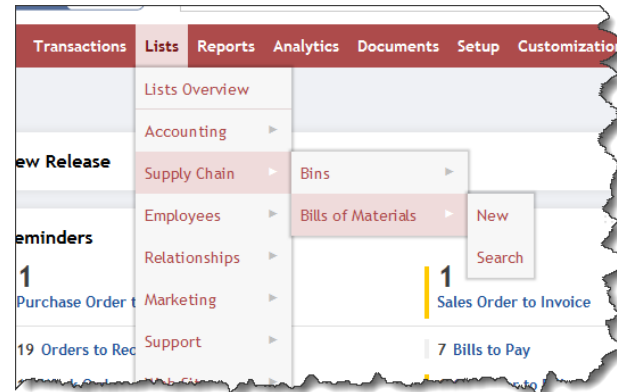
Setup Advanced BOM

1. Enable Advanced BOM

- Setup > Company > Enable Features > Inventory & Items subtab.
- *ADVANCED BILL OF MATERIALS* = checked
- In the warning box, click **OK** to enable Advanced BOM.

2. Edit/Create Bill of Materials

- Lists > Supply Chain > Bills of Materials



To enable editing of Legacy BOMs

- Setup > Accounting > Accounting Preferences > Order Management subtab
- In the Work Orders section *ALLOW EDITING OF LEGACY BOMS* = checked
- Agree
- After you click Agree, you cannot disable the Advanced BOM feature. It is important to test this feature in your sandbox account before turning it on in production

Assembly Item

Advanced BOM Components Example

Under Bill of Materials > Revision

Member items
Bill of materials (BOM)

Bill of Materials Revision

[Edit](#)
[Back](#)
[Previous](#)
NAME Revision 9
MEMO

[Actions](#)
StickyNotes ▾ New: ■ ■ ■
Drop files here. Click for more options.

INACTIVE
DATE CREATED 8/29/2019 11:42 am

BILL OF MATERIALS SA : PSn RevA lower case assembly Bom

EFFECTIVE START DATE 3/25/2017

EFFECTIVE END DATE

Components						
ITEM	DESCRIPTION	COMPONENT YIELD	BOM QUANTITY	QUANTITY	UNITS	ITEM SOURCE
RM CASE : RM CASE - PSn : PSn M8 Black LOWER Case drilled (4 btn)	PSn M8 Case drilled - 4 Button Part Numbers: 67-0000-0050 & 67-0000-0098	100.0%	1	1		Stock
SA PREBUILT : board level PSn lower RevA - stuffed 88-1000-0030		100.0%	1	1		Stock
SA PREBUILT : board level PSn Vib Sensor - stuffed 88-1000-0010		100.0%	1	1		Stock
SA : SA Airborne Sensleeve RevB	Airsen h + sensor airXducer + PWB board + 2 screws 60-1100-1001	100.0%	1	1		Phantom
SA PREBUILT : Assy vibsens w/crystal	AE Sensor Housing wth Crystal Glued	100.0%	1	1		Stock
RM Connectors : Solder Lug 58-1000-0009	Connectors - Lug Solder	100.0%	1	1		Stock
RM MP : Tie Strap 67-0000-0102	Tie Strap	100.0%	1	1		Stock
RM MP : Front Panel PSn 67-1000-0140	Front Panel PSn	100.0%	1	1		Stock
RM Hardware : Screw ss 60-2100-0004	Screw, Buttonhead UN-440 Stainless 0.25 Long	100.0%	2	2		Stock
RM Hardware : Screw tp 60-2400-0000	Screw, Buttonhead, Tamperproof	100.0%	6	6		Stock
Replacement Part : Nose Cone Gold 67-1000-0500	Focusing Cone - Gold	100.0%	1	1		Stock
RM Decals : Decals-Bat 68-0000-0010	Battery Pat#	100.0%	1	1		Stock
RM Hardware : PEM Nut Short 61-0400-0000	Broaching Nut Short	100.0%	4	4		Stock

Assembly Item

Legacy BOM Components Example

Under Purchasing / Inventory tab

Locations • Bin Numbers Components • Vendors

DISPLAY COMPONENTS ON TRANSACTIONS

Item Source
 Stock
 Purchase Order
 Phantom
 Work Order

Effective/Obsolete Date
 Date

Phantom Item

ITEM	DESCRIPTION	ITEM SOURCE	QUANTITY	EFFECTIVE DATE	OBSOLETE DATE
RM CASE : PSn M8 Black LOWER Case drilled (4 btn)	PSn M8 Case drilled - 4 Button Part Numbers: 67-0000-0050 & 67-0000-0098	Stock	1	9/1/2016	
SA : board level PSn lower RevA 88-1000-0030		Stock	1	8/21/2016	
Prebuilt Boards : board level PSn lower RevA I		Stock	1	6/1/2013	8/20/2016
Sub Assembly as Inventory Items : Assy airborne sensleeve I		Stock	1		8/23/2016
Sub Assembly as Inventory Items : Assy vibsens w/crystal I		Stock	1		8/23/2016
SA : Assy airborne sensleeve	Airborne Sensor Sleeve with sensor AirXducer	Stock	1	8/21/2016	3/24/2017
SA : SA Airborne Sensleeve RevB	Airsens h + sensor airXducer + PWB board +	Phantom	1	3/20/2017	
SA : Assy vibsens w/crystal	AE Sensor Housing with Crystal Glued	Stock	1	8/21/2016	
RM MP : Front Panel PSn 67-1000-0140	Front Panel PSn	Stock	1		
RM Hardware : Screw ss 60-2100-0004	Screw, Buttonhead UN-440 Stainless 0.25 Lon	Stock	2		
RM Hardware : Screw tp 60-2400-0000	Screw, Buttonhead, Tamperproof	Stock	6		
Replacement Part : Nose Cone Gold 67-1000-0500	Focusing Cone - Gold	Stock	1		
RM Decals : Decals-Bat USA 68-0000-0010	Battery Pat#	Stock	1	9/25/2014	

<Type then tab>

Creating Assembly Builds

non-serialized vs serialized

Transactions > Manufacturing > Build Assemblies

non-serialized

Assembly Build 🔍

Save ▼ Cancel Reset

Primary Information

* CUSTOM FORM	Standard Assembly Build ▼	BUILDABLE QUANTITY	190
REFERENCE #	2375-17	* QUANTITY TO BUILD	5
* ASSEMBLY	SA : SAMPLE SA Airborne Sensleeve 99-001 ▼	UNITS	
REVISION	▼	PROJECTED VALUE	20.42

Classification

CLASS	▼	* LOCATION	Aspen
SW/PROD EST SHIP DATE	▼	BASE PRODUCT	<None When Tab>

Components Communication

Customize

COMPONENT	QUANTITY	QUANTITY ON HAND	INVENTORY DETAIL	DISPLAY NAME	ELECTRONIC PART	HARDWARE PART
airsen h 67-1000-0800	5	190		67-1000-0800	No	Yes
Sensor AirXducer 11-3000-0000	5	1,793		11-3000-0000	Yes	Yes
Screw ss 0-80 X 3/16	10	968		60-1100-1001	No	Yes
PWB PSn Front Airsenh 58-0000-0040	5	978		58-0000-0040	Yes	No

Save ▼ Cancel Reset

Creating Assembly Builds

non-serialized vs serialized

serialized

Transactions > Manufacturing > Build Assemblies

The screenshot shows the SAP 'Assembly Build' transaction (ID 2369-17) with a custom form 'Custom Assembly Build'. The main form includes fields for DATE (5/4/2017), POSTING PERIOD (May 2017), REF. NO. (2369-17), ASSEMBLY (PRODUCT PSI : V 90-0004-0000), QUANTITY (112), UNITS, and LOCATION (Aspen). A red arrow points to the 'INVENTORY DETAIL' button in the top right corner, which is circled in red. An 'Inventory Detail' dialog box is open in the foreground, displaying a table of serial/lot numbers and their quantities.

SERIAL/LOT NUMBER *	QUANTITY *
92-0047-0225	1
92-0047-0226	1
92-0047-0227	1
92-0047-0228	1
92-0047-0229	1
92-0047-0230	1

Work Orders/Assembly Builds

Work Order

- Non-transactional
- Looks similar to Assembly Build – but is holding area; building the WO transitions to an Assembly Build
- Can change Item Source – very powerful!
- Allows for auto generation of other WOs and POs
- Can add/change/delete components (e.g. for substitution) without changing BOM
- Allows for phased assembly builds (e.g. blanket orders, partial builds)
- Allows for analysis for future orders - commit inventory and then determine shortage for future builds
- Assembly build occurs *after* saving a WO



Assembly Build

- Is transactional
- Build occurs immediately
- Inventory removed from on-hand

Value of standalone Assembly Build

- Determine current cost of building out an item to assist in pricing of that item.
- For production of sub-assemblies used in repairs.

Creating Work Orders

Initiated from 3 sources:

- Sales Order

- good for end-product assemblies tied to sales
- generate a Work Order manually or automatically

- Manually enter an Individual Work Order

- good for assemblies/sub-assemblies that are stocked

Transactions > Manufacturing > Enter Work Order

- Mass Create Work Orders page

- queue where you can select which work orders to generate based on Reorder Point in item records
- good for assemblies /sub-assemblies that are stocked

Work Order from Sales Order

Sales Order 1718-2017 **Bacharach** **PARTIALLY FULFILLED**

Edit Back Fulfill Authorize Return Close Order Create Dep New: ■ ■

CUSTOMER:JOB Bacharach
DATE 1/16/2017
ORDER # 1718-2017
CUSTOMER PO # PO24152B
MEMO BPO 2017

TOTAL 117,617.90
ACTION INT
NET COST 1.00

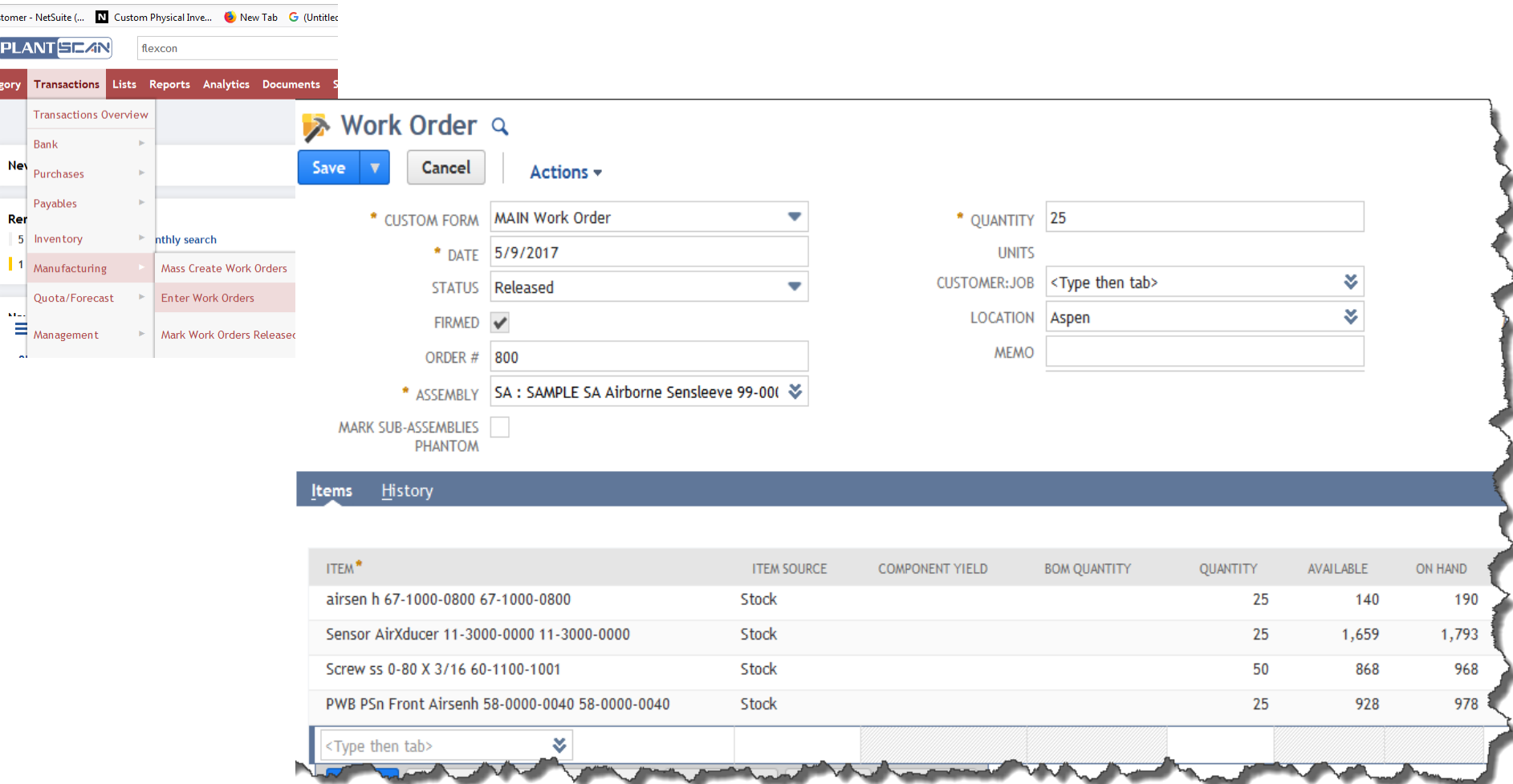
Items 117,617.90 • Product Release

#	ITEM	DISTPART#	DESCRIPTION	QTY	LOCATION	UNIT PRICE	PRICE LEVEL	CREATE WO	CREATE PO	FUL
20	TP 2100 (12) - 28-7003 90-0000-0019	0028-7003	Tru Pointe 2100 - Ultrasonic Leak detector release qty: 20	25	Aspen	695.00	Bach	Work Ord.	Drop Ship Spec. Ord.	

Edit Back Fulfill Authorize Return Close Order Create Dep

Exp... Sales Timelin... tic

Manually Create Work Order



The screenshot shows the NetSuite Work Order creation interface. The top navigation bar includes 'Transactions', 'Lists', 'Reports', 'Analytics', and 'Documents'. The left sidebar shows a navigation menu with 'Manufacturing' selected, containing options like 'Mass Create Work Orders' and 'Enter Work Orders'. The main form area is titled 'Work Order' and includes fields for 'CUSTOM FORM' (MAIN Work Order), 'DATE' (5/9/2017), 'STATUS' (Released), 'FIRMED' (checked), 'ORDER #' (800), and 'ASSEMBLY' (SA : SAMPLE SA Airborne Sensleeve 99-001). There are also 'Save', 'Cancel', and 'Actions' buttons. To the right, there are fields for 'QUANTITY' (25), 'UNITS', 'CUSTOMER:JOB' (<Type then tab>), 'LOCATION' (Aspen), and 'MEMO'. Below the form is a table with columns for 'ITEM', 'ITEM SOURCE', 'COMPONENT YIELD', 'BOM QUANTITY', 'QUANTITY', 'AVAILABLE', and 'ON HAND'. The table lists four items: 'airsen h 67-1000-0800 67-1000-0800', 'Sensor AirXducer 11-3000-0000 11-3000-0000', 'Screw ss 0-80 X 3/16 60-1100-1001', and 'PWB PSn Front Airsenh 58-0000-0040 58-0000-0040'. A search bar is visible at the bottom of the table.

Work Order

Save Cancel Actions

* CUSTOM FORM MAIN Work Order

* DATE 5/9/2017

STATUS Released

FIRMED

ORDER # 800

* ASSEMBLY SA : SAMPLE SA Airborne Sensleeve 99-001

MARK SUB-ASSEMBLIES PHANTOM

* QUANTITY 25

UNITS

CUSTOMER:JOB <Type then tab>

LOCATION Aspen

MEMO

Items History

ITEM*	ITEM SOURCE	COMPONENT YIELD	BOM QUANTITY	QUANTITY	AVAILABLE	ON HAND
airsen h 67-1000-0800 67-1000-0800	Stock			25	140	190
Sensor AirXducer 11-3000-0000 11-3000-0000	Stock			25	1,659	1,793
Screw ss 0-80 X 3/16 60-1100-1001	Stock			50	868	968
PWB PSn Front Airsenh 58-0000-0040 58-0000-0040	Stock			25	928	978

<Type then tab>

Mass Create Work Orders

Transactions
Lists
Reports
Analytics
Documents

Transactions Overview View

Bank ...

Purchases ...

Inventory 5 Invoices

Manufacturing Mass Create Work Orders

Quota/Forecast Enter Work Orders

Management Mark Work Orders Released

Mass Create Work Orders

Submit
Reset

LOCATION - All -

PARENT ITEM

Mark All
Unmark All
Customize

Manually Create Work Order

Work Order **Actions**

* CUSTOM FORM: MAIN Work Order
* DATE: 5/16/2017
STATUS: Released
FIRMED:
ORDER #: 800
* ASSEMBLY: SA : SAMPLE SA Airborne Sensleeve 99-001
MARK SUB-ASSEMBLIES PHANTOM:

Planned
Released
In Process
Built
Closed

Stock
Phantom
Work Order
Purchase Order

Transactions | Lists | Reports | Analytics | Documents

Transactions Overview
Bank
Purchases
Payables
Inventory
Manufacturing | Monthly search
Quota/Forecast | Mass Create Work Orders
Management | Enter Work Orders
Mark Work Orders Released

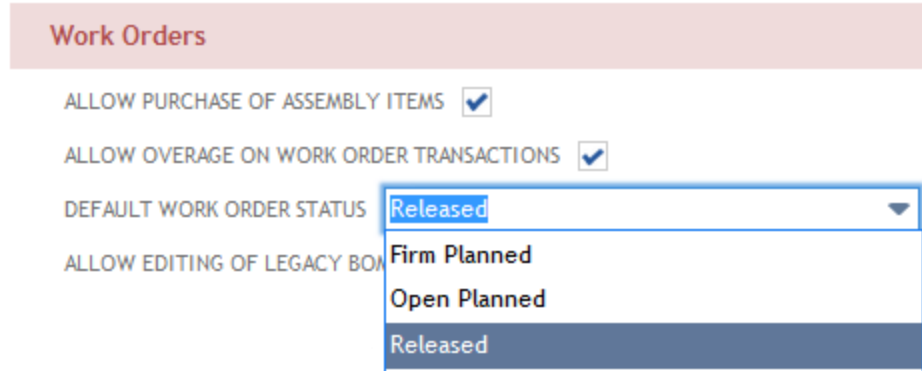
Items | History

ITEM*	ITEM SOURCE	COMPONENT YIELD	BOM QUANTITY	QUANTITY	AVAILABLE	ON HAND
airsen h 67-1000-0800 67-1000-0800	Stock			25	140	190
Sensor AirXducer 11-3000-0000 11-3000-0000	Stock			25	1,659	1,793
Screw ss 0-80 X 3/16 60-1100-1001	Stock			50	868	968
PWB PSn Front Airsenh 58-0000-0040 58-0000-0040	Stock			25	928	978

<Type then tab>

Planned vs Released Work Orders

Setup > Accounting >
Accounting Preferences >
Order Management subtab



The screenshot shows the 'Work Orders' setup screen. It includes several checkboxes: 'ALLOW PURCHASE OF ASSEMBLY ITEMS' (checked), 'ALLOW OVERAGE ON WORK ORDER TRANSACTIONS' (checked), and 'ALLOW EDITING OF LEGACY BOM'. The 'DEFAULT WORK ORDER STATUS' is set to 'Released'. A dropdown menu is open, showing the following options: 'Released' (selected), 'Firm Planned', 'Open Planned', and 'Released'.

- Open Planned
 - Does not commit items until the work order is released
 - No impacts on quantities in component item records – Quantity Committed and Quantity Back Ordered
- Released
 - Commits items
 - Impacts quantities in component item records – Quantity Committed and Quantity Back Ordered
 - Powerful for running shortage reports using a saved search
- Firm Planned – not relevant unless you have Demand Planning

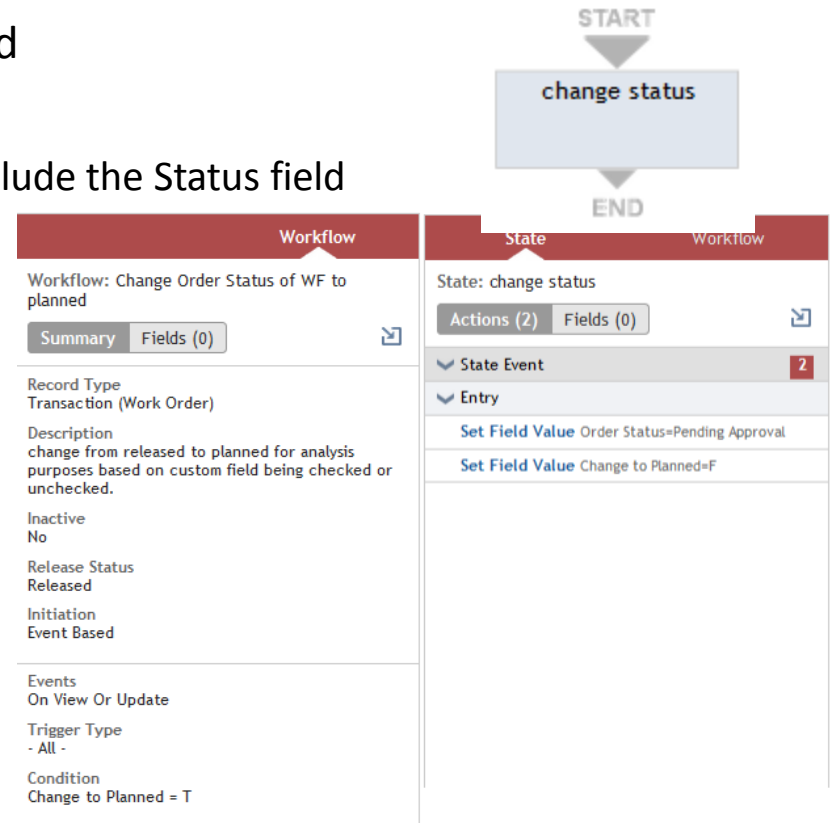
Changing Work Orders Status Planned/Released

Mark a planned work order as released – 2 methods

- Edit Work Order and change the Status field
- **Transactions > Manufacturing > Mark Work Orders Released** (a NS page)

Mark a released Work Order as planned – 2 methods

- Edit Work Order and change the Status field
- Create a saved search and a work flow
 - Search result to display work orders and include the Status field
 - Create an Event-based work flow
 - If custom field (Planned) is checked
Change status of planned to released
 - Field value is “Order Status Pending Approval”
 - Uncheck the custom field (Planned)



Building Work Orders

- Building a work order initiates an Assembly Build transaction
Transactions > Manufacturing > Build Work Orders
- Can build one or more automatically or manually
 - If serialized then must build individually

Build Work Orders

ITEM: <Type then tab>

CUSTOMER: - All -

POSTING PERIOD: Sep 2019

BOARD LEVEL: - All -

DATE: 9/14/2019

* BULK BUILD FROM LOCATION: <Type then tab>

FILTER BY: Ignore Item Availability

FILTER

Customize

BUILD	PROCESS	DATE	ORDER #	ITEM	CUSTOMER:JOB NAME	MEMO	ORDER QUANTITY	BASE PRODUCT	IS MASTER WO	LOCATION	STATUS	WOQTY2BUILD(TRX-BDY)	BO L
<input type="checkbox"/>	Build	9/26/2019	1067	PRODUCT PSI : TP Ultra (28) 0028-7000 90-0000-0017	Bacharach	28 TP Ultra 2019 rel 46	28	PRODUCT PSI : Blank PSI-H (blue) - SN	No	Aspen	In Process	27	
<input type="checkbox"/>	Build	10/1/2019	1068	SA PREBUILT : board level SB RevA - stuffed		505 board level SB for analysis	505	-----	No	Aspen	Released	505	Yes
<input type="checkbox"/>	Build	12/15/2019	1037	Product : VPX- WR Kit (no case) 90-0001-0006	Superior Signal	4 VPX SSC	4	MA : blank PSX	No	RAD	Released	4	
<input type="checkbox"/>	Build	9/23/2019	1036	Product : VPX- WR Kit (no case) 90-0001-0006	Superior Signal	4 VPX SSC	4	MA : blank PSX	No	RAD	Released	4	
<input type="checkbox"/>	Build	4/29/2019	1035	Product : VPX- WR Kit (no case) 90-0001-0006	Superior Signal	4 VPX SSC	4	MA : blank PSX	No	RAD	Released	4	



Useful Pages (bonus material)

- Component Where Used Inquiry
 - Look for where a part is used when it is to be removed or changed
- Order Items
 - Set up to order items
 - Takes into account what is on order at that location
 - **MUST** have reorder point entered for each item to show on this page
- Bill of Materials Inquiry
 - For shortages
 - For correct BOMs
- Review Negative Inventory

Useful Reports (bonus material)

- Physical Inventory Worksheet
 - Look at inventory by location at point in time
- Current Inventory Status
 - Customize (e.g. see where unit cases are; board level status for products)
 - provides a snapshot of real-time inventory data. Helps you pinpoint which items are low on stock and place orders accordingly.
 - For each inventory item, this report lists the item name, description, and preferred vendor. This report shows the following amounts for each location – reorder point, quantity on-hand, on-order, committed, to order, preferred stock level
- Inventory Valuation
 - Summarizes the value of inventory at a specific point in time
 - Assists in troubleshooting inventory problems
 - Detail shows landed cost
- Inventory Activity Detail
 - Looks at inventory over time – receipts, adjustments, assembly build, item fulfillment
- Open Sales Orders
 - Customize (e.g. to find open SO by release date)
- Stock Ledger
 - Activity summary of inventory over period of time –
 - beginning qty, receipts, other invty inputs, avg costs beginning and ending
- Inventory Back Order Report
 - shows the number of items backordered. Backordered items are items that are committed on sales orders or work orders, but are not in stock.
- Inventory Profitability Report
 - shows cost, revenue, and profitability information about your inventory. You can use this report to view and analyze profitability of your items and to help determine pricing.
- Inventory Revenue Report
 - shows the total sales amounts for inventory items and overall revenue from your inventory items.

Q&A

