# **PLC Configuration Notes**

## 1. DB property

Select the DB in the left pane under "Program blocks" and press Alt-Enter (or in the contextual menu select "Properties...")

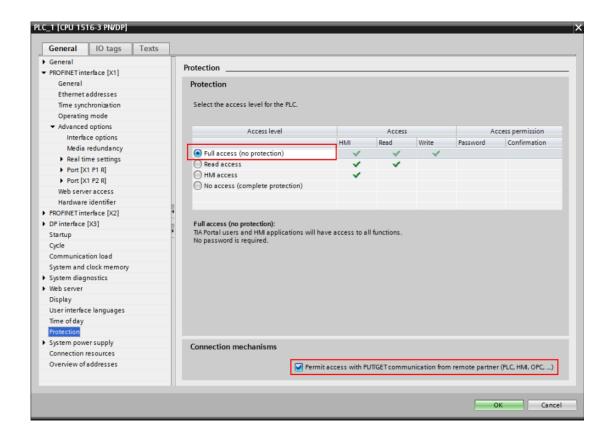
Uncheck Optimized block access, by default it's checked.

YM_IO [DB10]		
General		
General Information	Attributes	
Time stamps Compilation	Only store in load memory	
Protection Attributes Download with	Data block write-protected in the device     Optimized block access	
< III >		
		OK Cancel

#### 2. Protection

Select the CPU project in the left pane and press Alt-Enter (or in the contextual menu select "Properties...")

In the item Protection, select "Full access" and Check "Permit access with PUT/GET  $\dots$ " as in figure.



# **Edgelink Configuration**

#### 1. Add device

Project Configuration «	NewDevice(ECU-1051)*	x
e	Apply 🗙 Disc	card
🖶 🔤 Data Center	<b>General Information</b>	
🖶 🚟 IO Tag		
	Inable	
COM2(Disable)	Name:	NewDevice
	Device Type:	Siemens S7-300/1200/1500 PLC (S7Co
	Device Model	OPC UA Panasonic FP0, FP-X, FP2 Series PLC (Mewtocol)
⊕ Data Storage ⊕⊇ Service	Unit Number:	Schneider ION6200 (Modbus TCP) Siemens LOGO! PLC via Ethernet
🚽 Event Manager	Tag Write Type:	Siemens S7-200 PLC (PPI) Siemens S7-300/1200/1500 PLC (S7Comm TCPIP)
W Settings Connectivity Could Cloud	Description:	WAGO I/O System 750 YASKAWA MP Series Ethernet (Extension) YASKAWA MP900 series, MemoBus Modbus compatible (Modbus TCP) Yokogawa FA-M3 Ethernet Factiry ACE PLC
	Add device name as pr	refix to IO tags 🕒 Bulk Copy

NewDevice						
s S7-300/1200/1500 PLC (S7Co 🔻						
Double Click to Select Device Template						
Vrite 🔻						
A						
·*						
) tags 📃 🕒 Bulk Copy						
8.172.3						
01172.0						

Unit Number: Not the same as other device in the same interface is ok. IP Address: The IP of the PLC.

**Port Number:** Default port of S7 series PLC is 102. **TSAP:** S7-1200/1500 is generally fixed 01.00

### 2. Add Tags

New Tag			
🚰 Basic		Advanced	
Name: Data Type: Conversion Address: Start Bit: Length(bit): Span High: Span Low: Initial Value: Scan Rate: Read Write: Description:	NewTag Analog Analog Unsigned Integer Unsigned Integer  Unsigned Integer  0 0 16 1000 0 0 0 1 Read/Write	Scaling Type: Formula: Scale: Offset: Clamp:	No Scale
			OK Close

The format of address is "DB block,Offset" Below is the details:

### 1) Analog Configuration

	Template		Code			
参数	地址模板	描述	转換代码 (默认)	长度 (bits)	最高量程 ( 默认 )	显示格式
DB	DB5,10	DB	Unsigned Integer	16	65535	5.0
DBB	DBB1,0	DB Byte Data		8	256	3.0
DBD	DBD1,0	DB DWord Data		32	4,294,967,296	10.0
DBW	DBW1,0	DB Word Data		16	65535	5.0
IB	IB000	Input Byte		8	256	3.0
ID	ID000	Input Dword		32	4,294,967,296	10.0
IW	IW000	Input Word		16	65535	5.0
MB	MB001	Internal Byte		8	256	3.0
MD	MD001	Internal Word		24	1,048,576	7.0
MW	MW001	Internal Dword		16	65535	5.0
PIB	PIB000	Extend Input Byte		8	256	3.0
PID	PID000	Extend Input Dword		32	4,294,967,296	10.0
PIW	PIW000	Extend Input Word		16	65535	5.0
QB	QB000	Output Byte		8	256	3.0
QD	QD000	Output Dword		32	4,294,967,296	10.0
QW	QW000	Output Word		16	65535	5.0

Parameter Address Description Conversion Length

Example: There is a variable "abc" in DB1 which is int and the offset is 8. So the address should be DBW1,8.

项目树		IJ	〔目	1)	P	LC_1 [CPU 1214C	DC/D	C/DC]	▶ 程序	块	▶ db [D	B1]			
设备															
1 B	2	3	ÿ ≣	de de	iii,q	🛃 🖹 😤 保持	实际(	i 🔒	快照	Ph 1	🖳 将快	照值复制到起始值中	B- B-	将起始值加载为	内实际值
			dt	5											
▼ 🔄 项目1	^			名	称		1	数据类型	2		偏移量	起始值	保持	可从 HMI/	从 H
📑 添加新设备		1	-0	•	St	tatic									
晶 设备和网络		2				qwe	1	Real			0.0	1.1			
PLC_1 [CPU 1214C DC/DC/DC]		3	-			awer		Real			4.0	2.2			<b></b>
➡️ 设备组态		4		•		abc	1	Int			8.0	1			
№ 在线和诊断	=	5	1	1 -		abcd	1	Int			10.0	2			
▼ 🔜 程序块															
📑 添加新块															
-D- Main [OB1] db [DB1]															
▶ 🙀 工艺对象															
▶ 🔤 外部源文件															
▶ 🔁 PLC 变量															
▶ 📴 PLC 数据类型															

Analog	Example	Table:
--------	---------	--------

S7 PLC Address	Edgelink IO Configuration								
Register Address	Address         Start bit         Length         Conversion Code								
DB28.DBW2	DBW28,2	0	16	Unsigned Integer					

DB12.DBD86	DBD12,86	0	32	Unsigned Integer
DB2.DBB1	DBB2,1	0	8	Unsigned Integer
DB2.DBW64 (Float)	DBW2,64	0	32	Real

# 2) Discrete Configuration

Parameter	Address Template	Description	Conversion Code	Length	
参数	地址模板	描述	<ul><li> 转換代码 </li><li> ( 默认 ) </li></ul>	长度 (bits)	
DBX	DBX1,0	DB Bit	Unsigned Integer	1	
IX	IX000	Input		1	
MX	MX000	Internal Bit		1	
QX	QX000	Output		1	

Discrete Example Table:

S7 PLC Address	Edgelink IO Configuration								
Register Address	Address	Start bit	Length	Conversion Code					
I0001.2	IX0001	2	1	Unsigned Integer					
10003.5	IX0003	5	1	Unsigned Integer					
Q1003.2	QX1003	2	1	Unsigned Integer					