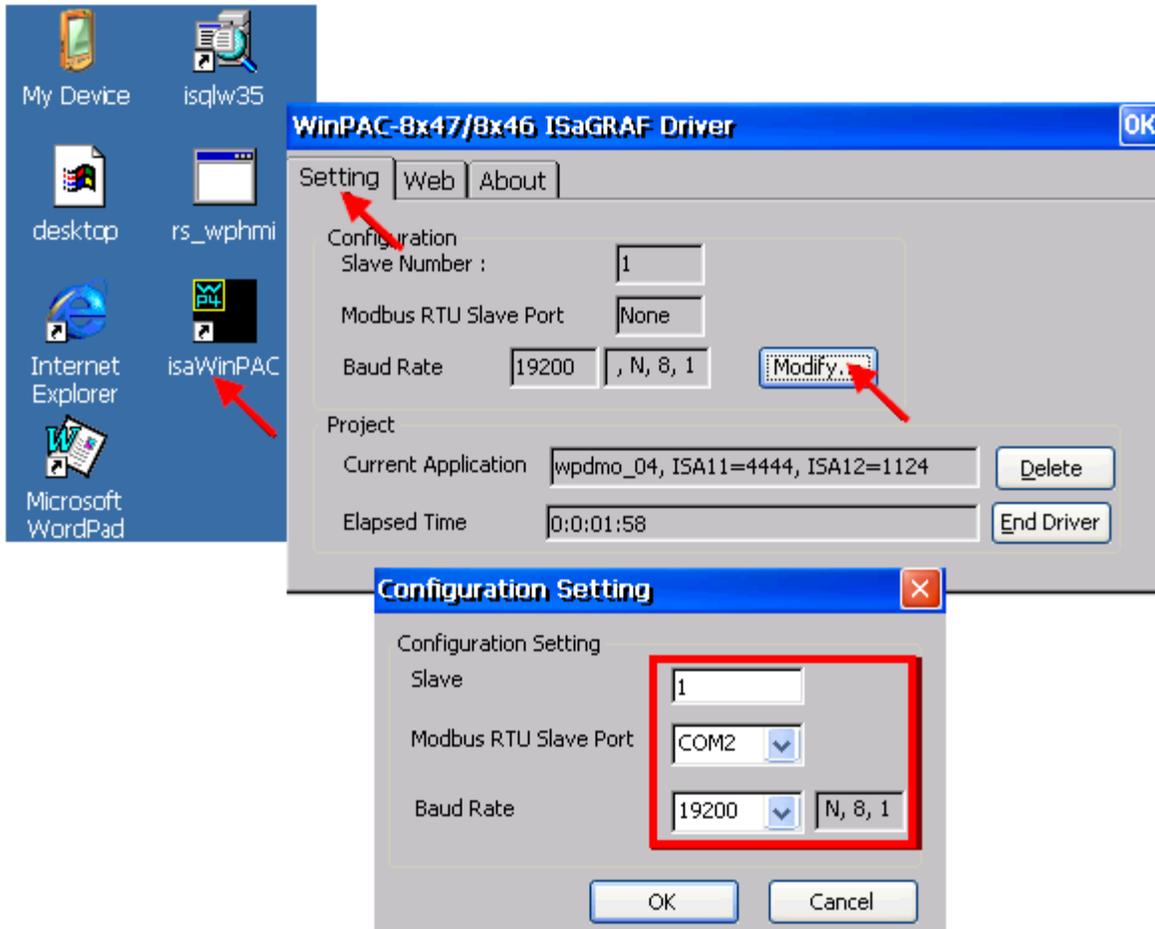


How to enable the second to the fifth Modbus RTU slave port of the WP-8xx7 and VP-2xW7 without modifying the ISaGRAF project ?

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User can use the following way to enable or disable the first Modbus RTU slave port (one of COM2 and COM3) of the WP-8147/8447/8847 and WP-8137/8437/8837 and VP-25W7/23W7.



There are two ways to enable the second to fifth Modbus RTU slave port in COM1 to COM8.

The first one is to connect the “RTU_slav” in the ISaGRAF project's I/O connection window.

The second one doesn't need to modify the ISaGRAF project. It is to edit a file to enable them. The file is “\System_Disk\ISaGRAF\rtu_slav.txt” (please refer to the next page).

Note: If apply both ways in the controller , only the first way will work.

1. Connect the “RTU_slav” in the I/O connection window to enable the 2nd to 5th Modbus RTU slave port in COM1 to COM8 .

The screenshot shows the ISaGRAF - T1 - Programs window with the I/O connection window open. The I/O connection window displays a table of settings for ports 0 through 18. A red circle highlights the settings for ports 2 through 5, which are: Rtu_Slave_Port2 = 5, Baud_Port2 = 19200, reserved = 0, Rtu_Slave_Port3 = 0, Baud_Port3 = 19200, reserved = 0, Rtu_Slave_Port4 = 0, Baud_Port4 = 19200, reserved = 0, Rtu_Slave_Port5 = 0, Baud_Port4 = 19200, reserved = 0, reserved = 0, reserved = 0. Below the table are four boolean inputs labeled 1, 2, 3, and 4, each with a checkmark. A red arrow points from the 'I/O connection' label to the I/O connection window. Another red arrow points from the 'I/O connection' label to the 'Select board/equipment' dialog box. The dialog box shows a list of equipment options, with 'rtu_slav: 2nd ~ 5th Modbus RTU slave port' selected. A red arrow points from the 'I/O connection' label to the 'rtu_slav: 2nd ~ 5th Modbus RTU slave port' option. A red arrow points from the 'I/O connection' label to the 'Equipments' radio button in the dialog box. A red arrow points from the 'I/O connection' label to the 'Equipments' radio button in the dialog box. A red arrow points from the 'I/O connection' label to the 'Equipments' radio button in the dialog box.

4 boolean inputs indicate the related port is enabled or disabled:
True: enabled.
False: disabled.

RTU_Slave_Port2 ~ 5 is the port No., it can be 0 , 1 to 8 (0 means disabled)

Baud can be 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200

2. Edit the “\System_Disk\ISaGRAF\rtu_slav.txt” file to enable the 2nd to 5th Modbus RTU slave port in COM1 to COM8 .

This function is supported in the below ISaGRAF driver version.

WP-8xx7 : driver Ver. 1.18 or later VP-2xW7: driver Ver. 1.09 or later

<http://www.icpdas.com/products/PAC/i-8000/isagraf-link.htm>

The “rtu_slav.txt” can have max. 4 rows. Each enables one port as Modbus RTU slave port. There are 3 numbers in each row. They are separate by a “,” character. Do not use any other character (like the SPACE character). Each row should end by two invisible characters, the <CR> and <LF>.

The format of each row:

Port_No,Baud_rate,Delay_time

Port_No : value can be 0 , 1 to 8 (0 means disable it)

Baud_rate : value can be 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200

Delay_time : value can be 0 , 1 to 10000, unit is ms (0.001 second)

For example,

Enable COM1 as Modbus RTU slave, baud_rate is 19200, reply immediately after request received.

Enable COM5 as Modbus RTU slave, baud_rate is 9600, delay 20 ms then reply after request received.

```
1,19200,0
5,9600,20
```

For example,

Enable COM2 as Modbus RTU slave, baud_rate is 4800, reply immediately after request received.

Enable COM3 as Modbus RTU slave, baud_rate is 9600, reply immediately after request received.

Enable COM6 as Modbus RTU slave, baud_rate is 38400, reply immediately after request received.

```
2,4800,0
3,9600,0
0,19200,50
6,38400,0
```

For example,

Enable COM5 as Modbus RTU slave, baud_rate is 38400, delay 20 ms then reply after request received.

```
5,38400,20
```

Please must reset the controller once to make the settings of the “\System_Disk\ISaGRAF\rtu_slav.txt” start to work.

Note: Via 2nd, 3rd, 4th or 5th Modbus RTU slave port, user may use ISaGRAF to Debug/Set_val to the controller, however user cannot Stop/Download/Update the ISaGRAF program.

The following setting is incorrect (invalid character found, the SPACE character).

1 ,19200,0

The following setting is incorrect (Port No. exceeds 0, 1 to 8).

9,19200,0

The following setting is incorrect (The separator should be “,”).

3:19200:0

The following setting is incorrect (The separator should be “,”).

2 19200 0