

# BlueCube to ESO

## Data Extraction and Loading

# Overview

This document describes the processes and user integration that are required in order to extract data from the Speedway specific version of Bluecube Enterprise and import the data into the latest version of JDA Enterprise Site Operations.

## Datasets to Extract and Load

The following data sets will be extracted and loaded. Note: as of 8/7 the filtering is not final and is subject to further review.

Import Name	Type	Filtering Conditions	Batch Method	Number of Files	Review Step
Business Units	E&L	Open business units	N/A	1	No
Business Unit Groups	E&L	Group has at least one not closed business unit assigned to it. Name starts "zsBUG".	50 Groups per batch	TBD	No
Organizational Hierarchy	E&L	Nodes that have at least one open site assigned to the lowest level.	N/A	1	No
Item Hierarchy	E&L	Nodes that have at least one item assigned to the lowest level.	N/A	1	No
Manufacturer	DB Script		N/A		
Retail Strategies	DB Script		N/A		
Retail Items	E&L	Items that are not purged, active, Xref code filtering, both unpurged and purged.	By Department, then 1,000 items per batch.	60	Yes
Retail Item Groups	DB Script		N/A		
Specials	E&L				
Supplier	E&L	Active Supplier with Supplier Item filter.	N/A	1	No
Supplier Assignment to Business Unit	E&L	Active Supplier with Supplier Item filter, business units not closed.	N/A	1	No
Supplier Assignment to Business Unit Groups	E&L	Active Supplier with Supplier Item filter, business unit group filter.	N/A	1	No
Supplier Items	E&L	Active and linked to and Item based upon Item Filters.	By Supplier & batches	1777	Yes
GL Accounts	XML		N/A		
Price Events	E&L	Events that contain prices currently in effect, and only those prices that are in effect.	By Event	TBD	No
BU Pricing for Cigs and Alcohol	E&L	Events that contain prices currently in effect, and only those prices that are in effect.	By groups of 4-5 Business Units	TBD	No

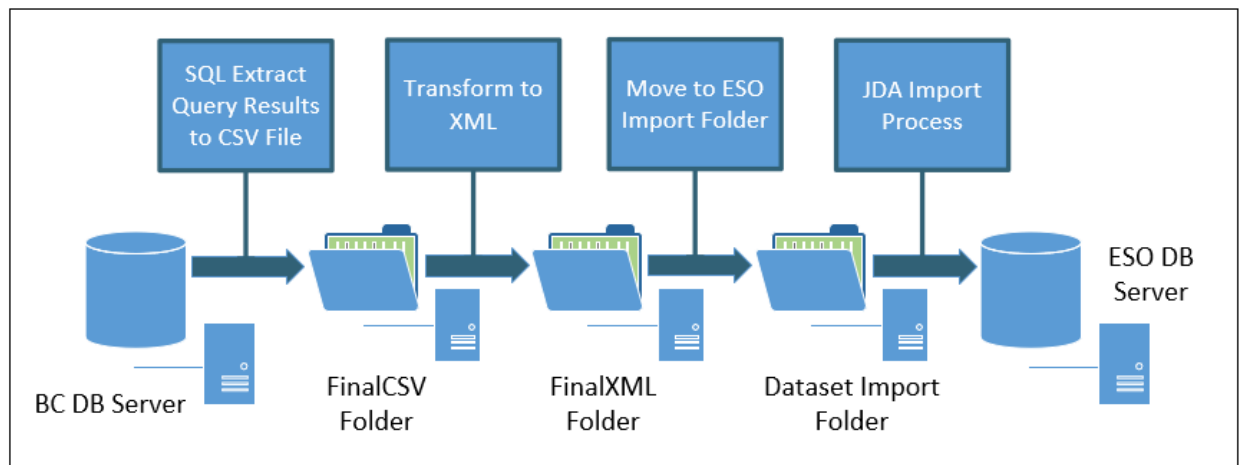
# Process Flow

There are two types of extraction and loading:

- Direct mode where the data is extracted, transformed, and imported into ESO.
- Review mode where someone will verify and cleanse the data before submitting it to be imported.

## Direct Mode

Process for Direct Mode, no user review.



### Direct mode uses 3 folders and 4 processes

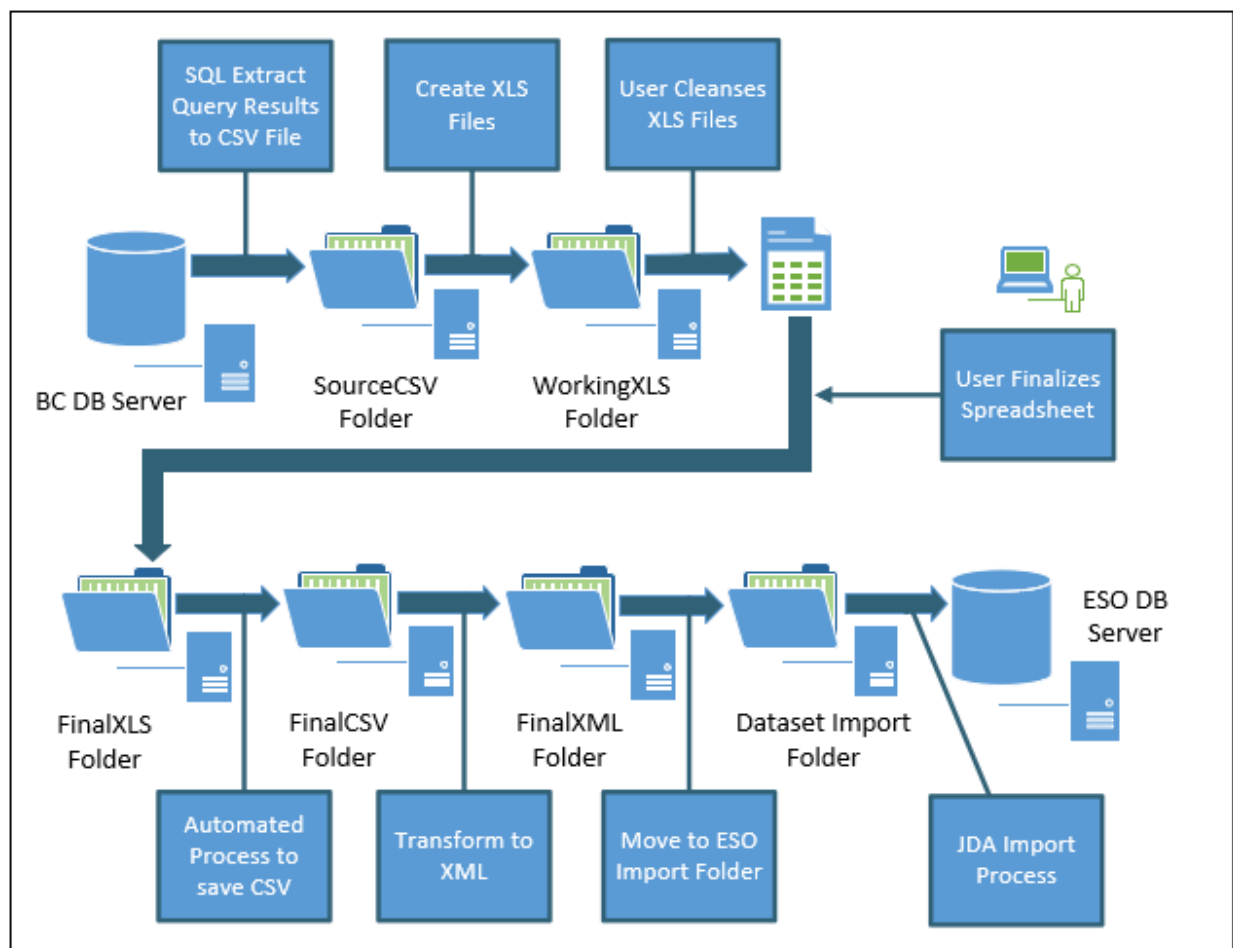
**FinalCSV** – A SQLCmd program will process a query and generate a comma delimited file. Because there is no review step, the extracted CSV is considered final.

**FinalXML** – A Jscript program and an XSL Transform will take final CSV files and convert the data into an XML file that matches the JDA ESO schema.

**Dataset Import Folder** – This is the standard JDA ESO folder that has directories for the client and each supported dataset. Files will be moved from FinalXML into the import folder either manually or via a command line script.

## Review Mode

### Process Flow for Review Mode



Review mode uses 6 folders and 7 processes

**SourceCSV** – A SQLCmd program will process a query and generate a comma delimited file. Because there is a review step, the extracted CSV is not considered final.

**WorkingXLS** – A Jscript program will convert the source CSV to an XLS file and place it in a working directory. In this directory the user can edit and save changes until the spreadsheet is finalized.

**FinalXLS** – Once the spreadsheet is final, the user must save it to a final folder.

**FinalCSV** – A Jscript program will convert the final XLS into a CSV and place it in the Final CSV folder.

**FinalXML** – A Jscript program and an XSL Transform will take final CSV files and convert the data into an XML file that matches the JDA ESO schema.

**Dataset Import Folder** – This is the standard JDA ESO folder that has directories for the client and each supported dataset. Files will be moved from FinalXML into the import folder, either manually or via a command line script.

# Review Spreadsheets

## Special Characters

Due to limitations and challenges with CSV files and Excel, special characters are used as place holders:

### **The underbar “\_”**

This character is used in front of a value that can be a number and have leading zeros. For example, a Business Unit Code of 009455 would be shown as \_009455. These underbars should be ignored and left alone. If a value is entered into a column that uses this technique (i.e., adding a new Barcode) the underbar must be entered by the user.

### **The tilde “~”**

Tildes are placeholders for commas within the actual data. For example - Enon, OH would be represented as Enon~OH. The tilde will be converted back into a comma during the transformation to XML. Technically tildes can be added or removed but should generally be left alone except to correct an error.

### **Asterisk “\*”**

If an asterisk appears in a column heading it generally means that the value is required for the first row of the Item, Retail Pack, or Supplier Item. There are more details described in each section, but a good rule of thumb is that if a column with an asterisk in the header already has a value, it should be retained or changed to another valid value, but not cleared out.

## Item

The Item spreadsheet allows a user to review the list of Items that have been extracted from the BC data. The extract process will create files per department with some of the larger departments segmented into smaller files. There will be an addition file for the list of Items that are not flagged for sale.

The spreadsheet template is hierarchical with 5 groups of rows

### Item ExternalID Key

Column A is the Item External ID. It must always have a value. The value is used to indicate rows that are related to the same Item. To remove an Item from the spreadsheet, all of the rows for the External ID must be deleted or an import error may occur.

A
Item ExternalID
10752
10752

### Common Item Properties

Common Items properties are those fields that are common for all Items even the Items that are not sold or tracked. When the row is blank it indicates that there are additional values to the right of the common properties.

A	B	C	D	E	F	G	H	I	J
Item ExternalID	Common Item Properties								
	Item Name*	Item Description*	SoldAs*	Category*	Base UOM Class*	Reported In UOM	Manufacturer	SKUNumber	Taxability*
10752	HERSHEY SYMPHONY ALMOND/TOFFEE		g	601 02 110 Hershey	Count		Hershey		Use Category Setting
10752									
192766	MONSTER REHAB GREEN TEA 4PK 15.5oz		g	601 13C 000 Energy	Count		Monster		Use Category Setting
192766									
192766									

### Notes:

The sold as flag is there for reference and should not be changed.

The Category should already exist before this spreadsheet can be saved to the final XLS folder.

Base UOM can only be Count, Weight, or Volume.

Taxability can only be, Use Category Setting, Taxable, and Non-taxable.

## Tracking

If an Item is configured for inventory, the values will be imported into the tracking section.

A	K	L	M	N	O	P	Q	R	S
Item ExternalID	Tracking								
	Active*	Track*	Expense Upon Receiving	Allow Fractional Quantities	Set Variance to Zero	Waste Tolerance	Missing Tolerance	Default Adjustme nt UOM	Default Transfer UOM
10752	y	y	n	n	n			Each	Each
10752									
192766	y	y	n	n	n			Each	Each
192766									
192766									

### Notes:

Unless these values are incorrect, the values should be left alone. If an Item needs to be marked inactive, it is probably better to remove the Item altogether.

## Selling – Base Properties

The base properties for Items that are sold are in a separate section. There will be a single separate spreadsheet for the Items that are not sold, so nearly all of the spreadsheets will have selling properties set.

A	T	U	V	W	X	Y
Item ExternalID	Selling					
	Base Properties					
	Retail Strategy	Prompt for Qty at POS*	Auto Queue Shelf Label*	Requires Swipe at POS*	Credit Category	Shelf Label UOM
10752	Default Strat	n	y	n		
10752						
192766	Default Strat	n	y	n		
192766						
192766						

### Notes:

Unless a value is incorrect, the value should be left alone. If a retail strategy change is needed, the ramifications to Price Event import need to be considered in order to prevent the loss of existing retail prices.

## Selling – Retail Packs

A sellable Item must have at least one retail pack.

A	Z	AA	AB	AC	AD	AE
Item ExternalID	Selling					
	Retail Packs					
	Pack Name*	Pack Qty*	External Id*	List Price*	Barcode Type*	Barcode Number*
10752	SINGLE	1	10752	0.85	c	_3400000159
10752	SINGLE	1			c	_341590
192766	SINGLE	1	192766	2.69	c	_9192766
192766	4-Pack	4	192766-4	6.99	u	_7084700855
192766	4-Pack	4			c	_7084700855

### Notes:

The Pack Name and Pack Qty must always have a value.

If the value of the List Price column is not empty, the row must have a value for the External Id for the Retail Pack. The source data will set this value and it should not be altered.

There is only one List Price allowed for the Retail Pack.

Barcodes are listed for each pack, they can be removed or added to.

If Barcode Number is present it should have a Type (c, e, g, u). UPC (u) and Custom (c) should be the most frequently used.

At a minimum a Barcode line must have the Pack Name and Pack Qty. The other values can be left blank.

If a Pack Name and Pack Qty are duplicated due to multiple Barcodes, the rows must still be grouped together.



## Supplier Item/Catalog

The Supplier Item spreadsheet allows a user to review the list of Supplier Items that have been extracted from the BC data. The extract process will create files per supplier with some of the larger suppliers segmented into smaller files.

The spreadsheet template is hierarchical with 5 groups of rows

### Supplier Identification

The Name and Xref of the Supplier will be at the top of the Spreadsheets. These values are for information only and should not be altered or an import error may occur.

A	B	
Supplier Name	MCLNSTHW- MCLANE SOUTHWEST (SW)	
Supplier Xref	MCLNSTHW	

### Product Code Key

Column A is the Supplier Item Product Code. It must always have a value. The value is used to indicate rows that are related to the same Supplier Item. To remove a Supplier Item from the spreadsheet, all of the rows for the Product Code must be deleted or an import error may occur.

A	
Supplier Name	MCLNSTHW
Supplier Xref	MCLNSTHW
Product Code	
_000018	HANG TABS
_000083	J LINKS POR
_000117	CLIF BAR SE
_000167	KENS HONE
_000570	KAMEL RED
_000570	

## Common Supplier Item Properties

Common properties identify the Supplier Item. When the line is blank it indicates that there is additional information in rows to the right of the common properties.

A	B	C	D	E	F	G	H	I	J
Supplier Name	MCLNSTHW- MCLANE SOUTHWEST (SW)								
Supplier Xref	MCLNSTHW								
Product Code	Item Name	Xref Code	Description	Status	Supplier Item Group	Supplier Package UOM	Package Qty	Availability Start Date	Availability End Date
_000018	HANG TABS/CT	10191054		a	77 01 000	Case - 500	500		
_000083	J LINKS PORK JRKY BBQ 2.85Z	91075563		a	601 04C 130	Box - 6	6		
_000117	CLIF BAR SEASONAL PECAN PIE	10197448		a	601 04 000	Case - 12	12		
_000167	KENS HONEY MUSTARD SAUCE	x2-184659		a	221 21 101	Each	1		
_000570	KAMEL RED BX 100 B1G\$0.50 OFF	1054774		a	501 01 800	Carton - 10	10		
_000596	KAMEL RED SMTH BX 100 B1G\$0.50 OFF	1054775		a	501 01 800	Carton - 10	10		

### Notes:

All of the fields can be modified, however unless there is an error the values should generally be left alone.

Supplier Groups will be created if not already present.

Package data will be created if not already present.

## Supplier Item Barcodes

A Supplier Item can have no Barcodes or multiple Barcodes. If there are multiple barcodes the Product Code line is repeated.

A	K	L
Supplier Name		
Supplier Xref		
Product Code	Barcode Type	Barcode Number
_000018	u	_055555064045
_000083	u	_017082876102
_000117	u	_722252161116
_000167	u	_041335363705
_000570	u	_012300114493
_000570	u	_012300114509
_000596	u	_012300114523

### Notes:

Since this information is usually provided by the supplier it is unlikely that this data should be edited. If a Barcode should be removed, the best approach would be to clear the field values without removing the row. If a Barcode needs to be added, the Product Code value must be set manually.

The screen example indicates the usage of the underbar “\_”. It must be preserved if any data is altered or new data is entered.

## Supplier Item Cost Levels

Each Supplier Item can have multiple Cost Levels and multiple prices for the cost level.

A	M	N	O	P	Q
Supplier Name					
Supplier Xref					
Product Code	Cost Level	Package Cost	Allowance	Start Date	End Date
_000018	Master	11.74	0	1900-01-01	2075-12-31
_000083	Master	25.9	0	1900-01-01	2075-12-31
_000117	Master	0	0	1900-01-01	2075-12-31
_000167	Master	3.73	0	1900-01-01	2075-12-31
_000570	Master	44.54	5	1900-01-01	2075-12-31

### Notes:

This information is provided by the supplier and should generally not be edited.

The spreadsheet can not be used to add cost for an unknown Cost Level.

Adding new costs can be accomplished, however the user must pay close attention to make sure that the cost Start Date and End Dates do not overlap for the same Cost Level.

## Relationship between Barcodes and Cost Levels

It is important to understand that the Barcode and Cost Level sections are independent lists. There is no relationship between the two. The example below indicates this. Product code 056382 has multiple Barcodes and 2 Cost Levels, but there is no relationship between the two groups.

A	K	L	M	N	O	
Supplier Name						
Supplier Xref						
Product Code	Barcode Type	Barcode Number	Cost Level	Package Cost	Allowance	S
_056382	u	_071720000052	Master	10.02	0	1
_056382	u	_071720000076	Detroit	11	0	1
_056382	u	_071720000083				
_056382	u	_0717200000847				
_056382	u	_0717200005088				
_056382	u	_0717200005286				
_056382	u	_071720305287				
_056437	u	_082657446769	Master	8.65	0	1