

Meet your presenters



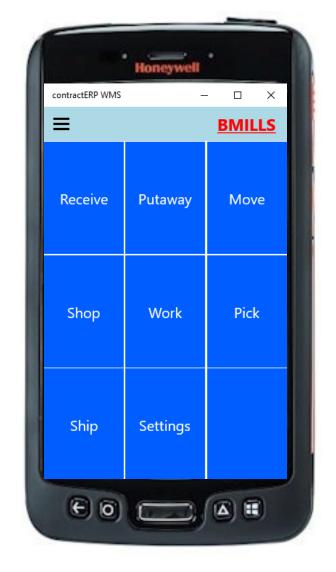
Matt Mead Project Lead



Brian MillsSenior Support Specialist



- Overview of WMS / Mobile App
- Storage Location Management
- Workstations, LPNs and Barcodes
- WMS Mobile App Functions
- Agenda 5 WMS Mobile App Demo





WMS/Mobile Objectives

Get Control

Manage where and why material is placed and moved throughout the warehouse.

Gain Visibility

- Easily see within contractERP where material exists in the warehouse, including history.
- Especially relevant with non-standard items such as special ordered / shop fabricated.

Improve Efficiency

- Put the warehouse and shop transactions in the hands of the user.
- Real-time information, real-time recording of your inventory transactions.

Supports your Industry Workflow

- Your warehouse & shop is unique within the industry.
- Material is often tracked down to the assignment, is non-standard or custom shop fabricated, even pre-installed together.



WMS/Mobile Overview

Storage Location Management

- Define your warehouse within contractERP.
- Location → Storage Areas (by Type) → Storage Locations (Aisle/Section/Shelf/Bin)

Storage Location Fntries

- · Every inventory movement is recorded.
- Complete accountability of your inventory including who created the transaction and when.

Mobile App

Receive - Purchase, Transfer, & Sales Returns

Shop & Work Order - Labor and Item

Putaway

Move

Pick - Shop, Work, Sales, Purch. Return, Transfer

• **Ship** - Sales, Transfer, Purch. Return

Automated Posting

- No longer do you need to post individual orders.
- Mobile (Scanned) transactions post via an automated process.



Storage Location Management

Location

- Storage Location Management handled at Location level.
- If multi-location, each can be setup uniquely; or you may not have Storage Location active.



Storage Areas

- Defines a zone or region of your warehouse.
- Types: Receiving, Stock, Shop Areas, Work Areas, Staging (both sales and contract material) Shipping and Shelved (Bonepile).



Storage Locations

- Storage Locations are created within an Area and define a specific location of material.
- Storage Location may be an Aisle, Section, Shelf, Bin or any combination of them.
- Inventory On-Hand Quantities are managed to this level.



Storage Location Entries

- A transaction entry table storing every in and out movement of material within this solution.
- It tracks the item, user, time, and other associated information of each movement.



Storage Location Management

Item Ledger Entry

Purchase Receipt Non-Standard Special Ordered Item



Storage Location Entries

- Receive to REC DOCK
- Putaway to JOB BIN 12
- Pick for Work Order to CART 04
- Work Order Start

- Work Order Finish
- Move to Shipping Bin AA12D
- Pick for Sales Order to SHIP DOCK
- Ship



Item Ledger Entry

Sales Shipment



Workstations, LPNs and Barcodes

Workstation Purpose

- Set up the rules related to a specific transaction type that happens within a work area.
- Examples auto print reports at time of transaction, auto create LPN plus other default settings.

Workstation Types

Receiving

Shipping

Putaway

Movement

Pick

Shop

Pack

Work

LPN (License Plate Number)

- What is it? A barcoded number / document, that acts as a virtual container, keeping a collection of items together, as they travel throughout the warehouse and are processed in transactions.
- Why are they Used? To support pallet movements, avoiding breaking up incoming containers, staging material, etc.....

Barcode Print Options

- Thermal Line/Item/Assignment level barcodes can be generated from several places even automatically from the mobile solution.
- Printed From Contract Material List and Release Schedule, Purchase Order, Sales Order, Shop and Work Orders.

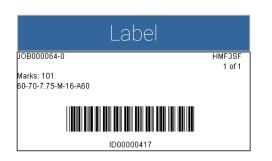
LPN – Prints Std Letter Size

JOB000064 - 0 KS
P0000602

Bethland Hospital

ID00000416
1/9/2018

Floor EXTERIOR Marks 101





Pick Assigning

Product Picking Groups

- Configure picking item categories or material types that will be picked together.
- i.e., Group for Hardware and Division 10 Items, Group for Doors, Group for Frames, etc.

Picker Teams

- Picks can be assigned to individual or team.
- Teams are predefined group of individuals (HDW TEAM 1 = Billy, Dusty and Frank).

Pick Priority

- Define Priority levels used when assigning picks.
- i.e., CPU (Customer Pick Up), HIGH, NORMAL, LOW, etc.
- Can default to send Notification to Picker or Pick Team once assigned.

Picking Worksheet

- Used to gather and sort documents to assign for users to pick items to prepare for next step.
- Pick Sales Orders, Delivery Routes, Shop Orders, Work Orders, Transfer Orders, Purch. Returns.



Picking Worksheet

Picking Worksheet												
Name · · · · · · · · · · · · · · · · · · ·							∨ Ship/	'Start Status · · ·				
Manage 🛅 Get Orders 👺 Update Selected Lines 🚟 View Lines 💿 Show Document 💗 Update Picking Status												
Ship/Start Status		Picking Status	Location Code	Ship/Start Date	Ship/Start Date Change	Document No.	Shipment Method Code	Picker Type	Pickers	Pick Priority	Noti	Rele to Pick
Ready		Not Releas	LI	10/20/2021		SO-001482		Team	LI			
Ready		Not Releas	LI	10/19/2021		SO-001483	OT	Team	LI			
Not Ready		Not Releas	LI	11/19/2021		SO-001486	OT	Team	LI			
Shipped		Not Releas	LI	4/11/2022		SO-001508	OT	Team	LI			
Partial		Not Releas	LI			SO-001508	OT	Team	LI	HIGH	✓	
Shipped	:	Released	П	5/30/2022		SO-001521	<u>OT</u>	Team	LI	NORMAL		Z





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- In Business 31 Years Across the U.S.
- Headquartered in Chattanooga, TN
- Barcode & RFID Hardware Solutions
 - Mobile Computers
 - Printers/Media
 - Wireless Infrastructure
 - Bin Location Labeling
 - Mobile Device Management
- Consulting & Specialization
- Pre & Post-Sales Technical Support



WMS Mobile App



User Experience

- Simple, direct, presenting only relevant data.
- Common screen interface throughout the app.
- Use as a Scanning device or by performing gestures on the touchscreen.

Navigation and Settings

- Hamburger Menu Icon (Options) Top left corner on all screens.
- Arrow Takes user back to last screen they were in.
- Resource (Top Right) User on the device. Recorded with entries.
- Location Warehouse Location filter for transactions.
- Profile Stores and fills in settings for the device.

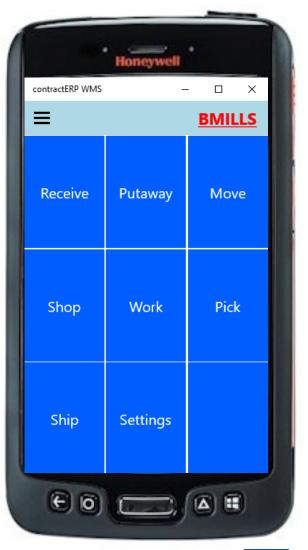
Transactions

- Receive
- Putaway
- Move
- Shop Order

- Work Order
- Pick
- Ship

Transaction Levels, Scan or Touch, Search

- Level Order, LPN (License Plate Number), Line or Assignment.
- <u>Scan/Touch</u> Scan barcodes or touchscreen used interchangeably.
- <u>Search</u> Options exist to find specific data.







Receiving Transactions

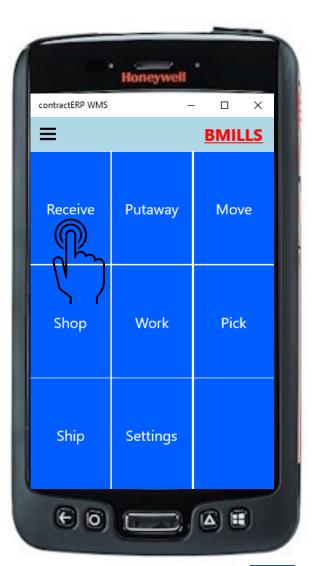
- Purchase Order Receiving
- Sales Order Returns
- Inbound Transfers

Receiving Options

- Receive All, Receive Per Associated Doc (Contract, Sales Order), By Line, By Assignment.
- Auto create LPNs at time of receiving.
- Auto create item level barcodes at time of receiving.

Receiving Process (Line level example using Putaway)

- Select Doc. Type to filter search and/or enter Doc. # (accepts partial)
- Select Order to view Lines.
- Default Place Rec. Location can fill in or user can change.
- Select or scan lines to receive, adjust quantity as needed.
- Hit the Complete Option Bottom Right.







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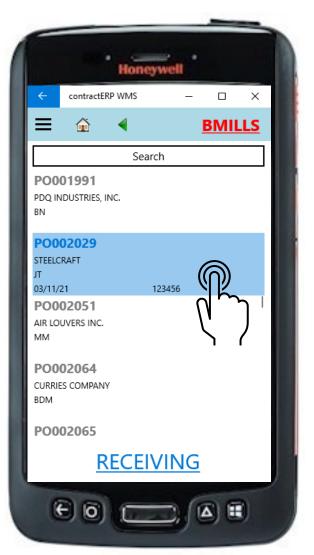
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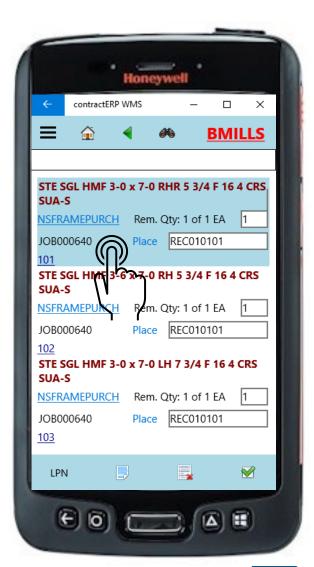
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- Select Order to view Lines.
- Default Place Rec. Location can fill in or user can change.
- Select or scan lines to receive, adjust quantity as needed.
- Hit the Complete Option Bottom Right.

Result of Receiving

- Instant Storage Entry created, full visibility within contractERP of the mobile transactions and where that material is located.
- Items received can be immediately used in a forward transaction, such as a Shop Order, Pick or Ship.
- LPN's and / or item level barcodes print.





WMS Mobile Putaway



Putaway Transactions

- Purchase Order Receiving
- Sales Order Returns
- Inbound Transfers

Putaway Options

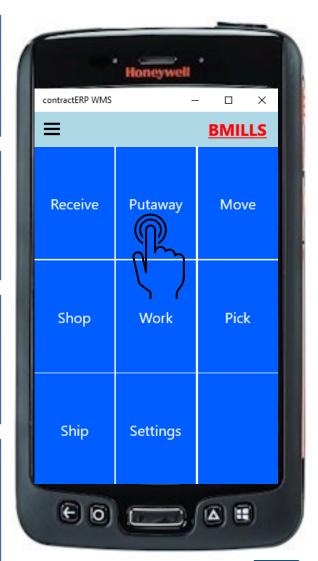
- Selection Options: By Take Loc, By Document No, By LPN
- <u>Putaway By Options</u>: Order, LPN, Line, Assignment
- Create new LPNs as needed.
- Create barcodes as needed.

Putaway Process (Line level example)

- Search based on selection choice or show all.
- Select Order to view Lines.
- Default Place Location will be filled in or user can change.
- Select or scan lines to Putaway, adjust quantity as needed.
- Hit the Complete Option Bottom Right.

Result of Receiving

- Instant Storage Entry created, full visibility within contractERP of the mobile transactions and where that material is.
- Items Putaway can be immediately used in a forward transaction, such as a Shop Order, Pick or Shipment.
- LPN's and / or item level barcodes print if needed.





WMS Mobile Move



Move Transactions

- Warehousing decision to move material or an LPN to another Storage Location.
- Moves can also be used to split or create new LPN's.

Move Options

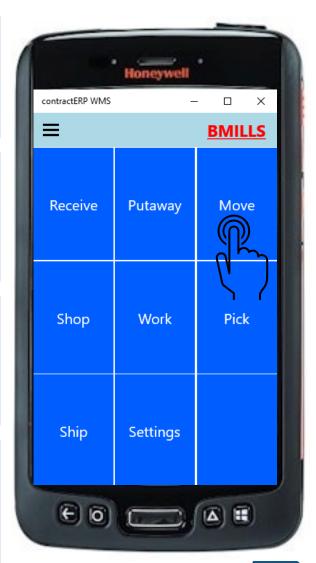
- View what is being moved by Storage Location, LPN, or Item No.
- Create new LPN's as needed.

Move Process

- Select move by Storage Location, LPN, or Item No.
- Select or scan line/item wanting to move, choose quantity and choose Place Storage Location.
- Hit the Complete Option Bottom Right.

Result of Move

- Instant Storage Entry created, full visibility within contractERP of the mobile transactions and where that material is.
- LPN's print if needed.





WMS Mobile Pick



Pick Transactions

- Shop Order
- Work Order
- Sales Order
- Delivery Route (Multiple S/O's)
- Purchase Return
- Outbound Transfer

Pick Options

- Pick By Item Category Option
- Pick By Document Type Option
- Choose Pick level: Entire Order, By LPN, By Line, By Assignment

Pick Process

- Filter as needed, then search for order to Pick.
- Default Place Location can fill in, user can change.
- Select or scan lines to Pick, adjust quantity as needed.
- Hit the Complete Option.

Result of Pick

- Instant Storage Entry created, full visibility within contractERP of the mobile transactions and where that material is located.
- Items Picked can be immediately used in a forward transaction, such as a shop order, Work Order or Shipment.
- LPN's and / or item level barcodes print if needed.





WMS Mobile Shop



Shop Transactions

- Scan Items, Lines or Orders as fabricated through the shop
- Multiple Shop Workstations can be set up to support recording the end item moving through the different operations until complete.
- Shop scanning can support both the item movement, as well as the labor time movement.

Shop Options

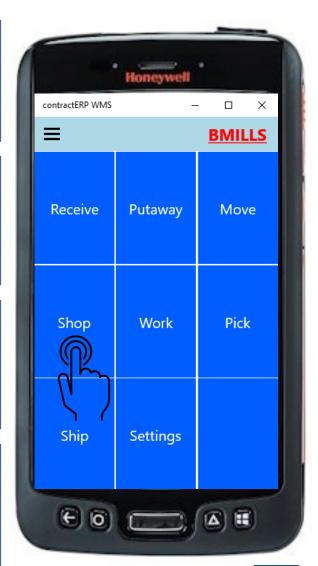
- Scan the piece (end item) only, or Labor and the Piece.
- Option to print thermal labels during the process.
- Option to generate an LPN at the end of the shop process to group end items together, such as on a pallet.

Shop Process

- Scan the Shop Order No, from one of the Shop Order Documents.
- Scan the piece label or Piece barcode from the Scanning Sheet.
- Piece labels represent either the unique assignment of 1 of XX.
- End Items can be scanned into an LPN as the last process as needed.

Result of Shop

- Shop Order line/quantity is set to finished, ready to be posted.
- LPN's print if needed.
- Item's Shop Fab'd can be immediately used in a forward transaction, such as Pick or Shipment.





WMS Mobile Work



Work Transactions

- Work Scan very similar to Shop scanning process but supports tasks such as Pre-installing Hardware or Painting end items.
- Work Orders are supporting a value-add service to the end item, whereas a Shop Order is fabricating an end item.

Work Options

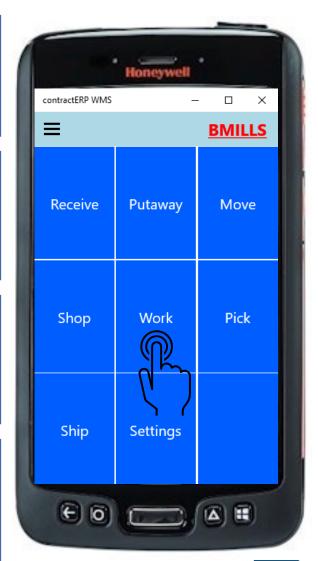
- Scan the piece (end item) only, or Labor and the Piece.
- Option to Print a PRE-INSTALL Report by opening.
- Option to print thermal labels during the process.
- Option to generate an LPN at the end of the work process to group end items together, such as on a pallet.

Work Process

- Scan the Shop Order No, from one of the Shop Order Documents.
- Scan the piece label or Piece barcode from the Scanning Sheet.
- Piece labels represent either the unique assignment of 1 of XX
- End Items can be scanned into an LPN as the last process as needed.

Result of Work

- Work Order line/quantity is set to finished, ready to be posted.
- LPN's print if needed.
- Item's can be immediately used in a forward transaction, such as Pick or Shipment.





WMS Mobile Ship



Ship Transactions

- Sales Order
- Delivery Route (Multiple Sales Orders)
- Purchase Return
- Outbound Transfer

Ship Options

- Select By Document Type Option.
- Choose View option: Entire Order, By LPN, By Line, By Assignment.

Ship Process

- Filter as needed, then search for order to Ship.
- Select or scan lines to Ship, adjust quantity as needed.
- Hit the Complete Option Bottom Right.

Result of Ship

- Sets Lines as Shipped, ready to be posted.
- LPN's and / or item level barcodes print if needed.
- Packing Ticket can be auto printed.





Automated Posting of Scanned (Mobile) Transactions

Purpose

- Post all transactions that have been properly handled by the warehouse, shop department, or work order department.
- Set as an automatic routine (Job Queue).

Types

- Scanned Items Ready to Receive
- Scanned Items Ready to Finish (Shop Order and Work Order)
- Scanned Items Ready to Ship
- Scanned Returns Ready to Receive
- Scanned Returns Ready to Ship
- Scanned Transfers Ready to Receive
- Scanned Transfers Ready to Ship



WMS Mobile App Demonstration

