Prophet 21 CommerceCenter 10.5

Wireless Warehouse Management Systems with Tagging
This class is designed for...

- Warehouse Personnel
- Operation Managers
Objectives

- Understand how the scanner screens work using Tagging
This course will NOT cover...

- Tagging Concepts in Detail
- CommerceCenter Transactions
- Advanced Bin Tracking
Wireless Inventory Mgt

- Method of Inventory Tracking
- Bar Codes
- Hand Held Scanners
- Makes managing inventory faster and more accurate
Functionality

- Inventory Operations
- Put-Away
- Receiving
- Picking
- Inventory Counting
Tagging

• What is Tagging?

Tagging is the license plating of product to group all the information pertaining to product contained in or on a package with a single Unique Number.
Tagging

Item Master Inquiry (F2)
Tagging

Header holds Pallet Details and Detail Record holds the Item, Package Type, Qty Per, Quantity, etc.

This package has a header and a detail record and also has a Parent Tag which is the Pallet Tag

This pallet record will have Header record with 54 Detail Records being the Tagged Boxes.
System Setup

• Bins MUST be enabled
  • Bin functionality is turned on in the System settings under the Inventory->Lots Serials and Bins System treats the scanner as a bin
  • All Inventory movement is captured
  • If moving material from a truck to a warehouse bin, the movement of the forklift taking the material to a bin, is recorded in an wireless bin
• Scanner bins will not appear in any inventory inquiry as they are not available for manual process
System Setup
Advanced Bins must be enabled
System Setup
# System Setup

![Location Maintenance](image)

<table>
<thead>
<tr>
<th>Location ID</th>
<th>Physical Address</th>
<th>Jurisdiction</th>
<th>Timestamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>100221</td>
<td>Tillman-Newtown</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Mailing Address**: 40 Samson St
- **Mailing City**: Newtown
- **Mailing Country**: CA
- **Central Phone**: (215) 334-4444
- **Company ID**: Tillman Supplies
- **Tax Group ID**: California Sales Tax
- **Branch ID**: BRANCH1

- **Enable Wireless Warehouse at this Location**: Enabled
- **Require Lot/Bin Integration**: Enabled
- **Use Tags at this Location**: Standard

- **Location Type**: Standard
- **Available To Transfer Calculation**

- **Delete**
System Setup
Log In

Only one location can be logged in at a time
Function Keys

- Shift [F2] – HELP screen for Function Keys
- [F2] – Look Up
- Shift [F1] – Sweep
- [F1] – Back, Exit
- [F9] – Save
Wireless Inventory Mgt
Wireless Inv Mgt
Wireless Warehouse Mgt

• **Inventory Operations**
  • System can tell you what is most efficient bin to put material away in

• **Picking**
  • System can provide you with a Picking List in an efficient order

• **Receiving**

• **System Info**

• **Logout**
Wireless Inventory Mgt

• FYI
  • A scanner does not have a printer in it
  • Labels can be printed from the Purchase Order Receipts window
  • Labels could also be pre-printed, if not using system generated tag numbers.
    • System Setting
PO Receipts

• Process
  • Labels will be placed on packages
    • Pre-printed or printed from Purchase Order Receipts
  • Receipt will be entered in the scanner
  • Receipt will be an unapproved in the system
  • Receipt will need to be saved in Purchase Order Receipts window in CC
PO Receipts

- **System generated tag numbers**
  - To print labels with the system assigned tag number you have to receive the material in Purchase Order Receipts

- **Non-system generated tag numbers**
  - Labels can be pre-printed, placed on package and then scanned
PO Receipts

• Why is the scan an unapproved receipt? Why do you essentially have to receive twice? Because in CC:
  • Material can be allocated
  • Freight can be added
  • Lines can be marked as completed
  • Notes and Links can be added
Remember!!!

With scanning, the system knows how your material is organized and where it is at all times. Scanning gives you control and efficiency in your warehouse.
First Example

Receiving 100 Outlets

10 outlets in a Each Bag

10 Bags stored in Box

Bin A100

Tag the Bags and the Box
First example

Remember!!!

- When tagging, you will indicate either the number of Tags, OR the number of packages

- In this example, we are tagging the 10 outlets in a bag, in a box, SO, we will indicate the number of Tags
PO Receipts

[Diagram showing a menu with options for Inventory Operations, System Info, Picking, Receiving, Logout, Purchase Order Receipts, RMA Receipts, Transfer Receipts]
PO Receipts

Enter or scan PO Number…press [F2] for a popup
PO Receipts

Enter or scan the Item ID

<table>
<thead>
<tr>
<th>Item ID:</th>
<th>IAC15</th>
</tr>
</thead>
<tbody>
<tr>
<td>UOM:</td>
<td>EA</td>
</tr>
<tr>
<td>Qty:</td>
<td></td>
</tr>
</tbody>
</table>
PO Receipts

PO Line Popup

Item Popup
PO Receipts

Enter in the Quantity you are receiving
PO Receipts - First Level

Enter Lot, Package, the quantity per package and the number of Tags
PO Receipts

FIRST tag, either scan per-printed label or system will automatically assign tag number
PO Receipts

<table>
<thead>
<tr>
<th>Item ID</th>
<th>IAC15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rec Qty.</td>
<td>100,000</td>
</tr>
<tr>
<td>UOM:</td>
<td>EA</td>
</tr>
<tr>
<td>Lot:</td>
<td>2252</td>
</tr>
<tr>
<td>Package:</td>
<td>BAG</td>
</tr>
<tr>
<td>Qty Per:</td>
<td>10,000</td>
</tr>
<tr>
<td>Number Of Packs:</td>
<td>0</td>
</tr>
<tr>
<td>Number Of Tags:</td>
<td>10</td>
</tr>
<tr>
<td>New Tag Number:</td>
<td></td>
</tr>
<tr>
<td>Tag</td>
<td>2 of 10</td>
</tr>
</tbody>
</table>

Continue with process for the 10 Tags you are creating.
Enter Bin. If Tagging at 2\textsuperscript{nd} and, or 3\textsuperscript{rd} levels, enter or scan Tag and then enter Package Type
PO Receipts - 2nd and 3rd Level

- **If** placing in existing tagged box, etc, scan existing label and system will populate
PO Receipts

PO is still open in the system, material is not received in system or allocated to orders
PO Receipts

A total of 1 unapproved receipt(s) exist for this purchase order. They can be accessed through the receipt number popup.
PO Receipts

Make sure to search for UNAPPROVED receipts

<table>
<thead>
<tr>
<th>Name</th>
<th>Location ID</th>
<th>Receipt Number</th>
<th>Po Number</th>
<th>Company ID</th>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tillman-Yardley</td>
<td>100220</td>
<td>19144</td>
<td>22302</td>
<td>T</td>
<td>Tillman Supplies</td>
</tr>
<tr>
<td>Tillman-Yardley</td>
<td>100220</td>
<td>19136</td>
<td>22307</td>
<td>T</td>
<td>Tillman Supplies</td>
</tr>
<tr>
<td>Tillman-Yardley</td>
<td>100220</td>
<td>19137</td>
<td>22311</td>
<td>T</td>
<td>Tillman Supplies</td>
</tr>
</tbody>
</table>
PO Receipts

Tags created from scanning will be attached to the Receipt.
PO Receipts

Remember to check Approve checkbox before saving.
Labels

- Item
- Description
- Date
- Serial
- Qty Per
- Tag Number
Labels

- Reports
  - Inventory Ledger
  - Inventory Adjustment
  - Inventory Value
  - Inventory Cards
  - Item Service Level
  - Physical vs. On Hand
  - Items Not Counted
  - Transfers
  - Transfer Packing List
  - Item List
- Label Printing
  - Inventory Labels
  - Inventory Receipt Labels
- System
- MyMenu
- Window
- Help

Stock Status
PO Receiving
Transfer Receiving
Open Transfer
Putaway
PO Pre-Receiving
Transfer Pre-Receiving
TPCx Item Rationalization
Cycle Count
Cycle Count Accuracy
EDI 852 Send Report
Purchase Method Review
Inactive Items
Bin Report
Labels
Labels
Labels

• Label Types
  • Item Tag
    • Reprints a Tag for Item selected
  • Bin
    • Print Labels to put on Bin
    • You want to be able to scan a bin, so you have to put a bar code on each bin
• Pre-Printed Tags
  • Print before receiving
  • Will contain Tag Numbers
Second Example

Receiving 100 Outlets

10 outlets in a Each Bag

10 Bags stored in Box

Bin A100

Tag the Box
Second Example

Enter in Purchase Order Number

Scan Item and enter quantity
Second Example

Enter Lot. Indicate Pkg Type and number of packs-this screen is informational
Scan the Tag on the Box, enter Pkg, and enter the Bin
Second Example

- Save the unapproved Receipt in CC in the Purchase Order Receipts window
Inventory Operations

• You may scan all of your items at once and place them in a holding area in your warehouse.

• After all the tags are created and the labels are placed, the material will be moved to its proper bin.
  • Done in Inventory Operations
Inventory Operations

[Diagram showing various inventory operations and transactions]
Self Directed Tag Putaway

• You are telling the system where the material is being moved to
  • Scan Tag number you are moving
  • Scan the Tag that you are moving the material to whether existing or new tag
  • System will update the move

The system will not recommend any bins
Self Directed Tag Putaway

Scan Tag you are moving material from
Self Directed Tag Putaway

Scan the Tag that you will move the material to, OR just scan the Bin
System Directed Tag Putaway

- **System Directed Tag Putaway**
  - System will suggest a bin to move the material to based on a Putaway algorithm
    - Scan Tag Number that you are moving
    - System will suggest Putaway place
    - Scan Tag or bin where you are moving the material
System Directed Tag Putaway

Scan the Tag you are moving material from
System Directed Tag Putaway

System will suggest Deposit Bin.

Scan Tag or Bin you are moving the material to
Putaway Algorithm

• Putaway Algorithm
  • Weight and Volume must be setup on package and bins
  • Must be utilizing Advanced Bin Management
    • Putaway Zones and Sequence
    • Warehouse Sequence
  • Putaway Ranks can be assigned to items
    • Ranking determined by demand of the product
Put Away Algorithm

The more in demand an item is, the more accessible you want that item to be.
Putaway Algorithm
Putaway Algorithm

• Goal - Maximize space that is used in warehouse
  • Will suggest up to 6 locations
  • First, Checks Primary Bin
  • Second, Looks at Putaway List
    • Is item already in a bin?
    • If not, looks for another bin that has sufficient space
    • Looks for a Bin that it can “Squeeze” into
Split and Content

Used to “Retag” Items or Packages
Split and Content

- Content Move
  - Breaking Tag
    - Retagging the Packages, not the items or unit of measure

- Split and Move
  - Breaking Tag
    - Retagging the items or units of measure

Pre-printed labels will need to be used.
Content Move

Wireless Warehouse

Transaction

Inventory Operations
- Picking
- Receiving
- System Info
- Logout

Content Move
- Split and Move
- Self Directed Item Putaway
- Self Directed Tag Putaway
- System Directed Item Putaway
- System Directed Tag Putaway
- Inventory Adjustment
- Inventory Count
Scan tag you are breaking, and enter Qty to Move
Content Move

Enter Pkg Type, Qty Per, No. of Packs, Total Unit Qty, and Scan the pre-printed tag, and enter Destination Pkg.
## Content Move

<table>
<thead>
<tr>
<th>Deposit Tags:</th>
<th>Container Tag:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container Pkg:</td>
<td>Platform Tag:</td>
</tr>
<tr>
<td>Platform Pkg:</td>
<td>Bin:</td>
</tr>
</tbody>
</table>

If appropriate scan tags for other levels, and scan Bin
Split and Move
Split and Move

Scan Tag and enter Qty to Move
Split and Move

Enter Pkg Type, Qty Per, number of tags, and the total unit quantity. Scan first pre-printed tag.
Split and Move

If appropriate, scan tags for other levels and then scan bin
Inventory Adjustments

Real Time Approved
Inventory Adjustments

Scan Tag, enter Reason ID and Adjustment Quantity
Inventory Adjustments

• Let’s say 100 widgets are in a bin
  • You need to add 10 widgets to the bin
    • Adjustment Quantity = 110
  • You need to adjust 10 out of stock
    • Adjustment Quantity = 90
Inventory Adjustments
Inventory Adjustments

Enter Item, Reason and then new Qty on Hand
Inventory Adjustment

Enter Pkg Type, Container and Platform tags if appropriate and then Bin
Inventory Adjustments

• Cost can NOT be entered
  • Cost will default to current, if System Setting in Inventory is turned on

• Labels can be printed from the Inventory > Reports > Label Printing

• Real Time transaction
Inventory Counts

How do you setup a Count?

- Go to the Physical Count screen and tab through the count number field
- Select the Cycle Count if required
- Enter the criteria of the items/bins you wish to count.
- Run the query and view the items/bins to be counted.
- Set the paperless count on the Adjustment tab and Save the count.
Inventory Counts

- Retrieve items that you want to count in Physical Count window in CC
- Check “Paperless Count” on Adjustment tab
- Retrieve count on scanner
- System will retrieve Bins
  - Items are displayed in Warehouse Sequence
- Count Items
Inventory Counts

Paperless Count must be checked!
Inventory Counts
Inventory Counts

Enter Count Number, Scan Bin and Tag
Scan Lots, enter qty and press [F3] to accept changes.
Scan next tag in Bin, and continue process
Inventory Counts

- Continue with scanning Bins and items in the Bins
- Once you have completed counting all the items in the bin, press [F6] to move to the next one
- When count is completed, the system will give you a message stating that the bin you just entered was last on your count
Inventory Counts

- After count is completed go to Physical Count window in CC and save it as approved
  - Counts are immediately updated on scanner
  - This is for efficiency
Inventory Counts

• Found Items Report

• Will display items that you have scanned that are not listed as being in the bin
  • System will ask you to rescan for verification
  • Item will be flagged to be on Found Items Report
Picking

- Order will be placed
- Pick ticket number will be created
- Items will be picked using scanner
- Pick ticket will be unconfirmed
- Shipment will be confirmed in Shipping window in CommerceCenter
Picking

• Move Pick
  • Picking entire Tag

• Split Pick
  • Tag is being split and separately identified
    • Items or units of measure will be tagged

• Content Pick
  • Tag is being split into an existing tag
    • Move to Package will be tagged
Picking

- **Content Pick**
  - Based on the premise that you are walking around the warehouse with, for instance a pallet, that you are putting different items on, that you are shipping to your customers
  - Can also be done with a Split Pick

Content picking is good for small orders where a small quantity of several items for a single order is picked to a box.
Picking

• System will default to a Split Pick
• [F4] will toggle between methods
  • Split or content pick
Picking
Picking

- **Sales Order Picking**
  - You tell the system what order/pick ticket you will pick
  - Items will appear
    - Pick Zone and then Sequence or..
    - Warehouse Sequence
Picking

- **Group Picking**
  - You tell the system the group of pick tickets you will be picking
  - Orders and items will appear
    - Pick Zone and then sequence or
    - Warehouse Sequence
Sales Order Picking
Sales Order Picking

Entering a Pick Zone is optional
Sales Order Picking

- Two Pickers
  - Charlie picks in Pick Zone A
  - Sam picks in Zone B
Sales Order Picking

• How does the system consolidate the two picks for the order?
  • Bins can be setup as consolidation Bins in Location/Bin Maintenance
  • If Charlie picks the items first on the order, when Sam picks, the consolidation bin will be indicated as the deposit bin
Sales Order Picking

If no pick zone is entered, the items will be arranged by Warehouse Sequence.
Sales Order Picking

Enter Pick Qty, and Scan Tag you are picking from
If Move Pick, entire contents on Tag will be moved
Move Pick

If appropriate, scan tags and enter pkgs for additional levels. Scan Bin
Split Pick

Scan tag you are picking material from

<table>
<thead>
<tr>
<th>Pick Tag</th>
<th>206</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order Number</td>
<td>1023643</td>
</tr>
<tr>
<td>Line Number</td>
<td>1</td>
</tr>
<tr>
<td>Bin</td>
<td>A 100</td>
</tr>
<tr>
<td>Item To Pick</td>
<td>L889</td>
</tr>
<tr>
<td>Lot</td>
<td>227</td>
</tr>
<tr>
<td>Traceable Factor</td>
<td>BOX</td>
</tr>
<tr>
<td>Package</td>
<td>10,000</td>
</tr>
<tr>
<td>Qty/Per</td>
<td>5,000</td>
</tr>
<tr>
<td>Pick Qty</td>
<td>5,000</td>
</tr>
</tbody>
</table>
Split Pick

Indicate Number of Tags as 1 UNLESS using more than one tag
Split Pick

System will provide Tag Numbers
Split Pick

If appropriate, scan tag for container and platform and scan Bin
Content Pick

Transaction

Picking
Order Number: 65287
PT Number: 129241
Pick Zone:
Content Pick

Scan Tag you are picking material from
Content Pick

• System defaults to Split Pick
  • For content pick, press [F4]
Content Pick

Content Pick
Order Number: 65287
Line Number: 2
Bin: BIN1C4
Item ID: DAD-DEB-LOT-TAG2
Lot: 2037
Traceable Factor: dfgfgf
Package: BAG
Qty/Per: 1
Pick Qty: 23.000
Pick Tag: TA2642
Qty: 23.000
New Tag: 123489

Deposit Form
Order Number: 65146
Line Number: 1
Tag To Be Moved: LKB92204
Deposit Bin:
Put In Container:
Container Pkg Type:
Put On Platform:
Platform Pkg Type:
Put In Bin: LKB-CONS
Picking

- Remember, bin is location where you are placing material
  - Loading Dock, UPS, Truck
- After scanning confirm shipments in Shipping window in CommerceCenter
### Sales Order Picking

![Screen capture of a software interface with a focus on picking orders. The interface includes a table listing order details such as Pick Ticket Number, Order Number, Order Date, Ship To Name, Company, and Order Line Notes. The table contains data for various orders, including dates and company names. Additionally, there is a pop-up window titled "Find Pick Ticket" with an option selected to "Confirmable Pick Tickets Only." The pop-up lists several items with their respective details. The screen also shows tabs for various sections such as "Document Links" and "Timestamp."]
Sales Order Picking

<table>
<thead>
<tr>
<th>Item ID</th>
<th>Description</th>
<th>Q'ty Available</th>
<th>Q'ty Ordered</th>
<th>UOM</th>
<th>Q'ty Disp</th>
<th>Unit Price</th>
<th>Extended Price</th>
<th>Q'ty Avail To Make</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAD-LOT-TA57A</td>
<td>seduced</td>
<td>254.000</td>
<td>123.000</td>
<td>EA</td>
<td>-</td>
<td>.4500</td>
<td>55.35</td>
<td>.000</td>
</tr>
</tbody>
</table>

Warehouse Activity
Group Picking

- Identify to the system what set of pick tickets you want to pick
- System will provide you with items to “pick” in an efficient order
  - Zone-Pick Sequence
  - Sequence
  - Warehouse Sequence
- As you are picking material, you will put the items in separate totes on your moving pallet
Group Picking

- “Deposit” consolidation Bins into Deposit Bin
- Retrieve shipments in Shipping in CommerceCenter
- Gather all information from the Deposit Bin
- Ship material
Group Picking
Group Picking

Select Pick Tickets
Group Picking

Transaction:
- Inventory Operations
  - Picking
  - Receiving
  - System Info
  - Logout
- Sales Order Picking
- Transfer Order Picking
- Group Picking
- Group Pick Ticket Creation
Group Picking

Enter Group Ticket User Defined Identifier, and if picking by Pick Zone, enter Zone.
Group Picking

- Items will appear as in Single Order Picking for you to scan except that the system will retrieve the items in a specific order
RMA Receipts

- Enter RMA in CommerceCenter system
- When material is returned to warehouse, scan return
- Confirm RMA in RMA Receipts window in CommerceCenter
  - Return to Stock
  - Inventory Adjustment
  - Inventory Return
RMA Receipts
Enter or scan the RMA number
RMA Receipts

Enter or scan Item ID, and Received Quantity
RMA Receipts

Enter Pkg Type, Qty Per, and either No. of Tags or No. of Packs
RMA Receipts

If indicate No of Tags, the next screens will prompt you with the Tag Numbers

<table>
<thead>
<tr>
<th>Item ID</th>
<th>IAC15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rec Qty</td>
<td>100.000</td>
</tr>
<tr>
<td>UOM</td>
<td>EA</td>
</tr>
<tr>
<td>Lot</td>
<td>2252</td>
</tr>
<tr>
<td>Package</td>
<td>BAG</td>
</tr>
<tr>
<td>Qty Per</td>
<td>10.000</td>
</tr>
<tr>
<td>Number Of Packs</td>
<td>0</td>
</tr>
<tr>
<td>Number Of Tags</td>
<td>10</td>
</tr>
<tr>
<td>New Tag Number:</td>
<td></td>
</tr>
<tr>
<td>Tag</td>
<td>2 of 10</td>
</tr>
</tbody>
</table>
RMA Receipts

If choose No. of Packs, indicate Destination Pkg and Tag. For both options, indicate Bin.
Transfers

- Create Transfer in CommerceCenter
- Print Transfer
- Source location will scan material that is being shipped
- Save shipment in Transfer Shipping in CommerceCenter
- Destination location will scan received material
- Receipt will be unapproved
- Confirm receipt in Transfer Receipts in CommerceCenter
Transfers

- Move Pick
- Content Pick
- Split Pick
## Transfers

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Sub-transaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory Operations</td>
<td></td>
</tr>
<tr>
<td>Picking</td>
<td>Sales Order Picking</td>
</tr>
<tr>
<td></td>
<td>Transfer Order Picking</td>
</tr>
<tr>
<td></td>
<td>Group Picking</td>
</tr>
<tr>
<td></td>
<td>Group Pick Ticket Creation</td>
</tr>
<tr>
<td>Receiving</td>
<td></td>
</tr>
<tr>
<td>System Info</td>
<td></td>
</tr>
<tr>
<td>Logout</td>
<td></td>
</tr>
</tbody>
</table>
Transfers

Scan or enter Transfer number
Transfers

Scan Tag you are picking
Indicate number of tags that you want to create
Transfers - Split Pick

If not system assigned tags, Scan Tag
Transfers

Scan or enter Bin
Transfers

- Save the shipment in Transfer Shipping in CommerceCenter
Transfer Receipts
Transfer Receipts

Enter or scan transfer or shipment number
Transfer Receipts

Entering the Tag Number or Scanning it will display the information for the Tag. Enter the Received QTY
Transfer Receipts
Summary

• Understand how the scanner screens work using Tagging
Wireless Management System suite

• Advanced Bin Management
  • Prerequisite for this course
• 10.5 Warehouse Management Systems with Lots and Bins