在 SIMATIC STEP 7 上設置 I-7550E

1. 雙擊 "SIMATIC Manager" 圖示來打開 "SIMATIC Manager"



2. 點擊"New Project Wizard"

SIMATIC Manager		
<u>File</u> P <u>L</u> C <u>V</u> iew <u>Options</u> <u>W</u> indow <u>H</u> elp		
<u>N</u> ew	Ctrl+N	1
New Project' Wizard		
Open	Ctrl+O	
S7 Memory Card	•	
Memory Card <u>File</u>	•	
Delete		
Reorganize		
<u>M</u> anage		
Arc <u>h</u> ive		
Retrie <u>v</u> e		
Page Setup		
1 S7_Pro2 (Project) C:\\Siemens\Step7\s7proj\S7_Pro2		
2 S7_Pro1 (Project) C:\\Siemens\Step7\s7proj\S7_Pro1		
Exit	Alt+F4	
Creates a new project step-by-step with the help of a wizard.		

- 3. 建立專案
 - a. 點擊 "Next"



b. 選擇 CPU 型號然後點擊 "Next"

STEP 7 Wizard: "New Proje	ct"		×
Which CPU are you usin	g in y our project?		2(4)
CP <u>U</u> : <u>C</u> PU name: MPI <u>a</u> dduess:	CPU Type CPU312C CPU312C CPU313C CPU313C-2 DF CPU313C-2 PF CPU314C-2 DP CPU314C-2 DP CPU313C-2 DF(1) 2 • 32 KB wn DI16/DO 3 channe	Order No 6ES7 312 5BD00-0AB0 6ES7 312-1AD10-0AB0 6ES7 313-5BE00-0AB0 6ES7 313-6CE00-0AB0 6ES7 313-6BE00-0AB0 6ES7 314-1AE04-0AB0 6ES7 314-6CF00-0AB0 cold memory; 0.1ms/1000 instruction 16 integrated; 3 pulse outputs (2.5 k ls counting and measuring increment Preview	s; ttal
< <u>B</u> ack <u>N</u> ext >	Finish	Cancel He	2lp

c. 選擇模塊和模塊所使用的語言,然後點擊 "Next"

STEP 7 Wizard: "New Proje	ct"		
🕞 Which blocks do you was	nt to add?		3(4)
Bloc <u>k</u> s:	Block Name ✓ OB1 OB10 OB11 OB12 OB13	Symbolic Name Cycle Execution Time of Day Interrupt 0 Time of Day Interrupt 1 Time of Day Interrupt 2 Time of Day Interrupt 3	
	🔲 Select <u>A</u> ll		Help on <u>O</u> B
	Language for Selec	ted Blocks	⊂ <u>F</u> BD
Create with source files			Pzevie <u>w</u> >>
< <u>B</u> ack <u>N</u> ext >	Finish	Cancel	Help

d. 設定專案名稱,然後點擊 "Finish"



4. 雙擊 "Hardware" 來打開 "HW Config"



5. 安裝 I-7550E GSD 檔案

http://ftp.icpdas.com/pub/cd/fieldbus_cd/profibus/converter/I-7550E/

a. 點擊 "Install GSD File"



b. 選擇 I-7550E 的 GSD 檔 (IPDS0EB9.gsd) 的路徑,然後點擊"OK"

Install GSD Files		×
I <u>n</u> stall GSD Files:	from the directory	
C-VI-7550EVGSD	瀏覽資料夾 ? 🔀	- 1. Browse
	Select a directory containing GSD files	
File Relea IPDSOEB9.gsd	HWUpdates I-7550E I-7550E ICFDAS	
Install	3. 確定 取消	
Close		Help

c. 點擊 "Install"

I	nstall GSD File	s						×
	I <u>n</u> stall GSD Files:			from the directory		•		
	C:\1-7550E\GSD						<u>B</u> rowse	
	File IPDS0EB9.gsd.	Release	Version	Languages Default				
	I-7550E							
	Install		Show Log	Select <u>A</u> ll	Desela	ect All		
	Close						Help	

d. 點擊 "OK"

Install GSD Files
Install GSD Files: from the directory
C.\I-7550EV3SDBrowse
File Release Version Languages IPDS0EB9.gsd. Default
Install GSD File (13:4986) Installation was completed successfully. OK
I-7550E
Install Show Log Select <u>All</u> Deselect All
Close Help

e. 點擊 "Close"

Install GSD Files	\mathbf{X}
Install GSD Files: from the directory	
CAI-7550EVGSD	<u>B</u> rowse
File Release Version Languages IPDS0EE9.gsd Default	
I-7550E	
Install Show Log Select All Deselect All	
Clow	Help

f. 確認已成功匯入 I-7550E 的 GSD 檔

🖳 HW Config - [SIMATIC 300 Station (Configuration) S7_Pro	.50] 📃 🗖 🔀
🕅 Station Edit Insert PLC View Options Window Help	_ 8 ×
) D 😅 🐎 🗳 🦞 🎒 🕼 💼 💼 🏙 🎰 🚯 📼 🚼 🕅	
	 :
	Find: I-7550E 01 14
= (0) UR	Profile: Standard
1 2 CPU 315-2PN/DP	🖨 🧰 Gateway
XI MPI/DP	⊡ ⊡ AS-I
X2 PI Port I	DP/RS232C Link
X2 P2 Port2	⊕ ⊕ GW-7552 ⊕ ⊕ GW-7553 ⊕ GW-7553
	⊕ 📮 G₩-7557
	+ <u>1728</u> → → → → → → →
×	
	Dr/DP Coupler, Release 2 Dr/DP Coupler, Release 2 Dr/DP Coupler, Release 2
(0) UR	
Slot 🚺 Module O Fi M I Q Co	<u>•</u>
Selecting the hardware	

6. 雙擊 PLC 的 PROFIBUS DP 介面

🖳 HW Config - [SIMATIC 300 Station (Configuration) S7_Pro5	0]		
에 Station Edit Insert PLC Yiew Options Window Help			- 2 ×
] D 🚅 ╬~ 🖉 🐘 🎒 16 🖻 🏜 🏙 🌐 🗖 🔡 校			
~			
	Find: I-	7550E	mt mi
(0) UR	Profile: St	tandard	•
1 2 XI XI X2 PN-IO X2 PI Port I X2 P2 Port 2 3 4		Gateway AS-I DP/DP Coupler DP/R\$232C Lin GW-7552 GW-7553 (DPV GW-7557 GW-7557 GW-7557 GW-7557 GW-7550 GW-7500 GW-7500 GW-7500 GW-7500 GW-7500 GW-7500 GW-7500 GW-7500	nk 1)
(0) UR		Compatible PROFI	RIIS D
Slot Module O Fi M I Q Co 1 <t< th=""><th></th><th></th><th>t<u></u></th></t<>			t <u></u>
l			

7. 建立 PROFIBUS 網路

a. 選擇 "PROFIBUS" 然後點擊 "Properties"

Properties - MPI/DP -	(R0/S2.1)		×
General Addresses Or	erating Mode Configuration Clock		
Short Description:	MPI/DP		
			<u>^</u>
	1		
<u>N</u> ame:	MPI/DP		
_ Interface			
Type:	OFIBUS 💽		
Address: 2	2 Propagation		
Networked: No	Z. <u>riopernes</u>		
<u>C</u> omment:			
			-
			~
OK		Cancel	Help

Properties - PROFIBUS interface MPI/DP (R0/S2.1)		
General Parameters 1.		
Address: 2. 🛛 🗸		
Subnet:	3.	
not networked		<u>Iew</u>
	Proj	perties
	D)elete
7		
OK	Cancel	Help

b. 點擊 "Parameters" 並且設定主站的 PROFIBUS 位址,然後點擊 "New"

c. 選擇 PROFIBUS 傳輸速率, Profile 選擇 DP 然後點擊 click"OK"

Properties - New subnet PR	OFIBUS	
General Network Settings		
Highest PROFIBUS Address:	126 💌 🗖 Change	Options
<u>T</u> ransmission Rate: 1.	500 Khns 1.5 Mbps 6 Mbps 12 Mbps 12 Mbps	
Profile: 2.	DP Standard Universal (DP/FMS) User-Defined	Bus Parameters
3.		
OK		Cancel Help

d. 選擇 PROFIBUS 網路,然後點擊 "OK".

Properties - PROFIBUS interface MPI/DP (R0/S2.1)	
General Parameters	
Address: 2 💌	
Highest address: 126	
Transmission rate: 1.5 Mbps	
Subnet: 1.	
PPONEUS(1) 1.5 Mbrs	New
	Properties
	Delete
2	
<u></u>	
	ncel Help

e. 確認 PROFIBUS 網路已建立

🙀 HW Config - [SIMATIC 300 Station (Configuration) S7_Pro50]	
💵 Station Edit Insert PLC View Options Window Help	- 8 ×
D 😅 🖫 🖷 🙀 🎒 💼 💼 🧰 🎰 📳 📼 🔡 💦	
	Find: Mt Mi
■ (0) UR	Profile: Standard 💌
1 2 CPU 315-2PN/DP X1 MPI/DP X2 PN-10 X2 PI Port 1 X2 P2 Port 2 3 •	PROFIBUS DP PROFIBUS-PA PROFINET IO SIMATIC 300 SIMATIC 400 SIMATIC PC Based Control 300/400 SIMATIC PC Station
(0) UR Slot Module O Fi M I Q Comment	PROFIBUS-DP slaves for SIMATIC S7, M7, and C7 (distributed rack)
Press F1 to get Help.	Chg

8. 加入 I-7550E



a. 搜尋 I-7550E 模組,然後點擊並拖移 I-7550E 的圖示至 PROFIBUS 網路

b.點擊 "Parameter", 然後雙擊 I-7550E 的圖示並設定 I-7550E 的 PROFIBUS 位址。

(這個位址必須和 I-7550E 上的指撥開關數值一致) · 然後點擊 "OK"

🙀 HW Config - [SIMATIC 300 Station (Configuration) S7_Pro50]	
에 Station Edit Insert PLC Yiew Options Window Help	_ <i>B</i> ×
Properties - PROFIBUS interface I-7550E	
General Parameters 1.	I-7550E
<u>→(0) UR</u> <u>A</u> ddress: 2.	Standard 💌
1 CPU 315-2P X1 MPUDP X2 PN-10 X2 P1 Port 1 X2 P2 Port 2 3 PROFIBUS() 4 Delete	Gateway AS-I DP/DP Coupler DP/RS232C Link GW-7552 GW-7553 (DPV1) GW-7557 GW-7550 GW-7550 GW-7550 DP/DP Coupler, Relea DP/DP Coupler, Relea Compatible PROFIBIIS D
(0) UR Slot Module OK Cancel Help	t s

c. 確認 I-7550E 已成功加入

🖳 HW Config - [SII	MATIC 300 Station (Configuration)) \$7_Pro50]					
💵 Station Edit Insert PLC View Options Window Help – 🗗 🗙							
□ ☞ ≌~ ◙ 🖏 (曇) ๒ 🖻 🏜 🏜 🚯 🗔 🔡 👀							
				~			
					<u>F</u> ind:	I-7550E	nt ni
🚍 (0) UR					Profile:	Standard	•
1 2 XI X2 X2 PI X2 PZ 3 4	CPU 315-2PN/DP MRI/DP PN-10 Port 1 Port 2 V	PROFIL	BUS(1): DP m (1) I-7550E	aster sy:		I-75500 Im Im	E A star setting syste In Syste In
(1) I-7550	E					10	Byte In Byte In
Slot 🚺 DP ID	Order Number / Designation	I Address	Q Addr	Com		12	Byte In
1 64	System setting	019		~		13	Byte In 🧔
2 128	> System setting		019				
3 23	8 Byte in	2027					
4							÷∠
2				~			
Press F1 to get Help.							Chg

9. I-7550E 的模組設置

a. 尋找 I-7550E 的模組

H W Config - [SIMATIC 300 Station (Configuration) S7_Pro50]	
🛍 Station Edit Insert PLC Yiew Options Window Help	_ @ ×
D 😅 🐂 🖷 🐘 🎒 🖻 💼 🏜 🏙 🗊 🗖 器 🕺	4
	Eind: I-7550E Mt Mi 2
■ (I) UR	Profile: Standard
1 2 CPU 315-2PN/DP XI MRIDP PROFIBUS(1): DP mass X2 PN-IO PROFI X2 PI Port I Prot 2 3 • • • • • • • • • • •	ter Gateway Gateway Gateway AS-1 DP/DP Coupler DP/RS232C Link GW-7552 GW-7552 GW-7553 GW-7557 GW-7557 GW-7550 Figure 17500 Figure 17500 Figu
Slot 🚺 DP ID Order Number / Designation I Address Q Addr C	⊡ Closed-Loop Controller ⊡ Configured Stations
	DP VO slaves
5	<u> </u>
6	
Selecting the hardware	Chg

b. 打開 I-7550E 資料夾

HW Config - [SIMATIC 300 Station (Configuration) S7_P1050]					
💵 Station Edit Insert PLC View Options Window Help 🛛 – 🗗 🗙						
						. =[]
					1 75507	
				Emd:	1-75505	WI WI
5 (0) 0R				Profile:	Standard	· · · · · · · · · · · · · · · · · · ·
1 CPU 315-2PN/DP X1 MRPI/DP X2 PN-IO X2 PI Port 1 X2 P2 Port 2 3	PROFIL	3US(1): DP m (1) I-7550E	aster sy:		I-7550	E versal module stem setting Byte In Byte In Byte In Byte In
(1) I-7550E		Char	2			Byte In Byte In Byte In Byte In Byte In Byte In
Slot DP ID Order Number / Designation	I Address	O Addr	Com.		- 11	Byte In
1 64 System setting	019		~		12	Byte In
2 128> System setting	00.07	019	_=	<		
2 22 0 Dyte In 4	2021					E.
5						-1
		1	~			
Press F1 to get Help.						Chg

c. 點擊 I-7550E 模組然後雙擊 "System setting module" 然後選擇你需要使用的 IO

Image: HW Config - [SIMATIC 300 Station (Configuration) S7_Pro50] Image: Station Edit Insert PLC Yiew Options Mindow Help Image: Station Edit In	
Image: CPU 315-2PN/DP Image: CPU 315-2PN/DP X1 MB/DP X2 PN-IO X2 PI Port I X2 P2 Port 2 3 Image: CPU 315-2PN/DP	S(1): DP master sy: 1-7550E 1-7550E S(1): DP master sy: 1-7550E System setting 1 Byte In 5 Byte In 6 Byte In 7 Byte In 7 Byte In 8 Byte In 1 B
Image: Number of Designation I Address O 1 64 System setting 019 2 128 > System setting 0. 3 23 8 Byte In 2027 4 5 0 0	Addr Cm

模組(例如: 8 Byte In)

10.已完成 I-7550E 的設定,然後請將這些設定下載至西門子的 PLC。

🖳 HW Config - [SIMA	TIC 300 Station (Configuration) S7_Pro5	0]	
🛄 <u>S</u> tation <u>E</u> dit Insert	<u>PLC V</u> iew Options <u>W</u> indow <u>H</u> elp		_ @ ×
D 🗃 🔓 🖷 🖏 (Download Ctrl+L		
		-	=
	Download Module Identification Upload Module Identification to PG		Find: mt mi
1	Faulty Modules		Profile: Standard 💌
2 CI XI M/L X2 I PN X2 PI Po X2 P2 Po 3	Module Information Ctrl+D Operating Mode Ctrl+I Clear/Reset Ctrl+I Set Time of Day Monitor/Modify	(BUS(1): DP master sy:	
	Updat <u>e</u> Firmware		⊡ 🛄 AS-I ⊡ 📷 DP/DP Coupler
	Save Device Name to Memory Card		⊡ 🚡 DP/RS232C Link 🕀 📥 G₩-7552
<	Ethernet 🔸		⊞ 📕 GW-7553(DPV1)
SIMATIC 300	PROFIBUS		i -7550
Slot Designation	<u>S</u> ave Service Data		⊡ 🚡 I-7550E ⊡ 🚡 IKAN-PFB
D OK			🕀 🚡 DP/DP Coupler, Relea 🗹
PROFDP master system ()	1)		t _s
Loads the current station into	o the load memory of the current module.		Chg