

X2SNMP User Manual

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1 Perforce

1.1 Statement

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1.2 Technical Support

- Email: support@opcmaster.com
- TEL: +86 021-58776098
- website: http://www.opcmaster.com/english/

http://www.bacnetchina.com/english/

1.3 Software Install and Uninstall

X2SNMP software is a green installation.

- No operation of the registry
- Do not operate the sensitive area of the system, including the root directory of the system starting area, the installation directory (Windows directory), the program directory (Program Files), and the account specific directory.
- Do not write anything to the directory outside my directory.
- Because the program itself does not have any effect on any file other than its directory, there is no installation and unloading problem at all.
- The deletion of the program, as long as the directory of the program and the corresponding shortcut are deleted (if you manually set a shortcut on the desktop or other position), the program is completely clean from your computer, without leaving any garbage.





• No need to install, copy and copy at will.

2 Overview

2.1 Function Description

- X2SNMP is called SNMP gateway, which can convert any device protocol into SNMP interface, and then other SNMP clients such as computer room management system can access and monitor third-party device data through the SNMP interface of Sunfull.
- How it works: on-site devices are connected to the "X2SNMP" hardware gateway. The gateway collects data and provides the SNMP agent interface. SNMP clients can manage and monitor on-site devices by accessing the X2SNMP hardware gateway.
- Advantages:
 - 1. Green installation free, strong configurability, simple operation, stable and reliable, convenient fault diagnosis.
 - 2. Support JS scripts.
 - 3. Support multi-language switching to facilitate user operation.
 - 4. In PC monitoring mode, configure the software XSNMP, which can be used for PC simulation.
 - 5. The gateway has a built-in WEB server. Users can view the real-time changing data and communication status through the browser, which is convenient for on-site debugging.You can also download configuration software X2SNMP and project files.
 - Support the simultaneous conversion of different protocols into SNMP protocols.
 - 7. Gateway analog quantity supports linear conversion, bit-fetching function



and high-low byte exchange function.

2.2 Operating Environment

- X2SNMP Configuration Software can support many kinds of OS, such as Windows XP/2000/2003/7/10/Vista.
- WEB supports IE9 and above, Opera, apple's Safari, Google Chrome, and firefox.

2.3 Hardware parameters

•Hardware Protocol Conversion Gateway

(SNMP1001-ARM,SNMP1002-ARM,SNMP2004-ARM,SNMP2004-A9)

3 Operating Steps

3.1 Select Operation Language

Firstly open and run the main program X2SNMP.exe. In the main program interface, click the view menu to select View->Language Settings, as shown in figure 3-1-1.

CONT		These Unidents Tetrand		► = a% LOAD ♦	*					
		Item Opdate Interval	1 1 103	x = x = 1	P	1	-		1	
sim 🗊		Internal Tag JS Script Editor		Register Type	Register	DataType	Value	Quality	Timestamp	SNMP OID
Date 2018/12	v	Clear Messages Log Errors Only Show Frame Frame Display Mode Save Log Bad Value	۰ ۲							
Date		Language Setting								
2018/12 2018/12	√ √	Toolbar Status Bar	星'D:\工作… :B服务器的…							

Figure 3-1-1 Select Operation Language

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Note: The upper computer configuration software X2SNMP and the uploaded project can be downloaded from the gateway.

Select the operating language in the pop-up dialog box, as shown in figure 3-1-2.

Language:	英语(美国)	•
	英语(美国) 中文(简体,中国)	

Figure 3-1-2 Select Operation Language

3.2 Select monitoring mode

The monitoring mode is divided into local mode and gateway mode. The local mode refers to running pure software gateway program x2snmpruntime. exe on PC and realizing protocol conversion function on PC.Gateway mode refers to the hardware gateway. Configuration engineering is uploaded to the hardware gateway on the PC to realize protocol conversion function in the hardware gateway and monitor the communication status of the hardware gateway on the PC.You can select the monitoring mode under the toolbar "monitoring mode", or double-click the "monitoring mode" in the bottom status bar to switch the mode, as shown in figure 3-2-1.

<u>File Edit View</u>	Tools SNMP We	Server	Gateway H	lelp						
	Monitor Mode	+	Local PC							
🕀 🇊 sim	Start Monitor		✓ Remote	GateWay	DataType	Value	Quali	Timestamp	SNMP OID	
	Stop Monitor									
	Device	۰.								
	Group	+								
	Tag									
C0 10								15		
Date	Time	Event								
1 2018/12/18	15:59:58	ping.e	xe 192.168.1.1	77						
1 2018/12/18	16:10:13	Succee	ed to get 'Time	e' parameter						
1 2018/12/18	16:12:05	Succes	ed to get 'Firm	ware' paramet	er					
1 2018/12/18	16:12:12	Succee	ed to get 'Syst	em' parameter						
1 2018/12/18	16:12:17	Succee	ed to get 'Syst	em' parameter						
1 2018/12/18	16:12:22	Succee	ed to get 'Syst	em' parameter						
0 2018/12/18	16:12:27	Succes	ed to get 'Syst	em' parameter						
		-								



Figure 3-2-1 Select Monitor Mode

3.3 New Driver

As one of the many protocols covered by X, Modbus RTU protocol is selected as the example.If you need to understand the configuration of other protocols, click "communication connection instructions" under the help menu to open CommunicationManual- ch.pdf.Click edit to select "add driver" or click the toolbar icon, as shown in figure 3-3-1.

3	New Driver		B B ×	ila 🕨 🗏 🛠 🙀 t	\$					
Œ	New Channel		tem ID	Register Type	Register	DataType	Value	Quality	Timestamp	SNMP OID
Ė	New Device	Ctrl+D	Tag_1	Sine	1	Word	98	Uncertain		1.3.6.1.6.1.12.1.
	New Group		Tag_2	Sine	2	Word	98	Uncertain		1.3.6.1.6.1.12.1.
	New Tag		Tag_3	Sine	3	Word	98	Uncertain		1.3.6.1.6.1.12.1.
	reew rug		Tag_4	Sine	4	Word	98	Uncertain		1.3.6.1.6.1.12.1.
	Cut	Ctrl+X	Tag_5	Sine	5	Word	98	Uncertain		1.3.6.1.6.1.12.1.
	Сору	Ctrl+C	Tag_6	Sine	6	Word	98	Uncertain		1.3.6.1.6.1.12.1.
	Parta	C+rl +V	Tag_7	Sine	7	Word	98	Uncertain		1.3.6.1.6.1.12.1.
	Paste	Ctri+v	Tag_8	Sine	8	Word	98	Uncertain		1.3.6.1.6.1.12.1
	Delete	Del	Tag_9	Sine	9	Word	98	Uncertain		1.3.6.1.6.1.12.1.
	Batch Modify		Tag_10	Sine	10	Word	98	Uncertain		1.3.6.1.6.1.12.1.
	baten mounym		Tag_11	Sine	11	Word	98	Uncertain		1.3.6.1.6.1.12.1.
	Properties		Tag_12	Sine	12	Word	98	Uncertain		1.3.6.1.6.1.12.1.
			Tag_13	Sine	13	Word	98	Uncertain		1.3.6.1.6.1.12.1
			Tag_14	Sine	14	Word	98	Uncertain		1.3.6.1.6.1.12.1.
			Tag_15	Sine	15	Word	98	Uncertain		1.3.6.1.6.1.12.1.
			•		III					

Figure 3-3-1 Select New Driver

Then select the driver in the popup window to add, as shown in figure 3-3-2 below.

) 🗳 🖵 🗊 🕫 🗏 🖆 🞒 😭 👗 🛍 I	3 🗙 <i>i</i> lə	🕨 🔳 🛠 🙀 1	‡					
Driver Properties			🗴 🚽 gister	DataType	Value	Quality	Timestamp	SNMP OID
				Word	98	Uncertain	1	1.3.6.1.6.1.12.1.3
Driver List				Word	98	Uncertain		1.3.6.1.6.1.12.1.
ModbusRTUClient	-			Word	98	Uncertain		1.3.6.1.6.1.12.1.
ModbusRTUClient		UK		Word	98	Uncertain		1.3.6.1.6.1.12.1.
ModbusKTUServer	100	Cancel		Word	98	Uncertain		1.3.6.1.6.1.12.1.
ModbusRTU_TCPClient				Word	98	Uncertain		1.3.6.1.6.1.12.1.
ModbusRTU_Thyssenkrupp_Elevator				Word	98	Uncertain		1.3.6.1.6.1.12.1.
ModbusRTU_Zenner				Word	98	Uncertain		1.3.6.1.6.1.12.1.
ModbusTCPClient		Sine	9	Word	98	Uncertain		1.3.6.1.6.1.12.1.
ModbusUDPClient		Sine	10	Word	98	Uncertain		1.3.6.1.6.1.12.1.
Modbus_CNM		Sine	11	Word	98	Uncertain		1.3.6.1.6.1.12.1.
Modbus_DAIRIA_IRACC Modbus_HOLTOP_HDK_09S_BA	1.00	Sine	12	Word	98	Uncertain		1.3.6.1.6.1.12.1.
Modbus_IEM3000	=	Sine	13	Word	98	Uncertain		1.3.6.1.6.1.12.1.
Modbus_Kent Modbus_Kone_Elevator		Sine	14	Word	98	Uncertain		1.3.6.1.6.1.12.1.
Modbus_Kone_Elevator_ASCII		Sine	15	Word	98	Uncertain		1.3.6.1.6.1.12.1.
Modbus_LDS								
Modbus_Otis_Elevator	-							
modbds_rmooo	1/2151							
			111					

Figure 3-3-2 Select Driver

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You can enable custom driver names, As shown in figure 3-3-3.

river List	
ModbusRTVClient 💽	OK
Name: ModbusRTV	Cancel
Scan Rate: 100 ms	

Figure 3-3-3 Driver Properties

Input custom driver name in the name of the project, the default time is 1000 milliseconds, polling polling time can adjust the frequency of access to all equipment, if visiting all the equipment needed is greater than the set time, polling time, then this setting, on the other hand if visiting all the equipment needed time is less than set the polling time, you will need to wait time to set the polling time later, can be the next visit.Users can change the polling time as they see fit.ModbusRTU protocol is selected here and added as shown in figure 3-3-4.

X2SNMP - SNMP test.xts		-	TRACK.			-		
<u>File Edit View T</u> ools SNMP We	b Server Gateway	<u>H</u> elp						
0 🗳 🖬 🗊 🗯 🖪 🗳 🚳 😭	ቆ 🖻 🖻 🗙 🌆	🕨 🗏 🛠 🙀 🕻	1					
🖅 🏢 sim	Item ID	Register Type	Register	DataType	Value	Quality	Timestamp	SNMP OID
	-							
	-							
	•		ш					•
Date Time	Event							
Ready Monitor Mo	de:Remote GateWay	192.168.1.177 Tota	I Items:16 Vali	Items:1024	www.opcma	aster.com 1356	4889340 support	@opcmaster.com

Figure 3-3-4 Complete add driver

3.4 New Channel

Select the current driver, right-click to select "new channel" or click 💷 the toolbar,



as shown in figure 3-4-1.

<u>E</u> dit	View Tools S	NMP Web Server	Gateway H	elp						
) 🚅 日	🎟 🖈 🔳 💣	Ø 🗗 👗 🖻 f	× 🚲 🕨	• 🔳 🛠 🙀 t	†					
🗐 sim		Item ID		Register Type	Register	DataType	Value	Quality	Timestamp	SNMP OID
	New Channel									
	Cut	Ctrl+X								
	Сору	Ctrl+C								
	Paste	Ctrl+V								
	Delete	Del								
	Properties									
		•			m					
ate	Time	Event								

Figure 3-4-1 Select new chennel

In the popup window, the corresponding Settings are made according to the driver communication protocol, and the channel name can be freely named, but the serial communication parameters must be consistent with the communication parameters of the data acquisition end, as shown in figure 3-4-2.

Port: External device access SNMP gateway by COM1.

Channel_1					
Communicat	ion Paramet	ers		12	
Port:	COM1	•	Baud Rate	9600	•
Data Bits:	8	•	Stop Bits	: 1	•
Parity:	None	F	low Control	: None	•
Response	Timeout: 🚺	500	ms		
	[1	1	



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When the channel addition is complete, see figure 3-4-3.



SHAP X2SNMP - SNMP test.xts	_	1.00	-		-		0.	
<u>File Edit View Tools SNMP We</u>	b Server Gateway	Help						
□ ☞ 🖬 🗊 🧭 📜 ☞ 🗊 😭	ž 🖻 🖻 🗙 🚲	▶ ■ 🛠 🛱 😫						
⊡-∰ sim ⊕-g≇ <mark>Channel 1</mark>	Item ID	Register Type	Register	DataType	Value	Quality	Timestamp	SNMP OID
			ш					•
Date Time	Event							÷
Ready Monitor Mo	de:Remote GateWay	192.168.1.177 Total	Items:16 Vali	d Items:1024	www.opcma	ster.com 1356	4889340 support	@opcmaster.com

Figure 3-4-3 Complete add channel

3.5 New Device

Select the current channel, right-click to select "new device" or click the toolbar , as shown in figure 3-5-1.

~ П			ar ⊾	*					
		「」 あ 喧 喧 X i	🖗 🕨 📄 🗶 🏥 🛛						
🗊 sim		Item ID	Register Type	Register	DataType	Value	Quality	Timestamp	SNMP OID
🗄 😴 Ch	annel_1								
	New Device	Ctrl+D							
	Export EXCEL								
	Cut	Ctrl+X							
	Сору	Ctrl+C							
	Paste	Ctrl+V							
	Delete	Del							
	Properties								
		•		m					
ate	Time	Event							

Figure 3-5-1 Select New Device

Set device-related properties in the pop-up dialog box.Under the communication protocol that supports group packet, in order to improve the communication speed, group packet communication can be realized under the continuous register address for the same register type.When the device does not support group packet communication,



the group packet parameters should be set to 0.In addition, when the response time of the device is slow, the time interval between data frames can be set, with the default frame interval set to 25 milliseconds.Note that the order adjustment is based on the order in which the high and low byte transfers are made when the device data is transferred.See figure 3-5-2.

Device ID: The station number of corresponding equipment

Device ID: 1	
Delay Between Polls: 50 ms	ė.
Delay After Write: 50 ms	6
Bytes Integer Order: 21	
Bytes Integer Order: 4321 💌	
4 Bytes Float Order: 4321 💌	
Bulk Transfer	
Analaog Adjacent Span: 4	
Analaog Max Span: 32	
Binary Adjacent 4	
Binawy Hay Span : Rd	-

Figure 3-5-2 sets device properties

Click "ok" to complete adding the device, as shown in figure 3-5-3.

X2SNMP - SNMP test.xts *		-						
<u>File Edit View T</u> ools SNMP We	b Server Gateway	Help						
	X 🖻 🖻 🗙 🚺	🕨 🔳 🛠 🙀 😫						
⊡ 🗊 sim	Item ID	Register Type	Register	DataType	Value	Quality	Timestamp	SNMP OID
⊡sª Channel_1								
Device_1								
	-							
			m					•
Date Time	Event							¢
Ready Monitor Mo	ode:Remote GateWay	y 192.168.1.177 Tota	l Items:1 Vali	d Items:1024	www.opcma	aster.com 1356	4889340 support	@opcmaster.com

Figure 3-5-3 Complete New Device

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3.6 New Tag

You can directly create a new label under the device (you can also create a group first, and then create a new label in the group), select the device and right-click to select a new label or click the toolbar icon¹, as shown in figure 3-6-1.

) 🖻 🔒 🗇) 🕫 🖪 💕 🕯	🗊 🗗 🛛 🕯	a 🛍 🗙 🍋 🕨	🔳 🛠 🙀			
ModbusRTU Item ID Rev		Register Type	Register	DataType	Value	Quality	
🖻 🚰 Chanr	nel_1	S					
	New Grou	p					
[New Tag	40					
	Export EX Import EX	CEL CEL					
	Cut Copy Paste Delete	Ctr Ctr Ctr	rl+X rl+C rl+V Del				
	Properties						

figure3-6-1 Select New Tag

The parameters of the acquisition end and the forwarding end are set in the pop-up dialog box, and the roll call, data type, register type and register address of the acquisition end are set in the label property.Figure 3-6-2 shows the collection end register address selected is 4X0001 and the data type is Word.In addition, when the data type is Short, Word, Long or DWord, it can be evaluated by the data bits of bytes.For some special data, linear conversion function can be enabled to realize linear amplification and reduction of data.

Turn began to SNMP Settings, the default scope for the SNMP OID. 1.3.6.1.4.1.319.1.2.0.0.0.1. Between 1.3.6.1.4.1.319.1.2.9.9.9.9 (OID) according to customer's specific needs configuration, turn to start the SNMP data types have Int32, UInt32, Counter64, a String four types.See figure 3-6-2.



Collection		
Name:	Tag_1	
Description:	[Cancel
Data Type:	Word (2Byte, 0~65535)	J
Register Type:	Sine	
Register Address:	1	
Mask Valu	e 🗖 Bit: 🚺 💌	
_Scale		
🔲 Enable	Setting	
Iransfer (SNMP Ages		
SNMP Oid:	1.3.6.1.6.1.12.1.3.0.0.0.0	-
C1000 D . T .	Int32	-
SNMF Data Type:	1702270	

figure3-6-2 New Tag Properties

Click "ok" to complete adding the label, as shown in figure 3-6-3.

	4 🛲 🖂 I V 🖻		338 LOAD 11			
🗆 🥔 📷 💷 📟 🔤			DataType	una Valua Qualitu		
⊡ ∰ Modblastrie ⊡ ∰ Channel_1	Tag_1	4X(Holding Regist	1	Short	Value	Uncertain
	4					

Figure 3-6-3. Adding labels is complete



Multiple points can be added one by one according to the above steps. It is

recommended to copy and paste the toolbar. The specific operations are as follows:

(1) select the label to be copied, click the copy button in the toolbar, or right-click and select "copy" as shown in figure 3-6-4.

Item ID	Register Type	Register	DataType	Value	Quality
A Tag_1	4X(Holding Regist	1	Short		Uncerta
			New Tag		
			Cut	Ct	rl+X
			Сору	Ct	rl+C
			Paste	Ct	rl+V
			Delete		Del
			Batch Mod	ify	
			Properties.		
	Tag_1	Tag_1 4X(Holding Regist	Tag_1 4X(Holding Regist 1	Tag_1 4X(Holding Regist 1 Short Cut Cut Cut Copy Paste Delete Batch Mod Properties.	Tag_1 4X(Holding Regist 1 Short Cut Cut Ctr Copy Ctr Paste Ctr Delete Batch Modify Properties

Figure 3-6-4 copies the current label

(2) right click on the blank and choose paste, as shown in figure 3-6-5.

D 🖻 🖬 🇊 🕫 🗓 💣	∭ mar k ⊑		🛠 💥 😫			
ModbusRTU	Item ID	Register Type	Register	DataType	Value	Quality
⊡_s≇ Channel_1 <mark>Щ</mark> Device_1	Tag_1	Tag_1 4X(Holding Regist 1		Short		Uncertair
		New Ta	g			
		Paste	Ctrl+	v		
		m				



Figure 3-6-5 paste the label

Some parameters of the new tag (such as the address of Modbus register) will be generated automatically accordingly, which needs to be set according to the field situation, as shown in figure 3-6-6.

0 🛩 🔒 🎯 🌶 🖪 💣	🗊 😭 🐰 🖻	a 🛍 × 🌆 ► =	* 🛱			
∃ ∰ ModbusRTU	Item ID	Item ID Register Type R		DataType	Value	Quality
🗄 🚰 Channel_1	ATag_1	4X(Holding Regist	1	Short		Uncertair
Device_1	Tag_2	4X(Holding Regist	2	Short		Uncertain
	Tag_3	4X(Holding Regist	3	Short		Uncertain
	Tag_4	4X(Holding Regist	4	Short		Uncertair
	Tag_5	4X(Holding Regist	5	Short		Uncertair
	Tag_6	4X(Holding Regist	6	Short		Uncertain
	Tag_7	4X(Holding Regist	7	Short		Uncertair
	Tag_8	4X(Holding Regist	8	Short		Uncertair

Figure 3-6-6 shows that the copy label is complete

The forwarding end corresponds to SNMP OID, and the SNMP data type is shown in figure 3-6-7 below.



🗅 😅 日 🎯 🍠 🔳 💣	🚮 😰 X 🖻 I	🗟 🗙 🍇 🕨 🔳 🛠 🙀 😫		
∃ ∰ ModbusRTU	Quality	Tim SNMP OID	SNMP Data Type	Updat
🗄 🚰 Channel_1	Uncertain	.1.3.6.1.4.1.319.1.2.0.0.0.2	Int32	0
Device_1	Uncertain	.1.3.6.1.4.1.319.1.2.0.0.0.3	Int32	0
	Uncertain	.1.3.6.1.4.1.319.1.2.0.0.0.4	Int32	0
	Uncertain	.1.3.6.1.4.1.319.1.2.0.0.0.5	Int32	0
	Uncertain	.1.3.6.1.4.1.319.1.2.0.0.0.6	Int32	0
	Uncertain	.1.3.6.1.4.1.319.1.2.0.0.0.7	Int32	0
	Uncertain	.1.3.6.1.4.1.319.1.2.0.0.8	Int32	0
	Uncertain	.1.3.6.1.4.1.319.1.2.0.0.0.9	Int32	0
	_			
			II.	1

Figure 3-6-7 transfers the SNMP parameter of the originator

3.7 X2SNMPRunTime

After the project configuration is completed, click the menu bar "tools" in local mode to select "start monitoring" or click the toolbar icon \blacktriangleright (note that the X2SNMPRuntime program is enabled only when the soft gateway is used on the PC or during simulation), as shown in figure 3-7-1.

D 🖻 🔒 🎟 👘	Monito	r Mode 🛛 🕨	X	稿 🕨 🗉 🛠 鱓 第		
🗄 🇊 ModbusRTU	Start M	lonitor	Tim	SNMP OID	SNMP Data Type	Updat
⊡g≇ Channel I <mark>Щ. Devi</mark>	Stop M	lonitor	.1.3.6.1.4.1.319.1.2.0.0.0.2		Int32	0
	Device +		.1.3.6.1.4.1.319.1.2.0.0.0.3		Int32	0
	Group	÷		.1.3.6.1.4.1.319.1.2.0.0.0.4	19.1.2.0.0.0.4 Int32	0
	Tag	•		.1.3.6.1.4.1.319.1.2.0.0.0.6	Int32	0
	1.00000	Uncertain		.1.3.6.1.4.1.319.1.2.0.0.0.7	Int32	0
		Uncertain		.1.3.6.1.4.1.319.1.2.0.0.0.8	Int32	0
		Uncertain		.1.3.6.1.4.1.319.1.2.0.0.0.9	Int32	0

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Figure 3-7-1 select start monitoring

X2SNMPRunTime running time program will then be started. In normal use, it only needs to be started in the background to realize the function of data collection on PC.Click the login page to browse the local WEB server. If some Internet explorer browser opens a blank page, you can refresh the page, as shown in figure 3-7-2.

X2SNM	PRunTime	
Settting	Licence Log	
Build:	Feb 13 2017(Unicode) www.opcmaster.com	
Language:	英语(美国)	
Project:	品\凌动网关30\X2SMMP配置软件_2\Simulat	or.xts
	Open Web	

In the X2SNMP software monitoring, you can see that some real-time data on the device is consistent with the data on the interface, as shown in figure 3-7-4.





X2SNMP - test.xts	ter ter	B. 3281		-				X
File Edit View To	ools SNMP We	eb Server Gateway Help						
	1 6 6	X 陶 @ X 🌆 🕨 📕	📯 🙀 😫			C		
🖃 🇊 ModbusRTU	Item ID	Register Type	Register	DataType	Value	Quality	Timestamp	SNMP OID *
	Tag 1	4X(Holding Register)-F6	1	Word	11	Good	2018-12-18 08:45:55	.1.3.6.1.4.1.319.1.2.0.0.0.1
Device_	1 1 Tag 2	4X(Holding Register)-F6	2	Word	22	Good	2018-12-18 08:45:58	.1.3.6.1.4.1.319.1.2.0.0.0.2
-	Tag_3	4X(Holding Register)-F6	3	Word	33	Good	2018-12-18 08:46:01	.1.3.6.1.4.1.319.1.2.0.0.0.3
	Tag_4	4X(Holding Register)-F6	4	Word	44	Good	2018-12-18 08:46:03	.1.3.6.1.4.1.319.1.2.0.0.0.4
	Tag_5	4X(Holding Register)-F6	5	Word	55	Good	2018-12-18 08:46:05	.1.3.6.1.4.1.319.1.2.0.0.0.5
	Tag_6	4X(Holding Register)-F6	6	Word	66	Good	2018-12-18 08:46:07	.1.3.6.1.4.1.319.1.2.0.0.0.6
	Tag_7	4X(Holding Register)-F6	7	Word	77	Good	2018-12-18 08:46:10	.1.3.6.1.4.1.319.1.2.0.0.0.7
	Tag_8	4X(Holding Register)-F6	8	Word	88	Good	2018-12-18 08:46:14	.1.3.6.1.4.1.319.1.2.0.0.0.8 *
ļ	•							• •
Date	Time	Event						*
€ 2018/12/18	8:48:13	ModbusRTU.Channel_1.D	evice_1.(RX) (1 03 10 00 0	B 00 16 0	0 21 00 2	C 00 37 00 42 00 4D 00	58 54 D4
⊕ 2018/12/18 8:48:14 ModbusRTU.Channel 1.Device 1.(TX) 01 03 00 00 00 844 0C								
2018/12/18	2018/12/18 8:48:14 ModbusRTU.Channel 1.Device 1.(RX) 01 03 10 00 0B 00 16 00 21 00 2C 00 37 00 42 00 4D 00 58 54 D4							58 54 D4
	8:48:15	ModbusRTU.Channel_1.D	evice_1.(TX) 0	1 03 00 00 0	0 08 44 0	C		
💥 Modbus Slave - [N	1bslav1]		- 0 X	SNMP X2S	NMPRun	Time	人名日本马克里德	
File Connection	Setup Display	View Window Help	- 5	× Settti	ng Licen	ce Log	1	
	U 🖶 📋 🤶 📢					1.0	1	
				- 11				
	-			Bu	ld: Feb 1	13 2017 (Ur	uicode) www.opcmaster.co	m
40001 = 11				Langu	aze: 西语	(美国)	•	
40002 = 22					-e 120+			
40003 = 33				Proj	ect: 冈关	产品\凌动	网关30\X2SNMP配置软件_2'	test.xts
40004 = 44								
40005 = 55							Open Web	
40007 = 77								
40008 = 88								
For Help, press F1. F	or Edit, double cl	ick on a value Port 2: 9	9600-8-N-1					



3.8 Upload project to gateway

After the project is configured and the test on PC is ok, the project can be uploaded to the hardware gateway of the next computer (note: the upload engineering function is effective in gateway monitoring mode). In the gateway mode, click "gateway" in the menu bar to select upload or click the toolbar¹¹, as shown in figure 3-8-1.



W X2SNMP - 无标	题*									
<u>File Edit View</u>	Tools	SNMP We	eb Server Gateway <u>H</u> elp	-						
	s a 🖪 🕯	* 🗗 🖆	3 🖻 🛍 🗙 🚺 🕨 🗉	🛠 🙀 😫						
⊡ 🗊 sim		Item ID	Register Type	Register	DataType	Value	Quali	Timestamp	SNMP OID	
		•								۲
Date	Time	1	Event	Event						
1 2018/12/18	15:59:	58	ping.exe 192.168.1.177							
1 2018/12/18	16:10:	13	Succeed to get 'Time' pa	rameter						
1 2018/12/18	16:12:	05	Succeed to get 'Firmwar	e' parameter						
1 2018/12/18	16:12:	12	Succeed to get 'System'	parameter						
1 2018/12/18	16:12:	17	Succeed to get 'System'	parameter						
1 2018/12/18	16:12:	22	Succeed to get 'System'	parameter						
1 2018/12/18	16:12:	27	Succeed to get 'System'	parameter						
1 2018/12/18	16:14:	23	Succeed to download pr	oject!						
l Ready	Monit	or Mode:R	emote GateWay 192,168,1,1	77 Total Item	s:16 Valid Ite	ms:1024	www.on	cmaster.com 1356	1889340 support@opcm	aster.com

Figure 3-8-1 Select upload the project

Enter the gateway IP address in the popup dialog box (note: the IP address of the gateway must be correct, the default IP address of the gateway factory is 192.168.1.88, the IP address on the PC should be set to the same network segment, Ping can be uploaded after.), click "upload". After successful upload, a dialog box will pop up to indicate successful upload, as shown in figure 3-8-2.

(P Address:	192. 168. 1 88	Ping
oject Path:	D:\工作文件夹\products\网关产品\凌动网关30\X2SWWP配置软件_	Upload

Figure 3-8-2 Upload project parameter Settings

3.9 Gateway Setting

In gateway monitoring mode, click "gateway" in the menu bar, select "parameter setting", and set hardware gateway configuration parameters in the pop-up dialog box, as shown in figure 3-9-1.



0 🚅 🗐 🇊 :	a 🖪 💣 🚳 😭	🔏 🖻 💼 Setting		1	ξ.				
- ModbusRTL	J Item ID	Register Download	ł	er	DataType	Value	Quality	Timestamp	SNMP OID
🗄 🚰 Channel_	1 🚺 Tag 1	4X(Hold			Word	11	Unce		.1.3.6.1.4.1.319.1.2.0.0.0
Devic	e_1 Tag_2	4X(Holding register)			Word	22	Unce		.1.3.6.1.4.1.319.1.2.0.0.0
	Tag_3	4X(Holding Register)-F	5 3		Word	33	Unce		.1.3.6.1.4.1.319.1.2.0.0.0
	Tag_4	4X(Holding Register)-F	5 4		Word	44	Unce		.1.3.6.1.4.1.319.1.2.0.0.0
	Tag_5	4X(Holding Register)-F	5 5		Word	55	Unce		.1.3.6.1.4.1.319.1.2.0.0.0
	Tag_6	4X(Holding Register)-F	5 6		Word	66	Unce		.1.3.6.1.4.1.319.1.2.0.0.0
	Tag_7	4X(Holding Register)-F	5 7		Word	77	Unce		.1.3.6.1.4.1.319.1.2.0.0.0
	Tag_8	4X(Holding Register)-F	5 8		Word	88	Unce		.1.3.6.1.4.1.319.1.2.0.0.0
	•			111					
Date	Time	Event							
2018/12/18	8:49:19	ModbusRTU.Channel_	1.Device_	1.(RX) 0	1 03 10 00 0	B 00 16 0	0 21 00 2	C 00 37 00 42 00 4D 00	0 58 54 D4
2018/12/18	8:49:20	ModbusRTU.Channel_	1.Device_	1.(TX) 0	1 03 00 00 0	0 08 44 0	С		
	8:49:20	ModbusRTU.Channel_	1.Device_	1.(RX) 0	1 03 10 00 0	B 00 16 0	0 21 00 2	C 00 37 00 42 00 4D 00) 58 54 D4
2018/12/18	8:49:21	ModbusRTU.Channel_	1.Device_	1.(TX) 0	1 03 00 00 0	0 08 44 0	С		
2018/12/18	8:49:21	ModbusRTU.Channel_	1.Device_	1.(RX) 0	1 03 10 00 0	B 00 16 0	0 21 00 2	C 00 37 00 42 00 4D 00) 58 54 D4
2018/12/18	8:49:22	ModbusRTU.Channel_	1.Device_	1.(TX) 0	1 03 00 00 0	0 08 44 0	С		
2018/12/18	8:49:22	ModbusRTU.Channel_	1.Device_	1.(RX) 0	1 03 10 00 0	B 00 16 0	0 21 00 2	C 00 37 00 42 00 4D 00) 58 54 D4
2018/12/18	8:49:23	ModbusRTU.Channel_	1.Device_	1.(TX) 0	1 03 00 00 0	0 08 44 0	С		
2018/12/18	8:49:23	ModbusRTU.Channel_	1.Device_	1.(RX) 0	1 03 10 00 0	B 00 16 0	0 21 00 2	C 00 37 00 42 00 4D 00) 58 54 D4
2018/12/18	8:49:24	ModbusRTU.Channel_	1.Device_	1.(TX) 0	1 03 00 00 0	0 08 44 0	С		
0 2018/12/18	8.49.24	Modbus RTU Channel	Device	1 (RX) 0	1 03 10 00 0	B 00 16 0	0 21 00 2	C 00 37 00 42 00 4D 00	1 58 54 D4

Figure 3-9-1 select Gateway setting

Enter the user name and password in the dialog box that pops up. The user name is fixed as "admin" and the password is fixed as "admin123456". After successful input, gateway related system parameters can be set, as shown in figure 3-9-2.

11 N	1		-
user name.	p.		
Password:			
	OK	Cancel	

figure 3-9-2 Enter Username and Password

Ethernet Setting: You can change the hardware gateway IP address, the factory default gateway IP address for 192.168.1.88, the default as 255.255.255.0 subnet mask, default gateway 192.168.1.1, complete click ok to set (note: the factory default gateway IP address is 192.168.1.88, users if it is to change the IP address for the first time, users only need a cable (cross or direct) and gateways. It is necessary to set the PC and gateway as the same network segment, and then input the current IP address of the gateway 192.168.1.88 in the current IP address text box, and then click "apply"

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to make the gateway parameter setting operation corresponding to the current IP address, and then set the new IP address.)The "Ping" function tests whether the Ping of the current IP address is successful. The "login page function" can log in to the WEB server where the gateway is located, as shown in figure 3-9-3.

Ethernet Setti	ng Time	Firmware	System		_
Current	IP Address:	192.168.1	. 88		- 10
Use t	he following	; IP addres	s:		
	IP Address:	192.168.1	. 88		
s	ubnet Mask:	255.255.2	55.0		
Defau	lt GateWay:	192.168.1	. 1		
	Setti		Ping	Login Web	
After enteri	ing the g	ateway I etting o	P, click peration	the apply but correspond	tton to
nake the y	accordy o				

Figure 3-9-3 Ethernet Setting

System time: can read the current system time of the hardware gateway. If the time does not match the normal time, you can click "write" to refresh the system time of the hardware gateway. The automatic update cycle refers to the interval between the system time of the hardware gateway to the bottom end device, as shown in figure 3-9-4.



thernet Setting Time Fi	rmware System	
Gateway DateTime: 2018-	12-18 16:13:12	Read
PC DateTime: 2018-	12-18 16:11:28	Write
Update Interval: 0	Minute	
Read: read the current syste Write: synchronize of systen Update Interval: the interva update to the terminal slave	em direction of the ha n time on a PC to the l between the hardwa device(for Haiwei PLC	irdware gateway gateway are gateway system tir using only)

Figure 3-9-4 Time

Firmware information: you can view firmware information burned into the hardware gateway, as shown in figure 3-9-5.

thernet Setti	ng Time Firmware System
Name:	X2SNMP Build: Nov 11 2018(Unicode)
Machine Code:	0083CFD2-D2D2-0000-7375-6E66756C6C31
Licence Code:	A9070000-80C72690-2F07DE06050040A303
	Refresh

Figure 3-9-5 Firmware Information

System: you can view the current usage of hardware gateway memory in the system and restart the gateway remotely. Delete the configuration project is generally used when updating the gateway, the user is generally used less, it is recommended



not to click casually, restore the configuration project can restore the user mistakenly deleted the gateway project, the above functions can also be accessed through the WEB server, on the WEB page Settings. The gateway parameter setting interface is shown in figure 3-9-6.

thernet Settin	ng Time Firmware	System					
Memory Load:	35%						
Total Memory:	29580K						
Used Memory:	10152K						
	Reboot GateWay	Delete Config File					
	Backup Config File	Recover Config File					

Figure 3-9-6 System Setting

3.10 Download Project to PC

Download project is to download the last configured project from the hardware gateway to the PC (note: the download project function is effective in gateway monitoring mode). On the PC, you can edit the project and view real-time data for debugging. Click "gateway" to select "download project", as shown in figure 3-10-1.

X2SNMP - test.x	kts *	ALL BALLER							
File Edit View	Tools SNMP W	eb Server Gateway Help	c.						
	a 🖪 💕 👩 😭	X 🗈 💼 Setting		1					
🖃 🗊 ModbusRTU	J Item ID	Register Download.		er	DataType	Value	Quali Timestamp	SNMP OID	
🗄 🚰 Channel_	1 🚺 Tag_1	4X(Hold Uplead		1	Word	11	Unce	.1.3.6.1.4.1.319.1.2.0.0.0.1	
Devic	te_1 1 Tag_2	4X(Holding register) re-	-		Word	22	Unce	.1.3.6.1.4.1.319.1.2.0.0.0.2	
	Tag_3	4X(Holding Register)-F6	3		Word	33	Unce	.1.3.6.1.4.1.319.1.2.0.0.0.3	
	Tag_4	4X(Holding Register)-F6	4		Word	44	Unce	.1.3.6.1.4.1.319.1.2.0.0.0.4	
	Tag_5	4X(Holding Register)-F6	5		Word	55	Unce	.1.3.6.1.4.1.319.1.2.0.0.0.5	
	Tag_6	4X(Holding Register)-F6	6		Word	66	Unce	.1.3.6.1.4.1.319.1.2.0.0.0.6	
	Tag_7	4X(Holding Register)-F6	7		Word	77	Unce	.1.3.6.1.4.1.319.1.2.0.0.0.7	
	Tag_8	4X(Holding Register)-F6	8		Word	88	Unce	.1.3.6.1.4.1.319.1.2.0.0.0.8	
	 ⊀ 			11				•	
Date	Time	Event							
2018/12/18	8:49:16	ModbusRTU.Channel_1.	ModbusRTU.Channel_1.Device_1.(TX) 01 03 00 00 00 844 0C						
2018/12/18	8:49:16	ModbusRTU.Channel_1.	ModbusRTU.Channel_1.Device_1.(RX) 01 03 10 00 0B 00 16 00 21 00 2C 00 37 00 42 00 4D 00 58 54 D4						
2018/12/18	8:49:17	ModbusRTU.Channel_1.	ModbusRTU.Channel_1.Device_1.(TX) 01 03 00 00 00 844 0C						
2018/12/18	8:49:17	ModbusRTU.Channel_1.Device_1.(RX) 01 03 10 00 0B 00 16 00 21 00 2C 00 37 00 42 00 4D 00 58 54 D4							
2018/12/18	8:49:18	ModbusRTU.Channel_1.Device_1.(TX) 01 03 00 00 08 44 0C							
	8:49:18	ModbusRTU.Channel_1.Device_1.(RX) 01 03 10 00 0B 00 16 00 21 00 2C 00 37 00 42 00 4D 00 58 54 D4						0 4D 00 58 54 D4	
2018/12/18	8:49:19	ModbusRTU.Channel_1.	Device_1.	(TX) 01	03 00 00 0	0 08 44 0	IC .		
	8:49:19	ModbusRTU.Channel_1.	Device_1.	(RX) 01	L 03 10 00 0	B 00 16 0	00 21 00 2C 00 37 00 42 00	4D 00 58 54 D4	
A 2018/12/18	8-49-20	ModbusRTI I Channel 1 I	Device 1	(TX) 01	03 00 00 0	0 08 44 0	ic .		
Download project f	fror Monitor Mode:	Remote GateWay 192.168.1.	177 Tota	al Item	s:9 Valid Ite	ems:1024	www.opcmaster.com 135	64889340 support@opcmaster.com	

Figure 3-10-1 Download the Project

Enter the gateway IP address in the pop-up dialog box to download the current project from the gateway (users can also download the project by logging into the gateway's WEB server), as shown in figure 3-10-2.

Ping
DownLoad

Figure 3-10-2 Download Project



4 WEB Service

The gateway comes with a WEB server and the default port is fixed at 80.Users can log into the WEB server through the browser, modify the IP address of the hardware gateway, view real-time data, download X2SNMP configuration software and engineering files, etc.

4.1 Website login

Enter the IP address of the hardware gateway in the browser. The default IP address of the gateway is 192.168.1.88. If the user changes the IP address for the first time, the user only needs one network line (either cross or direct connection is ok) and the gateway is directly connected. It is necessary to set the PC and gateway as the same network segment, and then enter 192.168.1.88 in the browser to complete the modification of gateway IP address. As the figure 4-1-1.

Enter the user name and password in the pop-up window. Note that the factory default user name is "admin" and the password is "admin123456". Users can add personal accounts in user management after logging in successfully. As the figure 4-1-2.

ひer Login Language ~ User Login admin Password Login Reset		hhtml		_	70
Suntul 支注自控物物互联 User Login Language ~ Usermane admin Password			迅绕		
专注自控 物物互联 User Login Language ~ Username admin Password ··········			sunfull		
User Login Language ~ Userame admin Password Login Reset		专注	E自控 物物互联		
Username admin Password Login Reset	Use	er Login		Language ~	
Password		Username admin			
Login Reset		Password	•		
			Login Reset		

Figure4-1-2 User Login



4.2 Download

Download: Download the configuration software used to complete the gateway, the current engineering file and the help document, as shown in figure 4-2-1.

X2SNMP ×			Finds Rop; Mond Rod	ا ا	9 ×
← → C 🗋 192.168.1.88/index	.html				:
送税 sunfull 专注自均 物物互联	Download			Language ~	•
CALIFIC IN ISELE	Download List	Size	Date Modify(*unknown)		
	X2SNMP	28.3 MB	2016-06-08 16:00:00		
1	BACnetScan	5.6 MB	2016-06-08 16:00:00		
Lownload	Modbus_Poll	208 KB	2016-06-08 16:00:00		
🔦 Web Service	Modbus_Slave	178 KB	2016-06-08 16:00:00		
📽 User Admin	Project File	*	*		
 Network Firmware Memory Communication Traffic 					

Figure 4-2-1 Download

4.3 User Admin

User Admin: users can manage their login accounts by adding, modifying and deleting, as shown in Figure 4-3-1.

	and the second of	Meaned Real	Are of			
X2SNMP ×		HE PACE	And State			
← → C D 192.168.1.88/index.	html					:
	User Admin					Language 🗸 🗭
🛓 Download	Password					
🔦 Web Service	Access					
醬 User Admin	User					*
🍄 Network	Add Rese	et				
T Firmware	Username	Password	Access	Modify	Save	Delete
(i) Memory	admin	admin123456	Admin	Modify	Save	Delete
Communication Traffic						

Figure 4-3-1 User Admin

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Add: 28 Senang Crescent,#05-11,Bizhub 28,Singapore 416601 Tel: +65 80385403 URL: www.bacnetchina.com milesgoiiot@gmail.com / sales@opcmaster.com



4.4 Network

Network: Set the IP address of the hardware gateway network port, as shown in figure 4-4-1 below.

			Konstructure (Respire)	Manager Proved	
X2SNMP ×	presi de la composición de la composicinde la composición de la composición de la composición de la co	HE PACE I	100		
← → C 🗅 192.168.1.88/inde	x.html				:
运统 sunfull 专注自控 物物互联	Network			L	anguage ~ 🗭
		Network1	Ne	twork2 (Default)	
	IP Address	172.24.13.88	IP Address	192.168.1.88	
📥 Download	Subnet Mask	255.255.255.0	Subnet Mask	255.255.255.0	
🔦 Web Service	Default	172.24.13.1	Default	192.168.1.1	
曫 User Admin	Outeway		Outendy		
Network			OK Reload		
T Firmware					
Memory					
Communication Traffic					

Figure 4-4-1 Network

4.5 Firmware

Firmware: Firmware information means that users can view the firmware version information, machine code and registration code currently burned, as shown in figure 4-5-1 below.

← → C 🗈 192.168.1.88/in	idex.html	
	≡	Language 🗸 🛛 🚱
ま注自控 物物互联	Firmware	
	Name	X2SNMP Build: Nov 11 2018(Unicode)
	Machine Code	0083CFD2-D2D2-0000-7375-6E66756C6C31
📩 Download	License Key	A9070000-80C72690-2F07DE06050040A303
🔦 Web Service		Reload
警 User Admin		
Network	-	
T Firmware		
Memory		
Communication Traffic		

Figure 4-5-1 Fireware 27/37

Add: 28 Senang Crescent,#05-11,Bizhub 28,Singapore 416601 Tel: +65 80385403 URL: www.bacnetchina.com milesgoiiot@gmail.com / sales@opcmaster.com



4.6 Memory

Memory: You can view the memory usage of the gateway, restart the gateway remotely, and so on.Delete project and restore configuration project are generally used when gateway is updated. In general, you do not need to click, as shown in figure 4-6-1 below.

VICANA VICANA	Contract Mage: 40	
	E AND AND THE PACE NAME	
€ → C [] 192.168.1.88/indes		:
		Language 🗸 🕒
退绕		
sunfull	Memory	
专注自控 物物互联		
	Memory Load	
	36%	
	Total Memory	
📥 Download	29580K	
🔦 Web Service		
	Used Memory	
警 User Admin	10472K	
	Memory Information Restart Gateway	
Vetwork	Delete Project File Restore Project File	
T Firmware		
Memory		
A Communication Testin		
Communication Tranic		•

Figure 4-6-1 Memory

4.7 Communication Traffic

Communication Traffic : In addition, the real-time dynamic data frame can be viewed in the web page to facilitate users to intuitively understand the real-time communication status. Through the analysis of the data frame, the cause of fault can be found out, which brings great convenience to users, as shown in Figure 4-7-1.





Figure 4-7-1 Communication Traffic

4.8 Internal Variable

Internal Variable: You can view the gateway's internal variables on the web page, as shown in figure 4-8-1.

X2SNMP ×	-			-	-		8000	×
← → C ③ 不安全 192.168.1.	177/index.html						\$:
些优 sunfull 专注自控 物物互联	Internal Variable							Î
	Tag Name	Data Type	Value	Quality	TimeStamp	SNMP OID		SNI Dat Typ
🕹 Download	\$.sim.Channel_1.Device_1.CommStatus	Boolean	1	good	2018-12- 11T18:03:35	.1.3.6.1.4.1.31	9.1.2.0.0.1.6	Int3
🔦 Web Service								
😤 User Admin								
Network								
T Firmware								
Communication Traffic								
Internal Variable								
🛢 Tag List 🗸 🗸					Copyright © 2	011-2016 www.ba	acnetchina.co	m _

Figure 4-8-1 Internal Variable

4.9 Tag List

Tag List: You can view the gateway's tag list on the web page, as shown in figure 4-9-1.

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Yamuri Light why zwitch Device_1 Tag Download Register Name Address Name Data Type Value Quality TmeStamp SNMP OID SMP Data Type I Tag_1 Sine 1 Word 0 good 2016-12: 11T18.04.32 1.3.6.1.4.1.319.1.2.0.0.0.1 Int32 I Tag_2 Sine 2 Word 0 good 2016-12: 11T18.04.32 1.3.6.1.4.1.319.1.2.0.0.0.1 Int32 I User Admin Tag_3 Sine 3 Word 0 good 2016-12: 11T18.04.32 1.3.6.1.4.1.319.1.2.0.0.0.3 Int32 I Network Tag_4 Sine 4 Word 0 good 2016-12: 11T18.04.32 1.3.6.1.4.1.319.1.2.0.0.0.5 Int32 I Network Tag_5 Sine 5 Word 0 good 2016-12: 11T18.04.32 1.3.6.1.4.1.319.1.2.0.0.0.5 Int32 I Memory Tag_6 Sine 6 Word 0 good 2016-12: 11T18.04.32 1.3.6.1.4.1.319.1.2.0.0.0.6<	· → C ① 不安全 192.16	8.1.177/index.h	tml								☆
Tag Register Address Data Value Quality TmeStamp SNMP OID SNMP Data Type I Download Tag_1 Sine 1 Word 0 good 2018-12- 11718.04-32 1.3.6.1.4.1.319.1.2.0.0.0.2 India	sunrui	Device	1								
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Firmware Tag_6 Sine	Network	Tag_4	Sine	4	Word	0	good	2018-12- 11T18:04:32	.1.3.6.1.4.1.319.1.2.0.0.0.4	Int32	
Memory Tag_6 Sine 6 Word 0 good 2018-12- 11T18.04.32 1.3.6.1.4.1.319.1.2.0.0.0.6 Int32 1 Communication Traffic Tag_7 Sine 7 Word 0 good 2018-12- 11T18.04.32 1.3.6.1.4.1.319.1.2.0.0.0.7 Int32 1 Internal Variable Tag_8 Sine 8 Word 0 good 2018-12- 11T18.04.32 1.3.6.1.4.1.319.1.2.0.0.0.8 Int32 1 Tag_16 Tag_9 Sine 9 Word 0 good 2018-12- 11T18.04.32 1.3.6.1.4.1.319.1.2.0.0.0.8 Int32 1	Firmware	Tag_5	Sine	5	Word	0	good	2018-12- 11T18:04:32	.1.3.6.1.4.1.319.1.2.0.0.0.5	Int32	
Communication Traffic Tag_7 Sine 7 Word 0 good 2018-12- 111718.04.32 1.3.6.1.4.1.319.1.2.0.0.07 Int32 Int32 Internal Variable Tag8 Sine 8 Word 0 good 2018-12- 111718.04.32 1.3.6.1.4.1.319.1.2.0.0.07 Int32 Int32 Tag_ Isis Tag9 Sine 9 Word 0 good 2018-12- 111718.04.32 1.3.6.1.4.1.319.1.2.0.0.08 Int32	Memory	Tag_6	Sine	6	Word	0	good	2018-12- 11T18:04:32	.1.3.6.1.4.1.319.1.2.0.0.0.6	Int32	
Internal Variable Tag_8 Sine 8 Word 0 good 2016-12- 11716.04.32 1.3.6.1.4.1.319.1.2.0.0.0.8 Int32 Tag_1st Tag_9 Sine 9 Word 0 good 2016-12- 11716.04.32 1.3.6.1.4.1.319.1.2.0.0.0.8 Int32	Communication Traffic	Tag_7	Sine	7	Word	0	good	2018-12- 11T18:04:32	.1.3.6.1.4.1.319.1.2.0.0.0.7	Int32	
Tag_List Tag_9 Sine 9 Word 0 good 2018-12- 11T18.04.32 1.3.6.1.4.1.319.1.2.0.0.0.9 Int32	Internal Variable	Tag_8	Sine	8	Word	0	good	2018-12- 11T18:04:32	.1.3.6.1.4.1.319.1.2.0.0.0.8	Int32	
	Tag List 🗸 🗸	Tag_9	Sine	9	Word	0	good	2018-12- 11T18:04:32	.1.3.6.1.4.1.319.1.2.0.0.0.9	Int32	

Figure 4-9-1 Internal Variable

You can also write values on a web page, as shown in figure 4-9-2.

X2SNMP ×		-	-	1.00	1	-		strate and the	<u>ele</u>	• X
← → C ① 不安全 192.168	.1.177/index.ht	tml								☆ :
Summuli	Device_	1								*
专注目控物物互联	Tag Name	Register Name	Address	Data Type	Value	Quality	TimeStamp	SNMP OID	SNMP Data Type	Descrip
📥 Download	Tag_1	Sine	1	Word	0	good	2018-12- 11T18:06:32	.1.3.6.1.4.1.319.1.2.0.0.0.1	Int32	
🔦 Web Service	Tag_2	Sine	2	Word	0	good	2018-12- 11T18:06:32	.1.3.6.1.4.1.319.1.2.0.0.0.2	Int32	
警 User Admin	Tag_3	Tag_1	1			1	× 3-12- 8:06:32	.1.3.6.1.4.1.319.1.2.0.0.0.3	Int32	
🍄 Network	Tag_4	12					3-12- 18:06:32	.1.3.6.1.4.1.319.1.2.0.0.0.4	Int32	
T Firmware	Tag_5				OF	Canc	el 3-12- 8:06:32	.1.3.6.1.4.1.319.1.2.0.0.0.5	Int32	
Memory	Tag_6	Sine	6	Word	0	good	2018-12- 11T18:06:32	.1.3.6.1.4.1.319.1.2.0.0.0.6	Int32	
Communication Traffic	Tag_7	Sine	7	Word	0	good	2018-12- 11T18:06:32	.1.3.6.1.4.1.319.1.2.0.0.0.7	Int32	
Internal Variable	Tag_8	Sine	8	Word	0	good	2018-12- 11T18:06:32	.1.3.6.1.4.1.319.1.2.0.0.0.8	Int32	
🛢 Tag List 🗸 🗸	Tag_9	Sine	9	Word	0	good	2018-12- 11T18:06:32	.1.3.6.1.4.1.319.1.2.0.0.0.9	Int32	
sim	Tex 10	Oins	40	1A/and	0	anad	2010 12	4 2 6 4 4 4 240 4 2 0 0 4 0	Lat20	

Figure 4-8-2 Write Value



5 SNMP Agent

Click SNMP of the menu, select the SNMP Agent, as the below figure 5-1.

D 🗳 🔒 🍘	🔊 🖩 🛛	SNMP A	gent Setting	= 🛠 Long 1	1			
⊡ ∰ sim		Sort SNN	AP OID	egister Type	Register	DataType	Value	Quality
			<					
Date	Time		Event					
0 2018/12/11	17:03:3	36	Open Project	'D:\工作文件夹\product	s\网关产品\凌动	网关30\X2SNN	P\X2SNMP	配置软件\S
A 2010/12/11	17:03:3	37	Local Web Se	erver Listening Port:8080	0			
2010/12/11	17:57:	54	ping.exe 192.	168.1.177				
2018/12/11								

Figure 5-1 SNMP Agent Setting

The port number is fixed as 161, and the type is fixed as public. These two properties cannot be modified. As the below figure 5-2.

P	ort: 16	1	5	
Commun	ity: In	blic	ē.	
	i pu			
	ок	Con	1 10	

Figure 5-2 SNMP Agent Setting

6 SNMP Client Access

The gateway can provide an SNMP interface after data collection, so that users of other SNMP management client platforms can indirectly access third-party devices by accessing the gateway.

You can test it by our X2OPC Server. Open X2OPC and choose the driver



SNMPClient, as shown in figure 6-1.

File Edit View Tools V	Web Server Help { 67 mod X, Bas De X 16s, N ■		
L	ID Item ID Register Register Address ID Item ID Register Register Address Driver Properties Driver List SNMPClient OK Scan Rate: 100 ms	DataType	Value
Ready	< III Total Items:9 Total Items:1 www.opcmaster.com 1356488	89340 support@opcm	aster.com

Figure 6-1 Select driver

Click"OK", to add the driver to complete, as shown in figure6-2.

(住(F) 编辑(F) 初時(V) T目 Web服冬器			
	j <u></u> (ncoakynn			
SNMP	点名	寄存器类型	寄存器地址	数据类型
	•	m		

Figure 6-2 Complete add driver

Right click **Right click**, select "New Channel" or select the icon **of** toolbar to add channel.

You can input the IP (e.g. 192.168.1.88) of SNMP gateway in IP Address, port



number is 161 by default. As shown in figure 6-3.

Channel Name	9			
Channel_1				
Communicatio	n Parameters			
IP Address:	192.168.1.88		Port:	161
Response Ti	meout: 1500	ms		

Figure 6-3 select channel

After the new channel is completed, right-click **Channel 1** to select the new device or click the icon of toolbar, and select the default property of the device property, as shown in figure 6-4.

Name:	Device_1	
Device ID:	public	
Delay Between Polls:	50	 ms
Delay After Write:	50	ms
Bulk Fransfer		

Figure 6-4 Select device

33 / 37

Add: 28 Senang Crescent,#05-11,Bizhub 28,Singapore 416601 Tel: +65 80385403 URL: www.bacnetchina.com milesgoiiot@gmail.com / sales@opcmaster.com



Click "ok" and the device is added, as shown in figure 6-5.

X2OPC - SNMPtest.x2o		Julie La	10. J		
<u>File Edit View T</u> ools We	b Server <u>H</u> elp				
	▋፼│▓▝▆▝▆፟╳│▓▖▎▶ ■				
SNMP	ID Item ID	Register	Register Address	DataType	Value
⊡-∰ Channel_1					
e		III			+
Ready		Total Items:9 Total	Items:1 www.opcmaster.com 1	3564889340 support@opcm	aster.com

Figure6-5 Complete add device

Right click

or right click on the blank area on the right to create a new

label	, as	shown	in	figure	6-6.
				<u> </u>	

X2OPC - SNMPtest.x2o *				
File Edit View Tools W	Veb Server Help			
0 🗳 🖬 🗊 🕫 🗒 💕	👩 🖆 👗 🖻 💼 🕻	× ã₀ ► ■		
⊡∰ SNMP ⊡∰ Channel_1 	ID Item ID	Register Type	Register Address	DataType
		New Tag		
	4	m		
Ready	ј`Т	otal Items:9 Total Items:1 ww	w.opcmaster.com 13564889340 suppo	ort@opcmaster.com

Figure 6-6 New Tag

Click "ok", input OID 1.3.6.1.6.1.12.1.3.0.0.0.1, pay attention to in front of the OID order a point, to select the correct data type, reproducing label batch operation, as shown in figure 6-7.



Name	Tag 1		OK
Description			Cancel
Data Type	Word (2Byte, 0~65535)	•	
Register Type	Oid	-	
Register Address	.1.3.6.1.6.1.12.1.3.0.0.0.1		
	Mask Value Bit 0 👻		
Scale			
🔲 Enable	Setting		

Figure 6-7 Scanned point

After completing the establishment of the label, click the start monitoring under the

toolbar, or click the shortcut key to start monitoring **b**, and we can see that the data has been read, as shown in figure 6-8.

<u>File E</u> dit <u>V</u> iew <u>T</u> ools '	Web Server	<u>H</u> elp						
	1 🗗 😭	※ �� � ×	ilo 🕨 📕					
SNMP	ID	Item ID	Register Type	Register Address	DataType	Value	Quality	Timestamp
🖻 🚰 Channel_1	1	Tag_1	Oid	.1.3.6.1.6.1.12.1.3.0.0.0.1	Word	83	Good	2018-12-17 11:30:06
Device_1	2	Tag_2	Oid	.1.3.6.1.6.1.12.1.3.0.0.0.2	Word	83	Good	2018-12-17 11:30:06
	3	Tag_3	Oid	.1.3.6.1.6.1.12.1.3.0.0.0.3	Word	81	Good	2018-12-17 11:30:06
	4	Tag_4	Oid	.1.3.6.1.6.1.12.1.3.0.0.0.4	Word	81	Good	2018012-17-11:30:00
	5	Tag_5	Oid	.1.3.6.1.6.1.12.1.3.0.0.0.5	Word	81	Good	2018-12-17 11:30:06
	6	Tag_6	Oid	.1.3.6.1.6.1.12.1.3.0.0.0.6	Word	81	Good	2018-12-17 11:30:06
	_							
							1.12	
	•			m				

Figure 4-8 Start monitoring

Third-party software, in third-party SNMP software related parameters Settings, input OID. After 1.3.6.1.6.1.12.1.3.0.0.0.3, we see the third-party SNMP client successful visit to the our X2SNMP gateway, and values is consistent, as shown in figure 6-9.



e Help		
1. Set SNMP Settin	195	
Local IP:	Any	Device: 192.168.1.88
Device IP:	192.168.1.88	2015/11/9 13:09:58 (9 ms) : Start using SNMP V1
Port:	161	2015/11/0.12/10/02 (4640 ms) : 2015/11/9 13:10:03 (4651 ms) : Value: 33
SNMP Version:	SNMP V1	2013/11/3 13:10:03 (4033 IIIS) : Doue
Community:	public	
V3 Authentication:	C MDS C SHA	
V3 Password:		
V3 Encryption Key:		
Advanced Settings	1	
Force 32bit	Slow" Tweak	
🗖 Single Get	🔲 Signed	
Read As:	String	
	- 10	
C 32 bit Traffic Cou	Iype	3
C 64 bit Traffic Cou	nter (V2/3), 1	
Custom OID:	14131912000	<u>범</u>
C Read Device Unit	me	
C Scan Available St	andard Interfaces	
C Scan Available O	Ds from OIDLIB:	
	e e	
l C Multiget Test (use	es counter number from first option)	
3. Run Test	🗆 Repeat every 5 🏒	

Figurre 6-9 The third-party software was successfully accessed



7 Common Problems

7.1 Hint "Failed to call 'http://192.168.1.88/soap' WEB server!"

When starting monitor in the Local PC monitor mode, the error message is constantly prompted in the print message bar "Failed to call 'http://192.168.1.88/soap' WEB server!". There are three main reasons for this situation:

- The first possibility is that the current monitoring mode is gateway mode, which needs to be adjusted to Local PC monitor mode.
- The second possibility is that the port number of the current WEB server is occupied by other applications on the local computer.
- The third possibility is that the X2SNMPRuntime program is closed, and only needs to restart the monitor.

7.2 Pay attention to the difference of "Upload" and

"Download"

It is particularly reminded that after the completion of the project configuration on PC, the project will be uploaded to the gateway through the button "Upload project". When you look at the project in the gateway, you download the project inside the gateway to the configuration software through the button "download project".