



This chapter describes how to complete two screens you created earlier, how to copy one screen and adjust it to make a new screen, and how to create a fourth screen.

Overview

In Chapter 2, you created two screens named:

- MM_Help
- JobOn

Do you remember how you did this? In Task 2, you created two menu items (commands) on the Main Menu and indicated the above screen names as Call Screen properties for them. The Call Screen properties indicate the screens the user will go to when one of the menu commands is chosen.

When EZBuilder checked for those screens in your Object List, it found the screens were not yet created and you were prompted as to whether or not you wanted to create the screens. Each screen was created when you responded Yes to the prompt. Although you didn't see the screens at that time, they were added to the Object List.

Whenever you want to see a list of high-level ("parent") components you have created, go to the Object List above the Properties and Actions area. Check the drop-down list for the names of applications, menus, screens, and transactions you have created. To see the "children" objects created for each of these parent components, from the View menu, choose the Resources command.

To see the Object List contents, click on its down arrow. An example Object List is illustrated next. MainMenu is highlighted in the list because the MainMenu menu is currently the active object in the Viewport, and you see its properties.

Object Manager		Vie	wport		
Object List		Г			
Menu: MainMenu	•			Main Monu	
App: ezbtutrl				Main Menu	
Menu: MainMenu					
Screen: JobOn					
Screen: MM_Help			F1-	Help	
Viewport Size	16×20				
Viewporting On	False		F2-	Job On	
Navigate	True		F3-	Job Off	
Hot Key Mode	False		10-	110 001	
Highlight Attribute	BOLD_INVERSE				
Display Attribute	NORMAL				
Input Prompt					
Visible	True				
	<u> </u>				

The screen creation was all done transparently, and you continued your work on the Main Menu at that time. The two screens were created with default settings, but with no data fields or labels on them.

Now, to continue the tutorial exercise, you will design the look of the two screens you already created and you will create the third and fourth screens.

Task 4: Creating the MM_Help Screen

For this part of the tutorial exercise, you will label the MM_Help screen in the same manner that you labeled the Main Menu. You will provide a scrolling section in that menu, and you will enter the help text into that section.

Note: A scrolling section is a special type of field that allows the user to scroll up and down through text that is too long to be contained in a regular field on the display area.

Labeling the MM_Help Screen

Note: Because you did basically the same steps when you created the label for the Main Menu, there are fewer illustrations shown here. If you need to see illustrations of the similar steps, refer back to Task 1 in Chapter 2.

To make a screen identification label for the MM_Help screen

- 1. Click the down arrow in the Object List and choose the MM_Help screen. Because the items are listed in alphabetic order, MM_Help is last.
- 2. From the File menu, choose the Add Label command. The label object is placed in the Viewport.
- 3. Enter Row = 1 and Column = 4. These coordinates center the label near the top of the Viewport.
- 4. Click to highlight the default Caption property. Type "Main Menu Help" to replace the default text, and verify the label's new text in the Viewport.
- 5. Click the down arrow to access the Display Attribute list of choices, and change the property from NORMAL to BOLD.
- 6. Click the Box button at the right end of the toolbar. The label that is currently selected (the one you last created) is automatically boxed.

Note: Or, from the File menu, you could choose the Add Draw Box command to box a label. Using the toolbar's Box button is quicker.

7. Verify results in the Viewport; the text "Main Menu Help" should be boxed.



8. Enter Column = 0 and Width in Columns = 20 to adjust the box size and placement so it matches the label box in the Main Menu (Row and Height in Rows remain as they are). Click any other property to end the entry.

Note: You could also go to the Main Menu and select the box object from there. Then from the Edit menu, choose the Copy Object command. Return to the Main Menu Help screen, and from the Edit menu, choose the Paste Object command. But, this method is more time-consuming.

9. Check your result of the previous steps with the next illustration.

Object Manager			Viewport				<u> </u>
Object List							
Screen: MM_Help		-		M - 4 -			
Set Properties and Action MM_Help.Bo×0	s for Box:	< ^	1	Main	- Menu	нетр	-(
Name	Box0						
Row	0						
Column	0						
Height in Rows	3						
Width in Columns	20						
Display Attribute	BOLD						
Line Type	Single						

Creating a Scrolling Section to Contain Help Data

When you need to present more text than can be displayed at one time on the screen, you can create a multiple-line object (called a "scrolling section") which will allow the user of your program to scroll up and down through the text as needed. A scrolling section is often used for help text, as demonstrated in this tutorial exercise.

To create a scrolling section and enter its help text

- 1. Click the Scrolling Section button in the toolbar (fourth button from the right) to quickly create a scrolling section. Or, from the File menu, choose the Add Scrolling Section command.
- 2. Notice the scrolling section is a multiple-line object with two handles, as illustrated next.

Dbject Manager			Viewport			
Object List						
Screen: MM_Help		-		Mada	Manu	
Set Properties and Action MM_Help.Multi0	s for MultiLine:	< ^		Main	Menu	Herb
Name	Multi0	-				
Comments					-	
Row	2				-	
Lines to Display	4					
Display Attribute	NORMAL					
Highlight Attribute	INVERSE					
Display Only	False					
Selection Key	F3					
Exit Key	F3					
Properties (On Entry (On	Selection/	<u> </u>				

- 3. Enter Row = 4 to lower the top of this object to Row 4 on your Viewport.
- 4. Enter Lines to Display = 11 to adjust this multiple-line object to the correct vertical size.
- 5. Click the Viewport window, somewhere outside the scrolling section, to turn the handles off (deselect the scrolling section). Check your result with the illustration next.

Note: You cannot enter the help text until the scrolling section is deselected.

Object Manager			Viewport			_ 🗆 🗵
Object List						
Screen: MM_Help		-		Main	Monu	Help.
Set Properties and Action MM_Help.Multi0	ns for MultiLine:	< ^		Main	Menu	Neib
Name	Multi0	-				
Comments						
Row	4					
Lines to Display	11					
Display Attribute	NORMAL					
Highlight Attribute	INVERSE					
Display Only	False					
Selection Key	F3					
Exit Key	F3					
Properties On Entry On	Selection/	<u> </u>				



6. Click once inside the scrolling section on the Viewport; this places the cursor inside the scrolling section so you can enter text. Enter the following help text. Do not type the double quote marks.

"Job On allows the operator to log onto a job. To select Job On, scan SFCLBR.

Job Off allows the operator to log off the job to capture the time spent. To select Job Off, scan EFCLBR.

Press F10 to return to the Main Menu."

Notice the text wraps around as you continue typing. Eventually, you cannot see the top part of the help text. Use the up and down arrow keys on your keyboard to scroll up and down, and check for typing errors.

- 7. Change the Highlight Attribute from INVERSE to NORMAL.
- 8. Double-click the word "False" in the Display Only property to change it to "True."
- 9. Type "F10" as the Exit Key.
- 10. Scroll down the Properties and Actions area and click the Navigation Choice property, then click its small button with three dots on it, as illustrated next. This button brings up a Navigation Selection dialog box.

Object Manager		Viewport
Object List		
Screen: MM_Help	•	Wada Wasa Wala
Set Properties and Action MM_Help.Multi0	s for MultiLine: <	Main Menu Help
Comments		a job. To select Job
Row	4	On, scan SFCLBR.
Lines to Display	11	
Display Attribute	NORMAL	Job Off allows the
Highlight Attribute	NORMAL	the job to capture
Display Only	True	time spent To select
Selection Key		Job Off, scan EFCLBR.
Exit Key	F10	
Navigation Choice	<next field=""></next>	Press F10 to return
Properties (On Entry (On	Selection/	to Main Menu.

11. The Navigation Selection dialog box shows the default selection (indicated by a small round circle) is the Next Field option. Click to change the selected option to Return From Call, as illustrated next.

Object Manager		Viewport	- <u> </u>
Object List		Navigation Selection	
Screen: MM_Help			'nШ
Set Properties and Action MM_Help.Multi0	ns for MultiLine:	∩ <u>N</u> ext Field ∩ <u>C</u> urrent Field	۲I
Comments		C Previous Field	
Row	4	◯ <u>G</u> o to Field	
Lines to Display	11	C Call Screen	1.11
Display Attribute	NORMAL	© <u>R</u> eturn From Call	1.11
Highlight Attribute	NORMAL		1.11
Display Only	True	On Return © Next Field	ht.
Selection Key		O Current Field	Ř. I
Exit Key	F10	O Return From Call	
Navigation Choice	<next field=""></next>		
Properties (On Entry (Or	Selection/	V OK X Cancel ? Help	H

12. Click OK in the Navigation Selection dialog box. Notice the word "Return" automatically becomes the Navigation Choice property, as illustrated next. (This allows the return to the previously viewed screen.)

Note: Later, during program run time, when the user presses F1 to view the Main Menu Help screen and wants to go back to the previously viewed screen, the user presses F10 and returns to the Main Menu.

Object Manager	l		Viewport				\times
Object List							
Screen: MM_Help		•		Mada N		11-1-	
Set Properties and Action MM_Help.Multi0	s for MultiLine:	< ^		Main r	lenu	нетр	
Comments			a jo	b. To	sele	ct Job	1
Row	4		On,	scan S	FCLB	SR.	
Lines to Display	11				_		
Display Attribute	NORMAL		Job	Off al	lows.	the fr	
Highlight Attribute	NORMAL		oper	iob to	0 10 0 2 2 0	g oll turo	
Display Only	True		time	spent	, сар :. То	select	
Selection Key			Job	Off, s	scan	EFCLBR.	
Exit Key	F10						
Navigation Choice	Return		Pres	s F10	to r	eturn	
Properties (On Entry (On	Selection/	<u> </u>	to M	1ain M∈	enu.		-

13. You have completed Task 4. Save your file and continue with Task 5.

Task 5: Creating the JobOn Screen

For this part of the tutorial exercise, you will first make a label for the top of the JobOn screen, then you will define three data fields (input areas) for the screen.

Labeling the JobOn Screen

Note: Because these steps are similar to the steps you did when you created labels for the Main Menu and MM_Help screen, there are fewer illustrations here. If you need to see illustrations of the similar steps, refer back to Task 1 in Chapter 2.

To make a label to identify the JobOn screen

- 1. Click the down arrow in the Object List and choose the JobOn screen.
- 2. From the toolbar, click the Add Label button (the one with the large "A"). The label object is placed in the Viewport.
- 3. Drag the label in the Viewport to Row = 1, Column = 7 to center the label.
- 4. Type "Job On" as the Caption property. Verify the label's new text in the Viewport.
- 5. Change the Display Attribute from NORMAL to BOLD.
- 6. Click the Box button in the toolbar to box the label "Job On."
- 7. Enter Column = 0 and Width in Columns = 20 to adjust box. Check your result with the next illustration.

Object Manager			Viewport	
Object List				
Screen: JobOn		-		
Set Properties and Action JobOn.Box0	s for Box:	< ^		[]
Name	Box0			
Row	0			
Column	0			
Height in Rows	3			
Width in Columns	20			
Display Attribute	BOLD			
Line Type	Single			

Creating and Labeling the Badge ID Number Data Field

Next, you will define the first of three input data fields needed for the Job On transaction. Each data field must be identified so the user knows what kind of data goes in that area. This identification is done by labeling the data field with appropriate caption text.

Note: For consistency in this tutorial, for each data field, you will first define the data field and then define its label. The second time you work through this tutorial, you may prefer to define the label first followed by the data field.

The first data field is a field of ten characters into which Badge Identification Number data will be entered or scanned during your program's run time.

To define the Badge ID Number data field

- 1. From the File menu, choose the Add Field command.
- 2. Enter Row = 4 and Column = 9 to position the field on the Viewport.
- 3. Enter Length = 10.
- 4. Click once to highlight the default Name property ("Field0") and type "BadgeNo" as the Name property for this field, as illustrated next.

Dbject Manager		- - ×	Viewport	
Object List				
Screen: JobOn		-	Job On	
Set Properties and Actio JobOn.Field0	ns for Field:	< ^		
Name	BadgeNo	-		-
Comments		_		
Display Attribute	INVERSE			
Row	4			
Column	9			
Length	10			
Data Type	String			
Formatting				
Mask/Picture Claus	е	-		
	in Entry (On Exit /	<u> </u>		

Note: The Display Attribute property remains the default INVERSE value. All data fields will be INVERSE to indicate each data field as a shaded area on the screen. This is necessary because, although NORMAL shows an outline of the data



area on the Viewport, NORMAL does not create an outline of the data area on the user's terminal.

To create the Badge ID Number data field's label

- 1. From the File menu or the toolbar, choose the Add Label command.
- 2. Position the label at Row = 4, Column = 1.
- 3. Type "Badge" as the Caption property. The Caption property identifies the kind of data that goes into the corresponding data field (the shaded area on the Viewport). Check your result with the next illustration.

Object Manager		_ D ×	Vie	wport			_ 🗆 ×
Object List			ſ				
Screen: JobOn		-			Tah	~-	
Set Properties and Action JobOn.Label1	ns for Label:	< ^			dou	on	
Name	Label1			Badge	•		
Comments				_			
Caption	Badge						
Row	4						
Column	1						
Length	6						
Display Attribute	NORMAL						

Creating and Labeling the Part Number Data Field

Next, you will define the second data field. This field has 25 characters and will hold Part Number data which is entered during your program's run time.

To create the Part Number data field

- 1. From the File menu, choose the Add Field command. Or, from the toolbar, press the button with the letters "ab."
- 2. Position the data field at Row = 7, Column = 9.
- 3. Enter Length = 25.
- 4. Type "PartNum" as the Name property, as illustrated next.

Object Manager			Vie	wport		
Object List		4	Г			
Screen: JobOn		-			Tab On	
Set Properties and Action JobOn.PartNum	s for Field:	< *			000 01	
Name	PartNum	_		Badge		
Comments						
Display Attribute	INVERSE					
Row	7				•	_
Column	9					
Length	25					
Data Type	String					
Formatting						
Mask/Picture Clause						
	1 Entry (On Exit /	•				

To create the Part Number data field's label

- 1. From the File menu or toolbar, choose the Add Label command.
- 2. Enter Row = 7, Column = 1.
- 3. Type "Part" as the Caption property. Check your result with the next illustration.

Object Manager		Vie	ewport		
Object List					
Screen: JobOn	-			Tab Op	
Set Properties and Actio JobOn.Label2	ns for Label: < ^			10 400	
Name	Label2		Badge		
Comments					
Caption	Part		Deet		
Row	7		₽art•		_
Column	1				
Length	4				
Display Attribute	NORMAL				

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Creating and Labeling the Order Number Data Field

Next, you will define the third data field for this tutorial exercise. This data field of nine characters will contain Order Number data which is entered or scanned during your program's run time.

To create the Order Number data field

- 1. From the File menu or toolbar, choose the Add Field command.
- 2. Enter Row = 10, Column = 9.
- 3. Enter Length = 9.
- 4. Type "OrderNo" as the Name property. Check your result with the next illustration.

Object Manager			Viewport		
Object List					
Screen: JobOn		•		Joh On	
Set Properties and Actio JobOn.OrderNo	ns for Field:	< ^			
Name	OrderNo	-	Badge		
Comments			_		
Display Attribute	INVERSE		. .		
Row	10		Part		
Column	9				
Length	9			•	
Data Type	String				
Formatting					
Mask/Picture Clause	e	_			
	n Entry (On Exit /	<u> </u>			

To create the Order Number data field's label

- 1. From the File menu or toolbar, choose the Add Label command.
- 2. Enter Row = 10, Column = 1.
- 3. Type "Order" as the Caption property. Check your result with the illustration next.

Object Manager			Vie	ewport		_ 🗆 🗵
Object List			ſ			
Screen: JobOn		-		· · ·	Tab Op	
Set Properties and Action JobOn.Label3	ns for Label:	< ^		`		
Name	Label3			Badge		
Comments						
Caption	Order			T 1		
Row	10			Part		_
Column	1					
Length	5			•Order•		_
Display Attribute	NORMAL					
L						

Wrapping Data on the JobOn Screen

Notice in the above illustration that the 25-character Part Number data field is not shown in its entirety on the Viewport. In other words, it does not "wrap" around to another row, but goes off the right edge of the Viewport.

Setting data fields to wrap is not done as attributes for individual fields. It is done on the parent screen level for all fields on the screen.

To set all JobOn data fields to wrap

- 1. Click the button marked with the ^ symbol, located to the right of the text "Set Properties and Actions for Label" in the Object Manager window. This will make the parent screen, JobOn, active.
- 2. Double-click on "False" to change the Wrap at Edge property from "False" to "True," as illustrated next.

Note: Although the Viewport cannot reflect the above change and show wrapped fields, the wrapped fields will be shown correctly when you build your program and run it on the Simulator or on the terminal.

Note: Up to 240 characters of text can be wrapped.

Object Manager			Viewport			
Object List						
Screen: JobOn		•		T - 1-	<u> </u>	
Set Properties and Action JobOn	ns for Screen:	< ^		aou	On	
Name	JobOn		Badg	e 🗌		
Comments						
Follow Cursor	False		Deet			
Viewport Size	16×20		Part			_
Viewporting On	False					
Wrap at Edge	True		Orde	r 🗌		
Message Line	50					
Message Display Ti	п					
Properties (On Entry (On	Exit/					

Programming the Function Keys

Programming the function keys in EZBuilder is easy and quick to do. This process is described next.

There are at least two reasons why you may want your program's user to be able to press a function key when entering or about to enter data in a field.

- When the user needs to know what type of data is to be entered in the field and how many characters are allowed for that data, pressing a function key can take the user to a help screen that describes the characteristics of the data field.
- When the user makes a mistake in entering data and wants to re-enter data for that transaction, a function key can take the user back to the previous data field or a different function key can take the user back to the beginning of the same data field.

To associate a help screen with a function key

- 1. Begin by having the JobOn screen in the Viewport (as illustrated above).
- 2. In the Viewport, double-click the shaded Badge data field to select it. The properties and actions for this field are now available for setting.
- 3. At the bottom of the Object Manager, click the KeyPress tab. You will see the options illustrated next.

Dbject Manager			Vie	wport		<u>- D ×</u>
Object List			Г			
Screen: JobOn		-			Tab On	
Set Properties and Action: JobOn.BadgeNo	s for Field:	< ^			10 400	
Tab	<set></set>	_		Badge		-
Back Tab	<set></set>					
F1				D 1		_
F2				Part		_
F3						
F4				Order		
F5						
F6						
F7		_				
Properties KeyPress (On	Entry (On Exit /					

4. Click the (blank) F1 property, then click on its small button with the three dots to bring up the Key Action Selection Editor for the F1 key, as illustrated next.

Key Action Selection Editor
F1 key:
© Do Standard <u>A</u> ction Cancel & Restart
C Do <u>I</u> ransaction
C Call <u>S</u> creen
C Go To <u>F</u> ield
C Do <u>U</u> ser Function
© Transmit <u>B</u> atch for Transactions From File
C Send File to Controller
🔨 OK 🕺 Cancel 🕺 Clear ? Help



5. Click to select the small circle button for the Call Screen option, and review its drop-down list. Double-click to choose MM_Help (currently your only list option), as illustrated next.

Key Action S	election Editor
F1 key:	
	C Do Standard <u>A</u> ction Cancel & Restart
	C Do <u>T</u> ransaction
	Call <u>S</u> creen
	C Go To <u>F</u> ield
	C Do User Function
	© Transmit <u>B</u> atch for Transactions From File
	© Se <u>n</u> d File to Controller
✓ <u>о</u> к	X Cancel A Clear ? Help

- 6. Suppose you now decide to make a new screen that explains the data field characteristics—instead of adding that information to the MM_Help screen. Over the highlighted MM_Help text shown in the above illustration, type "Data_Help" as the screen to be called for the F1 key press action.
- 7. Click OK on the bottom of the Key Selection Editor dialog box. When prompted if you want to create the Data_Help screen (currently non-existent), click Yes. You will see the F1 key's property is "<SET>."

Note: Later, when the program is running and the user presses F1 when the BadgeNo data field is selected (or when Badge ID data has been partially entered), the screen named "Data_Help" will be presented to the user.

8. Check the Object List to verify that you now have the (empty) screen named Data_Help listed. In Task 7, later in this chapter, you will complete the Data_Help screen in the same manner that you previously created the

MM_Help screen. On the Data_Help screen, you will describe the characteristics of the three data fields in a scrolling section

- 9. Return to Step 2 and select the PartNum data field instead of the BadgeNo data field. Repeat Steps 3 through 7 to send the user to the Data_Help screen when F1 is pressed in the PartNum field.
- 10. Return to Step 2 and select the OrderNo data field instead of the BadgeNo data field. Repeat Steps 3 through 7 to send the user to the Data_Help screen when F1 is pressed in the OrderNo field.

To return to a previous data entry field and correct data entry

- 1. Begin by having the JobOn screen in the Viewport.
- 2. Double-click in the Viewport to select the BadgeNo data field.
- 3. At the bottom of the Object Manager, click the KeyPress tab so you can set the properties and actions for field JobOn.BadgeNo.
- 4. Click the (blank) F4 property, then click on its small button with the three dots to bring up the Key Action Selection Editor for the F4 key, (similar to the previous illustration).
- 5. Click the circle button for the Go to Field option and review its drop-down list. Select the JobOn.PartNum field from the list. This will allow the user to go down to the next field (PartNum) when done with the BadgeNo field before completely filling the BadgeNo field with data.
- 6. Click OK on the Key Action Selection Editor dialog box and see the F4 key's property is "<SET>," as illustrated next.

Object Manager			Vie	wport		
Object List			Г			
Screen: JobOn		•			Job Op	
Set Properties and Action JobOn.BadgeNo	s for Field:	< ^			000 011	
Tab	<set></set>	_		Badge		•
Back Tab	<set></set>					
F1	<set></set>			D +		_
F2				Part		_
F3						
F4	<set></set>			Order		
F5						
F6						
F7		_				
Properties KeyPress (On	Entry (On Exit /					



Note: Later, when the program is running and the user presses F4 when the Badge data field is selected (or when Badge ID data has been partially entered), the cursor is sent to the beginning of the PartNum data field so the user can enter that data.

7. Set the F4 key also for the PartNum and OrderNo fields (refer back to Steps 2 through 6 on the previous page). Code it so that when the user presses F4 in the PartNum field, the user returns to the OrderNo field. And, when the user presses F4 in the OrderNo field, the user returns to the BadgeNo field.

Note: This "hot key" approach bypasses all exit validation and field exit action. If a field exit action is desired, you must associate an Exit Field choice from the Do Standard Action drop-down list available from the Key Action Selection Editor. Your introduction to this area comes in Steps 8 through 16.

Programming the Tab Key

Programming the Tab and Back Tab functions is as easy as programming the function keys (F1 through F10). The Tab key on the user's keyboard exits the field (goes down to the next field) and the Shift-Tab key combination (called the Back Tab function in EZBuilder) goes back up to the previous field. By default, exiting the field has an audible "beep." You can turn the beep on or off and you can set its volume. The Beep property can be set for any key press action (not just tabbing) in the On Val Fail and On Val Succeed pages accessed through the On Exit action page.

To remove the Tab key's audible beep

1. Click the default Tab property ("<SET>") to highlight it, as illustrated next.

Object Manager			Vie	ewport			
Object List			Γ				
Screen: JobOn		•			Tah	0-	
Set Properties and Action JobOn.OrderNo	s for Field:	< ^			000	011	
Tab	<set></set>	🔺		Badge			
Back Tab	<set></set>						
F1	<set></set>			Deet			_
F2				Part			
F3							
F4	<set></set>			Order			
F5							_
F6							
F7		_					
Properties KeyPress (On	Entry (On Exit /	<u> </u>					

2. Click the Tab property's small button with the three dots to get the Key Action Selection Editor dialog box, as illustrated next.

ey Action Selection Editor
Tab key:
Do Standard <u>Action</u> Exit Field
C Do <u>Transaction</u>
C Call <u>S</u> creen
C Go To <u>Field</u>
C Do User Function
© Transmit <u>B</u> atch for Transactions From File
© Se <u>n</u> d File to Controller
V OK K Cancel A Clear ? Help

- 3. Notice the Do Standard Action option is set to Exit Field. Leave that as it is, and click OK to close the Key Action Selection Editor.
- 4. With your cursor still in the Tab property, click the On Exit tab at the bottom of the Object Manager. This brings up tabs for Validation, On Val Fail and On Val Succeed.
- 5. Click the On Val Succeed tab to see its properties and actions that can be set for the field, as illustrated next.

Object Manager			Vi	ewport			
Object List							
Screen: JobOn		-			T = 1-	<u>^-</u>	
Set Properties and Action JobOn.BadgeNo	s for Field:	< ^			dou	Un	
Comments				Badge			
Message							
Веер	<success></success>			Deet			_
File Setup				Part			_
Process							
Do Transaction				Order			
User Function							_
Navigation Choice	<next field=""></next>						
Validation (On Val Fail) Properties (KeyPress (On	n Val Succeed / Entry <u>\On Exit</u> /						

6. Move your cursor to the Beep property, currently set to "<Success>" and view its drop-down list of options, as illustrated next.

Object Manager		XV	iewport		
Object List		_			
Screen: JobOn		-		Tab Op	
Set Properties and Action JobOn.BadgeNo	s for Field:				
Comments			Badge		
Message					
Веер	<success></success>	◄	L.		
File Setup	<error></error>		Part		_
Process	<pre> Kone Success Kone Kone Kone Kone Kone Kone Kone Kone</pre>				
Do Transaction	HLHL		Order		
User Function	үнүнүн				_
Navigation Choice	<next field=""></next>				
Validation (On Val Fail) (O Properties (KeyPress (On	n Val Succeed/ Entry),On Exit/				

7. To learn the meaning of the last two options in the list, use the EZBuilder online help. Place your cursor anywhere in the beep property list of options and press **F1**. You will see online help relating to the beep property, as illustrated next.

🖉 EZBuilder help 📃 🔲 🗙
<u>File Edit Bookmark Options Help</u>
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Веер
Specifies a beep string to be played in the selected event.
Click 🗹 and select a beep pattern. Or enter a new pattern by typing these codes:
Error
• None
Success
H = High pitched note
L = Low pitched note
 V = Very low pitched note
Space = Silence for one note time
The notes are approximately 50 ms in length.
For example, the value LLLLHH L creates a long low beep, a medium high note, a brief silence, and a brief low note.
Related topics
where to find this field

- 8. Close the online help by clicking the upper right-hand corner "close" box marked X.
- 9. Choose <None> from the drop-down list of Beep property options, as illustrated next.

Object Manager			Vi	ewport			
Object List							
Screen: JobOn		-			Tah	~-	
Set Properties and Action JobOn.BadgeNo	s for Field:	< ^			dou	on	
Comments				Badge			
Message							
Веер	<none></none>			Deel			_
File Setup				Part			_
Process							
Do Transaction				Order			
User Function							_
Navigation Choice	<next field=""></next>						
Validation (On Val Fail) Voidation (On Val Fail) Voidation (Conversion)	n Val Succeed/ Entry\On Exit/						

10. Click the Properties tab to return to the Properties page, and click the ^ button to make the JobOn parent screen active. Review the Object List to verify that you have three screens, one menu, and one application, as illustrated next.

Object Manager 📃		Viewport		
Object List				
Screen: JobOn	•		Tab An	
App: ezbtutrl			no doc	
Menu: MainMenu				
Screen: Data_Help				
Screen: JobOn	_	Badge		
Screen: MM_Help	-111			
Follow Cursor False	-11			
Viewport Size 16×20		Part		_
Viewporting On False	- 11			
Wrap at Edge True	- 11	Order		
Message Line 50	- 11			_
Message Display Tin	- 11			
Properties (On Entry (On Evit /				
(Topenes (on Endy (on Exit)				

11. You have completed Task 5. Save your file. Continue with Task 6.

Task 6: Creating the JobOff Screen

In this task, you will create a new screen for Job Off transactions. The JobOff screen will look like the JobOn screen you just created. Both screens will show the same data fields (BadgeNo, PartNum, OrderNo) with their corresponding labels. Both screens will have the property for Wrap at Edge = True. Both screens will have the F1 keys programmed to send the user to the Data_Help screen. The differences between the JobOn and JobOff screens are listed below.

- The boxed identification label will have "Job Off" text (not "Job On" text).
- You will adjust the programmed F4 keys for these fields to send the user to the JobOff screen's fields instead of the JobOn screen's fields.

Copying the JobOn Screen

Because of their similarity, you can easily and quickly create the JobOff screen by copying the JobOn screen and simply adjusting the screen's label and the function keys.

To copy the JobOn screen

- 1. From the Object List, choose the JobOn screen, if it is not already available.
- 2. Place your cursor anywhere inside the blank part of the Viewport (not on a label or data field). Hold down your right mouse button and pull down to Copy JobOn in the drop-down list, as illustrated next. When you release your mouse button, the JobOn screen and its properties are saved in your computer's clipboard.

Object Manager			/iewport		_ _ _ ×
Object List					
Screen: JobOn		-		Job Op	
Set Properties and Act JobOn	ions for Screen:	< ^			
Name	JobOn		Badg	Cut JobOn	
Comments				Copy JobOn	
Follow Cursor	False			Paste	
Viewport Size	16×20		Part	Delete JobOn Updelete Lest	
Viewporting On	False			Undelete	
Wrap at Edge	True		Orde	Previous	
Message Line	50		0140	Next	
Message Display	Tin			Select Parent	
Properties On Entry (On Exit/				



3. Place your cursor inside the Viewport again, and hold down your right mouse button again. Pull down to choose Paste JobOn, as illustrated next. The duplicate JobOn screen that was saved on your computer's clipboard is copied into your EZBuilder program and automatically named JobOn0.

Object Manager		- - ×	Viewport		_ 🗆 🗵
Object List					
Screen: JobOn		<u> </u>		Job On	
Set Properties and Acti JobOn	ions for Screen:	< ^		10 400	
Name	JobOn		Badge	Cut JobOn	
Comments				Copy JobOn	
Follow Cursor	False			Paste JobOn_	
Viewport Size	16×20		Part	Delete JobOn	_
Viewporting On	False			Undelete Last	
Wrap at Edge	True		Order	Disulation	
Message Line	50			Next	
Message Display	Tin			Select Parent	
			-		
	On Exit/				

4. The JobOn0 screen is now the active screen, as illustrated next.

Object Manager		×	Vie	wport			
Object List			Г				
Screen: JobOn0		-			Joh C	2	
Set Properties and Action JobOn0	s for Screen:	< ^				/11	-1
Name	JobOn0			Badge			
Comments							
Follow Cursor	False			Dent			_
Viewport Size	16×20			Part			_
Viewporting On	False						
Wrap at Edge	True			Order			
Message Line	50						_
Message Display Tir	T						
Properties (On Entry (On	Exit/						

5. Click the Object List's down arrow and see that you now have both a JobOn screen and a JobOn0 screen in your application, as illustrated next.

Object Manager		Vi	ewport	_ 0	×
Screen: JobOn0	•			7-1-0-	
App: ezbtutri Menu: MainMenu				Job Un	
Screen: Data_Help			- 1		
Screen: JobOn0			Badge		
Follow Cursor	False				
Viewport Size	16×20		Part		٩.
Viewporting On	False				
Wrap at Edge	True		Order		
Message Display Ti	50 T				
	-				
	Exit/				

Adjusting the Duplicate JobOn0 Screen

Except for their screen name, the two screens, JobOn and JobOn0, are currently exact duplicates. You will next adjust the JobOn0 screen to become the JobOff screen.

To rename the JobOn0 screen to be JobOff

1. Make sure the JobOn0 screen (not the JobOn screen) is showing on your computer monitor, as illustrated next.

Object Manager Object List			Vie	wport			
Screen: JobOn0 Set Properties and Act JobOn0	ions for Screen:	< < ^			Job	On	
Name	JobOn0			Badge			
Comments							
Follow Cursor	False			Deel			
Viewport Size	16×20			Part			_
Viewporting On	False						
Wrap at Edge	True			Order			
Message Line	50						
Message Display	Тіп						
Properties On Entry (Dn Exit/						



2. In the Viewport, place the mouse cursor on the word "On" in the JobOn screen's boxed identification label. Highlight the "On" word, and type "Off" to replace "On," as illustrated next.

Object Manager			Vie w port		
Object List					
Screen: JobOn0		•		Ich Off	
Set Properties and Acti JobOn0	ons for Screen:	< ^			
Name	JobOn0		Badge		
Comments					
Follow Cursor	False				
Viewport Size	16×20		Part		_
Viewporting On	False				
Wrap at Edge	True		Order		
Message Line	50				_
Message Display 7	Fin				
Properties (On Entry (C)n Exit/				

Note: Notice that part of the "Job Off" text may not show up well. EZBuilder still thinks the Length is one character shorter. Don't be concerned about the Length property; EZBuilder will fix it automatically later.

3. Highlight the Name property (JobOn0), as illustrated next.

Object Manager	E		Vie	wport		
Object List			Г			
Screen: JobOn0		-			Ich Off	
Set Properties and Action JobOn0	ons for Screen:	< ^				
Name	JobOn0			Badge		
Comments				_		
Follow Cursor	False			D 1		
Viewport Size	16×20			Part		_
Viewporting On	False					
Wrap at Edge	True			Order		
Message Line	50					
Message Display T	Гim					
Properties (On Entry (O)n Exit/					

4. Type over the highlighted Name property to change the property to "JobOff," as illustrated next.

Object Manager			Viev	vport		
Screen: JobOnO		-	Г		Ich Off	
Set Properties and Act JobOn0	ions for Screen:	< ^	L		110 401	
Name	JobOff			Badge		
Comments						
Follow Cursor	False			D +		
Viewport Size	16×20			Part		
Viewporting On	False					
Wrap at Edge	True			Order		
Message Line	50					
Message Display	Тіп					
	On Exit /					

5. Click the Object List's down arrow to verify that you now have both the JobOn and JobOff screen names, as illustrated next.

Object Manager		Vie	ewport		<u> </u>
Object List		ſ			
Screen: JobOff	-			1.1.055	
App: ezbtutrl				IIU dol	
Menu: MainMenu					
Screen: Data_Help					
Screen: JobOff			Badge		
Screen: JobOn			2		
Screen: MM_Help					
Follow Cursor	False		D +		
Viewport Size	16×20		Part		
Viewporting On	False				
Wrap at Edge	True		Order		
Message Line	50				_
Message Display T	īπ				
Properties (On Entry (O	In Euit /				
Veropercies XON Encry XU					

6. From the View menu, choose the Resource command to check your View Resource list. Review your JobOn and JobOff components, as illustrated



next. While there, notice that the Data_Help screen (listed above JobOff) has no components; these will be added in Task 7.

Object Manager	Viewport	
Object List	View Resource	×
Screen: JobOff		
Set Properties and A JobOff Name Comments Follow Cursor Viewport Size Viewporting On Wrap at Edge Message Line Message Displa	L Control Cont	<u>E</u> dit <u>D</u> elete <u>C</u> lose Pr <u>i</u> nt <u>H</u> elp
	Components (Menu (Screens (Fields (Transaction (Processes (File <u>N</u> ames / 💽 💽

7. Scroll down in the View Resource dialog box to see the Main Menu components you have created. Highlight the MenuItem2, as illustrated next.

Object Manager	Viewport	
Object List	View Resource	×
Screen: JobOff		
Set Properties and A JobOff Name Comments Follow Cursor Viewport Size Viewport Size Viewporting On Wrap at Edge Message Line Message Displa	BadgeNo PartNum OrderNo Box0 Data_Help Abol1 Clabel0 Clabel3 Box0 Box0 Menultem1 Clabel0 Menultem3 Box0 Box0 Menultem3 Box0 Box0	<u>E</u> dit <u>D</u> elete <u>Close</u> Pr <u>i</u> nt <u>H</u> elp
		File <u>N</u> ames / 💽

8. Click Edit in the View Resource dialog box. The View Resource dialog box closes and you are automatically taken to the Main Menu. Notice that the MenuItem2 ("F3- Job Off") that you had highlighted in the View Resource dialog box is selected, as illustrated next.

Object Manager		[] Vi	e۳	ewport 🗖 🗖	\times
Object List					
Menu: MainMenu	•		ſ	Main Manu	
Set Properties and Action MainMenu.Menulter	s for Menu Item: <* n2			Main Menu	
Name	Menultem2			F1- Help	
Comments					
Caption	F3- Job Off			F2- Job On	
Row	8			-F2 Job Off-	
Column	2			•F3- 30b 011 •	
Length	11				
Display Attribute	NORMAL				
Screen Nav Allowed	True				
Call Screen					
<u></u>					

9. Click the (blank) Call Screen property, then click its down arrow. Review the choices that drop down in the list, as illustrated next. Notice that you now have the JobOff screen listed as an option.

Object Manager		Vie	wport		
Object List		Г			
Menu: MainMenu	_			Main Monu	
Set Properties and Action MainMenu.MenuIter	s for Menu Item: <^ n2			Main Menu	
Name	Menultem2		F1	1- Help	
Comments					
Caption	F3- Job Off		F2	2- Job On	
Row	8		- ₽3	3_ Tob Off.	
Column	MM Help		-1.5	- 110 406 -6	
Length	JobOn				
Display Attribute	Data_Help				
Screen Nav Allowed	<return previou<="" th="" to=""><th></th><th></th><th></th><th></th></return>				
Call Screen					



10. Choose the JobOff screen option from the list. This will be the called screen when the user presses F3 when viewing the Main Menu. Check your result with the next illustration.

Object Manager	- D ×	View	port		
Object List Menu: MainMenu Y Set Properties and Actions for Menu Item:				Main Menu	
MainMenu.Menulten Comments	n2		F1-	Help	
Caption Row	F3- Job Off 8		F2-	Job On	
Column Length	2 11		• F 3-	Job Off•	
Display Attribute Screen Nav Allowed	NORMAL True				
Call Screen String to Activate	JobOff EFCLBR				
	<u></u>				

11. From the Object List, choose the JobOff screen so you can re-program your F4 function keys—which cannot remain the same as the JobOn screen. Or, you can more quickly go back to the JobOff screen by pressing the small button marked with the < (which brings back the previously active object, which in this case was the JobOff screen).

Note: The following steps are given in a brief form because you have already done similar steps in Task 5. If you need details or illustrations, see the "Programming the Function Keys" steps in Task 5.

- 12. In the Viewport, double-click to select the BadgeNo data field. Click the KeyPress tab in the Object Manager. Click the F4 key's property, then its small button marked with three dots to bring up the Key Action Selection Editor for the F4 key.
- 13. From the Go To Field's drop-down list, choose JobOff.PartNum to replace JobOn.PartNum, as illustrated next. Click OK.

Object Manager		Key Action Selection Editor
Object List Screen: JobOff		F4 key:
Set Properties and Action JobOff.BadgeNo	s for I	C Do Standard <u>A</u> ction
Tab	<se< th=""><th>C Do Transaction</th></se<>	C Do Transaction
Back Tab	<se< td=""><td></td></se<>	
F1	<se< td=""><td>C Call <u>S</u>creen</td></se<>	C Call <u>S</u> creen
F2		
F3		© Go To Field
F4	<se< td=""><td>JobOff.PartNum</td></se<>	JobOff.PartNum
F5 F6		C Do User Function
Properties KeyPress (On	Entry,	C Transmit <u>B</u> atch for Transactions From File
		C Se <u>n</u> d File to Controller
		✓ <u>O</u> K X Cancel A Clear ? <u>H</u> elp

- 14. On the JobOff screen, double-click in the Viewport to select the PartNum data field. Click the KeyPress tab in the Object Manager. Click the F4 key's property, then its small button marked with three dots to bring up the Key Action Selection Editor for the F4 key.
- 15. From the Go To Field's drop-down list, choose JobOff.OrderNo to replace JobOn.OrderNo. Click OK.
- 16. In the Viewport, double-click to select the OrderNo data field. Click the Key Press tab in the Object Manager. Click the F4 key's property, then its small button marked with three dots to bring up the Key Action Selection Editor for the F4 key.
- 17. From the Go To Field's drop-down list, choose JobOff.BadgeNo to replace JobOn.BadgeNo. Click OK.
- 18. You have now completed Task 6. Save your file. Continue with Task 7.

Task 7: Creating the Data_Help Screen

In this task, you will add one boxed screen identification label and one scrolling field with help text to the blank Data_Help screen you created earlier. This is done in the same manner as when you created the MM_Help screen in Task 4.

Note: Because the following steps are similar to those you did in Task 4 for the MM_Help screen, they are more briefly described here. Refer back to Task 4 if you need more detail or illustrations.

To complete the Data_Help screen

- 1. From the Object List, choose the Data_Help screen.
- 2. From the toolbar, click the button with the big "A" to create a new label.
- 3. Enter Row = 1, Column = 6 as the label position coordinates.
- 4. Enter "Data Help" as the Caption property.
- 5. Change the Display Attribute to BOLD.
- 6. From the toolbar, click the Box button to box the label.
- 7. Enter the box properties: Column = 0, Width in Columns = 20. Check the result with the next illustration.

Object Manager		_ 🗆 🗵	Viewport		
Object List				_	
Screen: Data_Help		-		Dete Vele	
Set Properties and Action	is for Box-	۲^		Data Help	
Data_Help.Box0			-	-	-
Name	Box0				
Row	0				
Column	0				
Height in Rows	3				
Width in Columns	20				
Display Attribute	BOLD				
Line Type	Single				
			<u> </u>		

8. From the toolbar, click the Scrolling Section button (fourth from right end).

- 9. Enter these properties for the Multi0 (multiple-line, scrolling section) field: Row = 4, Lines to Display = 11.
- 10. Click somewhere in the Viewport window, outside the scrolling section to be sure the scrolling section is not selected (no handles showing).
- 11. Click once inside the scrolling section to position your cursor inside it.
- 12. Enter the text and blank lines shown below. Do not type the double quote marks.

"Each data field is alphanumeric data.

Badge is employee's ID number, and is 10 characters.

Part Number is 25 characters maximum.

Order Number is 9 characters.

To re-enter data, press F4, Tab, or Shift-Tab keys.

Press F10 to return to the Job On or Job Off screen."

- 13. Change the Highlight Attribute from INVERSE to NORMAL.
- 14. Highlight and delete the Selection Key property.
- 15. Type "F10" as the Exit Key. Check your result with the next illustration.

Object Manager			Viewport
Object List			
Screen: Data_Help		-	
Set Properties and Action Data_Help.Multi0	s for MultiLine:	< ^	
Name	Multi0	-	
Comments			Order Number is 9
Row	4		characters.
Lines to Display	11		
Display Attribute	NORMAL		To re-enter data,
Highlight Attribute	NORMAL		Shift-Tab keys
Display Only	False		Diffic tub Royb.
Selection Key			Press F10 to return
Exit Key	F10		to the Job On or
Properties (On Entry (On	Selection/	<u> </u>	Job Off screen.



- 16. In the Object Manager window, scroll to the Navigation Choice property and click its small button with three dots to bring up the Navigation Selection dialog box.
- 17. Select the Return from Call option, as illustrated next.

Object Manager		Viewport
Object List		Navigation Selection
Screen: Data_Help		
Set Properties and Action	s for MultiLine	C <u>N</u> ext Field
Data_Help.Multi0	o tot maailante.	C <u>C</u> urrent Field
Comments		C Previous Field
Row	4	C Go to Field
Lines to Display	11	C Call Screen
Display Attribute	NORMAL	<u>R</u> eturn From Call
Highlight Attribute	NORMAL	
Display Only	False	Un Return On Next Field
Selection Key		O Current Field
Exit Key	F10	C Return From Call
Navigation Choice	<next field=""></next>	
Properties (On Entry (On	Selection/	OK X Cancel ? Help

- 18. Click OK to close the Navigation Selection dialog box. Notice that "Return" becomes the Navigation Choice property.
- 19. From the View menu, choose the Resource command. Notice the Data_Help screen now has three components (one label, one multi-line scrolling field, one box), as illustrated next.

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	· · · · · · · · · · · · · · · · · · ·
)bject Manager	View Resource
Object List	
Screen: Data_He	
Set Properties and A Data_Help.Mult Comments Row Lines to Display Display Attribute Highlight Attribu Display Only Selection Key Exit Key Navigation Choi	- Zezonnii - Clabel0 - Clabel0 - Multi0 - Box0 - Mabel0 - Clabel0 - Clabel1 - Clabel3 - Box0 - PartNum - OrderNo - Box0 - Matio - Box0 - Close - Print - Box0 - Multi0 - Box0 - Box0 - Box0 - Box0 - Box0 - Multi0 - Close Print Help - Close - Multio - Close - Multio - Close - Print - Help - Close
	Components America A Screens A Lieus A Transaction A Liocesses A File Mallies 7

20. Click Close to exit the View Resource dialog box. You have now completed Task 7. From the File menu or toolbar, save your application file.

Chapter Summary

This chapter gave you exercises in creating screens, data entry fields, and their respective labels. You learned how to wrap data and to program function keys for various navigation needs. You learned how to add, remove, and set the volume for audible beeps made upon key press actions. Also, in this chapter, you learned how to duplicate and adjust a screen as a quick way of creating a new screen that is similar to an existing screen.

The EZBuilder components covered up to this point in the tutorial are shaded in the next illustration. To create transactions, continue with Chapter 4.



Tutorial Exercise Summary

EZB.004