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How do you configure SIMATIC B.Data data acquisition with the Modbus RTU Gateway of the SENTRON PAC 4200?

SIMATIC B.Data V6.0

http://support.automation.siemens.com/WW/view/de/12345678

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Contents

1 Link Existing SENTRON PAC3100 Devices to SIMATIC B.Data

SENTRON PAC3100 and SIMATIC B.Data

SENTRON PAC3100 devices communicate only via Modbus RTU.

SIMATIC B.Data provides a Modbus/TCP interface for this.

SENTRON PAC4200 as Modbus RTU Gateway

You can use a SENTRON PAC4200 as Modbus RTU Gateway to link SETRON PAC3100 measuring devices to SIMATIC B.Data.

This enables you to use devices already in your plant with SIMATIC B.Data.

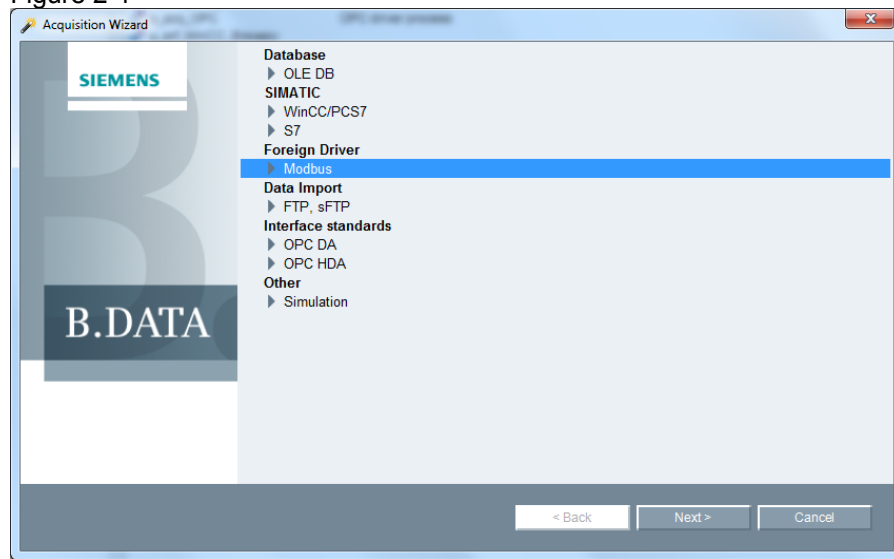Figure 1-1

2 Procedure

Introduction

Proceed as follows to use a SENTRON PAC4200 as Modbus RTU Gateway for SETRON PAC3100 measuring devices.
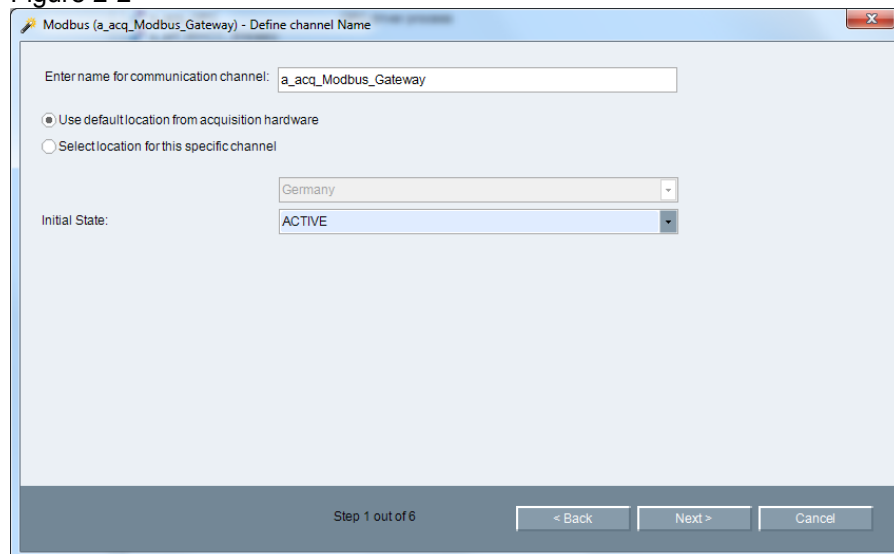
Steps

1. Start the SIMATIC B.Data Acquisition Wizard and select "Foreign Driver > Modbus". Click "Next".
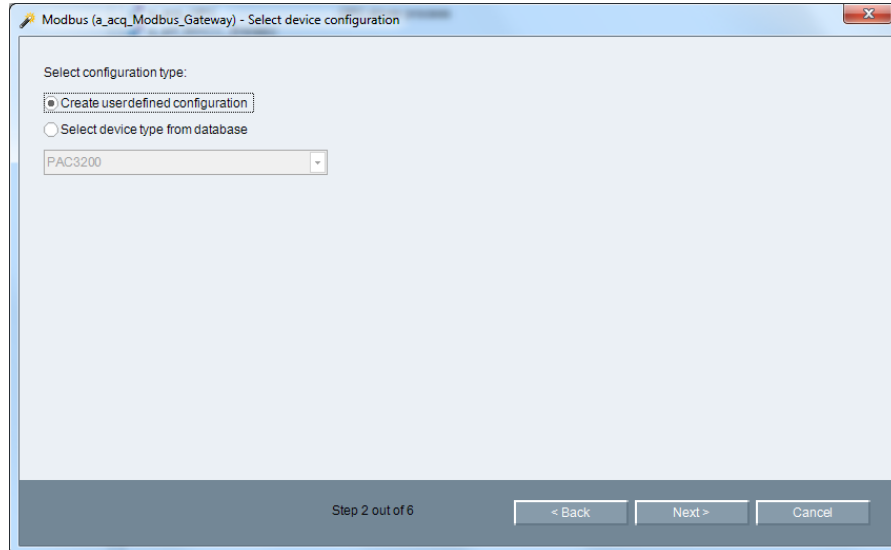
Figure 2-1

2. Enter a name for your communication channel and select "Use default location from acquisition hardware". Set the initial state to "ACTIVE". Click "Next".
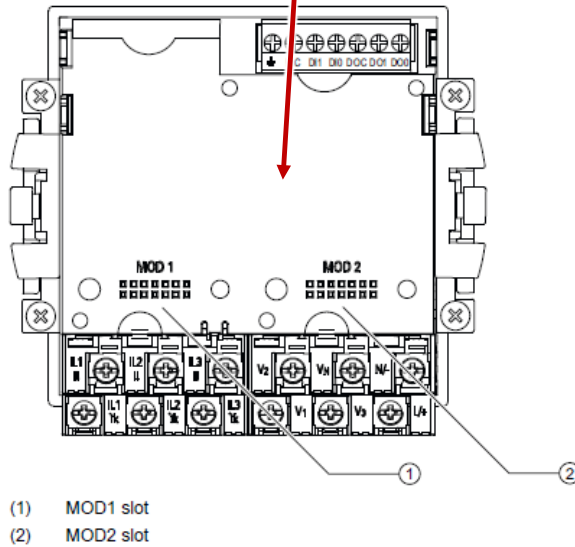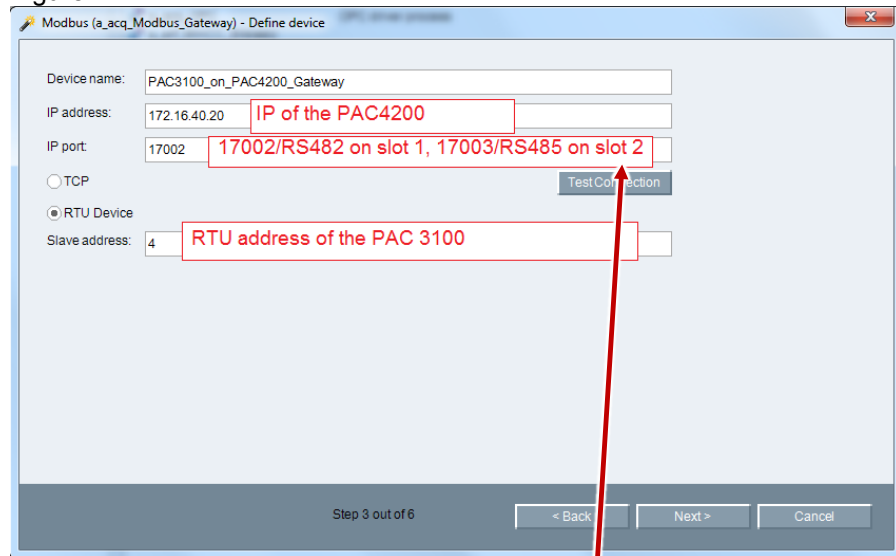
Figure 2-2

3. In the dialog "Select device configuration" you select the option "Create user-defined configuration" and click "Next".
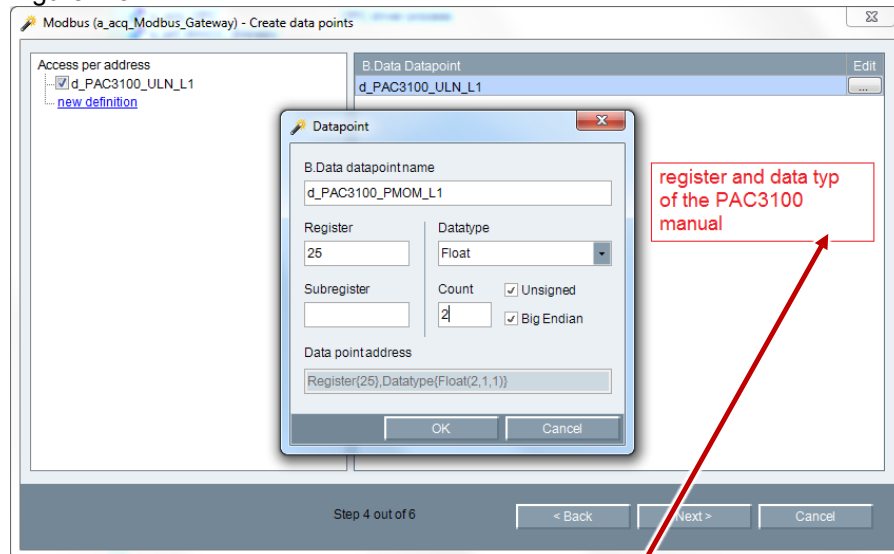
Figure 2-3

4. In the "Define device" dialog you assign the parameters as shown and select the option for the IP port "RTU Device".

Figure 2-4

(1)   MOD1 slot
(2)   MOD2 slot

5. In the "Create data points" dialog you select the required SENTRON PAC3100 data/parameters.

Figure 2-5

Offset	Number of registers	Name	Format	Unit	Value range	Access
1	2	Voltage a-n	Float	V	-	R
3	2	Voltage b-n	Float	V	-	R
5	2	Voltage c-n	Float	V	-	R
7	2	Voltage a-b	Float	V	-	R
9	2	Voltage b-c	Float	V	-	R
11	2	Voltage c-a	Float	V	-	R
13	2	Current a	Float	A	-	R
15	2	Current b	Float	A	-	R
17	2	Current c	Float	A	-	R
19	2	Apparent power a	Float	VA	-	R
21	2	Apparent power b	Float	VA	-	R
23	2	Apparent power c	Float	VA	-	R
25	2	Active power a	Float	W	-	R

Note	The SENTRON PAC3100 manual is available in Entry ID 37881976 or at the link below.
	https://support.industry.siemens.com/cs/#mdm/37881976?c=38432965387&lc=en-WW

6. Repeat steps 1 to 5 for all the other SENTRON PAC3100 devices.