DS0312
Multi Bin & MO Receipt Enhancement

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Problem Definition

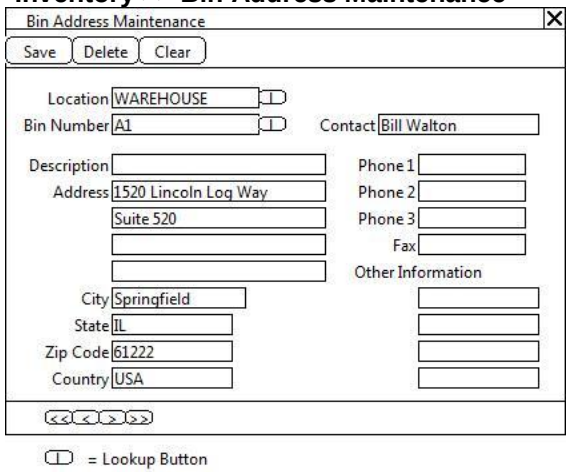
Problem Definition	CCDA
ACMECO makes nutritional supplements and drinks. There are two areas of need. **Multi-Bin Enhancements** GP is being implemented with multi-bins where each bin represents a different physical location. Bins are being used in this manner so that MRP will plan for all sites. The first requirement is to add additional functionality to multi-bins to better support using bins for each location. The changes include: 1. Address information for a Bin 2. Ability to assign a Bin to a PO Line and have that bin used as the PO Receipt location. **MO Receipt Enhancements** The Manufacturing Process uses two types of components: 1. Process Components (FOOD Components). All Process Component Item Numbers begin with 141. 2. Packaging Components. When producing 100 cases of a drink product, the manufacturing process may yield only 98 cases of finished packaged product. However the raw material consumed will be 100% of the Process Components and 98% of the Packaging Components. Due to shrinkage/loss of the Process components they are consumed completely while producing fewer of the final packaged product, so less of the packaging is used. The MO Receipt function in GP needs to be modified so that upon “FINAL” receipt of the MO, the Process Components are consumed based on the MO Start Quantity and the Packaging Components are consumed based on the sum of the MO Receipts including the	

FINAL Receipt Qty. The ability to manually edit the picklist after the quantities have been calculated at FINAL Receipt needs to be maintained. So, at the FINAL receipt the system should calculate the correct amount of packaging to be used and update the picklist, but the user should still have the ability to override those calculated numbers before posting the MO Receipt.	

Design Features

Multi-Bin Enhancements	CCDA

Navigation: Cards >> Inventory >> Bin Address Maintenance



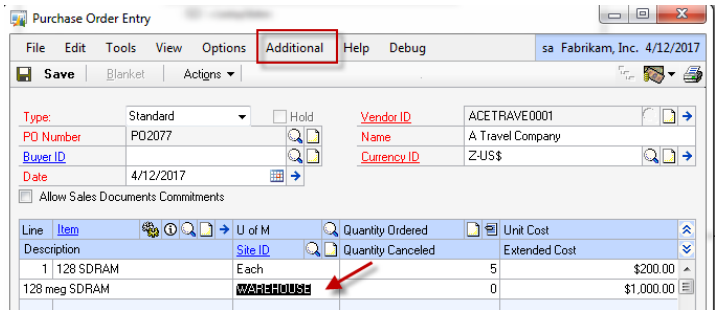
The Bin Address Maintenance is used to record the physical location information for a bin.

Field	Function
Location	User enters a Site ID, or selects one from the Lookup. After selecting a warehouse, the scroll buttons at the bottom of the window will scroll through existing Bin Address records.
Bin	User enters a value, or selects one from the Lookup. The Lookup shows all bins assigned to the selected site.
Description	30-character alpha-numeric description field
Address fields	Address, City, State, Zip, Phones, etc all function like the Customer Address window.
Other Information	Four extra fields (20-character alpha numeric) for recording

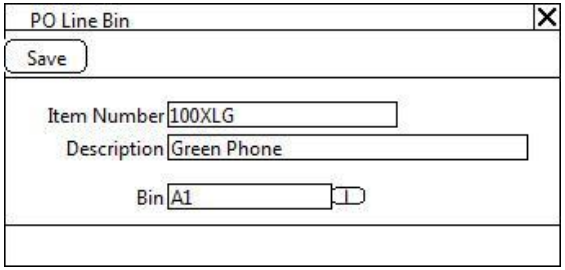
	information about the bin (site).

PO Line Bin Assignment

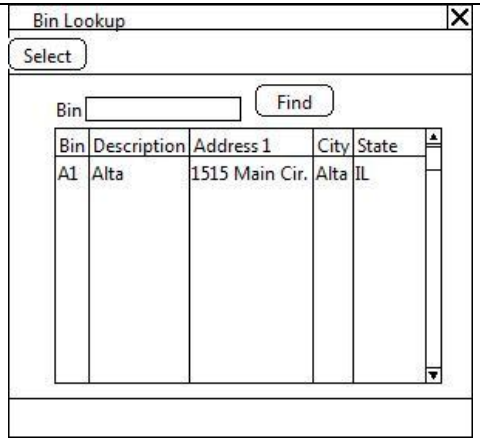
When creating a PO the PO Line Bin window will open automatically after selecting the Site ID:



The PO Line Bine window will show the Item Number and Description from the PO line (these fields are not editable).



The user can enter a Bin, or select one from the Bin Lookup (see below). The Bin Lookup is a custom window that shows only bins that have been set up in the Bin Address Maintenance window.



If the selected bin as not already been assigned to the item, the system will automatically create the Item-Bin record (the user will not be prompted).

After the first PO line has been entered, the system remembers the Site ID. New PO lines automatically default to use the same site as the previous line. Likewise, once a Bin has been selected, it will default to new lines. If the bin is changed when entering a new line, that new bin will default to subsequent lines.

The bin assigned to an existing line can be viewed/changed by opening the PO Line Bin window from Additional >> PO Line Bin (CTRL + Y).

The Address Fields from the Bin will be copied over to the address fields on the PO Line. Normally this address information comes from the Site assigned to the line.

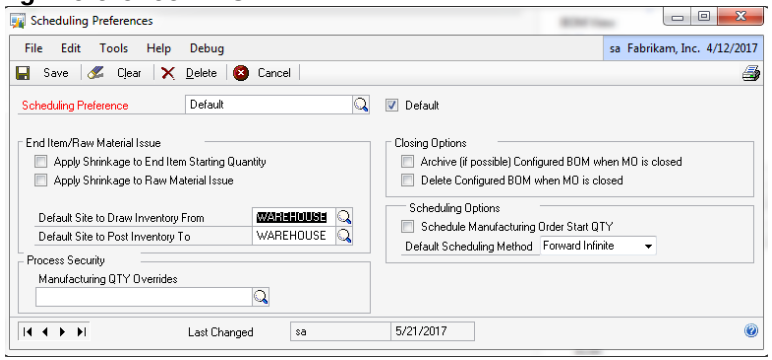
PO Receipt Line Bin

When performing a PO Receipt GP uses the “Default Purchase Receipts Bin”, if one exists in setup, or it requires the user to manually select a bin.

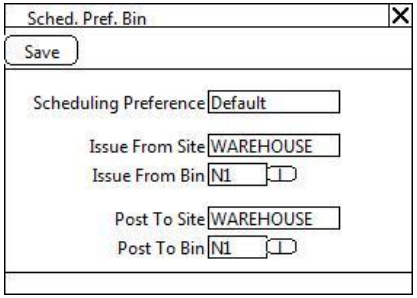
The Bin Enhancements will use the Bin assigned to the PO Line when performing the PO Receipt. The Bin assigned to the PO Line will essentially become the “default bin”. The normal functionality of GP will still allow the user to change the bin if needed.

MO Receipt Enhancement	CCDA

MO Scheduling Preference Bins



A bin can be assigned to the Draw From Site, and Post To Site, by selecting Additional >> Sched. Pref. Bin (CTRL + Y).



Only the bin fields are editable, the other information pulls from the Scheduling Preference window. The Bins entered here must have already been set up in the Bin Address Maintenance window. The Lookup will show only bins from the Bin Address Maintenance window.

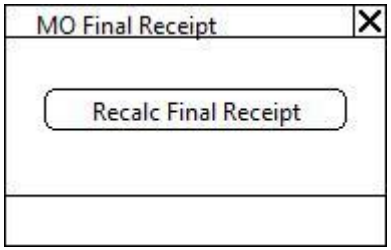
MO Receipt Enhancement

Since the MO Receipt will record the actual number of units produced, and raw materials are backflushed, the correct amount of packing will be consumed automatically.

If needed, the user can manually change packaging as needed to address scrap or damage.

The Process Components however always need to be consumed 100%, and if the quantity produced is less than expected, the Process Components on the final MO Receipt need to be adjusted upwards. All Process Components being with the prefix 141, so all items on the Picklist that begin with 141 will be recalculated so that they are 100% consumed by the final receipt.

When the MO Number is entered on Manufacturing Order Receipt Entry the user will be asked, “Is this the Final Receipt?” If they answer YES, the MO Final Receipt window will open.



This window can also be opened manually from Additional >> Final Receipt.

Clicking the Recalc Final Receipt button will recalculate the process components on the picklist (those that start with 141), so that the Quantity To Backflush will consume the entire Picklist Quantity of the component.

Quantity to Backflush will be adjusted as follows:

- A = Qty To Backflushed on the final MO Receipt as calculated by GP. This is the quantity to consume based on the quantity produced (received) on the current MO Receipt.
- B = Quantity Required of the item (the total Picklist quantity)

- C = Quantity Backflushed to date
- D = Adjusted Qty To Backflush. This is the number that will be used on the Final MO Receipt so that the 141-item is fully consumed.

$$D = B – (A + C)$$

Setting the correct bins on the final MO Receipt
The item being received will automatically go into the bin assigned on Sched. Pref. Bins window, for the “Post To Bin”.

The components will be drawn from the bin assigned on the Sched. Pref. Bins window for the “Draw From Bin”.

This will require modifying a SQL Stored Procedure used by Manufacturing. The stored procedure is: mmopAllocateBinQuantities.

We will provide the modified version as a tSQL script, with instructions on how to drop the original, create the modified version, and grant necessary permissions. This process will need to be performed manually in each company database where this customization is active.

Activating the modification inside GP as described in the next section will only apply to the dexterity part of this customization. There will be no way to selectively activate/deactivate the modified stored procedure. It must be manually created in an activated company. If deactivating a previously activated company, the stored procedure must be manually dropped and replaced with the original. There will be no software-side support for this process.

Our support plan will cover testing to make sure the modified stored procedure will run fine in a new release of GP, but somebody on-site must still be responsible for verifying the modified stored procedure was not overwritten by a service pack or upgrade.

Setup	**CCDA**
Navigation: Tools >> Setup >> Company >> ACMECO Setup A checkbox will be unmarked by default. All of the functionality above will only be enabled if the box has been marked. This setting enables/disables the modification on a per-company basis.	