



# Q.

### How to translate projects for MT500 model to

### MT8000/eMT3000 model

EasyBuilder provides a feature to translate project files used on MT500 models and download them to MT8000/eMT3000 models. In this way, the project files can be upgraded without being rebuilt.

The following demonstration explains how to translate a MT500 project file and use it on an eMT3000 model.



Step 1. Since EasyBuilder Pro (EB Pro) can only convert from .eob format file, open the .epj file in EasyBuilder500 (EB500) to convert first. Click [Tools] » [Compile] to convert the .epj file to an .eob file. If the file is already an .eob file, skip this step.







#### Step 2. Launch EB Pro, click [Tools] » [Translate MT500 Project].

📧 EasyBuild	der Pro	
Eile Too	l <u>H</u> elp	
i D 🖉 🗕	Compress/Uncompress	🔒 🐶 🛯 🗛 🛛 🖉 🎫 💷 🛠 🚾 🕎 📳
	Translate MT500 Project	· A A E = = I A ·
:	Data/Event Log Converter	입 때 아 마 [M 후 ] 드 테 편 🕷
····· W	Decompile	
	Easy Watch	
	Administrator Tools	
	Recipe Database Editor	

# **Step 3.** Select the .eob file and the needed functions, click [Translate] to start translating.

Translate MT500 Project to	eMT3000 SERIES Project	<b>—</b> ×
MT500 EOB file :	C:\Users\user\Desktop\Test.eob	Browse
eMT3000 project :	C:\Users\user\Desktop\Test.emtp	Browse
Default font		
ASCII :	Times New Roman V Font Siz	e Table
Non-ASCII :	宋體	
	✓ Use MT500 ASCII font files (suggestion : check this box)	
	$\overline{\mathbb{Z}}$ Use the most suitable font size automatically (suggestion : check	this box )
☑ Delete "Dire (eMT3000 \$	ct Window" objects which are triggered with LB9060~9069, 9080, SERIES uses a new mechanism to manage keyboards.)	9081.
	Stop Translate	Exit



- 3.1 In [MT500 EOB file] box select the .eob file.
- 3.2 In [eMT3000 project] box enter the directory and file name to store the translated file.
- 3.3 EB500 uses Dos Font whereas EB Pro uses Windows True Font. When translating the project, select [Use MT500 ASCII font files] and [Use the most suitable font size automatically] if needed.
- 3.4 If not selecting [Use the most suitable font size automatically], click [Font Size Table] to select the font size used when translating EB500 font to EB Pro font.

Font Size Translation Table							
Font sizes of ASC	CII strings	Font sizes of non	-ASCII strings				
MT500 ->	eMT3000	MT500 ->	eMT3000				
8 ->	9 🔻	8 ->	9 •				
16 ->	10 🔹	16 ->	10 🔻				
24 ->	16 🔹	24 ->	16 🔹				
32 ->	20 🔻	32 ->	20 🔻				
48 ->	36 🔻	48 ->	36 🔻				
64 ->	40 🔹	64 ->	40 🔻				
72 ->	56 🔻	72 ->	56 🔹				
96 ->	72 •	96 ->	72 🔹				
Use Default		ОК	Cancel				

(Note: When the font size is bigger than the object size, Text object cannot display complete content.)

3.5 In EB500, to trigger a popup keyboard, a Direct Window which works together with relative system tags is needed. In EB Pro, the popup keyboard can be set simply by selecting the window number when creating the object. Therefore, it is recommended to select [Delete "Direct Window" objects which are triggered with LB9060~6069, 9080, 9081.] check box.



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- **Step 4.** After translation, the "succeeded" message is displayed. Click [Exit] to leave.

	o eMT3000 SERIES Project	_
MT500 EOB file :	C:\Users\user\Desktop\Test.eob	Browse
eMT3000 project :	C:\Users\user\Desktop\Test.emtp	Browse
Default font	, 	
ASCII :	Times New Roman    Font	Size Table
Non-ASCII :	標楷體	
	Use MT500 ASCII font files (suggestion : check this box)	
	Vise the most suitable font size automatically (suggestion : ch	ack this hav )
_		eck this box )
Delete "Dire (eMT3000     Window 2 finished     Window 3 finished	ect Window" objects which are triggered with LB9060~9069, 908 SERIES uses a new mechanism to manage keyboards.)	80, 9081.
Delete "Dire (eMT3000 Window 2 finished Window 3 finished Window 5 finished Window 4 finished Window 10 finished Window 50 finished Window 51 finished	ect Window" objects which are triggered with LB9060~9069, 908 SERIES uses a new mechanism to manage keyboards.)	80, 9081.
Delete "Dire (eMT3000     Window 2 finished     Window 3 finished     Window 5 finished     Window 4 finished     Window 10 finished     Window 50 finished     Window 51 finished     Succeeded	ect Window" objects which are triggered with LB9060~9069, 908 SERIES uses a new mechanism to manage keyboards.)	80, 9081.

**Step 5.** The translated file is stored in the specified directory. Click [File] » [Open] to open the .emtp file.





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- **Step 6.** When open the .emtp file, [System Parameter Settings] dialog box appears. Select a HMI model.

System Parame	System Parameter Settings							
Extended	Extended Memory Printer/Backup Server e-Mail Recipes							
Model	Device	General	System Setti	ing Securi	ty Font			
HMI HMI stat	i model : eMT30 tion no : eMT31 eMT31 ort no. : eMT30	70 (800 x 480) 05 (800 x 600) 20/eMT3150 (1024 70 (800 x 480)	4 x 768) tu as moddus ser	vers port no. <i>j</i>				

**Step 7.** The screen size of the selected model may be different from that of the MT500 model. Therefore, the following dialog box appears. Select whether to resize windows or objects and click [OK] to finish translation.

Resize pop-up windows/objects						
General windows						
Resize pop-up windows						
Resize objects						
Keyboard windows						
Resize keyboard windows						
Resize function key objects						
OK Cancel						





## Notes

Generally, most of the translations can be done following the steps described earlier. However, some objects or features designed differently in EB500 and EB Pro. Some steps which are more complicated is simplified and improved in EB Pro, and some features can't be translated by EB Pro and therefore requires users to adjust manually. Please note if the following items are used in EB500 project file, and check carefully on the content.

#### **Improved features**

- Combines Alarm and Event Log
- > Adds scroll bar on Alarm Display / Event Display objects.
- > Adds scroll bar on Trend Display object.
- Combines Recipe Transfer object with Data Transfer (Trigger-Based) object.
- > Changes the limits of keyboard value entry.

#### Manually adjust features

- Window size
- Security class (user password)
- Popup window
- RS485 default communication interface
- Data displayed in keyboard window
- Trend Display
- Label Tag Library
- Customized Address Tag Library
- Language
- Window name
- Object description



#### **Improved features**

- Combines Alarm and Event Log In EB500, alarms are logged in Alarm Scan object and events are logged in Event Log object. EB Pro combines these two types of logs in Alarm (Event) Log object.
- Adds scroll bar on Alarm Display / Event Display objects.
   EB Pro includes scroll bars on Alarm Display / Event Display objects. Users don't have to create a word register to control event display in EB Pro.
- Adds scroll bar on Trend Display object.
   EB Pro includes scroll bars on Trend Display objects. Users don't have to create a word register to control trend display in EB Pro.
- Combines Recipe Transfer object with Data Transfer (Trigger-Based) object.
   EB Pro includes the functions of Recipe Transfer object on Data Transfer (Trigger-Based) object.
- Changes the limits of keyboard value entry. The format of value entry in EB500 is 32-bit signed, whereas the format of value entry in EB Pro is 32-bit float.





#### Manually adjust features

#### Window size

The screen size of MT500 may be different from that of the new model. If so, adjust the screen size of the project..

1. In EB Pro, right-click on the window tree in project and select [Attribute] to check the current window size.

Window Set	ttings	
Win	Name : Window_10	
Size	Width : 800	Height: 480
Frame	Width : 1	▼ Color : ▼
2 In [9	System Parameter 9	Settings] check the current HMI model

In [System Parameter Settings] check the current HMI model type and its resolution.

System Parameter Settings							
Extended Memory Printer/Backup Server e-Mail Recipes							
Device	Model	General	System Setti	ng	Security	Font	
HMI	model : eMT30	70 (800 x 480)				•	
HMI stat	ion no : 0	•					
PC	ort no. : 8000	(use	ed as MODBUS ser	ver's po	rt no.)		

3. If the resolution of the model is different from the project window size, please change the project window size by switching to another model.

FAQ Demonstration: <u>FAQ 07 Switch MT8000 Project between HMI Models</u> Video Demonstration: <u>EasyBuilder - Resize</u>



#### Security class (user password)

The security mechanism in EB500 mainly protects windows, and only three accounts are allowed. In EB Pro, not only windows but also objects on windows can be protected by different security classes. EB Pro provides two security modes, [General mode] and [Enhanced security mode]. [General mode] provides 12 user accounts and 6 security classes whereas [Enhanced security mode] provides 12 user accounts and 12 security classes. Secret user and User Account Control (UAC) are available in [Enhanced security mode]. Since the security mechanism in EB500 is completely different from EB Pro, this function can't be translated. Please set the security mechanism again after translation.

Extende	ed Memory	/ P	rinter/Backup Serv	er	e-Mail	R	ecipe
Device	Model General System Setting Security Font						
© General mode							
elect oper	able classe	es for each use	r				
Use e	xisting use	r accounts on H	MI				
No.	Enable	Secret user	User name	Passw	ord	Class A	
No. 1	Enable	Secret user	User name user1	Passw 1	ord	Class A	
No. 1 2	Enable	Secret user	User name user1 user2	Passw 1 2	rord	Class A	
No. 1 2 3	Enable	Secret user	User name user1 user2 user3	Passw 1 2 3	rord	Class A	* III
No. 1 2 3 4	Enable	Secret user	User name user1 user2 user3 user4	Passw 1 2 3 4	rord	Class A	* III
No. 1 2 3 4 5	Enable	Secret user	User name user1 user2 user3 user4 user5	Passw 1 2 3 4 5	rord	Class A	
No. 1 2 3 4 5 6	Enable	Secret user	User name user1 user2 user3 user4 user5 user6	Passw 1 2 3 4 5 6	rord	Class A	
No. 1 2 3 4 5 6 7	Enable	Secret user	User name user1 user2 user3 user4 user5 user6 user7	Passw 1 2 3 4 5 6 7	rord	Class A	

(EB Pro)

See EasyBuilder Pro User Manual: <u>Chapter 10 Security</u> [General mode] Demonstration: <u>Security</u>

[Enhanced security mode] Demonstration: Enhanced Security



#### Popup window

In EB500, a popup window can be closed by selecting [Change window] when setting a Function Key object, and at the same time change to another window. In EB Pro, the change window action and close popup window action are separated. The popup window has to be closed by selecting [Close window] when setting a Function Key object. If in EB500, [Change window] check box is selected, please select [Close window] in EB Pro after translation.

Function Key Object's Attributes	
General Shape Label Profile	
Description :	
◎ [ENT] ◎ [BS]	[CLR]
(ASCII)	Hard copy Attributes
Change window	Return to previous
Change common window	Window no. : 10

#### (EB500)

Furthermore, in EB Pro, [Close this popup window when parent window is closed] check box on [Function Key Object's Properties] dialog box is selected by default after translation. If this function is not needed, clear the selection manually.

Function Key Object's Properties	×
General Security Shape Label Profile	
Description :	ן כ
Activate after button is released	
Change full-screen window     Change common window	
Oisplay popup window	
Close this popup window when parent window is closed	
Style : No title bar 🗸	
Window no. : 11. Window_11	
(EB Pro)	





RS485 default communication interface

The [RS485 default] selection is not available in EB Pro PLC I/F setting, therefore, after translation, the interface may be changed to another one. Please select the correct PLC I/F in EB Pro.

System	Parameter Sett	ing		×
PLC	General Indi	cator Security Editor Ha	rdware Aux.	
	PLC type :	OMRON CJ1/CS1/CP1H [PI	DS V2.50] 🔹	
	HMI model :	MT510T/MT508T (640 x 480	)) 🔹	
	PLC I/F port :	RS-485 default 🔹	Baud rate :	9600 🔻
	Data bits :	7 Bits 🔹	Parity :	Even -
	Stop bits :	2 Bits 🔹		
		(FB5	00)	

> Data displayed in keyboard window

EB500 writes the data entered by keyboard to registers from LW-9060 through LW-9075. EB Pro writes the data entered by keyboard to LW-9150. Please check the ASCII Display object (AD\_0) in window number 50 and 51 to see if the translation is correct.

Trend Display

In EB500, when setting Trend Display object, the [Hold trend display] selection for [Hold style] is not loaded in EB Pro after translation. In EB Pro, please select [Data Sampling] object and set [Clear address] and [Hold address].

Create Trend Disp	olay Object		×
General Trend			
Page type :	Multiple pages 🔹	No. of page : 1	-
Hold style	Hold trend display	Attribute : Start from left	•
Sampling time	Hold trend display Hold trend display & clear	Plot point : 10	
Read address			
Device type :	RW 🔻	Device address : 0	
	BIN -	No. of channel : 1	•
	Aux.		
	(EB5	00)	



FAQ

Data Sampling Object	
Description : Sampling mode (a) Time-based (b) Trigger-based Sampling time interval : 1 second(s)	PLC name : Local HMI
Read address PLC name : Local HMI   Address : LW  Data Record  Max. data records (real-time mode) : 1000  Auto. stop  Data Leoroth : 0.word(c)	Hold address    Hold address   Mode : ON
Data Format Data Jengah : 0 Word(s)	Save to USB disk
(EB	Pro)

Label Tag Library

The format of Label Tag Library in EB500 is different from the format in EB Pro. Please follow the steps to use the data of Label Tag Library in EB Pro.

1. In EB500, open Label Tag Library, and click [Export CSV File].

Add Modify	Delete Export CSV File Import CSV File
	OK Cancel Apply Help

- 2. Open the .csv file by using Office Excel, edit the file and save to a .xls file.
- 3. In EB Pro, open Label Tag Library, and click [Import Excel File].





Lab	el Tag	g Library											83
La	bel	Font											
	La	nguage no. : 24	•										
		State no. : 0	•	• • 0	12	3 4 5	6 7						
	No.	Label tag name	No. of states	Language 1	Language 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language 8	Language 9 L	angu
	•		III										•
		New	Settings		Delete	Dele	te All		S	ave Label File	···· ] [ 1	oad Label File	
		Сору	Paste						Ex	port EXCEL Fi	le In	nport EXCEL File	
									OK	C	ancel	(	Help

Customized Address Tag Library

The format of Address Tag Library in EB500 is different from the format in EB Pro. Please follow the steps to use the data of Address Tag Library in EB Pro.

1. In EB500, open Address Tag Library, click [Export CSV...].

Tag Library				<b>—</b> ×
Tag test	mode : BIT	address : LB	0	Add Delete Modify
				Export Import Export CSV Import CSV
				Exit





	А	В	С
1	Coffee	LW	0
2	Tea	LW	1
3	Calories	LW	2
4	Sugar	LW	3
5	Milk	LW	4
6	Price	4x	0

3. Insert a column between column A and B, and enter the device name as shown in the following figure.

-		-		
	Α	В	С	D
1	Coffee	Local HMI	LW	0
2	Tea	Local HMI	LW	1
3	Calories	Local HMI	LW	2
4	Sugar	Local HMI	LW	3
5	Milk	Local HMI	LW	4
6	Price	MODBUS RTU	4x	0

In EasyBuilder, please see [System Parameter Settings] » [Device list] to find the device name.

stem Parame	ter Settings								2
Extended	Memory	Print	er/Back	up Server	e	e-Mail		Recip	es
Device	Model	Gener	General System Setting Security			General System Setting Security		Fo	ont
Device list : No.	Name	Location	Device	type	Interface		I/F Prot	ocol	Stati
Local HMI	Local HMI	Local	eMT3	070 (800 x	Disable		N/A		N/A
Local PLC 1	MODBUS RTU	Local	MODE	SUS RTU	COM 1 (90	600,E,8,1)	RS232		1

4. In EB Pro, open Address Tag Library, click [Import CSV...].

* Users can import MT5	00 tag to represent the a	ddress.		
New	Delete	Delete All	Settings	]
Save Tag File	Load Tag File	_		
Export CSV	Import CSV	Export EXCEL	Import EXCEL	Exit





#### Language

Chinese language contains Simplified Chinese and Traditional Chinese. After translation, if incorrect font is displayed in the file, please follow the steps to translate again.

- 1. In Easy Manager, use [Off-line simulation] to check current language of the project.
- On PC, go to [Control panel] » [Region and Language] »
  [Administrative] tab and set current language for non-Unicode
  programs according to the current language of the project.

Region and Language					
Formats Location Keyboards and Languages Administrative					
Welcome screen and new user accounts					
View and copy your international settings to the welcome screen, system accounts and new user accounts.					
🛞 Copy settings					
Tell me more about these accounts					
Language for non-Unicode programs					
This setting (system locale) controls the language used when displaying text in programs that do not support Unicode.					
Current language for non-Unicode programs:					
Chinese (Traditional, Taiwan)					
🚱 Change system locale					

3. When finished, restart PC, and translate the .eob file of EB500 again. The font should be correctly displayed.





#### Window name

The window names specified in EB500 will be renamed by window numbers after translation.

Windows	<b>•</b> ×
Object list	•
3 : Fast Selection     4 : Common Window     5     6     7 : Password Restriction     8     9     •••     *10 : Window_10     11 : Window_11     12 : Window_12     13 : Window_13     14 : Window_14	

Object description

The descriptions specified in EB500 will be cleared after translation.

unction Key Object's Properties				
General Security Shape Label Profile				
Description :				
Activate after button is released				