

PAPER-LESS

MANUFACTURING EXCELLENCE THROUGH SOFTWARE

PAPER-LESS MES/MV2

5.4.0 RELEASE INFORMATION

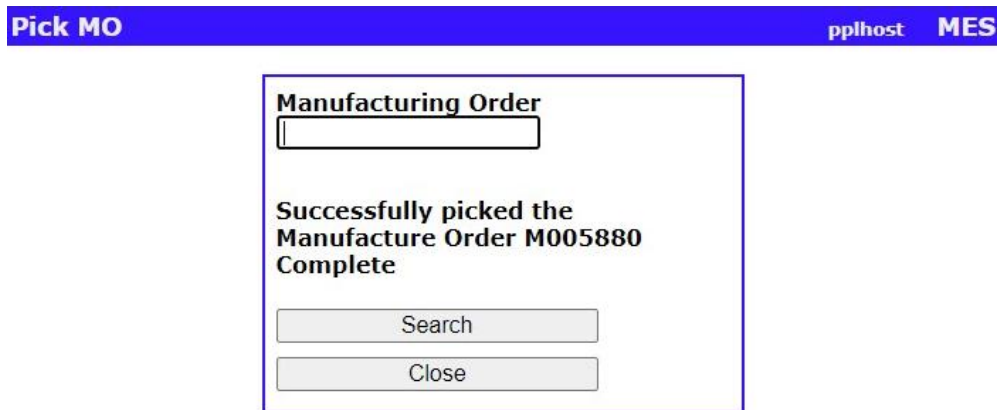
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PURPOSE

The purpose of this document is to outline the major enhancements and change requests made to the latest Paper-Less release. Prior to performing any upgrades, please review the Paper-Less Hardware and Software Requirements documentation to ensure your system meets the latest recommended requirements. If you have any questions, please contact the Paper-Less Help Desk at: help.desk@paperlessllc.com or 888-473-0800.

NEW FEATURES & ENHANCEMENTS

- Material Handling Pick MO (Phase 1). This feature is available on Mobile Apps and allows users to report when all the components on a manufacturing order have been picked complete. Note: Users will still need to issue material separately at this time.



The MO picking status is an available column that can now be added to the WIP page. This column provides a visual status on whether material for the order has been picked complete (green checkmark) or is incomplete (red checkmark).

Work in Process					
Select an action to perform on M007080-1900 with Status Started at Workcenter 8000 for User PPLHost Administrator. Users: None					Site: 000 (Main production site) PPLHost Administrator
<div style="display: flex; justify-content: space-between;"> <div> <p>Full Bin</p> <p>Empty Bin</p> <p>Record Pieces</p> <p>Change Status</p> <p>Shop Packet</p> <p>Start Setup</p> <p>Start Run</p> <p>Start Indirect</p> </div> <div> <p>Job Details -</p> <p>Workcenter:8000 Expected Qty:100 Std Run Rate:10 Std Run Time:10:00:00 Open Qty:738 Actual Run Rate:0 Accum Run Time:00:00:00 Good Qty:818 Variance:-100.00 % Scrap Qty:20 Labor Active?:False</p> </div> </div>					
Page 1 of 4					
Order	Item	User	Pick	S	I
M007080-1900	1000-A (Desktop, Model: MC309LL1A)		✓	⏸	⚠
M007910-0040	6020- (FLOW SHOP MILESTONE)		✗	⏸	⚠
M007930-0040	6030- (JOB SHOP MILESTONE)		✓	⏸	⚠
M007920-0040	6020- (FLOW SHOP MILESTONE)		✗	⏸	⚠
M007940-0040	6030- (JOB SHOP MILESTONE)		✓	⏸	⚠
M005420-1900	2424-A (24 X 24 FAB B/L=Y INSPECT=N)		✗	⏸	⚠
M007400-1900	1002-D (PC, 266 MHz Desktop)		✗	⏸	⚠

- The Synchronization of data between the ERP system and Paper-Less has been updated to improve performance, response time, and throughput. These changes will substantially reduce the time required to execute full and mini-synch processes. The following is a list of the Entities that were modified (OAGIS logic only):
 - Employees
 - Items*
 - Item Revisions*
 - Inventory Balance
 - Sales Orders
 - Sales Order Notes
 - Manufacturing Orders
 - Manufacturing Order Operations
 - Manufacturing Order Operation Notes
 - Purchase Orders
 - Purchase Order Lines
 - Purchase Order Line Schedules

*In addition the Item and Item Revision entities were also changed to no longer retrieve the Items Warehouse and Location information from Infor XA's ITEMBL file for each record.
- **Infor XA Only:** The Paper-Less Synchronization has been updated to improve Infor XA integration with Pick 2 Ship functionality.
 - If XA file/field ITMRVA/ B2IPST= YES
 - Set MES Table “serial number”= YES, then
 - Automatically set Item Admin “serial number override” = YES, then
 - Automatically set Item Admin “Record on Picking (Shipment)” = MANUAL

Serial Number Settings

Serial Number Override

Serial Number

Record On Purchase Order Receipt: None

Record On Production Receipt: None

Record On Record Pieces: None

Record On Issue Material (Finished Item): None

Record On Issue Material (Component): None

Record On Scrap Material: None

Record On Picking (Shipment): Manual

Serial Number Pattern: [UniqueNumber,10,0]

Operation To Start Recording:

Save

- Sync and assign the XA Default Pick Location specified in XA (ITEMBL file, column WHSLC).

Inventory Settings

Override Default Production Consumption Settings

Warehouse:

Location:

Override Default Production Receipt Settings

Warehouse:

Location:

Save

Sales Order Defaults:

	Warehouse ▲	Default Pick Location ▲	Default Stage Location ▲
Edit	1	01011	
Edit	D1	01011	
Edit	U1		

- **Non-Infor XA:** Updated the SQL Provider to support the Pick to Ship Default Picking Location and Item Site Revision Serial Controlled flag.

Serial Number Settings

Serial Number Override

Serial Number

Record On Purchase Order Receipt:

Record On Production Receipt:

Record On Record Pieces:

Record On Issue Material (Finished Item):

Record On Issue Material (Component):

Record On Scrap Material:

Record On Picking (Shipment):

Serial Number Pattern:

Operation To Start Recording:

Save

Inventory Settings

Override Default Production Consumption Settings

Warehouse:

Location:

Override Default Production Receipt Settings

Warehouse:

Location:

Save

Sales Order Defaults:

	Warehouse ▲	Default Pick Location ▲	Default Stage Location ▲
Edit	1	01011	
Edit	D1	01011	
Edit	U1		

- Paper-Less will be marked with a noticeable push toward an API infrastructure to deliver functional capability. This will serve both the internal development so that business logic, database updates, and editing and validation of transactional data can all be insulated from changes to user interface technologies in the future. Our API strategy will also enable a new era of integration to other systems following a pattern adopted by a significant number of system integrators. As IoT evolves, along with citizen developer platform tools grow in adoption, our API infrastructure will allow customers and partners to add value to Paper-Less deployments rapidly and accurately. Below are the API infrastructure updates available in 5.4.0:
 - Provided an API to support the same functionality available in MES Job Search Order Number or Operation (Like).
 - Added a JobsController endpoint to retrieve a job by the alternate id.
 - Provide an endpoint to get work center configuration data from MES/MV2. Changes made to the configuration data in MES/MV2 will be reflected in the endpoint data.
 - Added a EmployeesController endpoint to return a user's roles.
 - A Swagger io document has been created for the web API.
- System Administrators now have the ability to maintain the BulkLoadRetryDays setting in the user interface. This will prevent the synch from continually trying to re-sync incomplete data. This can be configured under the ERP to MES Synchronization Entities section within Work with System Administration.

The screenshot shows the 'Work with System Administration' interface. The main content area is titled 'Edit/View System Administrative Settings'. It contains several sections for configuration, including 'Default WIP Configuration for Workcenters', 'Default WIP Notifications for Workcenters', 'Default User Exits for Workcenters', 'Import Nests', 'ERP Message Configuration', 'ERP to MES Partial Synchronization', and 'ERP to MES Synchronization Entities'. The 'ERP to MES Synchronization Entities' section includes input fields for 'Default Batch Size' (500), 'Synchronize All Max Timeout' (800), 'Synchronize Changes Max Timeout' (30), 'Process Transactions Max Timeout' (15), and 'BulkLoad Retry Days' (7). A red arrow points to the 'BulkLoad Retry Days' field. Below these fields is a table for 'Synchronization Entities' with columns for 'Values/Data', 'Enabled', and 'Batch Size'.

Values/Data	Enabled	Batch Size
Sites	<input checked="" type="checkbox"/>	<input type="text"/>
Reason Codes	<input checked="" type="checkbox"/>	<input type="text"/>
Unit of Measures	<input checked="" type="checkbox"/>	<input type="text"/>
Item Categories	<input checked="" type="checkbox"/>	<input type="text"/>
Warehouses	<input checked="" type="checkbox"/>	<input type="text"/>
Inventory Locations	<input checked="" type="checkbox"/>	<input type="text"/>

- Updated template editor to accept scripts to support 2D barcoding. The editor is used to create and update templates in HTML format that are used for printing labels and email notifications, as well as the Job Details section on the WIP page.

DEFECTS/REPAIRS/BUG FIXES

- Labor Attendance table no longer has a null value when an employee is not assigned to a Calendar in Shop Activity Management.
- Supervisors no longer receive a data error message when accessing Today's Attendance from the Touchscreen.
- Users no longer receive an error message when attempting to stop labor in a job off only work center when the Start button is not visible.
- Corrected an issue with the late clock-in/early clock-out messages in Shop Activity Management.
- Updated Shop Activity Management to use the correct offset when updating the date and time of a transaction that is created in a timezone different than the host server.
- Updated the Database Installation tool status messages.
- Updated the Database Installation tool so that the OAGIS database is correctly updated and matches the MES database version.
- Updated the Database Installation tool so that online databases are displayed even if other databases are offline.
- Updated the Database Installation tool where MES databases that have a non-NULL collation now display in the tool.
- Updated the Database Installation tool so that occasional deadlocks are no longer encountered when installing or upgrading on SQL 2014.
- The Work with Attendance screen has been updated to correctly reflect the timezone assigned to the site and no longer reverts to the host server time zone.
- Updated the Configuration Installation tool to load and validate both the Paper-Less and OAGIS databases.
- Updated Quick Print to use the work center of the manufacturing order operation. This eliminates a "404 File or directory not found" error message that was being displayed in a very unique workflow.
- Updated the TimeProvider class to support requests from the API that include a "Time" value in the request.
- Updated the WebApi to no longer allow a StopDate that is prior to StartDate when using attendance and attendance/stop scripts.