

## TCP Transparent Communication for CBEH Module

### 1 Brief description:

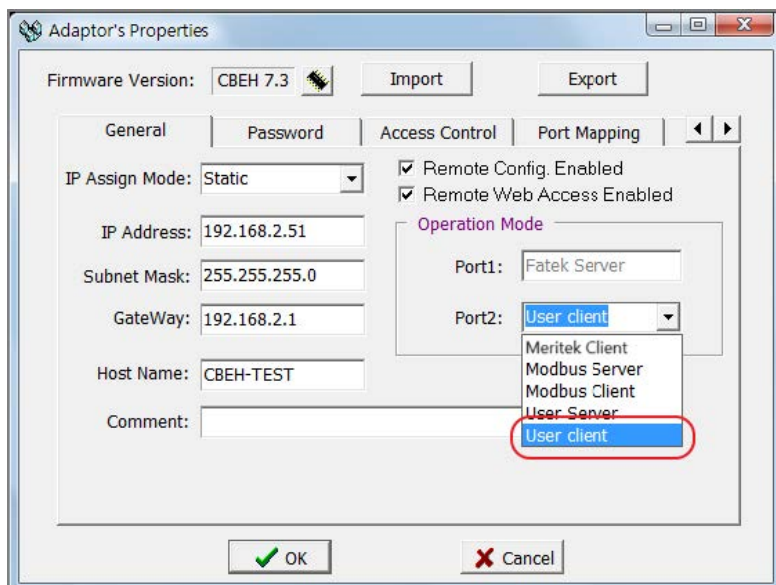
- .Role of CBEH – Server or Client
- .Communication mode – TCP point to point
- .Data flow – half-duplex.
- .Max. packet size – 1024 bytes
- .Network timeout time – 0.5 seconds. After the client transmit the packet that grab from the PLC , it will wait the reply message for 0.5 second. If it has not received the reply message before that period of time then it will stop waiting and go back to get another message from PLC.
- .PLC communication port usage – port2. Data bit length is fixed to 8. When work at transparent mode the functions of Modbus server, Modbus client and Meritek client are not available.
- . The transparent TCP communication mode is supported only for the V7.3 B130109 or later firmware version of CBEH

**2 Setup procedure:** Using the ether\_cfg utility software (V3.3 Build 20130109 or later) to perform the following setup

#### 2.0 Client mode setup

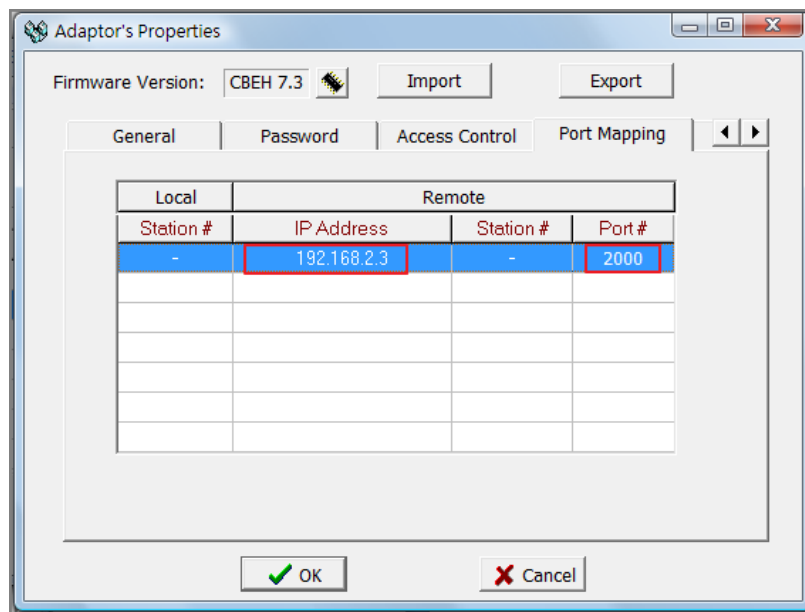
It should note that the TCP transparent communication mode only provides fixed one to one communication

##### 2.0.1 Port2 operation mode setup



Select the "User Client" mode for Port2.

## 2.0.2 Remote server IP and service port number setup



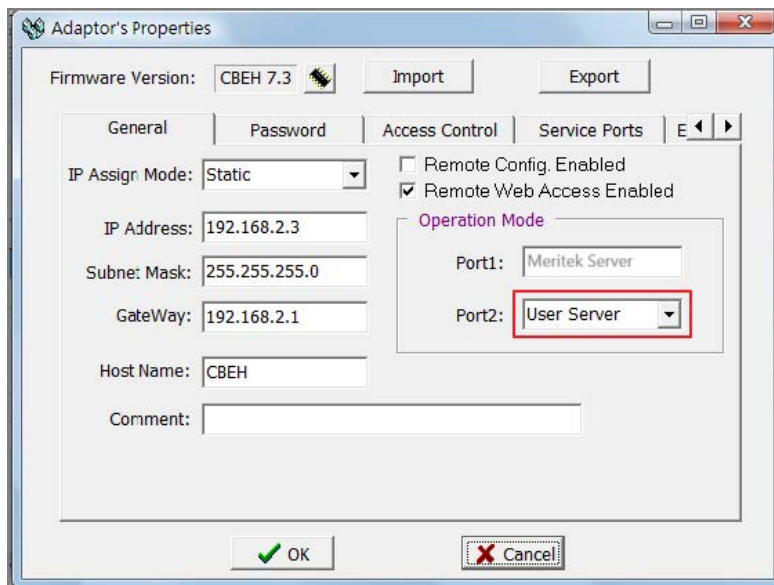
Please add one mapped data entry in **Port Mapping** tab. It is shown in above example that the remote IP is set to 192.168.2.3 and service TCP port number is set to 2000.

## 2.0.3 Application program for client mode

The client mode application should use the CLINK(Function 151) mode 1 function in the ladder program to transmit then receive the data packet. The utilization of the CLINK function block is identical with normal serial port communication but with the additional step described at above section(2.0.2) to setup the remote site IP and service port number.

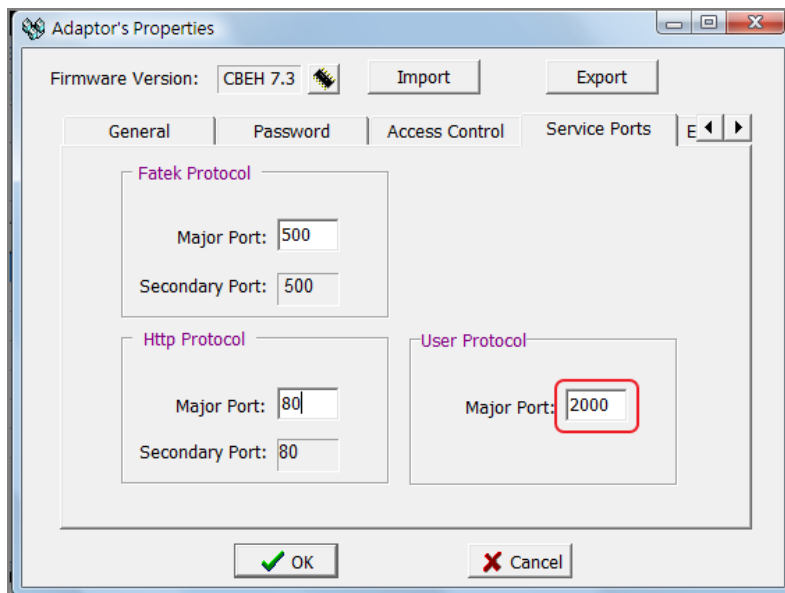
### 3.0 Server Mode Setup

#### 3.0.1 Port2 operation mode setup



Set the port2 operation mode to "User Server"

#### 3.0.2 Service port setup



Locate the Service Ports tab and setup the service port number in the field of Major Port of User Protocol

### **3.0.3 Server mode application**

The server mode application should use the CLINK(Function 151) mode 2 function in the ladder program to receive then transmit the data packet. The utilization of the CLINK function block is identical with normal serial port communication but with the additional step described at above section(3.0.2) to setup the service port number.