Application: Link Serial COM Port to the Modbus RTU device by COM functions

ANS:

When the Modbus function blocks provided by ICP DAS are unable to read / write some special Modbus devices, please refer to the FAQ098 demo. User can define the Modbus command depend on the device to link the Modbus RTU device.

User can apply the code listed below or rewrite the similar code to accomplish it.

🚭 ISaGRAF - DEMO98 - Programs	- 🗆 🗙							
<u>File Make Project Tools Debug Options H</u> elp								
┣ ■�� □ ■ ● ¥ ¥ ↦ ■ ¥ 옷 ■ ₽								
Begin: Enit 1st PLC scan cycle								
Sequential: Process Modbus command								
Functions: modbus_c Modbus Request Command								
🞏 modbus_r Modbus Response								
Begin: init_ (Structured Text)								
Version for ICP-DAS i-7188/i-8000/iView/Wincon series controllers only								

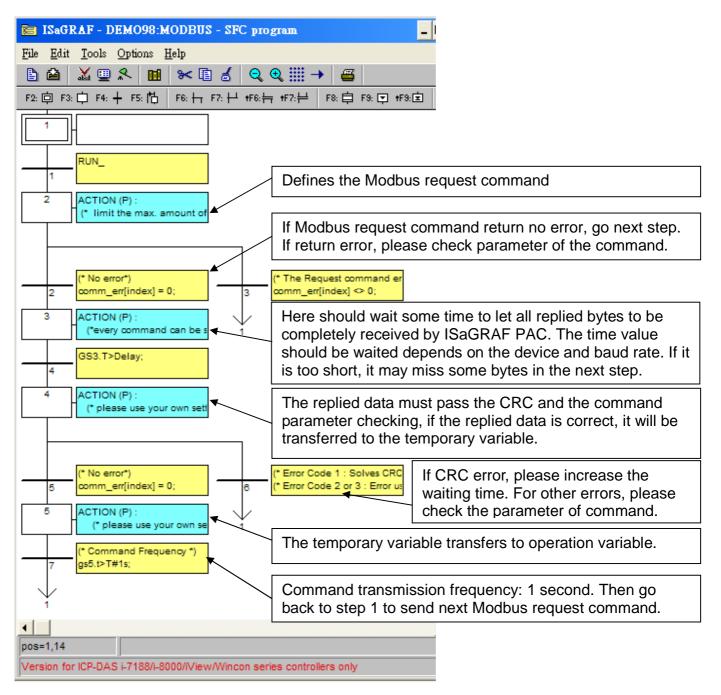
"modbus_c" and "modbus_r" in this demo are used for processing the Modbus request command and the Modbus response. If user has no special demand, do not need to revise them. User must define the variables for these two function blocks as the figure.

٩	Sagraf - DEMO98 -	Global integer	s/reals		- 🗆 🗙	
F	ile <u>E</u> dit <u>T</u> ools <u>O</u> ptions <u>H</u>	lelp				
	📸 🔘 🕼 🤘 🏭 🐱 🛅 🤞 📉 🚝					
Booleans Integers/Reals Timers Messages FB instances Defined words						
	Name	Attrib.	Addr.	Comment		
r				//Below variables For Modbus_c function	▲	
L	nbb_C	[internal,integer]	0000			
L	index nbi	[internal,integer]	0000			
L	index ⁻ nbi 2	[internal,integer]	0000			
ι	B00 V –	[internal,integer]	0000			
17				//Below variables For Modbus_r function		
	index_nbi_tmp	[internal,integer]	0000			
	index_	[internal,integer]	0000			
	B00_byte	[internal,integer]	0000			
	nbb R	[internal,integer]	0000			
IL	index nbb	[internal,integer]	0000		—	
V	Version for ICP-DAS i-7188/i-8000/iView/Wincon series controllers only					

🏷 ISaGRAF - DEMO98 - Global function blocks 📃 🗆							
<u>File Edit T</u> ools <u>Options H</u> elp							
Booleans Integers/Reals Timers Messages FB instances Defined words							
Name	Value Comment						
CRC16_1	crc_16	-					
Version for ICP-DAS i-7188/i-8000/IView/Wincon series controllers only							

The main procedure of this example:

- A. Define the Modbus request command according to the Modbus device in Modbus program.
- B. Send a Modbus Command to device via COM2.
- C. Waiting for Modbus device to reply the related answer
- D. Delay 1 second, then send next Modbus Command to devices ...



Please refer to the "Modbus" program for more detail descriptions.