

Inventory & Advanced Inventory– Part II

Margie Komninos
mkomninos@plantscan.com
PLANTSCAN CORPORATION



SHOP BY CATEGORY

- All Products
- Product by Industry Solution
- Product by Application
- Solutions
- Accessories

FEATURED PRODUCTS



PS-I Ultrasonic Leak Detector Kit

\$454.00

ADD TO CART



PS-Ign Hybrid - Ultrasonic Leak Detector

\$710.00

ADD TO CART



PS-2200L LeakView® Ultrasonic Inspection System - Automatic Leak Laser Pointer

\$3,250.00

ADD TO CART



SoundBuster-II AudioReplica

\$325.00

ADD TO CART

- Used for predictive and preventative maintenance
- Most industries - HVAC
Industrial plant / facilities,
transportation, automotive

- Sell B2B
- OEM to other companies
- Sell direct and wholesale
via distributors
- Implemented NS in 2002



Inventory & Advanced Inventory– Part II

- Cycle Counting
- Landed Costs
- Assembly / Serialized Assembly Items
 - Anatomy of an Assembly Item
 - Creating Assembly Builds
 - Phantom vs Stock Items
- Work Orders vs Assembly Builds
 - Value of a Work Order
 - Creating Work Orders from 3 sources
 - Planned vs Released Work Orders
 - Building Work Orders
- Useful Pages/Reports (bonus material)

What We're Covering & Not Covering

Advanced Inventory Module

- Cycle Counting
- Landed Cost
- Assembly Items
- Bill of Materials - Phantom vs Stock
- Work Orders & Assembly Builds
- Matrix items - already covered
- Auto calculate re-order points for inventory - already covered
- Bin/Lot management - already covered
- Lot management new SuiteApp
- Advanced Bill of Materials - separating the BOM from the item
- Supply Chain Management (free bundle) that includes Customer Part Number, Estimated Landed Cost, Engineering change Order, Item Substitution

Enable Features

Cycle Counting, Landed Cost, Assembly Items, Work Orders

Setup > Company > Enable Features > Item & Inventory tab

Enable Features

Save

Cancel

Company Accounting Tax Transactions **Items & Inventory** Employees CRM Analytics

Inventory

☒ ASSEMBLY ITEMS

ALLOW BUILDING AND STOCKING OF ASSEMBLY ITEMS FROM COMPONENTS.

☒ 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



The Inventory Count feature provides improved tracking of inventory. When enabled, you can enter regular periodic counts of on-hand item quantities to maintain inventory accuracy. Additionally it overcomes limitations of the Inventory Adjustment.

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 – the ADJUSTMENT ACCOUNT field)

3. Update each item record (optional)

- Enter NEXT COUNT DATE and COUNT INTERVAL (in days) under each location
- 2 methods to update item record – manual/CSV import

Note: The Advanced Bin/Numbered Inventory Management feature must be enabled to support inventory counts of serialized or lot numbered items.

*
= required

Cycle Counting

3 New Item Fields

Cycle counts defined on item records (by location)

Locations			
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 entered the only option is to enter item lines on the **Enter Inventory Count** page.
- 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 using a checklist instead of entering each item individually



Cycle Counting

Update Item Records



Update item records manually (option 1)

1. Go to the Locations subtab and for each location

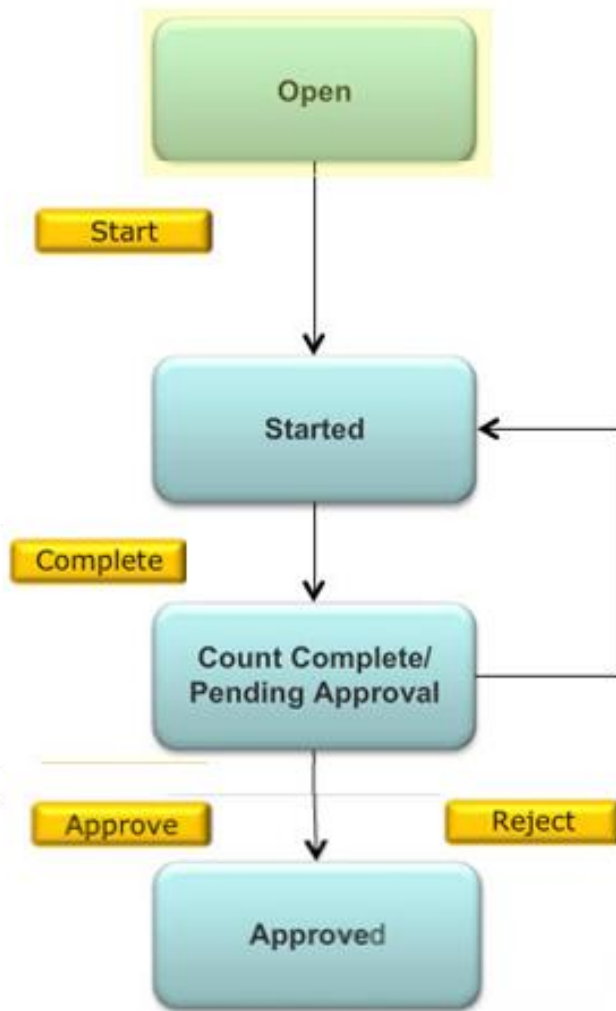
1. NEXT COUNT DATE = date of the next planned inventory count for this item. NetSuite will use this date to calculate when a count is suggested and update it after a cycle count
2. COUNT INTERVAL = total number of days between counts

Update item records via CSV Import (option 2)

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:

Field Map		
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

Inventory Count Process



Status: Open

1. Go to **page:Create Inventory Count** (auto) or **page:Enter Inventory Count** (manual item entry). Check boxes or add items.

Tip: customize to filter on other fields.

1. Press **Submit** (if Create Inventory Count) or **Save** (if Enter Inventory Count)
2. Press **Start Count**– NS takes snapshot of on-hand count.

Note: If you pressed Edit then you can add more lines.

Status: Started

1. Press **Edit** and enter the quantity, rate (if incrementing inventory), and memo.
2. Press **Save** to review inputted data
3. Press **Complete Count** when it looks good
 - NS calculates the differences and displays them for approval . Approval changes status to Count Complete/Pending Approval.

Status: Completed/Pending Approval

Now see before and after counts

- **Reject** – Status changed back to Started
 - **Approve** – status changed to Approved
 - Inventory Adjustment(s) created
 - Go to **History tab > Inventory Adjustments** tab
 - one IA for items that increased and one for items that decreased
- Note: decreases ignores rate changes
- Item record updated: Last Count Date and Next Count Date

CAUTION: Don't modify inventory (or run transactions that will modify the inventory) between the Start and the Approve dates.

CAUTION: Regardless of when count is started or completed the inventory adjustment date is posted on date it is actually approved and quantity changes are applied to the current count (not the complete count number).



Cycle Counting

Understanding Count Start / End Date



Refers to Next Count Date. If blank selects all. This filters the list to show only items that require a count on or after the date entered in this field.

Refers to Last Count Date. If blank selects all. This filters the list to show only items that require a count on or before the date entered in this field.

Create Inventory Count

Submit

* LOCATION Aspen

COUNT START DATE

COUNT END DATE

CLASSIFICATION

* COMPONENT OF Blank Psi-H (blue) - SN

ELECTRONIC PART

No

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

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, ...
- Can use industry standard classifications - A, B, C
 - A = 20% of items; 80% of revenue
 - B = 30% of items; 15% of revenue
 - C = 50% of items; 5% of revenue
- Ease of Adjust Inventory Worksheet but generates Inventory Adjustments so no impact on the average cost of an item (can use with LIFO/FIFO)
- Reduces human errors - even if you don't care about Cycle Counting use to create Inventory Adjustments with less human error

Landed Costs



All costs related to the purchase of product outside the material cost

Examples of landed costs

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

What does the item really cost?

What is your real profit per item you sell?

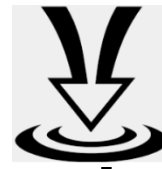
How do you determine the price for your item?

Impacts inventory value, impacts average cost

Headset BTH							
Locations							
LOCATION ▲	QUANTITY ON HAND	QUANTITY ON HAND (BASE UNIT)	VALUE	AVERAGE COST	LAST PURCHASE PRICE	REORDER POINT	PREP STOCK
Aspen	110	110	3,605.45	32.77681818	28.00		
Drop Ship							

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)

Lists > Accounting > Accounts New

- set up expense accounts separate from regular expense accounts for auditing

3. Create landed cost categories (show on Landed Cost tab on Receipt or Bill)



Caution: order creation is the display order on Landed Cost tab

Without landed cost categories the Landed Cost tab is not displayed on receipts and bills

Setup > Accounting > Accounting Lists

- Select Type = *Cost Category*
- Add landed cost categories assoc. with expense account from step 2

4. Create Landed Cost Items (needed so you can add landed cost items to bills)

Lists > Accounting > Items > new

- Create Other Charge type item(s)
- Enter the expense account from Landed Cost Category (step 3)
- Must match the expense account from step 3 as it is the contra account from step 3

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

FILTERS

Type Cost Category

DESCRIPTION	INTERNAL ID
Shipping	4
Special Handling Cost - NRE	8

Cost Category

NAME Shipping

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

Contra account to cost category

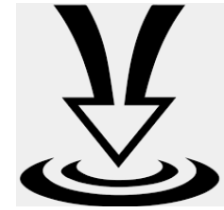
Setup > Accounting > Accounting Lists > Cost Category

Lists > Accounting > Items > new (Other Charge)



Landed Cost Example

Item Receipt & GL Impact



Item Receipt

3465-2017 DPP

Save

Cancel

Reset

Actions

StickyNotes

New:

CUSTOM FORM

RAD Item Receipt

CUSTOMER

DPP

CREATED FROM

Purchase Order #05-2101-2017

DATE

5/16/2017

POSTING PERIOD

May 2017

REF. NO.

3465-2017

IMP NOTES (TRX)

IMP BILL NOTES

MEMO

receipt date AEM - vibs cap

BILL CUSTOMER

Items & Expenses

Landed Cost

History

Workflow

Custom

Warranties

COST ALLOCATION

Quantity

METHOD

SHIPPING

5.00

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

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](#)

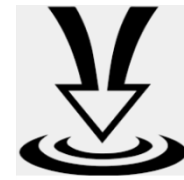
ITEM	VENDOR NAME	QUANTITY	UNITS	DESCRIPTION	RATE	LANDED COST CATEGORY
Touch Probe Solid - 6" 67-1000-0600		1		Touch Probe Solid - 6"	2.77	
Landed Cost Ship/Handle		1		Shipping/Handling	5.00	Shipping

GL Impact

ACCOUNT	AMOUNT (DEBIT)	AMOUNT (CREDIT)
2000 Accounts Payable		\$7.77
2002 Inventory Received Not Billed	\$2.77	
7000-500 Landed Costs	\$5.00	

Landed Cost Item

Applying Landed Costs



- Apply Landed Costs to these transaction types:
 - Item Receipts
 - Vendor Bills
 - Credit card charges
 - Checks
- Works with Advanced Receiving (separates item receipts and bills)
checked/unchecked but recommend that you turn on Advanced Receiving
 - 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)
- Provides method to attach costs from 3rd party shipping to an item receipt

Landed Cost

Cost Allocation Methods

Transaction level

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

Line level

- Only Quantity Allocation Method

Applying Landed Costs

Two Methods to apply Landed Cost



- Landed costs are applied per transaction
 - Uses Landed Cost tab
 - Select Allocation Method
 - 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”



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



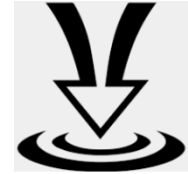
If items have already been sold, the COGS impact on the fulfillments will be updated to include the new value

Landed Cost

Standard Cost Item



shutterstock - 10232377



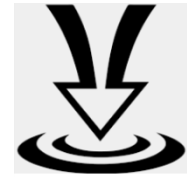
- When Landed Costs are associated to Item Receipts or Vendor Bills, they are not capitalized as part of Inventory Asset but are rather charged to Variance Account.
- To capitalize Landed Cost, incorporate/add it in the Planned Standard Cost Record then revalue the Standard Cost Inventory Item.

Landed Costs

Closed Periods



shutterstock - 100323377



- Inventory Worksheet using current date (won't work with LIFO/FIFO)
 - 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 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
 - Impacts the books. Not recommended.

Recommend investigating Estimated Landed Cost using NS (part of free Supply Chain bundle) or a bundle from Prolecto (Prolecto Landed Cost Applications)

Landed Cost Flow Example

PO > Item Receipt > Bill (shipping included)

1. Receive Item – enter nothing for landed cost (waiting on vendor bill)
2. When Bill arrives edit Item Receipt associated with the bill
 - a. Go to Landed Cost tab
 - b. Enter Cost Allocation Method – quantity/value/weight
 - c. Enter values in cost category
3. Save & Bill
 - a. Add Landed Cost line items for with NO cost category entered

Landed Cost Flow Example

PO > Item Receipt > Bill (3rd party shipping)

1. Receive Item - enter nothing for landed cost shipping (waiting on 3rd party bill)
2. Bill the PO
3. When 3rd party Bill arrives
 - a. Enter line items for landed cost on the Item subtab instead of the expenses, using the Landed Cost Item name (e.g. Landed Cost Shipping)
 - b. Enter value
 - c. Scroll over to the right and select the appropriate LANDED COST CATEGORY
4. Edit Item Receipt associated with the bill
 - a. Go to Landed Cost tab
 - b. Enter Cost Allocation Method - quantity/value/weight
 - c. Find appropriate category - same cost category from 3rd party bill
 - d. SOURCE = Other Transaction
 - e. TRANSACTION = search for the related transaction

A Couple Tips

- Recommend entering purchase price on item. Otherwise, new PO will use Last Purchase Price.
 - Inventory Adjustment (IA)
 - Inventory Worksheet
 - might include landed cost (see next bullet)
- Do not include landed cost in last purchase price unless you have a defined purchase price set.

Setup > Accounting Preferences > Items tab

INCLUDE LANDED COST IN LAST PURCHASE PRICE ☐

Anatomy of an Assembly Item

An item that is made up of 1 or more components, but identified as a single item

SA Airborne Sensleeve RevB

[Edit](#) [Back](#) | [Actions](#)

Primary Information

INTERNAL ID 1180

SA Airborne Sensleeve

[History](#) [Accounting](#) [Inventory](#) [Customer Part](#) [Matrix](#) [More](#) [Communication](#) [Custom](#) [Preferences](#)

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

USE BOM ☐

REORDER MULTIPLE

SPECIAL WORK ORDER ITEM ☐

Check to mark the sub-assemblies of this item as phantom when used in other assemblies if no sub-assemblies are stocked.

MARK SUB-ASSEMBLIES PHANTOM ☐

PHANTOM ☒

Check to mark this assembly as phantom when used in other assemblies if it is not a stocked item.

EFFECTIVE BOM CONTROL Effective Date

ROUND UP QUANTITY AS COMPONENT ☐

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 : aisen 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			

Assembly Item

BOM Components Example

Under Purchasing / Inventory tab

Item Source

- Stock
- Purchase Order
- Phantom
- Work Order

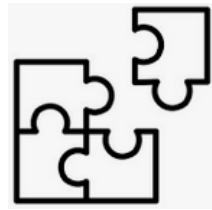
Effective/Obsolete Date

Locations • Bin Numbers Components • Vendors				DISPLAY COMPONENTS ON TRANSACTIONS <input type="checkbox"/>	
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					
RM Hardware : Screw tp 60-2400-0000					
Replacement Part : Nose Cone Gold 67-1000-0500					
RM Decals : Decals-Bat USA 68-0000-0010					
<Type then tab>					

EFFECTIVE DATE	OBSOLETE DATE	EFFECTIVE REVISION	OBSOLETE REVISION
8/2018		D	
8/2018		D	
5/21/2020		E	
8/8/2018	5/20/2020	D	D
8/8/2018		D	



Assembly Item Explored



An item that is made up of 1 or more components, but identified as a single item.

- A Serialized assembly item tracks the assembled items with a unique serial number identified with each one.
- A Lot Numbered assembly item tracks the assembled items as a group by assigning a lot number to the group of assembled items.
- Primary difference between an Inventory Item and Assembly Item is the components (bill of materials or BOM)
 - Legacy BOM – since the beginning of NS time
 - Advanced Bill of Materials – since version 2018.1 (**Setup > Enable Features > Items & Inventory**)
- Assembly items can be purchased

Setup > Manufacturing > Manufacturing Preferences



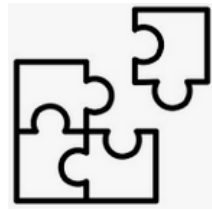
ADVANCED BILL OF MATERIALS

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

ALLOW PURCHASE OF ASSEMBLY ITEMS ☒



Assembly Item Explored



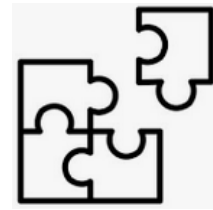
- Differences between non-serialized and serialized Assembly items
 - Costing Method
 - Non-serialized is whatever you have set up (Average, LIFO, ...)
 - Serialized = Can choose Average or Specific (associates by serial number) -
 - Costing Method = Specific then GL will show profit based on that specific item built and not the average for that item
 - Serialized Assemblies have Inventory Detail tab
 - Shows what's in stock and what's been sold

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** because it uses the average cost of the raw materials at that location where you unbuild, so could be totally different or zero if a different location from where you built it

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

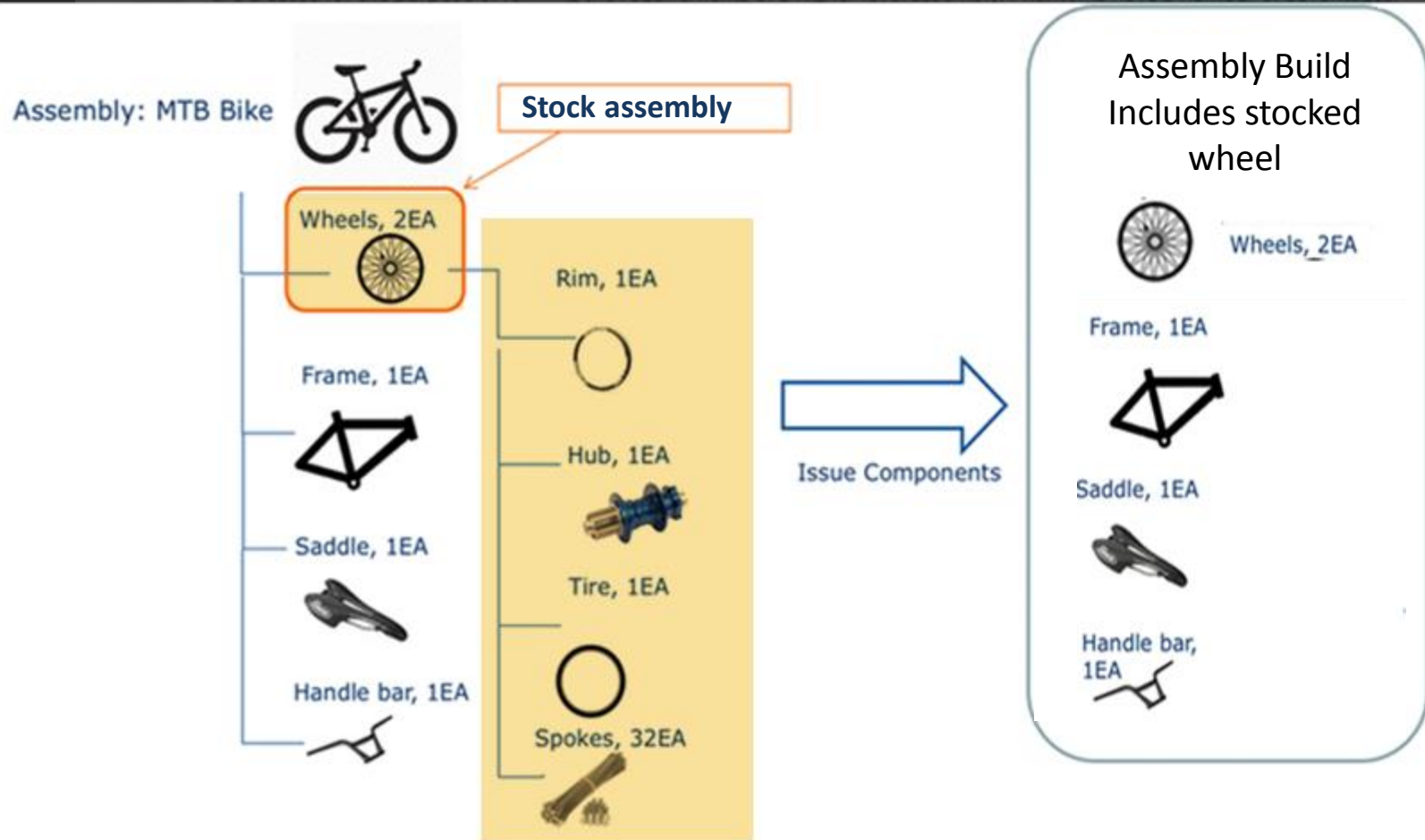
Highlights in yellow = differences



Stock vs Phantom Assembly

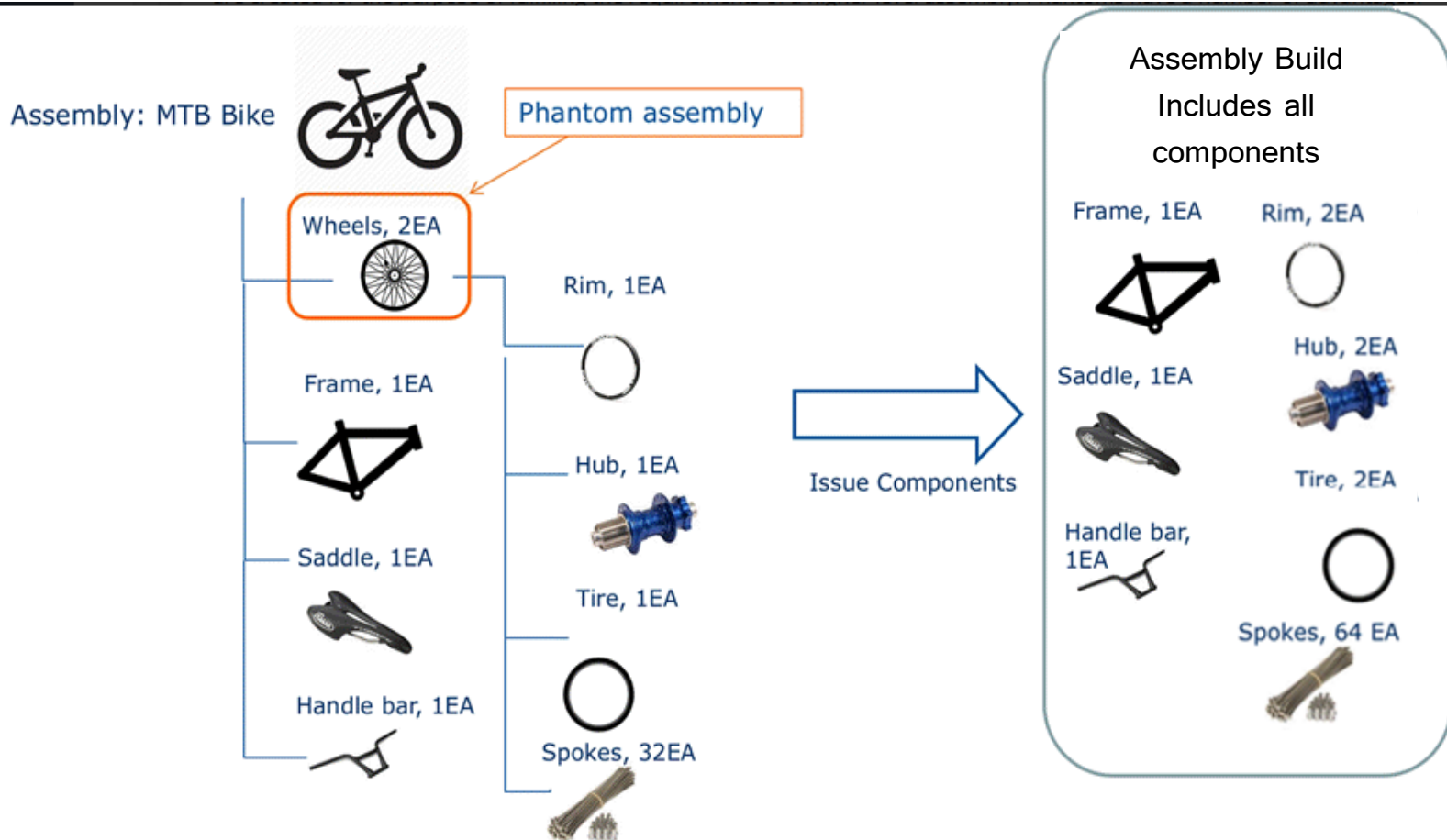


Stock – Prebuilt and stocked prior to Bike **Assembly**



Stock vs Phantom Assembly

Phantom (since 2016.2) – uses components during assembly build



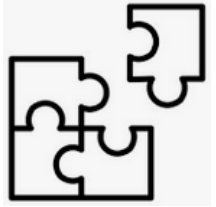
- Reusable component list – create once and use in multiple assembly items
- Phantom items have zero average cost on the item record unless you actually build one of the phantom items for stock



Power of the Phantom Assembly Item

- For assemblies that share a subset of components you don't have to enter all the components each time you create an assembly that uses those items
- When a change is required to a Phantom Assembly you don't have to update each Assembly item that uses it because it will automatically pull through

How to Build an Assembly Item



Two Methods:

- Direct

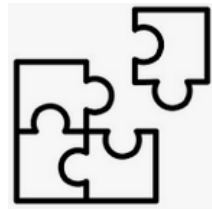
Transactions > Manufacturing > Build Assemblies

- Via Work Orders

Transactions > Manufacturing > Build Work Orders

Build Assembly Items

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

NEW/OLD EST SHIP DATE

BASIC PRODUCT

<None When Tab>

Components

Communication

Customize

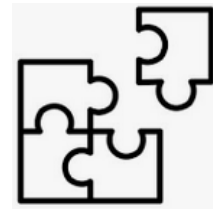
COMPONENT	QUANTITY	QUANTITY ON HAND	INVENTORY DETAIL	DISPLAY NAME	ELECTRONIC PART	HARDWARE PART
airsen h 67-1000-0800	5	190		67-1000-0800	No	Yes
Sensor AirXducer 11-3000-0000	5	1,793		11-3000-0000	Yes	Yes
Screw ss 0-80 X 3/16	10	968		60-1100-1001	No	Yes
PWB PSn Front Airsenh 58-0000-0040	5	978		58-0000-0040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

Cancel

Reset

Build Assembly Items

Serialized



Assembly Build

2369-17

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

* CUSTOM FORM Custom Assembly Build

* DATE 5/4/2017

POSTING PERIOD May 2017

REF. NO. 2369-17

ASSEMBLY PRODUCT PSI : V 90-0004-0000

* QUANTITY 112

UNITS

* LOCATION Aspen

Components **History** **Workflow**

Customize

COMPONENT

Blank Psi-H (blue)

Board Level Psi-H Lower

Board Level Psi-H Slide

Inventory Detail

OK **Close**

ITEM VPE-H (blue) PL QUANTITY 11

DESCRIPTION UNITS

Inventory Detail •

Express Entry **Autogenerate Numbers**

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

MEMO 112 VPE PL S

209.72

Work Order #

ON HAND

112

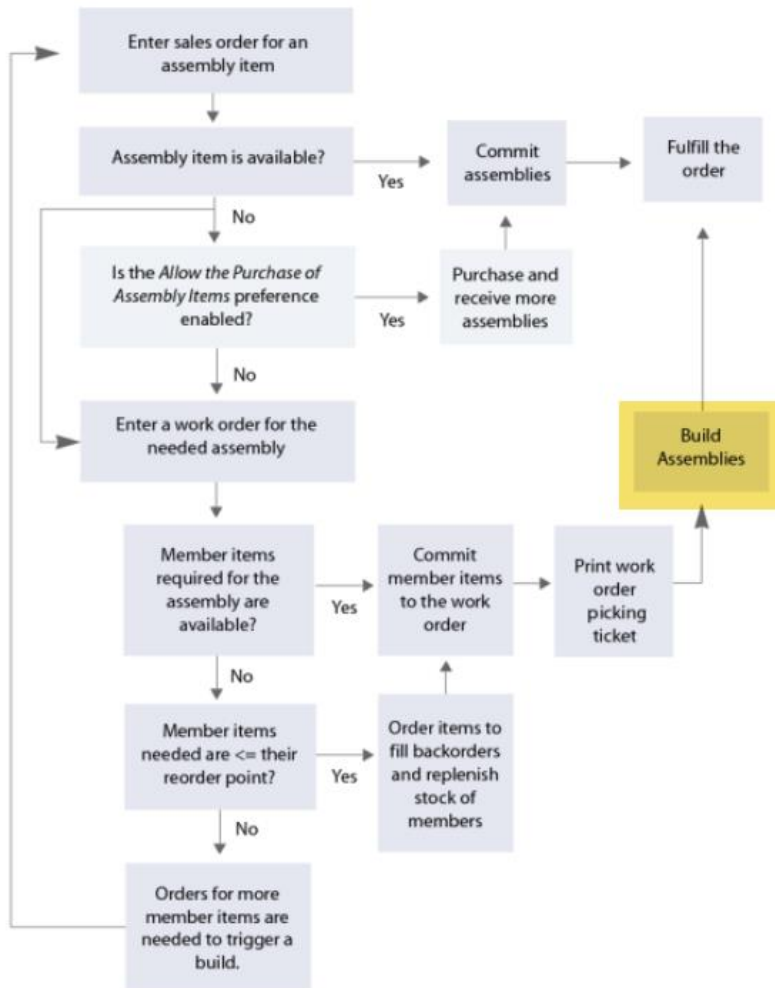
545

555

Work Orders



Assembly Work Orders Workflow Chart



A planned assembly build that tracks the production of assembly items needed for stock or to fill orders.

Anatomy of a Work Order

ORACLE NETSUITE **PLANTSCAN**

[Activities](#) [Search/Report by Category](#) [Flashlight](#) **Transactions** [Lists](#) [Reports](#) [Analytics](#) [Customization](#) [Documents](#) [Setup](#) [Comm](#)

Work Order

Save

Cancel

Actions

* CUSTOM FORM

* DATE

STATUS

FIRMED ☒

ORDER #

* ASSEMBLY

MARK SUB-ASSEMBLIES PHANTOM ☐

* QUANTITY

UNITS

CUSTOMER:JOB

LOCATION

MEMO

MASTER WO

IS MASTER WO

MASTER WO MEMO

REVISION

Items

History

ITEM *	ITEM SOURCE	QUANTITY	AVAILABLE	ON HAND	ITEM ON ORDER	OPTIONS
board level PSX long/short boards - BOM 88-0000-0009 88-0000-0012	Phantom	1	0	0	0	
re3.92ka 11-0000-0006 11-0000-0006	Stock	2	250	256	0	
re5.62ka 11-0000-0008 11-0000-0008	Stock	1	437	443	0	
re10ka 11-0000-0009 11-0000-0009	Stock	9	1,111	1,144	0	
Standoff PSX 67-0000-0080	Stock	2	520	526	0	
PSX (Pot & Switch) 11-0100-0010	Stock	1	21	24	0	
PSX Battery 88-2000-0000	Phantom	1	0	0	0	
Bat Pack PSX 13-0000-0002	Stock	1	48	51	0	
Pad, Battery Pack 67-0000-0103	Stock	1	29	32	0	
-----	Stock	1				
Sleeve, Horn Protector (PSX) 67-0000-0107	Stock	1	505	508	0	
Sleeve, Cushion (PSX) 67-0000-0090	Stock	1	49	52	0	
PSX-Knob-New 67-0000-0148	Stock	1	32	35	0	

+ Add Row

Save

Cancel

Actions

Work Orders/Assembly Builds

Assembly build occurs *after* saving a work order

Work Order (WO)

- Non-transactional
- Can be automatically created from a Sales Order (SO)
 - ❖ For serialized assemblies if generated from a SO when fulfilling it will auto-fill the serial numbers
- Looks similar to Assembly Build – but is holding area; Building the WO transitions to an Assembly Build
- Allows you to modify the assembly build:
 - Change an assembly item source (phantom / stock)
 - Add/change/delete components (e.g. for substitution) without changing BOM
- Can auto generate other WOs and POs
- Allows for phased assembly builds (e.g. blanket orders, partial builds)
- **Allows for analysis for future orders – can commit inventory and then determine shortage for future builds**



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 it manually or automatically by checking the checkbox on the SO

- Manually enter an Individual Work Order

- good for products and 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

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

MINIMUM QUANTITY

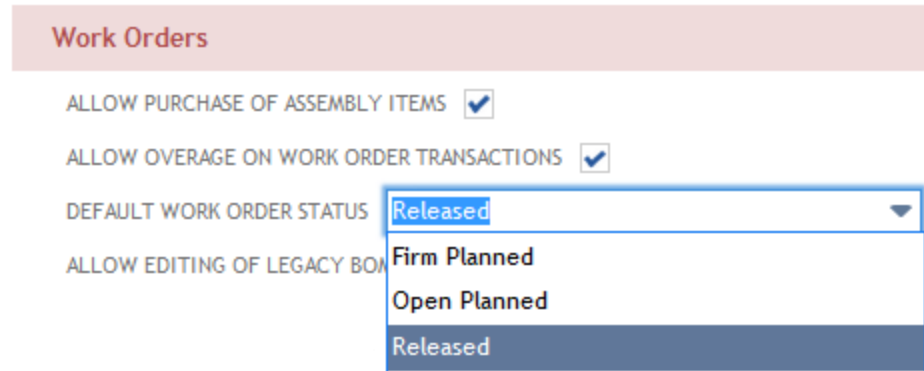
Mark All Unmark All Customize

ORDER	LOCATION	ITEM	DESCRIPTION	AVAILABLE	BACK ORDERED	ON ORDER	BL PO
<input checked="" type="checkbox"/>	Aspen	RM CASE : RM CASE - SB : SB M6 Black UPPER Case drilled	note: we have additional 372 tops drilled (300 SG2, 22 KentMoore, 50 MT)	0	19	0	
<input checked="" type="checkbox"/>	Aspen	RM CASE : RM CASE - PSn : PSn M8 Black UPPER Case drilled (4 btn)	PSn M8 Case drilled - 4 Button Part Numbers: 67-0000-0050 & 67-0000-0098	0	29	0	
<input checked="" type="checkbox"/>	Aspen	RM CASE : RM CASE - PSn : PSn M8 Black UPPER Case drilled (4 btn)	PSn M8 Case drilled - 4 Button	0	48	0	

Production work orders are generated when the back ordered quantity of an assembly reaches its assigned build point. After the build point is reached, a work order is added in the Mass Create Work Orders queue.

Planned vs Released Work Orders

Setup > Accounting > Accounting
Preferences > Order Management
subtab



The screenshot shows the 'Work Orders' subtab in the SAP Accounting Preferences. It contains four settings: 'ALLOW PURCHASE OF ASSEMBLY ITEMS' (checked), 'ALLOW OVERAGE ON WORK ORDER TRANSACTIONS' (checked), 'DEFAULT WORK ORDER STATUS' (set to 'Released'), and 'ALLOW EDITING OF LEGACY BOM' (unchecked). A dropdown menu is open for the 'DEFAULT WORK ORDER STATUS' field, showing three options: 'Firm Planned', 'Open Planned', and 'Released' (which is highlighted).

Setting	Value
ALLOW PURCHASE OF ASSEMBLY ITEMS	<input checked="" type="checkbox"/>
ALLOW OVERAGE ON WORK ORDER TRANSACTIONS	<input checked="" type="checkbox"/>
DEFAULT WORK ORDER STATUS	Released
ALLOW EDITING OF LEGACY BOM	<input type="checkbox"/>

- Released
- Firm Planned
- Open Planned
- Released

- Open Planned
 - Does not commit items until the work order is released
 - No impact on quantities in component item records – Quantity Committed nor 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
- Firmed – not relevant unless you have Demand Planning

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

CUSTOMER

POSTING PERIOD

DATE

BOARD LEVEL

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)

- **Page:Component Where Used Inquiry**
 - Look for where a part is used when it is to be removed or changed
- **Page: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
- **Page:Bill of Materials Inquiry**
 - For current BOMs
 - It explodes out all sub-assemblies – phantom and stock
- **Page:Review Negative Inventory**
 - Find out where you are under water

Useful Reports (bonus material)

- Physical Inventory Worksheet
 - Look at inventory by location at point in time
- Current Inventory Snapshot
 - 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
 - Really good for finding discrepancies and errors
- 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

