

PSO9.0 如何配置 OPC DA Client

问题描述:

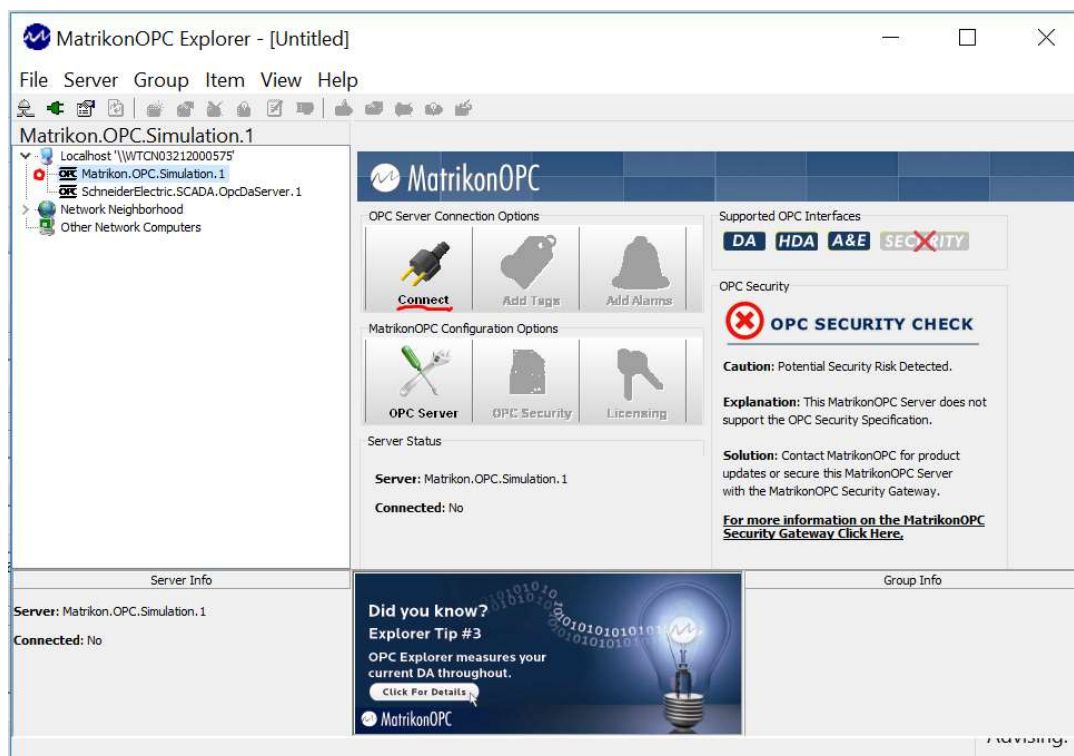
如何配置 OPC DA Client

解决方案:

步骤如下:

本示例用 MatrikonOPC Explorer 模拟 OPC DA Server

1. 配置 OPC DA Server



MatrikonOPC Explorer - [Untitled*]

File Server Group Item View Help

Group0

Contents of 'Group0'

Item ID	Access Path	Value	Quality	Timestamp	Status
Random.ArrayOfReal8		9743.52029688,3154...	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.ArrayOfString		never, "before,"	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.Boolean		False	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.Boolean		False	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.Int1		54	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.Int2		9866	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.Int2		9866	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.Int4		23995	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.Money		1669	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.Qualities		8693	Good, unknown, l...	04/04/2020 10:24:05.859 AM	Active
Random.Real4		11771.765625	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.Real4		11771.765625	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.Real8		3276.87505593	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.String		your	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.Time		2020/4/4 2:24:05	Good, non-specific	04/04/2020 10:24:05.329 AM	Active
Random.UInt1		201	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.UInt2		1139	Good, non-specific	04/04/2020 10:24:05.859 AM	Active
Random.UInt4		29537	Good, non-specific	04/04/2020 10:24:05.859 AM	Active

2. 进入 PS0 Studio - 拓扑 - I/O 设备 - 快速向导，选择 IOserver

PowerSCADA Studio - TEST 1 [Active Project]

Topology Computers Edit Computer Profiles **I/O Devices** Components & Mapping

Save Discard Copy Paste Delete Row(s) Export All Import All Export Tags Import Tags Refresh Tags Express Wizard

Row	Server Name	Name	Number	Address	Protocol	Port Name	Startup Mode	Pr
1	IOserver1	zOL	1		IEC61850N		Primary	1
2	IOserver1	NetworkTags	2		IEC61850N		Primary	1
3	IOserver1	PU1	126	17	PWRMODBUS	P10_177_121_225	Primary	1

Device Communications Wizard

Select the I/O Server you wish to work with. You may create a new I/O Server by entering the desired name, or select from your existing I/O Servers.

☐ Create a new I/O Server

Name:

☒ Use an existing I/O Server

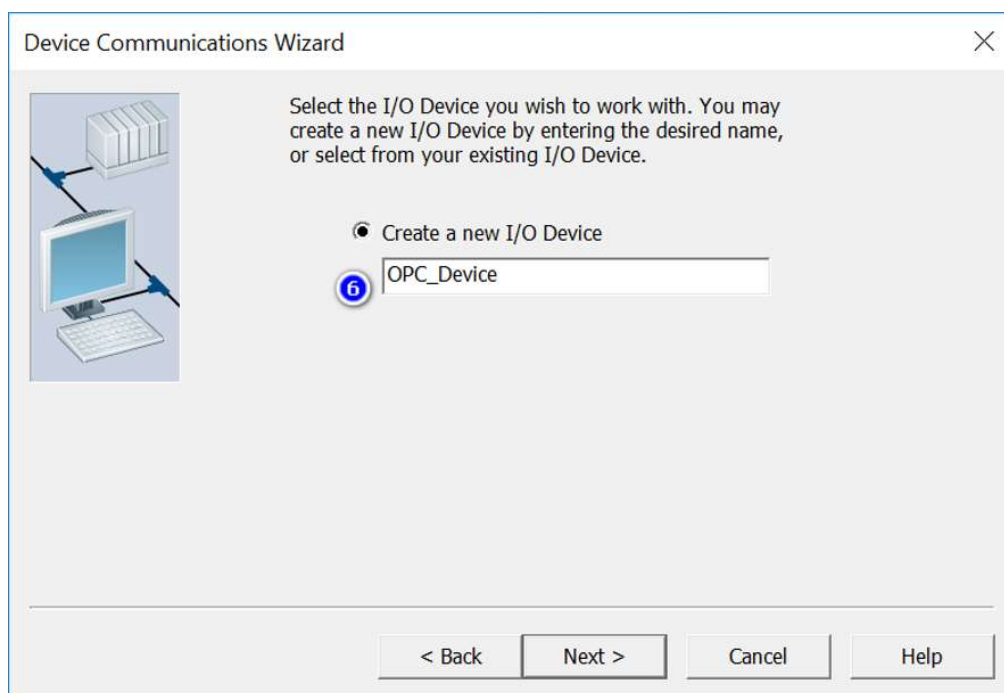
IOserver1

< Back Next > Cancel Help

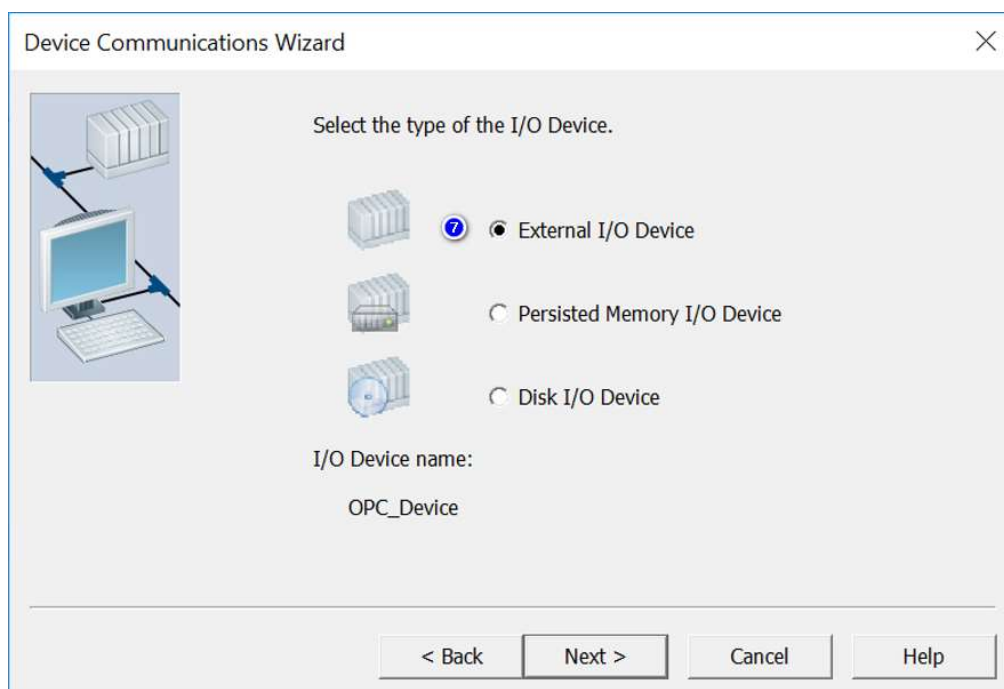
No objects selected.

Compile Messages

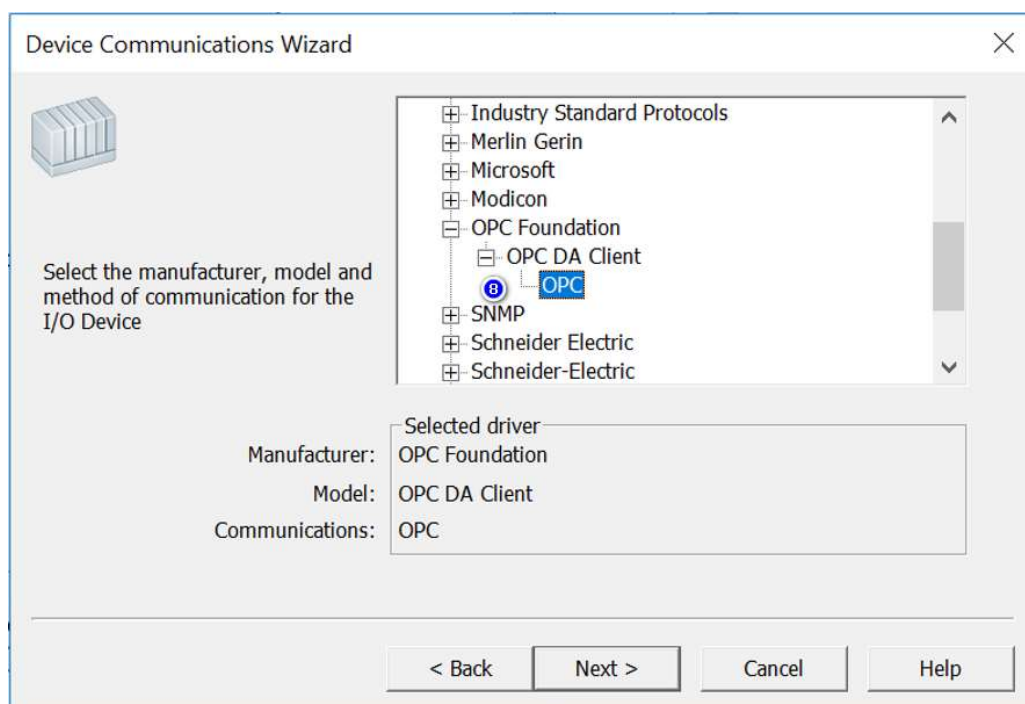
3. 创建 I/O Device



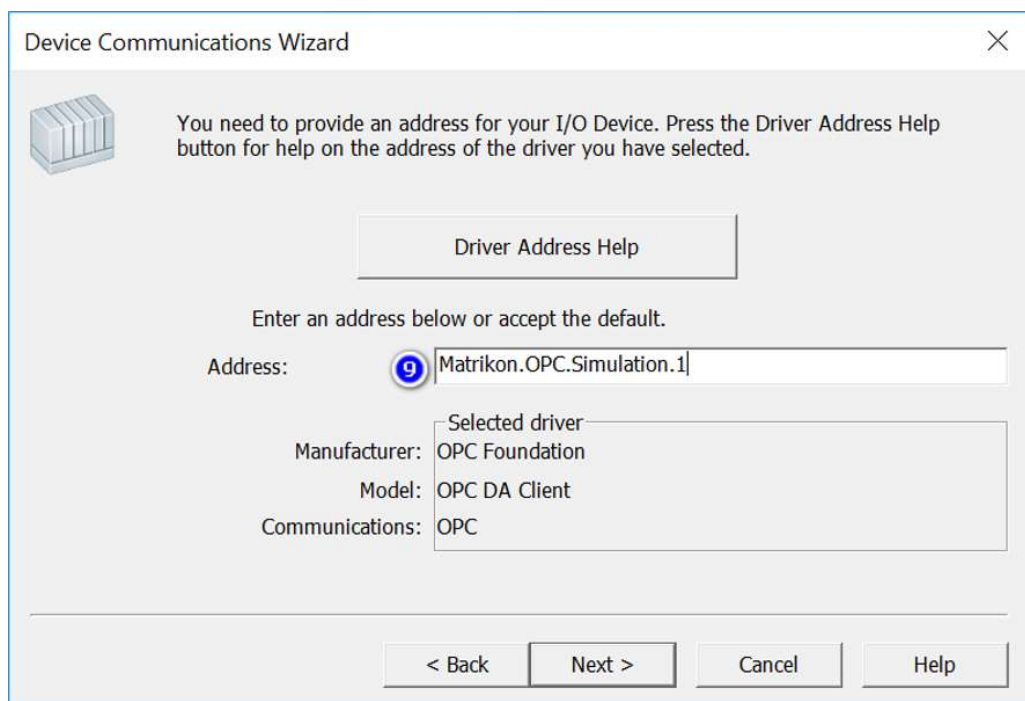
4. 选择 External I/O Device



5. 通讯方式选择 OPC DA Client 下的 OPC

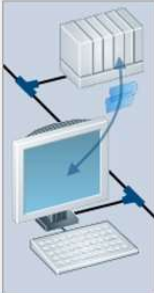


6. 输入 OPC DA Client 的地址（查看第 1 步中的地址填入此处）



7. 下一步

Device Communications Wizard



Select this option if you want this I/O Device to link to an external tag database.

☐ Link I/O Device to an external tag database

Database type:
Unity SpeedLink to OFS via generic OPC

External tag database:
 Browse...

Connection:

☐ Add prefix to externally linked tags

Tag prefix:


☒ Automatic refresh of tags

☐ Live Update

< Back **10** Next > Cancel Help

8. 完成

Device Communications Wizard



The Communications Wizard will make the following changes to the project 'TEST 1'.

Using I/O Server 'IOServer1'.

Using Board Settings:

- + Memory address: 0
- + I/O address:
- + Interrupt:

Using Port Settings:

- + Baud Rate:
- + Data Bits:
- + Stop Bits:

Press Finish to save this setup.

Print

< Back **11** Finish Cancel Help

可查看到已经添加的 I/O Device

Row	Server Name	Name	Number	Address	Protocol	Port Name	Startup Mode
1	IOServer1	zOL	1		IEC61850N		Primary
2	IOServer1	NetworkTags	2		IEC61850N		Primary
3	IOServer1	PU1	126	17	PWRMODBUS	P10_177_121_225	Primary
4	IOServer1	OPC_Device	127	Matrikon.OPC.Simulation.1	OPC	PORT3_BOARD2	

9. 进入 PS0 Studio - 拓扑 - I/O 设备 - 导入标签，选择 I/O 设备，数据库类型，浏览外部数据库

PowerSCADA Studio - TEST 1 [Active Project]

Topology Computers Edit Computer Profiles I/O Devices Components & Mapping

Save Discard Copy Paste Delete Row(s) Export All Import All Export Tags Import Tags Refresh Tags Express Wizard

Row	Server Name	Name	Number	Address	Protocol	Port Name	Startup Mode	Pr
1	IOServer1	zOL	1		IEC61850N		Primary	1
2	IOServer1	NetworkTags	2		IEC61850N		Primary	1
3	IOServer1	PU1	126	17	PWRMODBUS	P10_177_121_225	Primary	1
4	IOServer1	OPC_Device	127	Matrikon.OPC.Simulation.1	OPC	PORT4_BOARD2		

Import Variable Tags

Destination
I/O Device: OPC_Device

Source
Database type: OPC
External database: Matrikon.OPC.Simulation.1
Connection string: ServerNode=;Branch=Simulation Items/Random;

Options
☒ Add prefix to imported tags
Tag prefix: OPC_
☐ Delete all I/O Device tags prior to import
☐ Purge deleted tags not found in data source

Import Cancel Help

OPC Data Access Server Parameters

Machine name: (blank=local) Connect

Select server and branch to import:

- SchneiderElectric.SCADA.OpcDaServer.1
 - Matrikon.OPC.Simulation.1
 - Simulation Items
 - Random
 - Read Error
 - Saw-toothed Waves
 - Square Waves
 - Triangle Waves
 - Write Error
 - Write Only
 - Configured Aliases

OK Cancel Help

成功导入标签后可在变量表中确认

Variables								
Row	Equipment	Item Name	Tag Name	Cluster Name	I/O Device	Data Type	Address	
3204	OpcDec		OpcDec\RandomBoolean	c1	OpcDev	DIGITAL	Random.Boolean	
3205	OpcDec		OpcDec\RandomInt1	c1	OpcDev	STRING	Random.Int1	
3206	OpcDec		OpcDec\RandomInt2	c1	OpcDev	INT	Random.Int2	
3207	OpcDec		OpcDec\RandomInt4	c1	OpcDev	LONG	Random.Int4	
3208	OpcDec		OpcDec\RandomMoney	c1	OpcDev	STRING	Random.Money	
3209	OpcDec		OpcDec\RandomQualities	c1	OpcDev	UINT	Random.Qualities	
3210	OpcDec		OpcDec\RandomReal4	c1	OpcDev	REAL	Random.Real4	
3211	OpcDec		OpcDec\RandomReal8	c1	OpcDev	STRING	Random.Real8	
3212	OpcDec		OpcDec\RandomString	c1	OpcDev	STRING	Random.String	
3213	OpcDec		OpcDec\RandomTime	c1	OpcDev	STRING	Random.Time	
3214	OpcDec		OpcDec\RandomUInt1	c1	OpcDev	BYTE	Random.UInt1	
3215	OpcDec		OpcDec\RandomUInt2	c1	OpcDev	UINT	Random.UInt2	
3216	OpcDec		OpcDec\RandomUInt4	c1	OpcDev	ULONG	Random.UInt4	

10. 在图形编辑器页面中添加显示标签并保存

OpcDec\RandomUInt4

Text 属性

✓ Appearance

Movement

Scaling

Fill

Input

Slider

Access

Metadata

Type

On / off

Multi-state

Array

Numeric

String

Numeric expression

OpcDec\RandomUInt4

Format: #####.##

11. 编辑、运行测试

HOME

GRAPHICS

ONE-LINE

ALARMS/EVENTS

ANALYSIS

FLOOR PLANS

ELEVATIONS

OPCPAGE

OpcDec\RandomUInt427324