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.

General		
General Information	Attributes	
Time stamps		
Compilation	Only store in load memory	
Attributes Download with	Data block write-protected in the device Optimized block access	

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" as in figure.





Edgelink Configuration

1. Add device





Name:	NewDevice						
Device Type:	Siemens S7-300/1200/1500 PLC (S7Co *						
Device Model	Double Click to Select Device Template						
Unit Number:	1						
Tag Write Type:	Single Write	•					
Description:							
		· ·					
Add device name	as prefix to IO tags	Bulk Copy					
Add device name a	as prefix to IO tags	Bulk Copy					
Add device name a	as prefix to IO tags	Bulk Copy					
Add device name : TCP/IP IP Address: Port Number:	as prefix to IO tags	Bulk Copy					
Add device name a TCP/IP IP Address: Port Number:	as prefix to IO tags 192.168.172.3 102	Bulk Copy					
Add device name : TCP/IP IP Address: Port Number: cention Properties	as prefix to IO tags 192.168.172.3 102	Bulk Copy					
Add device name : TCP/IP IP Address: Port Number: ention Properties Device Address (if	as prefix to IO tags 192.168.172.3 102 f other than Unit Number):	Bulk Copy					
Add device name : TCP/IP IP Address: Port Number: ention Properties Device Address (if	as prefix to IO tags 192.168.172.3 102 f other than Unit Number):	Bulk Copy					
Add device name : TCP/IP IP Address: Port Number: ention Properties Device Address (if TSAP in Hex :Device	as prefix to IO tags 192.168.172.3 102 f other than Unit Number): ID, RackSlot:	Bulk Copy					

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

Sasic			Advanced					
Name: Data Type: Conversion Address: Start Bit: Length(bit): Span High: Span Low: Initial Value: Scan Rate: Read Write: Description:	NewTag Analog Unsigned Integer 0 16 1000 0 0.0 1 Read/Write	* *	Scaling Type: Formula: Scale: Offset: Clamp:	No Scale				

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

1) Analog Configuration

Parameter Address Description Conversion Length



Template

Code

参数	地址模板	描述	转换代码 (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	DB Word 16 65535 Data			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

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	•	项	目1		PLC_1	[CPU 1	214C DC	DC/D	C] 🕨	程序块	▶ d	6 [DB1]				
设备																
TEN (1	full.	¢ ₫	8	h 🕸	11	保持实际	标值 🚺	ile t	央照 崎	taj.	将快照值复	更制到起始值	+ B.B.	将起始值加载:	为实际值
			db													
▼ 🛄 项目1	^	-		名称	尔			数据:	类型		偏移	建 起始	值	保持	可从 HMI/	从 H
📑 添加新设备		1	-0	• :	Static											
晶 设备和网络		2	-		qwe	e		Real			0.0	1.1				
PLC_1 [CPU 1214C DC/DC/DC]		3	-		qwe	er		Real			4.0	2.2				
1 设备组态		4	-0		abo			Int			8.0	1				
♀ 在线和诊断	=	5	-		abo	:d		Int			10.0) 2				
▼ 🛃 程序块																
📑 添加新块																
Hain [OB1]																
🧧 db [DB1]																
▶ 🙀 工艺对象																
▶ 📾 外部源文件																
▶ 🔚 PLC 变量																
▶ 🧾 PLC 数据类型																
<u></u>	_	_														

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 Description Conversion Length Code

Template

参数	地址模板	描述	 转換代码 (默认) 	长度 (bits)	
DBX	DBX1,0	DB Bit	Unsigned Integer	1	
IX	IX000	Input	00 V/00	1	a a
MX	MX000	Internal Bit	5.0	1	
QX	QX000	Output		1	

Discrete Example Table:

S7 PLC Address	Edgelink IO Configuration								
Register Address	Address	Start bit	Length	Conversion Code					
10001.2	IX0001	2	1	Unsigned Integer					
10003.5	IX0003	5	1	Unsigned Integer					
Q1003.2	QX1003	2	1	Unsigned Integer					

