Bin Overview

Owner of this document is: Scott Wiacek – swiacek@feedingamerica.org

Purpose of this document

This document illustrates the general function of using Bins in Ceres. Bins in Ceres is the equivalent of Warehouse "Locations" in standard warehousing terminology.

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Purpose

Zones and Bins comprise the basic sub structure of a Location (warehouse/building). Bins are physical storage units that are used for storing items. A Bin can be anything from a specific slot on a rack to general area within a Zone. In Ceres, at least one Location, Zone and Bin must be defined for Inventory.

The warehouse hierarchy within Ceres is Location → Zone → Bin. Bins are the smallest unit of the warehouse logical structure. Parameters that are defined at the Zone level flow to Bins underneath it. This document describes the parameters available for a Bin. Refer to the Inventory Process Flows Procedure for more information on warehouse entities and their relationships.

Ceres object release 4.00.00 is required for the functionality documented in this procedure.

Accessing Bins

1. Bins for a Location can be accessed from the Location List from Departments → Warehouse → Administration → Setup → Locations.
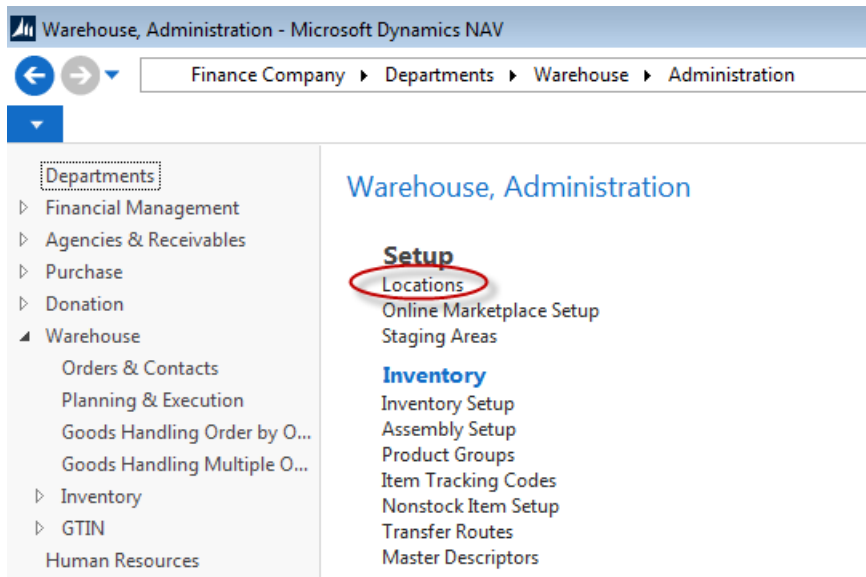
2. Select a Location from the List that displays.

3. Select Navigate → Location → Bins to view the Bins List which will display all Bins related to the Location. Bins specific to a Zone can also be accessed from the Zone from Navigate → Zone → Bins.

    Note: Fields listed on the Bin List may be in a different order depending upon user applied customizations. Additionally, not all fields are displayed here.

4. Select Home → New create a new Bin within the Location or Location/Zone combination. Update the Zone fields based on how your warehouse is configured and how you would like the warehouse functionality to work in Ceres.

Code: This is the main identifier for the Bin, which can be entered as any combination of text and numbers (up to 20 characters). The Code value must be unique within a Location, not just a Zone.

Alt Code: Specify an Alternative Code here if you would like to reference the Bin by another Code when using ADCS Handheld functionality. If during ADCS Handheld transactions Ceres is unable to find the related Bin by the ADCS Location and the text value provided by the Handheld, Ceres will attempt to find the Bin using the ADCS Location and the Alt Code.

Description: This field provides the description of the Bin. Up to 50 characters (text and numbers) can be entered in this field.

Zone Code: This is the Zone the Bin is attached to.

Location Code: This is the Location the Bin is attached to.

Bin Type Code: This field provides the ability to designate the Bin Type that applies to the Bin. The Bin Type determines how Ceres will use the Bin in warehouse activities related to the inbound and outbound flow of items. The Bin Type Code can be selected from the List or can be entered manually. The Bin Type Code is used for filtering available quantity. Only quantities that are in a Bin with a Bin Type Code of Put Away, Pick, or both will display as available quantity.

Bin Class Code: This field provides the ability to designate the Bin Class Code for the Bin. This allows the food bank to designate a class of Bin that an Item should be put-away in or dropped

to. An example of their use would be if you have special bins for chemicals. The Bin Class Code can be selected from the List or can be entered manually. The Bin Class Codes that can be entered are limited to the values in the edit assist list.

Bin Ranking: This field indicates the ranking of the Bin. With all other inventory attributes ("Bin Process Order", "Expiration Date", "Consume by Date", "Received Date") being equal, Ceres will suggest inventory from the Bin with the **highest** number. This field is numeric only.

Block Movement: The field contains the option selected to indicate how the movement of items into or out of the Bin is blocked, if at all. The options are:

> **Blank** – No movement is prevented
> **Inbound** – Items cannot be moved into the Bin
> **Outbound** – Items cannot be moved out of the Bin
> **All** – All movements are blocked.

Empty: A checkmark in this field indicates that the Bin contains no items.

Warehouse Class Code: This field provides the ability to designate the Warehouse Class Code that applies to the Bin based on how you store an item. If used, Items stored in the Bin must have the same Warehouse Class Code as the Bin. The Warehouse Class Code can be selected from the List or can be entered manually.

Special Equipment Code: This field contains the code of the special equipment to be used when you work in this Bin. The Special Equipment Code can be selected from the edit assist list or can be entered manually.

Maximum Cubage: This field suggests the maximum cubage (volume) that the Bin can hold. This field is numeric only. Note that it is not a hard limit.

Maximum Weight: This field suggests the maximum weight that the Bin can hold. This field is numeric only. Note that it is not a hard limit.

Default: This field does not provide applicable functionality in Ceres. Its intended purpose (to provide preferred Bin selection) has been replaced with "Last Used Bin", "Single Bin", Put-away Templates, and WAP Templates.

> a. **Last Used Bin** – The Bin Content table records the Bin that was last used for a picking or put away transaction.
> b. **Last-Used Pick Bin** – Ceres will suggest the last used pick bin when running the Create WAP process when any of the following have been specified as criteria for the WAP Template.
> > i. Empty Bin
> > ii. Not Full with Same Item
> > iii. Last Used Pick Bin
> c. **Last-Used Put-away Bin** – Ceres will suggest the last used put away bin when creating inventory put away documents. Its use is contingent upon the following criteria.
> > i. The Location requires put away.

ii. The Location does not require receive.
iii. The Receipt Bin Code has not been specified for the Location.
iv. A Put away Template Code has not been specified for the Location.

d. **Single Bin** – Ceres considers a Bin to be the Default only when one Bin exists within a Location's Zone.

Note: For more information on put away and WAP templates refer to Ceres documentation Warehouse Activity Plan & WAP and Default Pick Bins.

Cross-Dock Bin: A checkmark in this field indicates that the Bin is considered a Cross-Dock Bin.

Max. Pallets: This field is a guide as to the maximum number of pallets that should be placed in a Bin. Please note that this is a guide and not a restriction as to the number of pallets that Ceres will allow to be placed in a Bin.

Note: The usage of "Max. Pallets" is complemented by the Consider Pallet Empty % setup option for the Bin's related Location. For example a value of 10% in the Consider Pallet Empty % setup option dictates that a pallet with 10% or less of its original quantity should be considered as empty and thus does not occupy space within the Bin. A configuration such as this allows Ceres to suggest placement of a pallet (up to the Bin's Max. Pallets) at the "empty" pallet's Bin during put away and WAP operations.

Row No.: The row number is used by the Warehouse Activity Plan (WAP) process to determine the closest Bin. The WAP determines the closest Bin by looking at the Bins' Row Nos. in increments of one. (i.e. If the Item is currently in a Storage Bin with a Row No. of 5 it will look for an empty Pick Bin in Row No. 5 first, then look in 4 & 6, then 3 & 7, then 2 & 8, etc. until it finds an empty Pick Bin).   The lower Row No. will always be used first. This field is numeric only.

Using Directed Put-away and Picks

If you are using directed put-away and pick, you have zones available to you in addition to some advanced bin options. When you select a zone for the bin and then create the bin, the program fills in four of the Bin fields – Bin Type Code, Warehouse Class Code, Special Equipment Code, and Bin Ranking - with the values defaulted from the corresponding zone. You can change these field values as necessary. When you create a bin without selecting a zone first, you must fill in all the fields manually. To achieve an optimal routing of items through the warehouse, you must accurately fill in the Bin Type Code, Bin Ranking, Maximum Cubage and Maximum Weight fields for each bin.

Note: The following fields are only active when used in connection with Directed Put-away and Pick: Zone Code, Bin Type Code, Warehouse Class Code, Block Movement, Special Equipment Code, Bin Ranking, Maximum Cubage, Maximum Weight, Cross-Dock Bin as described above.

Picking Sequence No: This field is used to identify the preferred picking sequence. It controls the order in which pick document information is sent to Voxware. Since Voxware cannot sort the data imported from Ceres, this field allows Voxware to present pick transactions in a sort order that provides for efficient warehouse navigation by the warehouse employees.

Yellow Check Digit: Specify an integer value here to indicate that this Bin's check digit color is yellow. Refer to Ceres Voxware documentation for more information about this field and its use.

Red Check Digit: Specify an integer value here to indicate that this Bin's check digit color is red. Refer to Ceres Voxware documentation for more information about this field and its use.

Green Check Digit: Specify an integer value here to indicate that this Bin's check digit color is green. Refer to Ceres Voxware documentation for more information about this field and its use.

CMobile Route: This setting of this field is controlled by the field of the same name on the Zone. It is used internally to control inventory availability calculations when using CMobile Handheld functionality

Leased Storage: This field is used to identify a Bin as being leased. The inventory contained within a leased Bin is segregated form distributable warehouse inventory so that it is not available for inventory transactions.

Leased Storage Pallets: This field is calculated by Ceres and indicates a count of pallets contained within a Leased Storage Bin.

Related Topics:
1. Agency Order Overview
2. Inventory Picks
3. Inventory Process Flows
4. Leased Warehouse Overview
5. Location Overview
6. Voxware Overview and Integration
7. Warehouse Activity Plan – WAP
8. Warehouse Activity Plan and Default Bin Picking
9. Warehouse ADCS Processing
10. Warehouse Put-Away Overview
11. Warehouse Receipting Overview
12. Zone Overview