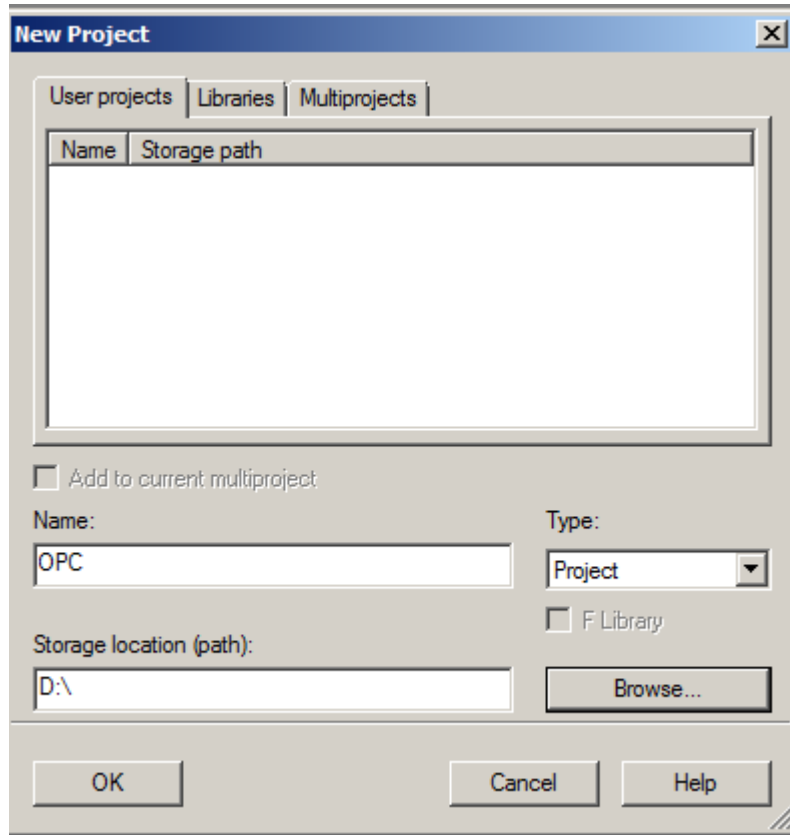
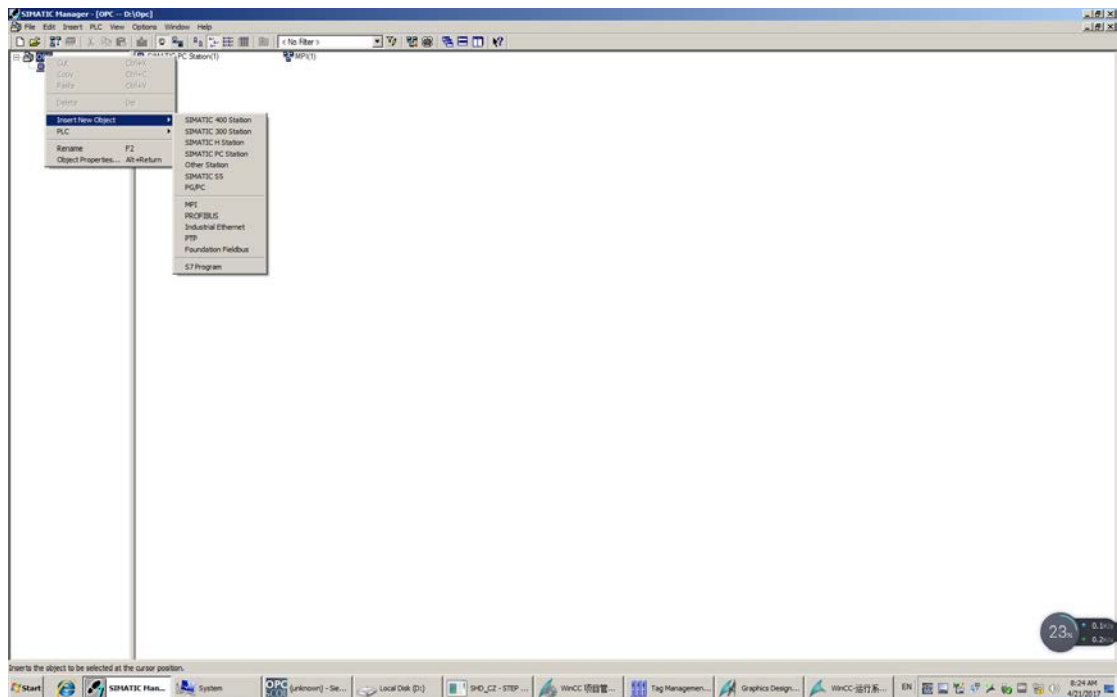


S7-200SMART PLC 与 SIMATIC NET OPC 通讯方法

1.在 STEP7 软件下，创建项目

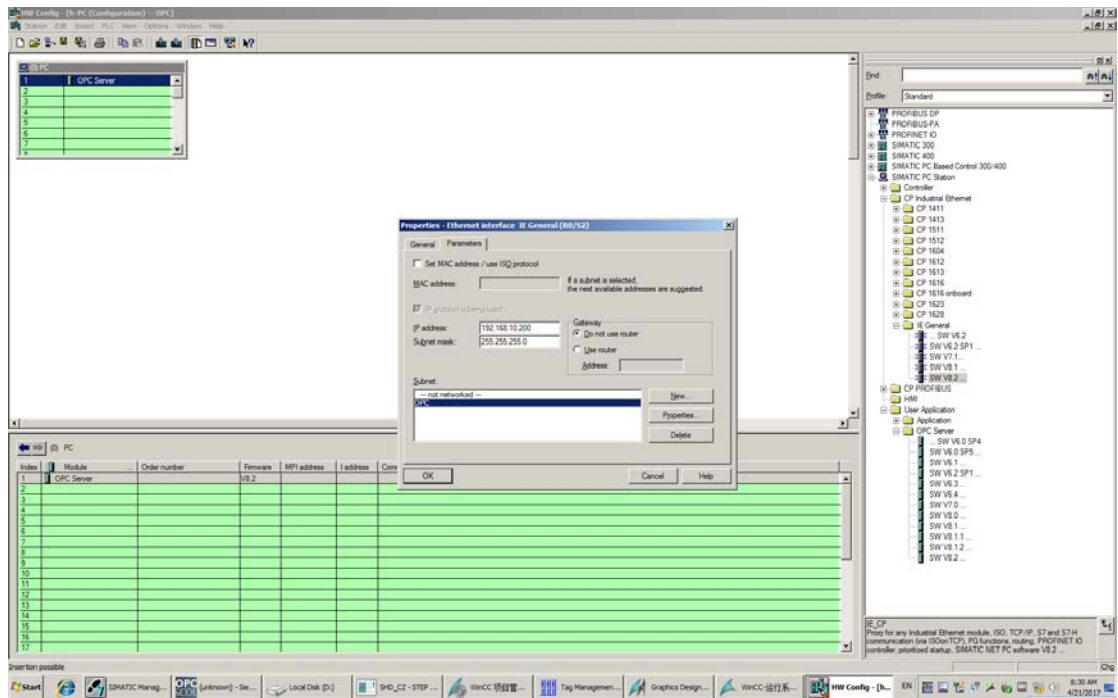


2.插入 PC Station

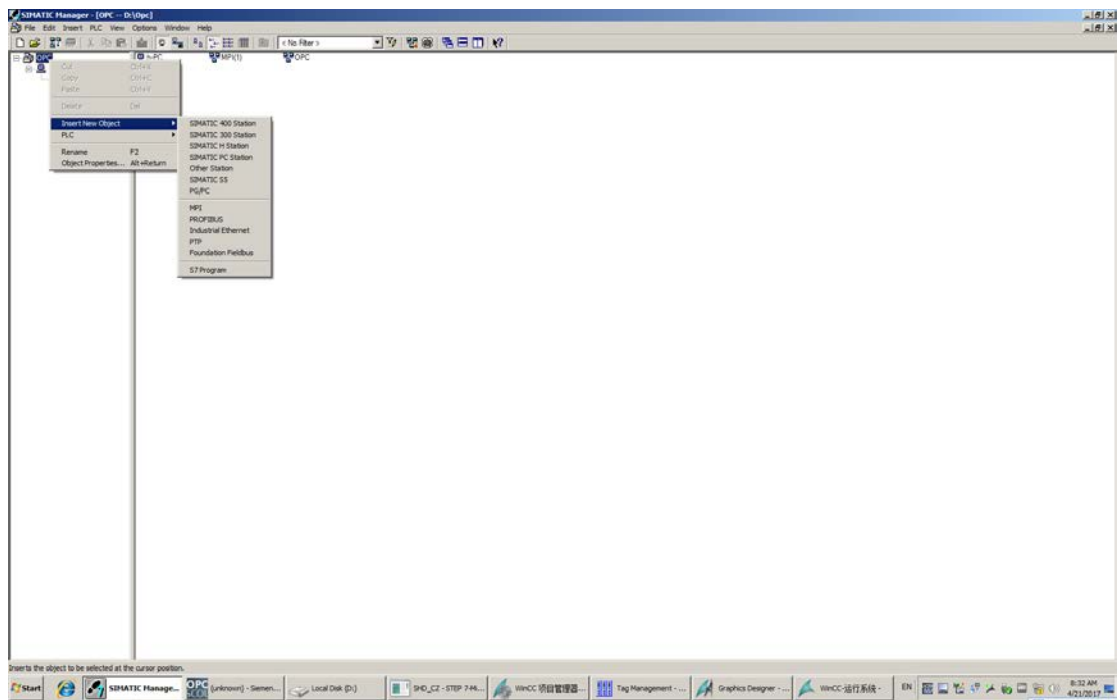


重命名 PC Station，与本地计算机名相同。

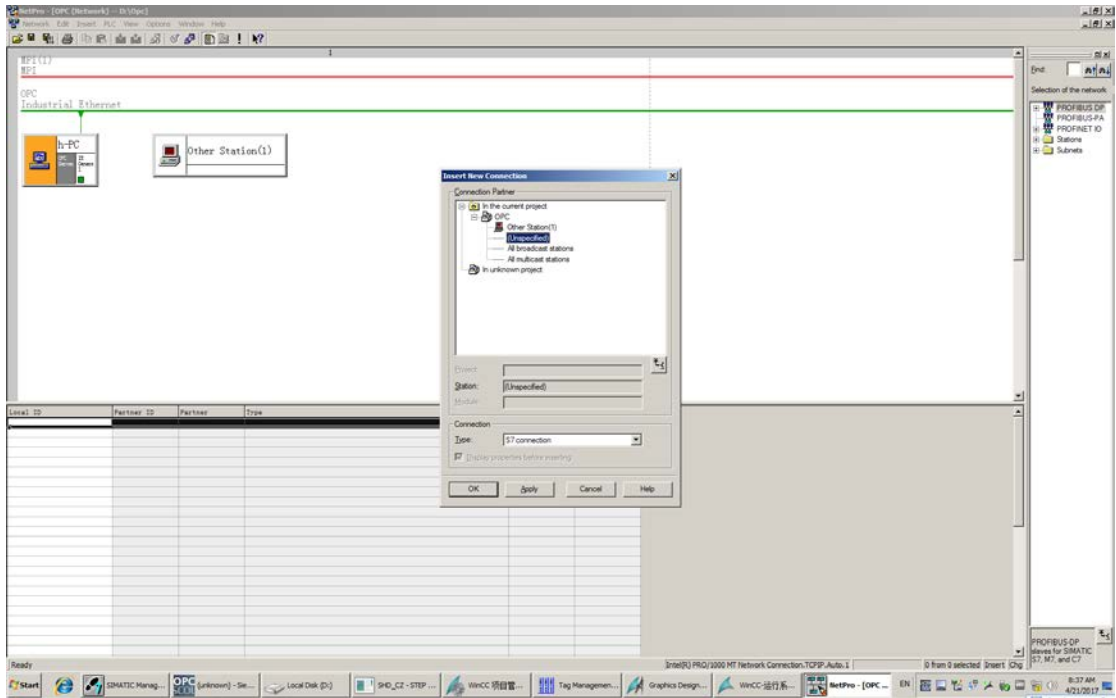
3.组态 PC 站，添加 OPC SERVER 和 IE General，新建网络连接，编译保存。



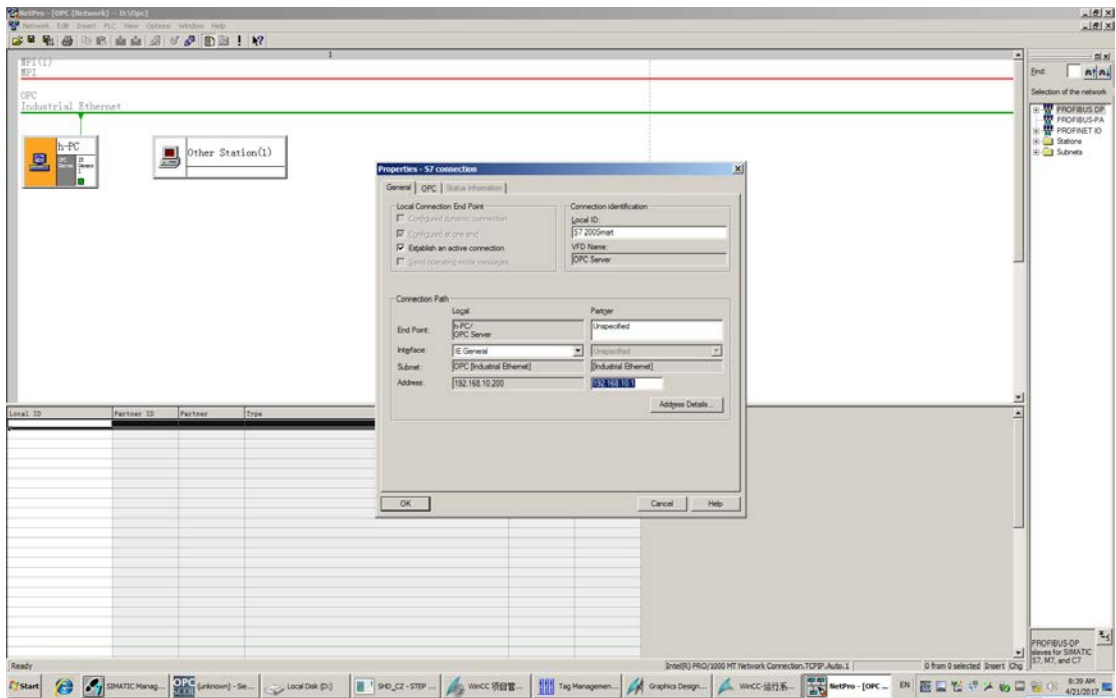
4.在 STEP7 项目里，添加 Other Station



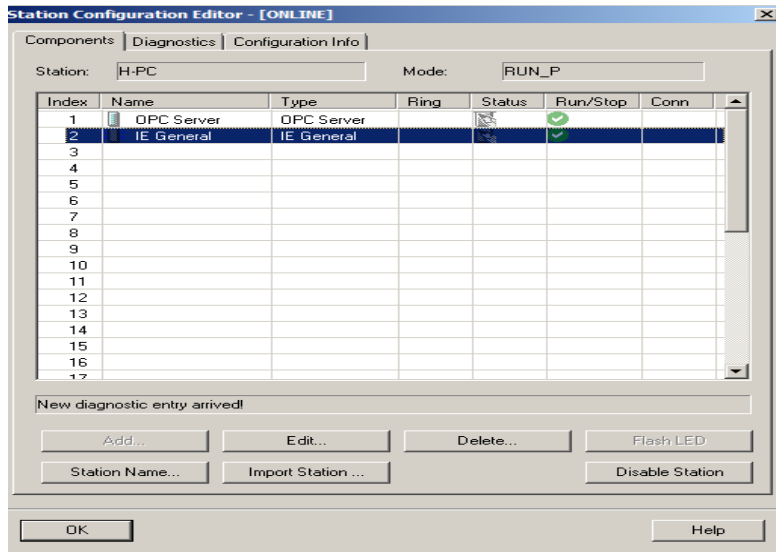
5.打开 configure NetWork,组态 Netpro 。创建 S7 连接，并重命名。



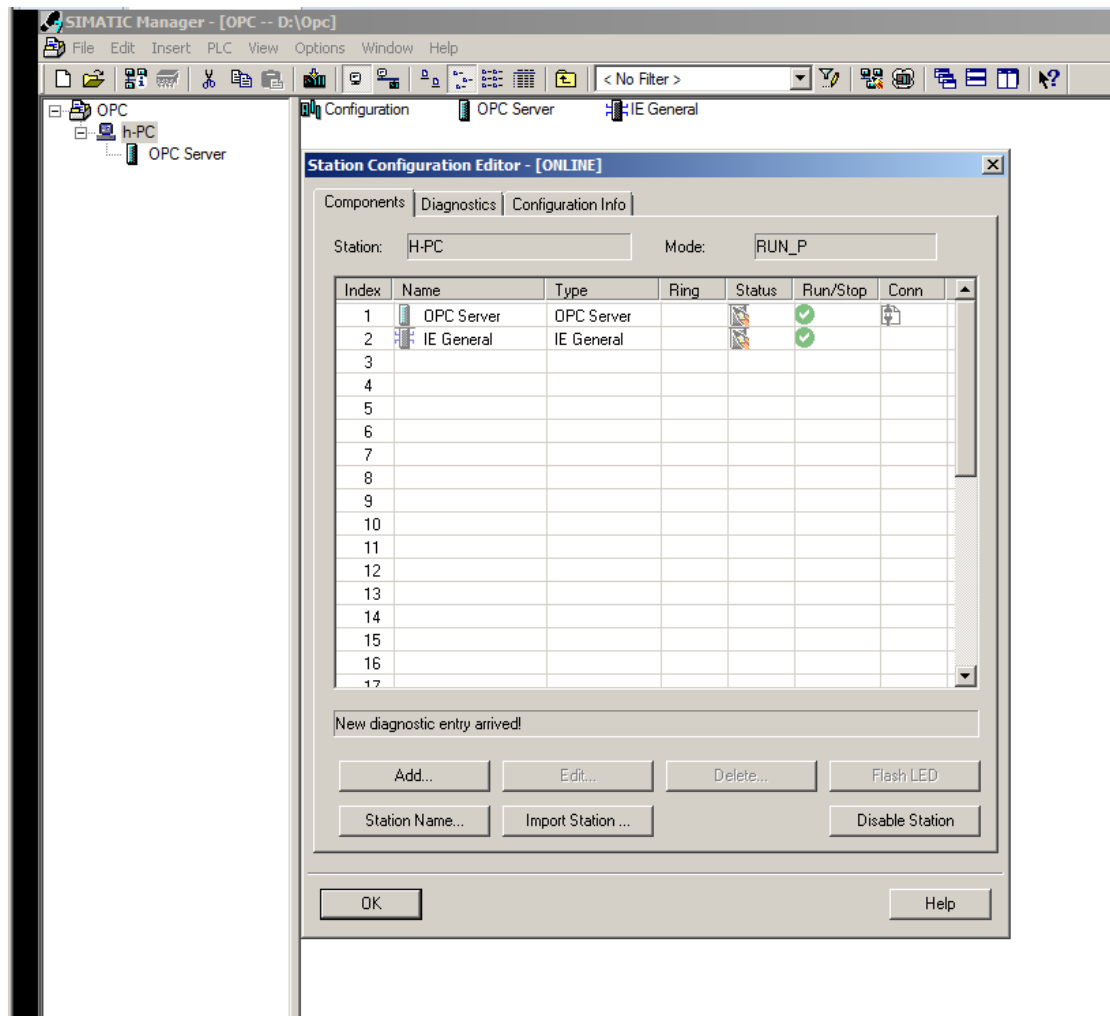
添加 S7-200Smart IP 地址。



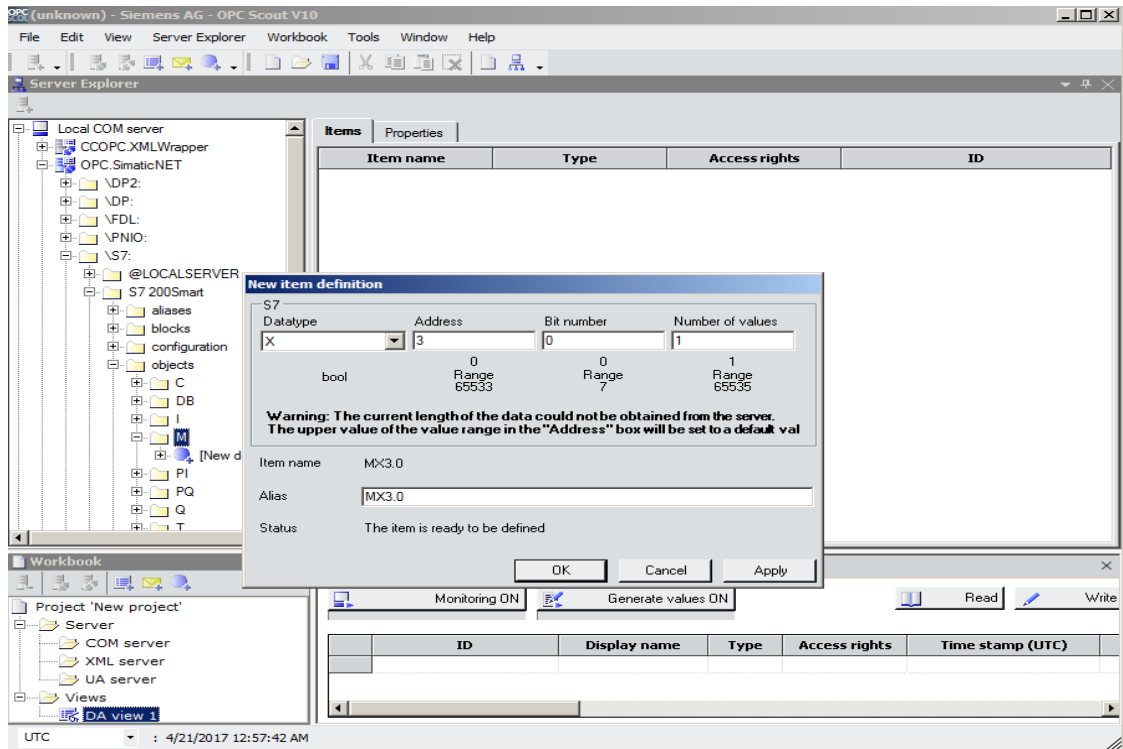
6.组态 Station Configuration Editor



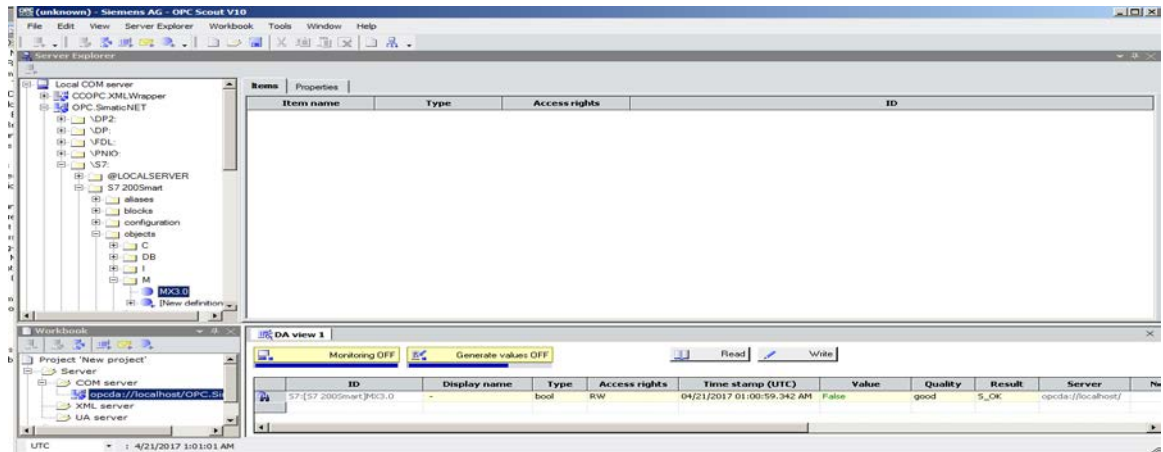
7.在 STEP7 下，下载整个站点，并确认连接正常。



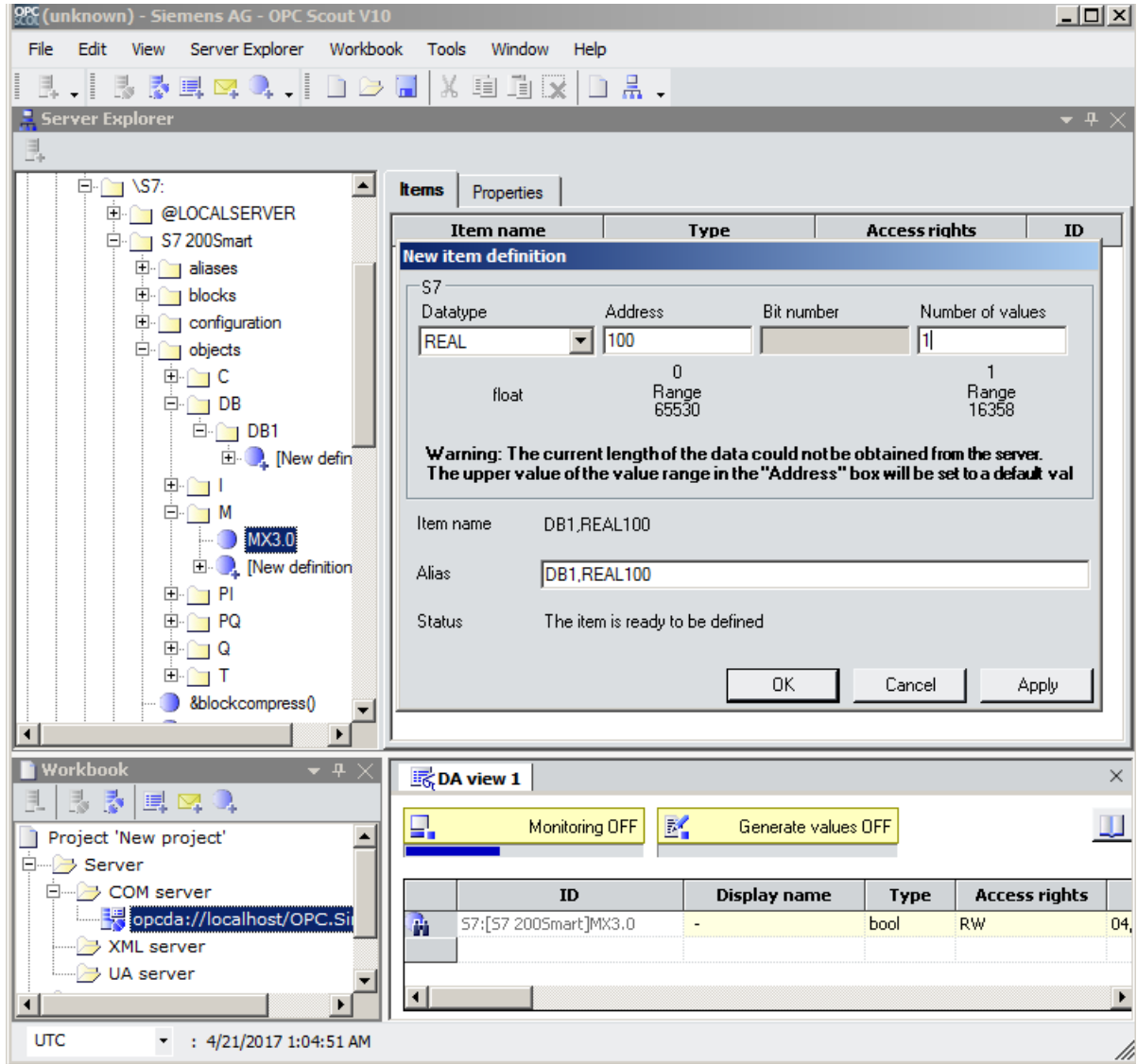
8.在 SIMATIC NET OPC Scout V10 测试 OPC 连接情况
找到 PLC 项目中，需要与上位机通讯的点，比如 M3.0



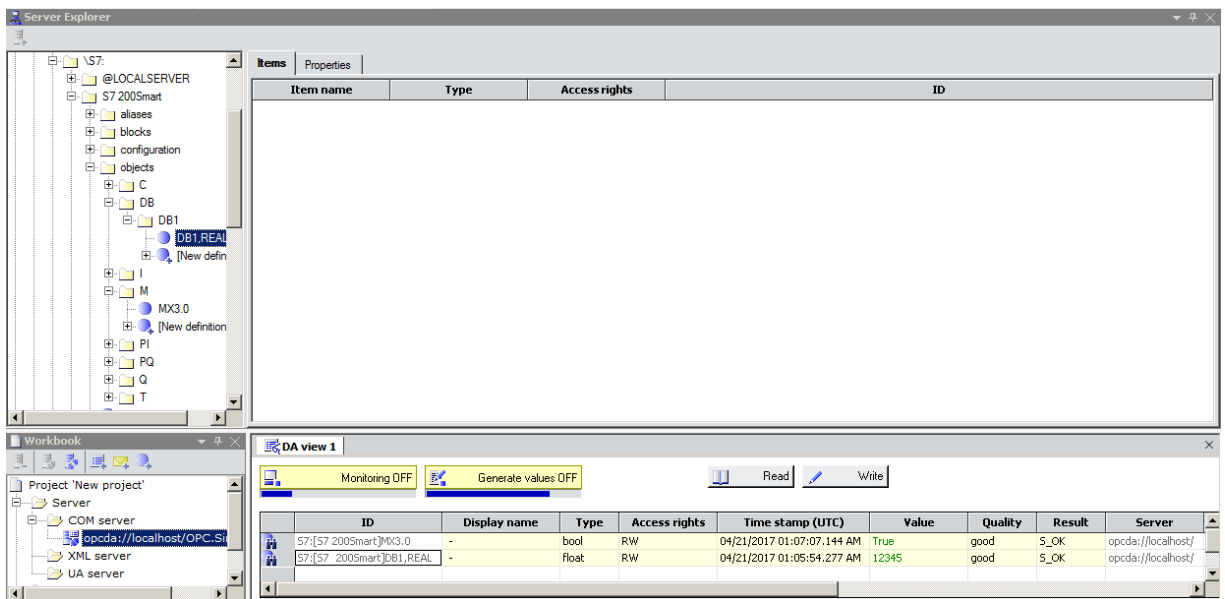
建立好的变量点，拖到测试窗口中，查看测试结果



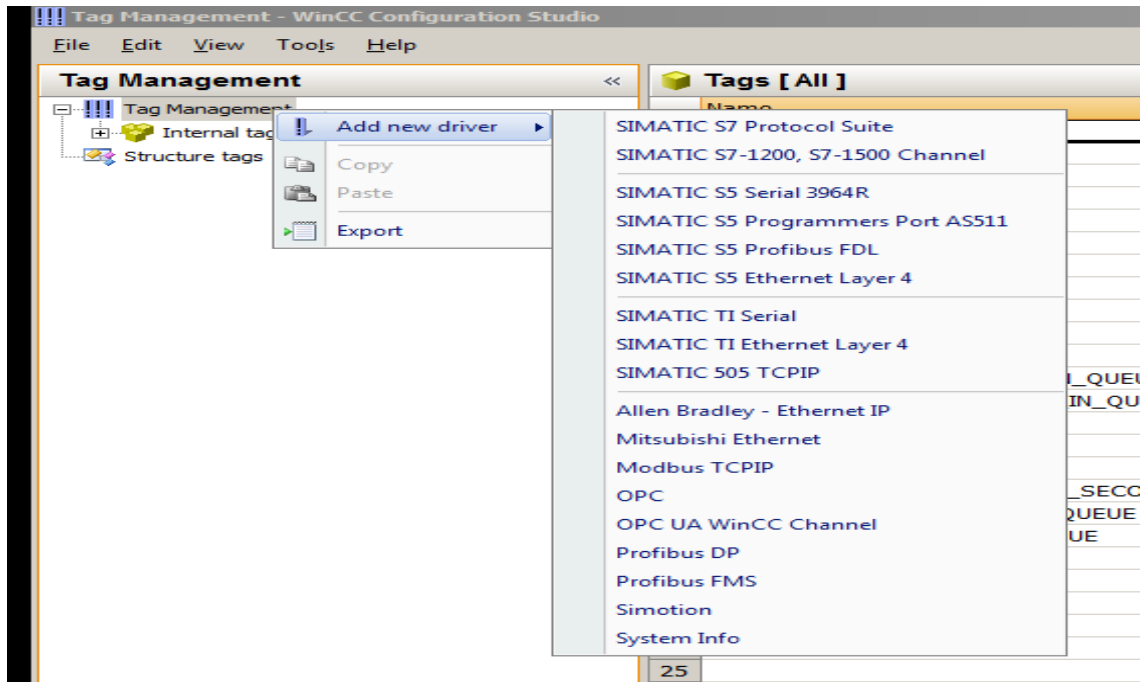
V区的连接，SIMATIC NET 没有 V 区的连接，应该连接到什么地方呢？继续往下看连接 VD100（浮点数）的方法：



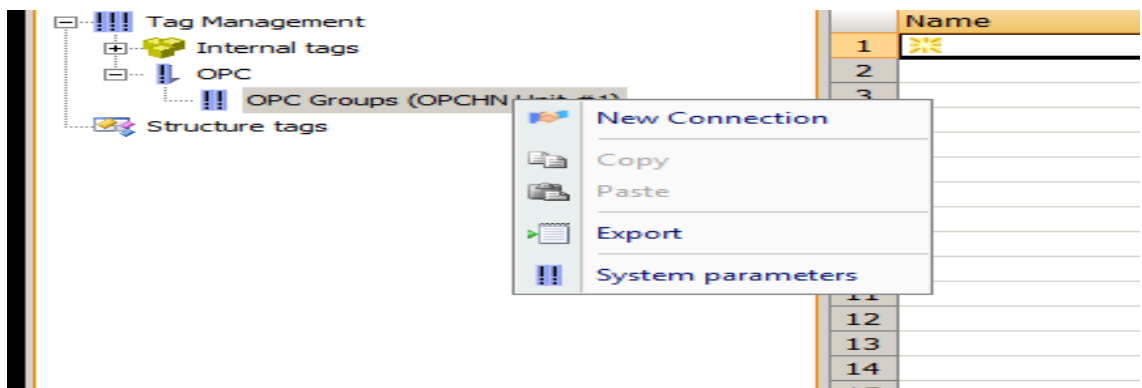
测试 VD100 连接结果



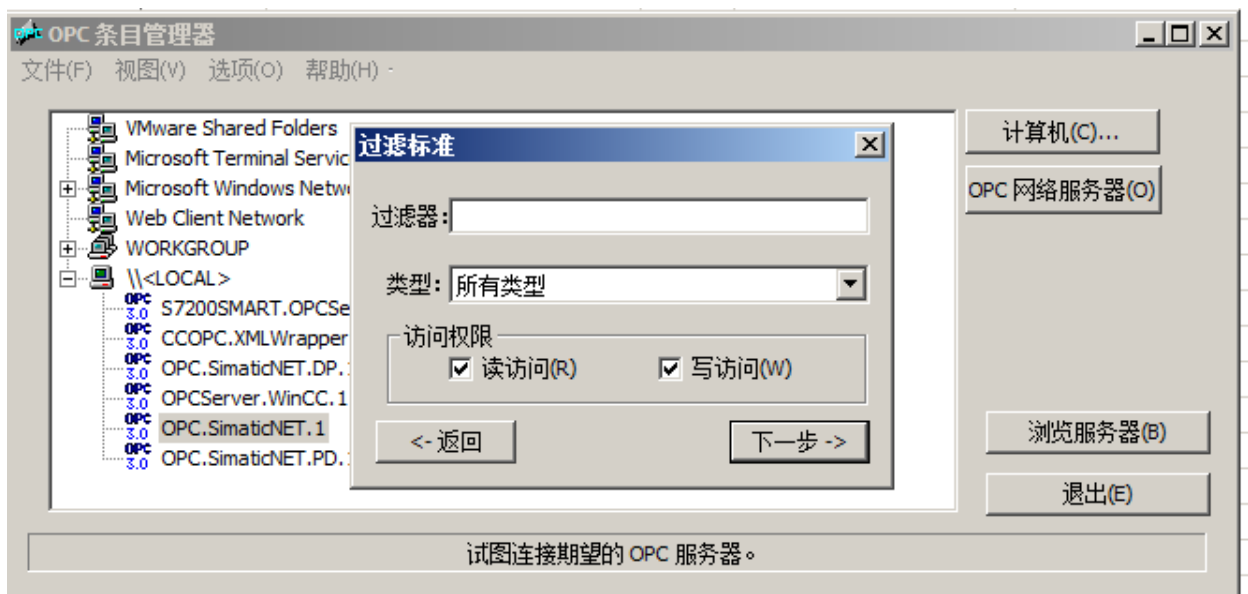
9.在 WinCC 变量管理器中，添加 OPC 驱动

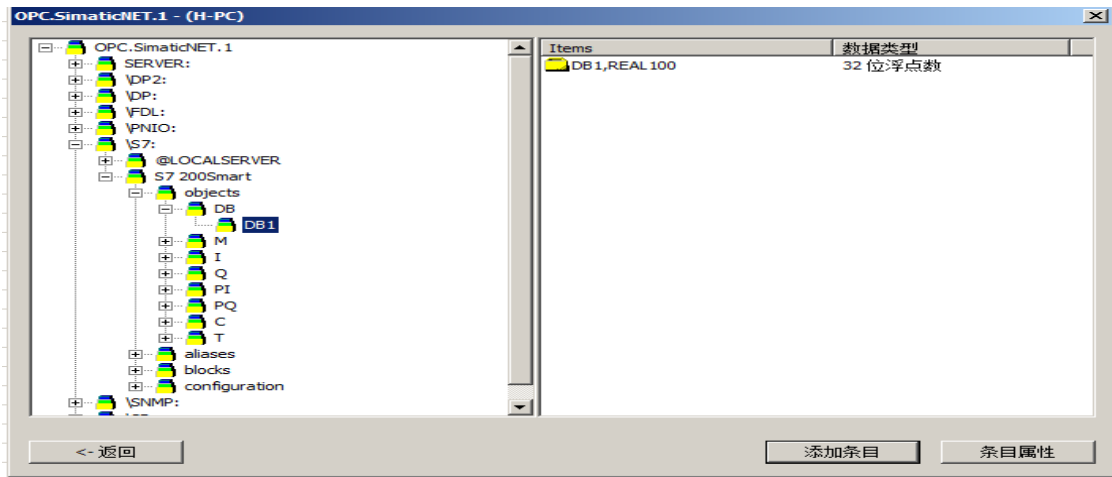


右键系统参数

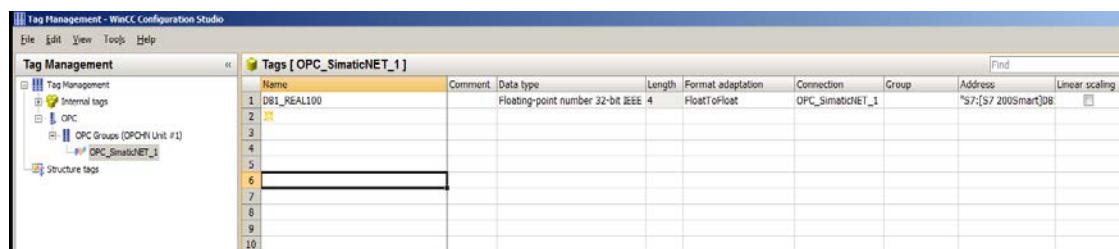
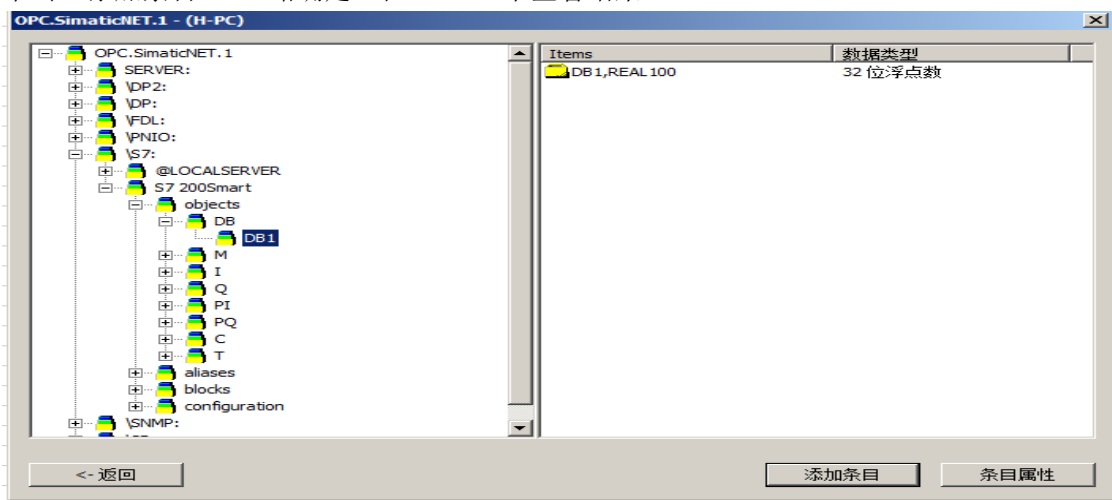


双击本地，并浏览 OPC SimaticNET.1，选中读访问、写访问。单击下一步。





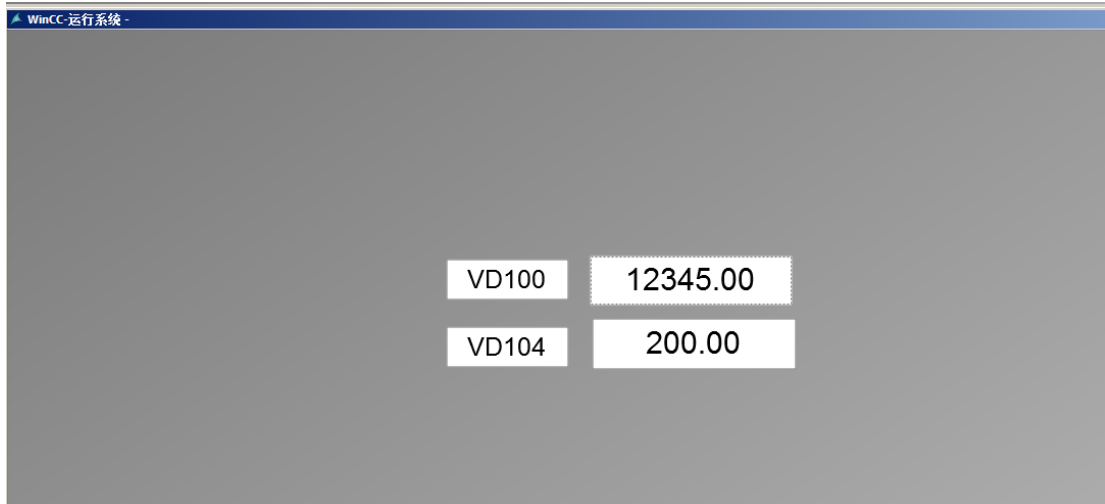
单击“添加条目”，一路确定，在 WINCC 中查看结果



如果此处，需要使用 VD104，则直接在 WinCC 变量管理器中直接添加

Tags [OPC_SimaticNET_1]								
Name	Comment	Data type	Length	Format adaptation	Connection	Group	Address	Linear scaling
1 DB1_REAL100		Floating-point number 32-bit IEEE	4	FloatToFloat	OPC_SimaticNET_1		"S7:[S7 200Smart]DB1,REAL100", ""	4
2 DB1_REAL104		Floating-point number 32-bit IEEE	4	FloatToFloat	OPC_SimaticNET_1		"S7:[S7 200Smart]DB1,REAL104", ""	5
3								

测试 WinCC 连接情况



可以在 WinCC 中，手动添加其它数据类型，但要注意数据格式

Tags [OPC Groups (OPCHN Unit #1)]								
	Name	Comment	Data type	Length	Format adaptation	Connection	Group	Address
1	DB1_REAL100		Floating-point number 32-bit IEEE	4	FloatToFloat	OPC_SimaticNET_1		"S7:[S7 200Smart]DB1,REAL100", "", 4
2	DB1_REAL104		Floating-point number 32-bit IEEE	4	FloatToFloat	OPC_SimaticNET_1		"S7:[S7 200Smart]DB1,REAL104", "", 5
3	MX3_0		Binary Tag	1		OPC_SimaticNET_1		"S7:[S7 200Smart]MX3.0", "", 11
4	MX3_1		Binary Tag	1		OPC_SimaticNET_1		"S7:[S7 200Smart]MX3.1", "", 12
5	