How to use OPC server

1. Register OPC server and OPCDAAuto.dll: double-click “Register.bat”.

2. Must run OPC server manually. Because the OPC server for WinGPC 4.0 can not be launched automatically even though there is one OPC client who is connecting to it.

3. How to use the configuration file based on XML format

- Connect to two PLC via one serial port.

<?xml version="1.0"?><DeviceInformation> //XML version and the name of this file(or root node)

<section name="OPCServerInfo">//this section describes the OPC server information.

<setting name="DeviceNumber" value="2"/> // indicate how many devices can be connected to

<setting name="LogFileSize" value="10"/>// indicate how many characters the log file can contain. The unit is MB (1024*1024)

</section>//the end character of the OPC server information

<section name="Device1">// the configuration information of Device 1

<setting name="DriveType" value="WGPCComm"/>

// indicate which driver is used for communication. Now, the OPC server only support //WGPCComm driver. In the future, other driver may be supported, such as the driver for //DeviceNet.

<setting name="DeviceName" value="PLC1"/>// device name.

<setting name="CommunicationProtocol" value = "Serial"/>// use communication protocol to connect this device

<setting name="Port" value="0"/>// Serial port number. The index is based on zero. For example, value 0 means COM1.

<setting name="Baud" value="9600"/>// baud rate for serial communication

<setting name="Rs232Only" value="1"/>

<setting name="CPUID" value="3"/>// CPU ID for PLC

<setting name="LinkOnline" value="0"/>

</section>// the end character of the device 1 information

<section name="Device2">// the configuration information of Device 2

<setting name="DriveType" value="WGPCComm"/>// indicate which driver is used for communication.

<setting name="DeviceName" value="PLC3"/>// device name.

<setting name="CommunicationProtocol" value = "Serial"/>// use communication protocol to connect this device

<setting name="Port" value="0"/>// Serial port number

<setting name="Baud" value="9600"/>// baud rate for serial communication

<setting name="Rs232Only" value="1"/>

<setting name="CPUID" value="3"/>// CPU ID for PLC

<setting name="LinkOnline" value="0"/>

</section>// the end character of the device 2 information

</DeviceInfomation>// the end character of the configuration file information

- Connect two PLC via two serial com port.

<?xml version="1.0"?><DeviceInformation> //XML version and the name of this file(or root node)

<section name="OPCServerInfo">//this section describes the OPC server information.

<setting name="DeviceNumber" value="2"/> // indicate how many devices can be connected to

<setting name="LogFileSize" value="10"/>// indicate how many characters the log file can contain. The unit is MB (1024*1024)

</section>//the end character of the OPC server information

<section name="Device1">// the configuration information of Device 1

<setting name="DriveType" value="WGPCComm"/>

// indicate which driver is used for communication. Now, the OPC server only support //WGPCComm driver. In the future, other driver may be supported, such as the driver for //DeviceNet.

<setting name="DeviceName" value="PLC1"/>// device name.

<setting name="CommunicationProtocol" value = "Serial"/>// use communication protocol to connect this device

<setting name="Port" value="0"/>// Serial port number. The index is based on zero. For example, value 0 means COM1.

<setting name="Baud" value="9600"/>// baud rate for serial communication

<setting name="Rs232Only" value="1"/>

<setting name="CPUID" value="3"/>// CPU ID for PLC

<setting name="LinkOnline" value="0"/>

</section>// the end character of the device 1 information

<section name="Device2">// the configuration information of Device 2

<setting name="DriveType" value="WGPCComm"/>// indicate which driver is used for communication.

<setting name="DeviceName" value="PLC3"/>// device name.

<setting name="CommunicationProtocol" value = "Serial"/>// use communication protocol to connect this device

<setting name="Port" value="1"/>// Serial port number

<setting name="Baud" value="9600"/>// baud rate for serial communication

<setting name="Rs232Only" value="1"/>

<setting name="CPUID" value="3"/>// CPU ID for PLC

<setting name="LinkOnline" value="0"/>

</section>// the end character of the device 2 information

</DeviceInfomation>// the end character of the configuration file information

4. If no device is connected to successfully, the OPC server exists automatically.
5. There are two log files, which is located in the same directory as the OPC server executable program. The file names are log1_OPC.txt and log2_OPC.txt respectively. Anyone can not open them when the OPC server is running. The user can view them only when stop the OPC server. If the user re-launched the OPC server, these two files are re-written. It means the previous information is lost.

This is a sample file named “Device.xml” for communicating NX-Series PLC.

```
<?xml version="1.0"?><DeviceInformation>
<section name="OPCServerInfo">
<setting name="DeviceNumber" value="2"/>
<setting name="LogFileSize" value="1"/>
</section>
<section name="Device1">
        <setting name="DriveType" value="WGPCComm"/>
        <setting name="DeviceName" value="Device1"/>
        <setting name="CommunicationProtocol" value="Serial"/>
    <setting name="Port" value="0"/>
    <setting name="Baud" value="9600"/>
    <setting name="Rs232Only" value="1"/>
    <setting name="CPUID" value="255"/>
    <setting name="LinkOnline" value="0"/>
</section>


</DeviceInformation>
```