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作者:北岛李工

前面的文章我们介绍了S7通信协议(收藏 | 深入理解S7通信协议)及S7-200 Smart用于S7通信的指令(详解S7-200 Smart的S7通信指令)。接下来的两篇 文章我们来介绍下如何在S7-1200和S7-200 Smart之间进行S7单边通信。



首先我们来认识下本例程的硬件环境:

1. CPU1215C ( S7-1200 PLC ) ;

2. CPU ST40 ( S7-200 Smart ) ;

3. 编程电脑PC及网络交换机;

通信任务:

1. 采用S7单边通信的方式,将S7-200 Smart ST40作为服务器

(Server),将S7-1200 CPU1215C作为客户端(Client);

2. CPU 1215C 将通信数据区 DB1 中的100 个字节发送到 S7-200 SMART的V存储区(VB0~VB99)。;

3. CPU1215C 读取 S7-200 SMART中的V存储区(VB100~VB199)的数 据到S7-1200 的数据块DB2 。

4. IP地址设置:CPU 1215C的IP地址为:192.168.0.10;CPU ST40的IP 地址为:192.168.0.15;

*本例程将CPU1215C作为客户端(Client),仅需要在CPU1215C侧进行编程和 配置,CPU ST40要占用服务器的连接资源,不需要任何编程。* 使用博途V13进行CPU1215C的配置和编程。

## 打开博途新建项目,选择硬件CPU1215C并配置其IP地址,如下图:

Project1 🕨 PLC_CPL	J 1215C [	CPU 1	215C DC/	DC/DC]										_ <b>-</b> i
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User interface langua	iges				e	y Set IP ad	iaress in	the proj	ect					
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PLC_CPU1215C CPU 1215C	Device configuration Change device		
PN/IE_1	X Cut   Ctrl+X     I □ Copy   Ctrl+C     I □ Paste   Ctrl+V		
	X DeleteDelRenameF2		
	Go to topology view     Add new connection     Highlight connection partners		
	Compile Download to device   Download to device Ctrl+K   Go online Ctrl+K   Go offline Ctrl+M   Online & diagnostics Ctrl+D   Receive alarms Update and display forced operands		
	Cross-reference information Shift+F11 Call structure Assignment list		
:	Properties Alt+Enter	> 100%	

在弹出的对话框中,选择【S7连接(S7 Connection)】,点击【添加

(Add)】 , 如下图:

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## 在新添加的S7连接的属性中,对IP地址和Slot进行配置,如下图:

		20			불 Торо	ogy view	Metwo	rk view 🚺 D	evice viev
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Connecti	on_1 [\$7 conn	ection]			S. Pro	perties	i Info 🔒	<b>Diagnostics</b>	
eneral	IO tags	System consta	ants Tex	cts					
eneral cal ID		General							
ecial connection prope dress details		Conne	Name: Name:	S7_Connection_	1				
				Local	<b>_</b>		Partner		
			End point:	PLC_CPU1215C			Unknown		
			Interface:	PLC_CPU1215C,	PROFINET interfac	:e_1[X1 -	Unknown		
			Interface type:	Ethernet			Ethernet		
			Subnet:	PN/IE_1					
				102 168 0 10			102 169 0	15	
			Address:	192.166.0.10			192.100.0	.19	

					2	Topology	view	📩 Netw	ork view	Devic	e view
Network overview	Conr	nections	I/O con	nmunication	VPN						
V Local connection S7_Connection_	name I	Local end point	5C	Local ID (hex) 100	Partner ID	) (hex) Par	tner Unknov	/n 🖣	Connectio S7 connec	n type :tion	
Connection_1 [S7 co	nnection]					🔍 Propert	ies	🗓 Info 🔒	🔋 🔁 Diagr	nostics	
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		Subr	net ID:	SIMAIIC-ACC	1			SIMAIIC	-ACC		

好了,关于S7-1200与S7-200 Smart的S7通信的硬件部分就先介绍到这里,下 一篇文章我们来介绍如何编程来实现两者之间的数据交换。

如果你喜欢这篇文章,可以去官网(www.founderchip.com)下载本文PDF版本。

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