

## Rockwell CompactLogix - Free Tag Names

Rockwell ControlLogix, CompactLogix, FlexLogix CH0 DF1.

Website: <https://www.rockwellautomation.com/>

### HMI Settings:

Parameters	Recommended	Options	Notes
PLC type	Rockwell CompactLogix - Free Tag Names		
PLC I/F	RS232		
Baud rate	19200	9600, 19200, 38400	
Data bits	8	8	
Parity	None	Even, Odd, None	
Stop bits	1	1	
Turn around delay	10	10 ~ 100	*Note
HMI sta. no.	0		
PLC sta. no.	1	1-31	

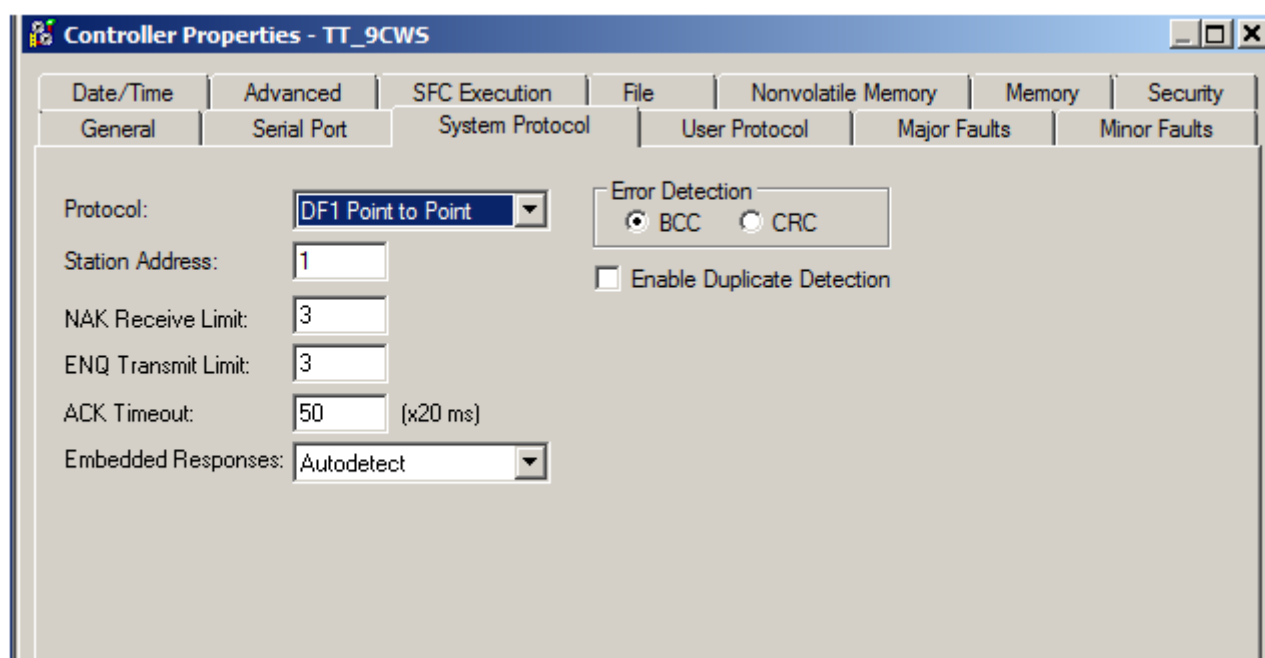
\*Note : When communication is not stable, please adjust [Turn around delay].

### PLC Settings:

#### Communication mode

DF1 Point to Point Protocol

Error Check: BCC, Station Address: 1



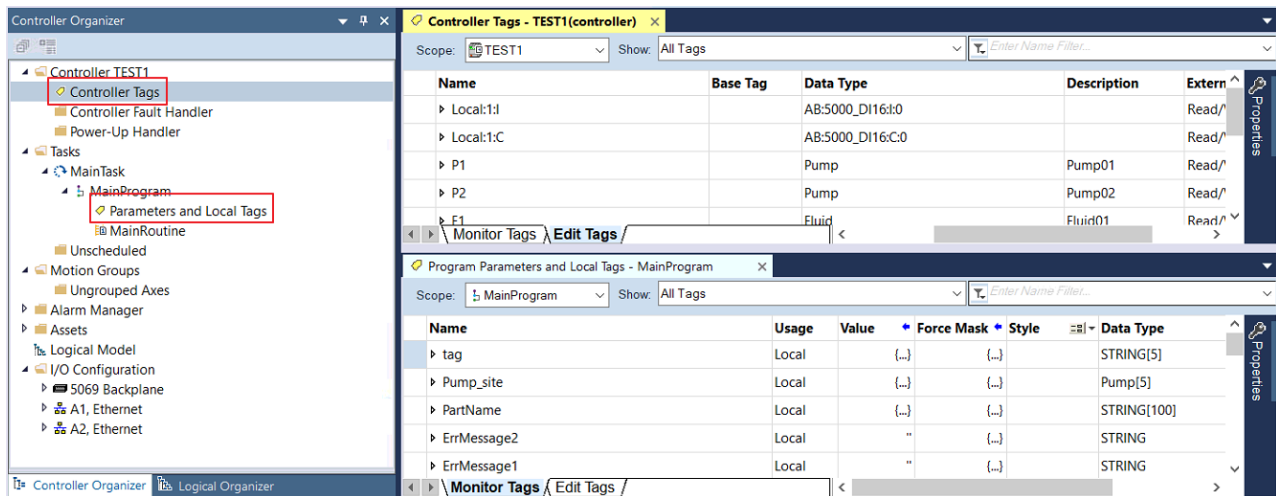
**Controller Properties - TT\_9CWS**

Date/Time | Advanced | SFC Execution | File | Nonvolatile Memory | Memory | Security  
 General | Serial Port | **System Protocol** | User Protocol | Major Faults | Minor Faults

Protocol: **DF1 Point to Point**  
 Station Address: **1**  
 NAK Receive Limit: **3**  
 ENQ Transmit Limit: **3**  
 ACK Timeout: **50** (x20 ms)  
 Embedded Responses: **Autodetect**

Error Detection:  
☒ BCC ☐ CRC  
☐ Enable Duplicate Detection

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

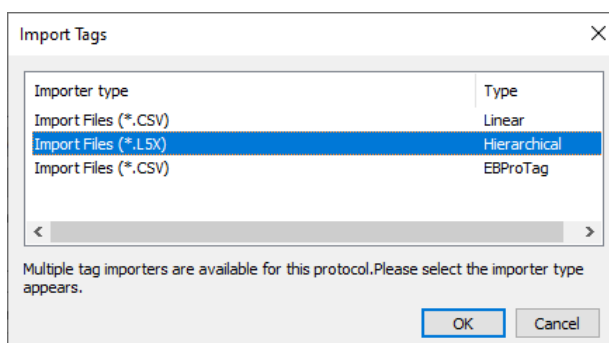
Comparison:

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

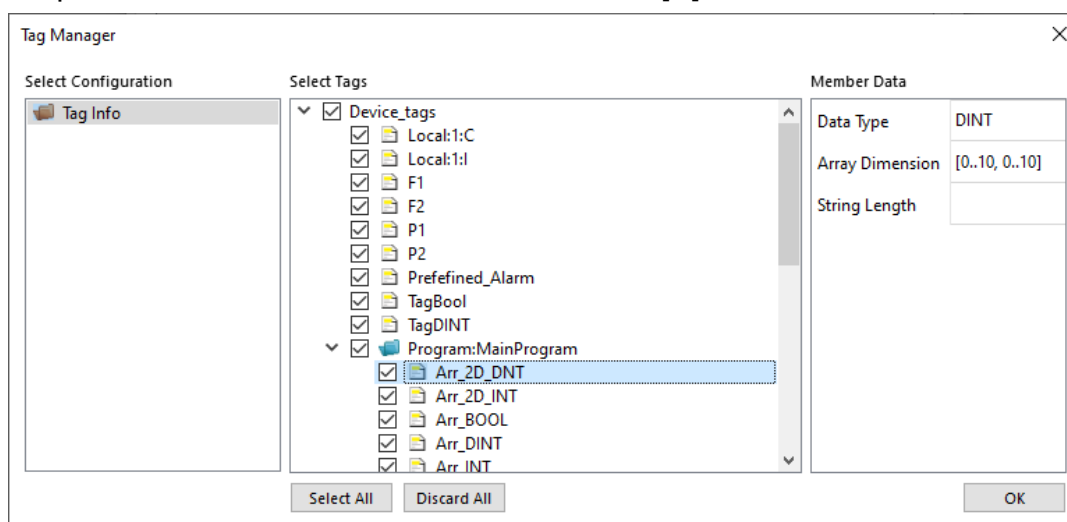
\*Description is only supported for atomic tags. (Not supported for structure or array)

## Import Tag (L5X):

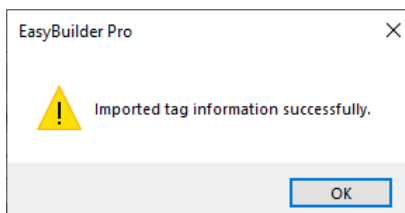
1. Export .L5X file from RSLogix 5000 software. The path is: File -> Save as -> Logix Designer XML File (\*.L5X).
2. Add the driver in EasyBuilder Pro, click [Import Tags], select [Import Files] (\*.L5X), and then click [OK].



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



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

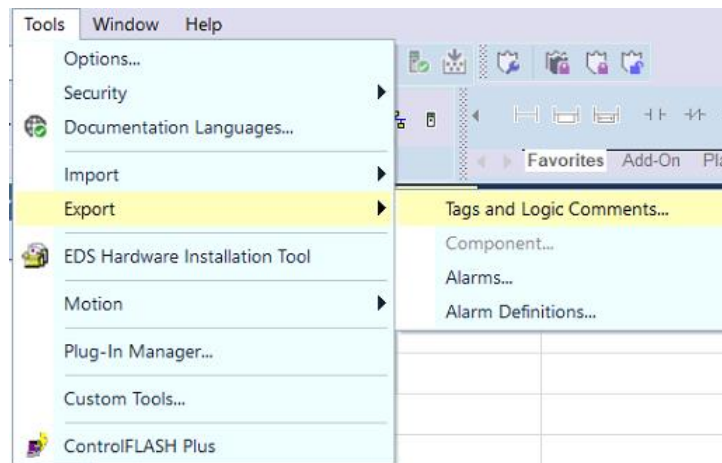


## Import Tag (CSV):

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.

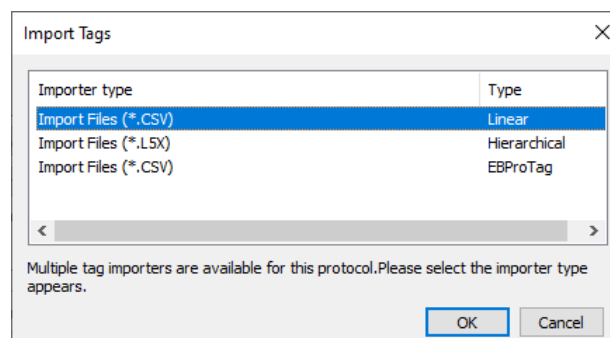
1. Export tag data to CSV file. ( [Tools] » [Export] » [Tags and Logic Comments] )



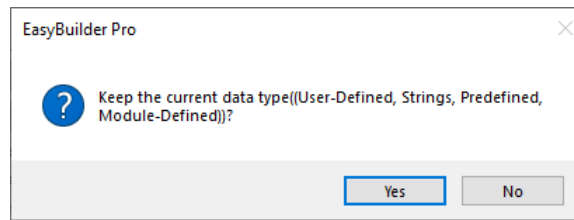
Note: The separator character in CSV file must be a comma “,”; otherwise the file is invalid.

The directory for 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.

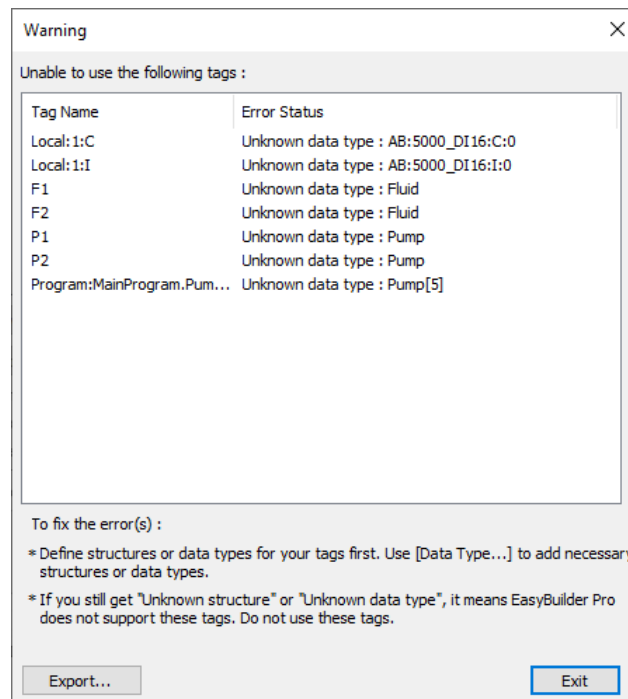
2. In [System Parameters], click [Import Tags], select [Import Files] (\*.CSV), .and then click [OK].



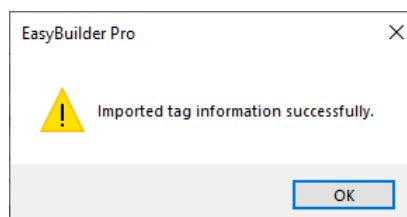
3. Decide whether to keep the current data type (User-Defined, Strings, Predefined, Module-Defined) or replace with default data type.



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



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

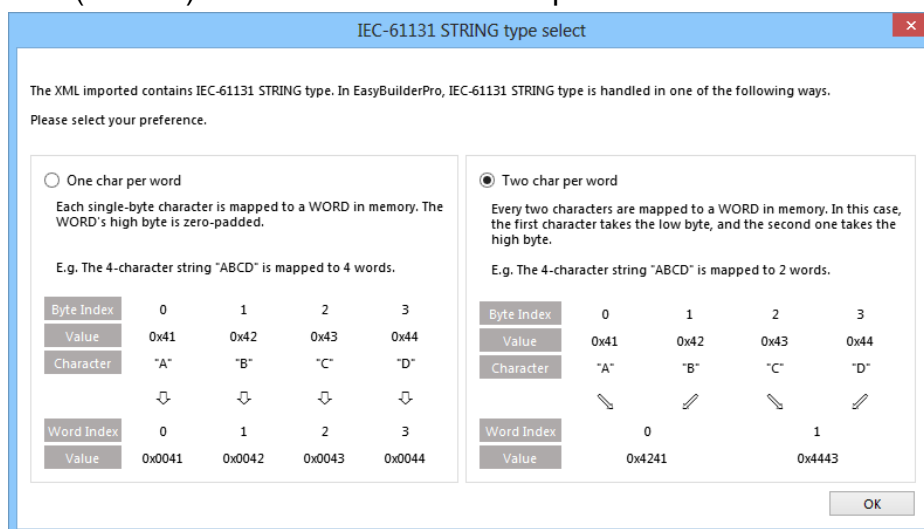


## Device Address:

PLC Data Type	Bit/Word	EasyBuilder Data Format	Memo
BOOL	Boolean	Bit object	
BitArray			
SINT			-128 ~ 127
INT	Integer	16-bit signed, ASCII	-32768 ~ 32767
DINT	Double Integer	32-bit signed	$-2^{31} \sim (2^{31}-1)$
REAL	Single Precision Float	32-bit float	IEEE 754
LINT	Long Integer	64-bit signed	*Note1
ULINT	Long Integer	64-bit unsigned	*Note1
LREAL	Double Precision Float	64-bit double	*Note1
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:

### RS-232

The serial port pin assignments may vary between HMI models, please click the following link for more information.

