

Rockwell EtherNet/IP (ControlLogix) – Free Tag Names

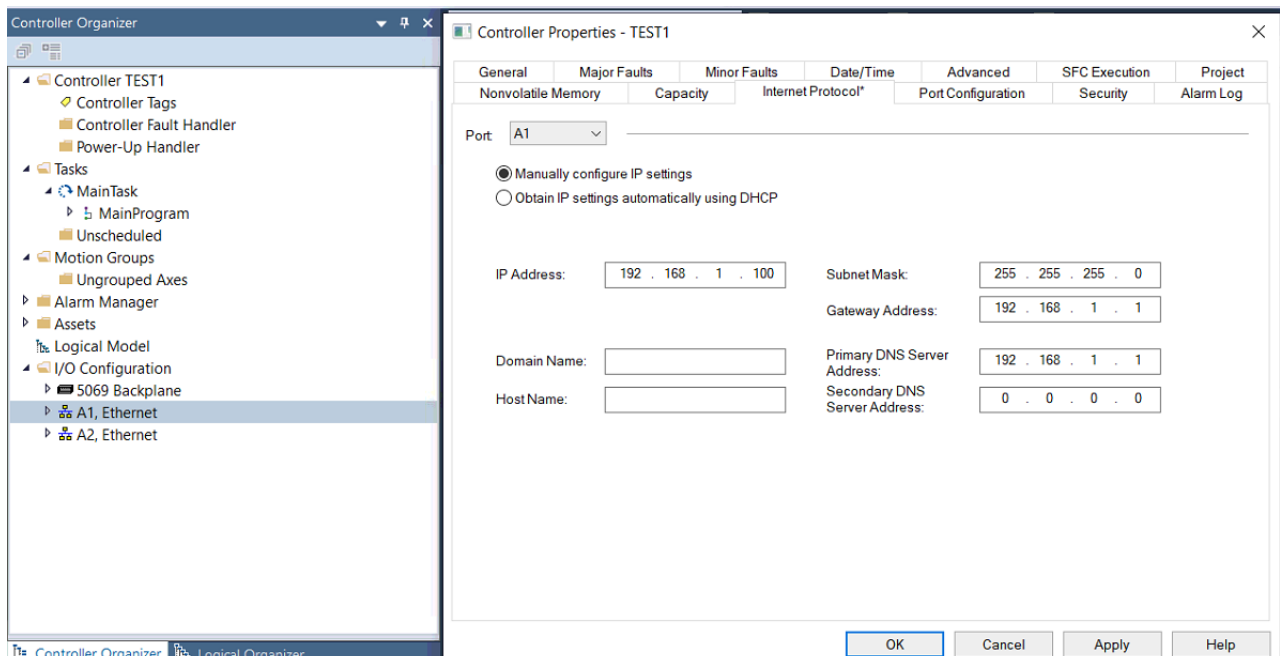
Supported Series: Rockwell ControlLogix, CompactLogix, FlexLogix Ethernet,
 CompactLogix 1768-L43 1768-L45 with 1768-ENBT/A Ethernet module
 Website: <http://www.ab.com>

HMI Settings:

Parameters	Recommended	Options	Notes
PLC type	Rockwell EtherNet/IP (ControlLogix) – Free Tag Names		
PLC I/F	Ethernet		
Port no.	44818		
PLC sta. no.	The same as CPU Slot No.		

PLC Settings:

1. Set PLC IP address.

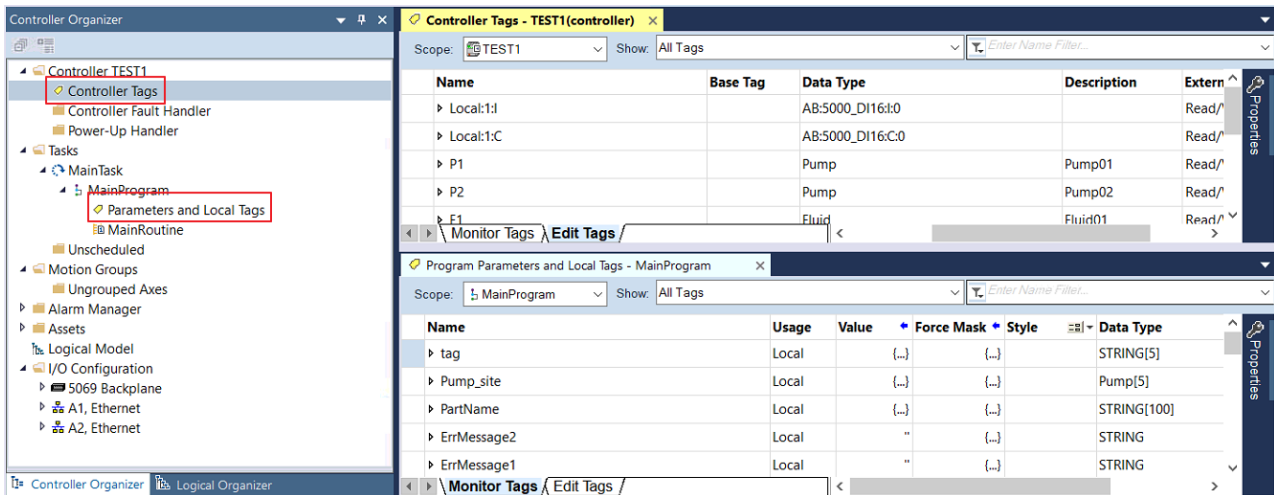


The screenshot displays the 'Controller Properties - TEST1' dialog box in the Rockwell Studio 5000 software. The 'Port Configuration' tab is selected, and the 'Port' is set to 'A1'. The 'Manually configure IP settings' radio button is selected. The IP configuration fields are as follows:

- IP Address: 192 . 168 . 1 . 100
- Subnet Mask: 255 . 255 . 255 . 0
- Gateway Address: 192 . 168 . 1 . 1
- Domain Name: (empty)
- Primary DNS Server Address: 192 . 168 . 1 . 1
- Secondary DNS Server Address: 0 . 0 . 0 . 0
- Host Name: (empty)

The 'Controller Organizer' on the left shows the project structure for 'Controller TEST1', with 'A1, Ethernet' selected under 'I/O Configuration'.

2. Create new tags (Controller Tags and Program Tags supported).



There are two ways to get tags, one is by importing .L5X or .CSV files (click Import Tags...), another is by connecting PLC (click Get Tag Info...). After creating a project by one of these ways, please use the same way in future for maintenance to prevent compilation failure.

Recommended for PLC Offline: Import .L5X

Recommended for PLC Online: Get Tag Info

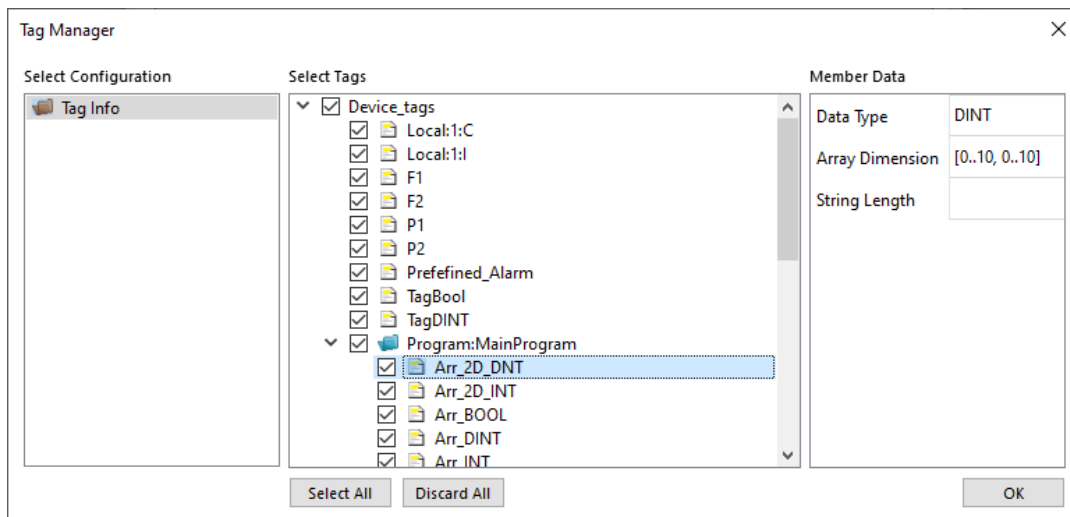
Comparison:

	L5X	CSV	Get Tag Info
Can Description be Imported?	Yes	Yes	No
Need Adding Data Type?	No	Yes	No

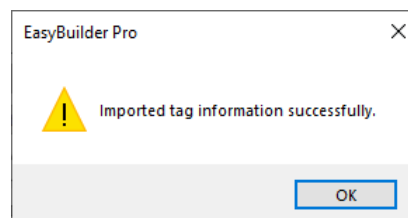
*Description is only supported for atomic tags. (Not supported for structure or array)

Get Tag Info:

1. After adding the driver in EasyBuilder Pro, check whether all communication parameters are correct, and then click [Get Tag Info].
2. Select the tag information to be imported and then click [OK].



3. Click [OK] after tag information is imported successfully.

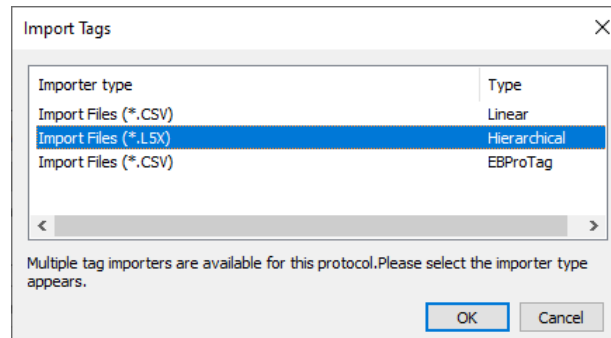


4. View imported information and click the close icon [X] to leave.

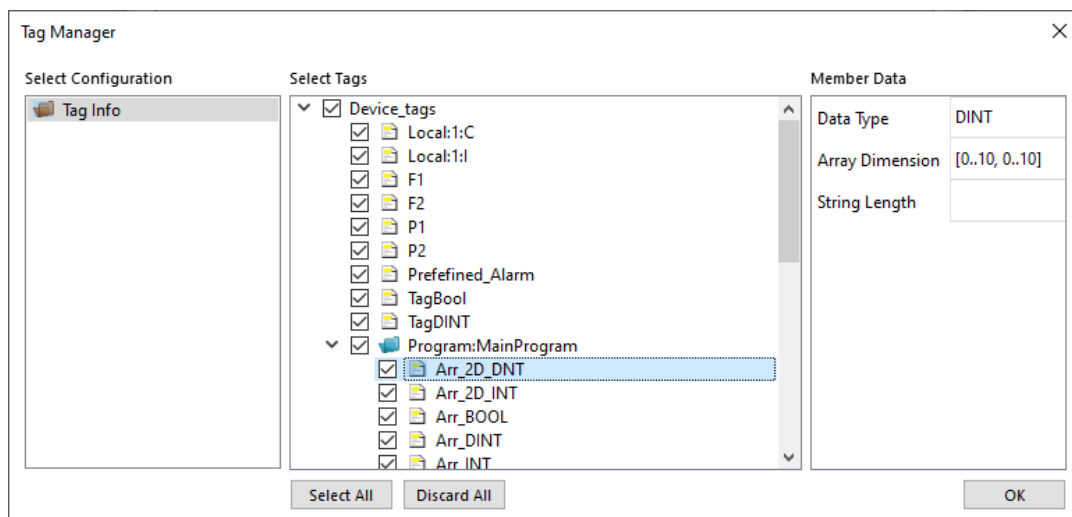
Name	Data type	Description
F1	Fluid	
F2	Fluid	
Local:1:C	AB:5000_...	
Local:1:I	AB:5000_...	
P1	Pump	
P2	Pump	
Prefefined_Alarm	ALARM	
TagBool	BOOL	
TagDINT	DINT	
__CONTAINER	DINT	
Program:MainProgram	Program:...	

Import Tag (L5X):

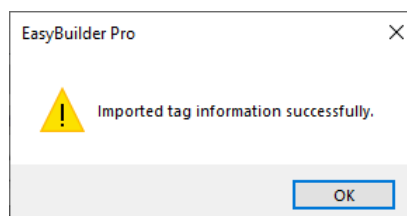
1. Export .L5X file from RSLogix 5000 software. The path is: File -> Save as -> *.L5X.
2. Add the driver in EasyBuilder Pro, click [Import Tags], select [Import Files] (*.L5X), and then click [OK].



3. View imported information and click the close icon [X] to leave.



4. Click [OK] after tag information is imported successfully.

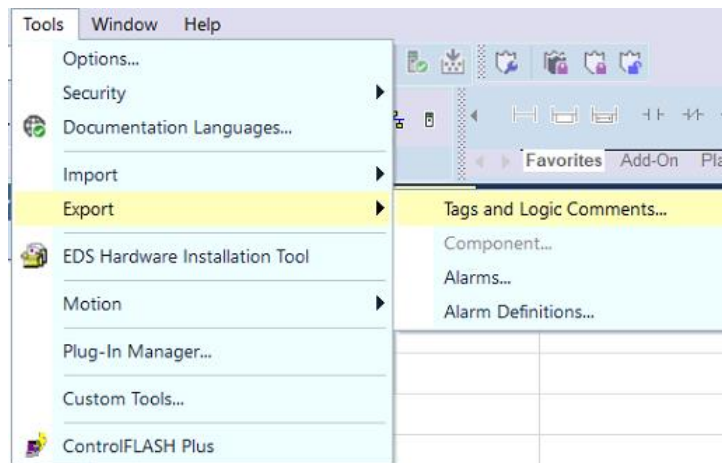


Import Tag (CSV):

The tags edited using RSLogix5000 can be exported as a CSV file, and then imported in EasyBuilder Pro.

Note: For Tags that use Data Types such as User-Defined, Strings, Predefined, and Module-Defined, please click [Data Type...] to add necessary data types before importing the CSV file.

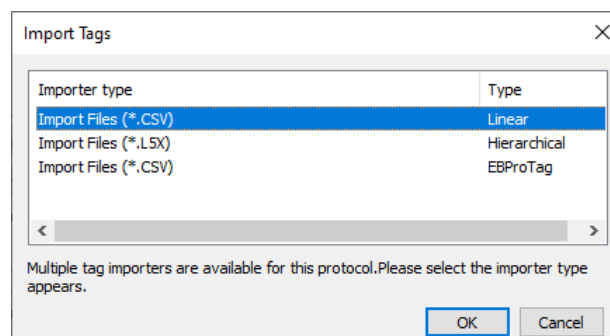
1. Export Tag data to CSV file. ([Tools] » [Export] » [Tags and Logic Comments])



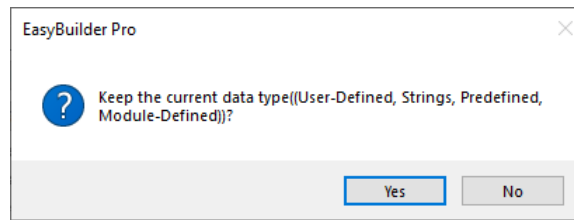
Note: The separator character in CSV file must be a comma “,” otherwise the file is invalid.

The directory of changing system settings: [Control Panel] » [Date, Time, Language, and Regional Options] » [Change the format of numbers, dates, and times] » [Customize] » [List separator]. Please select “,” and export CSV file after setting.

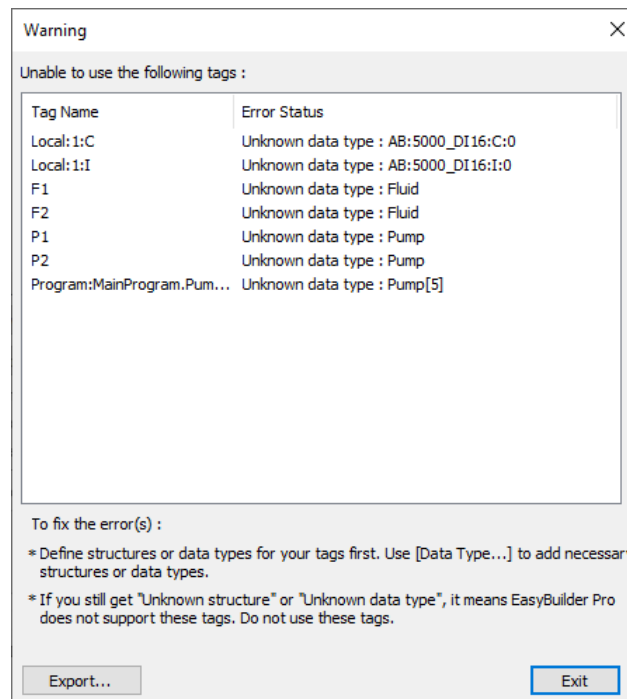
2. In [System Parameter Settings], click [Import Tags], select [Import Files] (*.CSV), .and click [OK].



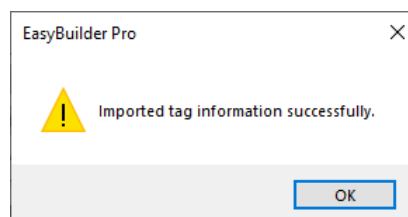
3. Decide whether to keep the current data type (User-Defined, Strings, Predefined, Module-Defined) or replace with default data type.



4. A Warning window appears when unsupported tags are used. Please check whether these tags use data types, and add the necessary ones.



5. The following message pops up when the tags are successfully imported.

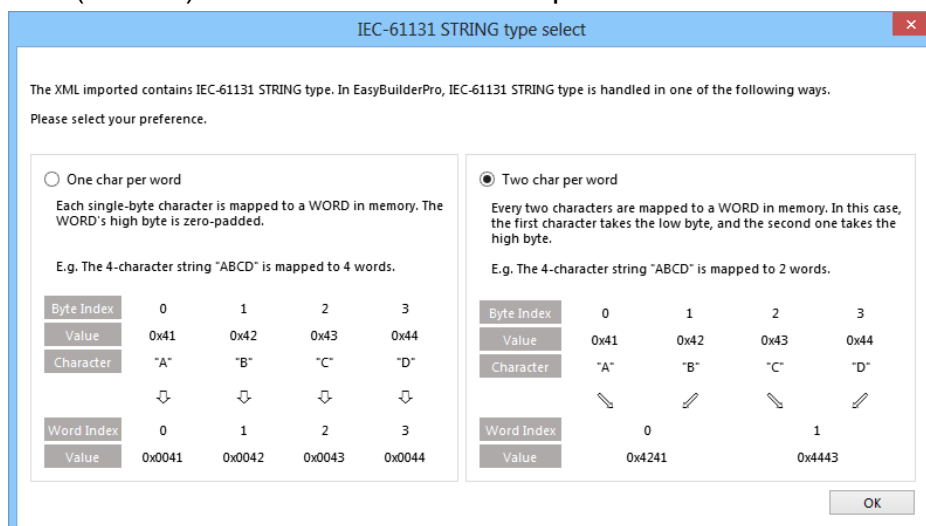


Device Address:

PLC data type name	Bit/Word	EasyBuilder data format	Memo
BOOL	Boolean	Bit object	
BitArray			
SINT			-128 ~ 127
USINT			0 ~ 255
INT	Integer	16-bit signed, ASCII	-32768 ~ 32767
UINT			0 ~ 65535
DINT	Double Integer	32-bit signed	$-2^{31} \sim (2^{31}-1)$
UDINT			0 ~ 4294967295
REAL	Single Precision Float	32-bit float	IEEE 754
LINT	Long Integer	64-bit signed	*Note
ULINT	Long Integer	64-bit unsigned	*Note
LREAL	Double Precision Float	64-bit double	*Note
STRING			*Note4

Note:

1. EBPro V6.03.02 or later supports 64 bits data type (cMT Series only), but please note that the address limit range is 48 bits in maximum.
2. Please avoid using "." in the Tag name because this may influence macro execution.
3. Shorter tag names are recommended for enhancing communication efficiency.
4. When importing, there are two modes of one/two char per word to choose from. When importing one char per word, choose Unicode data format for ASCII objects, and choose UTF-8 (Default) data format for two char per word.



5. Data format supported for Binary Access: INT, DINT, and SINT.

Wiring Diagram:

Ethernet cable:

