# MEMBER BUSINESS FEEDING SOLUTIONS AMERICA



# **Kitting Overview**

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#### Purpose of this document

This document illustrates how to setup, manage and build Kits, like backpacks or food boxes in Ceres.

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# Table of Contents

PURPOSE	.3
SETTING UP KITTING	.3
SPECIFYING SUBSTITUTE ITEMS ON THE KIT BOM	.6
SETUP THE KIT ITEM	.8
BUILDING KITS FOR INVENTORY	.8
DISASSEMBLY OF KITS IN CERES	12
RELATED TOPICS:	16

## Purpose

The Kitting process provides the user with the tools necessary to setup, manage and build kits. Kitting allows the grouping and packaging of items together to properly track inventory and costs associated with the components of the kit. Building kit items also facilitates the ability to expedite agency orders by distributing the pre-assembled kits. When creating the kit bill of materials, Ceres allows for the inclusion of substitute items which can be used if sufficient quantities of a primary item are not found. Common uses for kits within the food bank include USDA boxes and some child nutrition programs such as a "Backpack" program. Please note that there is another document for Advanced Kitting, which involves more cost tracking components.

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

# **Setting up Kitting**

- 1. There are four steps to setting up kits that must be accomplished before you can start building kits with Ceres.
  - i. Create all the component items that will go into the kit if they do not already exist in the inventory system. Setup of items is beyond the scope of this document. Refer to documentation on setting up items in inventory for more help.
  - ii. Create the kit item card. Kit items are setup very similar to regular items with a few small exceptions that will be documented later in this document.
  - iii. Create a kit bill-of-materials detailing the components contained in the kit and the quantity of each component in the kit.
  - iv. Associate the kit bill-of-materials with the kit item.
- Once you have created the component items and kit item in the inventory system you can continue with the creation of the kit bill-of-materials. Go to Departments → Warehouse → Planning & Execution → Kit BOMS.



3. To enter a new Kit BOM, click Home → New. To edit an existing Kit BOM, click Home → Edit and the Kit BOM card will be displayed. The Kit BOM consists of two FastTabs; General, and Kit BOM Lines.

Kit BOMs - Microsoft Dynamics NAV				
🗲 🕞 🔻 🛅 Finance Company	<ul> <li>Departments</li> </ul>	<ul> <li>Warehouse          <ul> <li>Planning &amp;</li> </ul> </li> </ul>	Execution + K	it BOMs
HOME NAVIGATE				
1) / A X		<b>N –</b>	S 🖹	
	Show Show as as List Chart	OneNote Notes Links	Refresh Clear Filter	Find
New Manage	View	Show Attached	Page	
Departments > Financial Management	Kit BOMs	•		
<ul> <li>Agencies &amp; Receivables</li> <li>Purchase</li> </ul>	No.	Description	Status	Unit of
<ul> <li>Donation</li> <li>Warehouse</li> </ul>		<b>▲</b>		Measure Code
Orders & Contacts	6F KIT BON	/ 6F Kit BOM	Certified	EACH
Planning & Execution	BPKIT-2	Kit BOM for BPKIT-2	Certified	CASE
Goods Handling Order by Order	BPKITA-1	Kit BOM for BPKITA-1	Certified	CASE
Goods Handling Multiple Orders	KCF0001	Kids CAfe SLP August 2012	Certified	EACH

#### **General FastTab**

#### BPKIT-2 · Kit BOM for BPKIT-2

General			^
No.:	BPKIT-2	Search Name:	KIT BOM FOR BPKIT
Description:	Kit BOM for BPKIT-2	Last Date Modified:	2/5/2014
Unit of Measure Code:	CASE 👻	Process Substitutions By:	Using Substitute 👻
Status:	Certified 🗸		

**No.:** This is the main identifier for the Kit BOM, which can be entered as any combination of text and numbers. Ceres can be set up to automatically number each Kit BOM Card for you, or you can enter the number manually. While the Kit BOM can be any number, many food banks will associate the Kit BOM number with the kit item card as we have done here. Kit BOM "KCK001" will be used on kit item "KCK001". If you intend to keep old kit BOMs you might consider a No. that incorporates the item number and a time period. (For Example: KCK001-Nov-2010) This can be useful to later see what components where used in previous builds.

**Description:** Here you can enter a descriptive title of the Kit-BOM. If you intend to keep old billof-material Kit BOMS it might be helpful to enter a time period as part of title (For example: Kid's Café Backpack Nov 2010). **Unit of Measure Code:** This unit of measure should match the base unit of measure of the kit item.

**Status:** There are four statuses to choose from. You will only be able to build items with a Kit BOM status of "Certified". The other statuses are available to show various stages of the KIT BOM. The available statuses are:

**New:** Indicates a new or planned Kit BOM. This status usually indicates the Kit BOM has never been built before. Modifications to the Kit BOM are allowed under this status.

**Under Development:** Indicates a Kit BOM that has been used in builds before, however is now undergoing some modifications. If you wish to make changes to a Kit BOM that has a status of Certified, you must change it to this status "Under Development" before making the changes.

**Certified:** This status indicates that Kit BOM is complete and ready to be used in builds. Changes to the Kit BOM are not allowed under this status.

**Closed:** This status indicates that the Kit BOM is no longer in use but is being retained for historical purposes. No changes to the Kit BOM are allowed under this status. Kit BOM with a status of "Closed" can be reopened by changing the status to "Under Development" or "Certified"

**Note:** Ceres does not prevent the changing of status of a Kit BOM in any way at any time. The different statuses allow users to accurately identify the correct status of a Kit BOM and also prevent builds of kits that are not yet ready for building and also the accidental changes of Kit BOMs.

**Search Name:** Here you can enter a search name. You can use the Search Name field to search for a Kit BOM when you cannot remember the Kit BOM number. "USDA November 2010" for example. When you enter something in the Description field and press *Tab*, Ceres automatically copies the contents to the Search Name field. The contents of the Search Name field do not need to be the same as those of the Description field.

**Note:** If the search name was inserted automatically by Ceres, it will be changed each time you change the Description field. If you inserted the search name manually, it will not be changed automatically when the Description field is changed.

**Last Date Modified:** This field is updated by Ceres and will reflect the date the kit was last changed.

**Process Substitutions By:** This field is disabled. Currently Ceres only support "Using Substitute Item".

#### Kit BOM Lines FastTab

Kit BOM Line	S			
Component •	Find	Filter 🛛 🏹 Clear Filter		
Туре	No.	Description	Quantity per	Unit of Measure Code
Item	BPC0744A	A-2 Rice w/Chicken and Veg-2	5	EACH
Item	BPC0753A	A-2 Peaches-2	5	EACH
Item	BPC0779A	A-2 Apple Strip Fruit Snack-2	10	EACH

**Type:** Enter the type of line from the list. You may choose from "Blank" or Item. The line types of resource and setup resource are not used in Ceres at this time.

Blank - You can enter a comment line on the Kit BOM using the Description field

**Item** – This is the most common line type. Use this type to enter the component lines on the Kit BOM.

**Item No.:** Here you can enter the item number of the component. Use the assist button to access the drop-down list of items.

**Description:** When entering an item line, this field will default to the description of the item entered. You can alter the description if desired.

**Quantity Per:** Here you can enter the quantity of this item that is needed to build one of the kits. The quantity is based on the base unit of measure of the component item. The unit of measure will default from the item card once you have entered the component item no. If the component is a case item and the quantity needed is less than a full case you will need to enter the quantity as a fractional quantity of the case. For example if the component item is a case that contains 24 units (EA) per case, you can enter this quantity as 1/24. Ceres will perform the calculation for you and change the quantity to the correct decimal value (0.04167 in this example). Ceres will handle these fractional quantities, but as a business practice, you may decide to keep the component inventory in units (EA) as it may be difficult to track inventory by fractional cases.

**Note**: When you have completed entering the components on the Kit BOM, it is important to set the status to "Certified" before you will be able to start the building of kits in Ceres.

### Specifying Substitute items on the Kit BOM

1. Ceres allows for the specification of substitute items on the Kit BOM Line. In instances where a sufficient quantity of a primary item is not available to build the desired number of kits, Ceres will try and use substitute items to complete the build. To specify a substitute item for a Kit BOM line, first click on the line in the Kit BOM Lines FastTab you wish to use.

Kit BOM Line	es			*
Component	- 🎢 Find I	Filter 🛛 🏹 Clear Filter		
Туре	No.	Description	Quantity per Unit of Measure Code	
Item	BPC0744A-2	Rice w/Chicken and Veg-2	5 EACH	
Item	BPC0753A-2	Peaches-2	5 EACH	
Item	→ BPC0779A-2	2 Apple Strip Fruit Snack-2	10 EACH	

2. To access the kit line substitutions click Component  $\rightarrow$  Substitutions.

Kit BOM Lines			
Component 🝷 🎢 Find	Filter 🛛 🏹 Clear Filter		
Comments Where-Used	Description	Quantity per	Unit of Measure Code
Substitutes			

3. Here we have substituted item BPC0799A-1 for BPC0799A-2. Enter the item number of the substitute item in the "Substitute Item No." field. If the weights are different between the primary item and the substitute item, you will receive a warning.

Kit BOM Line	S		Lu Edit - Kit BOM Comp. Substitutes - BPC0779A-2 · BPKIT-2	
Component *	👫 Find 🛛 Filt	ter 🛛 📉 Clear Filter	HOME	
Туре	No.	Description	View OneNote Notes Links Refresh Clear	Go to Previous
Item	BPC0744A-2	Rice w/Chicken and Veg-2		Next
Item	BPC0753A-2	Peaches-2	Manage Show Attached Page	
Item	BPC0779A-2	Apple Strip Fruit Snack-2	BPC0779A-2 · BPKIT-2	
			No. No.	
			BPC0779A-2 BPKIT-2 BPC0779A-1 Apple Strip Fruit Snaci	k-1

# Setup the Kit Item

You must now associate the kit item with the Kit BOM. This can be done from the Item Card. Go to Departments  $\rightarrow$  Warehouse  $\rightarrow$  Planning & Execution  $\rightarrow$  Lists  $\rightarrow$  Items to access the Item Card. Navigate to the kit item. Select the Kitting Fast Tab and fill in the "Kit BOM No" field and check the "FB Kit Item" field. The "Kit Disassembly BOM No." field will default to the same as the "Kit BOM No." field. You may use the drop-down list to select from a list of available Kit BOMs.

BPKIT-3 · Backpack Kit #3					
General				BPKIT-3 CASE	• 0
Distribution				FIFO 0.00 B	(SK 🗸
Replenishment				Prod. Or	der 🗸
Planning				Optio	nal 👻
Item Tracking					~
Warehouse				CASE	~
Kitting (Ceres)					^
Kit BOM No.: BF	PKIT-2	•	FB Kit Comp. Generic:		
Kit Disassembly BOM No.: BF	РКІТ-2	•	Kit Component Item:		
Automatic Build Kit BOM:			Bulk Break Location Code:	-	
FB Kit Item:	$\triangleright$		Bulk Break Bin Code:		•

# **Building Kits for Inventory**

Building kits in Ceres is accomplished through the BOM Journal. The BOM Journal handles the receipt of finished kits into inventory and the posting the consumption of components relieved from inventory. Go to Departments  $\rightarrow$  Warehouse  $\rightarrow$  Inventory  $\rightarrow$  Tasks  $\rightarrow$  BOM Journals to access the BOM Journal Page.



1. Begin by filling in the "Posting Date", "Document No.", and then enter the Kit Item to be built in the "Item No." field.

- 2. Set the "Entry Type" to Assembly. This should be the default entry.
- 3. Fill in the location and bin where the finished goods are to be stored when completed.
- 4. Select the proper "FBC Product Source Code" for this build.
- 5. The "FBC Product Category Code" will default from the kit item's record. If it is blank you will also need to enter a valid code in this field.
- 6. Enter the quantity of kits to be built in the Quantity field.



7. Next you must assign a new lot number to the kit item. This is done by clicking Actions → Assign Lots.

•	HOME	ACTIONS	NA	VIGATE								
Brea	ak Bulk ponents				Abort Break Bulk Components Functions	<ul> <li>Reverse Break Bulk Components</li> <li>Suggest FB Kit Disassembly</li> <li>Delete Advanced Kitting Lines</li> </ul>	Test Report	Postine	Post and Print	BOM Journal	Kitting Report	Kitting Reconciliation Report Print

8. Ceres will prompt you with following message. Select "Yes" to assign the lots. Upon successful assignment of the lots, a confirmation dialog box will be displayed.



9. At this time you may enter the "Lot Expiration Date" and "Lot Consume by Date" if desired

10. The next step is to retrieve the components from the kit. This process has been enhanced in Ceres to automatically select the component inventory utilizing the FEFO (First Expired First Out) method. Ceres will select the correct lots, bins and quantities for each component pulling from multiple lots if necessary. It will also handle the substitutions if necessary. To retrieve components click Actions → Retrieve Components.



11. If there is insufficient component quantity to create the kits, an error will display. To resolve, you can setup substitutions for component with insufficient quantity, reduce the number of kits you are creating, or update the Kit BOM with a different component. In this example, the number of kits that are being created was reduced from 100 to 10.



12. Once the components have been retrieved you can view the kit lines by clicking Navigate  $\rightarrow$  Kit Lines.



13. Currently Ceres does not allow any changes to the kit lines for non-palletized items. You can close the display of the Kit BOM Journal Lines by clicking on the OK button.

📶 Edit - Kit BON	/I Journal Lines - DEFA	ULT · Default Journal							
<ul> <li>HOME</li> </ul>	NAVIGATE								
View Edit List List	Show Show as as List Chart	OneNote Notes Links		lear Find					
Manage	View	Show Attached	P	age					
Kit BOM Jou	urnal Lines • No. Desc	ription	Pallet No.	Bin Code	Lot No.	Quantity per	Unit of Measure Code	Extended Quantity	Applies-to Entry
Item	BPC0744A-2 Rice	w/Chicken and Veg-2		01-101-C	LOT-02639	5	EACH	50	0
Item	BPC0753A-2 Peac	nes-2		01-103-D	LOT-02641	5	EACH	50	0

14. You can print a list showing the kit build by clicking Actions  $\rightarrow$  BOM Journal



15. This is a sample report showing the kit to be assembled and each component needed with quantity and location of each. The Kit is shown with an Entry Type of Assembly and the components with an Entry Type of blank.

BOM Movement Finance Company Journal Template Name BOM Journal Batch Name DEFAULT							Monday, Au	igust 25, 2014 3:29:12 PM Page 1 KJK
BOM Journal Line: Journal Templat	e Name: BOM, Journal Batch Name: D	DEFAULT						
Posting Entry Type Date Item No.	Description	Variant Code	Location Code	Bin Code	Lot No.	Pallet No.	Unit of Qty. Per Measure C	Ext. Qty.
Assembly 08/20/14 BPKIT-3	Backpack Kit #3		KAN	01-101-B	LOT-03148		1 CASE	10
Item BPC0744A	2 Rice w/Chicken and Veg-2		KAN	01-101-C	LOT-02639		5 EACH	50

16. If the kits you are creating are a palletized item, you will need to create pallets before you can post the BOM Journal. Enter a quantity in the Tier and Height field. Then click Actions  $\rightarrow$  Create Pallets.



17. Ceres will prompt you with following option. Select one of the options to create pallets and/or print labels. Upon successful creation of the pallets, a confirmation dialog box will be displayed.



18. Posting the BOM journal is the final step in building the kit. Click Actions  $\rightarrow$  Posting  $\rightarrow$  Post. Alternatively you can select "Post and Print".



- 19. Ceres will prompt you to confirm the posting of the BOM Journal. Answer "Yes" to post the BOM Journal. Once completed, Ceres will confirm successful posting of the journal.
- 20. The entries that were created can be viewed from the Item Ledger Entries.

HOME	ACTIONS N	AVIGATE									0						- 9		
														0	Search (Ctrl+I	F3)			
	l der								In View	- Item Le	dger Entries								
Tra	acking nctions								<b>•</b>	HOME	ACTIONS	NAVIGAT	E						
em Ledge	er Entries •						Type to filter (F3)	Posting Dat	Navigat		ow Show as	OneNote	Not	es Links	Refresh Clea	r Find			
how results:									Process		View	Sho	w Att	ached	Pag				
✓ Where ] ► Add Filter	Item No. 🔻 is	BPKIT-	3						Item I	Ledge	r Entries •						Тур	e to filte	er (F3)
Posting	Entry Type	Docu	Docum	Item	Descrip	Reason	Location	Quantity P	Show re	esults:									
Date	Entry Type	Туре	No.	No.		Code	Code	Quantity P	🗙 Wh	ere D	Oocument No.	▼ is	IBJ-0	0058					
	<b></b>		101 00050	BPKIT-3		1077-014			🗙 And	J P	Posting Date	▼ is	08/2	0/14					
8/20/2014	Output			BPKIT-3		KITCV KITCV	KAN KAN	-10	+ Add	Filter									
8/25/2014	Negative Adjmt.		IBJ-00059	BPN1-3		KIICV	KAN	-10	Posti Date		Entry Type	Do No.	*	Item No.	Reason Code	Location Code	Qua	Pallet No.	Lot No.
									8/20/	2014	Output	IBJ-0	0058	BPKIT-3	KITCV	KAN	10		LOT-03
									8/20/	2014	Consumption	IBJ-0	0058	BPC0744A-2	KITCV	KAN	-50		LOT-02
									8/20/	2014	Consumption	IBJ-0	0058	BPC0753A-2	KITCV	KAN	-50		LOT-0

## **Disassembly of Kits in Ceres**

Once kits are built in Ceres, it may still be possible to disassemble the kits back into component inventory. This function is called "FB Kit Disassembly" and can be accessed from the same BOM Journal used to build the kits originally. Ceres will allow the disassembly process to return the components back to unit component inventory or completely to the bulk items they were taken from. This can be useful if some reason, the wrong bulk items was used in the creation of the kits. To being the disassembly function. Go To Departments  $\rightarrow$  Warehouse  $\rightarrow$  Inventory  $\rightarrow$  Tasks  $\rightarrow$  BOM Journals to access the BOM Journal Page.



1. From the BOM Journal click Actions  $\rightarrow$  Suggest FB Kit Disassembly.

•	HOME	ACTIONS	NA	VIGATE							
	ak Bulk	Retrieve Components		Create	Abort Break Bulk	Suggest FB Kit Disassembly Delete Advanced Kitting Lines	Test Report	Post	Post and Print	Kitting Report	Kitting Reconciliation Report
					Functions			Posting	9		Print

- 2. This will open the disassembly Page where you can filter to isolate the kits you wish to disassemble.
- 3. For Non-Advanced Kitting, on the Options tab the only valid selection is for the disassembly process to return inventory to the Each (UOM) (i.e. Unit Components).
- 4. In the Document No field input the Document No that was assigned to the Kits when they were built. This information can be obtained from the Item Ledger Entries.

Edit - Suggest FB Kit Disassembly	- • •
<ul> <li>ACTIONS</li> </ul>	0
Clear Filter Page	
Options	^
8/25/2014 -	
Each (UOM) 👻	
Item Ledger Entry	~
Show results: ★ Where Item No. ▼ is BPKIT-3	
X And Document No. Vis IBJ-00058	
+ Add Filter	
ОК	Cancel

5. Click OK to continue. Ceres will return the followinig message.



6. Ceres will dissameble the kits and the associated components.

📶 Edit - BOM Jour	nal - DEFAULT	· Default Journal													• ×
HOME	ACTIONS	NAVIGATE													0
Dimensions Kit Lines	Bin s Contents	Card Ledger Entries Av Item	Item vailability by •	Item Trans Journal Jour View											
Batch Name: D	EFAULT	•													
Posting Date	Status	Entry Type	Document No.	Item No.	Description	Pack S	ze	Location Code	Pallet No.	Lot No.	Bin Code	Quantity	Lot Consume by Date	Lot Expiration Date	Ship t
8/25/2014 👻	Not Started	Disassembly	IBJ-00059	BPKIT-3	Backpack Kit #3	10 back	packs per case	KAN		LOT-03	01-101-B	10	12/31/9999	12/31/9999	12/31/
				📶 Edit -	Kit BOM Journal	Lines - DEFAU	JLT - Default Journ	nal							
				•	HOME NAVIO	GATE									0
•		m	1	View List Mai	Edit List nage	Show as	OneNote Note		Refresh Cle Filt Pa	er					
Doc				Kit BC	DM Journal	ines •					[	Type to filter (F3)	Type		• <b>→</b> •
											L		Filter: BOI	M • DEFAULT	• 10000
				Тур	e No.	Desc	ription		Pallet No.	Bin Code	Lot No.	Quantit	y per Unit of Measure Code		Extended Quantity
				ltem	BPC07	44A-2				01-101-C	LOT-0263	19	1 EACH		50
				Item						01-103-D	LOT-0264		1 EACH		50
пе				Item	BPC07	79A-2				01-105-B	LOT-0264	3	1 EACH		100
ted Documents				•					m						•
partments															OK

7. Click Actions  $\rightarrow$  Click Actions  $\rightarrow$  Posting  $\rightarrow$  Post. Alternatively you can select "Post and Print".



- 8. Ceres will ask you to confirm the posting. Select "Yes" and Ceres will then confirm the posting.
- 9. Ceres will prompt you to confirm the posting of the BOM Journal. Answer "Yes" to post the BOM Journal. Once completed, Ceres will confirm successful posting of the journal.
- 10. The entries that were created can be viewed from the Item Ledger Entries.

HOME	ACTIONS N	IAVIGATE							View - Item	Ledger Entries						
T	Order racking								номе			tes Links	Refresh Clea	ar Find		
Item Ledg	er Entries 🔹						Type to filter (F3)	Posting Da	Process	is List Chart View	Show Att	ached	Filte Pag		_	
Show results:									Item Ledg	jer Entries 🔹					Туре	to filter (F3)
X Where	Item No. 🔻 is	BPKIT-	3						Show results:							
+ Add Filter									X Where	Document No.	is IBJ-0	00059				
									X And	Posting Date	is 08/2	5/14				
Posting Date	Entry Type	Docu Туре	Docum No.	Item No.	Descrip.	. Reason Code	Location Code	Quantity	+ Add Filter	r osting bate						
	Entry Type Output		No.					Quantity 10		Entry Type	Do	Item No.	Reason	Location	Qua I	allet Lot No.
Date			No. IBJ-00058	No.		Code	Code		+ Add Filter	2		Item No.	Reason Code	Location Code		allet Lot No. Io.
Date 8/20/2014	Output		No. IBJ-00058	No. BPKIT-3		Code KITCV	Code KAN	10	+ Add Filter Posting	2	Do	Item No. BPKIT-3				
Date 8/20/2014	Output		No. IBJ-00058	No. BPKIT-3		Code KITCV	Code KAN	10	+ Add Filter Posting Date	Entry Type	Do No. 🔺		Code KITCV	Code	<u> </u>	lo.
Date 8/20/2014	Output		No. IBJ-00058	No. BPKIT-3		Code KITCV	Code KAN	10	+ Add Filter Posting Date 8/25/2014	Entry Type Negative Adjmt.	Do No.	BPKIT-3	Code KITCV KITCV	Code KAN	-10	lo. LOT-03148

# **Related Topics:**

- 1. Advanced Kitting Overview
- 2. Bin Overview
- 3. Item Overview
- 4. Item Journal Repack and Item Reclass