

MM Cycle Counting and Cistech RF Physical Inventory

Options for counting/validating your inventory quantities

Jim Simunek Jim.Simunek@Cistech.net







Cycle Count/Physical Inventory



- Companies need an auditable method to validate their inventory quantities, whether that's via Cycle Counting items throughout the year or a wall to wall Physical Inventory
- XA Inventory Management and XA Materials Management offer both Cycle Count and full Physical Inventory options
 - Both methods use pre-printed tags or a report sorted by item/location



Cycle Count/Physical Inventory



- Cistech has created an RF application that uses blank tags to count and then pass the count quantities to either an IM Count Batch or an MM Count Group
 - XA programs are then used to update the Item Location/Balance quantity on hand if the count quantity if different from the location quantity

This Presentation



- This Presentation will detail Materials
 Management Cycle Count/Physical Inventory:
 - Location Controlled Warehouse
 - XA Release 7 or higher







Purposes of Cycle Counting



- Validate inventory accuracy for financial reporting (Balance Sheet amount)
- Determine the reasons for inaccuracies/root cause analysis
 - 'Diagnostic Cycle Count'
 - Count the same 5 or 10 items every day
 - Keep a manual log on the items in the warehouse
 - If count differs from XA quantity, compare manual log to transaction history



Count Process



- XA Cycle Count & Physical Inventory both work exactly the same way, the only difference is the number of items selected for count
- Steps are:
 - Create a Count Group/print tags or a count report
 - Count the items
 - Activate Next Count
 - Enter count quantities
 - Run Variance reports
 - Recount items
 - Activate Next Count
 - Update inventory (creates PH Transactions)





CREATE COUNT GROUP

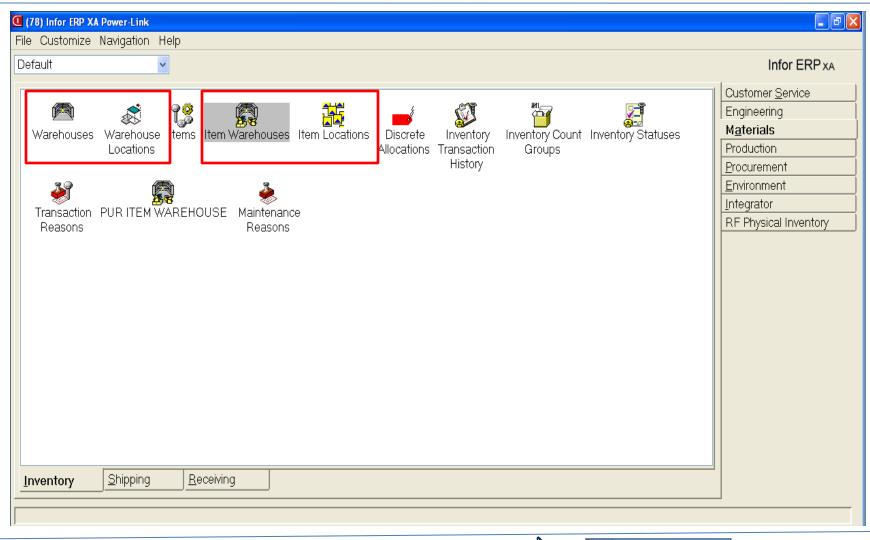




- From 'File' then 'Host Job' you can create a Count Group from the following objects:
 - Item Warehouse
 - Item Location
 - Warehouse Location
 - Warehouse
 - Warehouse is the only option that will select all items with Item Balance/warehouse records regardless of quantity on hand (i.e. will also select zero quantity items for count)











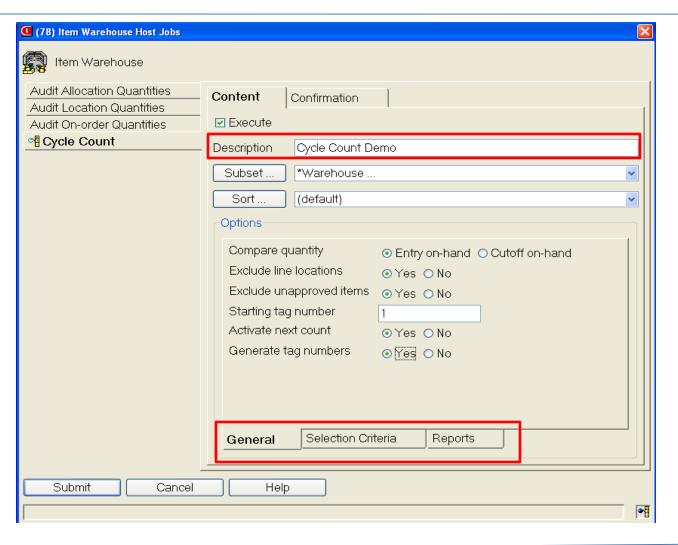
n Customize Navigation Help							₽×
F5 , 🚜 🖪 66° 🙊 💯	4 4 D	/ /= 'PI BB	55				
n Statistics				64 411 111 114 114 114 114 115 1			
	1,			(= · · ·			
·	Whs 📤	Planner	Primary		І/Т	On-hand	
			vendor	location			
r Filter	1				2	0	^
r Filter	1				1		
					4	l l	
Įs .					4		
Molds	1				4		
Volt	i						
Closet For 220 Volt	li l	100			4	ŏ	
Mrs T's Potato/cheese Pierogie	1	1			1	0	
Standard Conveyor Bar	1	100			4	0	
	1				1		
	1				1	l l	
	1				4	l l	
					4		
					4		
					4		
	li l				4		
Cannon Bubble Jet 1000	i l	100			4	ŏ	
Cannon Bubble Jet 80	1	100			4	0	
Flat Tower Base	1	100			4	0	
Micro Tower Base	1				4		
, Mini Tower Base	1	100			4	0	~
	r Filter r Filter r Filter or Molds ds Wolds Volt Closet For 220 Volt Mrs T's Potato/cheese Pierogie Standard Conveyor Bar Base Unit Base Unit Assembled Battery Purchased Component Test Long Betamax French Long Betamax English Regular Betamax French Regular Betamax English Cannon Bubble Jet 1000 Cannon Bubble Jet 80 Flat Tower Base	r Filter 1 r Filter 1 molds 1	Whs Planner Filter 1	Whs Planner Primary vendor	Whs	Statistics	Statistics Whs











Description: Will be the description of the Count Group

Compare Qty: Freezes the location quantity either at Count Entry or when 'Activate Next Count' is run Exclude:

Repetitive Line Locations Items waiting QC insp

Activate Next Count:

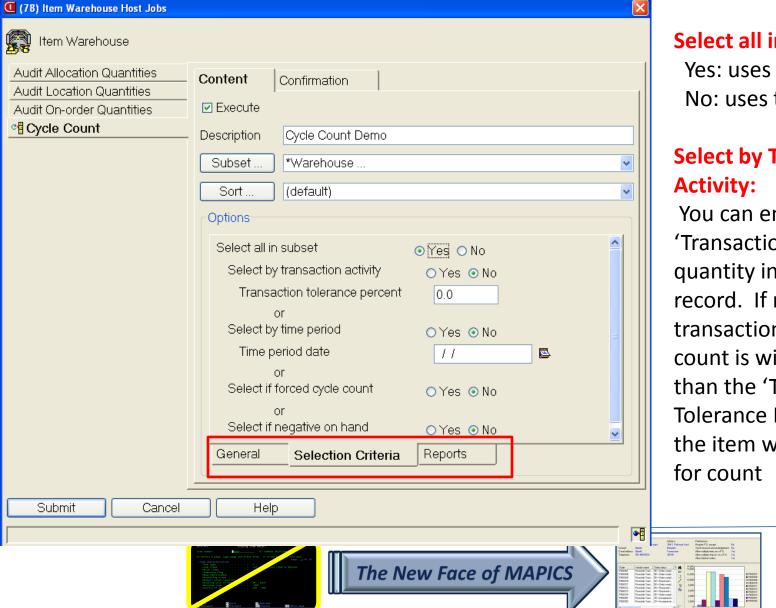
Opens the group for count entry. Can be run later

Generate Tag Numbers:

Assigns tag number to each item/location to be counted







Select all in Subset:

Yes: uses Subset

No: uses the following:

Select by Transaction

You can enter a 'Transaction Count' quantity in the Item Whs record. If number of transactions since last count is within or greater than the 'Transaction Tolerance Percent', then the item will be selected



Select by Transaction Date

- Uses the Cycle Count Code in the Item Warehouse to determine if the item is due for cycle count
 - Code 1 = Monthly
 - Code 2 = Quarterly
 - Code 3 = Every six months
 - Code 4 = Manually entered 'Date next Count'
- Compares today's date to the 'Date Last Count' field in the item Balance/Warehouse record to determine if the item is due for Cycle Count





Force Cycle Count = Yes

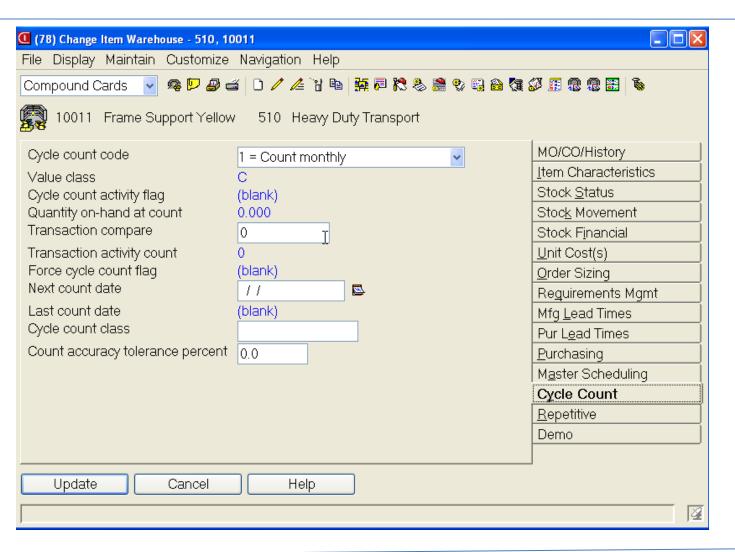
- There is a flag in the Item Balance/Whs record that will be set if the item's quantity on hand went negative since the last cycle count
 - 'Yes' value in this field will select all items where the FCYCT flag = 1

Select if Negative on Hand

Will select those items whose quantity on hand is negative



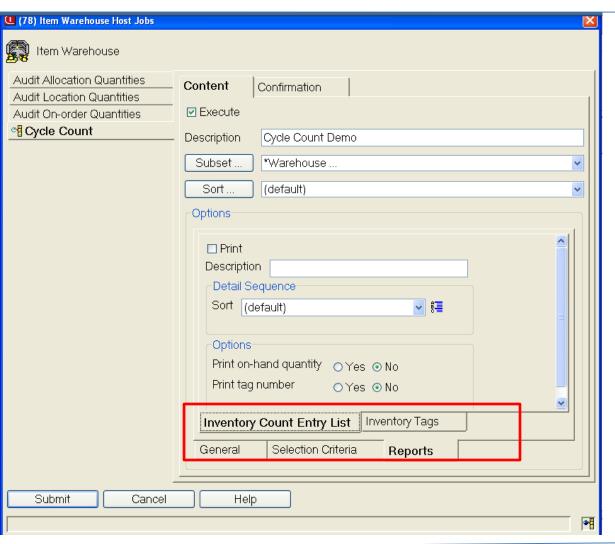




Item
Warehouse/Balance
record fields used in
conjunction with the
'select criteria' card







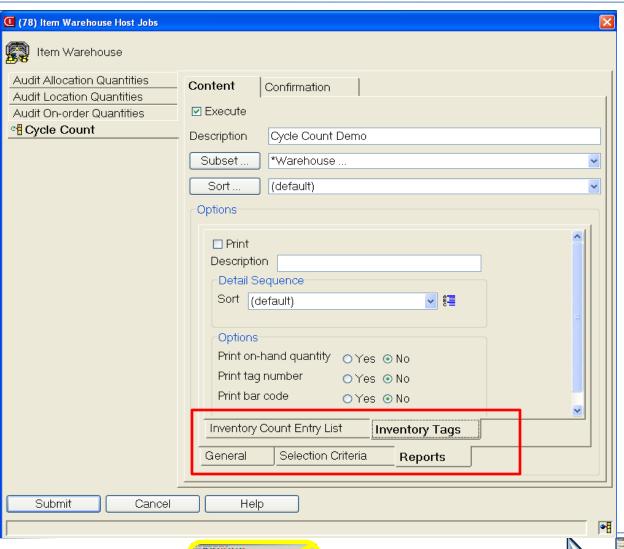
Determines if tags or a count report is created

Report can include existing quantity on hand (not recommended)









Tags will have item, warehouse, location and, if applicable, batch/lot

XA only allows 1 tag per item/location combination

Tags can print with bar code



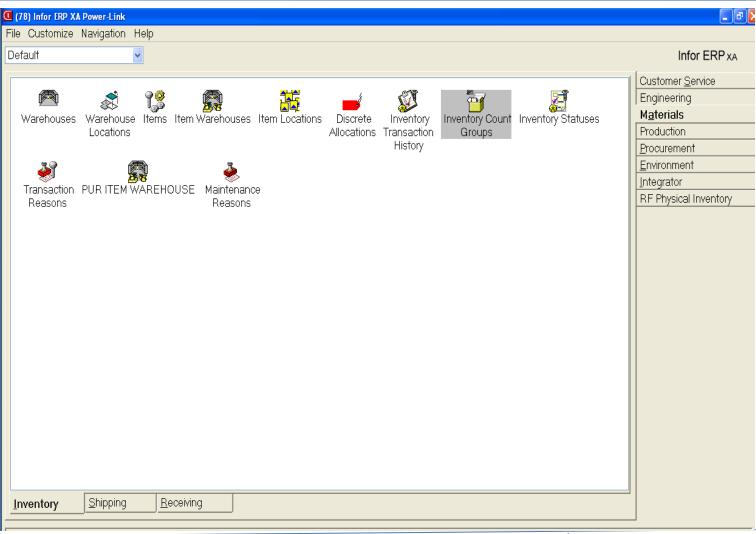




ENTER COUNT QUANTITIES











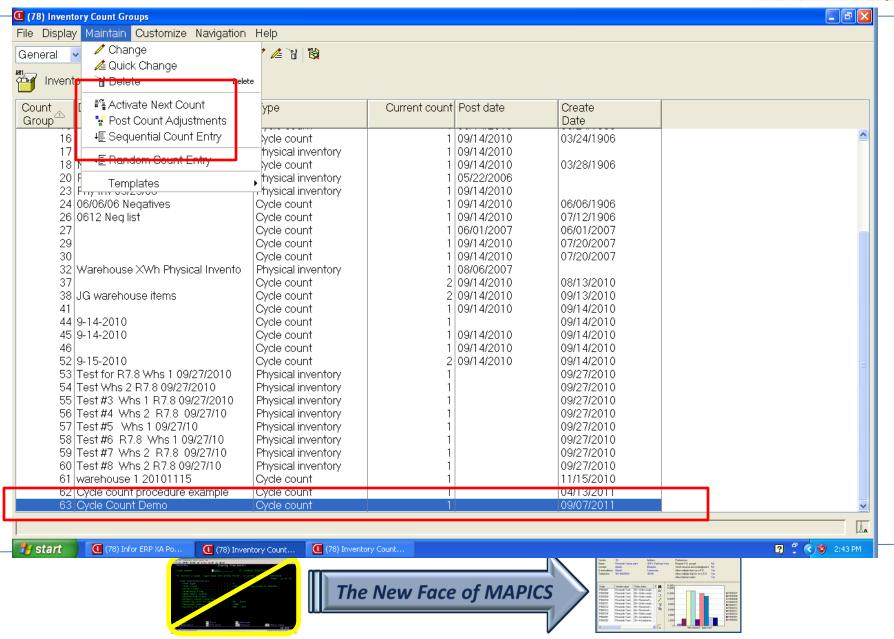




- Double Click on 'Count Group' object to display a list of count groups
- Description entered when Host Job was run to create the Count Group will be displayed
- Can run 'Activate Next Count' from the 'Maintain' menu if not run when creating the count group
- Each Item/Location has 3 count entry fields to show history of recounts/corrections
 - Last count entered is used to update item/location quantity







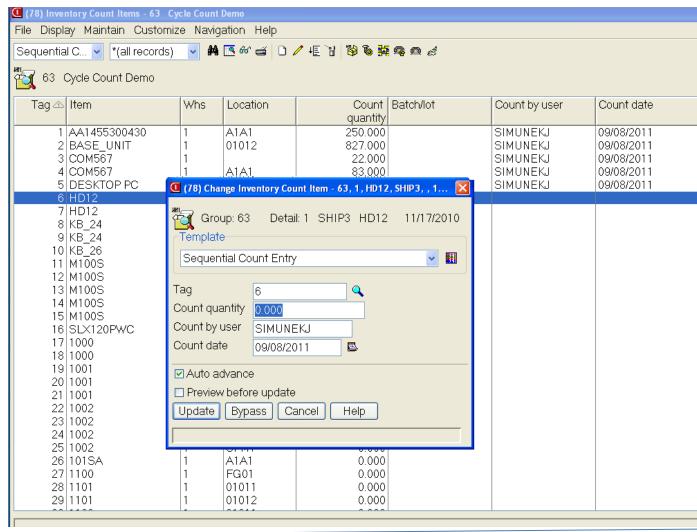


- Double click on the Count Group to display the list of items to be counted
- Two types of Count Entry:
 - Sequential: uses the item or tag number to 'walk through' the items in the count group
 - Random: enter the tag number and all information
 - Use Random count entry to add new items to the count group (i.e. 'found' items)



Sequential Count Entry







The New Face of MAPICS



Sequential Count Entry



- Fields displayed on the Count Entry card are determined by the view used (similar to 'Quick Change')
- Use the Change Template to set default values such as 'Counted by' and 'Count Date'
- 'Count Quantity' will populate the Active Count field (count 1, 2 or 3)
- Once counts have been entered, use 'Host Print' to create reports



Count XA Reports

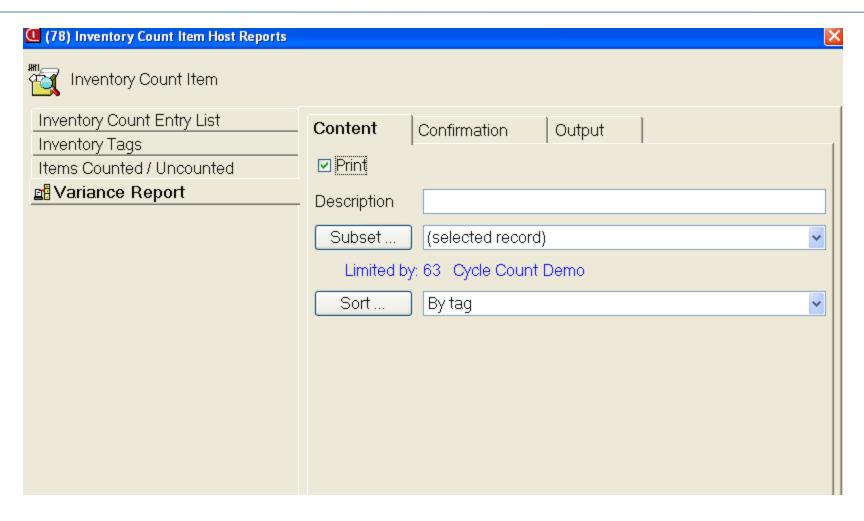


ile Display Maintain Custor	nize Navi	gation Help				
Refresh Calculate Column Statistic	F5 S	i 🌃 667 🚄 🗎 ∡	/ 恒 7 │ 👸 🗞 🛱	9 9 3		
<u>∎</u> Host Print						
^ਫ ਊ Host Jobs	'hs	Location	Count		Count by user	Count date
[©] o Export		A1A1	quantity 250,000		SIMUNEKJ	09/08/2011
≝ Send to		01012	827.000 22.000		SIMUNEKJ SIMUNEKJ	09/08/2011 09/08/2011 09/08/2011
■ Local Print		A1A1 FG01	83.000 15.000		SIMUNEKJ SIMUNEKJ	09/08/2011 09/08/2011
% Status		SHIP3	0.000		OHIOTELO	00/00/2011
Summary Info		SHIP4 A100	0.000 0.000			
Close		ROD1	0.000			
10 KB_26 11 M100S 12 M100S 13 M100S 14 M100S 15 M100S 16 SLX120PWC 17 1000 18 1000	1 1 1 1 1 1 1	A200 A0101 01015 01015 01015 01016 FG01 FG01 SHIP	0.000 0.000 0.000 0.000 0.000 0.000 0.000	36-485-102 34-567-351 34-567-395 4523678 35-422-302		
19 1001 20 1001 21 1001 22 1002 23 1002 24 1002 25 1002	1 1 1 1 1 1	FG01 INTR SHIP2 FG01 INTR SHIP SPMT	0.000 0.000 0.000 0.000 0.000 0.000			
26 101SA 27 1100 28 1101 29 1101	1 1 1 1	A1A1 FG01 01011 01012	0.000 0.000 0.000 0.000			



Variance Report









- After reviewing the Variance Report, you can 'Activate Next Count' for the entire Count Group or individual items (by single clicking on the item, then 'Maintain'/'Activate Next Count')
- Enter re-counts (they will go into the 'Count 2' field
- When all counts are entered and verified, to update the on hand balances, go back to the Count Group Header



Post Inventory Adjustments (PH)



(78) Inventory Count Groups					
File Display Maintain Customize Navigation	Help				
General ✓ Change ∠ Quick Change	*				
Invento 🔐 Delete Dele	te				
Count # Activate Next Count	уре	Current count	Post date	Create	
Group Post Count Adjustments				Date	
63 (LE Sequential Count Entry	ycle count	-		09/07/2011	
62 (→ E Random Count Entry	ycle count ycle count	1		04/13/2011 11/15/2010	
60 T 59 T Templates	hysical inventory hysical inventory	1		09/27/2010 09/27/2010	
58 Test #6 R7.8 Whs 1 09/27/10	Physical inventory	1		09/27/2010	
57 Test#5 Whs 1 09/27/10	Physical inventory	1		09/27/2010	
56 Test #4 Whs 2 R7.8 09/27/10	Physical inventory	1		09/27/2010	
55 Test #3 Whs 1 R7.8 09/27/2010	Physical inventory	1		09/27/2010	
54 Test Whs 2 R7.8 09/27/2010	Physical inventory]		09/27/2010	
53 Test for R7.8 Whs 1 09/27/2010	Physical inventory]	00/14/0010	09/27/2010	
52 9-15-2010	Cycle count		09/14/2010	09/14/2010	
46	Cycle count		09/14/2010	09/14/2010	
45 9-14-2010 44 0 14-2010	Cycle count		09/14/2010	09/14/2010	
44 9-14-2010	Cycle count		09/14/2010	09/14/2010	
41 38 JG warehouse items	Cycle count			09/14/2010 09/13/2010	
38 JG warehouse items 37	Cycle count Cycle count		09/14/2010 09/14/2010	09/13/2010	
37 32 Warehouse XWh Physical Invento	Physical inventory	I	09/14/2010	00/13/2010	



Post Count Adjustments



- Post Count Adjustments will:
 - Create PH transactions for all items counted
 - If the Count Quantity is different from the Cutoff Quantity the PH transaction will hold the difference, either positive or negative
 - Update the 'Date Last Count' field in the Item Balance record
 - Reset 'Transaction Count' in the Item Balance record
 - Generate a report of updated items with quantity and cost
 - Update the 'Post Date' in the Count Group header



Implementation Considerations



- Determine which objects/files will be used to create Count Groups
- Create Subsets to select items for counting
- Train Counters on count entry
 - Cistech sells an RF CC entry which will display the items on the RF screen, one item at a time in tag sequence, for count entry
- Cistech can assist with all of these options





CISTECH'S RF PHYSICAL INVENTORY



Non-XA Features



- Blank tag file
- Can flag employees as Counter, Auditor or Manager
- Assign tags to employees
- Peel off, bar code labels as tags
- Void a tag with user defined reason code
- Flag tags as 'unused'
- Audit tags with user defined reason code for rejected tags
- Can have multiple tags for same item/location combination



Non-XA Features



- Tag Status Codes
- Creates zero count tags for items/locations not counted
- Consolidates multiple tags for same item/location onto one tag when moving the count to MM or IM
- Count variance as tag is updated with item and count quantity
- Simulated update for a PowerLink Variance file



Pre-Requisites



- Materials Management (MM)
- Inventory Management (IM)
- Integrator
- Production Monitoring and Control (PM&C)
- XA release 7 or higher







Overview



- Creates a set of 'blank' tags in a non-XA file; this file will be used for tag control
- 'Tags' are printed on peel off labels with bar code tag numbers, 30 labels to a sheet
- A range of tags is assigned to a counter (must be a valid employee in PM&C employee master file)
- Counters will:
 - Scan the tag number
 - Scan (or key) the item number
 - Scan (or key) the location
 - Key the quantity
 - Scan (or key) a batch/lot number



Overview



- Counters can only use tags that have been assigned to them
- Counters can void a tag (requires a reason code)
- Counters can mark a tag as 'unused'
- As tags are entered on the RF gun, the tag information is written to the Tag file (removes need for Data Entry of tags)
 - Will calculate count to location difference in both quantity and cost
 - Difference may be inaccurate if there are multiple tags for the same item/location combination



Overview – Audit Functions



- Can flag an employee as an Auditor
- Auditor scans tag
 - Tag information is displayed on the RF gun
 - Auditor can accept or reject count
 - If count is rejected, a reason code must be entered
- Tag file is updated with:
 - Audited by name & number
 - Count accepted or rejected flag
 - Reject reason code



Overview



- Anytime during the count process, a Variance file can be generated by Item or by Item & Location
- The Variance file will simulate the records that will be created in MM or IM
 - Multiple tags for the same item/location will be consolidated
 - Zero tag counts will be created
- Variances will be displayed signed and in their absolute value for sorting purposes
- Allows for reconciliation prior to posting



Overview



- A range of tags can be flagged as unused from PowerLink
- Once all tags have been accounted for, send the tags to either:
 - Materials Management as a 'Count Group'
 - Inventory Management as a 'Physical Inventory Batch'
 - Option to create zero count tags for uncounted item/location combinations



Overview

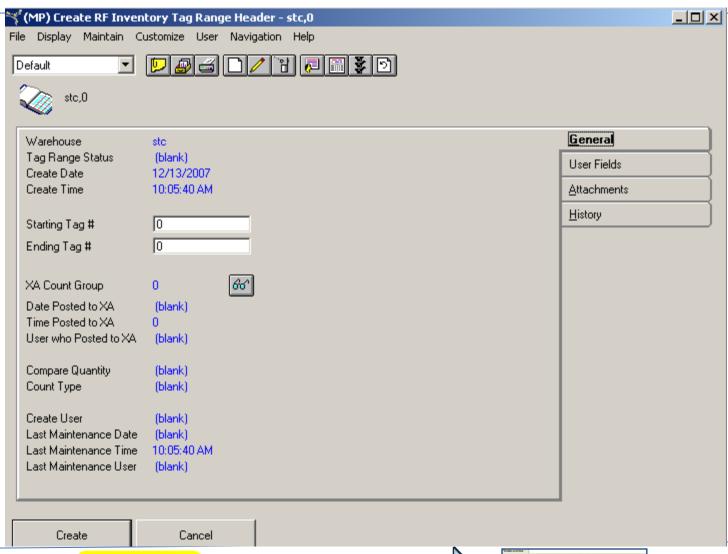


- Use MM or IM to run XA variance reports and enter recounts after count group or physical inventory batch has been created
- Use MM or IM to create PH transactions which will update on hand balances



Create Tags





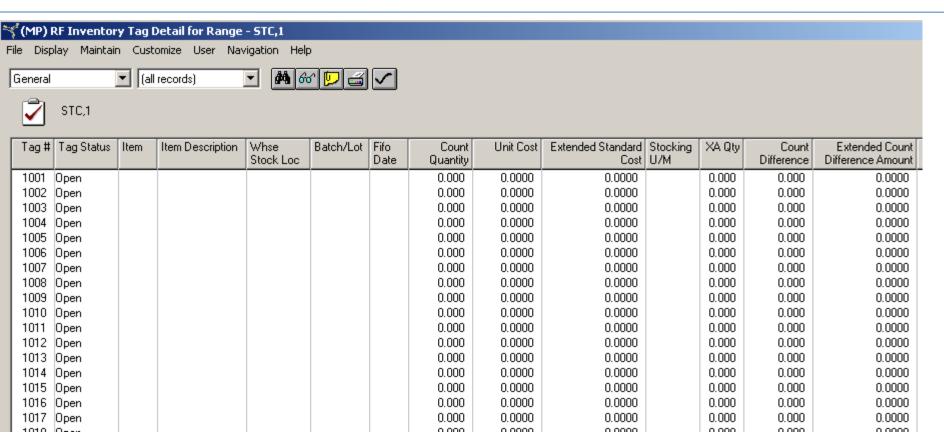






Tag List



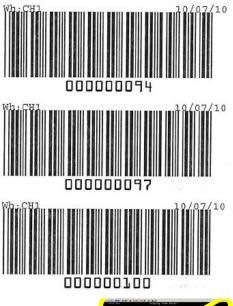


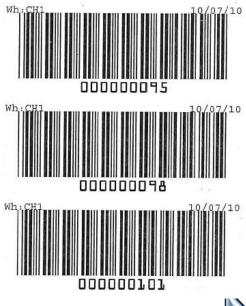


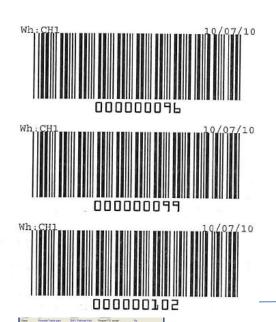
Tags



- Tags are peel off labels that will be attached to the items as they are counted
- Tags show:
 - Tag number (both bar code and written),
 warehouse & date











Assignment

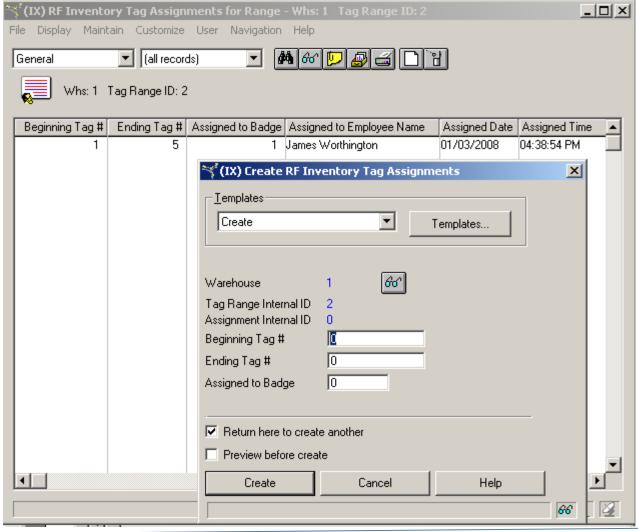


- Once tags are created they are assigned to Counters
- When creating counts, employee number assigned to the tag must match employee number signed onto the RF gun
- Prevents one Counter from giving their tag(s) to another Counter



Assign Tags to Counter











Counter Actions



- Counter signs onto RF gun
- Chooses whether they are a 'Counter', 'Manager' or an 'Auditor'
 - Only Counters and Managers can change tags
 - Auditors can only approve or reject tags
- Enters/scans Employee number
- Then uses the following screens:



Count Entry Screens



12/11/07 14:31:09 Count Entry

Tag#: _____0

F2=Return F3=Exit

12/11/07 14:38:50 Tag# 11

Item _____

Location _____

Qty _____.<u>000</u>

Btch/Lot _____

F2=Rtn F3=Exit F4=Set Tag Unused







Entered Tag



12/13/07 11:15:40

Tag# 4

Item 239402 A - GE ROTOR R8579 (4,

70F)

UOM EA

Location A1230 Btch/Lot

Qty 415.000

F1=Void F2=Rtn F3=Exit

- Once the tag has been created, there are options to:
 - Change the count quantity
 - Void the tag (requires a reason code)

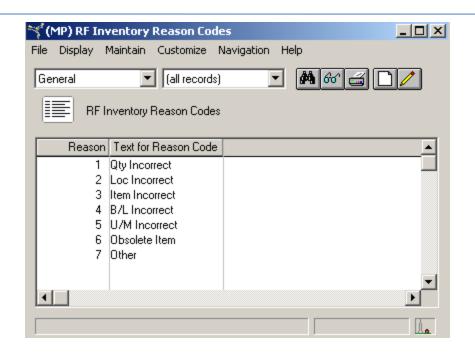






Void/Reject Reasons





- Custom file has been created to enter Void or Audit Reject Reasons
- In addition to reason, counter or auditor can enter a manual entry of a description
- Audit Rejected tags must be voided before MM Count Group can be created



Tag File

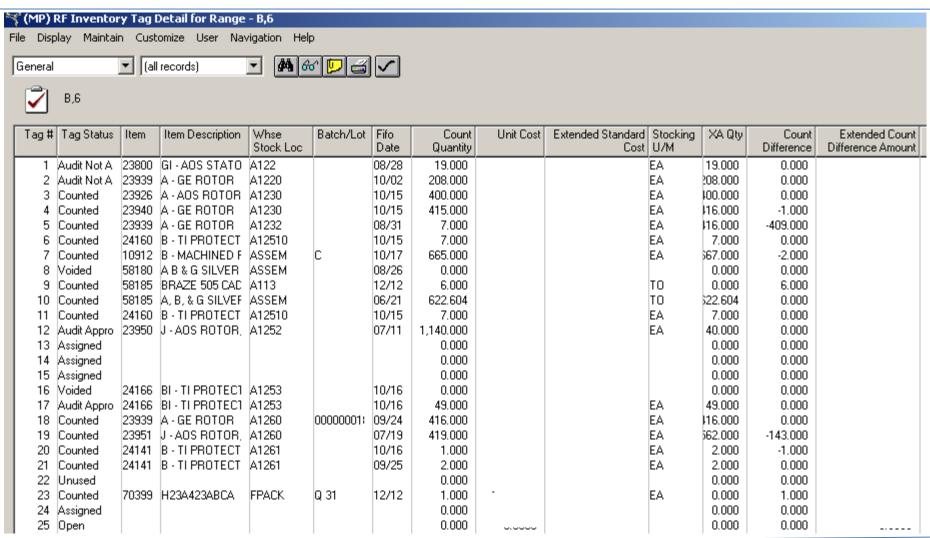


- As counts are scanned/entered, tag file is updated with:
 - Tag Status
 - Counted By (must match Assigned To)
 - Item, Location, Quantity and, if required, Batch/Lot number
 - Quantity and Cost difference between Location quantity and Count quantity



Tags after Count/Audit











Auditor Features



- An Auditor will be able to either approve or reject tags
- Rejected and Voided tags will require a Reason Code
- Auditor employee number, date, time, approval code and, if rejected, reason code will be added to the tag
- Un-used tags must be flagged as such



Auditor Screens



12/13/07 11:37:12

Tag# 4

Item 239402

A - GE ROTOR R8579 (4, 70F)

Location A1230

Btch/Lot

Count 415.000

Audit Accepted?

N(Y/N)

F2=Return

12/13/07 11:29:20 Select Reason Code AUDIT NOT APPROVED

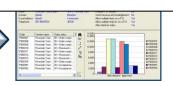
Reason Code

- __ Qty Incorrect
- Loc Incorrect
- Item Incorrect
- B/L Incorrect
- __ U/M Incorrect
- Obsolete Item
- Other

F5=PageUp F6=PageDn







Tag Reconciliation



- Use Subsets and Views to review tags
- Audit rejected tags must be voided before MM Count Group can be created
- Verify that all tags have been accounted for



Tag Status



- OP Open
- AS Assigned
- *CT Counted
- *AA Audit Approved
- AN Audit Not Approved
- *VD Voided
- *UU Unused
- *CN Consolidated To (for internal use when posting counts to MM)
- *UI Uncounted Item (for internal use when posting counts to MM)
- * all tags must be in one of these status codes to create the count group or IM batch







Create Count Group



- Once all tags have been accounted for, a job will be run that will take the tag information and create an XA Materials Management Count Group:
 - Multiple tags for the same item/location will be consolidated
 - Program provides an option to create zero count quantity tags for item/locations that did not have a count quantity entered



Tag Status



- *CT Counted
- *AA Audit Approved
- *VD Voided
- *UU Unused
- *CN Consolidated To (for internal use when posting counts to MM)
- *UI Uncounted Item (for internal use when posting counts to MM)
- * all tags must be in one of these status codes to create the MM count group or IM batch



MM Count Group



- Materials Management will now control count quantities
- XA Variance reports can be created
- Re-counts can be entered (MM allows up to 3 count quantities per item)
- Update quantity on hand is run from MM (creates 'PH' Physical Inventory Adjustment Transactions)
- Raw count data remains in RF Physical Inventory



IM Phy Inv Batch



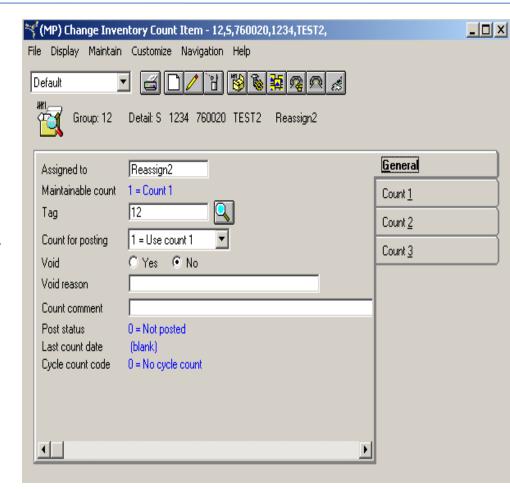
- Instead of an MM Count Group, you can choose to create a Physical Inventory Batch in Inventory Management
 - No tracking of Tag Number in IM, only MM
- Run the IM variance report and adjust counts as necessary
- Post the result through IM
- Raw count data remains in RF Physical Inventory



MM Count Group



- Once the Count
 Group has been
 created, all activity
 would occur in MM
- If a re-count quantity needs to be entered, the MM card file would be used:





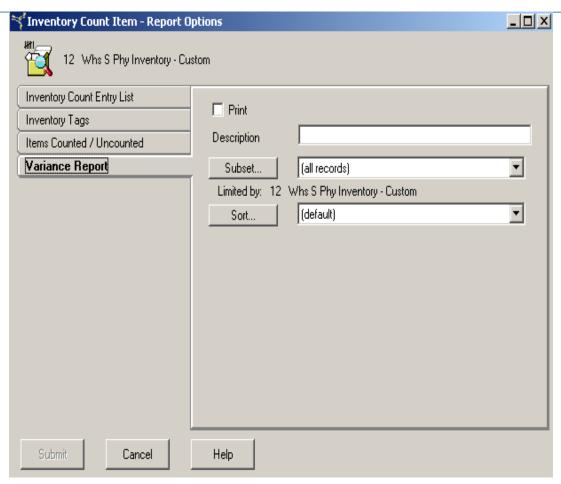




Variance Reports



 Variance reports would be created from MM





Updating On Hand Balances



- Once all count items have been approved,
 Materials Management would be used to post count quantities
- If there is a difference between the count quantity and the location quantity, a PH (Physical Inventory Adjustment) transaction will be created to update the on hand balance



Cycle Count after Physical Inventory



- The Cistech RF PI application includes programs that will:
 - Reset the 'Date Last Count' field in the Item Balance record based on the Cycle Count Code
 - Posting a Physical Inventory will change the 'Date Last Count' for every item in the warehouse to the same date
 - Update the 'Cycle Count Code' field based on the Value Class/ABC code of the item

Physical Inventory Summary



- Tags are now a 'peel off' label
- Scanning provides the tag 'data entry'
- Auditors can see count quantity from the RF gun and approve or reject a tag
- Counters can void a tag
- Auditor Rejected and Counter Voided tags require a user defined reason code
- Tags will create either an MM Count Group or IM Batch
- MM/IM will produce variance reports and update quantity on hand information



Implementation



- Rapid implementation-be ready for your next physical inventory!
 - Create Employee/Badge numbers for Counters, Auditors & Managers in PM&C
 - Create a sample tag group and train employees on RF Gun screens & keys
 - Take your Physical
- Every company that has implemented RF PI has had a reduction of more than 50% in the time required to take a Physical Inventory



Implementation



- Typical implementation..education/training on:
 - PM&C/Employee Master
 - Tag Control
 - Counter procedures
 - Auditor procedures
 - Reconciliation options
 - Posting counts to XA
 - Inventory update
- Normally, 2 to 3 days of consulting assistance



Benefits



- Significantly reduce the amount of time to count, audit and reconcile a physical inventory
- Significantly reduces keystrokes with RF scanning functions, increases data accuracy
- Integrated with MM minimizes training effort
- 'Tags' printed on peel off labels using a laser printer
- Can track tag from creation to posting with tag status
- Can audit tags and present an excel spreadsheet (exported from PowerLink) to external auditors showing count/audit
- Reason codes for void and audit rejected tags







Thank You!

