RSVIEW SE 读写网关
BT-EN-XXX 系列
内部数据手册

BEACON GLOBAL TECHNOLOGY

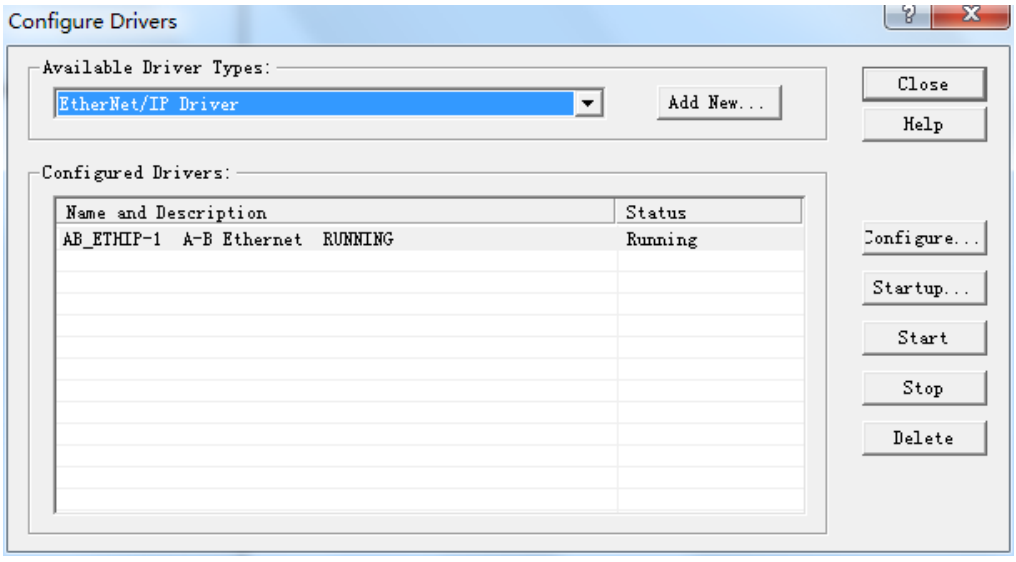
目录

BT-EN-XXX简介：

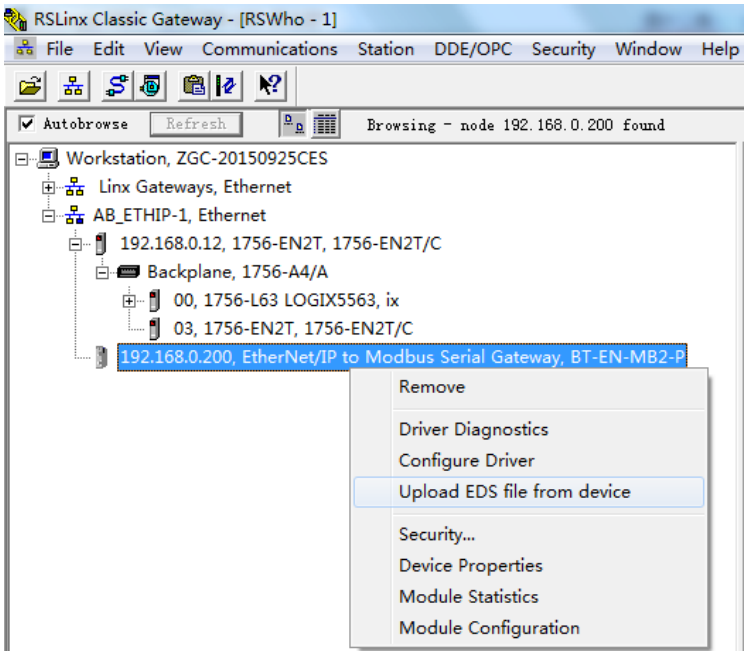
BT-EN-XXX系列是连接罗克韦尔PLC，EtherNet/IP通讯协议的网关，其中EN代表的是EtherNet/IP通讯协议，有些不需要PLC操作读写的数据可以直接送到RSVIEW SE上位机软件里面。

一：RSLINX 配置网关

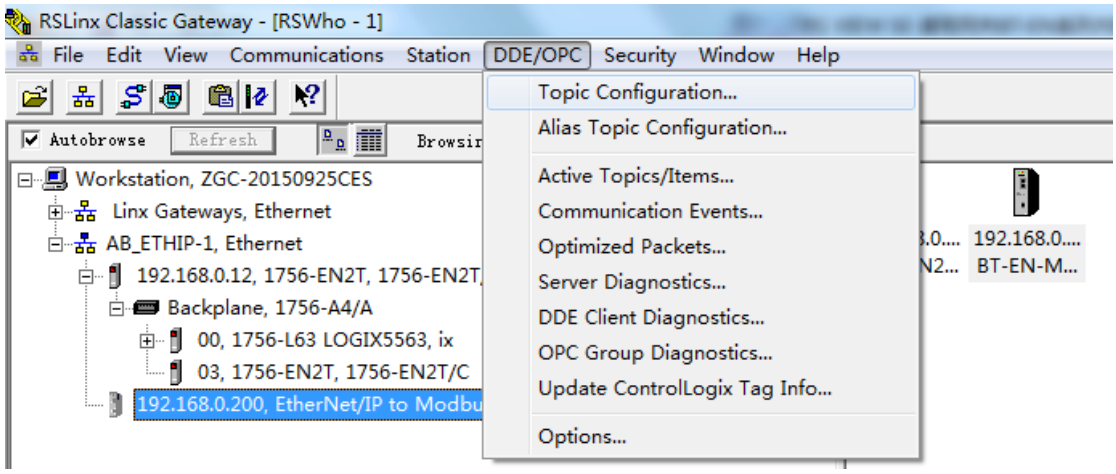
1. 建立以太网驱动，选择 Ethernet devices 配置 IP 地址



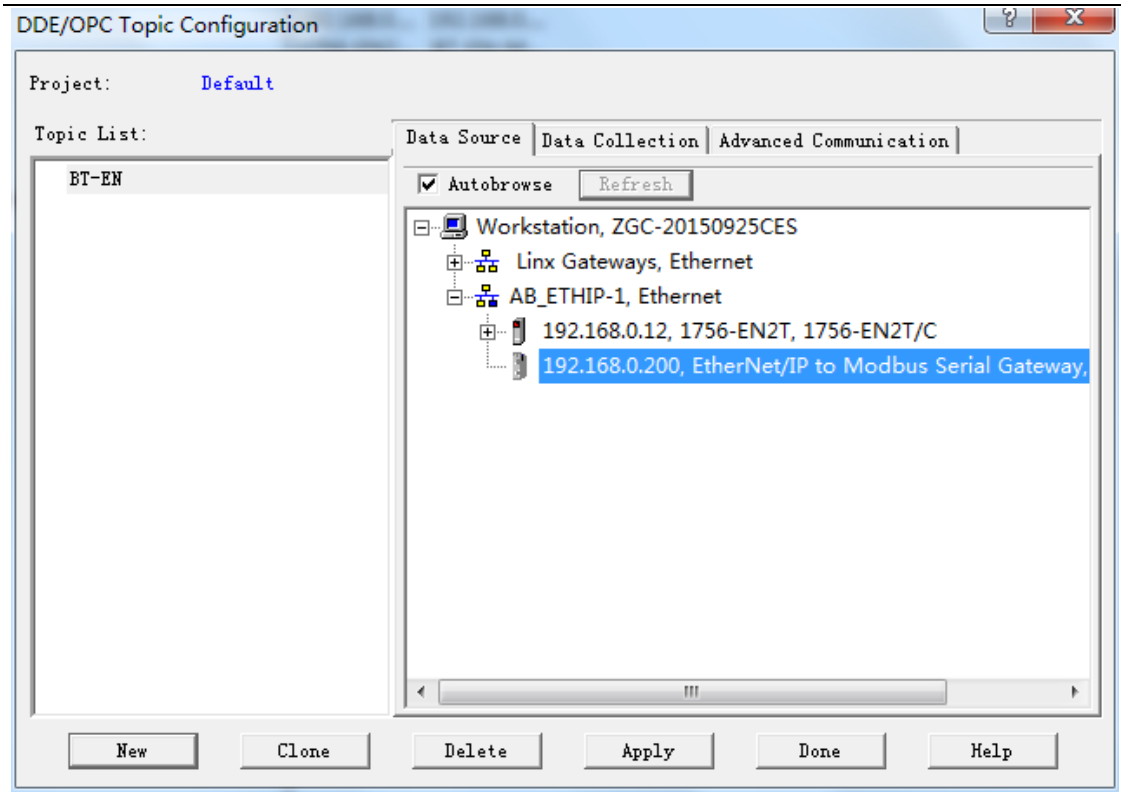
2. 开始时会显示黄色的问号，点击从设备上传 EDS 文件。



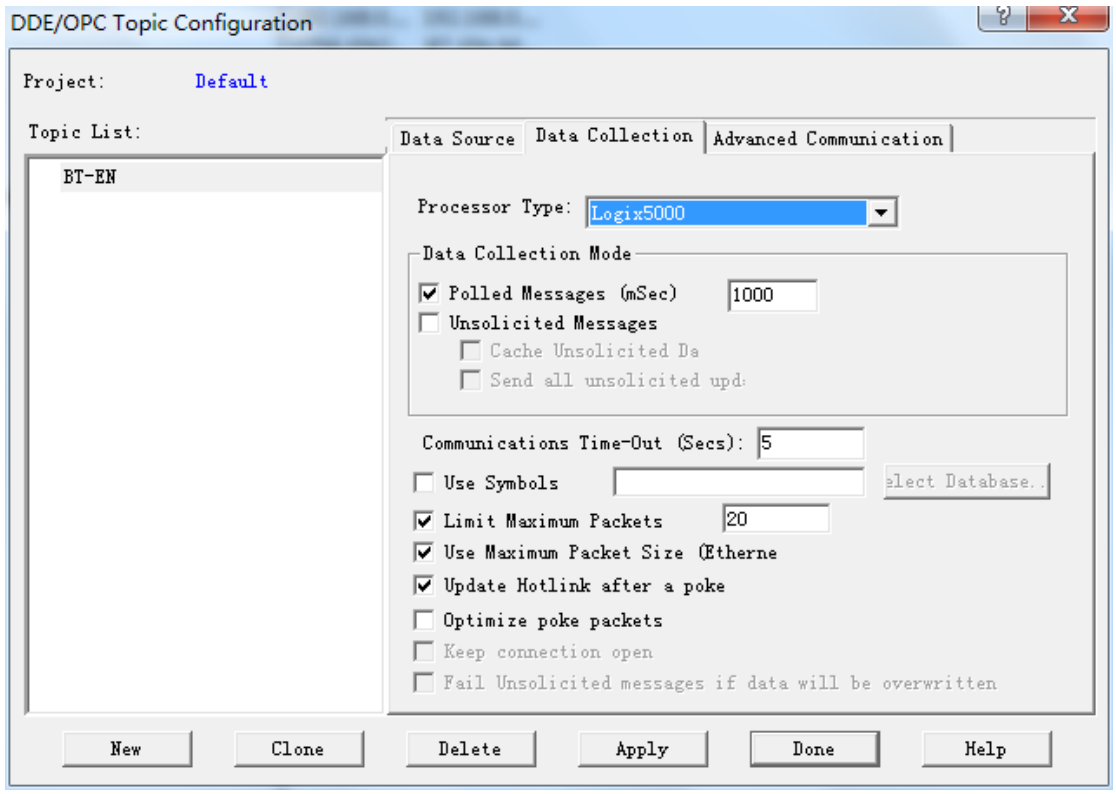
3. 配置 DDE/OPC 驱动，点击 Topic Configuration.

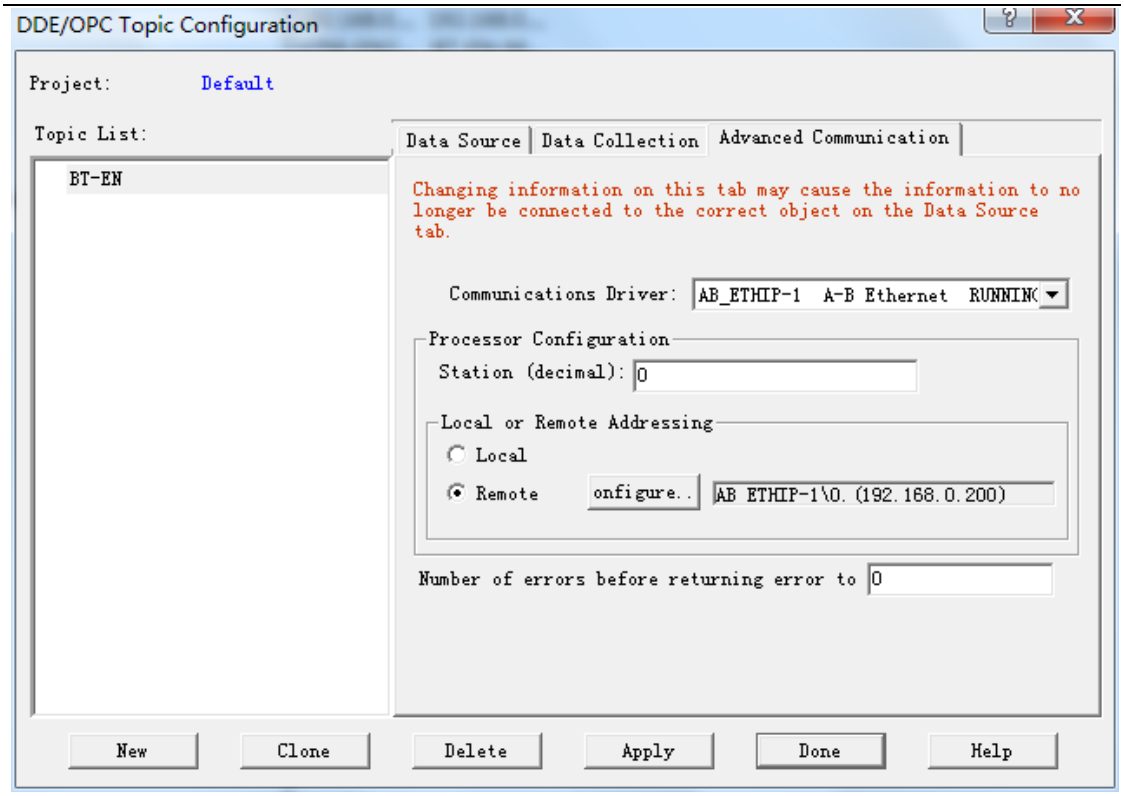


4. 新建一个项目 BT-EN ，指定到 192.168.0.200 的网关上

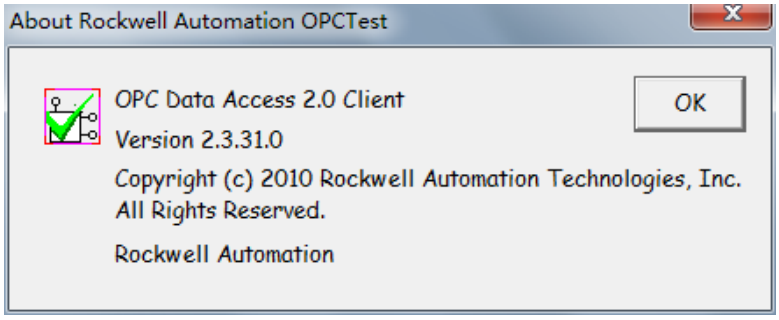


5. 点击 Apply，查看其他参数的设定

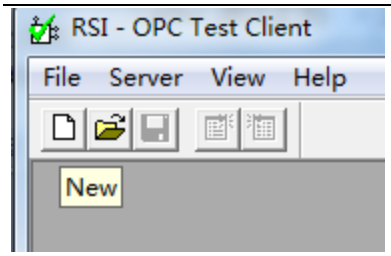


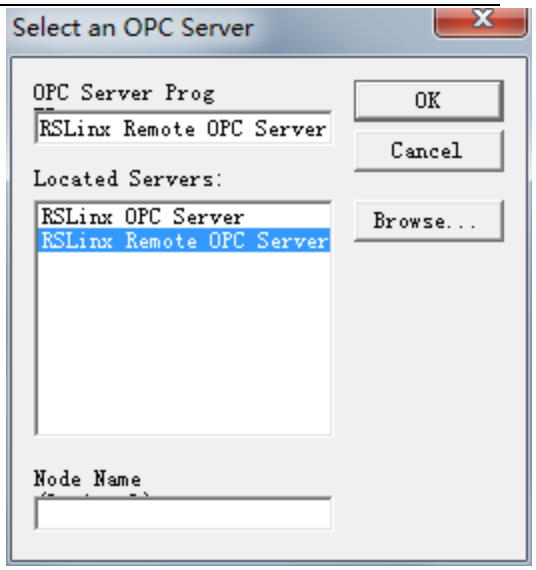


6. 打开测试工具 OPC Test Client,这个工具随着 RSLINX 自带，这个工具只是测试工具。不需要建立全部的数据点。

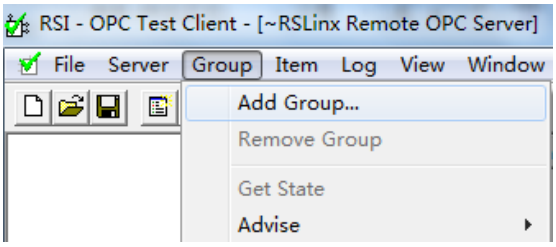


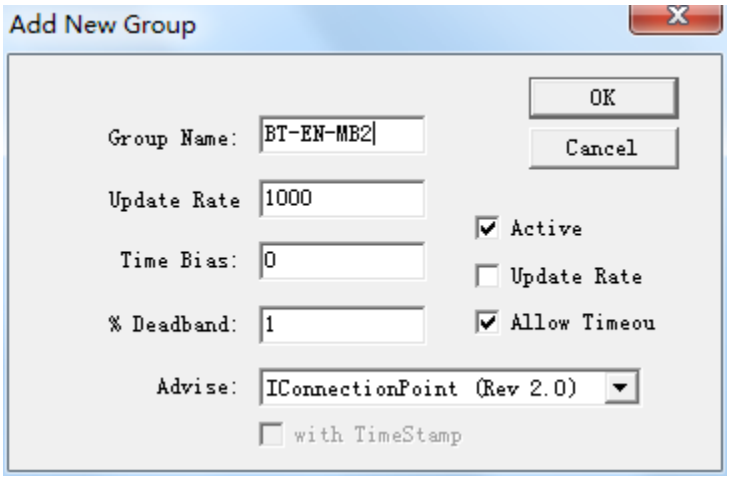
7. 配置 OPC Test Client，新建一个项目，选择 Remote OPC Server

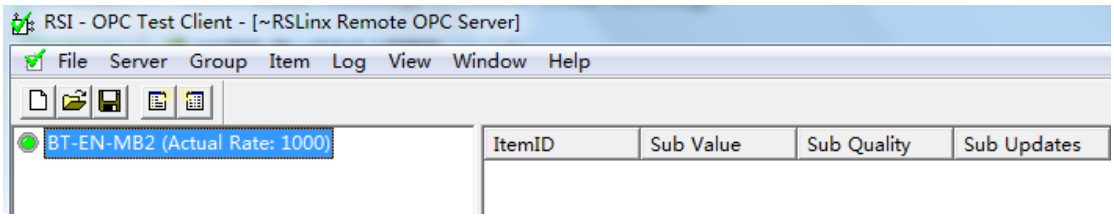




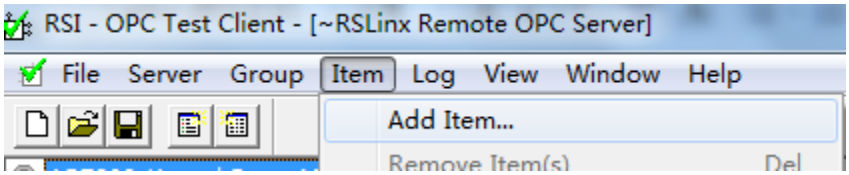
8. 添加一个 Group, 起一个名字, 点击 OK 。







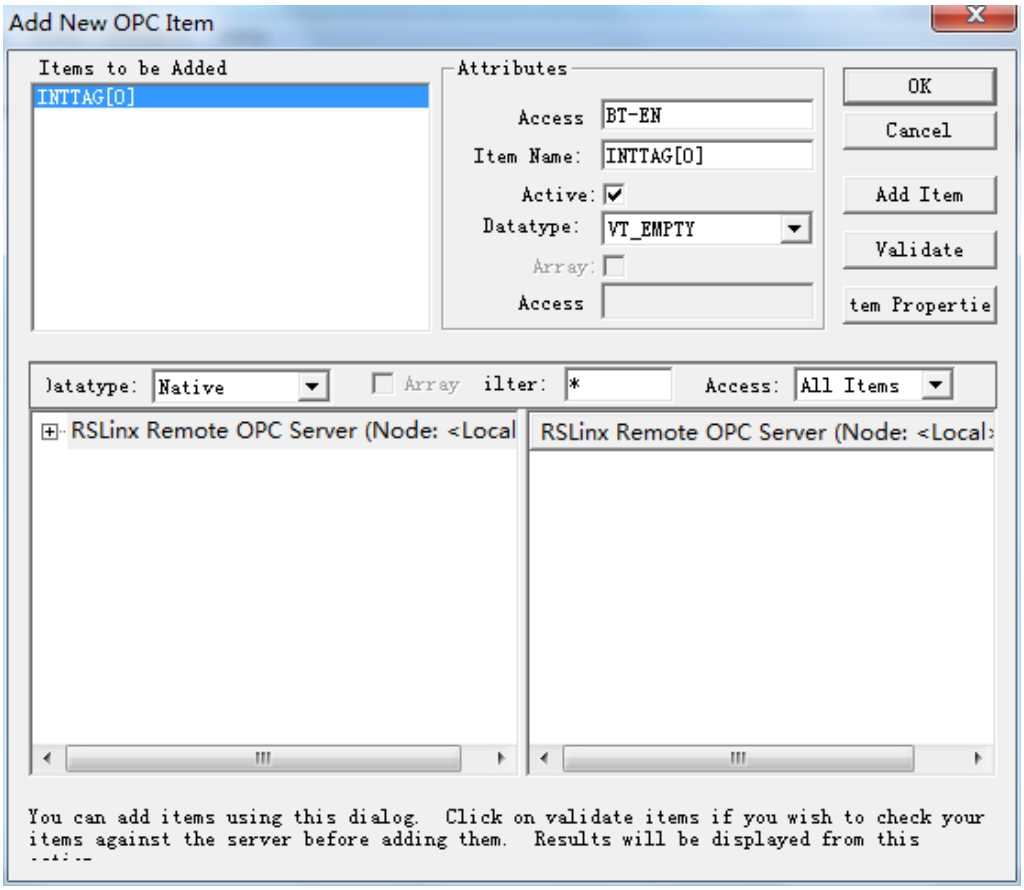
9. 添加一个 Item。

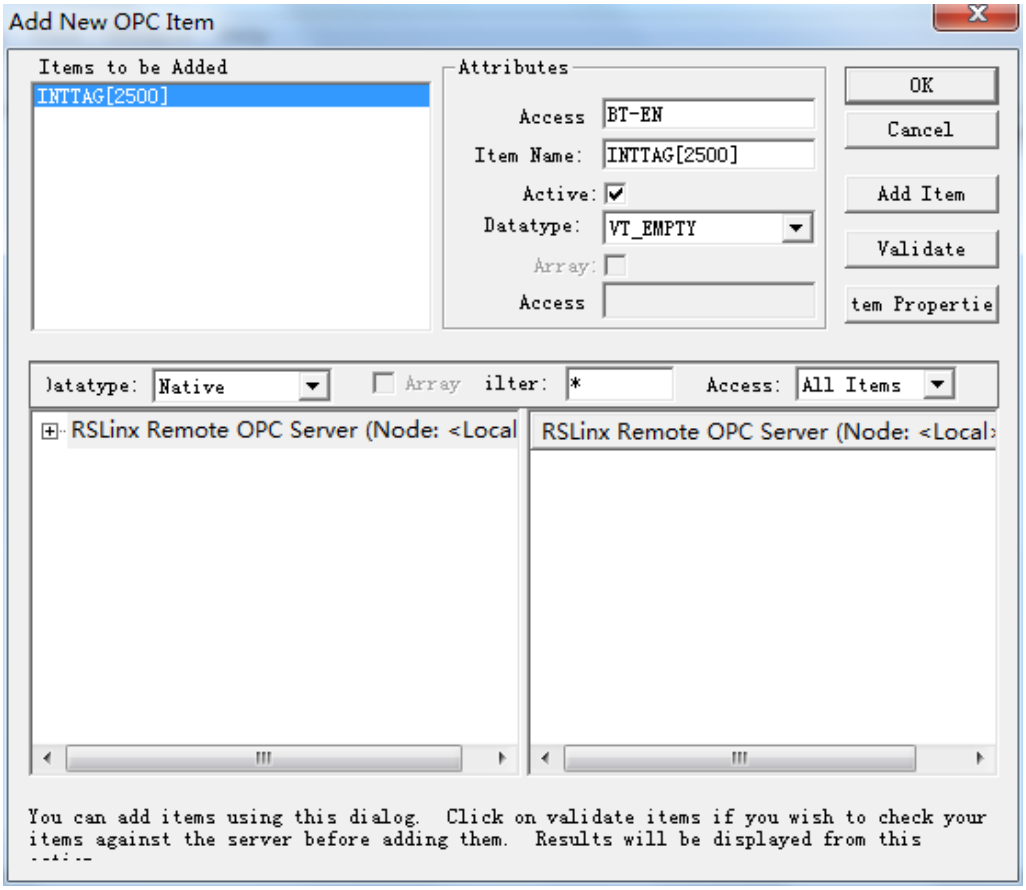


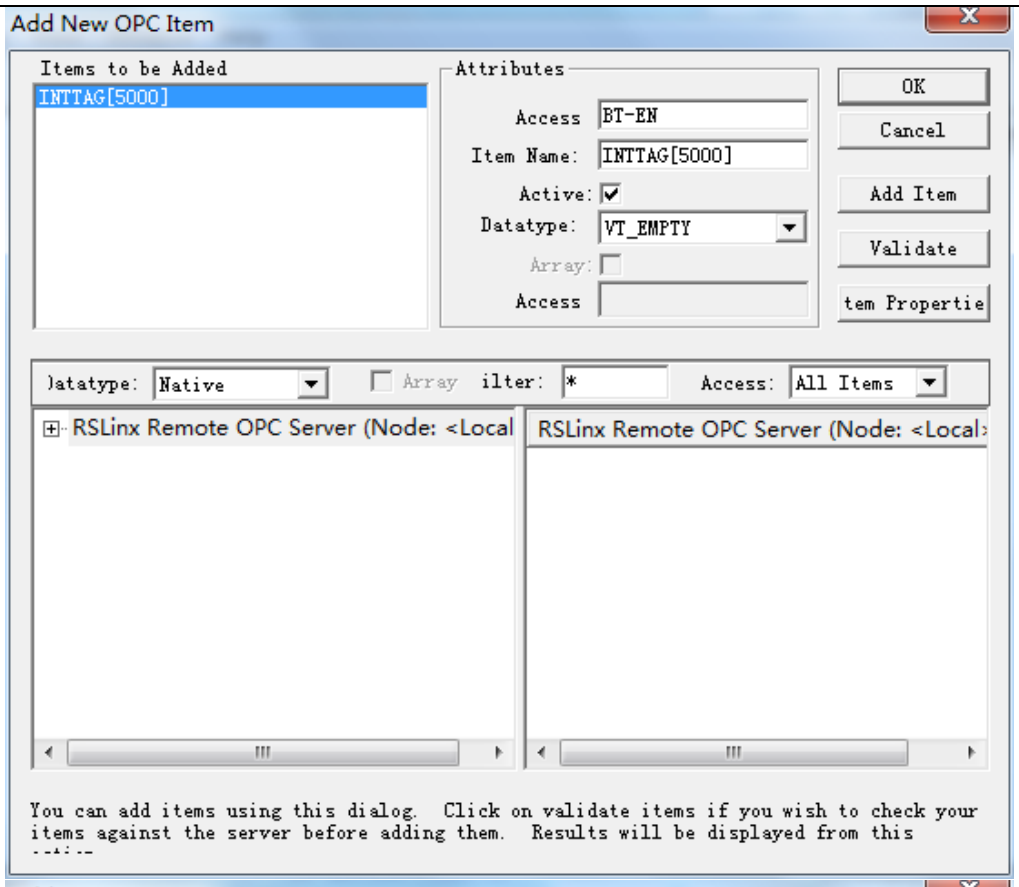
建立测试点
BOOL
SINT
INT
DINT
REAL
对应关系说明

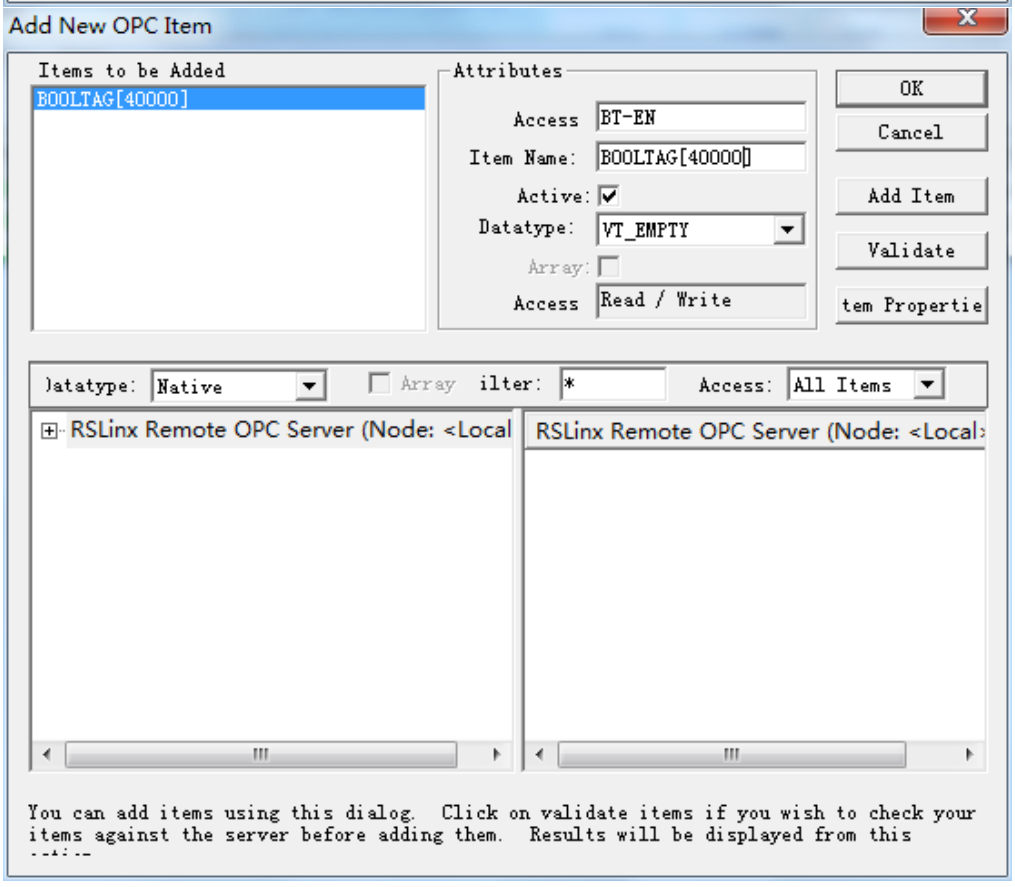
Internal Data	OPC_BOOL	OPC_SINT	OPC_INT	OPC_DINT	OPC_REAL
内部数据库地址	布尔量地址	单整型地址	整型地址	双整型地址	浮点型地址
16 位	1 位	8 位	16 位	32 位	32 位
0	booltag[0]	sinttag[0]	inttag[0]	dinttag[0]	realtag[0]
998	booltag[15968]	sinttag[1996]	inttag[998]	dinttag[499]	realtag[499]
1000	booltag[16000]	sinttag[2000]	inttag[1000]	dinttag[500]	realtag[500]
1998	booltag[31968]	sinttag[3996]	inttag[1998]	dinttag[999]	realtag[999]
2500	booltag[40000]	sinttag[5000]	inttag[2500]	dinttag[1250]	realtag[1250]
5000	booltag[80000]	sinttag[10000]	inttag[5000]	dinttag[2500]	realtag[2500]
10000	booltag[160000]	sinttag[20000]	inttag[10000]	dinttag[5000]	realtag[5000]
内部地址	内部地址×16	内部地址×2	内部地址	内部地址÷2	内部地址÷2

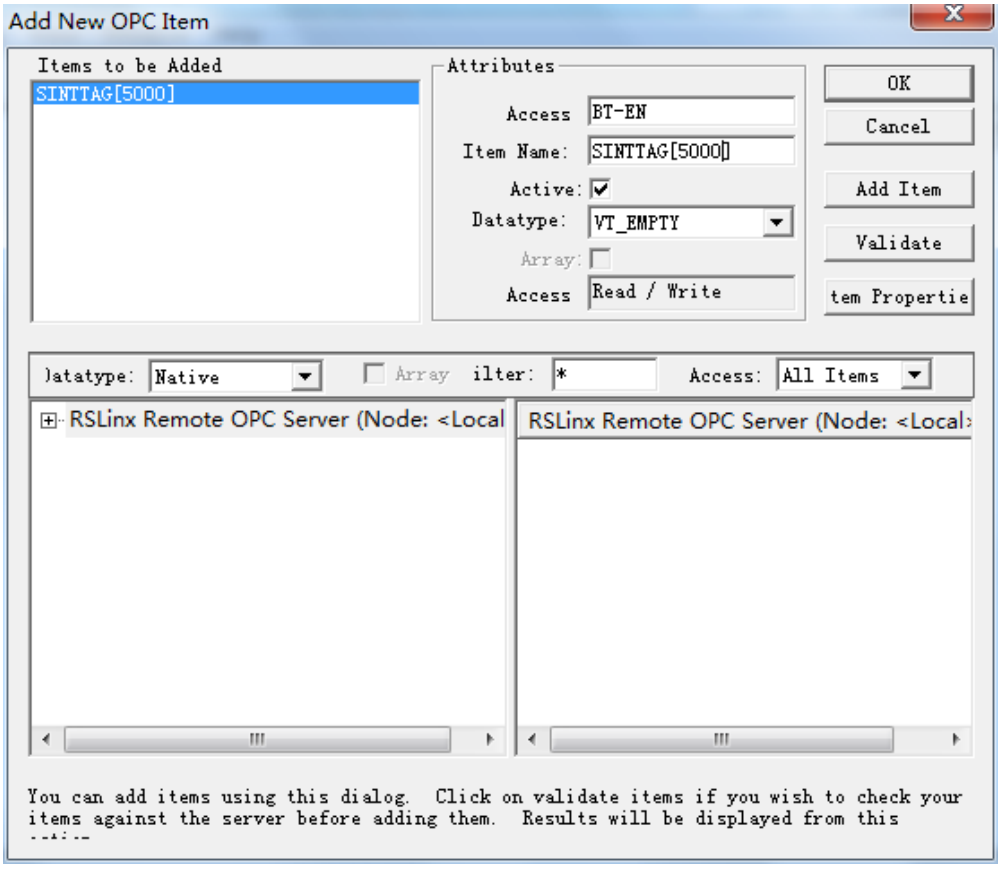
10. 点击 Add Item 添加测试点，添加完后点 OK.

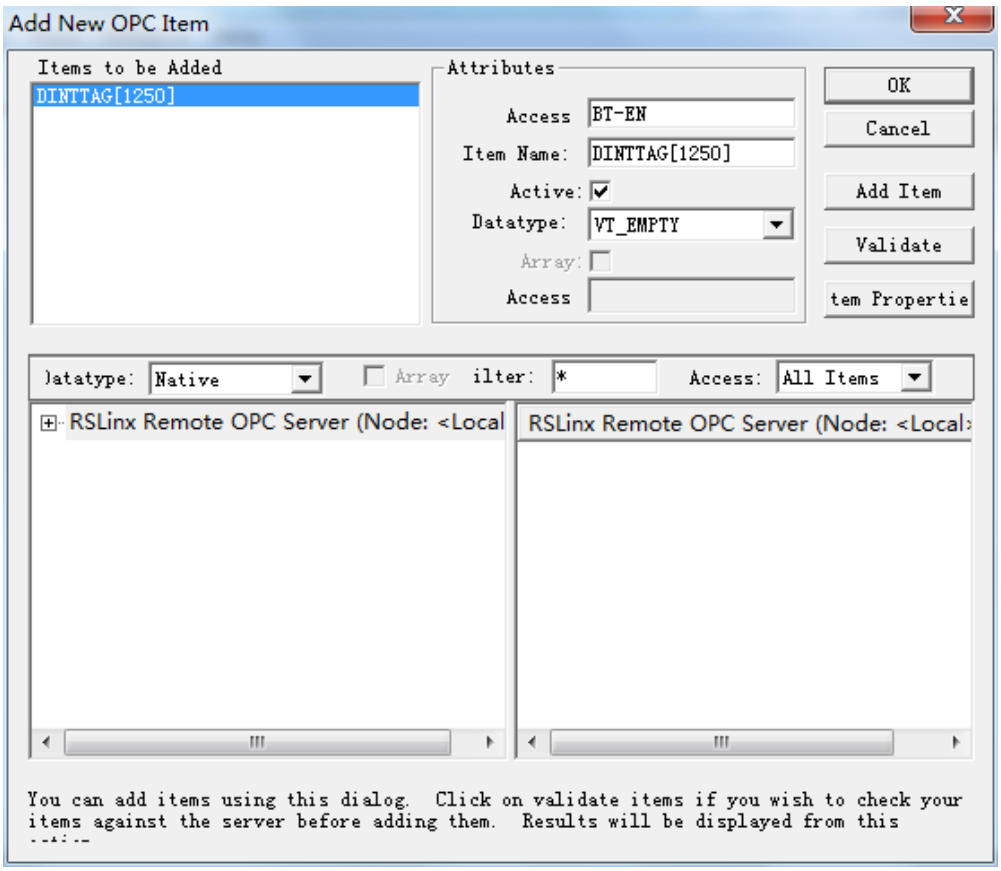

Add New OPC Item
Items to be Added
INTTAG[0]
Attributes
Access BT-EN
Item Name: INTTAG[0]
Active:
Datatype: VT_EMPTY
Array:
Access
OK
Cancel
Add Item
Validate
tem Propertie
Datatype: Native
Array
ilter: *
Access: All Items
RSLinx Remote OPC Server (Node: <Local
RSLinx Remote OPC Server (Node: <Local
You can add items using this dialog. Click on validate items if you wish to check your items against the server before adding them. Results will be displayed from this

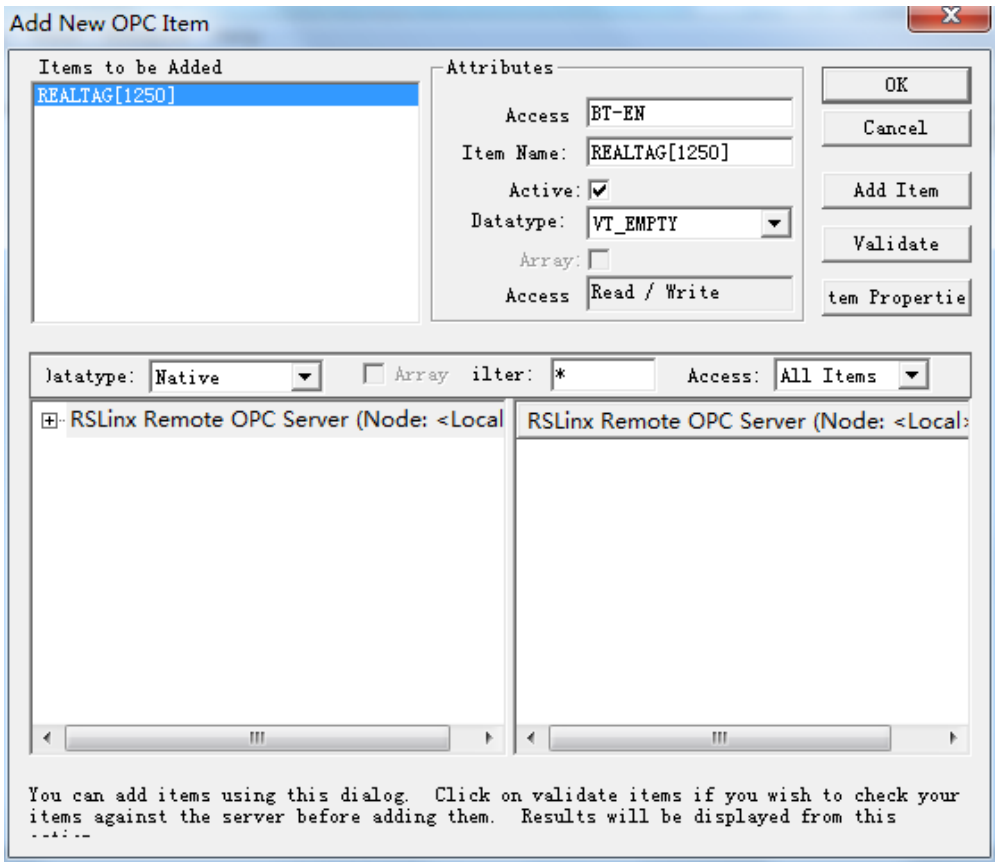

Add New OPC Item
Items to be Added
INTTAG[2500]
Attributes
Access BT-EN
Item Name: INTTAG[2500]
Active:
Datatype: VT_EMPTY
Array:
Access
OK
Cancel
Add Item
Validate
tem Propertie
Datatype: Native
Array
ilter: *
Access: All Items
RSLinx Remote OPC Server (Node: <Local
RSLinx Remote OPC Server (Node: <Local
You can add items using this dialog. Click on validate items if you wish to check your items against the server before adding them. Results will be displayed from this


Add New OPC Item
Items to be Added
INTTAG[5000]
Attributes
Access
BT-EN
Item Name:
INTTAG[5000]
Active:
Datatype:
VT_EMPTY
Array:
Access
OK
Cancel
Add Item
Validate
tem Propertie
Datatype:
Native
Array
ilter:
*
Access:
All Items
RSLinx Remote OPC Server (Node: <Local
RSLinx Remote OPC Server (Node: <Local
You can add items using this dialog. Click on validate items if you wish to check your
items against the server before adding them. Results will be displayed from this


Add New OPC Item
Items to be Added
BOOLTAG[40000]
Attributes
Access
BT-EN
Item Name:
BOOLTAG[40000]
Active:
Datatype:
VT_EMPTY
Array:
Access
Read / Write
OK
Cancel
Add Item
Validate
tem Propertie
Datatype:
Native
Array
ilter:
*
Access:
All Items
RSLinx Remote OPC Server (Node: <Local
RSLinx Remote OPC Server (Node: <Local
You can add items using this dialog. Click on validate items if you wish to check your
items against the server before adding them. Results will be displayed from this


Add New OPC Item
Items to be Added
SINTTAG[5000]
Attributes
Access
BT-EN
Item Name:
SINTTAG[5000]
Active:
Datatype:
VT_EMPTY
Array:
Access
Read / Write
OK
Cancel
Add Item
Validate
tem Propertie
Native
Array
Access:
All Items
RSLinx Remote OPC Server (Node: <Local
RSLinx Remote OPC Server (Node: <Local
You can add items using this dialog. Click on validate items if you wish to check your items against the server before adding them. Results will be displayed from this


Add New OPC Item
Items to be Added
DINTTAG[1250]
Attributes
Access
BT-EN
Item Name:
DINTTAG[1250]
Active:
Datatype:
VT_EMPTY
Array:
Access
OK
Cancel
Add Item
Validate
tem Propertie
Native
Array
Access:
All Items
RSLinx Remote OPC Server (Node: <Local
RSLinx Remote OPC Server (Node: <Local
You can add items using this dialog. Click on validate items if you wish to check your items against the server before adding them. Results will be displayed from this

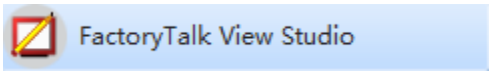


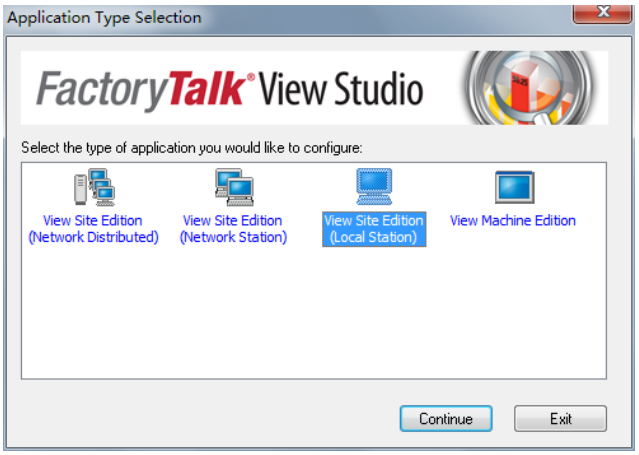
ItemID	Sub Value	Sub Quality	Sub Updates	Update Rate	Run. Avg
INTTAG[0]	0	Good	1	0	0.000304
INTTAG[2500]	0	Good	1	0	0.000328
INTTAG[5000]	12012	Good	2933	1	0.997212
BOOLTAG[40000]	0	Good	2546	1	0.998769
SINTTAG[5000]	0	Good	116	1	0.987379
DINTTAG[1250]	0	Good	1	0	0.013833
REALTAG[1250]	0	Good	1	0	0.053911

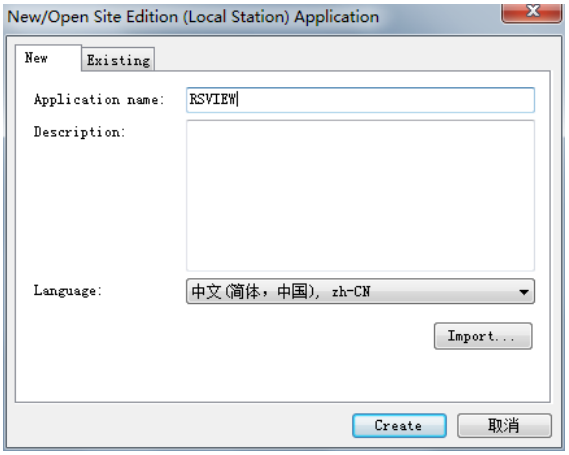
11. 测试点的状态位是 Good ，表示数据 OK。

二：RSVIEW SE 配置

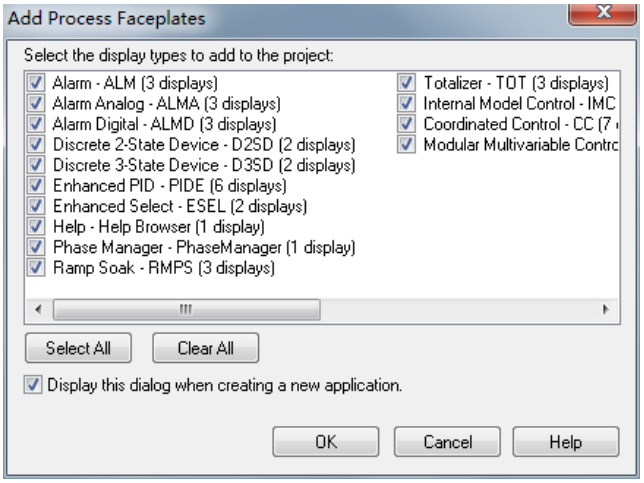
1. 新建 SE 项目，打开 RSVIEW SE 软件，建立一个项目。



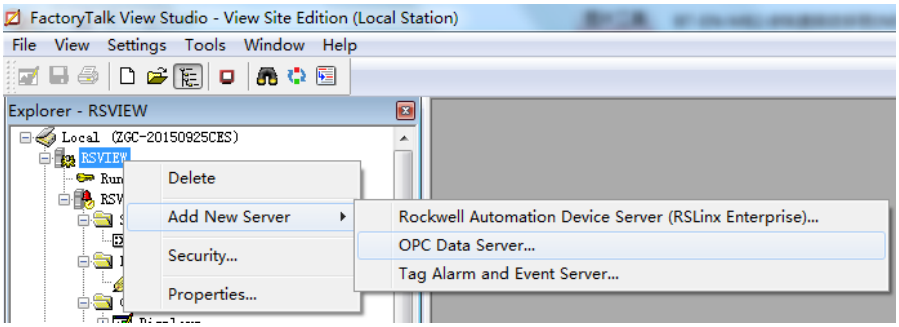




2. 弹出如图所示界面，点击 OK。

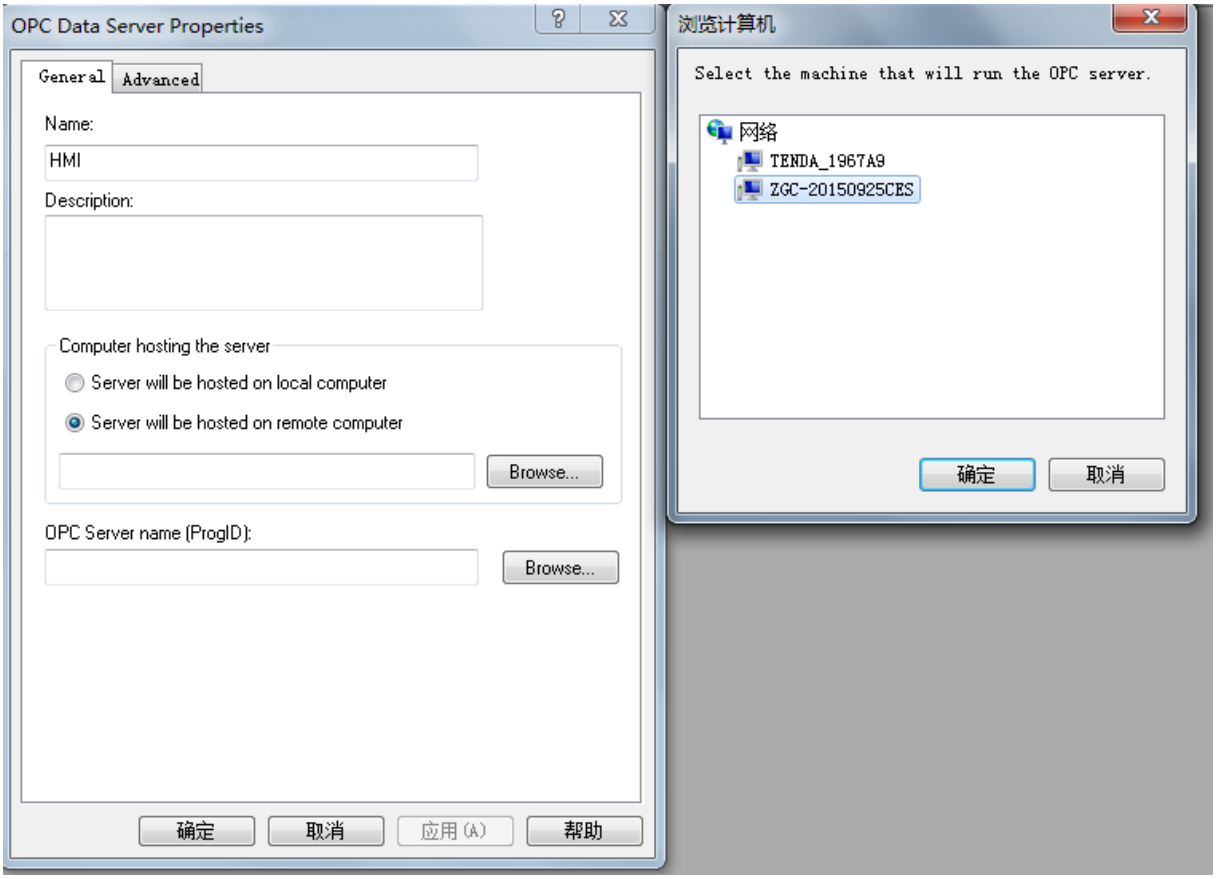


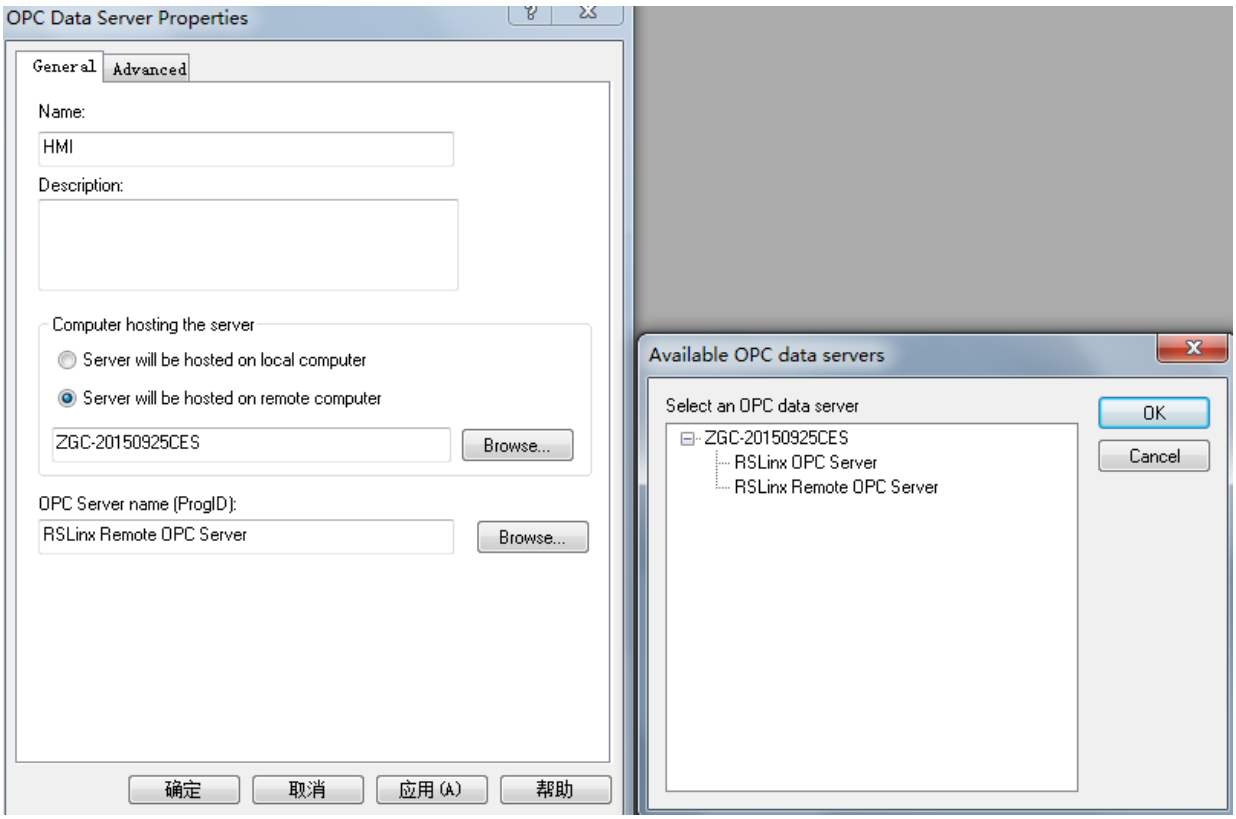
3. 配置通讯。右键单击，弹出菜单中选择“创建新的服务器”，然后选择 OPC Data Server。



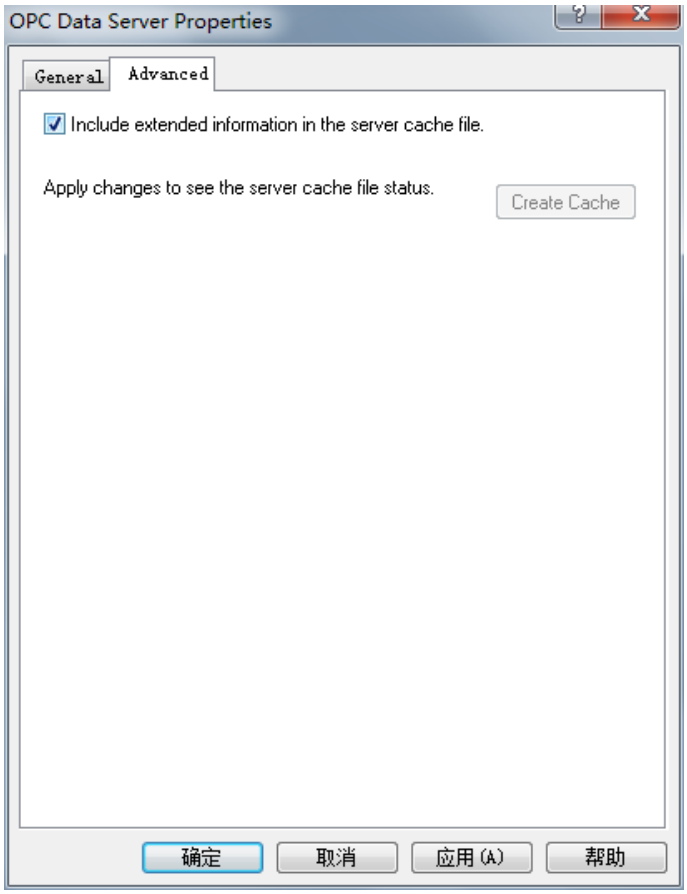
4. 如下图所示，创建名字后，选择远程电脑，并选择 OPC 名字。 示例中 ZGC-20150925CES 是所使用电脑的名字，单击选择后点击确定，选择要连接

的 OPC Server name，选择远程 OPC.



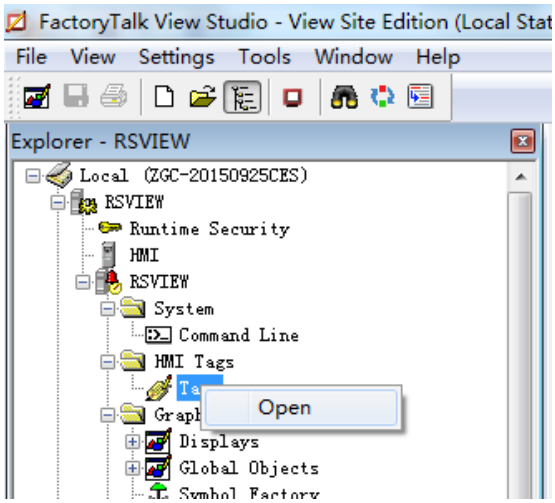


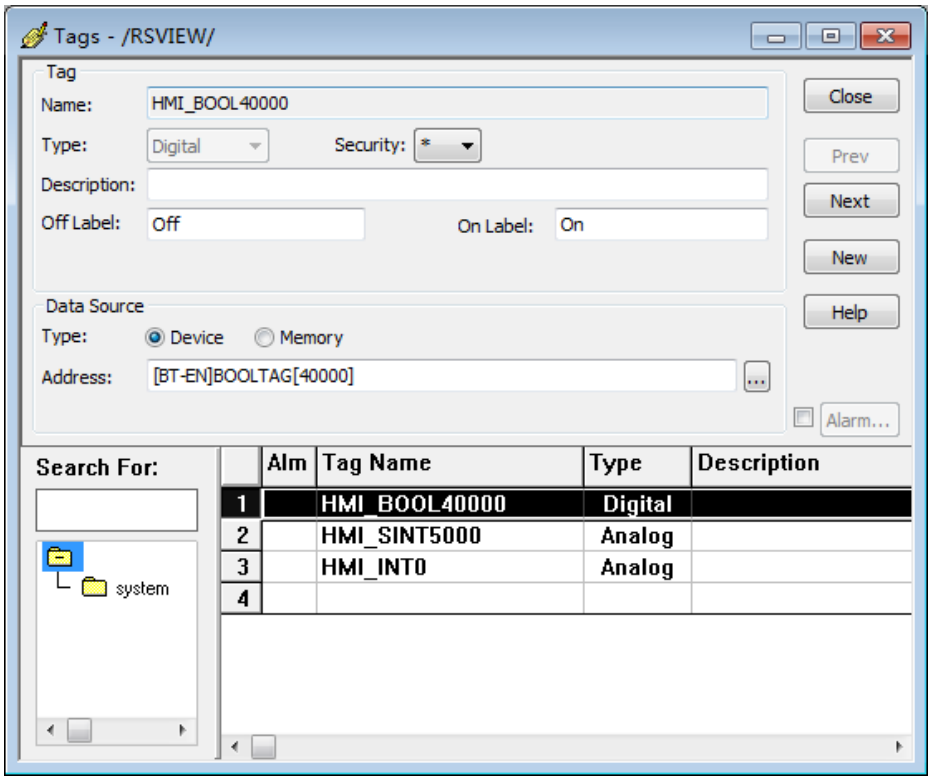
5. 增加选项里勾选包括扩展服务器缓存文件中的信息，点击确定。

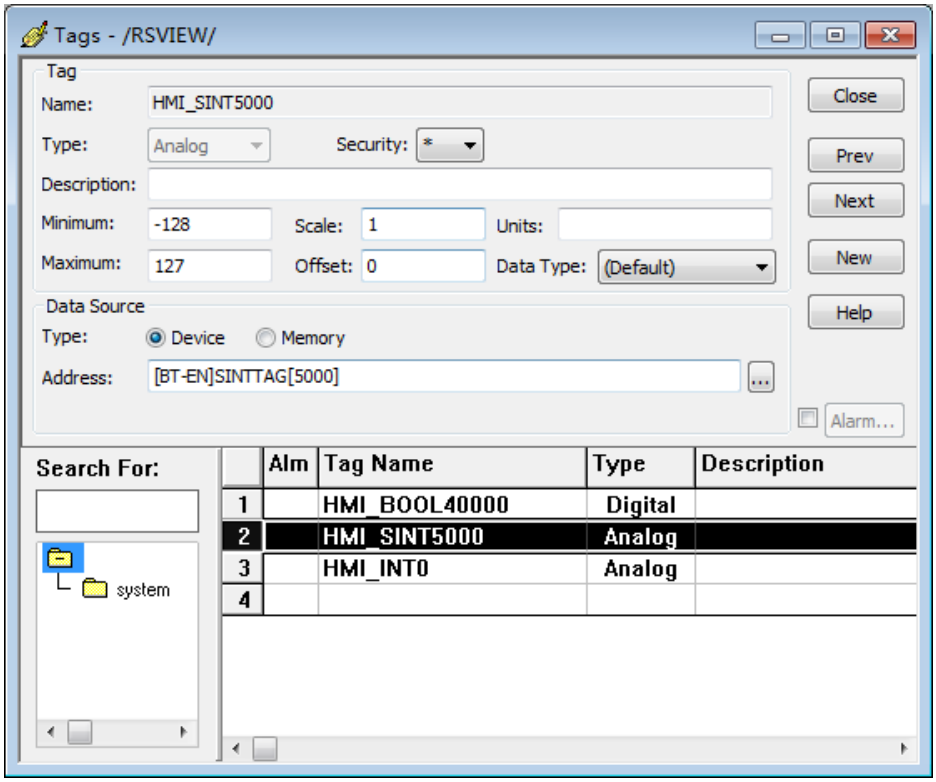


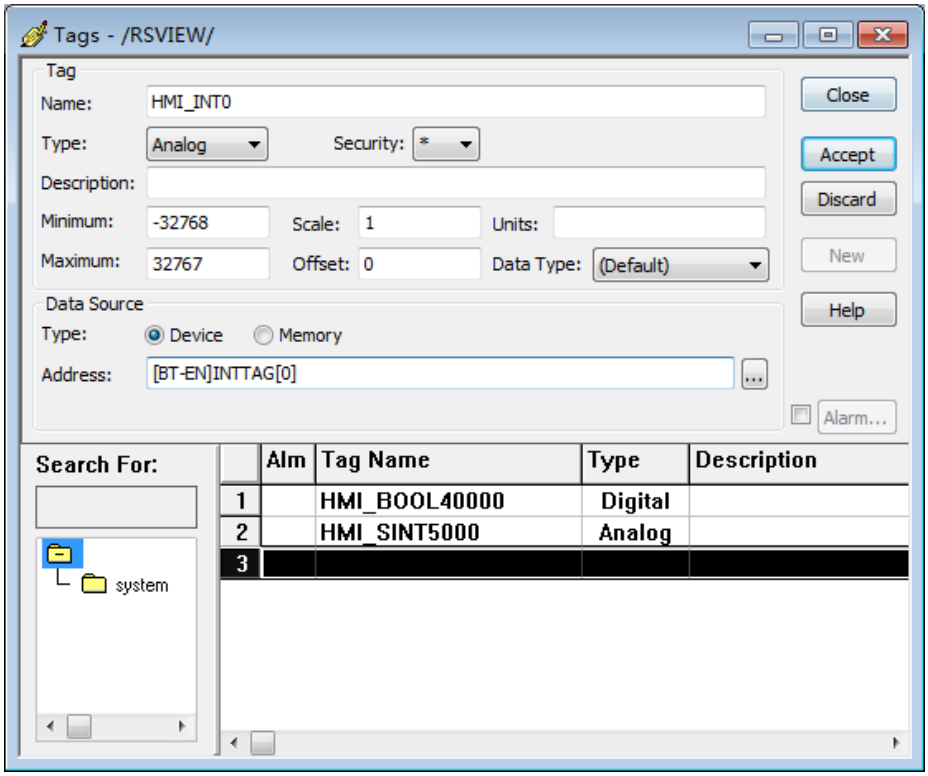
6. 配置标签。

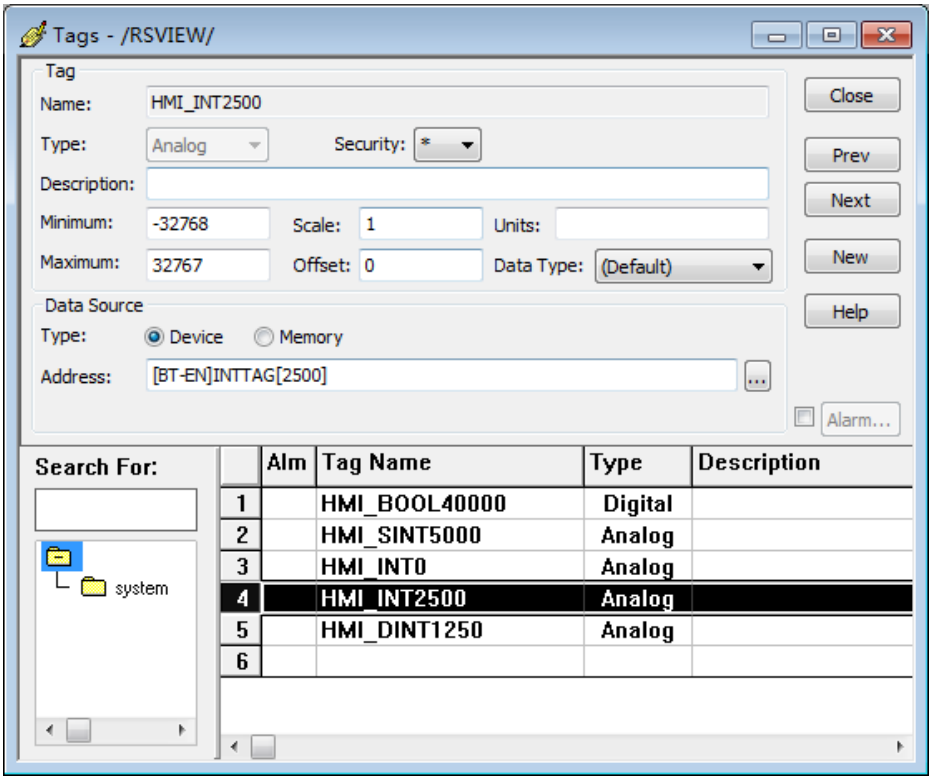
右键点击 TAGS，创建标签名字 HMI_BOOL ，选择数字量 Digital，点击 Accept 建立标签。按照相同方法创建其他数据类型。

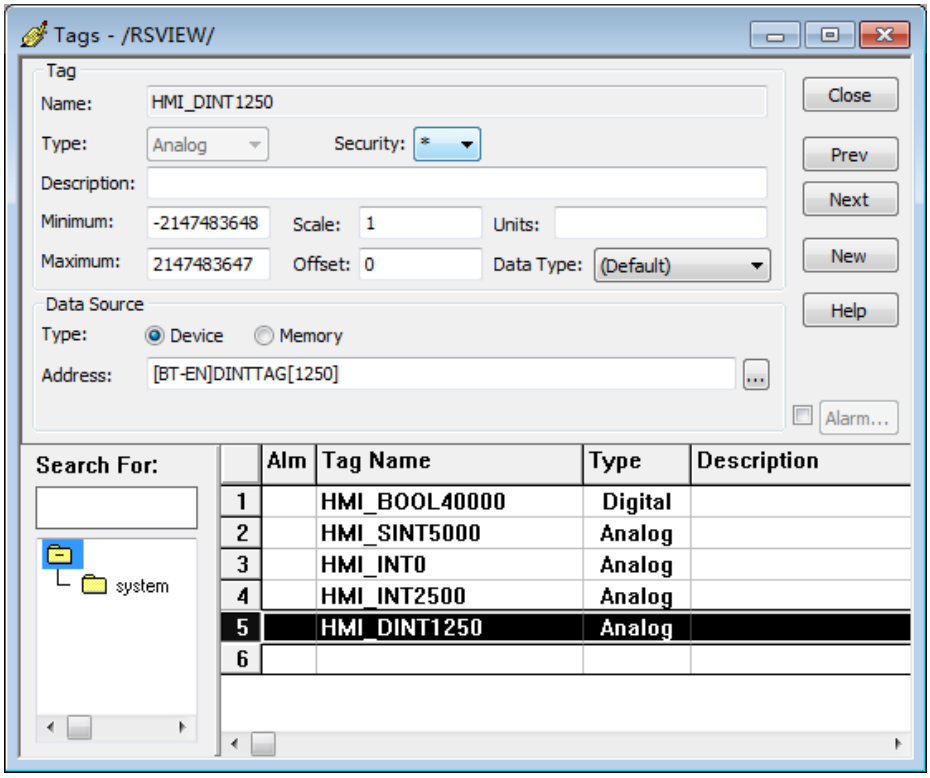


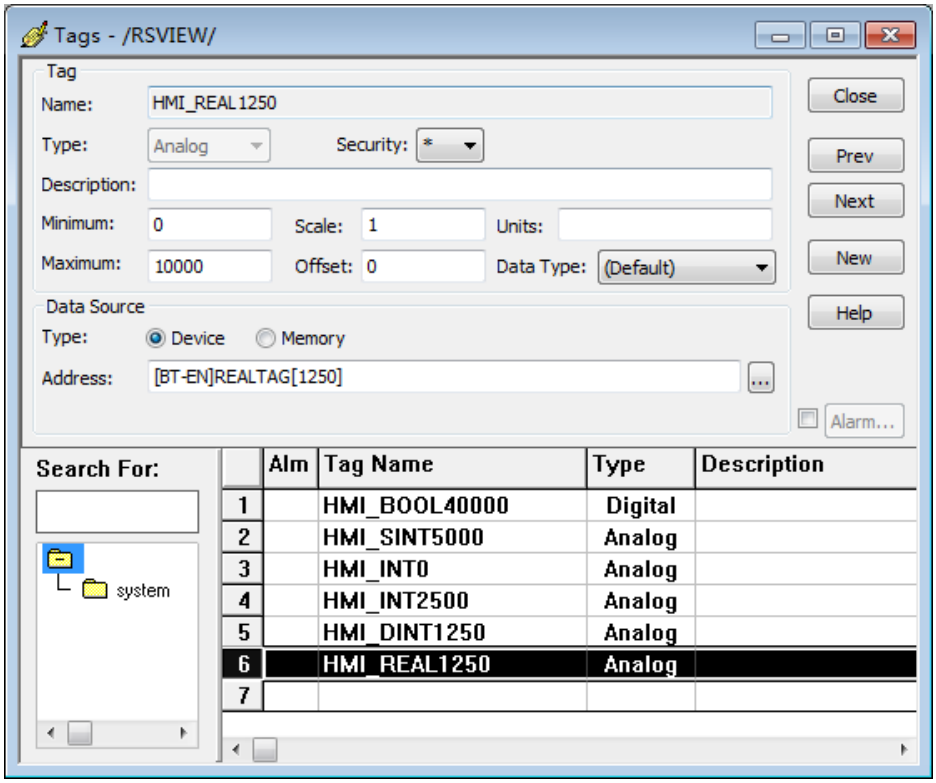

Tags - /RSVIEW/
Tag
Name: HMI_BOOL40000
Type: Digital
Security: *
Description:
Off Label: Off
On Label: On
Close
Prev
Next
New
Help
Data Source
Type: Device Memory
Address: [BT-EN]BOOLTAG[40000]
Alarm...
Search For:
system
Alm
Tag Name
Type
Description
1 HMI_BOOL40000 Digital
2 HMI_SINT5000 Analog
3 HMI_INT0 Analog
4

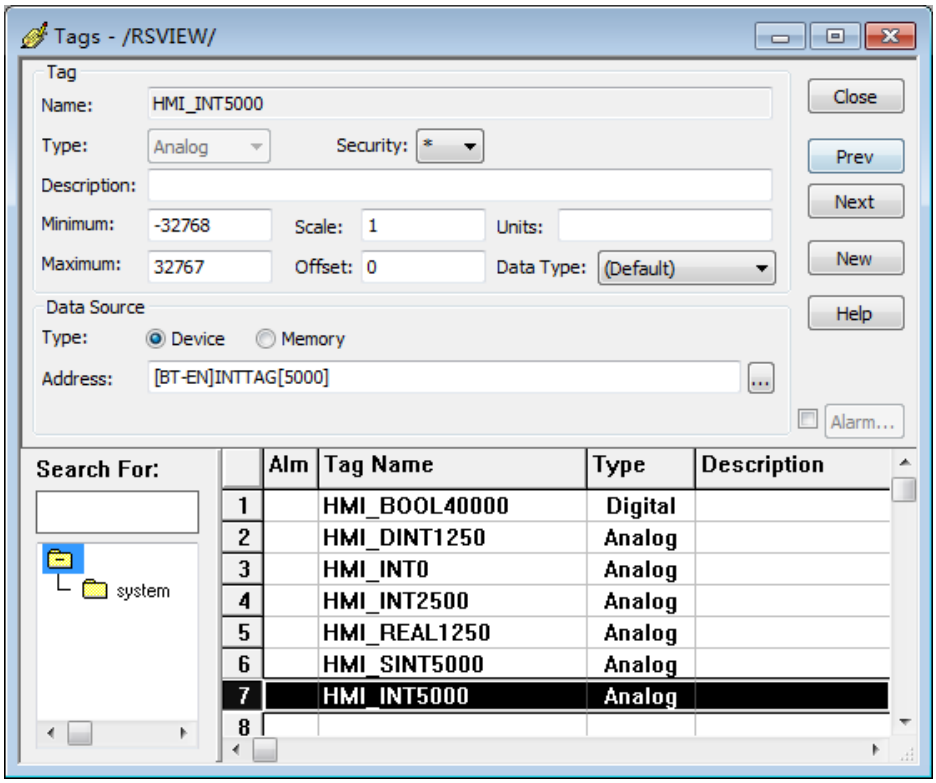

Tags - /RSVIEW/
Tag
Name: HMI_SINT5000
Type: Analog
Security: *
Description:
Minimum: -128
Scale: 1
Units:
Maximum: 127
Offset: 0
Data Type: (Default)
Close
Prev
Next
New
Help
Data Source
Type: Device Memory
Address: [BT-EN]SINTTAG[5000]
Alarm...
Search For:
system
Alm
Tag Name
Type
Description
1 HMI_BOOL40000 Digital
2 HMI_SINT5000 Analog
3 HMI_INT0 Analog
4


Tags - /RSVIEW/
Tag
Name: HMI_INT0
Type: Analog
Security: *
Description:
Minimum: -32768
Scale: 1
Units:
Maximum: 32767
Offset: 0
Data Type: (Default)
Data Source
Type: Device Memory
Address: [BT-EN]INTTAG[0]
Close
Accept
Discard
New
Help
Alarm...
Search For:
system
Alm
Tag Name
Type
Description
1 HMI_BOOL40000 Digital
2 HMI_SINT5000 Analog
3

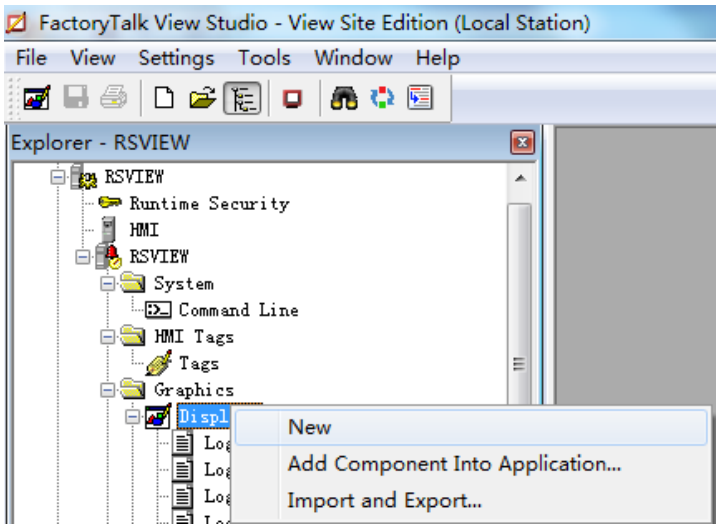

Tags - /RSVIEW/
Tag
Name: HMI_INT2500
Type: Analog
Security: *
Description:
Minimum: -32768
Scale: 1
Units:
Maximum: 32767
Offset: 0
Data Type: (Default)
Data Source
Type: Device Memory
Address: [BT-EN]INTTAG[2500]
Close
Prev
Next
New
Help
Alarm...
Search For:
system
Alm
Tag Name
Type
Description
1 HMI_BOOL40000 Digital
2 HMI_SINT5000 Analog
3 HMI_INT0 Analog
4 HMI_INT2500 Analog
5 HMI_DINT1250 Analog
6


Tags - /RSVIEW/
Tag
Name: HMI_DINT1250
Type: Analog
Security: *
Description:
Minimum: -2147483648
Scale: 1
Units:
Maximum: 2147483647
Offset: 0
Data Type: (Default)
Data Source
Type: Device Memory
Address: [BT-EN]DINTTAG[1250]
Close
Prev
Next
New
Help
Alarm...
Search For:
system
Alm
Tag Name
Type
Description
1 HMI_BOOL40000 Digital
2 HMI_SINT5000 Analog
3 HMI_INT0 Analog
4 HMI_INT2500 Analog
5 HMI_DINT1250 Analog
6

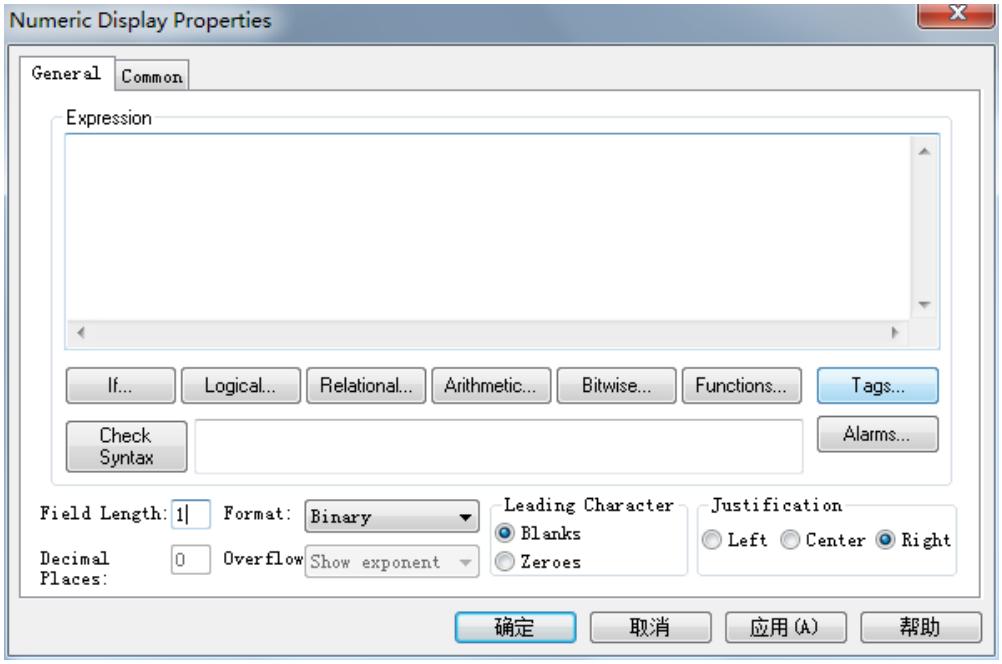

Tags - /RSVIEW/
Tag
Name: HMI_REAL1250
Type: Analog
Security: *
Description:
Minimum: 0
Scale: 1
Units:
Maximum: 10000
Offset: 0
Data Type: (Default)
Data Source
Type: Device Memory
Address: [BT-EN]REALTAG[1250]
Close
Prev
Next
New
Help
Alarm...
Search For:
system
Alm
Tag Name
Type
Description
1 HMI_BOOL40000 Digital
2 HMI_SINT5000 Analog
3 HMI_INT0 Analog
4 HMI_INT2500 Analog
5 HMI_DINT1250 Analog
6 HMI_REAL1250 Analog
7



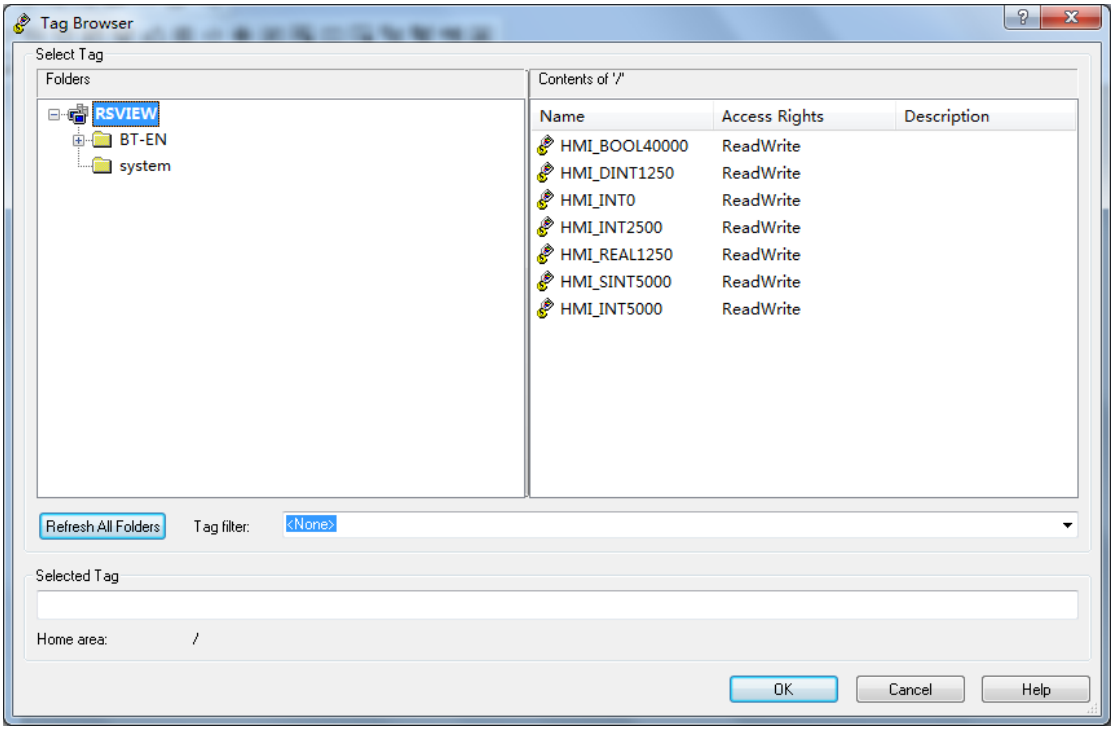
7. 新建一个显示的画面点击 New.



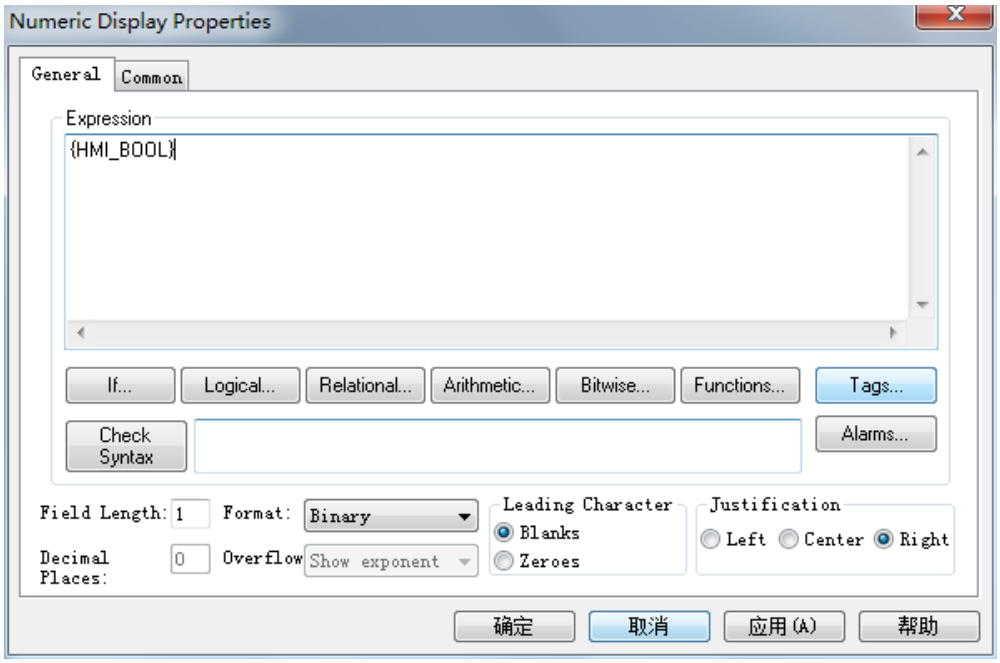
使用显示数据的标志
建立位显示

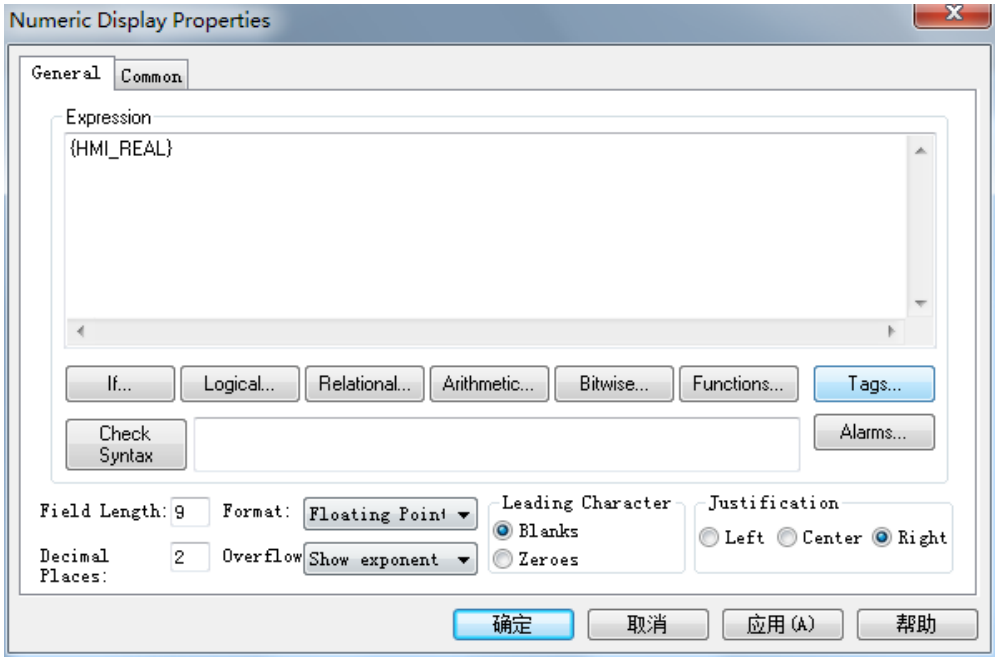


8. 建立其他显示，点击 Tags... 选择之前建立的标签。

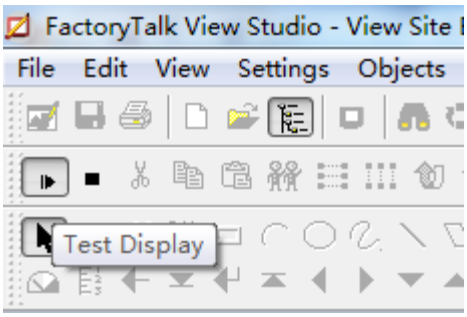


9. 选择位的标签点。可按照此方法连接其它数据格式。





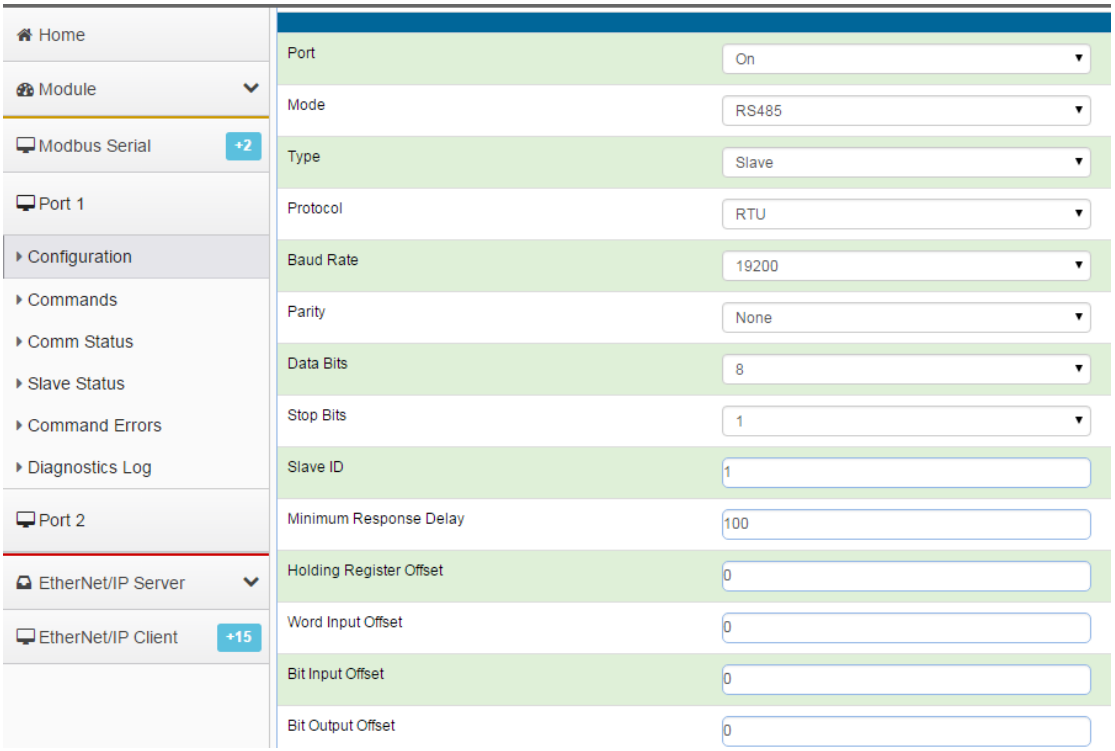
10. 点击测试显示。

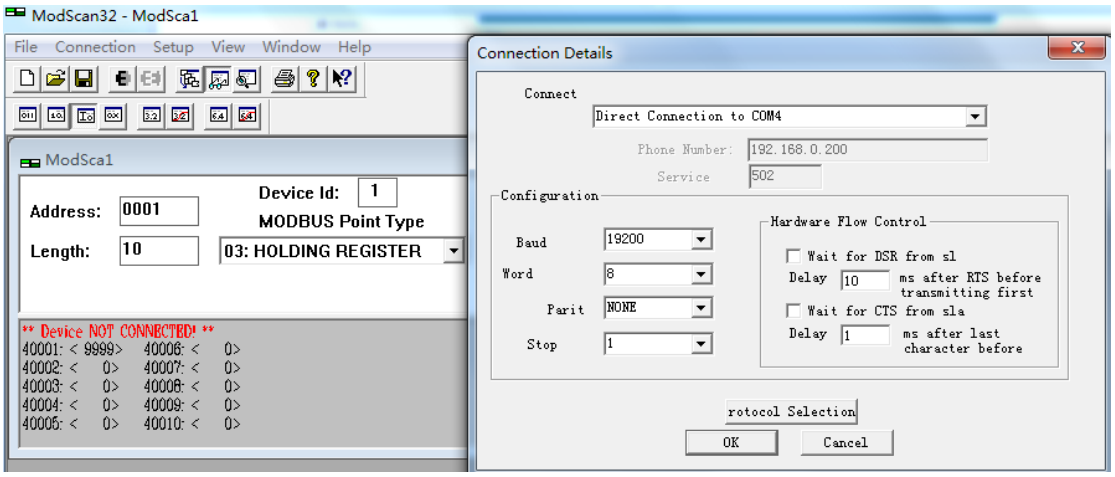


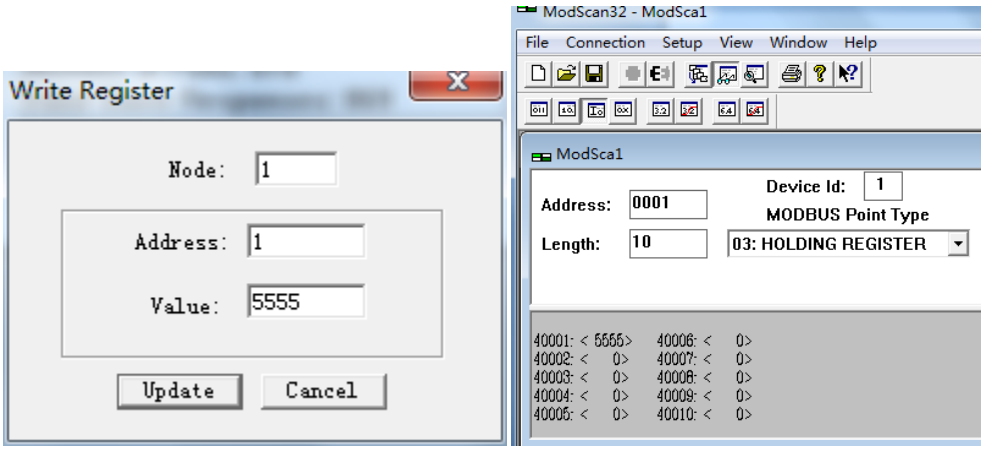
举例说明：如果通过 MODBUS RTU 和对方 DCS 通讯，数据要求可读可写。配置 Port 1 为 MODBUS 从站，使用仿真软件 MODSCAN 32 仿真 DCS 主站。

端口做为从站后，内部数据库 0 对应的地址为 40001
内部数据库 1 对应的地址为 40002
以此类推;;;;;;;;;;;;;;;;;;;;;;;;
内部数据库 0-4999 对应的 40001-44999 都可以读写。

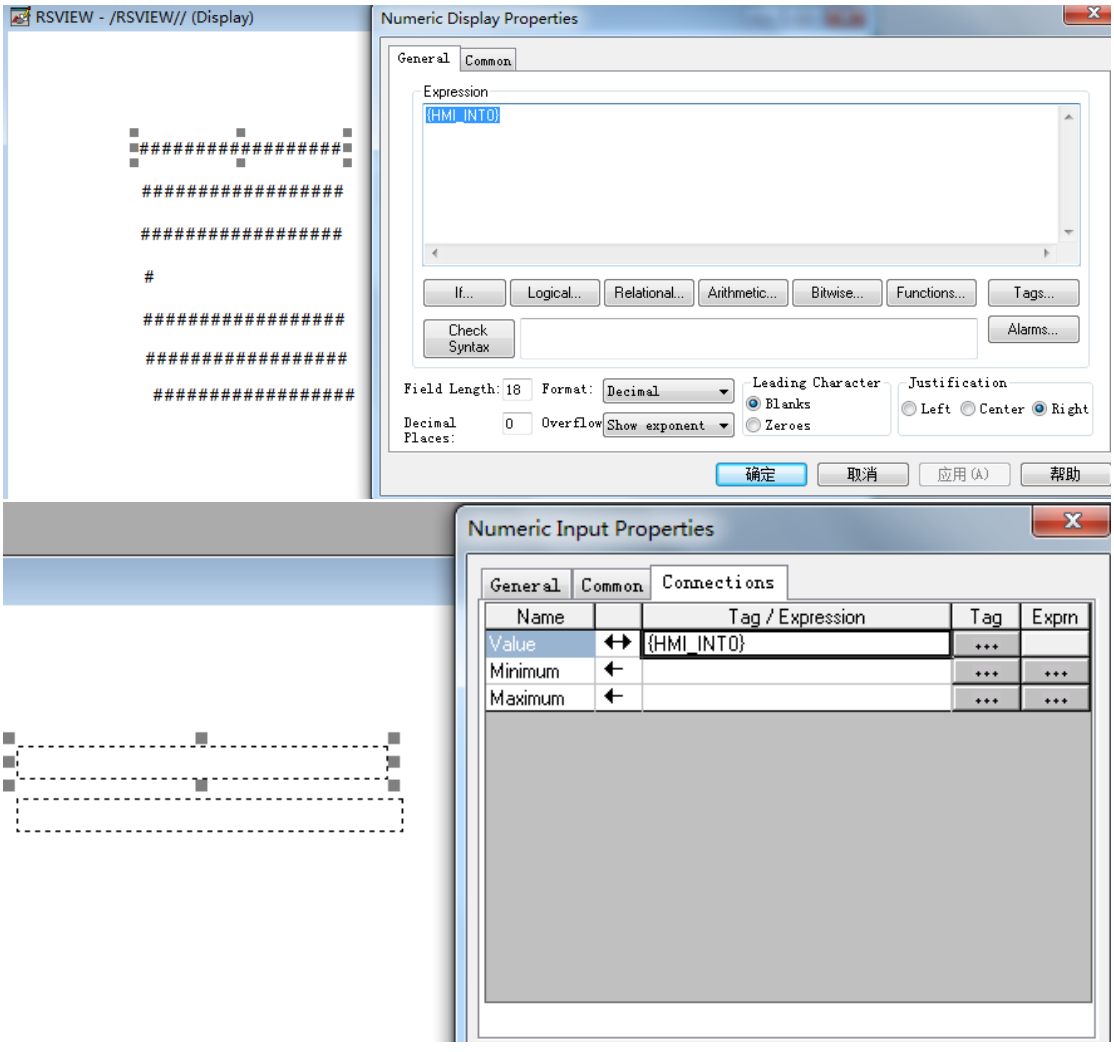
Address	0	1	2	3
0	0	0	0	0
10	0	0	0	0
20	0	0	0	0

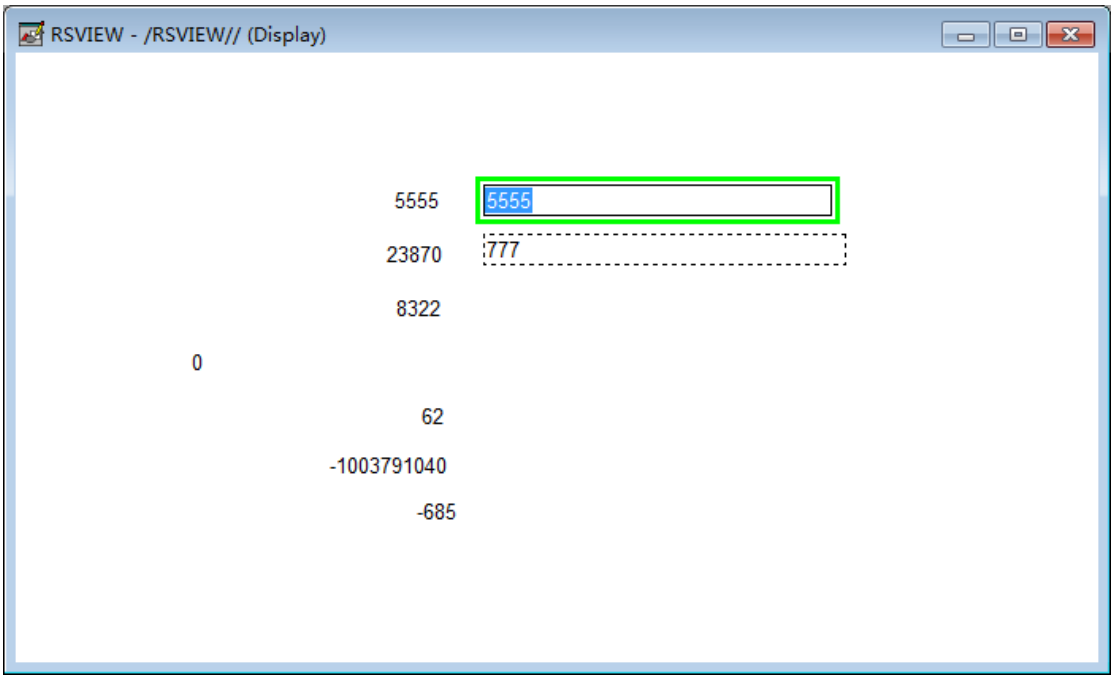




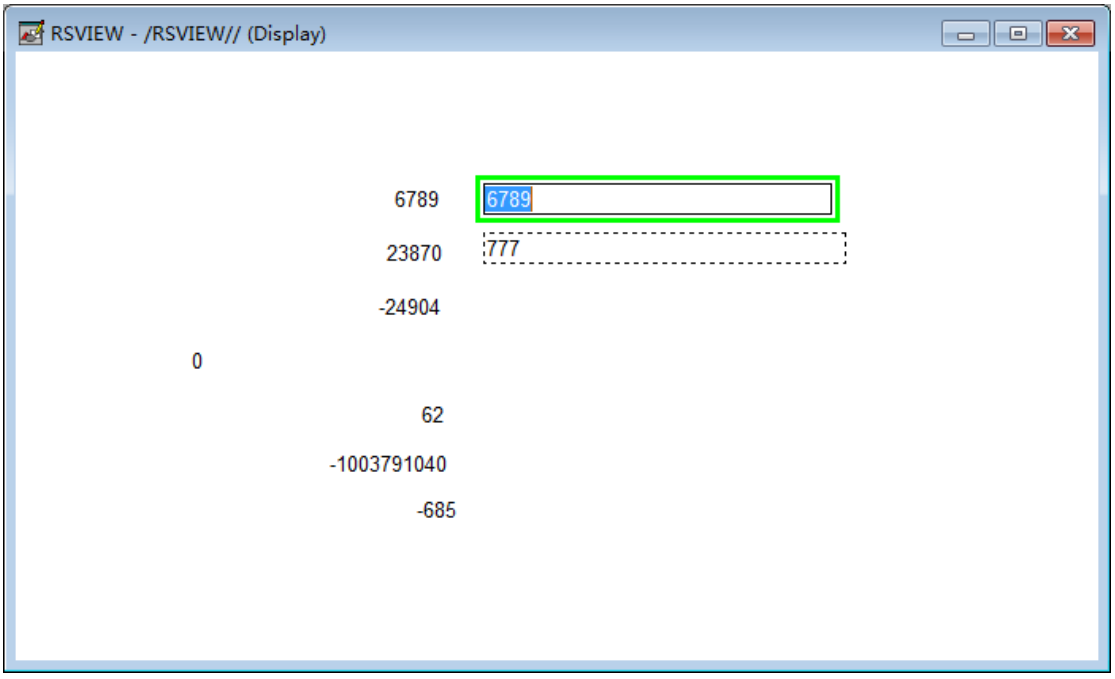


修改 40001 寄存器的值从 9999，改成 5555。

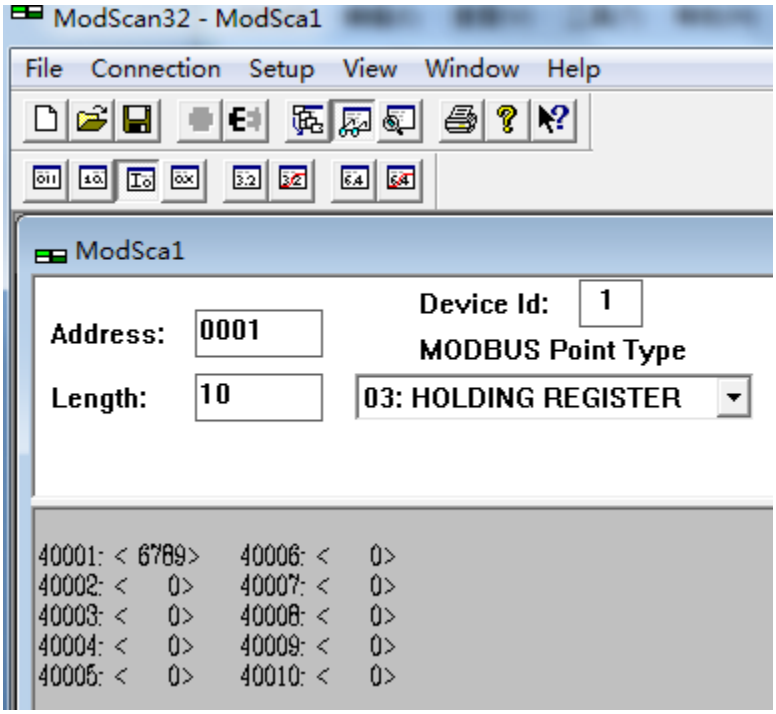




上位机修改 5555 的值　改成 6789

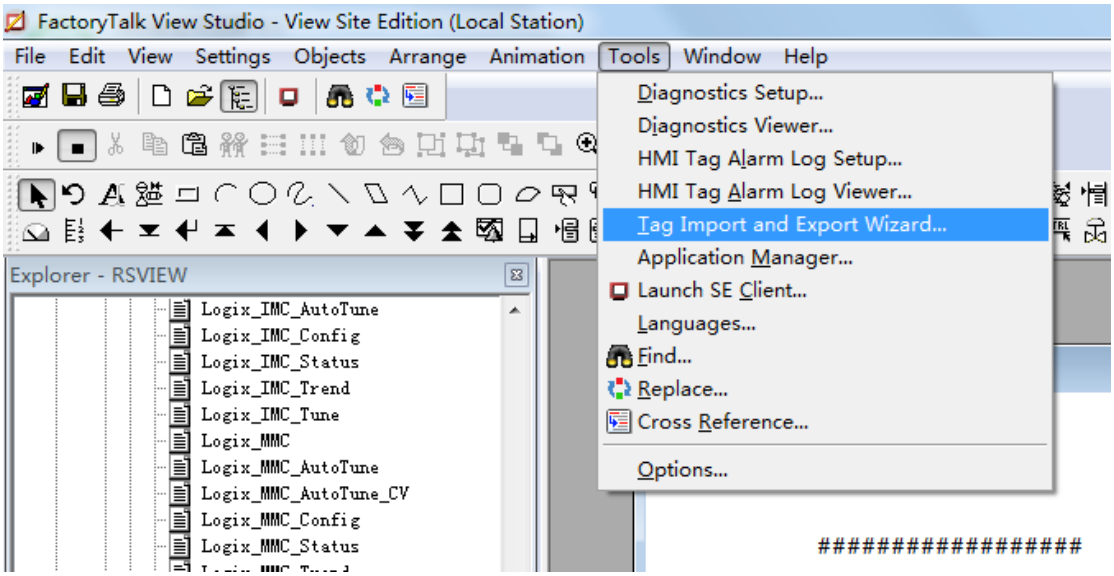


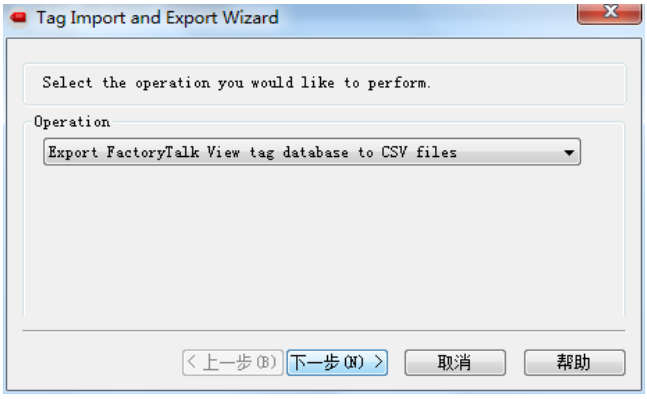
仿真软件 MODSCAN 就可以看到 40001 的变化。



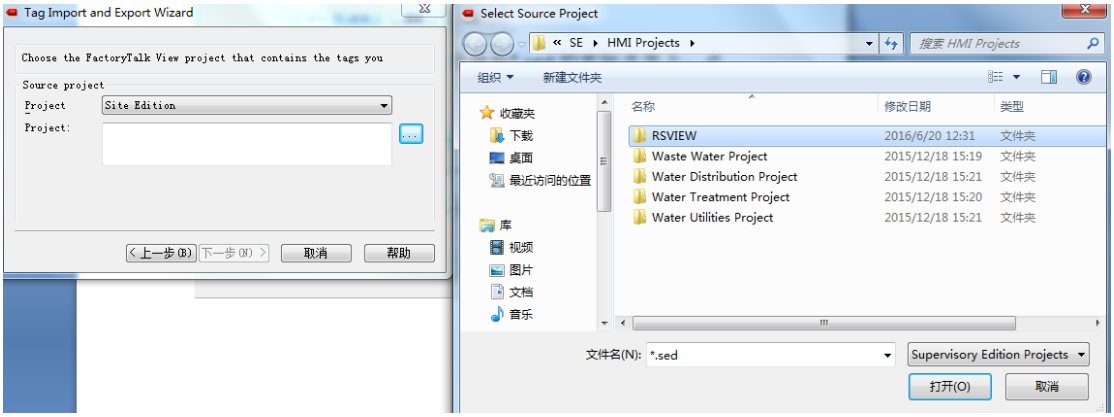
可以看到数据是对应好的。鉴于这只是一个测试工具，可不必理会 RSI-OPC test Client。

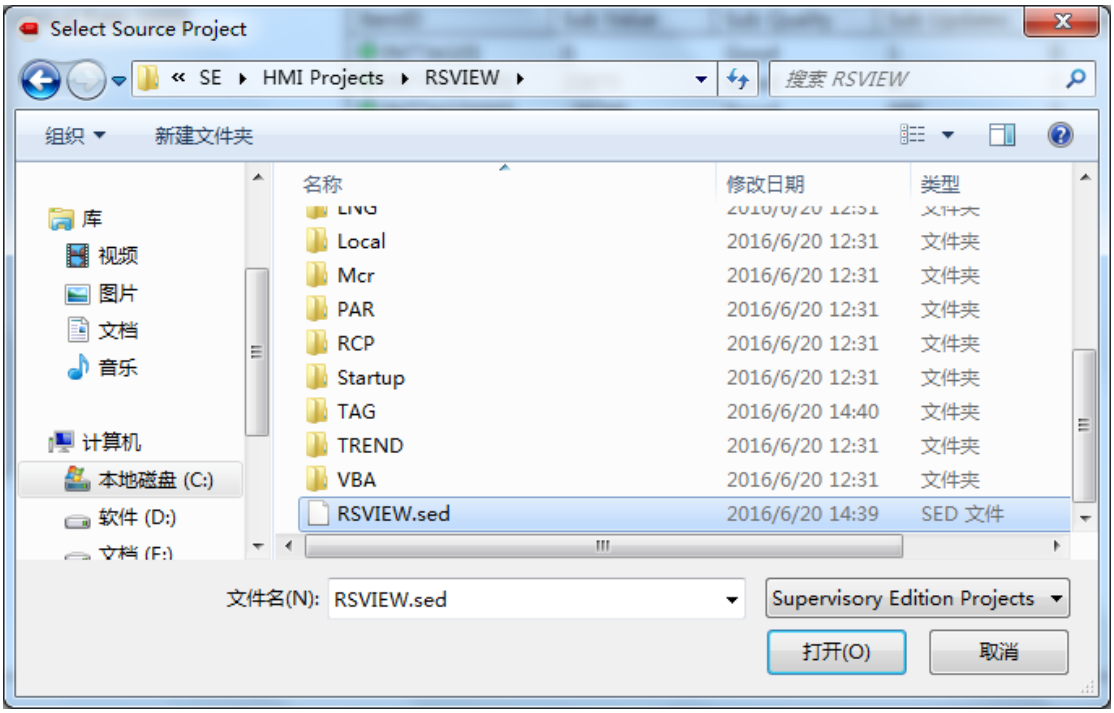
11. 导出标签 ，可以批量编辑标签和数据点对应的关系。



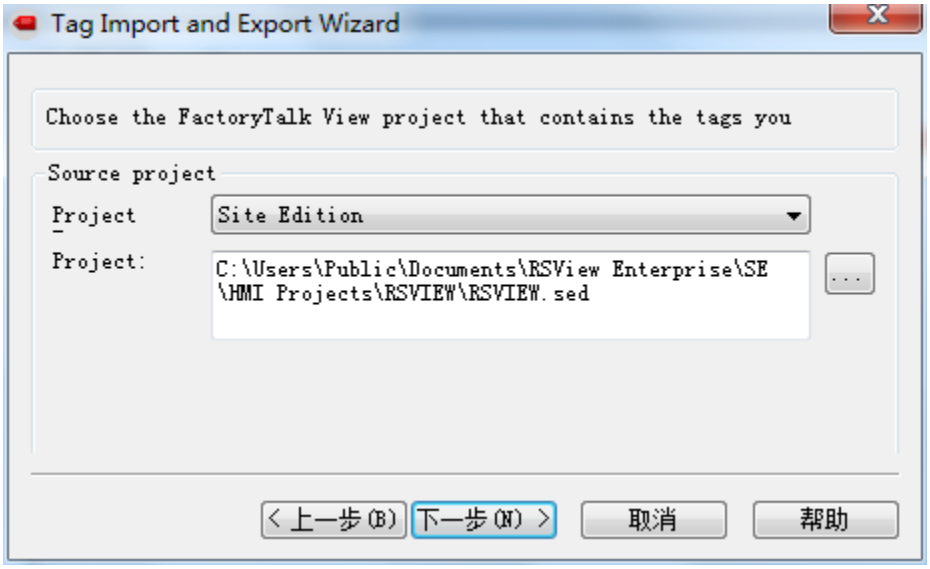


选择 SE　. 选择工程名，选择到*. sed 的实际名字上，点击打开。



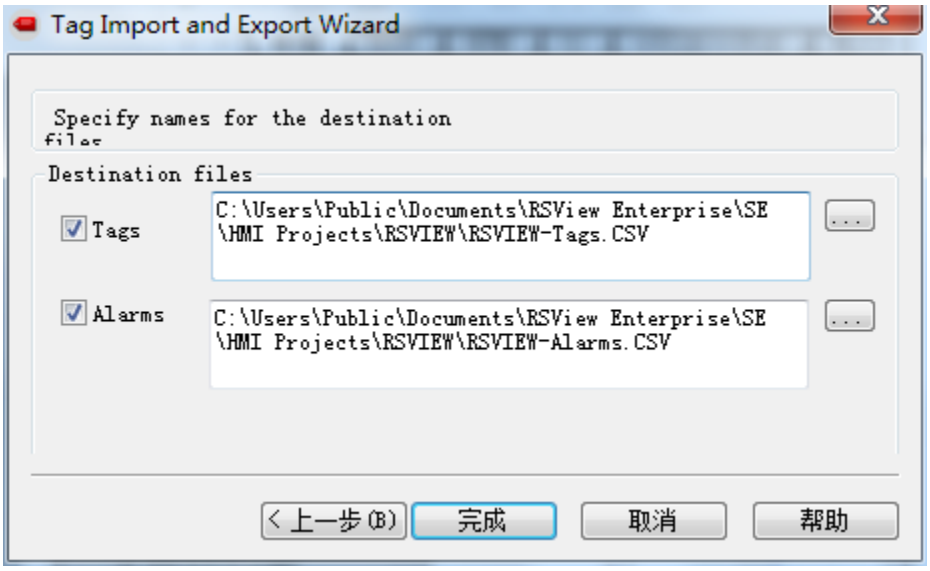


选择下一步。

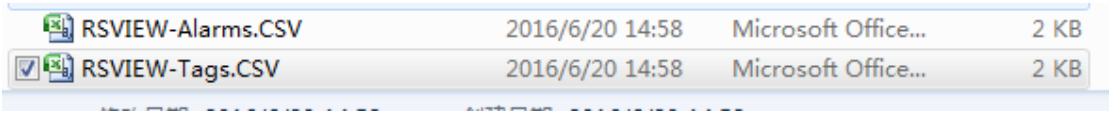


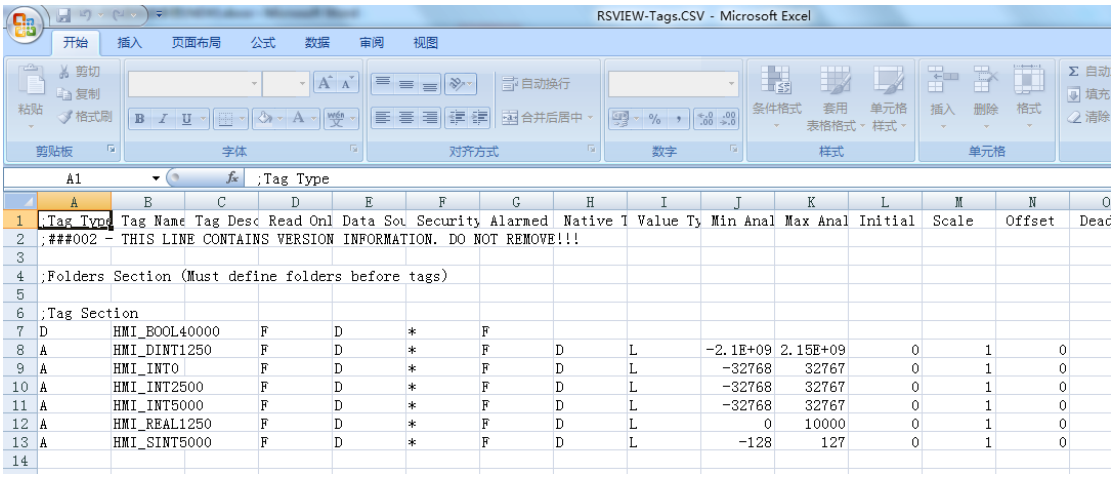
标签表保存的位置，复制下来，点击完成。

C:\Users\Public\Documents\RSView Enterprise\SE\HMI Projects\RSVIEW\RSVIEW-Tags.CSV



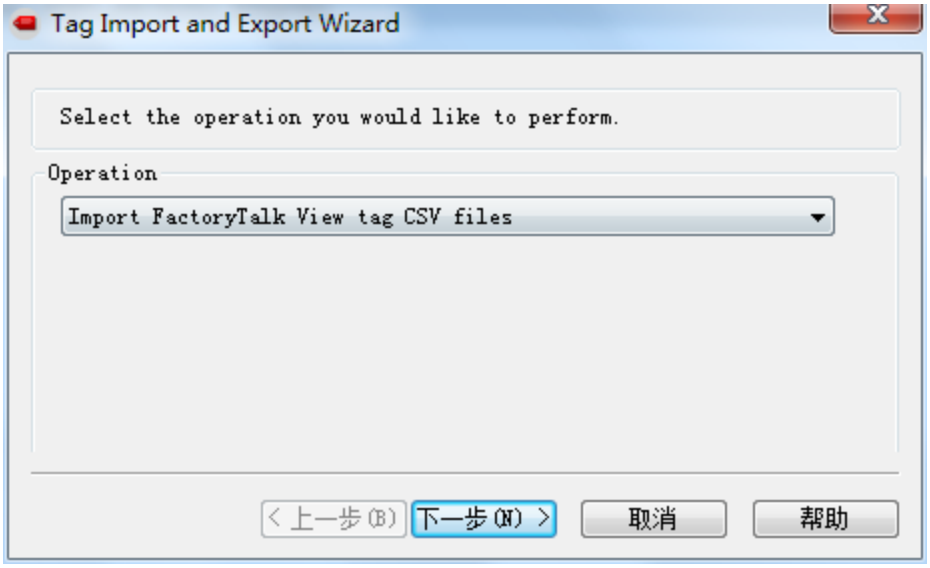
找到这个标签表，复制粘贴就可以任意修改。



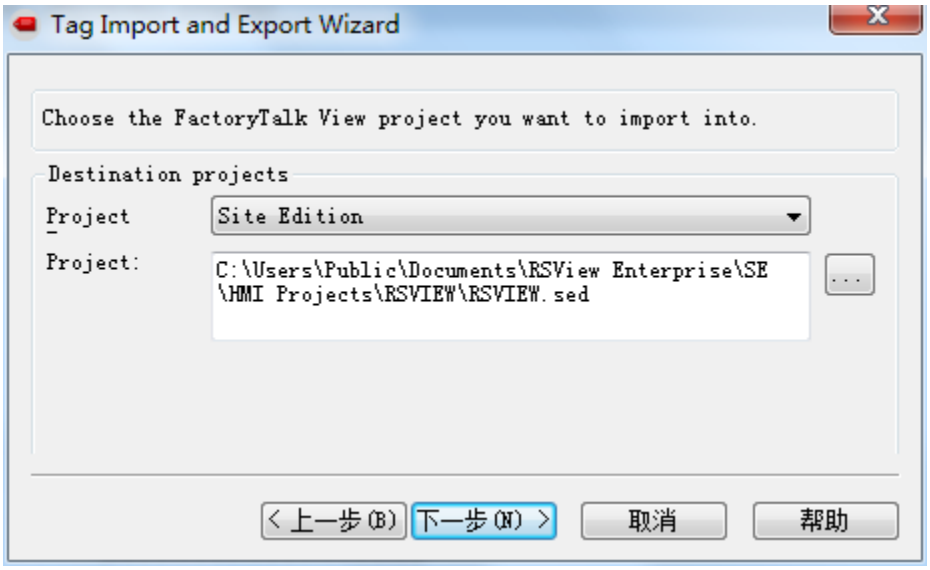

RSVIEW-Tags.CSV - Microsoft Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	;Tag Type	Tag Name	Tag Desc	Read Onl	Data Sou	Security	Alarmed	Native T	Value Ty	Min Anal	Max Anal	Initial	Scale	Offset	Dead
2	;###002 - THIS LINE CONTAINS VERSION INFORMATION. DO NOT REMOVE!!!														
3															
4	;Folders Section (Must define folders before tags)														
5															
6	;Tag Section														
7	D	HMI_BOOL40000		F	D	*	F								
8	A	HMI_DINT1250		F	D	*	F	D	L	-2.1E+09	2.15E+09	0	1	0	
9	A	HMI_INT0		F	D	*	F	D	L	-32768	32767	0	1	0	
10	A	HMI_INT2500		F	D	*	F	D	L	-32768	32767	0	1	0	
11	A	HMI_INT5000		F	D	*	F	D	L	-32768	32767	0	1	0	
12	A	HMI_REAL1250		F	D	*	F	D	L	0	10000	0	1	0	
13	A	HMI_SINT5000		F	D	*	F	D	L	-128	127	0	1	0	
14															

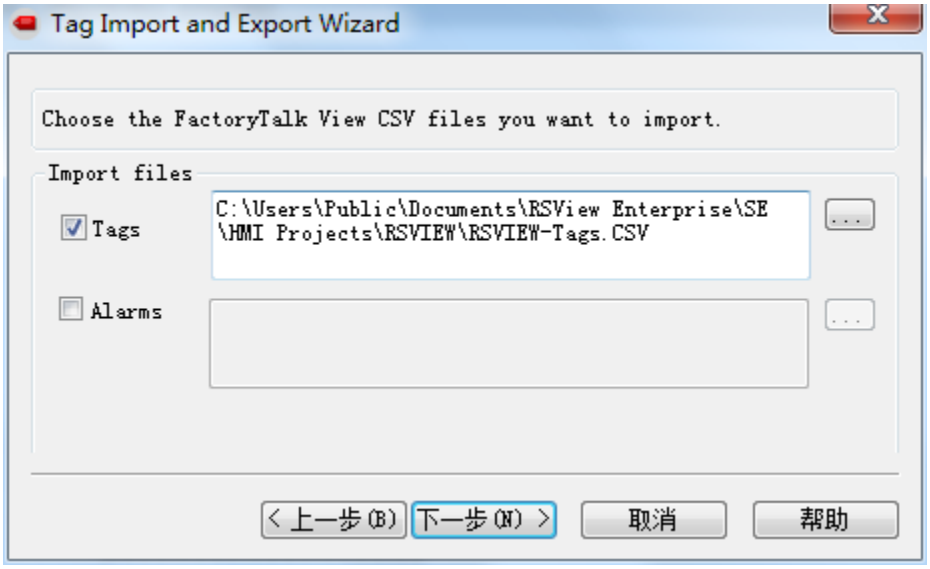
修改完，导入回来。



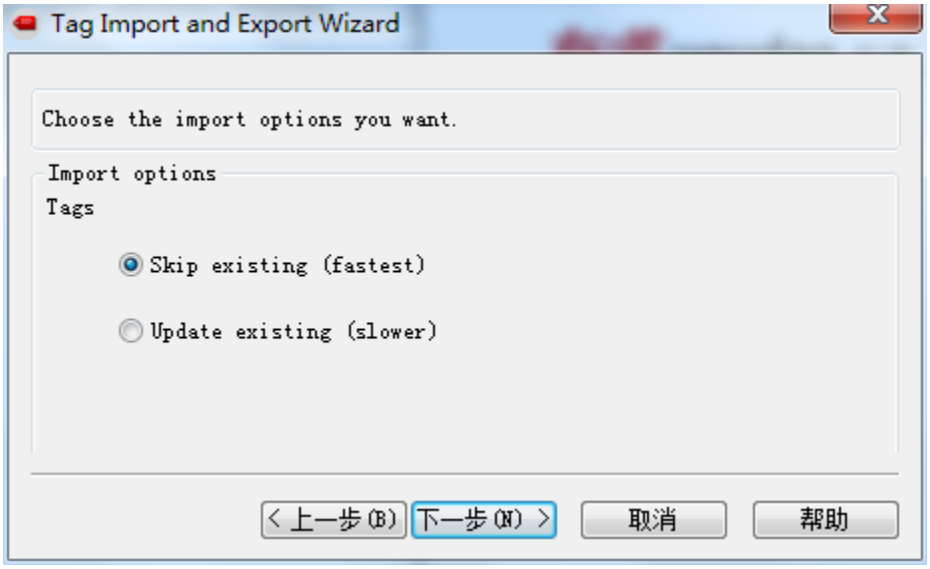
选择目标导入项目。

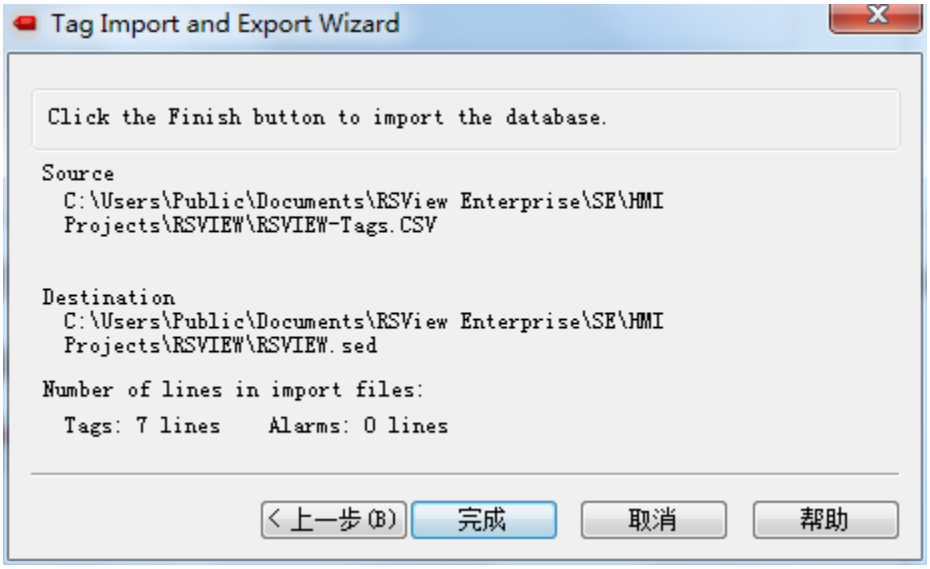


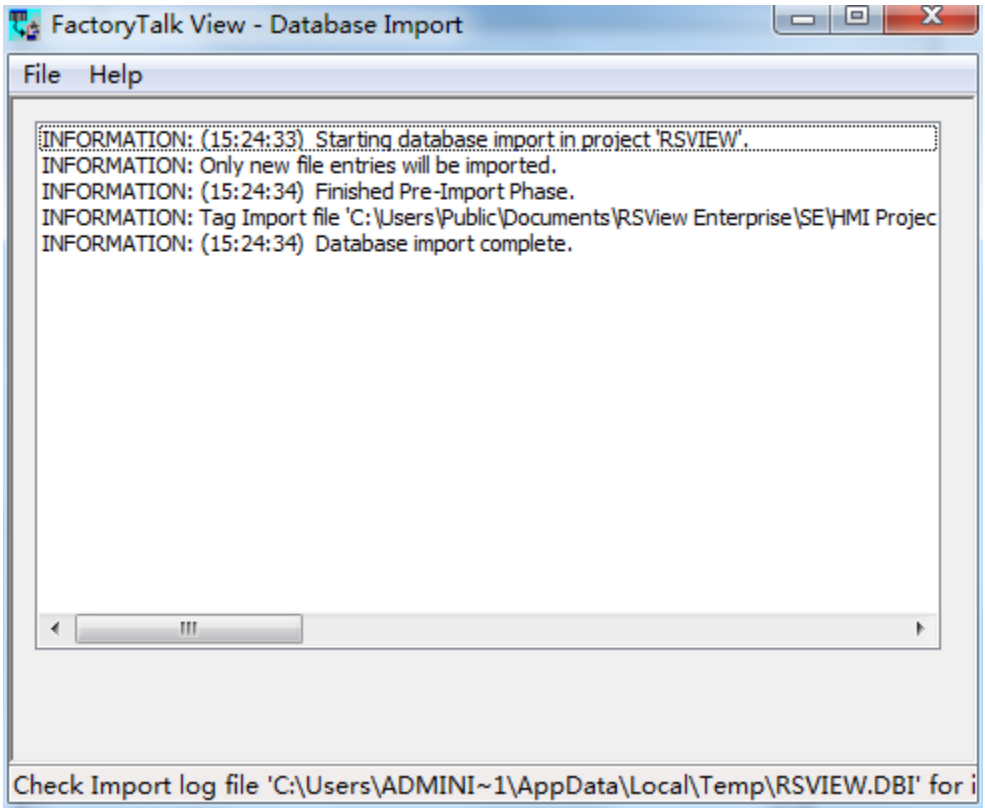
选择目标导入变量表。



选择跳过现有的标签，可以看到成功导入一个在 EXCEL 里面编辑的标签。







OPC 连接网关就此结束 。
鉴于这只是一个测试工具，可不必理会 RSI-OPC Test Client。

其他版本

- 本案例介绍了BEACON品牌 BT-EN-XXX系列的网关从上位机直接读取网关内部数据。并适包含EtherNet/IP协议的产品。

联系我们

如果在使用过程中有更多的问题，可以通过以下方式联系我们获得支持。

客户服务热线（中国大陆）	4008-710-598
技术支持	support@beacongt.com
亚太区销售	asia@beacongt.com
北美区销售	usa@beacongt.com