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# 西门子 PROFINET 网络调试和诊断工具 PRONETA 入门

http://support.automation.siemens.com/CN/view/zh/109742305

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# 西门子 PROFINET 网络调试和诊断工具 PRONETA

#### **1.1** 产品功能概述

西门子 PRONETA 是基于 PC 的免安装软件,用于帮助诊断和调试 自动化系统 PROFINET 网络,其提供了以下的特点:

- 拓扑总览,自动扫描 PROFINET 网络,显示所有节点拓扑联结关系
- I/O 测试,快速测试现场 ET200 分布式 I/O 的接线和配置
- 所有任务可在无 CPU 连接下进行

最新版本 PRONETA V2.3.0.26 可以从以下链接免费下载,还包括手册和相关资料。

https://support.industry.siemens.com/cs/us/en/view/67460624

#### 1.2 使用前注意

PRONETA 是基于 PC 的免安装软件,下载软件后,解压缩即可以通过 Proneta.exe 文件直接打开。如图 1。



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## PRONETA 软件功能说明

#### 2.1 基本设置

软件打开后如图 2。首先点击"Settings"在选择连接网络使用的网卡,如图 3。

Siemens - PRONETA	
SIEMENS PRONI	ETA
A Home ►	Help ?
<ul> <li>Network analysis</li> <li>Online: show online topology and configure devices</li> <li>Offline: show offline topologies</li> <li>Comparison: compare online and offline topologies</li> <li>Configuration: adopt device names from an offline topology or a STEP7 project</li> </ul>	
• Force and monitor values of SIMATIC ET 200 devices	
Settings     • Change Proneta settings	

图 2

Siemens - PRONETA		
A Home		
General Settings Network Adapter	Selection GSDML Manager	
elect a network adapter		
Name	Description	IP address
O No adapter		
Local Area Connection	Intel(R) 82579LM Gigabit Network Connection	192.168.0.20
○ VMware Network Adapter VMnet1	VMware Virtual Ethernet Adapter	192.168.146.1
O Muluara Natwork Adapter Maate	VMware Virtual Ethernet Adapter	192.168.147.1
<ul> <li>Viviware Network Adapter Vivineto</li> </ul>	initial initial anticitation append	

图 3

如果网络中有不支持 PROFINET 的第三方设备,可以在"General Settings" 选择"Find devices which do not support PROFINET",并设置扫描的设备 IP 地址范围,如图 4。

Siemens - PRONETA <ul> <li>Home</li> </ul> General Settings Network Adapt	r Selection GSDML Manager
Change general settings	
Online topology	
Automatically assign temporary IP	ddresses
Subnet network IP address	192, 168. 0. 0
Subnet network mask	255, 255, 255, 0
Devices connected to an enterprise netw of firewalls and network segmentation. F Automatically assign temporary de Network scanner	k or directly to the internet must be appropriately protected against unauthorized access, e.g. by use more information about industrial security, please visit <u>http://www.siemens.com/industrialsecurity</u> ice names
<ul> <li>Scan network automatically (scanned)</li> <li>Read I&amp;M data of controllers (not a result of the second s</li></ul>	continually runs) commended for S7-1200 with firmware version 2.2) ROFINET
Scan IP addresses from	192.168. 0. 0 to 192.168. 0.255

图 4

#### 2.2 拓扑

在图 2 中选择"Network Analysis",进入到"Online"窗口,点击 1 图标 开始扫面网络。扫描的结果如图 5。

左侧的窗口是拓扑视图,可以看到现场实际的拓扑连接关系;在右边的窗口 里,可以看到扫描到的设备信息,例如:产品类型, IP 地址等。



图 5

通过 图标,可以将扫描到的拓扑视图保存到 PC 本地。如图 6,可以选择.XML 或者图片的方式。



图 6

如果选择.XML的方式,保存的项目可以在离线状态下导入 PRONETA,如图 7,在"Offline"窗口打开保存的.XML 文件,可以在离线状态分析拓扑。这样即 使离开现场也可以分析现场情况。



通过图 5 → 图标,现场设备的详细信息导出,可以通过 Excel 等软件查看。 如图 8,包含现场设备端口连接关系,订货号,固件版本等!这样无需到现场, 也可以掌握现场设备的情况。

Name	DNS Name	Device Ty	IP Addres: F	Port Num Port ID	Port Desc	Operatio	n Remote P	Remote N	Remote I	D Cable Del	Port Erro	or MAU Typ	e Medium T	Power Bu	Module Ir	Module N	Vendor ID	Order Number	Serial Number	Hardware	Software	1&M Versi
pn-io-1	pn-io-1	S7-300	192.168.0.	1 port-001	Siemens	Ethernet	no link	autonego	Down													
				2 port-002	Siemens	5 Ethernet	link	100 Mbit	full dupl	e autonego	Up	port-002-	-00:0e:8c:9	00-0e-8c-	9 O	C	100Base-T	Copper Cable				
et200mp	ret200mpx	ET200MP	0.0.0.0	1 port-001	Reported	Down	port-003-	(00:0e:8c:9	00-0e-8c-	·s 0		0 Unknowr	n Unknown									
00-0e-8c-	900-0e-8c-9	SCALANC	E 192.168.0.	1 port-001-	Cap0	Down	port-001		lixw-hp	0		0 1000Base	- Copper Ca	ble	0	unknown	0x002A	6GK5 414-3FC0	VPVD521099	6	V3.10.1	V1.1
				2 port-002-	(ap1	Down	4	94:b8:c5:f	5:6c:40	0		0 100Base-	T Copper Ca	ble	6	unknown	0x002A	6GK5 491-2AB0	0-8AA2	1	V0.0.0	V1.1
				3 port-001-	Cap2	Down									2	unknown	module					V
				4 port-002-	Cap3	Down									4	unknown	module					V
				5 port-001-	Cap6	Down	port-001		plcxb2d1	a 0		0 100Base-	T Copper Ca	ble	5	unknown	module					v
				6 port-002-	Cap7	Down									9	unknown	0x002A	6GK5 414-3FC0	VPVD521099	6	V3.10.1	V1.1
				7 port-003-	Cap8	Down	port-001		et200mp	x 0		0 100Base-	T Copper Ca	ble	10	unknown	module					V
				8 port-004-	Cap9	Down	port-001		ptp	0		0 100Base-	T Copper Ca	ble	11	unknown	module					V
				9 port-001-	(ap10	Down	port-001		pn-io	0		0 100Base-	T Copper Ca	ble								
				10 port-002-	Cap11	Down	port-002		pn-io-1	0		0 100Base-	T Copper Ca	ble								
				11 port-003-	(ap12	Down																
				12 port-004-	Cap13	Down																
				13 port-001-	Cap14	Down																
				14 port-002-	(ap15	Down																
				15 port-003-	(ap16	Down																
				16 port-004-	(ap17	Down																
ptp	ptp	ET200SP	0.0.0.0	1 port-001	Reported	Down	port-004-	(00:0e:8c:9	00-0e-8c-	.s 0		0 Unknowr	n Unknown									
			192.168.0.	1 1	L	Down																
				2 2	2	Down																
				3 3	3	Down																
				4 4	1	Down	port-002-	(00:0e:8c:9	00-0e-8c-	· 0		0 Unknowr	n Unknown									
				5 5	5	Down																
				6 6	5	Down																
plc 2	plcxb2d1a	S7-1500	192.168.0.	1 port-001	Siemens	SIMATIC	§ Ethernet	X1 P1R	Up	port-001-0	00:0e:8c	:9 00-0e-8c-	-9 0	0	100Base-T	Copper C	able					
				2 port-002	Siemens	SIMATIC	§ Ethernet	X1 P2R	Down													
pn-io	pn-io	S7-300	192.168.0.	1 port-001	Siemens	5 Ethernet	link	100 Mbit	full dupl	e autonego	Up	port-001-	00:0e:8c:9	00-0e-8c-	s 0	c	100Base-T	Copper Cable				
				2 port-002	Siemens	5 Ethernet	no link	autonego	Down													

#### 2.3 I/O 测试

I/O 测试是 PRONETA 软件的一个亮点! 无需连接实际的 CPU, PRONETA 可以作为一个 PROFINET 控制器连接 ET200,测试模块儿组态参数和打点工作!

注意,如果要使用 I/O 测试功能,请一定使用 PRONETA 最新的版本,建议 使用 V2.3 以上,并且要保证测试的 ET200 支持 PRONETA 测试功能,如图 9。 兼容性列表可以随 PRONETA 下载页获得!

Device Type	Order Number	SW Revision	Status
ET 200eco PN 16DI	6ES7 141-6BH00-0AB0	V7.0.1	
ET 200eco PN 16DI DC24V 8xM12	6ES7 141-6BH00-0AB0	V6.0.3	
ET 200eco PN 16DO	6ES7 142-6BH00-0AB0	V7.0.1	
ET 200eco PN 16DO DC24V/1.3A 8xM12	6ES7 142-6BH00-0AB0	V6.0.3	
ET 200eco PN 4 AO U/I 4xM12	6ES7 145-6HD00-0AB0	V6.0.3	
ET 200eco PN 4AO	6ES7 145-6HD00-0AB0	V7.0.1	
ET 200eco PN 8AI	6ES7 144-6KD00-0AB0	V7.0.1	
ET 200eco PN 8AI U/I/RTD/TC 8xM12	6ES7 144-6KD00-0AB0	V6.0.3	
ET 200eco PN 8DI	6ES7 141-6BG00-0AB0	V7.0.1	
ET 200eco PN 8DI	6ES7 141-6BG00-0AB0	V7.0.1	
ET 200eco PN 8DI	6ES7 141-6BF00-0AB0	V7.0.1	
ET 200eco PN 8DI DC24V 4xM12	6ES7 141-6BF00-0AB0	V6.0.3	
ET 200eco PN 8DI DC24V 8xM12	6ES7 141-6BG00-0AB0	V6.0.3	
ET 200eco PN 8DIO	6ES7 147-6BG00-0AB0	V7.0.1	
ET 200eco PN 8DIO DC24V/1.3A 8xM12	6ES7 147-6BG00-0AB0	V6.0.3	
ET 200eco PN 8DO	6ES7 142-6BF00-0AB0	V7.0.1	
ET 200eco PN 8DO	6ES7 142-6BF50-0AB0	V7.0.1	
ET 200eco PN 8DO	6ES7 142-6BR00-0AB0	V7.0.1	
ET 200eco PN 8DO	6ES7 142-6BG00-0AB0	V7.0.1	
ET 200eco PN 8DO DC24V 2A 8xM12	6ES7 142-6BR00-0AB0	V6.0.3	
ET 200eco PN 8DO DC24V/0.5A 4xM12	6ES7 142-6BF50-0AB0	V6.0.3	
ET 200eco PN 8DO DC24V/1.3A 4xM12	6ES7 142-6BF00-0AB0	V6.0.3	
ET 200eco PN 8DO DC24V/1.3A 8xM12	6ES7 142-6BG00-0AB0	V6.0.3	
ET 200eco PN IO-Link Master	6ES7 148-6JA00-0AB0	V7.0.5	
ET200AL	6ES7 157-1AB00-0AB0	V1.0.0	
ET200MP	6ES7 155-5AA00-0AB0	V1.0.0	
ET200MP	6ES7 155-5AA00-0AB0	V2.0.1	
ET200MP	6ES7 155-5AA00-0AC0	V1.0.2	
ET200pro	6ES7 154-8AB00-0AB0	V2.5.4	
ET200SP	6ES7 155-6AU00-0CN0	V3.1.0	
ET200SP	6ES7 155-6AR00-0AN0	V3.2.2	
ET200SP	6ES7 155-6AU00-0CN0	V3.0.0	
ET200SP	6ES7 155-6AU00-0BN0	V3.1.0	
ET200SP	6ES7 155-6AU00-0BN0	V1.1.1	
IM151-3	6ES7 151-3BA22-0AB0	V5.6.1	

图 9

进入 I/O 测试功能,有两种办法。方法 1,在之前提到的在线的拓扑视图,找 到需要测试的 ET200,点击鼠标右键,选择"Start IO test",如图 10;方法 2, 回到主页面 图 2,直接选择"IO test"。





如图 11 状态, ET200 没有分配设备名称和 IP 地址, 需要手动分配, 具体步骤请见图 12-14。

No <sup>®</sup> Siemens - PRONETA ▲ Home	-	-
Device Selection IO Test		
Accessible devices	Details	
ET 200SP	- Device	
C ptp ET 200MP C C C C C C C C C C	Name Device Type IP Address Subnet Mask Device ID MAC Address Role Gateway Vendor ID Vendor Name Status <b>Ports</b>	ptp ET200SP 0.0.0.0 0x0313 28:63:36:34:c2:d3 Device 0.0.0.0 0x002A SIEMENS AG Unknown
et200mp hf	<ul> <li>ptp - port-00</li> <li>Diagnostic State</li> </ul>	1 us
	Diagnostic buffe	er is not supported

图 11



图 13

No Siemens - PRONETA				
A Home				
Device Selection IO Test				
Accessible devices		Details		
		* Device		
	Set Network Parameters			
	Please select your network	parameters		
ptp	<ul> <li>Assign device name</li> </ul>	ptp		
ET 200MP	IP configuration			
0	<ul> <li>Static IP configu</li> </ul>	ration		
	IP addres	s	192.168. 0.111	
	Network	mask	255. 255. 255. 0	
et200mp hf	Use rout	er for Gateway	0. 0. 0. 0	
	🔘 Obtain IP config	uration from a DHC	P server and identified by	-
	MAC add	iress		
	<ul> <li>Device n</li> </ul>	ame		
	O Client ID			
	Devices connected to appropriately protecte network segmentation http://www.siemens.co	an enterprise network o d against unauthorized . For more information m/industrialsecurity	r directly to the internet must be access, e.g. by use of firewalls and about industrial security, please visit	
	Apply settings perman	ently		
			Set Cance	

图 14

为 ET200 分配设备名称和 IP 地址后,如图 15 状态,右侧的窗口显示站点的 信息。

如果此时模块已经连接到了 CPU,此时的右侧窗口也可以看到站点信息,包括诊断。





接下来双击站点进入到"IO Test"窗口。选中模块儿,在右侧"Parameters" 设置模块儿的基本参数,结束后点击,进入到测试状态,如图 16。

Siemens - PRONETA		No. of the local division of the local divis	100 100	TTO PA	the state of	- B X
Durin Colorina TO Task						Firep (
Device Selection NO Test						
00						Scanner
Device view Force m	ode Details					Force mode
	Parameters	Test protocol IO event log Diagi	iostics			
$\Theta_{+}$		S				
	Protocol of the	device: et200sp 8/63/36/34/22/13, s/m: S.CE6E1824720151				
	Channel C	ontrol Symbolic Name	Address	Status Wiring	Comment	
TC 2,3,4 2,4 wire Wre ST 16x28VDC 16x28VDC Wre Hill ST V1.0 V1.0 V1.0 SA ST 3T V1.0	0 - IM 155-6 F	PN BA V3.2 (6ES7 155-6AR00-0AN0, s/n:	5 C-F6EJ82472015)			
	▶ 1 - AJ 4xRTD/	TC 234-wire HF V1.0 (6ES7 134-6JD00	OCA1. s/n: S C-C4V635	282012)		
	3 - AI 4xU/I 2-4	wire ST V1.0 (6ES7 134-66000-08A1, s/r	: S C-C3VH73952012)			
	▼ 4 - DQ 16x24	/DC/0.5A ST V1.0 (6ES7 132-6BH00-0BA	l, s/n: S C-C4U0338020	12)		
	channel a.0	0		Open O OK O NOK		
	channel a.1	1,0,0		• Open • OK • NOK		
	channel a.2	2		Open O OK O NOK		
LK22 BM 155.6 PN 2 - 40 2 - mA 1 - mA 1 - mA	channel a.3	3		Open O OK O NOK		
	channel a.4	4		Open O OK O NOK		
	channel a.5	5		Open O OK O NOK		
MAC ADDRIL 55 28-63-36-34-C2-D3	<ul> <li>channel a.6</li> </ul>	6		Open O OK O NOK		
	channel a.7	7		Open O OK O NOK		
	channel b.0	0		Open O OK O NOK		
	channel b.1	1		Open O OK O NOK		
	channel b.2	2		Open O OK O NOK		
	channel b.3	3		Open O OK O NOK		
	channel b.4	4		Open O OK O NOK		
	channel b.5	5				
	chappel b.6	6				
	channel b 7	7				
	▶ 5 - DI 16x24V	DC ST V1.0 (6ES7 131-68H00-08A0, s/n: 1	C-C4TX978720121	S Open O OK O HOK		
	6 - Server mo	dule (2 bytes. 13 slots) (6ES7 193-6PA00-	0AA0. s/n: S C-F780307	732015)		

图 16



#### 如图 17,现场接线对 DI 点打点,可以看到指示灯的状态。





Siemens - PRONETA	and the second s	NAMES OF TAXABLE PARTY.	100 12	A DECEMBER OF A	- 121 1	- 0 ×
A Home						Help?
Device Selection IO Test						
						Scanner
Device view Force mode	Details					Force mode
	Parameters Test	protocol IO event log Diagn	ostics			
$\ominus_{+}$	📙 📑 🗙					
	Protocol of the device (MAC address: 28:63:	:e: et200sp 36:34:c2:d3, s/n: S C-F6EJ82472015)				
SIEMENS AI 4x8TD/ AI 4x1 AI 4xUI 2- DQ DI	Channel Contro	ol Symbolic Name	Address	Status Wiring	Comment	
TC 2-,3-,4- 2-,4-wire wire ST 16x24VDC 16x24VDC wire HF ST V1.0 V1.0 /0.5A ST ST V1.0	0 - IM 155-6 PN BA	A V3.2 (6ES7 155-6AR00-0AN0, s/n: S	C-F6EJ82472015)			
	1 - AL4xRTD/TC 2-,	.3-,4-wire HF V1.0 (6E57 134-6JD00-I ST V1.0 (6ES7 134 6GD00 0R41 c/m	CA1, s/n: 5 C-C4V	(535282012)		
	<ul> <li>3 - AI 4xU/I 2-wire</li> </ul>	ST V1.0 (6ES7 134-6HD00-0BA1, s/n	S C-C3VH739520	12)		
	▼ 4 - DQ 16x24VDC/0	0.5A ST V1.0 (6ES7 132-68H00-0BA0	s/n: S C-C4U0338	102012)		
	channel a.0	0		● Open ○ OK ○ NOK		
	channel a.1	1		● Open ○ OK ○ NOK		
	channel a.2	2		● Open ○ OK ○ NOK		
LK1 = 1 200 3F 0 C 0 IIA 0 - IIIA 0 - IIIA LK2 = at 135-6 PN 2 C 2 - mA 1	channel a.3	3		• ореп О ок О NOK		
xi 3*C 3mA 3mA 0 PROFINIT BAND ■ PWR ===================================	channel a.4	4		● Open ○ OK ○ NOK		
MACADDRESS	channel a.5	5		● Open ○ OK ○ NOK		
28-63-36-34-C2-D3	channel a.6	6		Open O OK O NOK		
	channel a.7	7		● Open ○ OK ○ NOK		
	channel b.0	0		● Open ○ OK ○ NOK		
	channel b.1	1		● Open ○ OK ○ NOK		
	channel b.2	2		● Open ○ OK ○ NOK		
	channel b.3	3		• Open O OK O NOK		
	channel b.4	4		● Open ○ OK ○ NOK		
	channel b.5	5 <sub>0-</sub>		🔹 Open 🌢 OK 🌑 NOK		
	channel b.6	6		• Open O OK O NOK		
	channel b.7	7		Open O OK O NOK		
	▶ 5 - DI 16x24VDC ST	T V1.0 (6ES7 131-68H00-0BA0, s/n: S	C-C4TX97872012	)		
	6 - Server module (	(2 bytes, 13 slots) (6ES7 193-6PA00-0	IAA0, s/n: S C-F7B	030732015)		



如图 19, AI 点状态。AO 的输出控制和 DO 点类似。

Siemens - PRONETA Device Selection IO Test Parameters Test protocol 10 event log Diagno Θ-------(Ŧ Protocol of the de 1 2 3 4 5 6 
 One and
 Control
 Symbolic Name
 Address

 0 - IM 155-6 FN BA V3.2 (6557 155-6AR00-0AN0, s/m S C-F6EI82472015)
 1
 At 4x81D/TC 2-.3.-4/wm FI V1.0 (6557 134-6B00-0CA1, s/m S C-C4VV

 2 - Al 4x81D/TC 2-.3.-4/wm FI V1.0 (6557 134-6B00-0CA1, s/m S C-C4VV1401201
 C-C4VV1401201

 2 - Al 4x92, -4/wine ST V1.0 (6557 134-6B00-0CB1, s/m S C-C4VV1401201
 C-C4VV1401201
 -14.96 m O OK O NO 
 Channel 0
 -14.95
 mA

 channel 1
 -14.95
 mA

 channel 2
 -14.95
 mA

 channel 3
 -14.95
 mA

 channel 3
 -14.95
 mA

 - 0.0 Lick/VDC/DAS AT VIL0 (EST 113-16H00-0BA0, s/m S C-4T1907872012)
 S - 50 - 11624/VDC (14600-0BA0, s/m S C-4T1907872012)

 6 - Server module [2 bytes, 13 stots) (6557 133-68A00-0AA0, s/m S C-47103
 S - C-471937872012)
 Open OK NOK
 Open OK NOK
 Open OK NOK
 Open OK NOK

图 19

如图 20, "IO event log"可以记录之前进行的所有操作的日志,并且可以



Siemens - PRONETA     A	A COLUMN AND	111 TE 4 TE 8	→ · Help?
Device Selection IO Test			
			Scanner
Device view Force mode	Details		Force mode
	Parameters Test protocol IO event	log Diagnostics	
$\Theta_{+}$			
+ + + +	Slot Module	Description	Time Stamp
0 1 2 3 4 5 6	2 AI 4xI 2-,4-wire ST V1.0	Analog input 1 was changed from 4 mA to -14.96 mA.	9/23/2016 5:00:12 PM
SIEMENS         AI 4xRTDr TC 2:,3:,4:         AI 4xUI 2: 2:,4 wire         DQ         DI           16x24VDC         16x24VDC         16x24VDC         16x24VDC	2 AI 4xI 2-,4-wire ST V1.0	Analog input 2 was changed from 4 mA to -14.96 mA.	9/23/2016 5:00:12 PM
VI.0 VI.0 VI.0 VI.0 VI.0	2 AI 4xI 2-,4-wire ST V1.0	Analog input 0 was changed from 4 mA to -14.96 mA.	9/23/2016 5:00:12 PM
	5 DI 16x24VDC ST V1.0	Digital input a.4 was changed from 0 to 1.	9/23/2016 5:00:12 PM
	1 AI 4xRTD/TC 234-wire HF V1	0 Analog input 3 was changed from 0 °C to 3276.7 °C.	9/23/2016 5:00:12 PM
	3 AI 4xU/I 2-wire ST V1.0	Analog input 2 was changed from 4 mA to -14.96 mA.	9/23/2016 5:00:12 PM
	3 AI 4xU/I 2-wire ST V1.0	Analog input 3 was changed from 4 mA to -14.96 mA.	9/23/2016 5:00:12 PM
	3 AI 4xU/I 2-wire ST V1.0	Analog input 1 was changed from 4 mA to -14.96 mA.	9/23/2016 5:00:12 PM
LKT ET 200SP 0*C 0mA 0mA	2 AI 4xl 2-,4-wire ST V1.0	Analog input 3 was changed from 4 mA to -14.96 mA.	9/23/2016 5:00:12 PM
LK2 IM 155-6 PN 2 - °C 1 mA 1 mA 2 mA	3 AI 4xU/I 2-wire ST V1.0	Analog input 0 was changed from 4 mA to -14.96 mA.	9/23/2016 5:00:12 PM
xx 3*C 3mA 3mA 8485 8485 PROFEET AM1 PWR HILANDROCAL INCOMPANY HILANDROCAL HILANDROMAN	1 AI 4xRTD/TC 234-wire HF V1	0 Analog input 2 was changed from 0 °C to 3276.7 °C.	9/23/2016 5:00:12 PM
	1 AI 4xRTD/TC 2-,3-,4-wire HF V1	0 Analog input 0 was changed from 0 °C to 3276.7 °C.	9/23/2016 5:00:12 PM
MAC ADDRE 55 28-63-36-34-C2-D3	AI 4xRTD/TC 234-wire HF V1	0 Analog input 1 was changed from 0 °C to 3276.7 °C.	9/23/2016 5:00:12 PM
	2 AI 4xl 2-,4-wire ST V1.0	Analog input 2 was changed from 0 mA to 4 mA.	9/23/2016 5:00:09 PM
	2 AI 4xI 2-,4-wire ST V1.0	Analog input 1 was changed from 0 mA to 4 mA.	9/23/2016 5:00:09 PM
	2 AI 4xI 2-,4-wire ST V1.0	Analog input 0 was changed from 0 mA to 4 mA.	9/23/2016 5:00:09 PM
	2 AI 4xI 2-,4-wire ST V1.0	Analog input 3 was changed from 0 mA to 4 mA.	9/23/2016 5:00:09 PM
	3 AI 4xU/I 2-wire ST V1.0	Analog input 2 was changed from 0 mA to 4 mA.	9/23/2016 5:00:09 PM
	3 AI 4xU/I 2-wire ST V1.0	Analog input 3 was changed from 0 mA to 4 mA.	9/23/2016 5:00:09 PM
	3 AI 4xU/I 2-wire ST V1.0	Analog input 0 was changed from 0 mA to 4 mA.	9/23/2016 5:00:09 PM
	3 AI 4xU/I 2-wire ST V1.0	Analog input 1 was changed from 0 mA to 4 mA.	9/23/2016 5:00:09 PM
Δ			

图 20

如图 21,如果为模块儿组态了故障报警," Diagnostics"可以查看模块儿的 报警信息,例如断线。

# Control of the second of

图 21

完成模块儿的测试后,在"Test protocol"如图 22,通过 2010 可以保存模块儿测试的结果,通过 Excel 可以离线查询,如图 23。

Siemens - PRONETA		-		6 m.	C. S. Store &	and the second second	100.000	To B		- 0 ×
Device Selection	O Test									
										Scanner
Device view			Force mode	Details						Force mode
				Parameters	Test protocol IC	event log Diagno	ostics			
$\Theta \rightarrow \blacksquare \rightarrow \rightarrow \bullet \bullet$	Ð				X					
	*	+		Protocol of th	e device: et200mp hf					
1	2	3	4	(MAC address Channel	28:63:36:8b:da:7d, s/r	: S C-F6S483132015) Symbolic Name	Address	Status Wiring	Comment	
			different incodere	▼ 2 - DI 16x24	4VDC HF V2.0 (6ES7 52	1-18H00-0AB0, s/n: S	C-DOS809092013)			^
CIEMENIC	64,57 521-10/00-0400	6E 57 522-110 00-0400	GE S7 541-1AB00-0AB0	channel a.0	0			○ Open ● OK ○ NOK		
SIEIVIEIVS				channel a.1	1			Open O OK O NOK		
28-63-36-88-DA-7D		2		channel a.2	2			○ Open ● OK ○ NOK		
				channel a.3	3			🔿 Open 💿 OK 🔿 NOK		
				channel a.4	4			○ Open ● OK ○ NOK		
X1P1R				channel a.5	5			○ Open ● OK ○ NOK		
X1P2R				channel a.6	6			○ Open ● OK ○ NOK		
		8 8		channel a.7	7			○ Open ④ OK ○ NOK		
		8 8		channel b.0	0			○ Open ④ OK ○ NOK		
				channel b.1	1			○ Open ○ OK ● NOK		
				channel b.2	2			○ Open ○ OK ● NOK	issue	
				channel b.3	3			Open OK NOK	issue	
				channel b.4	4			Open O OK O NOK		
				channel b.5	5			Open O OK O NOK		
				channel b.6	6			Open O OK O NOK		
				channel b.7	7			Open O OK O NOK		
				▼ 3 - DQ 8x24	4VDC/2A HF V2.0 (6ES	7 522-18F00-0AB0, s/n	S C-D55K64482013)			
				channel a.0	0			○ Open ○ OK ④ NOK	the issuse channel	
				channel a.1	1			○ Open ● OK ○ NOK	ok	
				channel a.2	2			○ Open ● OK ○ NOK		
				channel a.3	3			○ Open ● OK ○ NOK		
				channel a.4	4			○ Open ④ OK ○ NOK		
				channel a.5	5			○ Open ● OK ○ NOK		
				channel a.6	6			○ Open ● OK ○ NOK		
				channel a.7	7			○ Open ● OK ○ NOK		
									9	

图 22

Siemens	ight year	eserved	
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1	Protocol of the station et200mp hf ( MAC address	s/n: S C-F6S483132015 )		
2	1 - IM 155-5 PN HF V3.0 (6ES7 155-5AA00-0AC0	s/n: S C-F6S483132015)		
3	2 - DI 16x24VDC HF V2.0 (6ES7 521-1BH00-0AB0	s/n: S C-DOS809092013)		
4	channel a.0		OK	
5	channel a.1		Open	
6	channel a.2		OK	
7	channel a.3		ОК	
8	channel a.4		OK	
9	channel a.5		OK	
10	channel a.6		OK	
11	channel a.7		ОК	
12	channel b.0		OK	
13	channel b.1		NOK	
14	channel b.2		NOK	issue
15	channel b.3		NOK	issue
16	channel b.4		Open	
17	channel b.5		Open	
18	channel b.6		Open	
19	channel b.7		Open	
20	3 - DQ 8x24VDC/2A HF V2.0 (6ES7 522-1BF00-0AB0	s/n: S C-D5SK64482013)		
21	channel a.0		NOK	the issuse channel
22	channel a.1		OK	ok
23	channel a.2		ОК	
24	channel a.3		OK	
25	channel a.4		OK	
26	channel a.5		OK	
27	channel a.6		OK	
28	channel a.7		OK	
29	4 - unknown module (6ES7 541-1AB00-0AB0	s/n: N/A)		

图 23

#### 2.4 使用注意

- ✓ 受限于操作系统, PRONETA I/O 测试的循环时间 256 ms。因此某些 高速模块儿的信号可能无法采集到,并且在事件信息里不能记录结果。
- ✓ PRONETA I/O 测试需要和现场 ET200 建立 PROFINET 通讯,因此 保证该设备此时没有连接 PROFINET 控制器。
- ✓ 在进行 I/O 测试之前,需要查看测试模块是否支持当前版本PRONETA 的测试功能。

关于 PRONETA 的其他应用,请参考手册或者帮助,本文不作赘述。