MAPICS XA
Cycle Counting in Materials Management

Presented by

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Cycle Counting in Mapics

Goals of a Cycle Count Inventory:

Verify the accuracy of the on hand balances

- Audit and adjust all inventory records to ensure an accurate inventory balance at least once a year.
- Provides support for the dollar amount of inventory reported to the General Ledger
- Ensures material planning (MRP) creates a valid plan for purchases and manufacturing orders
- Allows employees to locate inventory to issue to manufacturing orders and/or ship to customers.
- If differences exist between the on hand and count quantities, identify the reason for the difference and correct procedures
- Avoids full physical inventory and disruption to operations

Steps in Cycle Counting

- Before starting inventory counting, create the inventory count groups to categorize the items you are counting.

- When you create the inventory count group, the documents needed can be generated to record the count and activate the count.

- If the count is not activated when creating the inventory count group, the Inventory Count Items object can be used to edit the items in the inventory count group.

- If the selection to print the counting documents is not elected when creating the inventory count group, the counting documents can be generated after the inventory count items are
- edited.

The counting documents can be lists, tag numbers, or bar codes.

After the counters return the counting documents, enter counting information into the Inventory Count Groups or Inventory Count Items objects to compare with the current inventory information.

After counts are entered, generate reports to help decide whether another count is required. Up to three counts can be activated for each count group.

When confident the count information is the correct view of the inventory situation, then post the count to update XA with the inventory quantities determined during the count.

Inventory count groups remain in the Inventory Count Groups list window after posting so that the posting date can be viewed. Subset the list to see the inventory count groups wanted. (Posted/ Unposted)

Frequency of Cycle Count/MAPICS

Frequency of count to is normally tied to the ABC classification of the Inventory:

- 'A' items counted monthly
- 'B' items counted quarterly
- 'C' items counted semi-annually
- 'D' items not cycle counted
  - 'D' items are typically considered as vendor consignment, low cost/low usage, etc.

Frequency of Cycle Count/VARIATIONS

Frequency of count to is normally tied to the ABC classification of the Inventory:

- 'A' items counted quarterly
- 'B' items counted semi-annually
- 'C' items counted once a year

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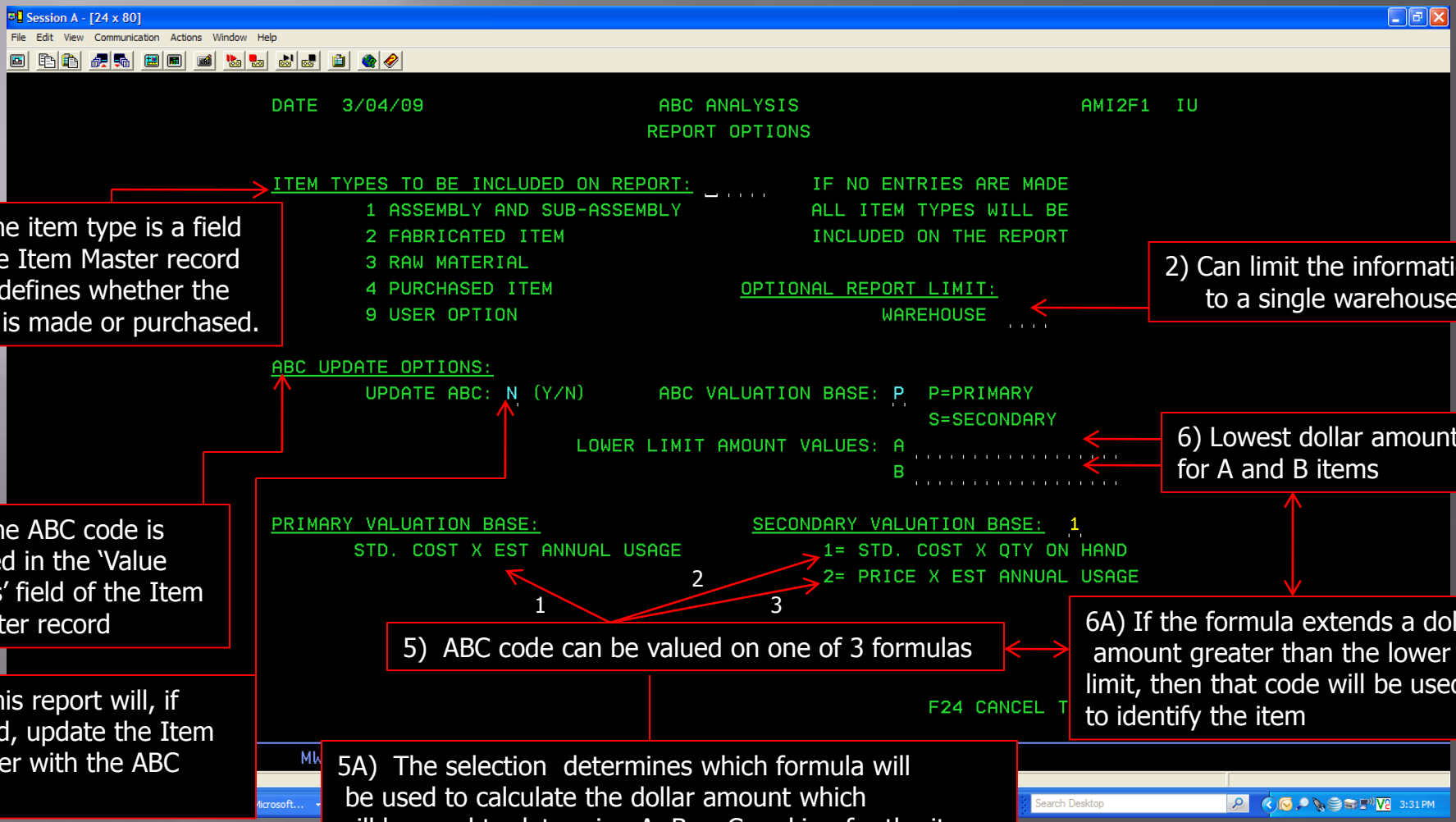
Mapics will assist with setting the ABC code of the item with the 'ABC Analysis' report.

- From the Inventory Management Reports menu, select option #2 'Status/Analysis Reports', then option #6 'ABC Analysis'
- The following screen will be displayed:



1) The item type is a field in the Item Master record that defines whether the item is made or purchased.

2) Can limit the information to a single warehouse.

3) The ABC code is stored in the 'Value Class' field of the Item Master record

6) Lowest dollar amounts for A and B items

5) ABC code can be valued on one of 3 formulas

6A) If the formula extends a dollar amount greater than the lower limit, then that code will be used to identify the item

4) This report will, if asked, update the Item Master with the ABC code

5A) The selection determines which formula will be used to calculate the dollar amount which will be used to determine A, B or C ranking for the item

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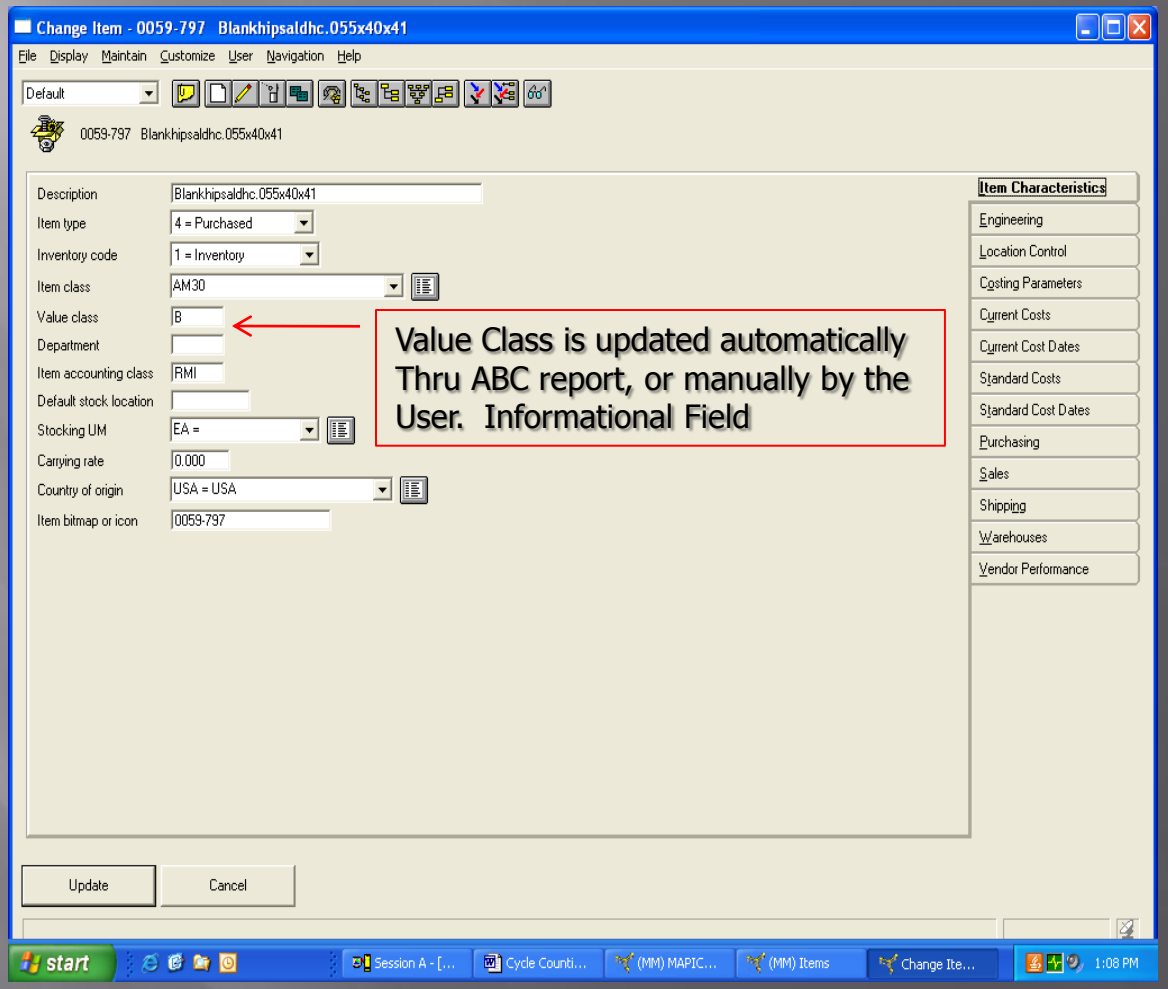
Item Revision – Updates – Value Class



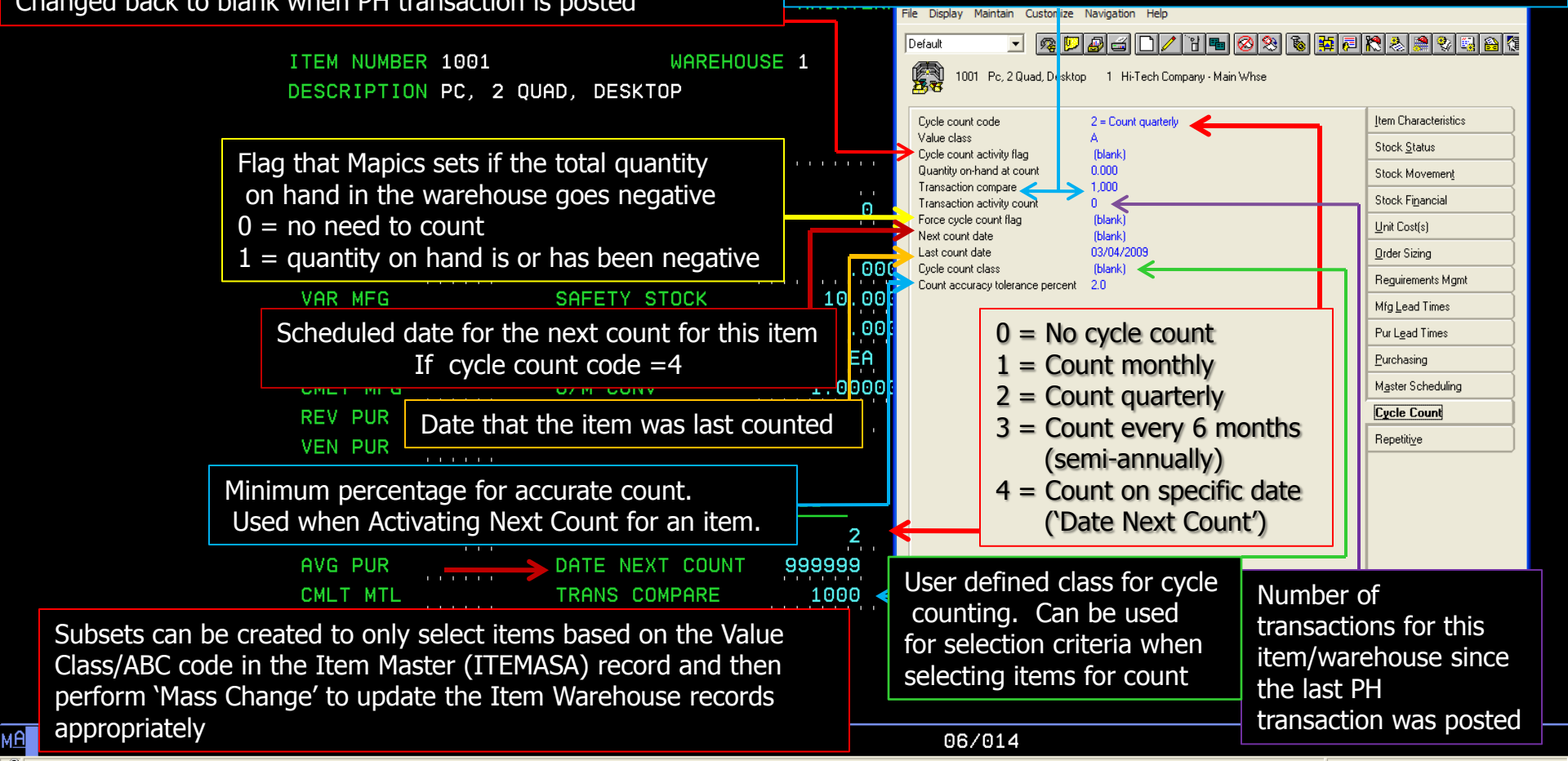
Value Class is updated automatically Thru ABC report, or manually by the User. Informational Field

Item Warehouse – Cycle Count Fields

Stored in the Item Warehouse/Item Balance file

Flag to let you know if the item is being counted:
Blank = record recently created/not currently being counted
1 = Item selected for count
2 = Item counted with a variance
Changed back to blank when PH transaction is posted

Transaction Compare -For items where cycle count code is not equal to 0. Number of transactions before the item is selected for cycle count even if the 'Next Cycle Count Date' has not been reached.



Flag that Mapics sets if the total quantity on hand in the warehouse goes negative
0 = no need to count
1 = quantity on hand is or has been negative

Scheduled date for the next count for this item
If cycle count code =4

Date that the item was last counted

Minimum percentage for accurate count.
Used when Activating Next Count for an item.

0 = No cycle count
1 = Count monthly
2 = Count quarterly
3 = Count every 6 months (semi-annually)
4 = Count on specific date ('Date Next Count')

User defined class for cycle counting. Can be used for selection criteria when selecting items for count

Number of transactions for this item/warehouse since the last PH transaction was posted

Subsets can be created to only select items based on the Value Class/ABC code in the Item Master (ITEMASA) record and then perform 'Mass Change' to update the Item Warehouse records appropriately

Field	Description
Cycle Count Code	0 = No cycle count 1 = Count monthly 2 = Count quarterly 3 = Count every 6 months (semi-annually) 4 = Count on specific date ('Date Next Count')
Value Class	ABC code (from the Item Master)
Cycle Count Activity Flag	Flag to let you know if the item is being counted: Blank = record recently created/not currently being counted 1 = Item selected for count 2 = Item counted with a variance Changed back to blank when PH transaction is posted
Quantity on hand at count	Cutoff quantity for the item when selected for count
Transaction Compare	For items where cycle count code is not equal to 0, number of transactions before the item is selected for cycle count even if the 'Next Cycle Count Date' has not been reached
Transaction Activity Count	Number of transactions for this item/warehouse since the last PH transaction was posted
Force Cycle Count Flag	Flag that Mapics sets if the total quantity on hand in the warehouse goes negative 0 = no need to count 1 = quantity on hand is or has been negative
Next Count Date	Scheduled date for the next count for this item if Cycle count code =4, reset to 999999 after count posted.
Last Count Date	Date that the item was last counted
Cycle Count Class	User defined class for cycle counting. Can be used for selection criteria when selecting items for count
Count Accuracy Tolerance Percent	Minimum percentage for accurate count. Used when Activating Next Count for an item. For example, if the on hand was 100 and count was 85 then the variance percent is 15%. If this field was set to 10% then this item would automatically be selected for next count since the percent difference was greater than the tolerance

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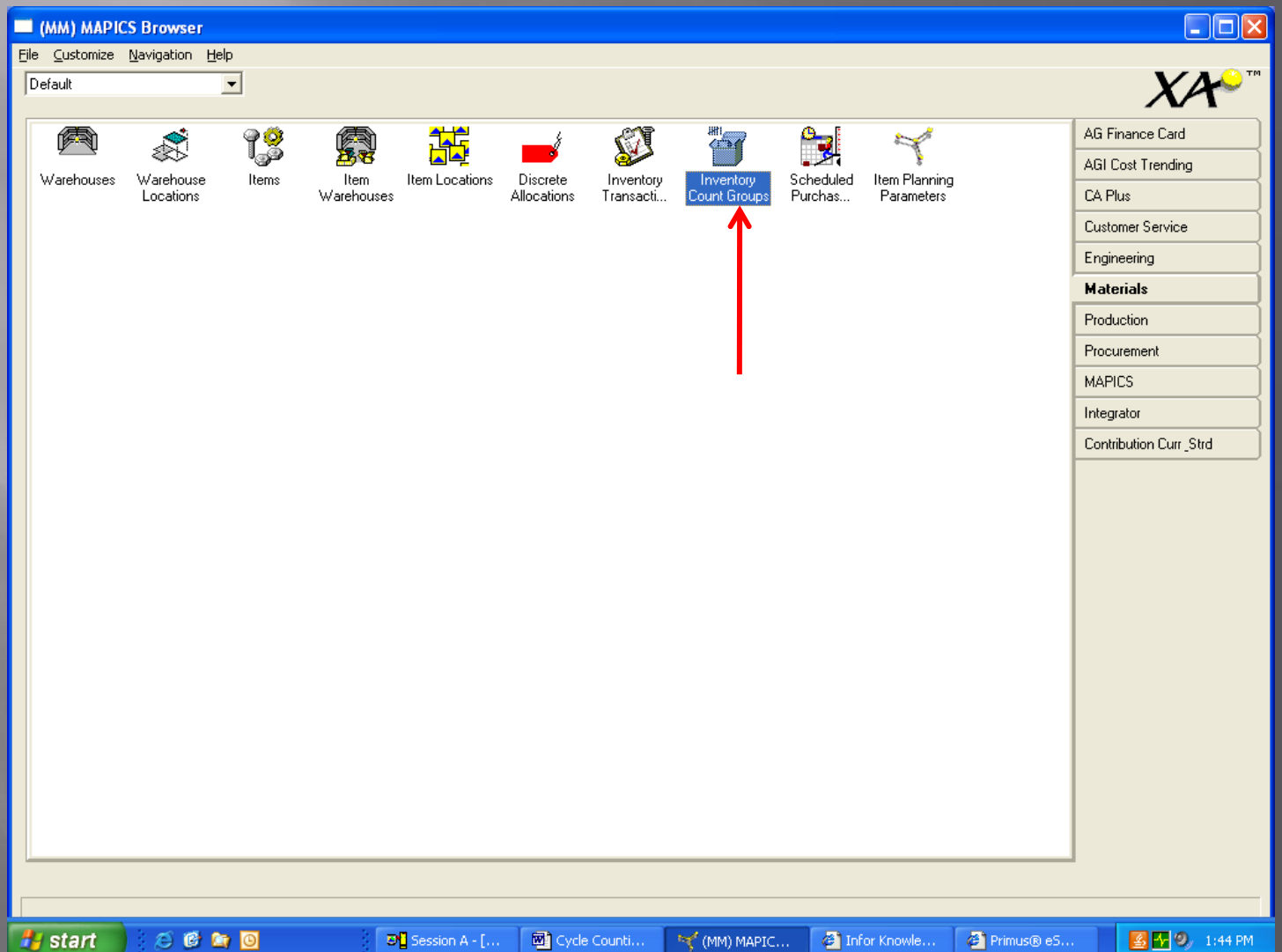
Creating Count Groups

From the 'Materials' Card in Mapics Browser, select (double click) on the 'Inventory Count Groups' object



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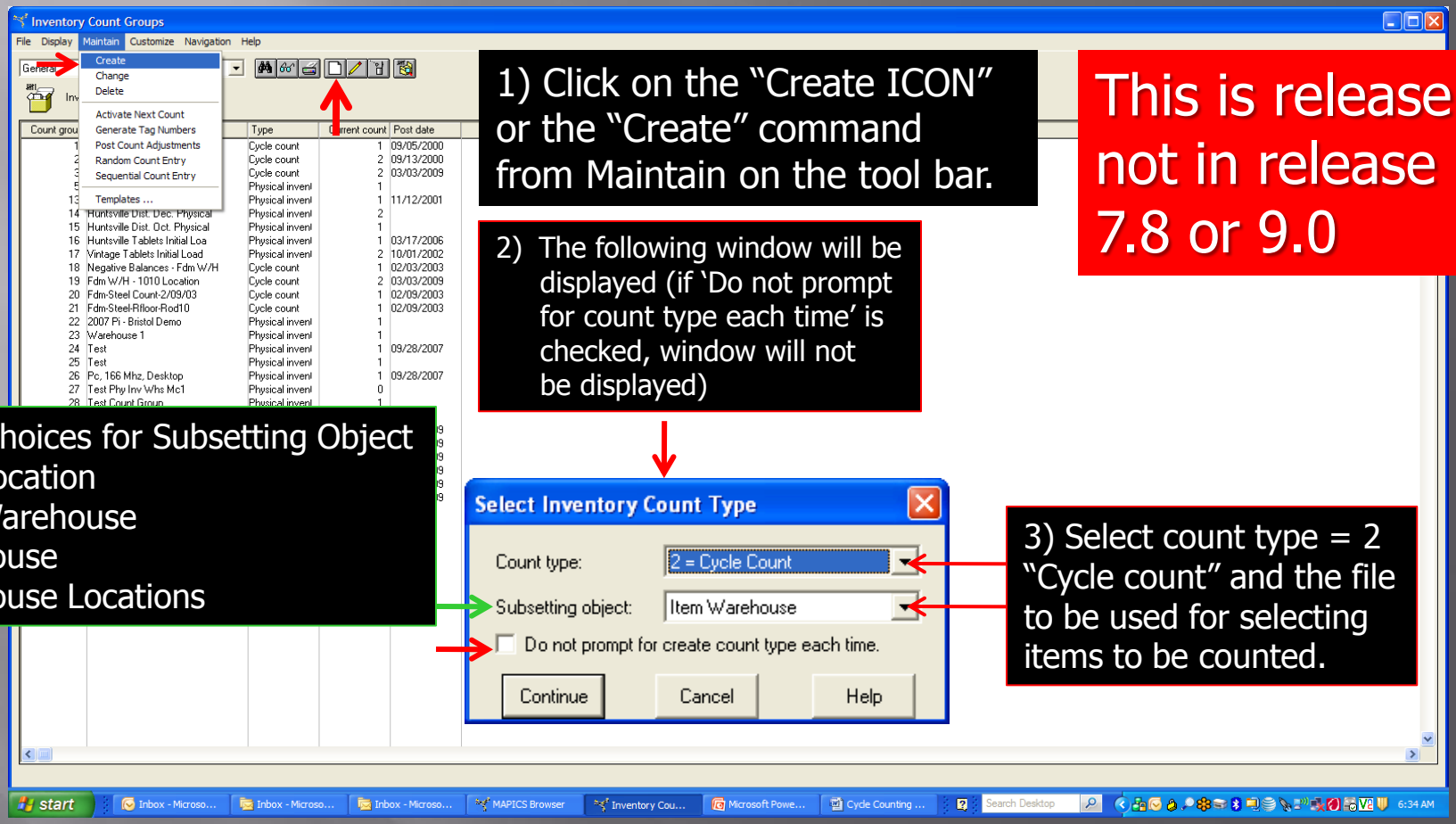
Creation of a Cycle Count Group



This is release 6.0, not in release 7.8 or 9.0

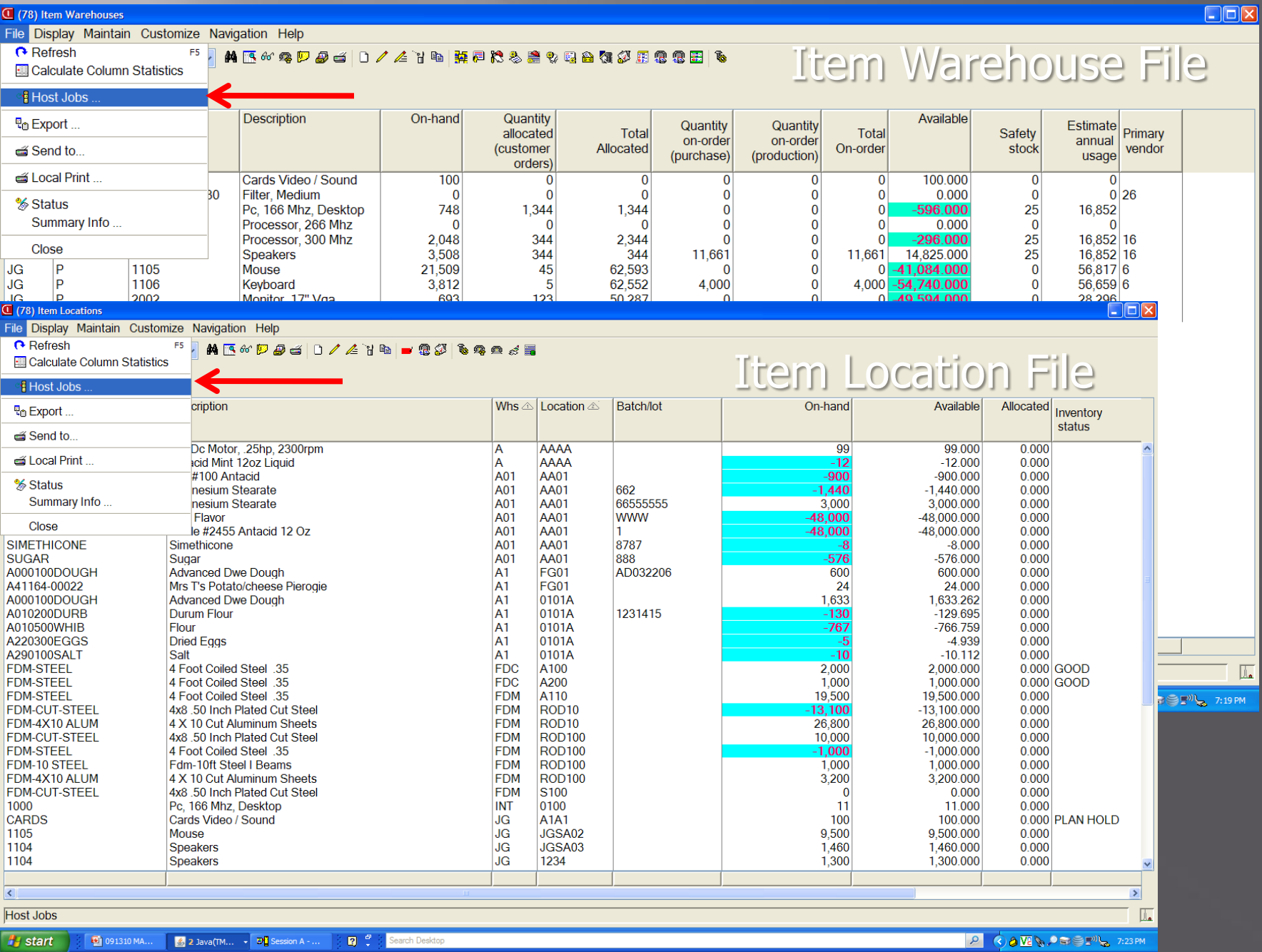
Inventory Control Group Selection Parameters

Field	Definition
Count Type	1 = Physical Inventory. Full selection of all items in warehouse 2 = Cycle Count
Subsetting Object	File to be used for selecting items to be counted. Choices are: ***Item Location*** – locations where inventory is stored ****Item Warehouse*** – Item Balance records ***Warehouse*** – used primarily for **Physical Inventory** ***Warehouse Locations*** – used when counting all items in a range of locations (i.e. an aisle) * Recommended choice

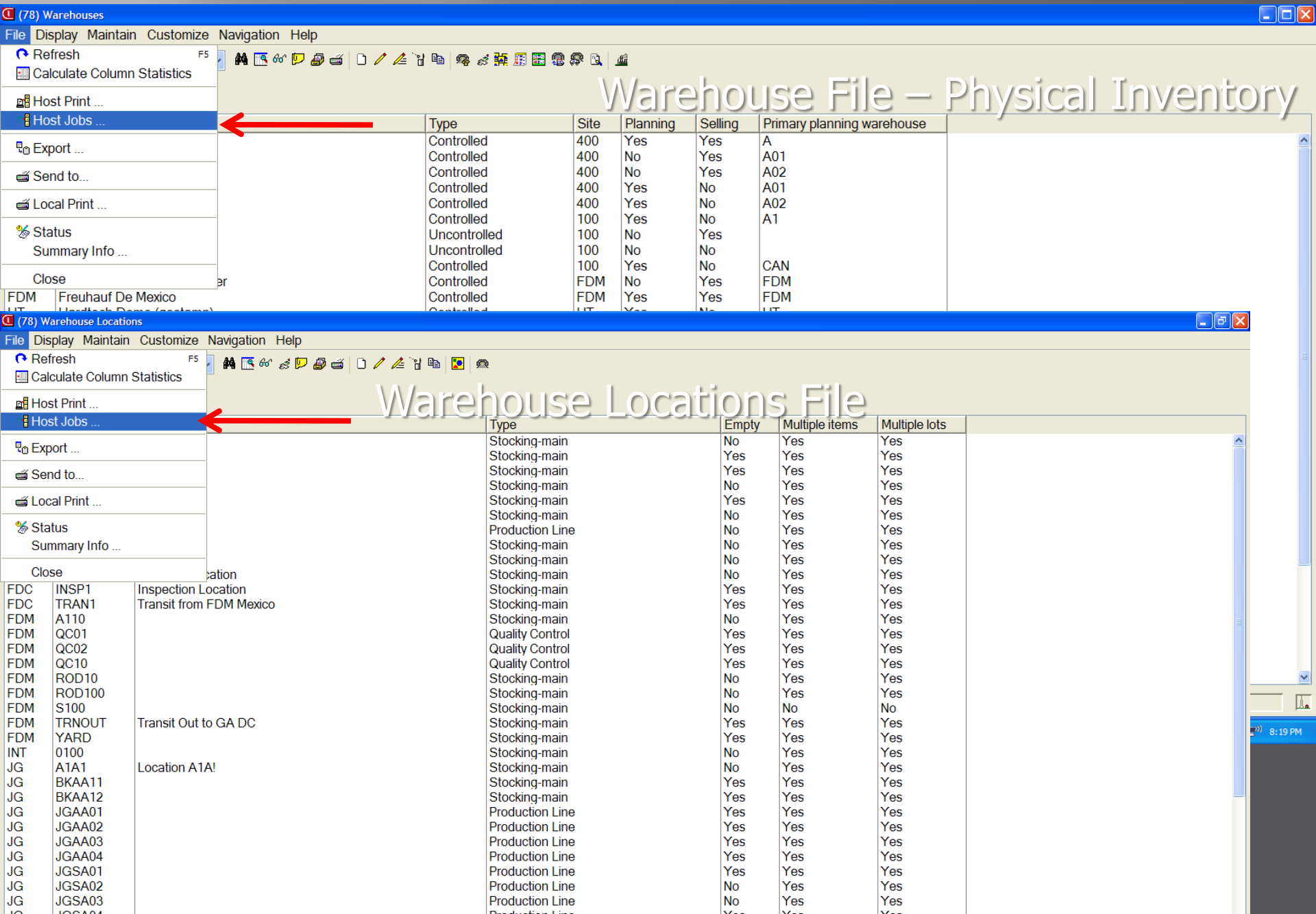
This is release 6.0, not 7.8 or 9.0

This is release 7.8 or 9.0

Creation of a Cycle Count Group #5

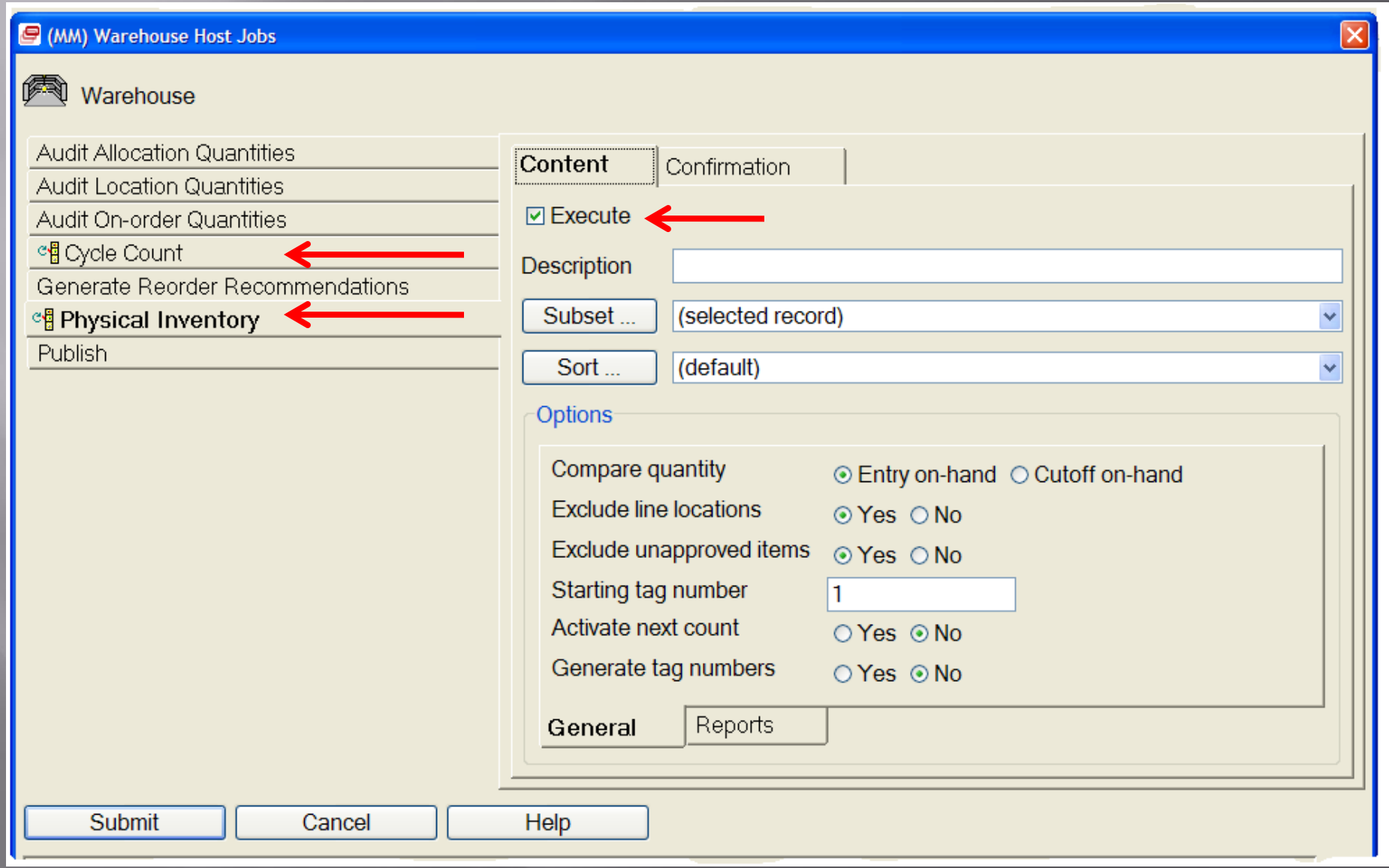


Creation of a Cycle Count Group #5A



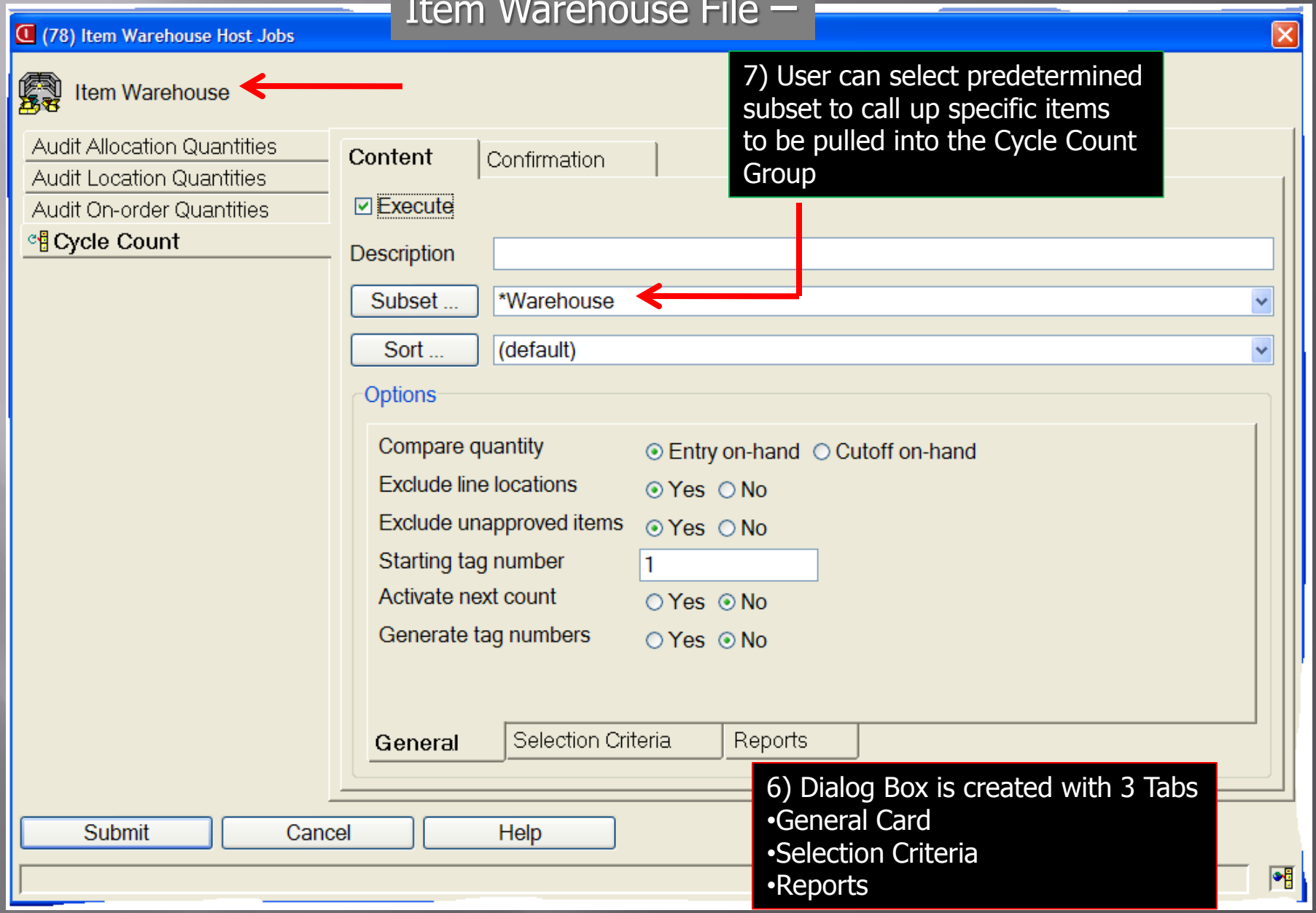
Creation of a Cycle Count Group #5A

Warehouse File – Physical Inventory



Creation of a Cycle Count Group - Continued

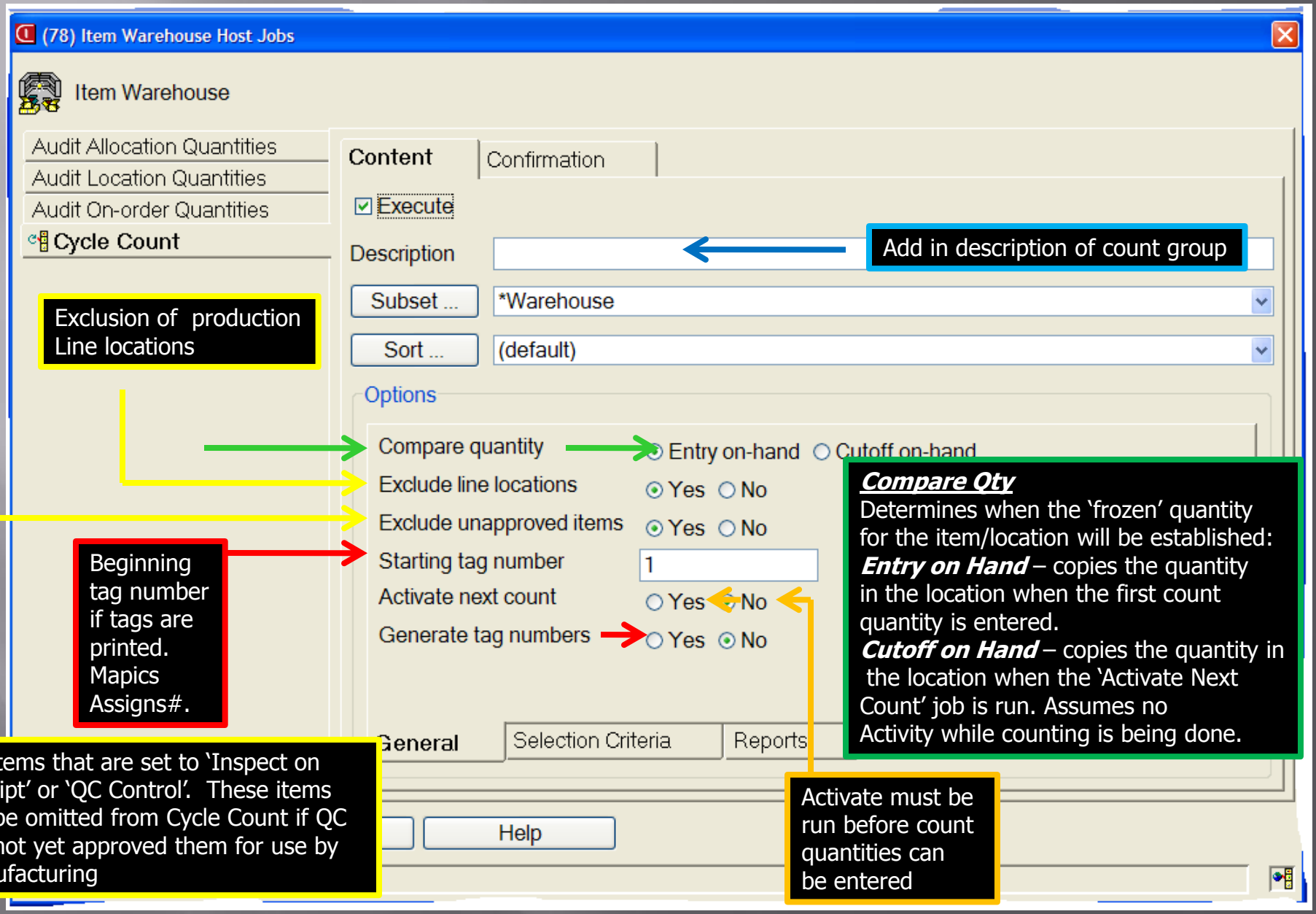
Item Warehouse File –



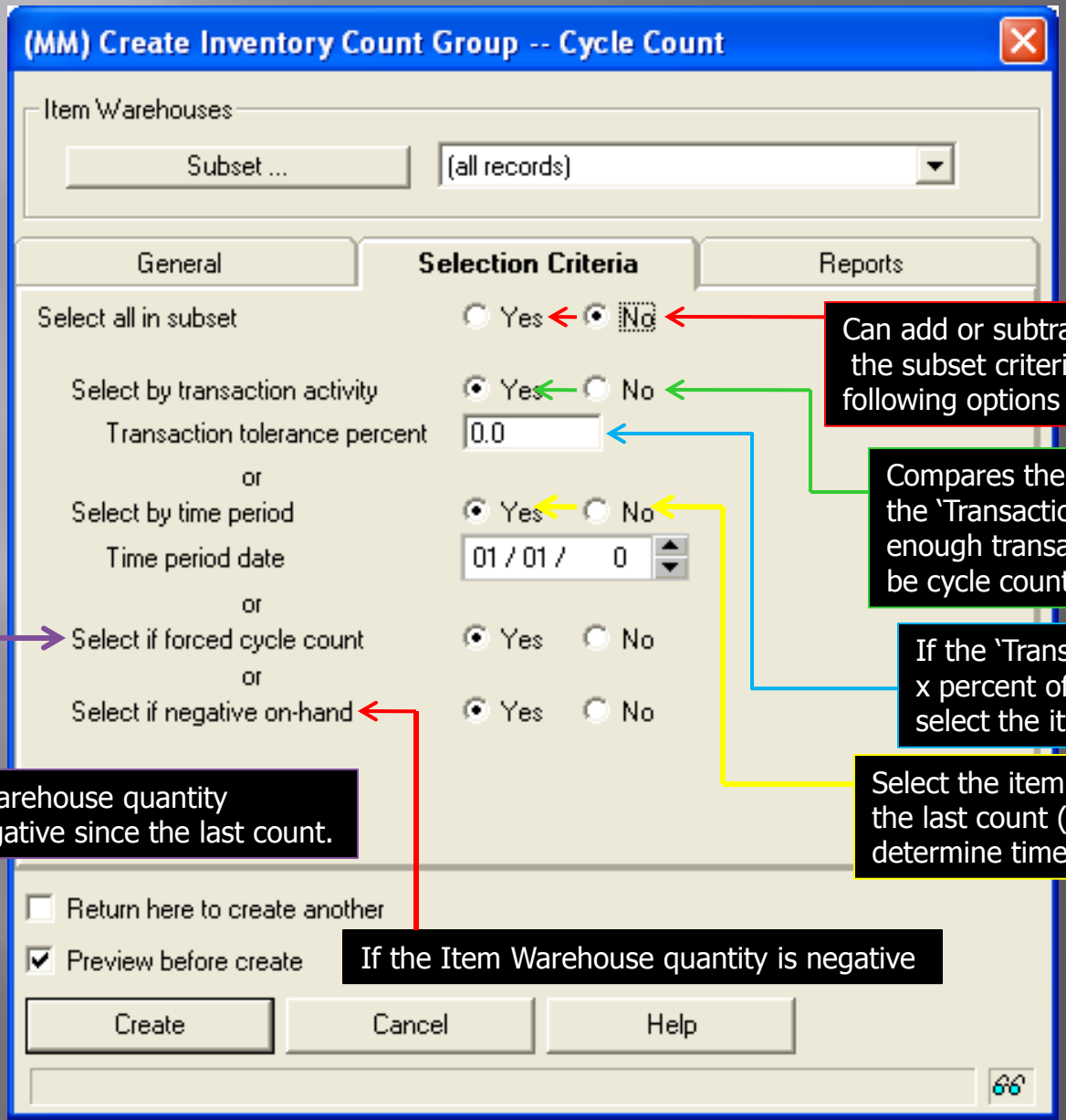
7) User can select predetermined subset to call up specific items to be pulled into the Cycle Count Group

6) Dialog Box is created with 3 Tabs
- General Card
- Selection Criteria
- Reports

Creation of a Cycle Count Group – Continued #8



Creation of a Cycle Count Group – Continued
Selection Criteria- (9)



Can add or subtract items selected by the subset criteria depending on the following options

Compares the 'Transaction Compare' quantity to the 'Transaction Activity Count' to determine if enough transactions have occurred for the item to be cycle counted

If the 'Transaction Activity Count' is within x percent of the 'Transaction Compare' select the item for count

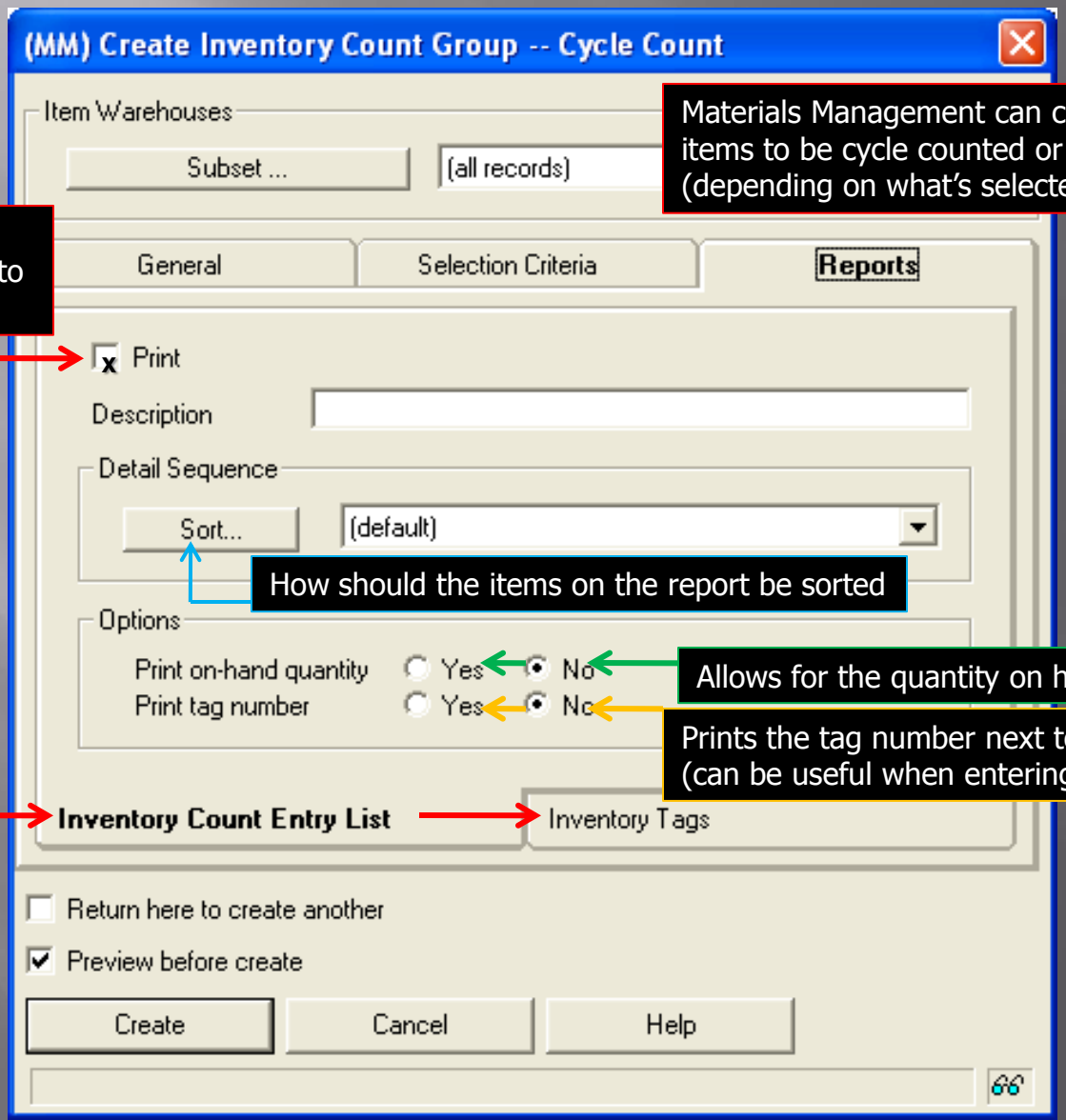
Select the item if enough time has passed since the last count (uses the Cycle Count Code to determine time span)

If the Item Warehouse quantity has gone negative since the last count.

If the Item Warehouse quantity is negative

Creation of a Cycle Count Group – Continued

Report Inventory Count Criteria- (10)



Materials Management can create either full page reports of items to be cycle counted or individual count tags or both (depending on what's selected on the screen below)

A check here will cause the report to print

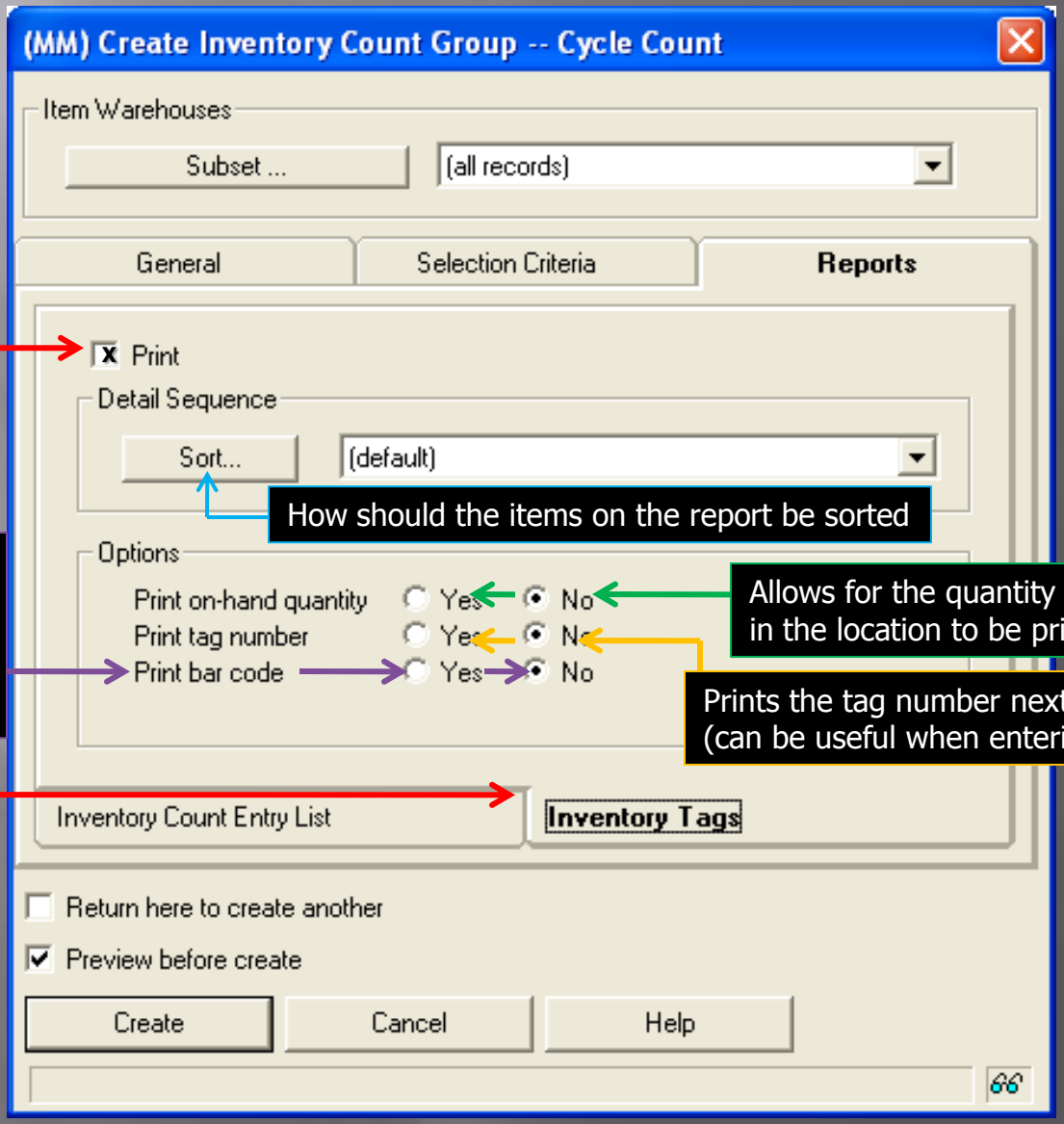
How should the items on the report be sorted

Allows for the quantity on hand in the location to be printed

Prints the tag number next to the item/location (can be useful when entering tags)

Creation of a Cycle Count Group – Continued

Report Criteria Tags- (11)



A check here will cause the report to print

How should the items on the report be sorted

Prints a bar code on the tag that can be used for 'Random Count Entry by Barcode'

Allows for the quantity on hand in the location to be printed

Prints the tag number next to the item/location (can be useful when entering tags)

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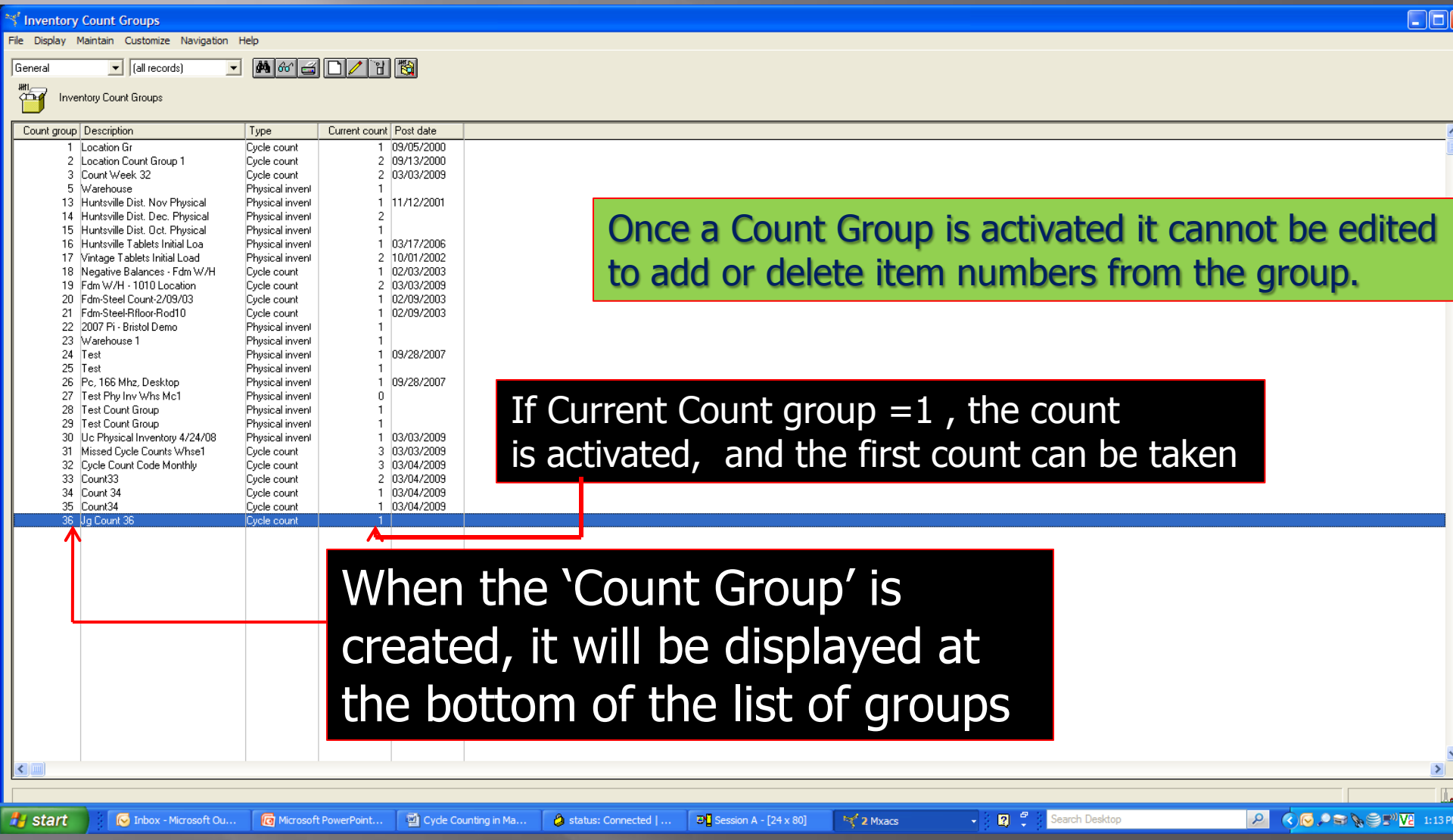
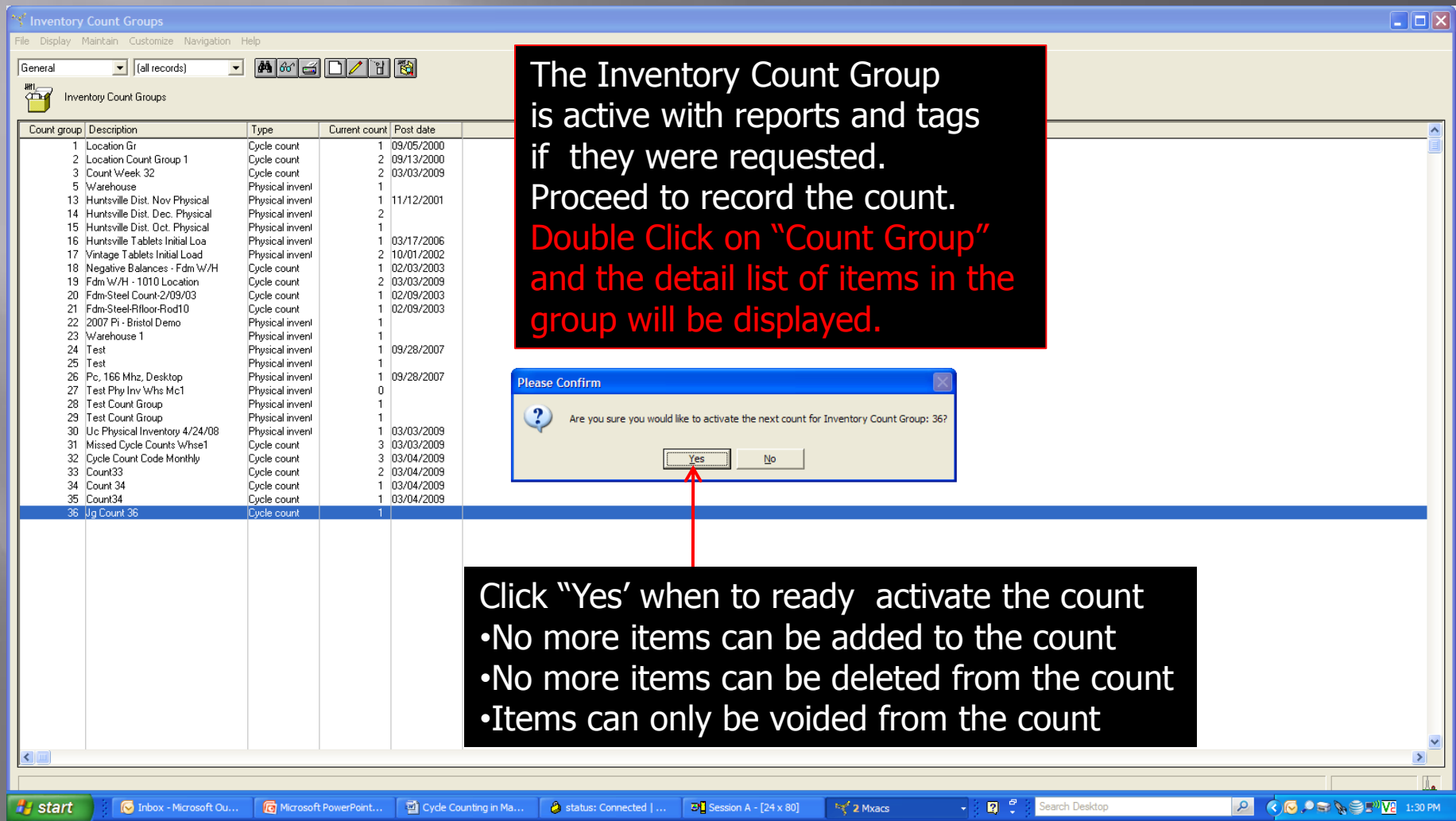
Creation of a Cycle Count Group – Continued



Creation of a Cycle Count Group – Continued

If 'Activate Next Count' was not run at the time that the Count Group was created it will need to be done prior to entering count quantities.

- Single click on the Count Group from the list
- Right Click and select 'Maintain Menu' then 'Activate Next Count'



The Inventory Count Group is active with reports and tags if they were requested. Proceed to record the count. Double Click on "Count Group" and the detail list of items in the group will be displayed.

Click "Yes' when to ready activate the count

- No more items can be added to the count
- No more items can be deleted from the count
- Items can only be voided from the count

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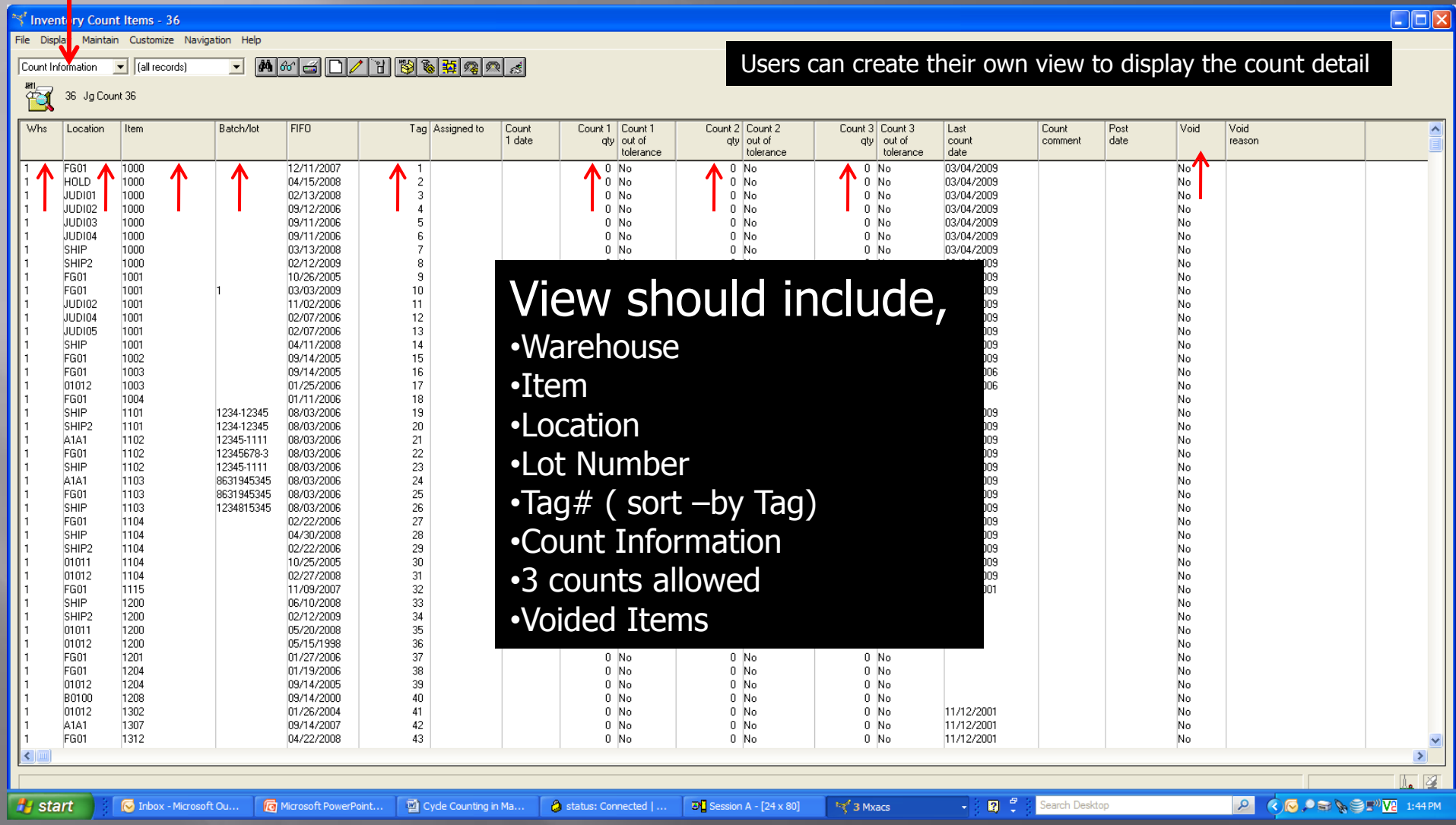
Count Group Details
"Count Information"



View should include,

- Warehouse
- Item
- Location
- Lot Number
- Tag# (sort –by Tag)
- Count Information
- 3 counts allowed
- Voided Items

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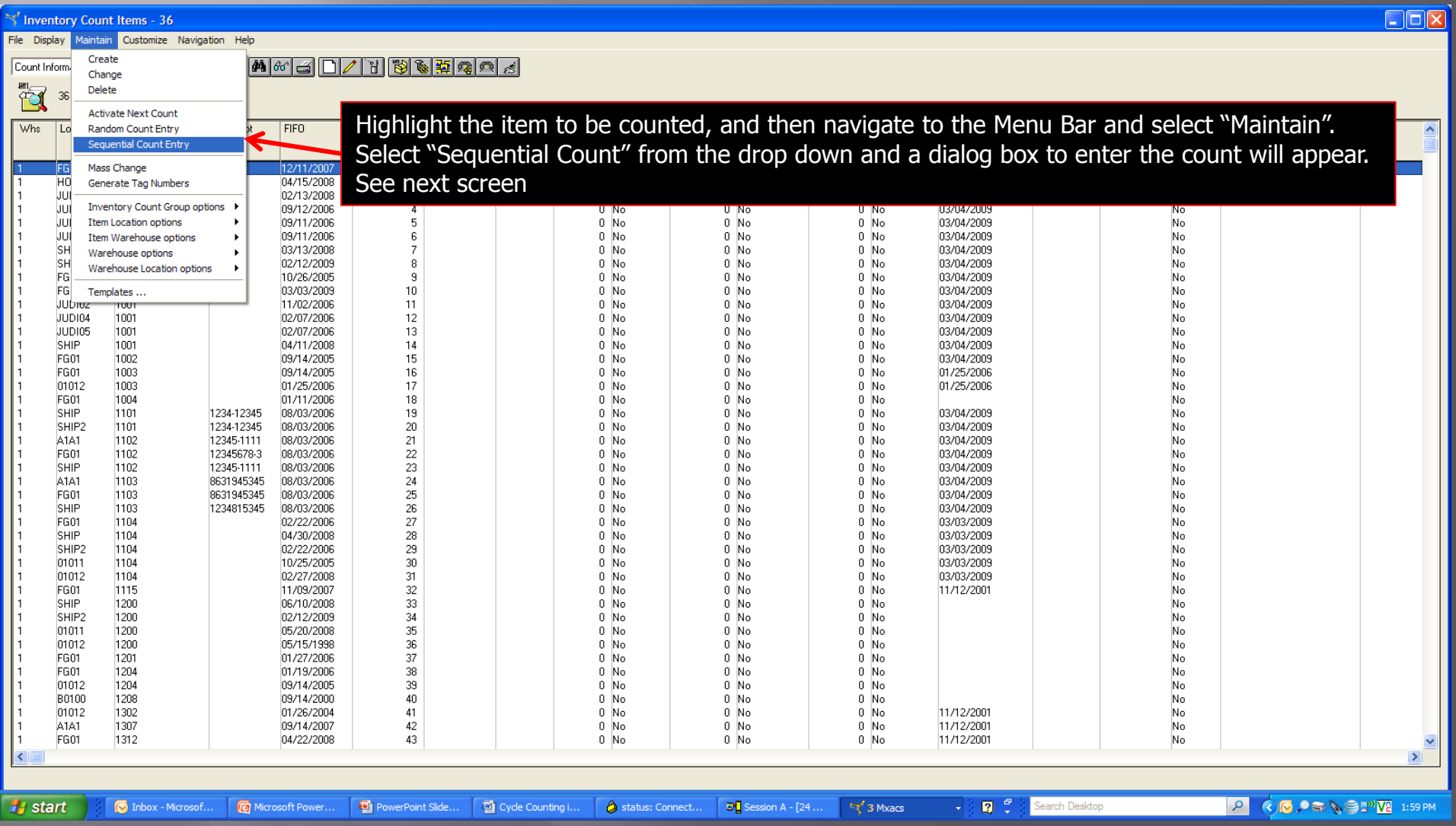
Count Group Details
" Enter Count Information"



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Count Group Details
" Enter Count Information"

Speed Data Entry

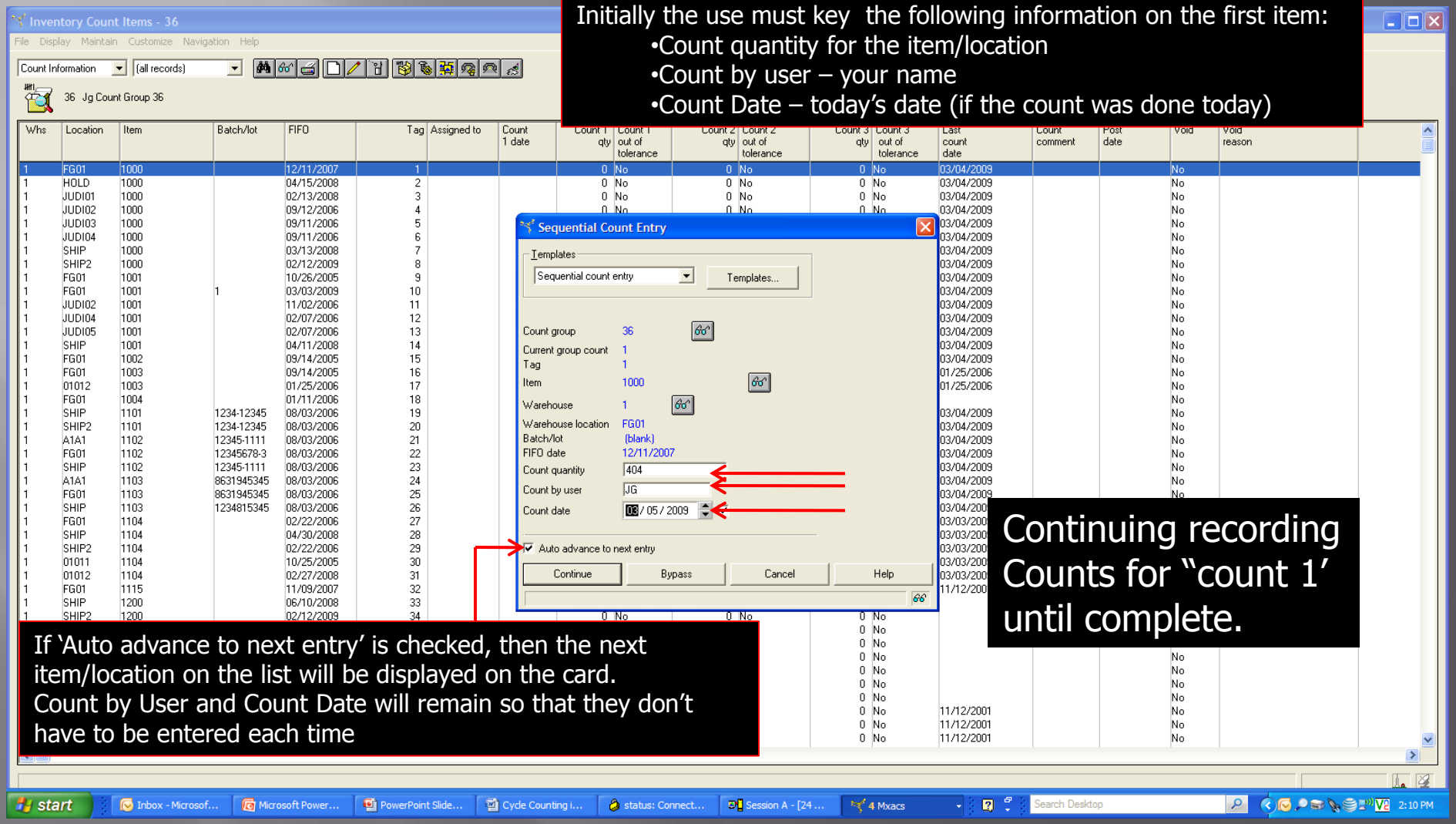
- **Sequential Entry**
  - Warehouse/Location/Item
  - Warehouse/Item/Location
  - Tag Number

- **Random Entry**
  - By Item
  - By Tag
  - By Barcode

Count Group Details
" Enter Count Information" SEQUENTIAL

Initially the use must key the following information on the first item:

- Count quantity for the item/location
- Count by user – your name
- Count Date – today's date (if the count was done today)

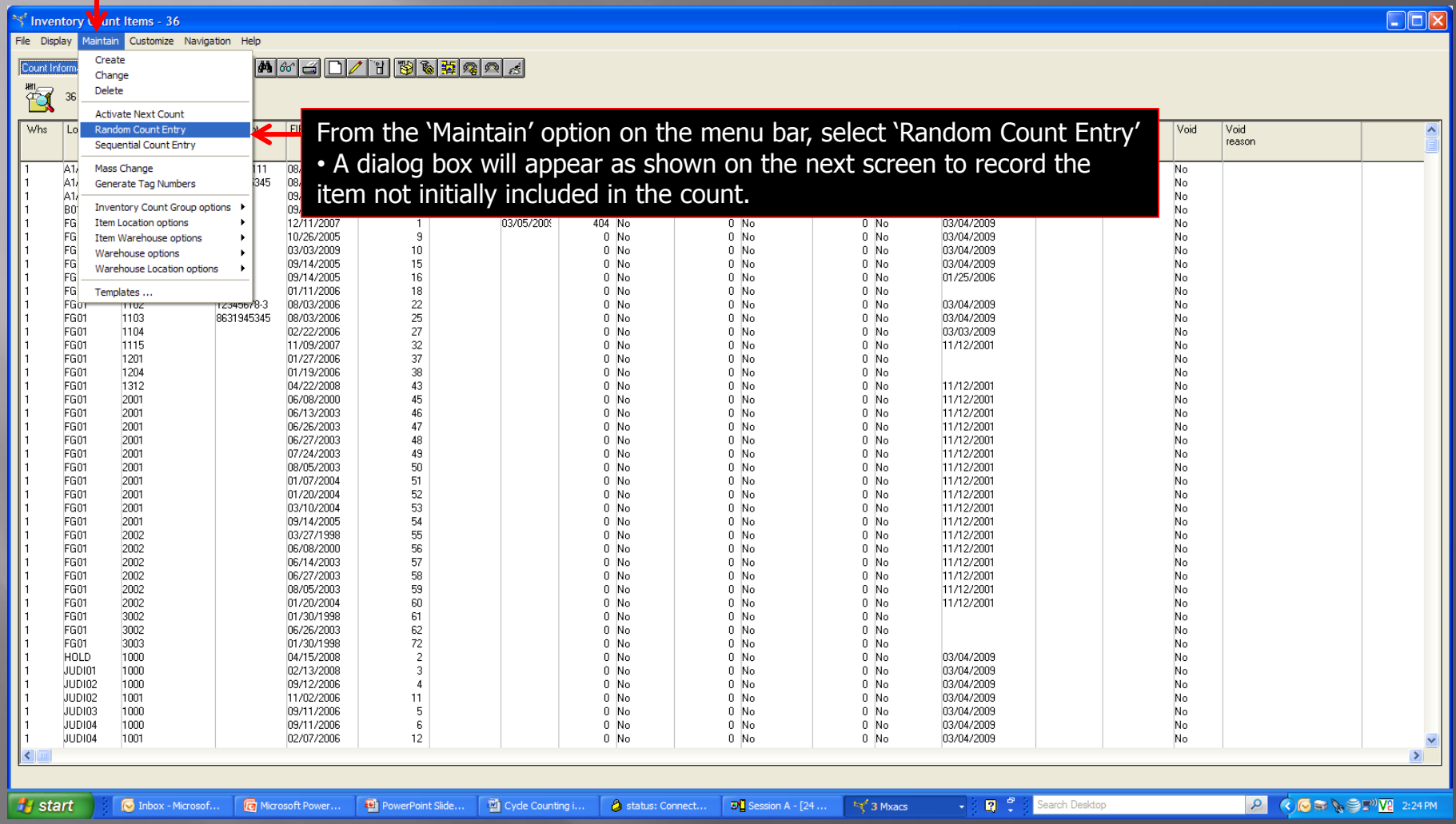


Continuing recording Counts for "count 1' until complete.

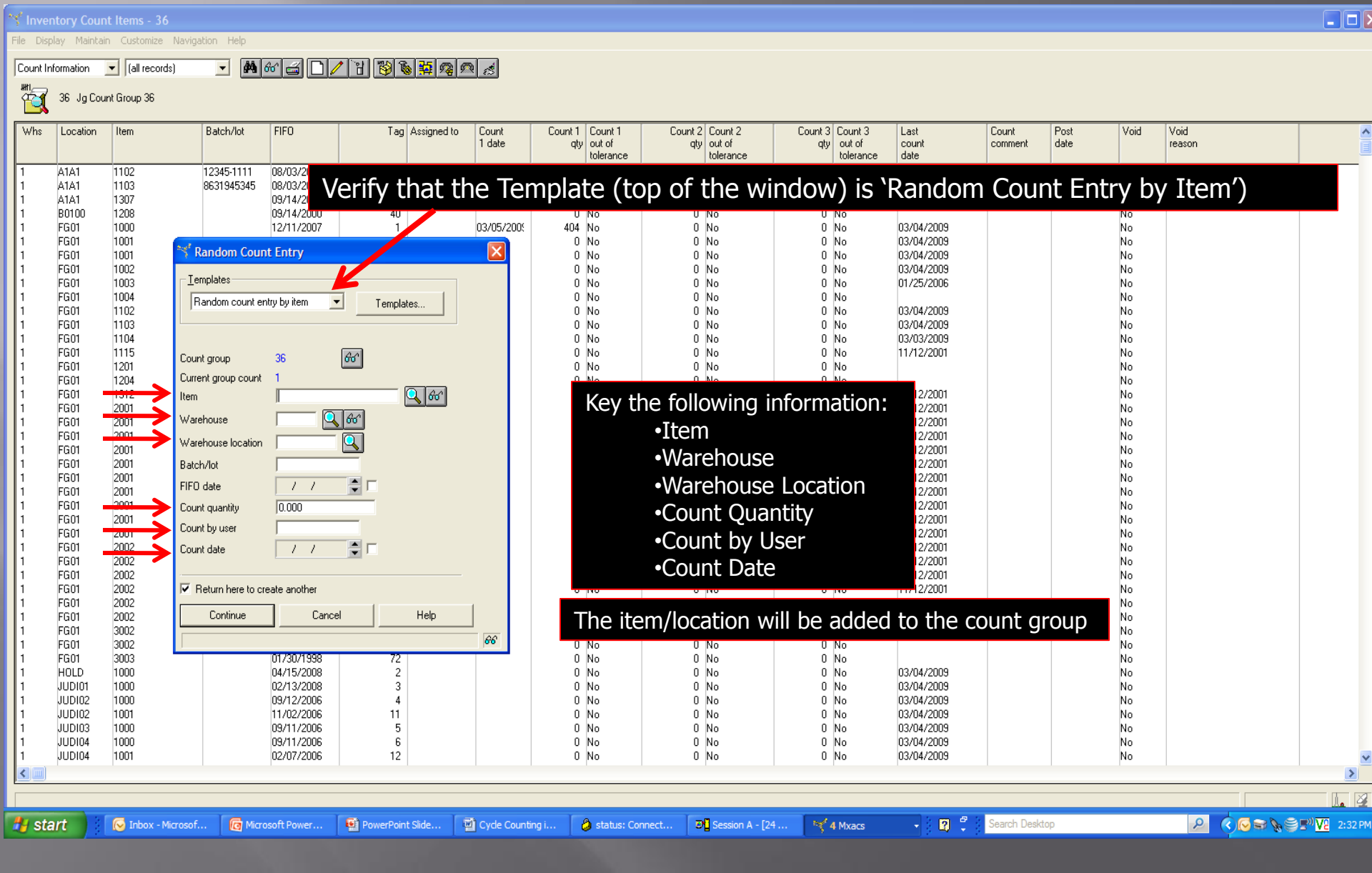
If 'Auto advance to next entry' is checked, then the next item/location on the list will be displayed on the card. Count by User and Count Date will remain so that they don't have to be entered each time

Count Group Details
" Enter Count Information" RANDOM

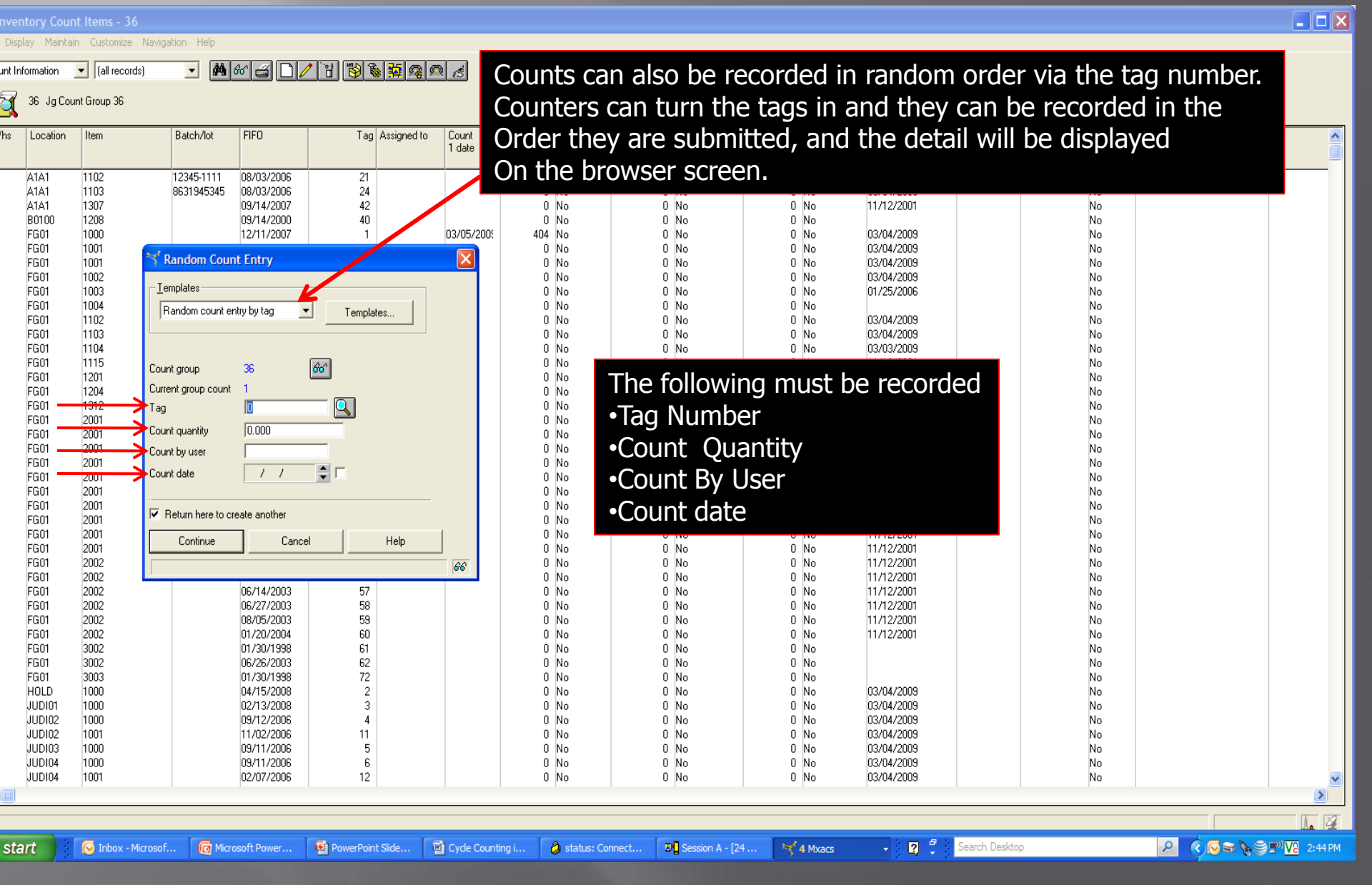
If an item is discovered in a location but Mapics is not showing any of that item in the location, then a tag can be created in the Count Group



Count Group Details
" Enter Count Information" RANDOM

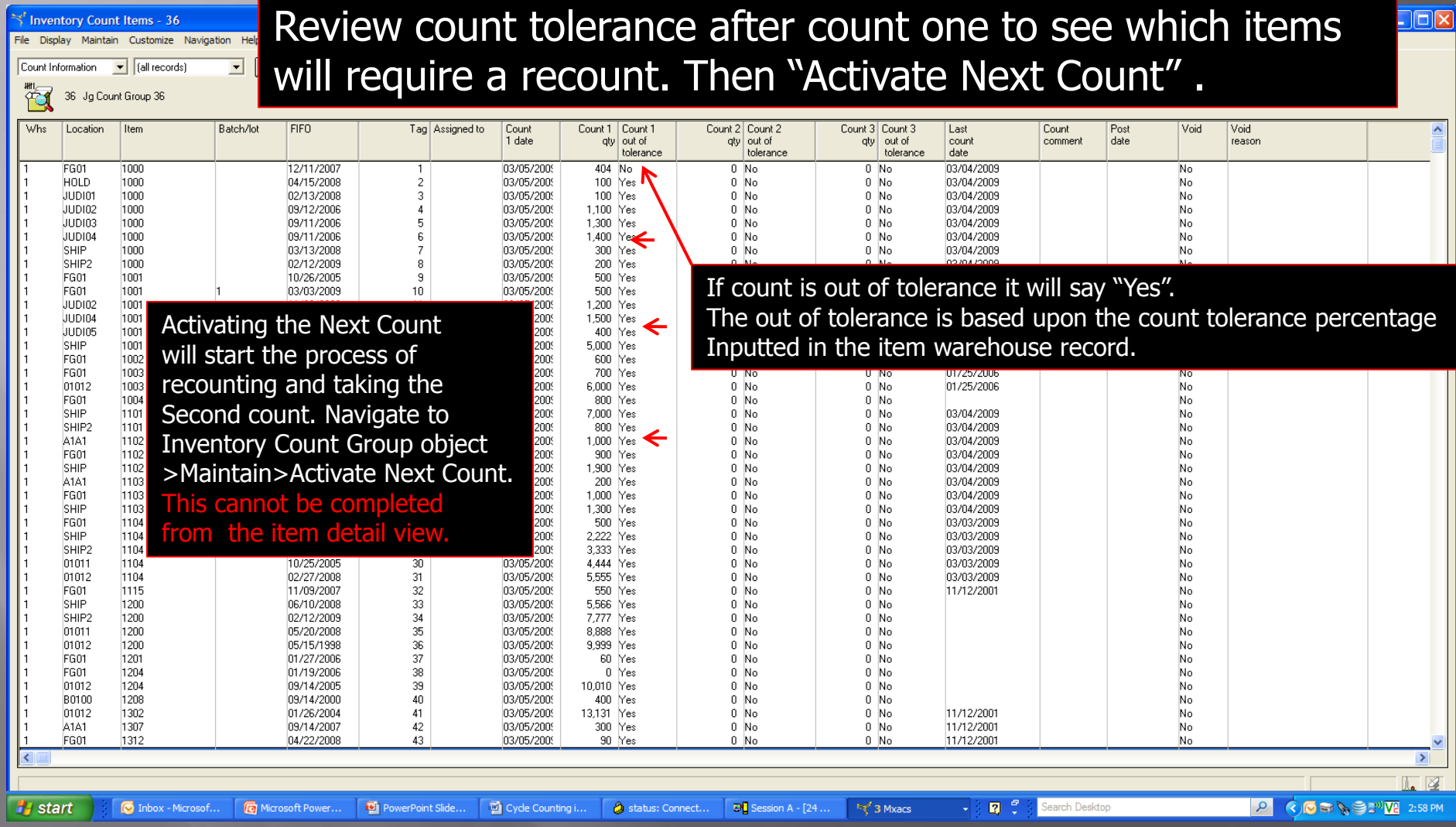


Count Group Details
" Enter Count Information" RANDOM



Count Group Details
" Count 1 – Out of Tolerance

Review count tolerance after count one to see which items will require a recount. Then "Activate Next Count" .



Whs	Location	Item	Batch/lot	FIFO	Tag	Assigned to	Count 1 date	Count 1 qty	Count 1 out of tolerance	Count 2 qty	Count 2 out of tolerance	Count 3 qty	Count 3 out of tolerance	Last count date	Count comment	Post date	Void	Void reason
1	FG01	1000		12/11/2007	1		03/05/2009	404	No	0	No	0	No	03/04/2009			No	
1	HOLD	1000		04/15/2008	2		03/05/2009	100	Yes	0	No	0	No	03/04/2009			No	
1	JUDI01	1000		02/13/2008	3		03/05/2009	100	Yes	0	No	0	No	03/04/2009			No	
1	JUDI02	1000		09/12/2006	4		03/05/2009	1,100	Yes	0	No	0	No	03/04/2009			No	
1	JUDI03	1000		09/11/2006	5		03/05/2009	1,300	Yes	0	No	0	No	03/04/2009			No	
1	JUDI04	1000		09/11/2006	6		03/05/2009	1,400	Yes	0	No	0	No	03/04/2009			No	
1	SHIP	1000		03/13/2008	7		03/05/2009	300	Yes	0	No	0	No	03/04/2009			No	
1	SHIP2	1000		02/12/2009	8		03/05/2009	200	Yes									
1	FG01	1001		10/26/2005	9		03/05/2009	500	Yes									
1	FG01	1001	1	03/03/2009	10		03/05/2009	500	Yes									
1	JUDI02	1001					2009	1,200	Yes									
1	JUDI04	1001					2009	1,500	Yes									
1	JUDI05	1001					2009	400	Yes									
1	SHIP	1001					2009	5,000	Yes									
1	FG01	1002					2009	600	Yes									
1	FG01	1003					2009	700	Yes									
1	01012	1003					2009	6,000	Yes	0	No	0	No	01/25/2006			No	
1	FG01	1004					2009	800	Yes	0	No	0	No				No	
1	SHIP	1101					2009	7,000	Yes	0	No	0	No	03/04/2009			No	
1	SHIP2	1101					2009	800	Yes	0	No	0	No	03/04/2009			No	
1	A1A1	1102					2009	1,000	Yes	0	No	0	No	03/04/2009			No	
1	FG01	1102					2009	900	Yes	0	No	0	No	03/04/2009			No	
1	SHIP	1102					2009	1,900	Yes	0	No	0	No	03/04/2009			No	
1	A1A1	1103					2009	200	Yes	0	No	0	No	03/04/2009			No	
1	FG01	1103					2009	1,000	Yes	0	No	0	No	03/04/2009			No	
1	SHIP	1103					2009	1,300	Yes	0	No	0	No	03/04/2009			No	
1	FG01	1104					2009	500	Yes	0	No	0	No	03/03/2009			No	
1	SHIP	1104					2009	2,222	Yes	0	No	0	No	03/03/2009			No	
1	SHIP2	1104					2009	3,333	Yes	0	No	0	No	03/03/2009			No	
1	01011	1104		10/25/2005	30		03/05/2009	4,444	Yes	0	No	0	No	03/03/2009			No	
1	01012	1104		02/27/2008	31		03/05/2009	5,555	Yes	0	No	0	No	03/03/2009			No	
1	FG01	1115		11/09/2007	32		03/05/2009	550	Yes	0	No	0	No	11/12/2001			No	
1	SHIP	1200		06/10/2008	33		03/05/2009	5,566	Yes	0	No	0	No				No	
1	SHIP2	1200		02/12/2009	34		03/05/2009	7,777	Yes	0	No	0	No				No	
1	01011	1200		05/20/2008	35		03/05/2009	8,888	Yes	0	No	0	No				No	
1	01012	1200		05/15/1998	36		03/05/2009	9,999	Yes	0	No	0	No				No	
1	FG01	1201		01/27/2006	37		03/05/2009	60	Yes	0	No	0	No				No	
1	FG01	1204		01/19/2006	38		03/05/2009	0	Yes	0	No	0	No				No	
1	01012	1204		09/14/2005	39		03/05/2009	10,010	Yes	0	No	0	No				No	
1	B0100	1208		09/14/2000	40		03/05/2009	400	Yes	0	No	0	No				No	
1	01012	1302		01/26/2004	41		03/05/2009	13,131	Yes	0	No	0	No	11/12/2001			No	
1	A1A1	1307		09/14/2007	42		03/05/2009	300	Yes	0	No	0	No	11/12/2001			No	
1	FG01	1312		04/22/2008	43		03/05/2009	90	Yes	0	No	0	No	11/12/2001			No	

If count is out of tolerance it will say "Yes".
The out of tolerance is based upon the count tolerance percentage Inputted in the item warehouse record.

Activating the Next Count will start the process of recounting and taking the Second count. Navigate to Inventory Count Group object >Maintain>Activate Next Count. This cannot be completed from the item detail view.

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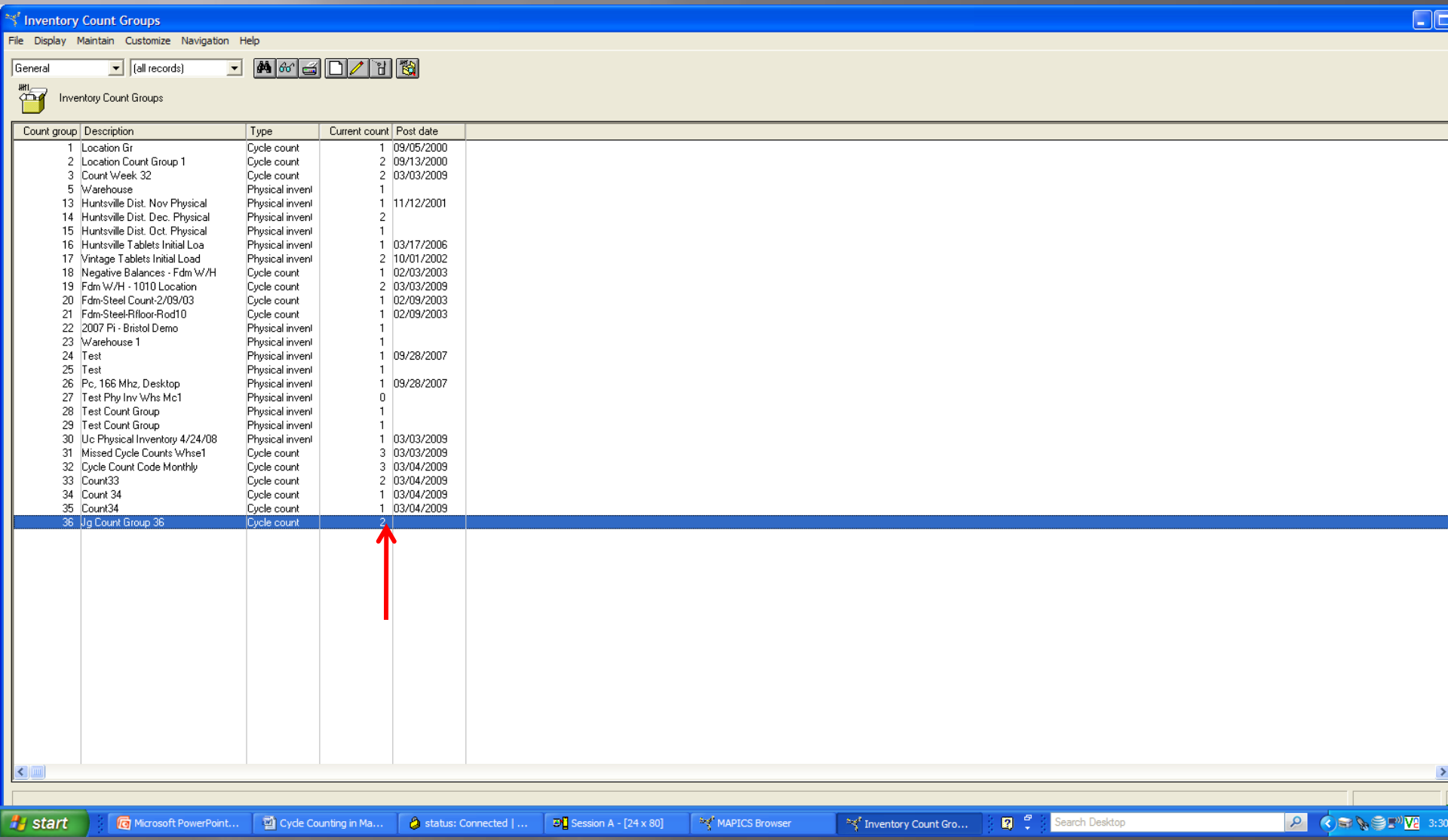
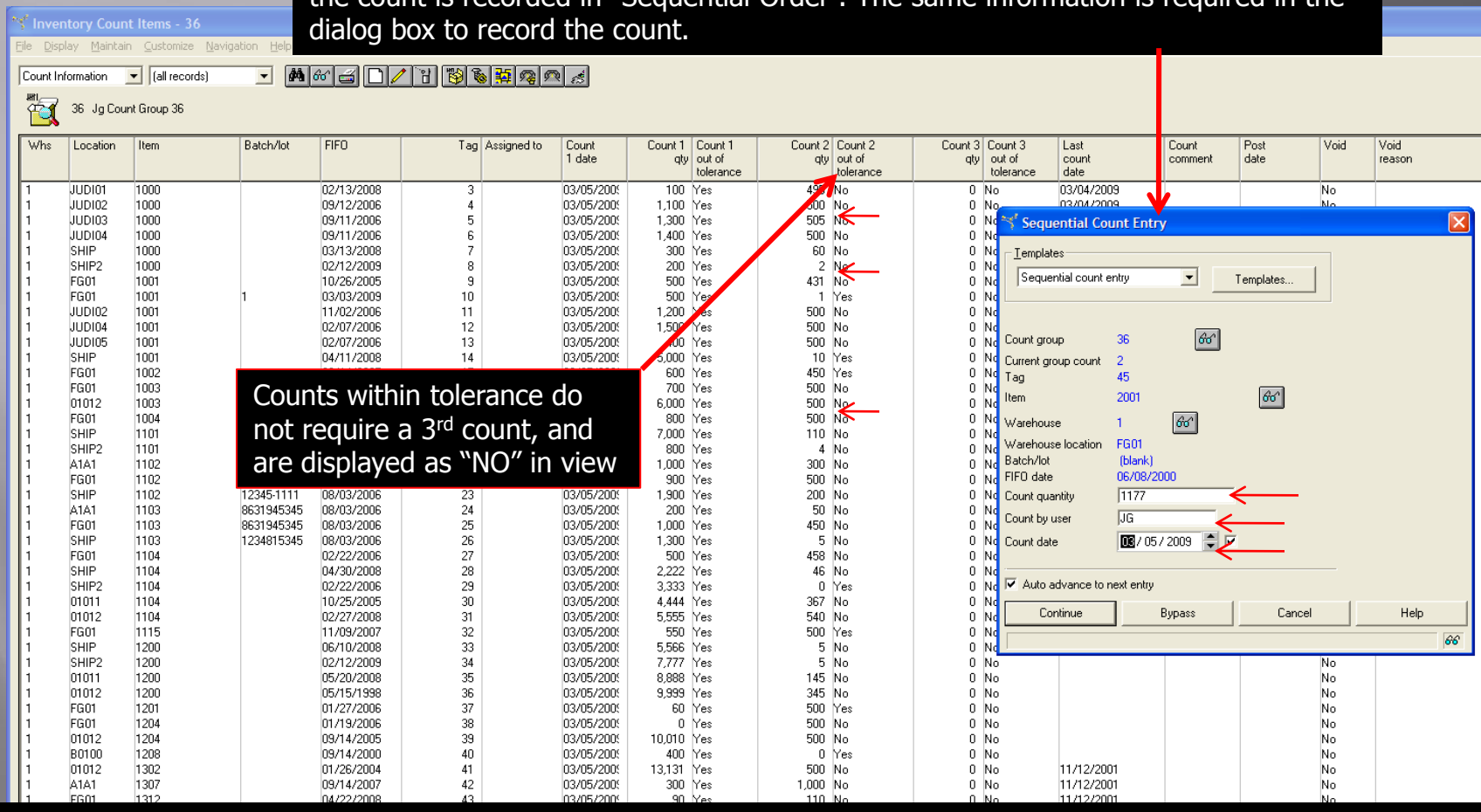
Count Group
" Activating Count 2 "



Count group	Description	Type	Current count	Post date
1	Location Gr	Cycle count	1	09/05/2000
2	Location Count Group 1	Cycle count	2	09/13/2000
3	Count Week 32	Cycle count	2	03/03/2009
5	Warehouse	Physical invent	1	
13	Huntsville Dist. Nov Physical	Physical invent	1	11/12/2001
14	Huntsville Dist. Dec. Physical	Physical invent	2	
15	Huntsville Dist. Oct. Physical	Physical invent	1	
16	Huntsville Tablets Initial Loa	Physical invent	1	03/17/2006
17	Vintage Tablets Initial Load	Physical invent	2	10/01/2002
18	Negative Balances - Fdm W/H	Cycle count	1	02/03/2003
19	Fdm W/H - 1010 Location	Cycle count	2	03/03/2009
20	Fdm-Steel Count-2/09/03	Cycle count	1	02/09/2003
21	Fdm-Steel-Rfloor-Rod10	Cycle count	1	02/09/2003
22	2007 Pi - Bristol Demo	Physical invent	1	
23	Warehouse 1	Physical invent	1	
24	Test	Physical invent	1	09/28/2007
25	Test	Physical invent	1	
26	Pc, 166 Mhz, Desktop	Physical invent	1	09/28/2007
27	Test Phy Inv Whs Mc1	Physical invent	0	
28	Test Count Group	Physical invent	1	
29	Test Count Group	Physical invent	1	
30	Uc Physical Inventory 4/24/08	Physical invent	1	03/03/2009
31	Missed Cycle Counts Whse1	Cycle count	3	03/03/2009
32	Cycle Count Code Monthly	Cycle count	3	03/04/2009
33	Count33	Cycle count	2	03/04/2009
34	Count 34	Cycle count	1	03/04/2009
35	Count34	Cycle count	1	03/04/2009
36	Jg Count Group 36	Cycle count	2	

Count Group Details
" Count 2 "

If any count is out of tolerance the cursor is positioned directly to the line for input if the count is recorded in "Sequential Order". The same information is required in the dialog box to record the count.



Counts within tolerance do not require a 3rd count, and are displayed as "NO" in view

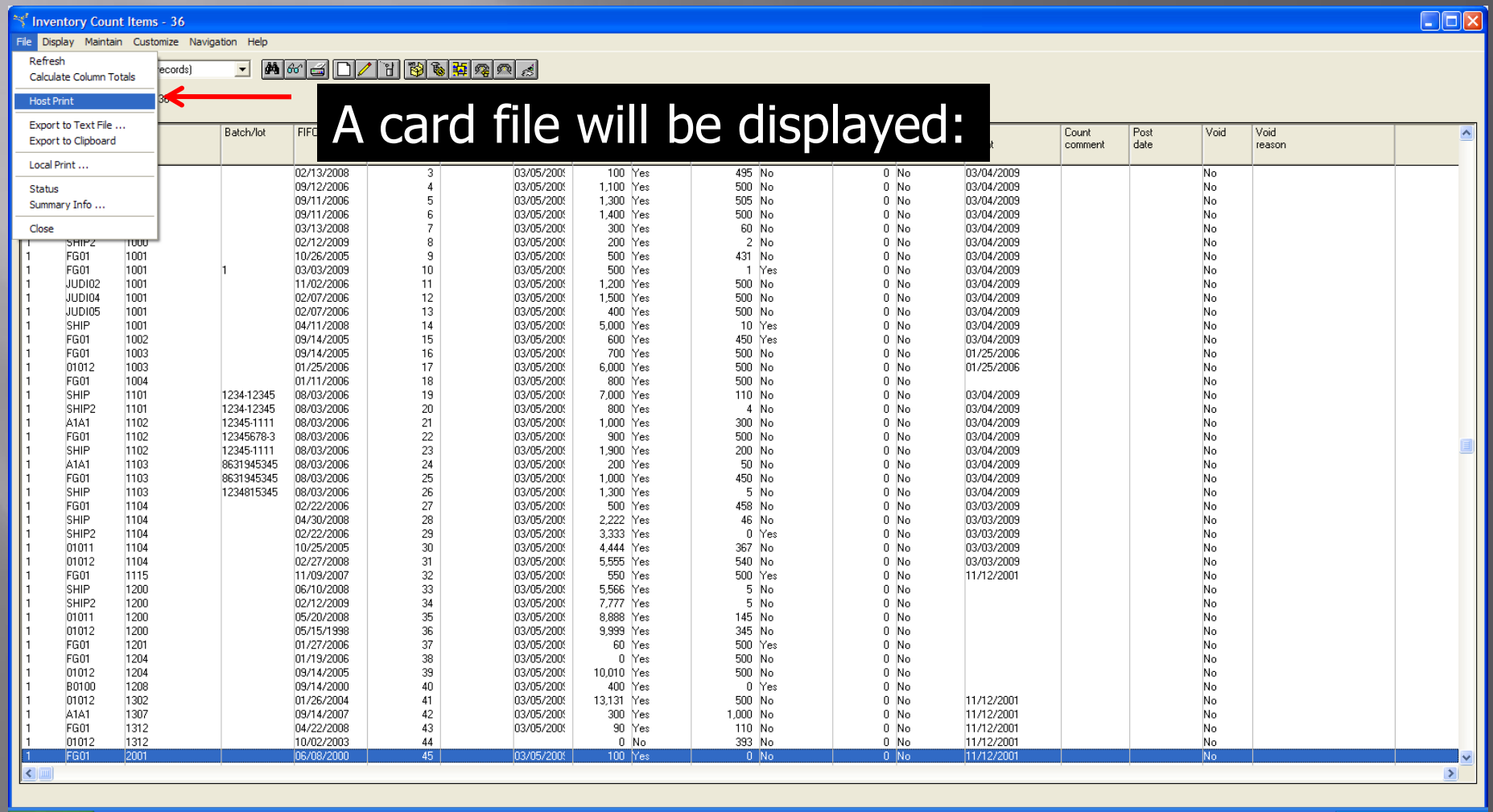
Items still out of tolerance could require a 3rd and final count.

This will require repeating the steps, starting with "Activating the Next Count".

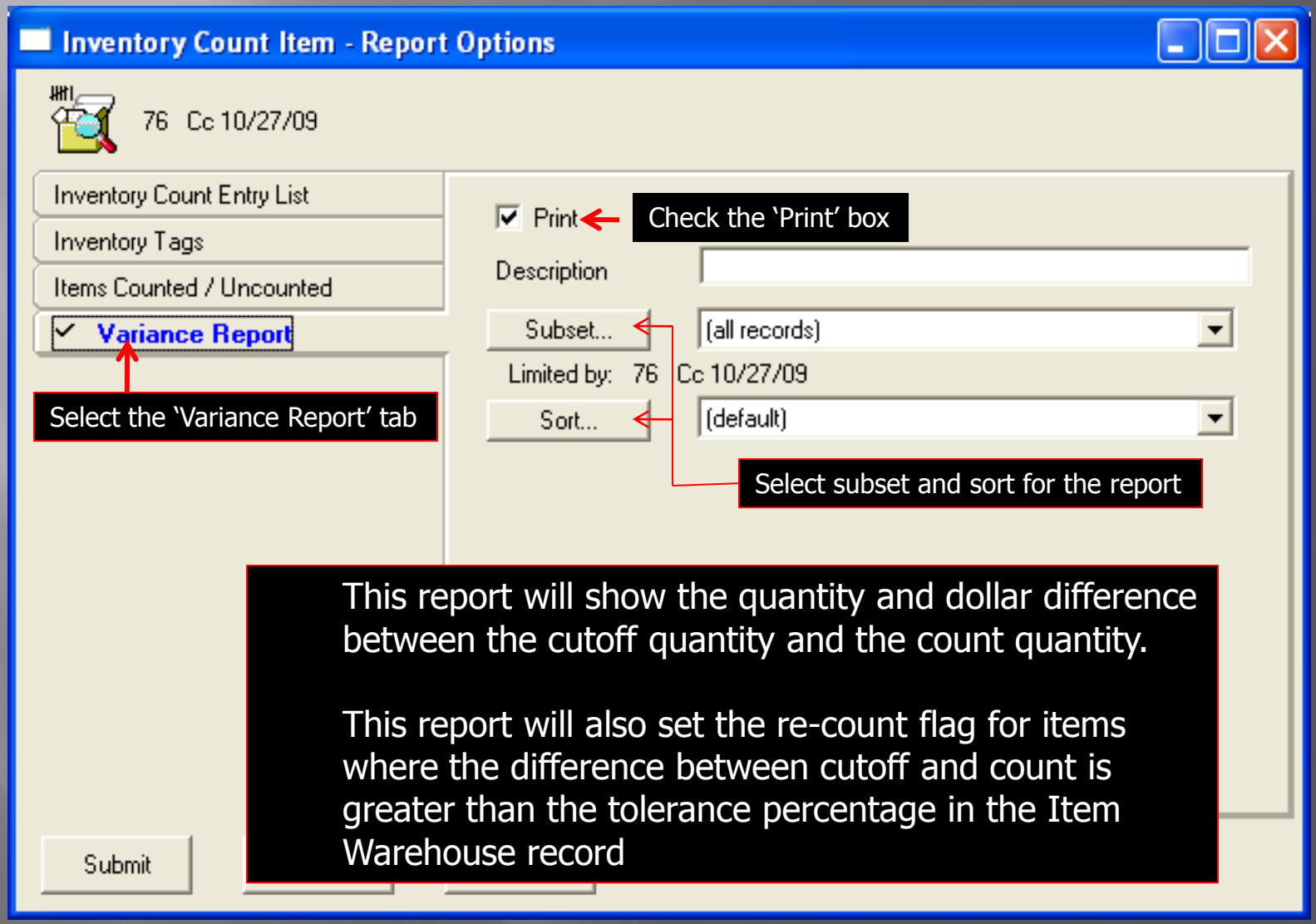
" Generating a Variance Report"

When all counts have been entered, a variance report can be generated:

- From the 'File' option on the Menu Bar, select 'Host Print'

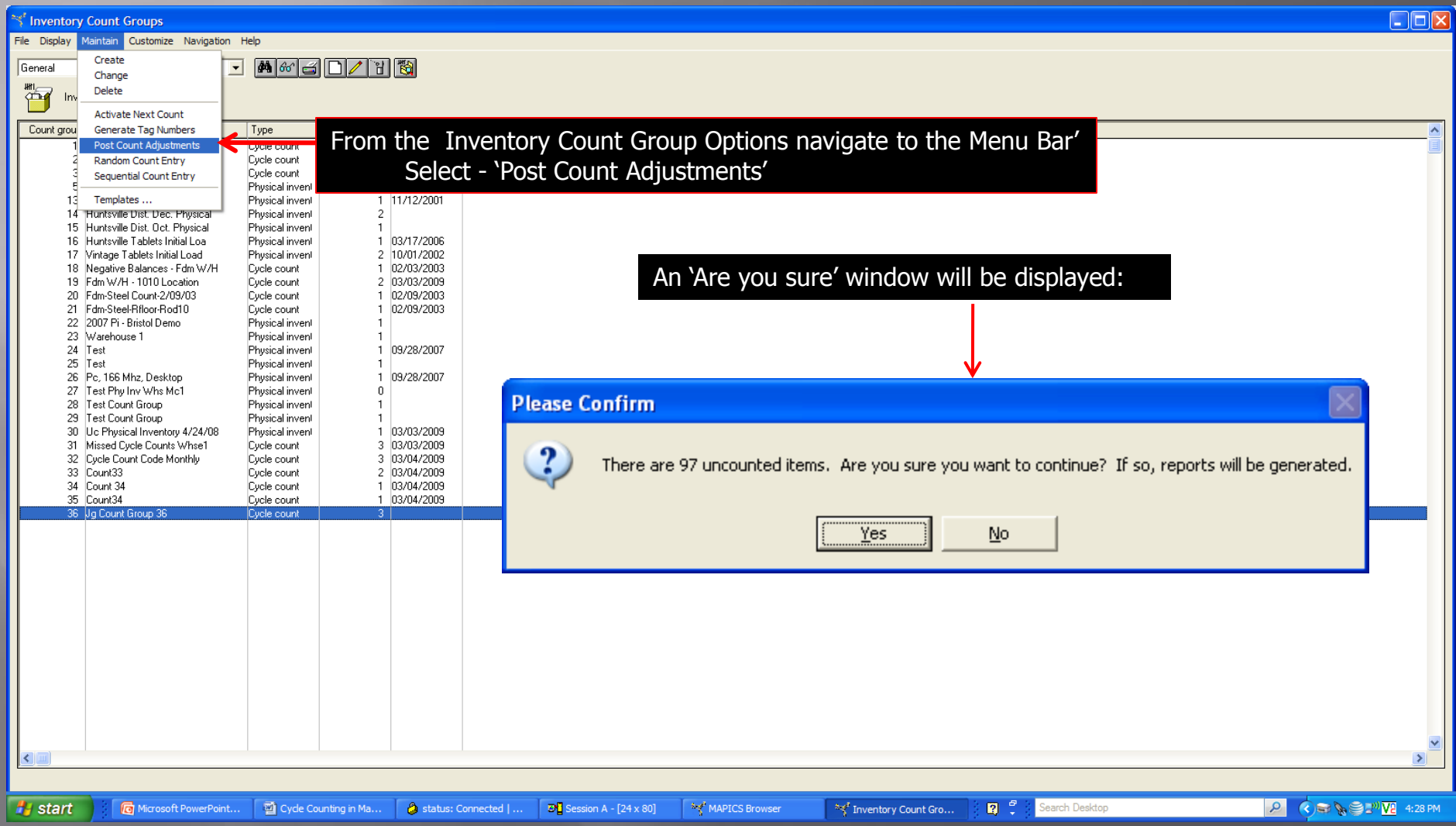


" Generating a Variance Report"



"Updating Inventory Balances"

Once all counts have been entered and approved then they need to be posted to the locations and item warehouse records.



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"Updating Inventory Balances"

Clicking on 'Yes' will:

- Update the on hand balances in the location files by creating a PH (Physical Inventory Adjustment) transaction for the difference between the final count quantity and the cutoff quantity
- Update the total on hand for the item based on the sum of the count quantities
- Create a report of PH transactions
- Add the PH transactions to the transaction history file
- Set the 'Date of Last Count' in the Item Warehouse file
- Zero out the 'Transaction Activity Count' in the Item Warehouse file

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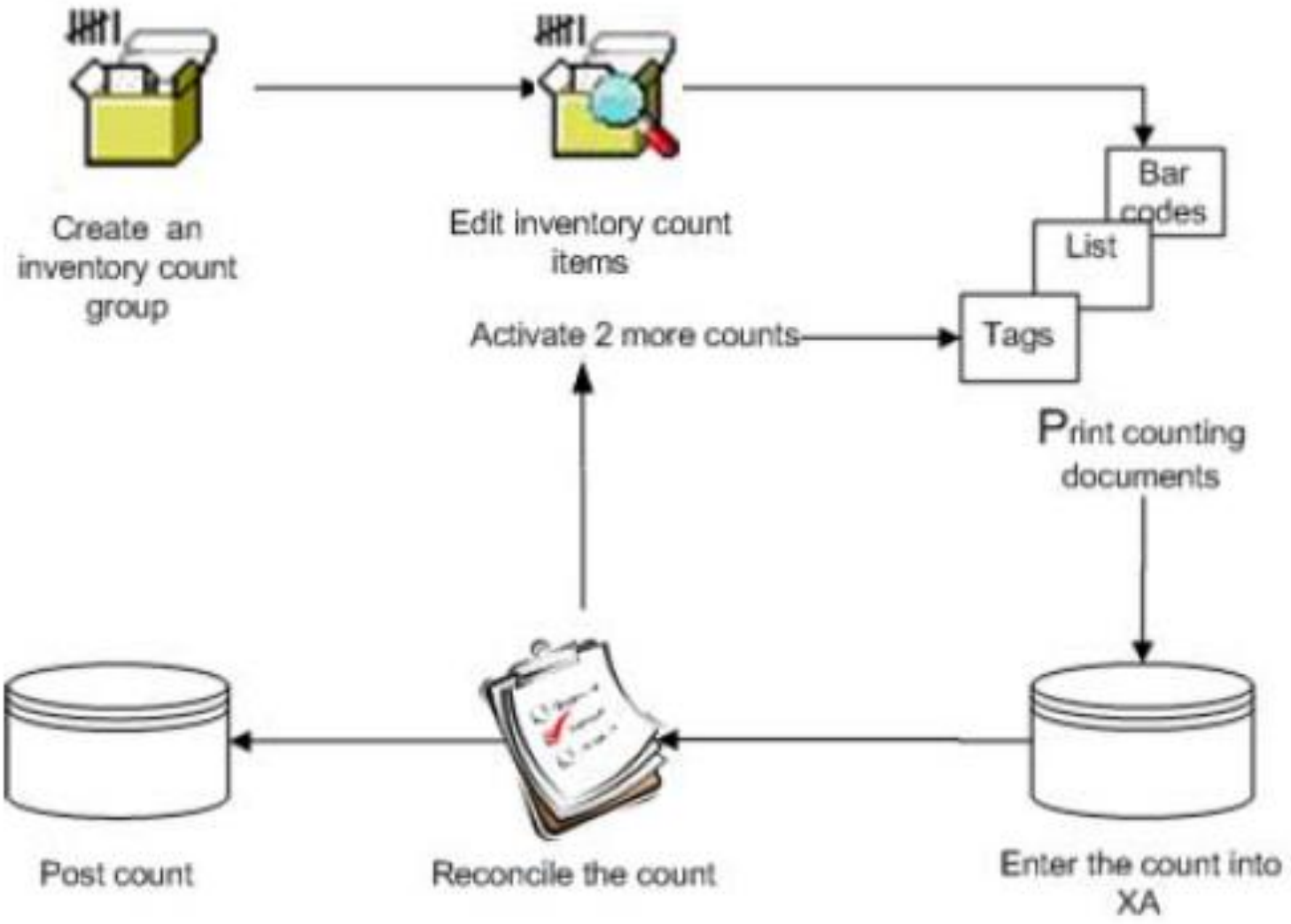
"Cycle Count Steps"

1. Create count group.
2. Activate count group. This step flags the items to be counted and stores the on-hand quantity to be used for comparison to the physical count if using "Cutoff On-Hand Quantity" option.
3. Print Count Sheet and/or Inventory Tags to be used for the physical counting process.
4. Physically count.
5. Enter the count – Sequential or Random
6. Reconcile physical count to on-hand quantity in the system. Up to 3 Counts
7. Print Variance and/or Counted/Uncounted Reports if desired.
8. Review Variances – make corrections if required thru additional counts.
9. Post results which will process PH Transactions
10. Transaction history single Item to determine cause of error (variance).

"Cycle Count Steps"



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"Cycle Count Limitations"

No Automatic Determination of how many A, B, C items to count within a set period of time, (week, month, year). There is no means to level load the daily count to achieve the site goals.

There is no tracking system to display how many counts have been completed for A , B, or C, items, and what the remaining counts are for each of the classifications.

Cycle count code 1,2, and 3 is assumed to align with A,B, and C classification determined thru ABC calculation and populating the value class field. Sites have different logic for how A,B , and C items are to be counted.

There is no reason code tracking for variances. This data can be used to focus in on process changes to improve accuracy. Can enter a count comment.

There is no reason code tracking for bypassing or voiding an item. No edit checking for Void reasons . (25 characters)

Variance approval system is manual , and not an automated electronic approval process.

There is no performance measurement system to display the results of the data by warehouse, planner, item class, location, etc. The data is tracked manually.

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"Cycle Counting"

QUESTIONS?

Thank You for Attending.