



# Matrix Processing by Item For Sage 100 2018

457 Palm Drive  
Glendale, CA 91202  
818-956-3744  
818-956-3746  
[sales@iigservices.com](mailto:sales@iigservices.com)

[www.iigservices.com](http://www.iigservices.com)



Information in this document is subject to change without notice. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose without the express written consent of Information Integration Group, Inc.

## **TRADEMARKS**

*MS-DOS* and *Windows* are trademarks of Microsoft Corporation.

SAGE 100 (formerly Sage ERP MAS 90 and 200) is registered trademark of Sage Software, Inc.

All other product names and brand names are service marks, and/or trademarks or registered trademarks of their respective companies.

**Table of Contents**

*Installation Instructions and Cautions*..... 3

    Wait! Before You Install – Do You Use CUSTOM OFFICE? ..... 3

    Registering IIG products..... 4

    ODBC Security..... 5

    Role Maintenance ..... 5

*Size & Color Matrix for Data Entries* ..... 6

    Inventory Management Options..... 6

    Item Maintenance ..... 9

    Matrix Code Maintenance ..... 13

    Purchase Order ..... 17

    Sales Order Entry ..... 19

*Visual Integrator* ..... 21

*ODBC Dictionary* ..... 21

## Installation Instructions and Cautions

**PLEASE NOTE:** *SAGE 100 must already be installed on your system before installing any IIG enhancement. If not already done, perform your SAGE 100 installation and setup now; then allow any updating to be accomplished automatically. Once SAGE 100 installation and file updating is complete, you may install your IIG enhancement product by following the procedure below.*

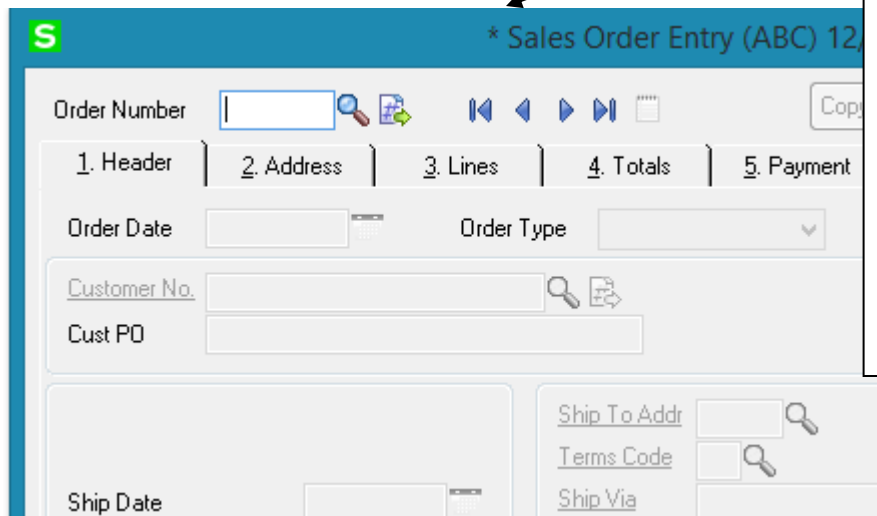
### Wait! Before You Install – Do You Use CUSTOM OFFICE?

**THIS IS AN IMPORTANT CAUTION:** *If you have Custom Office installed, **and** if you have modified any SAGE 100 screens, you must run **Customizer Update** after you do an enhancement installation.*

**But wait! BEFORE** you run **Customizer Update**, it is very important that you **print all of your tab lists**. Running **Customizer Update** will clear all Tab settings; your printed tab list will help you to reset your Tabs in Customizer Update. **Custom Office** is installed on your system if there is an asterisk in the title bar of some of the screens. The asterisk indicates that the screen has been changed.

An **asterisk** in a window's title bar indicates that the screen has been modified. This means that **Custom Office** is installed.

Follow all the instructions on this page before you run **Customizer Update!**



## Registering IIG products

IIG Enhancement should be registered to be able to use it. If registration is not performed, the enhancement will work in a demo mode for a limited time period. The registration can be still done during the demo period.

Select the **IIG Product Registration** program under the **Library Master Setup** menu of the SAGE 100.

If this option is not listed under the Library Master Setup menu, go to the main menu, and select **Run** from the **File** menu. Type in SVIIGR and click **OK**.

**IIG Master Developer Enhancement Registration**

Registered Customer: IIG - Glendale

Registration Information:

Reseller Name:

Serial Number: 1111111

Customer Number: 222222222

User Key: 3333333333333333

Product Key: 55555 55555 55555 55555 55555

Enhancement	Level	Release Date	Serial Number	Unlocking Key
IIG Enhancement	6.00		AAAAAAAAAAAAAAAAA	BBBBB

Buttons: OK, Undo, Print Registration Form, Close

Status Bar: IIG ABC 12/16/2016

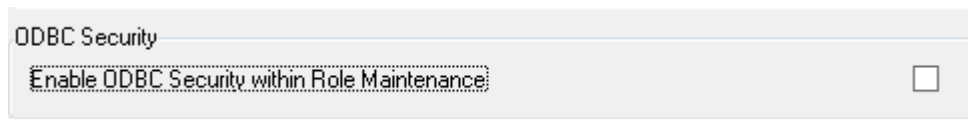
Enter **Serial Number** and **Unlocking Key** provided by IIG, and click **OK**.

If multiple IIG Enhancements are installed, Serial Numbers and Unlocking Keys should be entered for each enhancement.

Use the **Print Registration Form** button to print IIG Registration Form.

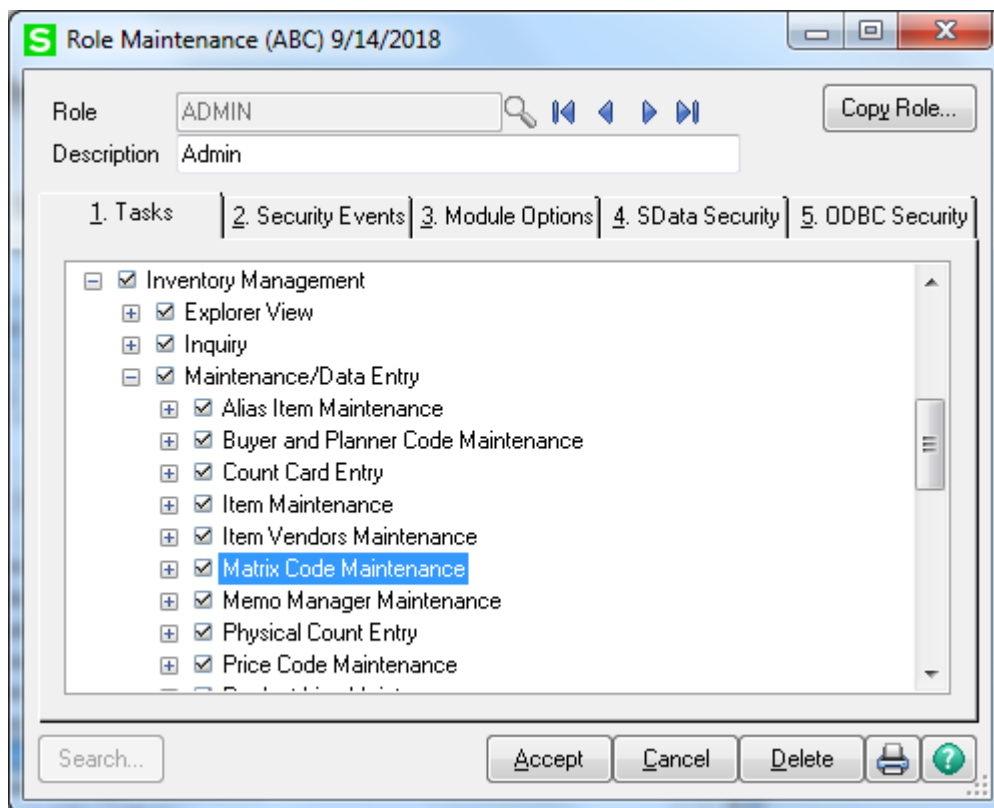
## ODBC Security

After installing an **IIG Enhancement**, it is **very important** to **verify** whether or not the **Enable ODBC Security within Role Maintenance** check box is selected in the **System Configuration** window of your system. If it is selected you must assign ODBC security permissions and allow access to custom data tables/fields for the Roles defined in your system.



## Role Maintenance

After installing an **IIG Enhancement**, permissions must be configured for newly created Tasks and Security Events.



## Size & Color Matrix for Data Entries

### Inventory Management Options

The **Matrix Processing by Item** section with **Master Item Code Style**, **Size** and **Color** fields have been added to the **Main** tab of the **Inventory Management Options** screen to allow for specifying the number of characters for respective segments of Master Items.

The first segment of Item Code “Style” indicates the size of Master Item Code. The second (Size) and third (Color) segments are intended correspondingly for indicating the number of characters for Size and Color.

Inventory Management Options (ABC) 9/14/2018

1. Main | 2. Additional | 3. Entry | 4. Printing

Require Multiple Warehouses ☒  
Reorder by Warehouse ☒  
Default Warehouse Code 000

Inventory Period  
Base Inventory Periods On Calendar Months  
Current Calendar Year 2018  
Current Period 09

Segment Substitution  
G/L Segment for Whse Postings Location

Enable Warranty Tracking ☒

Integrate with  
General Ledger ☒  
Job Cost ☐

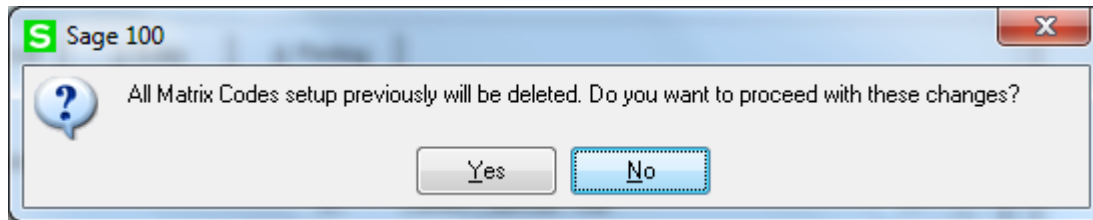
Track Warehouse Transfers as Issues ☐  
Calculate Commission by Inventory Item ☒  
Include in Quantity Available No POs and WOs

Matrix Processing By Item  
Master Item Code Style 8 Size 2 Color 5  
Construct Grid by only existing Item Codes  
Manual

Accept Cancel Print Help

The **Manual** button allows for viewing the MXI 2018 manual in PDF format.

If there are Matrix Codes already setup in the system based on the defined segments, the following message will appear upon changing the sizes of corresponding segments.



Selecting **Yes** will allow the user to accept changes and delete all Matrix Codes previously setup.

Select **Item Codes** or **Matrix Codes** in the **Construct Grid by only existing** drop down to construct the Matrix grid by existing Item Codes or Matrix Codes.

It's necessary to have the Item Codes with corresponding number of characters for Style, Size and Color segments setup in the system so that to have the Matrix Distribution grid constructed based on the **Item Codes**.

The "Item Matrix Distribution Entry" window shows the item "SUN HATSL BLACK" and "Kids Sun Hats". It contains a table with columns for sizes (L, M, S, XL) and rows for colors (BLACK, CREAM, GREEN, PINK, PURPL). The table shows quantities for each combination.

	L	M	S	XL
BLACK	0/88.00			
CREAM			0/43.00	
GREEN		0/200.00		
PINK			0/117.00	0/495.00
PURPL		0/167.00		

Below the table, there are controls for "Grid column Width" (set to 15), "Enter quantities by" (set to Columns), and "Show Quantities Available" (checked). There are "OK" and "Cancel" buttons at the bottom right.

If Matrix **Code** is selected in the **Construct Grid by only existing** drop-down, the Item **Matrix Distribution Entry** looks as follows:

	L	M	S	XL
BLACK	0/88.00			
BLUE				
BROWN				
CREAM			0/43.00	
GREEN		0/200.00		
LILAC				
PINK			0/117.00	0/495.00
PURPL		0/167.00		
WHITE				

The **Matrix Processing by Item** options are available also on the **Options Listing** report.

**Inventory Management Options Listing** ABC Distribution and Service Corp. (ABC)

**Main Folder Options**

Require Multiple Warehouses: Yes  
 Reorder by Warehouse: Yes  
 Default Warehouse Code: 000 CENTRAL WAREHOUSE

**Segment Substitution**

G/L Segment for Warehouse Postings: Location  
 Track Warehouse Transfers as Issues: No  
 Calculate Commission by Inventory Item: Yes  
 Include in Quantity Available: No POs and WOs

**Inventory Period**

Base Inventory Periods On: Calendar Months  
 Current Calendar Year: 2018  
 Current Period: 09  
 Enable Warranty Tracking: Yes

**Integrate with**

General Ledger: Yes  
 Job Cost: No

**Matrix Processing by Item**

Master Item Code : Style: 8 Size: 2 Color: 5  
 Construct Grid by only existing: Matrix Codes

Current Page No.: 1 Total Page No.: 1 Zoom Factor: 100%

## Item Maintenance

In the **Item Maintenance** enter an item with the Item Code size equal to the number of characters specified for Style in the Inventory Management Options and select **Master** in the **Master/Slave** drop down.

Item Maintenance (ABC) 9/14/2018

Item Code: SUN HATS  
Description: Kid Sun Hats

1. Main | 2. Additional | 3. Quantity | 4. History | 5. Transactions | 6. Orders | 7. Cost Detail

Product Line: WF&A WORKSTATION FURN & ACCESS  
Product Type: Finished Good  
Valuation: FIFO  
Procurement: Buy

Weight: 35  
Volume: 0.0000  
Inventory Cycle: B

Unit of Measure: Standard EACH  
Purchases EACH No. of EACH 1  
Sales EACH No. of EACH 1

Master/Slave: Master Master Item

Price Code: STD STANDARD QUANTITY PRIC Primary Vendor: 01-CONT Container Corporation Of Usa  
Default Whse: 000 CENTRAL WAREHOUSE Warranty Code: 30 DAY 30 days from shipment

Sales: Retail Price 84.000  
Standard Price 84.000  
Last Sold

Purchases: Standard Cost 32.750  
Average Cost 32.750  
Last Receipt 9/14/2021

Last Costs: Item 32.750  
Allocated .000  
Total 32.750

Whse	Description	On Hand	On PO	On SO	On Bk Ord	Committed	Available	In Shipping	On H
000	CENTRAL ...	500.00	.00	.00	.00	.00	500.00	.00	
001	EAST WA...	500.00	.00	.00	.00	.00	500.00	.00	

Accept Cancel Delete

After accepting the Master Item it's necessary to enter corresponding Slave Items with Item Codes constructed as follows: **Master Item Code + Size +Color** and assign to respective **Master Item**.

Item Maintenance (ABC) 9/14/2018

Item Code: SUN HATSXLPINK  
Description: Kid Sun Hats

1. Main | 2. Additional | 3. Quantity | 4. History | 5. Transactions | 6. Orders | 7. Cost Detail

Product Line: WF&A WORKSTATION FURN & ACCESS  
Product Type: Finished Good  
Valuation: FIFO  
Procurement: Buy  
Weight: 35  
Volume: 0.0000  
Inventory Cycle: B

Unit of Measure: Standard EACH  
Purchases: EACH No. of EACH: 1  
Sales: EACH No. of EACH: 1

Master/Slave: Slave Master Item: SUN HATS

Price Code: STD STANDARD QUANTITY PRIC Primary Vendor: 01-CONT Container Corporation Of Usa  
Default Whse: 000 CENTRAL WAREHOUSE Warranty Code: 30 DAY 30 days from shipment

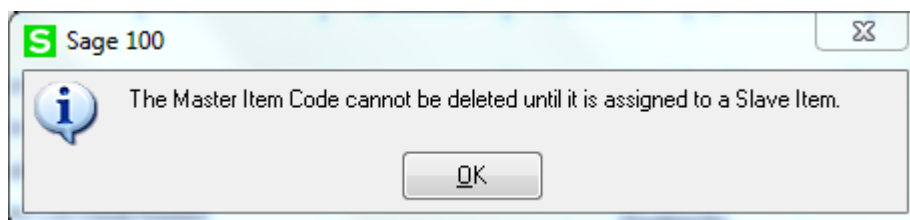
Sales: Retail Price: 84.000 Standard Price: 84.000 Last Sold:   
Purchases: Standard Cost: 32.750 Average Cost: 32.750 Last Receipt: 9/14/2021  
Last Costs: Item: 32.750 Allocated: .000 Total: 32.750

Whse	Description	On Hand	On PO	On SO	On Bk Ord	Committed	Available	In Shipping	On H
000	CENTRAL ...	500.00	100.00	5.00	.00	5.00	495.00	.00	
001	EAST WA...	500.00	.00	.00	.00	.00	500.00	.00	

Accept Cancel Delete

*Note: Specifying **Master Item** for Slave items is required in case you have selected the **Item Codes** option in the **Construct Grid by only existing** drop down in the **Inventory Management Options**.*

The user is not allowed deleting Master Item if there is an Item (Slave) in the system to which it is assigned.



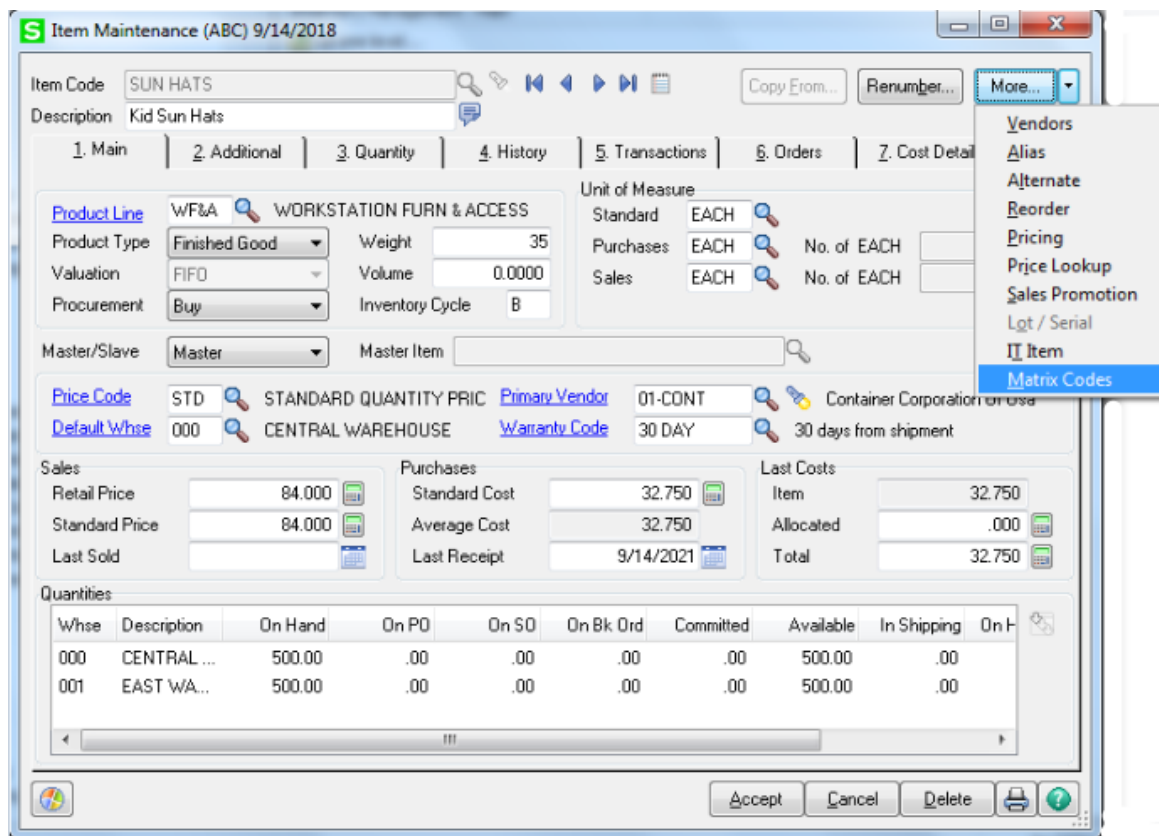
A message appears also when changing Master/Slave option for Master Item already assigned to a Slave one.



If **Matrix Codes** is selected in the Inventory Management Options it's enough to have corresponding Item Codes setup in the system.

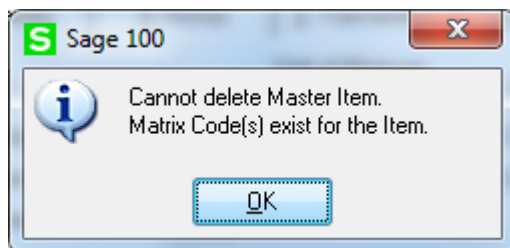
Select **Matrix Codes** from the **More...** menu button to open the **Matrix Code Maintenance** for the selected **Master Item**. This option is available only for Master Items.

The Matrix Codes button is not available if **Construct Grid by only existing** option in the Inventory Management Options screen is set to **Item Codes**.



	Matrix Code	Description	R	G	B	Color	Sort
1	BLACK	Black	64	255	64		
2	BLUE	Blue	0	0	255		
3	BROWN	Brown	128	64	64		
4	CREAM	Cream	233	230	188		
5	GREEN	Green	0	255	0		
6	LILAC	Lilac	247	219	251		
7	PINK	Pink	255	128	255		
8	PURPL	Purple	198	0	0		
9	WHITE	White	255	255	255		
10			0	0	0		

The user is not allowed to delete Master Item if there are Matrix Codes entered for it.



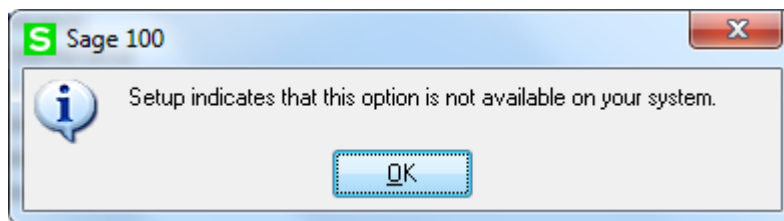
The user cannot change also the Master/Slave option for Master Item having Matrix Codes.



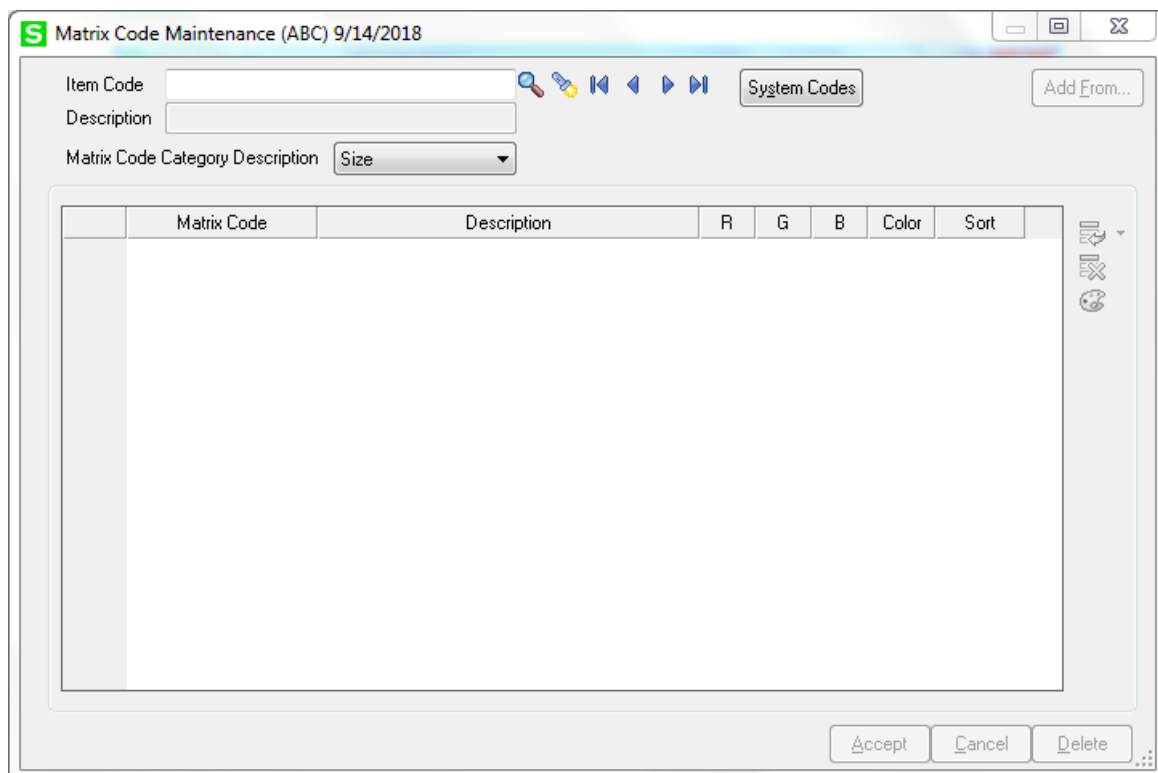
## Matrix Code Maintenance

The **Matrix Code Maintenance** has been added to the **Inventory Management Setup** menu to allow specifying Matrix Codes for Size/Color to be used for Master item.

The **Matrix Code Maintenance** is available in the system only if Matrix Codes option is selected in the Construct Grid by only existing drop- down in the Inventory Management Options, otherwise the following message will appear while trying to run the Matrix Code Maintenance:



Each **Master Item** (item specified as Master in the **Inventory Maintenance** program) can have its own **Matrix Codes**. Besides it, Matrix Codes can be defined for the entire system.



If there is not Item selected in the **Item No.** field, the **System Codes** button is enabled allowing the user to setup system matrix codes, which may be added to any Item. The **Item Code** is defaulted to \*SYSTEM\_MATRIX\* in this case:

Matrix Code Maintenance (ABC) 9/14/2018

Item Code: \*SYSTEM\_MATRIX\*

Description: \*SYSTEM MATRIX CODES\*

Matrix Code Category Description: Size

	Matrix Code	Description	R	G	B	Color	Sort
1	L	Large	255	255	255		
2	M	Medium	255	255	255		
3	S	Small	255	255	255		
4	XL	Extra Large	255	255	255		
5			0	0	0		

Buttons: System Codes, Add From..., Accept, Cancel, Delete

To enter a new Code, first select the **Matrix Code Category** by Description and type in the **Matrix Code** and **Description**.  
To assign **Color** to the selected Code, enter RGB values or click the **Color palette** button to select a color in the standard Windows **Color** screen.

Click **Del** to delete the selected Code from the grid.

To view/modify an existing Matrix Code select the Item code having Matrix Codes setup. All the Matrix Codes of current Item for the selected Category are loaded in the grid.

Matrix Code Maintenance (ABC) 9/14/2018

Item Code: SUN HATS  
 Description: Kid Sun Hats  
 Matrix Code Category Description: Color

	Matrix Code	Description	R	G	B	Color	Sort
1	BLACK	Black	64	255	64		
2	BLUE	Blue	0	0	255		
3	BROWN	Brown	128	64	64		
4	CREAM	Cream	233	230	188		
5	GREEN	Green	0	255	0		
6	LILAC	Lilac	247	219	251		
7	PINK	Pink	255	128	255		
8	PURPL	Purple	198	0	0		
9	WHITE	White	255	255	255		
10			0	0	0		

Accept Cancel Delete

The **Add From** button allows copying and adding Matrix Codes from other Items. The existing Matrix Codes of the destination Item will be retained, and the copied Codes will be added. If the Code already exists, it is retained with all options and not overridden by the added Code.

Copy Matrix Codes

Item Code:   
 Description:

OK Cancel

From the Item Code lookup select the Item, which Matrix Codes you want to copy.

The screenshot shows a window titled "Matrix Codes Item List". It contains a table with two columns: "ItemCode" and "Description". The table lists four records:

ItemCode	Description
*SYSTEM_MATRIX*	*SYSTEM MATRIX CODES*
SUN HATS	Kid Sun Hats
SUNN HATL BLACK	Kid Sun Hats
SUNN HATS	Kid Sun Hats

Below the table, there is a search section with a "Search" dropdown menu set to "<default>", a "Find" button, and a "Filters..." button. At the bottom, there are buttons for "Custom...", "Lookup Wizard...", "Select", "Cancel", and a help icon. A status bar at the very bottom indicates "Found 4 records".

Press **Ok** to add the Matrix Codes of the selected Item to the new Item.

The screenshot shows a dialog box titled "Copy Matrix Codes". It has two input fields: "Item Code" with the value "\*SYSTEM\_MATRIX\*" and "Description" with the value "\*SYSTEM MATRIX CODES\*". There are "OK" and "Cancel" buttons at the bottom.

**Delete-** this button deletes all Matrix Codes setup for current Item.

## Purchase Order

Create a new **Purchase Order** and go to **Lines** tab. Select a **Master Item** from the **Item Code** lookup.

The screenshot shows two overlapping windows from a software application. The top window is titled "Purchase Order Entry (ABC) 9/14/2018". It has a tabbed interface with "1. Header", "2. Address", "3. Lines", and "4. Totals". The "3. Lines" tab is active, showing a table with columns: Item Code, Ordered, Back Ordered, Unit Cost, Extension, and Cor. The first row shows "1" in the first column, "SUN HATS" in the second, and ".00" in the third and fourth columns. The bottom window is titled "Item Matrix Distribution Entry". It has a text field for "Item Code" containing "SUN HATSXLPINK" and a label "Kid Sun Hats". Below this is a grid with columns L, M, S, and XL. The rows are color-coded: BLACK (green), BLUE (blue), BROWN (brown), CREAM (yellow), GREEN (green), LILAC (purple), PINK (pink), PURPL (red), and WHITE (white). The grid contains numerical values representing quantities and costs. For example, in the BLACK row, L is 23.00/100.00. In the CREAM row, S is 0/45.00. In the GREEN row, M is 10.00/220.00. In the PINK row, S is 5.00/136.00 and XL is 100.00/500.00. In the PURPL row, M is 0/167.00. At the bottom of the window, there are controls for "Grid column Width" (set to 10), "Enter quantities by" (set to Columns), and a "Show Quantities Available" checkbox which is checked. There are also "OK" and "Cancel" buttons.

	L	M	S	XL
BLACK	23.00/100.00			
BLUE				
BROWN				
CREAM			0/45.00	
GREEN		10.00/220.00		
LILAC				
PINK			5.00/136.00	100.00/500.00
PURPL		0/167.00		
WHITE				

**Item Matrix Distribution Entry** screen will popup to allow ordering Items. In the **Show Quantities** group select/clear the **Available** check box to show/hide available quantity for each Item.

Only the **Matrix Cells**, which refer to existing **Item Codes**, are available for entry. Enter quantities in the matrix grid and press **OK**. New order line will be added for each entered quantity with respective Item Code and Quantity.

Purchase Order Entry (ABC) 9/14/2018

Order Number 0010041

Copy From... Defaults... Vendor...

1. Header | 2. Address | 3. Lines | 4. Totals | User useriig

Quick Row 1

	Item Code	Ordered	Back Ordered	Unit Cost	Extension	Cor
1	SUN HATSL BLACK	23.00	.00	32.750	753.25	
2	SUN HATSM GREEN	10.00	.00	32.750	327.50	
3	SUN HATSS PINK	5.00	.00	32.750	163.75	
4	SUN HATSXLPINK	100.00	.00	32.750	3,275.00	
5		.00	.00	.000	.00	

Description Kids Sun Hats  
Warehouse 000  
Unit of Measure EACH  
Qty Received .00

Enter qty ordered for vendor item no: TWO DRAWER LETTER FILE (Qty on PO: Total Amount 4,519.50

Quick Print... Accept Cancel Delete

The same functionality has been provided also in the **Receipt of Goods Entry** and **Invoice Data Entry**.

## Sales Order Entry

Open the **Sales Order Entry** program and create a new Order. Go to **Lines** tab. Select a Master Item from the **Item Code** lookup.

The screenshot shows the 'Sales Order Entry (ABC) 9/14/2018' window. The 'Lines' tab is active, showing a table with one line item: 'SUN HATS' with an ordered quantity of .00. An 'Item Matrix Distribution Entry' dialog is open, displaying a matrix for 'SUN HATSS CREAM' (Kid Sun Hats). The matrix has columns for sizes L, M, S, and XL, and rows for colors: BLACK, BLUE, BROWN, CREAM, GREEN, LILAC, PINK, PURPL, and WHITE. The matrix shows unit prices and quantities for each combination. For example, for size L, BLACK is 12.00/100.00 and GREEN is 20.00/220.00. For size S, CREAM is 2.00/45.00 and PINK is 19.00/136.00. For size XL, PINK is 5.00/500.00. The dialog also includes a 'Grid column Width' of 13, an 'Enter quantities by' dropdown set to 'Columns', and a 'Show Quantities Available' checkbox which is checked. The 'OK' and 'Cancel' buttons are at the bottom right.

Item Code	Ordered	Back Ordered	Unit Price	Extension	Comment
1 SUN HATS	.00	.00	.000	.00	

Item Code	Kid Sun Hats			
	L	M	S	XL
BLACK	12.00/100.00			
BLUE				
BROWN				
CREAM			2.00/45.00	
GREEN		20.00/220.00		
LILAC				
PINK			19.00/136.00	5.00/500.00
PURPL		0/167.00		
WHITE				

**Item Matrix Distribution Entry** screen will popup to allow ordering Items. In the **Show Quantities** group select/clear the **Available** check box to show/hide available quantity for each item

Enter quantities in the matrix grid and press **OK**. The user may enter more quantity than is available in the stock for current Item.

The font color of a cell is changed to red if the **Qty Entered** exceeds the **Qty Available**. The Quantity entered will be loaded into the line as **Ordered** quantity and the difference of **Qty Entered** and **Qty Available** will be automatically backordered. This logic is applied to the **Sales Quotes** as well.

New order line will be added for each entered quantity with the corresponding Item Code and Quantity.

	Item Code	Ordered	Back Ordered	Unit Price	Extension	Comment
1	SUN HATSL BLACK	12.00	.00	78.120	937.44	
2	SUN HATSS CREAM	2.00	.00	84.000	168.00	
3	SUN HATSM GREEN	20.00	.00	78.120	1,562.40	
4	SUN HATSS PINK	19.00	.00	78.120	1,484.28	
5	SUN HATSXLPINK	5.00	.00	81.480	407.40	
6		.00	.00	.000	.00	

Description	Kids Sun Hats
Warehouse	000
Unit Of Measure	EACH
Shipped	.00
Price Level	1

Available Quantity in this Warehouse is 100 EACH

Total Amount 4,559.52

Print Order... Print Pick... Recalc Price Accept Cancel Delete

When Sales Order is created from a Master Order the program will check the Qty Available and automatically backorder the quantity exceeding Qty Available.

## Visual Integrator

The files listed below have been added, or changed, in the Data Dictionary by MXI enhancement for Visual Integrator purposes.

Tables	Fields
CI_Item	CI068_MXIMasterItemCode CI068_MXIMasterSlaveCode
IM068_MXIMatrixCodesDetail	All Fields
IM068_MXIMatrixCodesHeader	MatrixItemCode

## ODBC Dictionary

The files listed below have been added or changed in the ODBC Dictionaries by this enhancement for Crystal Reports purposes.

Tables	Fields
IM_ItemListingWrk	IM068_MXIMasterItemCode IM068_MXIMasterSlaveCode
IM_OptionsListingWrk	IM068_MXIConstructGrid IM068_MXIItemCodeSeg1 IM068_MXIItemCodeSeg2 IM068_MXIItemCodeSeg3