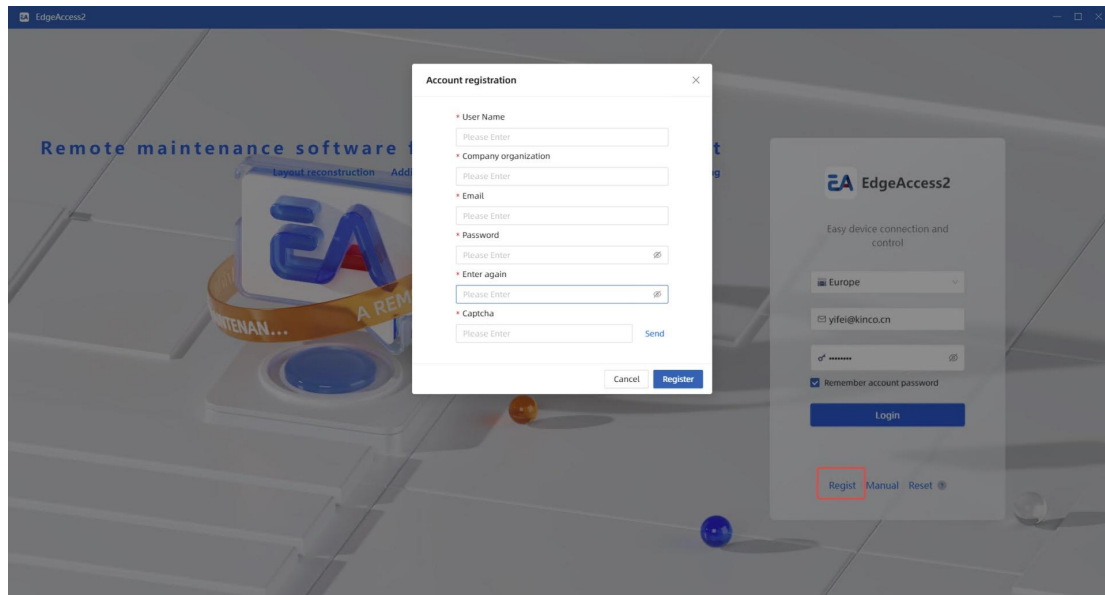


1.Preparation	2
1.1 Register	2
1.2 Change Password	2
1.3 Binding HMI	2
1.4 HMI Connect VPN Network	3
2.EA Features	5
2.1 RTO Mgmt-DTP Tools Update HMI Project	5
2.2 RTO Mgmt-FTP File Operations	7
2.3 RTO Mgmt-Parameter Monitoring HMI Data	8
2.4 RTO Mgmt-VNC Monitor	9
2.5 RTO Mgmt-Independent Desktop	11
2.6 RTO Mgmt-Remote PLC PassThrough	12
2.6.1 Network port PassThrough	13
2.6.2 Serial port passThrough	15
2.7 Device Mgmt	18
2.8 User and Group Management	19
2.9 File Management-Batch Issue File	22
2.9.1 Batch issue project file	22
2.9.2 Batch issue recipe file	24
3. Serial Port PassThrough Detailed Introduction	26
3.1 Open the passThrough tool	26
3.2 Install the virtual serial port driver	27
3.3 Configure PassThrough parameters	28
3.4 PLC software starts PassThrough	29
3.5 Introduction to Serial Port PassThrough by Manufacturers	31
3.5.1 Kinco PLC	31
3.5.2 Mitisubishi FX PLC	33
3.5.3 Omron C series PLC	35
3.5.4 Delta DVP	40
3.5.5 XINJE XC Series	43
3.5.6 FATEK FB Series	45
4. Network Port PassThrough Detailed Introduction	48
4.1 Detailed Introduction	48
4.2 Network topology diagram of network port passThrough	48
4.3 Introduction to Network Port PassThrough by Manufacturers	49
4.3.1 Kinco PLC	49
4.3.2 Siemens - 1500 PLC	52
4.3.3 Inovance AC series PLC	57
4.3.4 VEICHI VC series PLC	59
4.3.5 Mitsubishi FX5U series PLC	62
4.3.6 Omron CP series PLC	67
4.3.7 Omron NX_NJ series PLC	71
4.3.8 Beckhoff TwinCat series PLC	73
4.3.9 Keyence KV-X/KV8000 Series PLC	76

1.Preparation

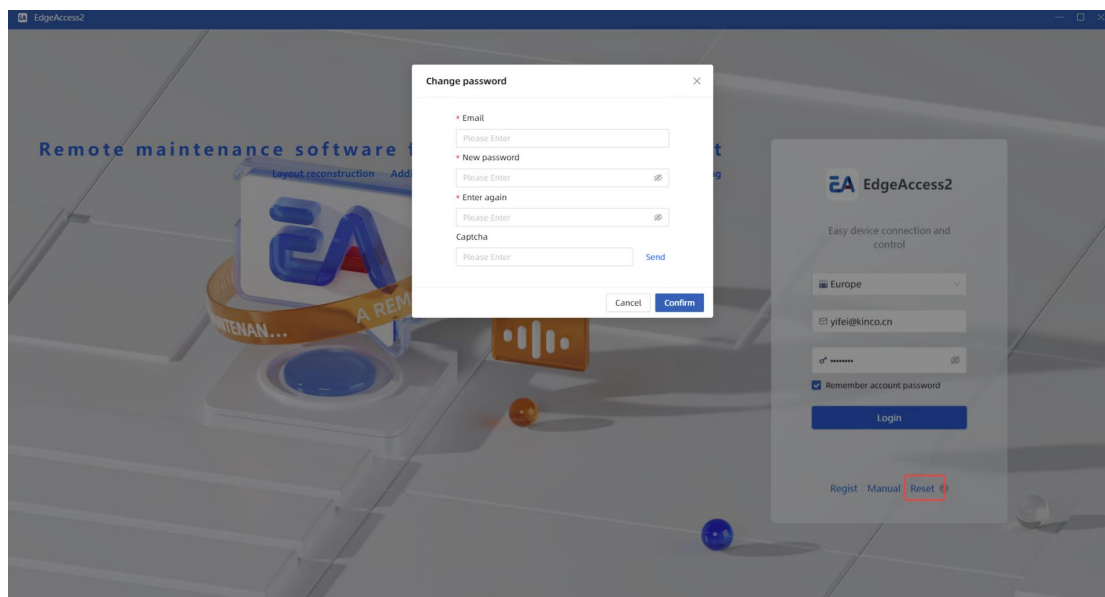
1.1 Register

Open the EA desktop application, click Register, and fill in the relevant information



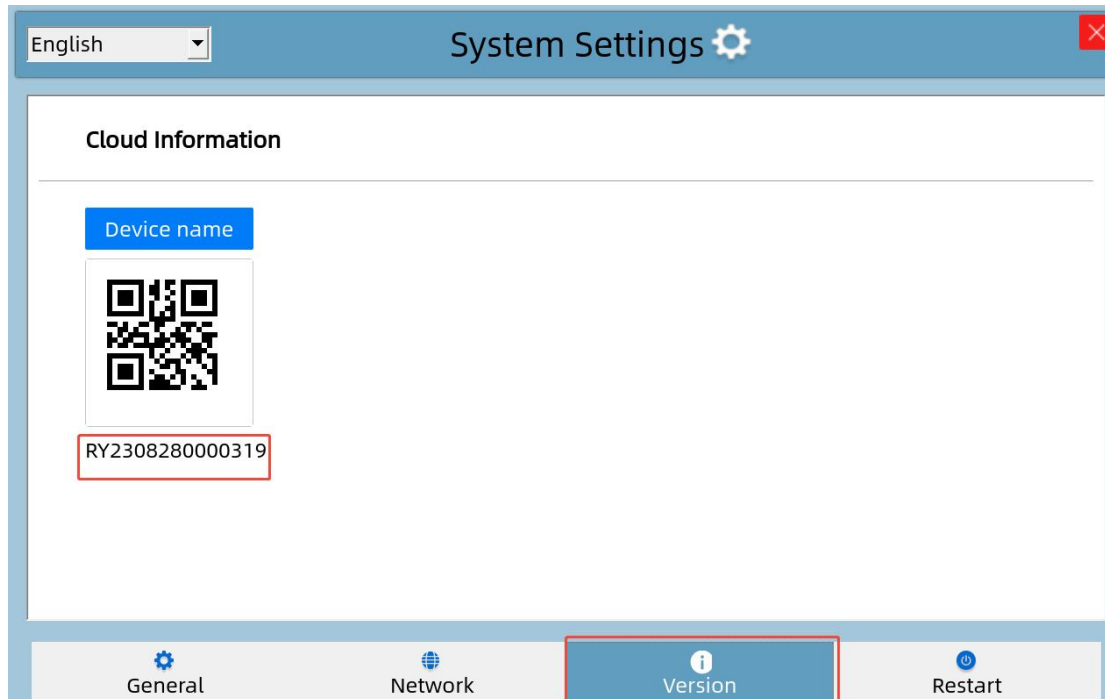
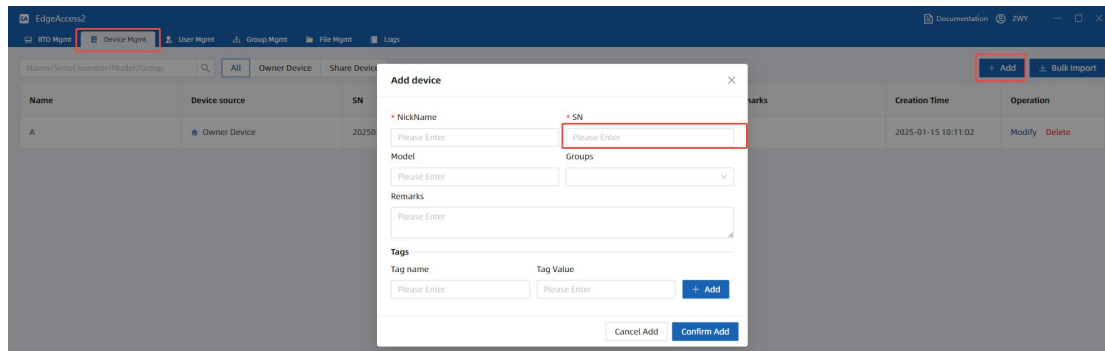
1.2 Change Password

Open the EA desktop application, click Reset, and fill in the relevant information



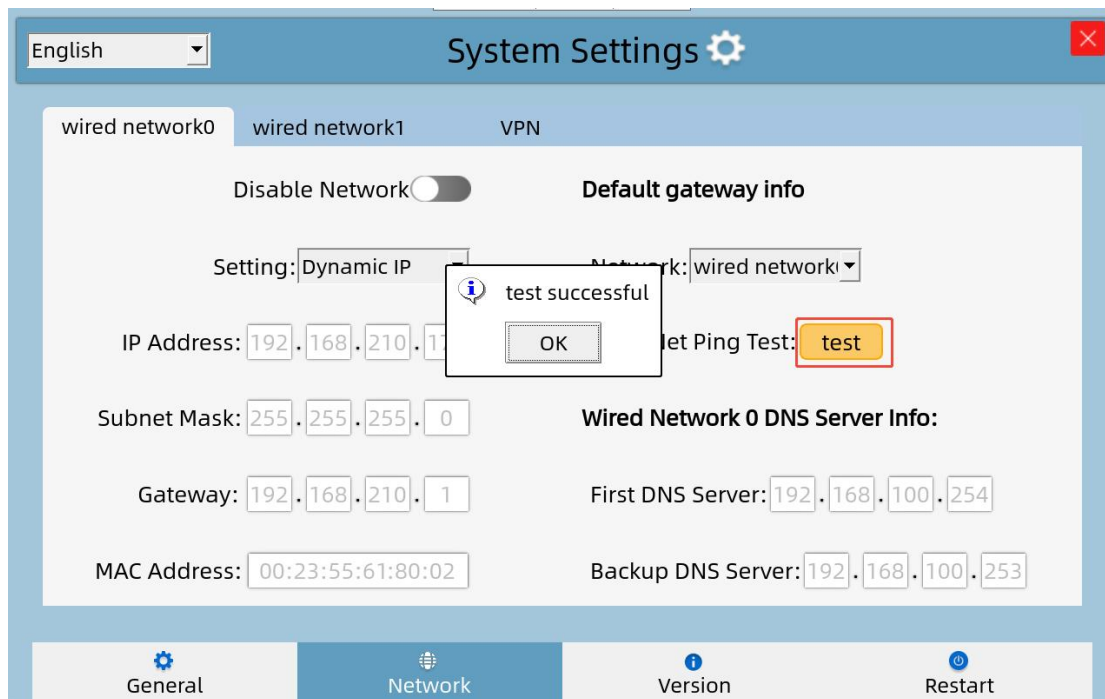
1.3 Binding HMI

Click [Device Management], click [Add], add the 15-digit serial number of the HMI, the device name and model can be set arbitrarily, the 15-digit serial number can be seen in the system settings interface

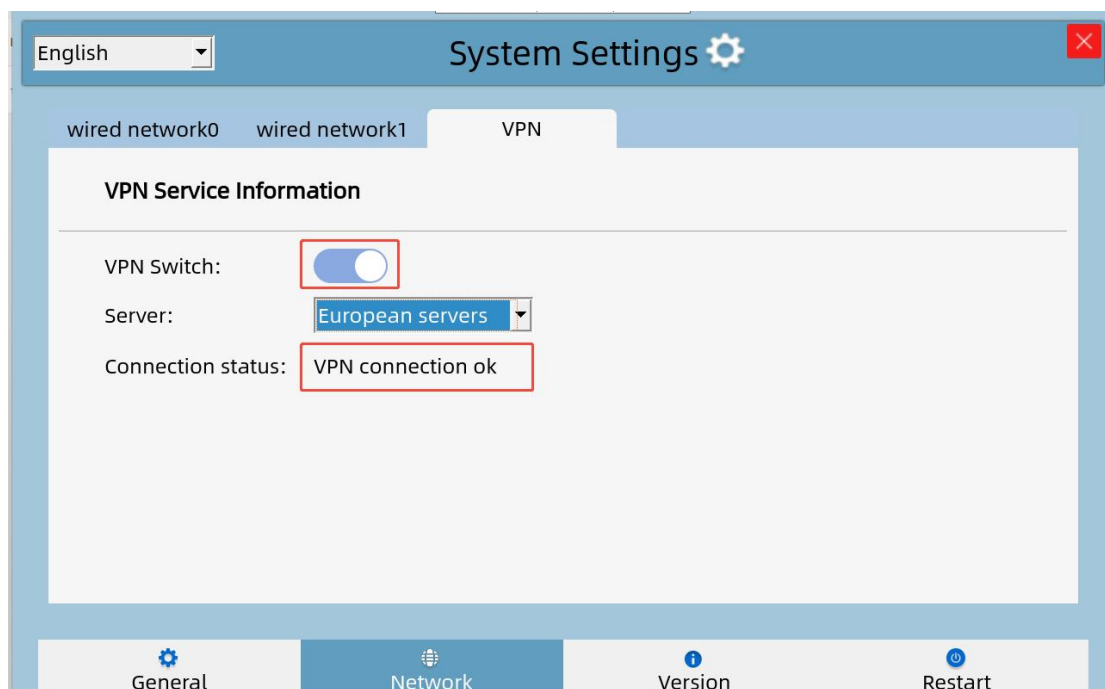


1.4 HMI Connect VPN Network

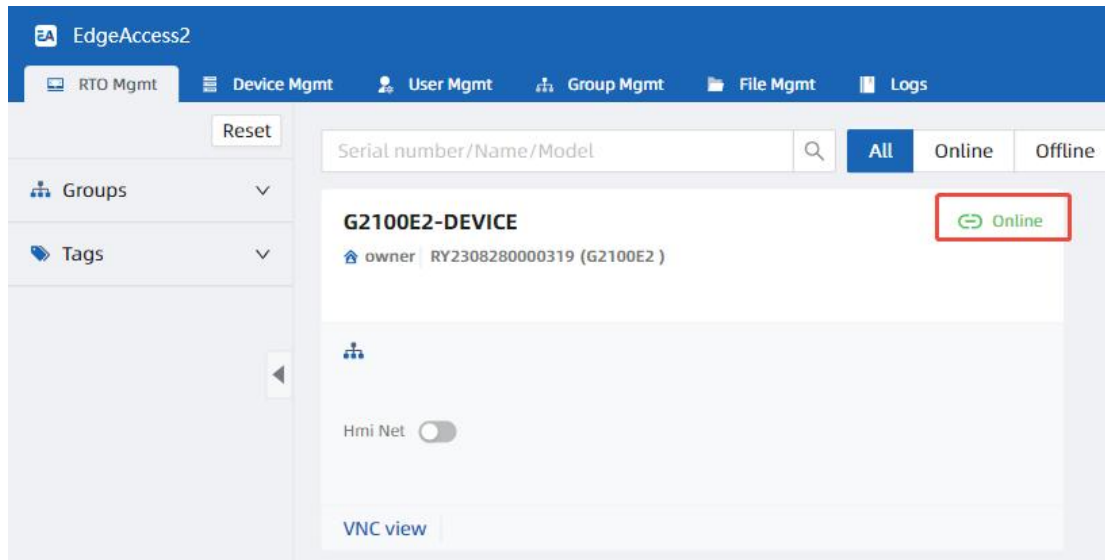
The system setting interface can set the external network. After the setting is completed, click "Test". If the test is successful, you can communicate with the external network



Enter VPN options and turn on VPN



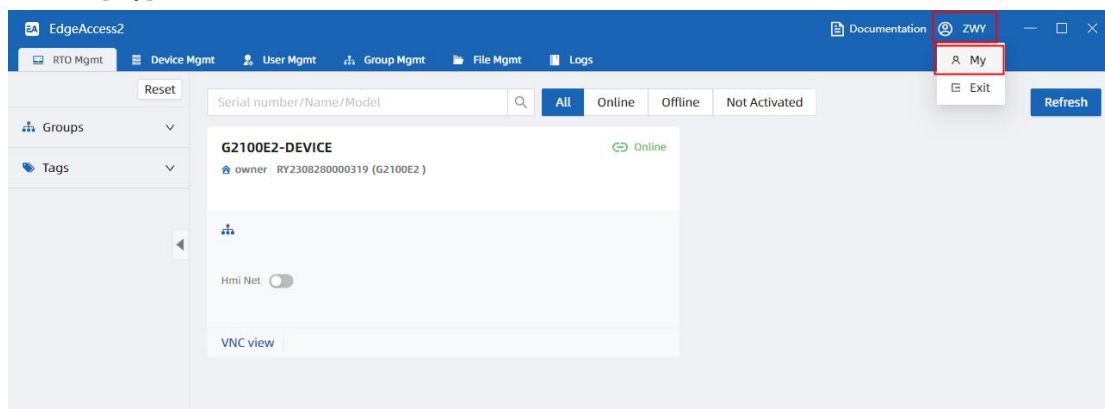
After the connection is successful, you can see that this device is online on EA



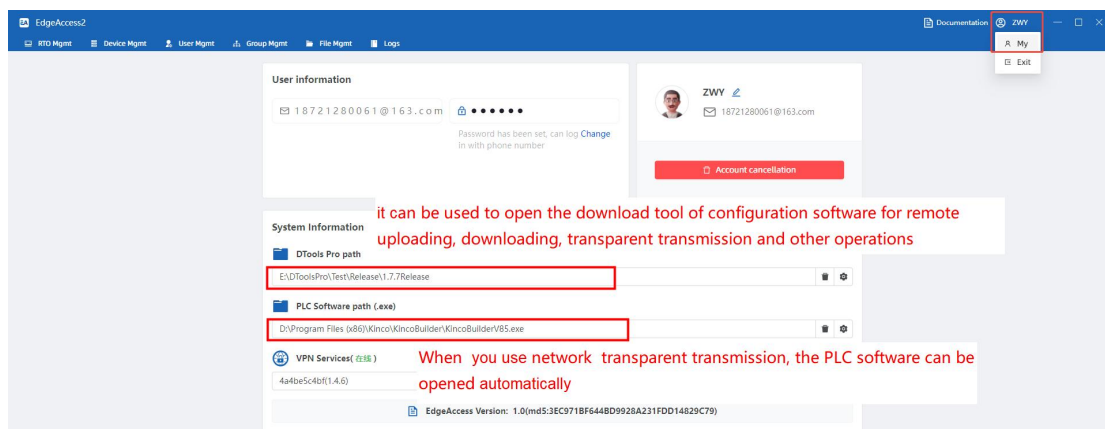
2.EA Features

2.1 RTO Mgmt-DTP Tools Update HMI Project

1.Click [My]



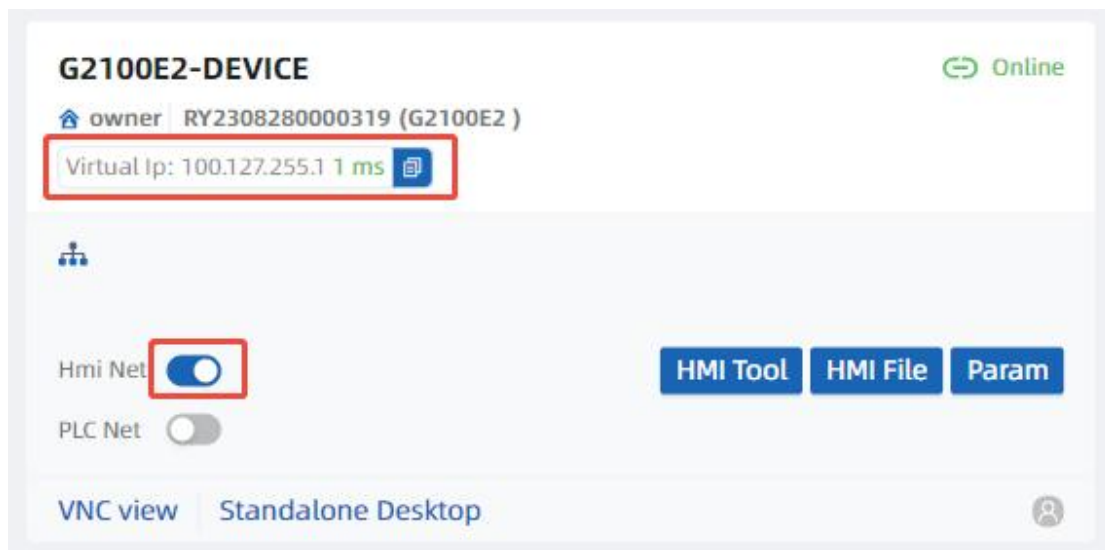
Bind the software installation directory of Kinco DtoolsPro, the PLC software directory of the network port passThrough device



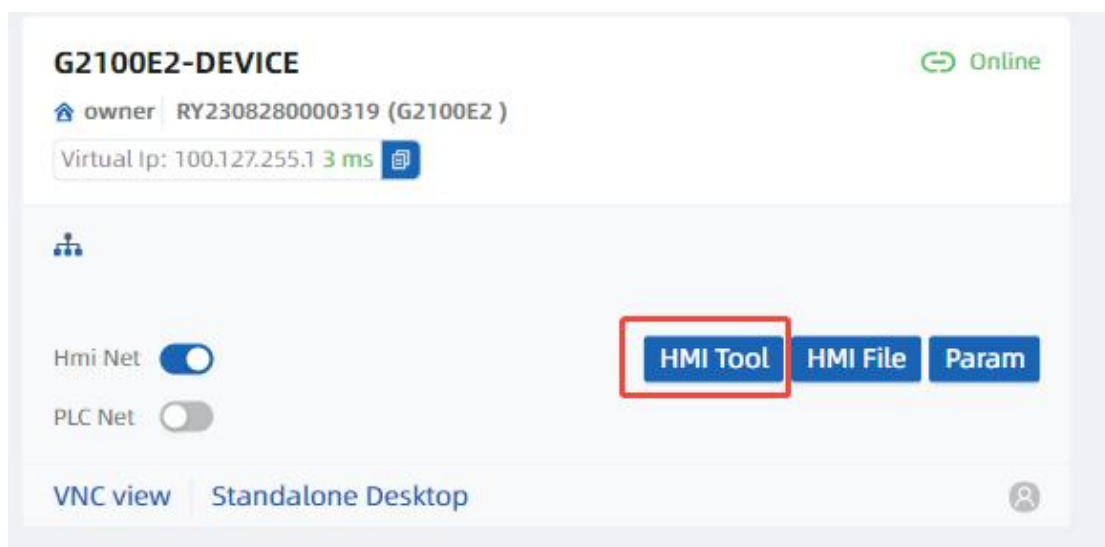
2.Open [HMI Connection] to realize VPN network communication between computer and HMI

After the connection is successful, You can see the VPN virtual IP of the HMI and detect

the network delay between the HMI and the computer in real time



3. Click [HMI Software] to open the DTP-Tools tool to perform operations such as upload, download, and serial port PassThrough



DTP-Tools

Download Upload Version Information System Setting Pass Through Communication

Communication Method

☒ Network Port ☐ USB Port

Designated IP HMI Scan

☒ Use custom IP

☐ Use Net0 IP

☐ Use Net1 IP

IP Port

192.168.210.177 21846

File Path

Choose to download project files Select

Download

☒ Auto shutdown after downloading

☒ Update IP after downloading

☐ Download Power-on screen

☒ Download project file

☒ Download local device name

Clear

☐ Clear disk register data

☐ System register reset to factory settings

☒ Restore default user information

☒ Clear history alarm,operation log

☒ Clear Sampling history data

☐ Clear local database

☐ Restore default recipe data

Download Exit

2.2 RTO Mgmt-FTP File Operations

Click [HMI File] and right-click to upload, download, and add files to the HMI

G2100E2-DEVICE Online

owner RY2308280000319 (G2100E2)

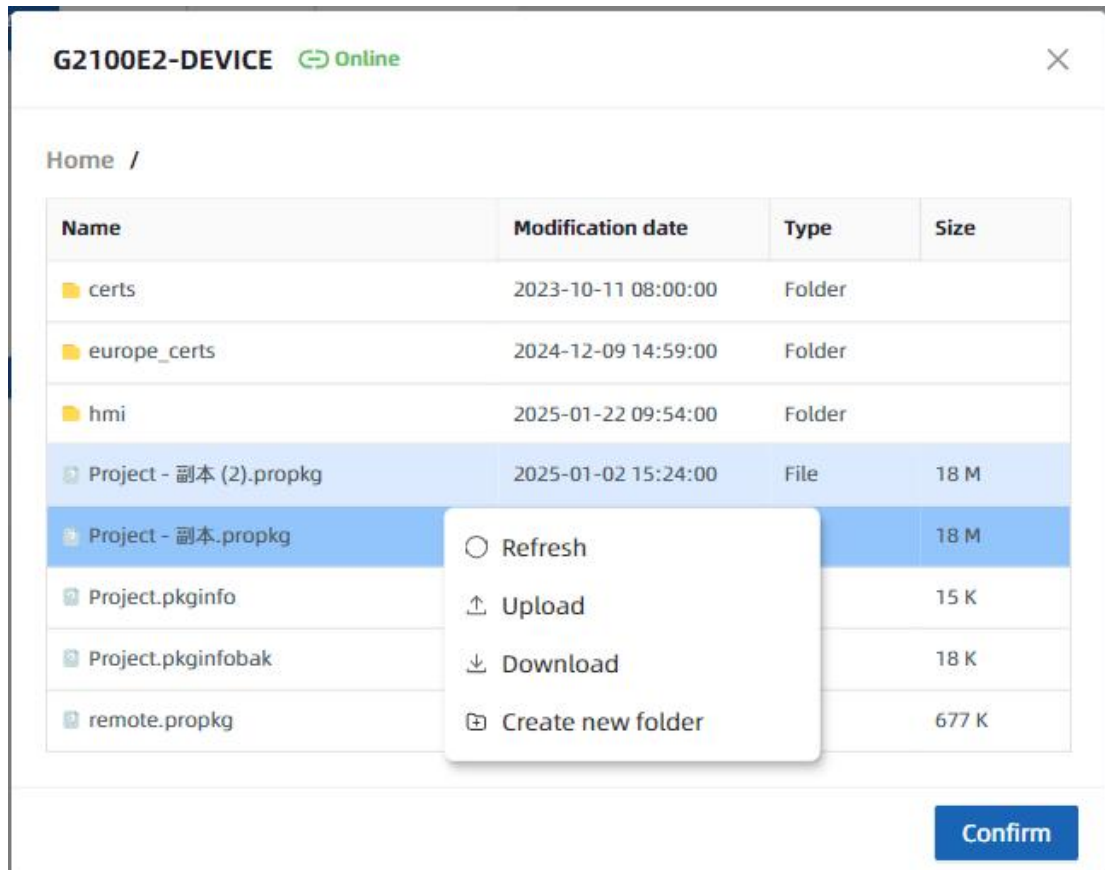
Virtual Ip: 100.127.255.1 3 ms

Hmi Net ☒

PLC Net ☐

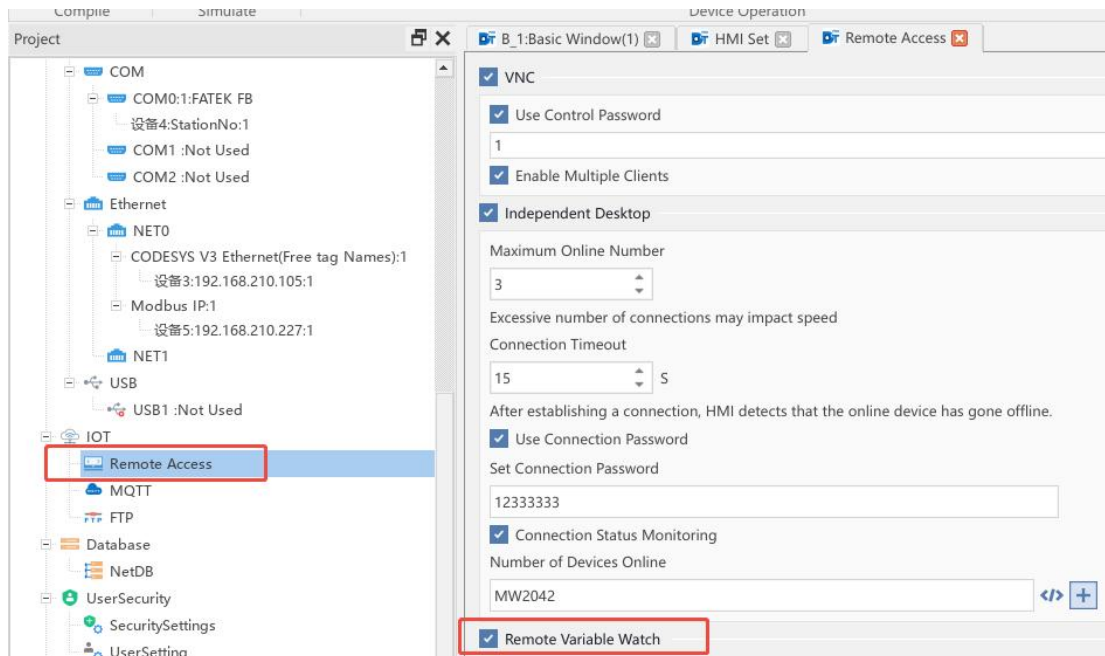
VNC view Standalone Desktop

HMI Tool **HMI File** Param

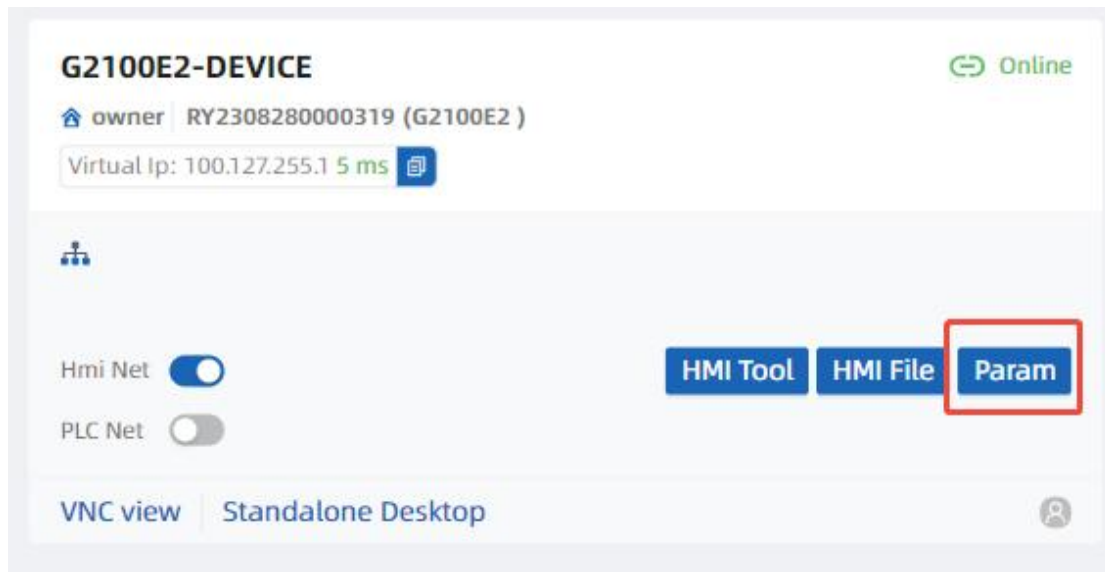


2.3 RTO Mgmt-Parameter Monitoring HMI Data

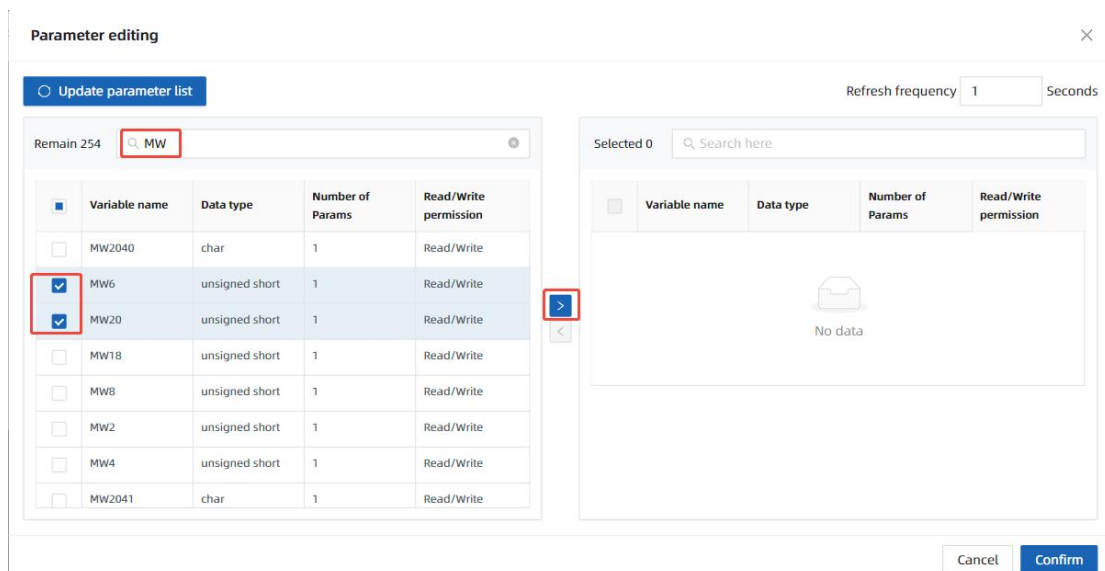
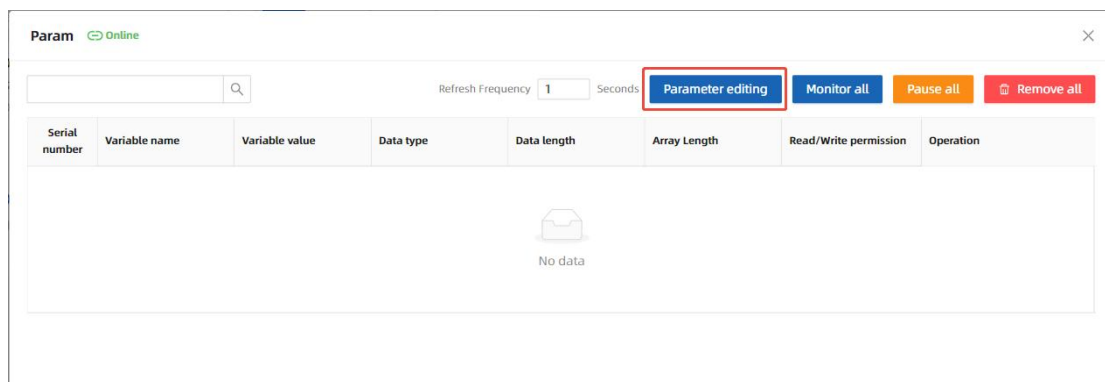
1.Enable the [Remote Variable Watch] function



2.Click [Parameter Monitoring]

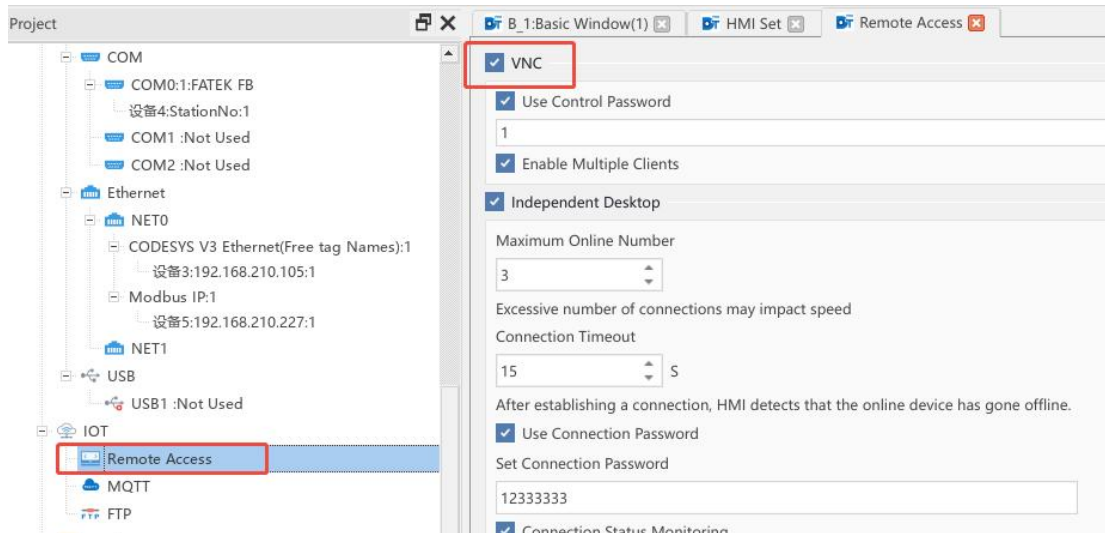


3. Click [Parameter Edit] to check the internal variables of the HMI for monitoring

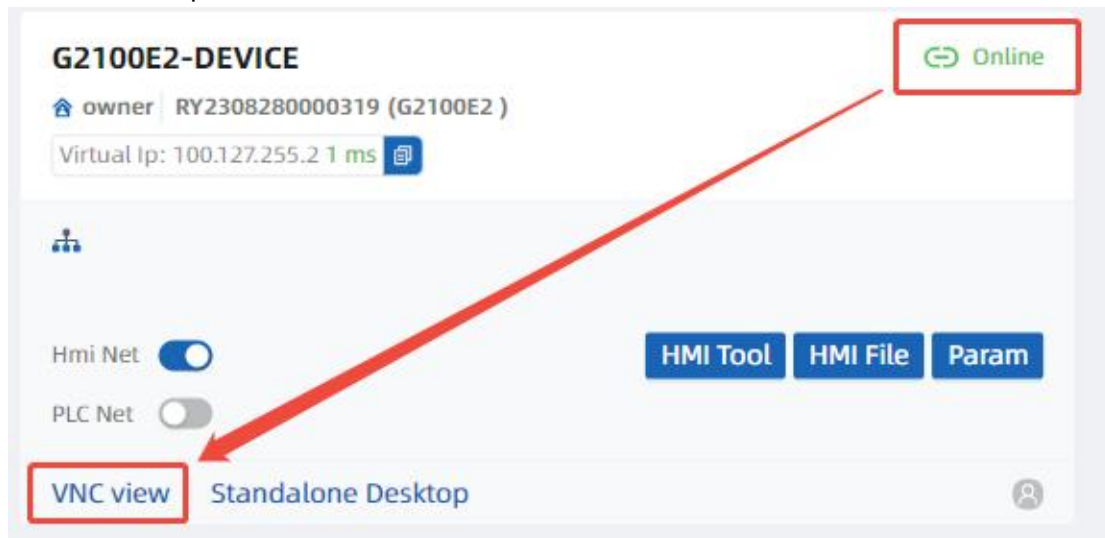


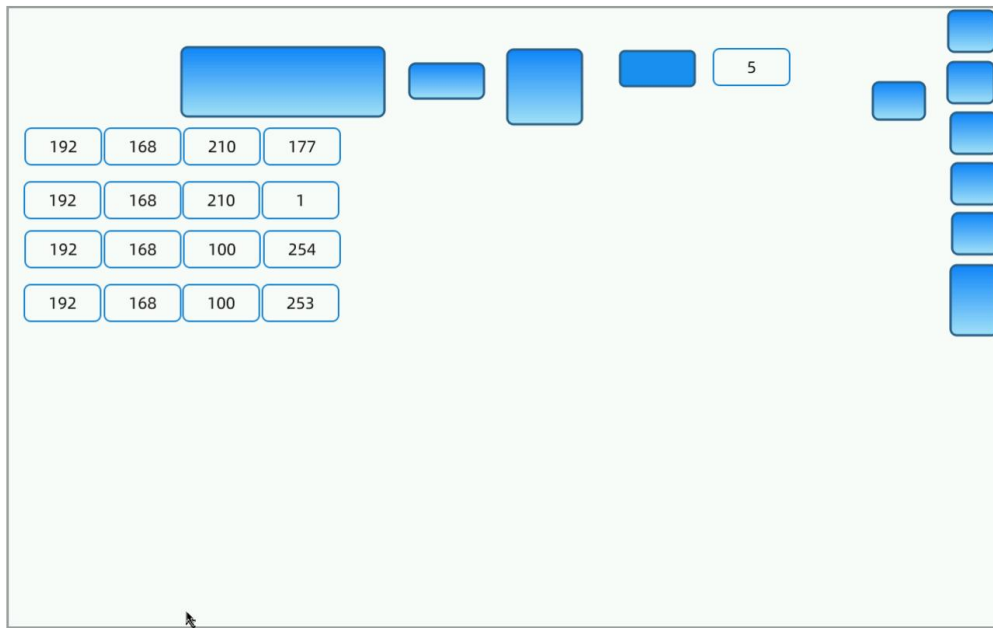
2.4 RTO Mgmt-VNC Monitor

Enable VNC service on the HMI



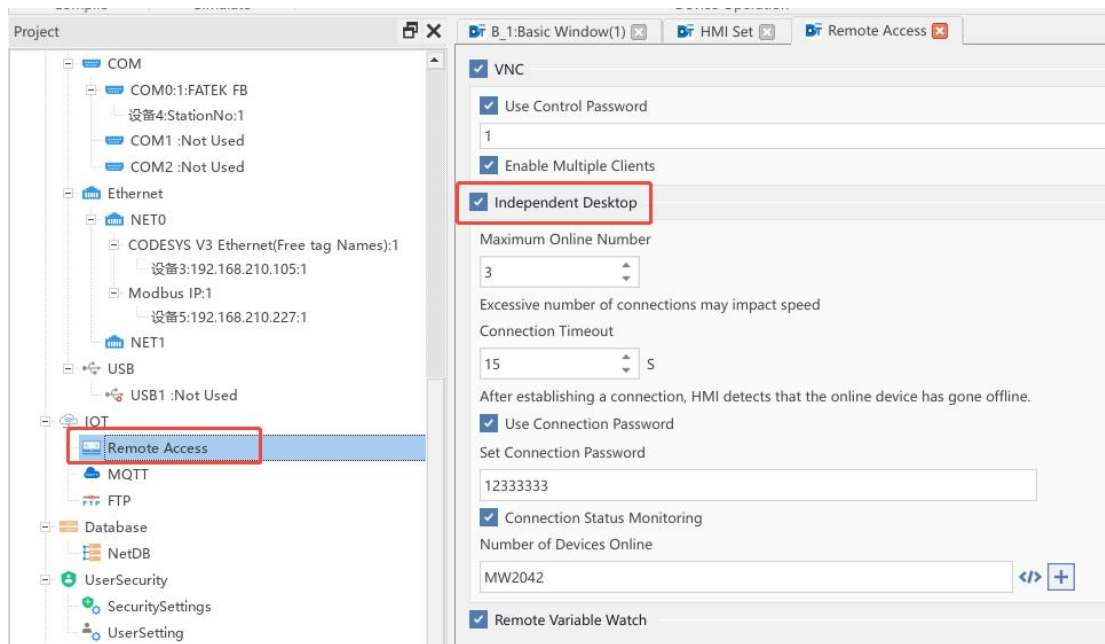
When the device status is "connected", You can click [VNC Monitoring] to open the VNC HMI without a password



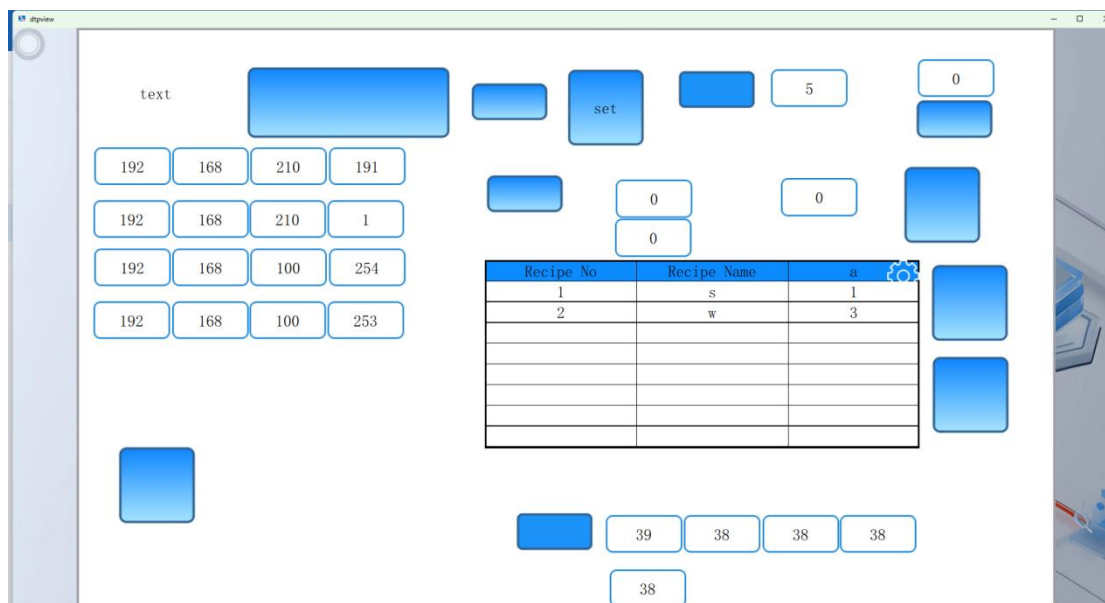
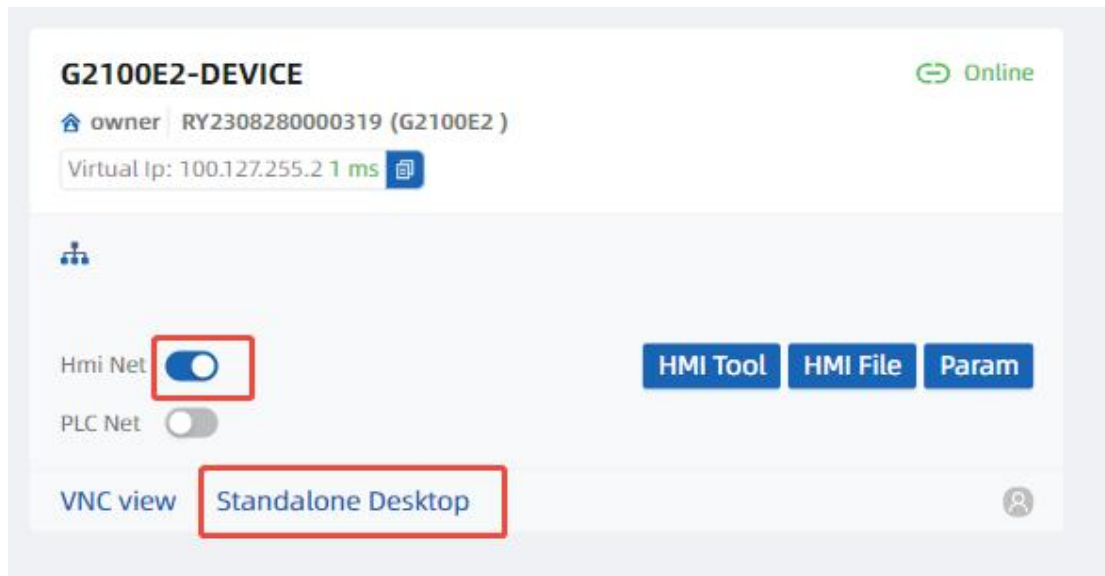


2.5 RTO Mgmt-Independent Desktop

Enable independent desktop function on the HMI

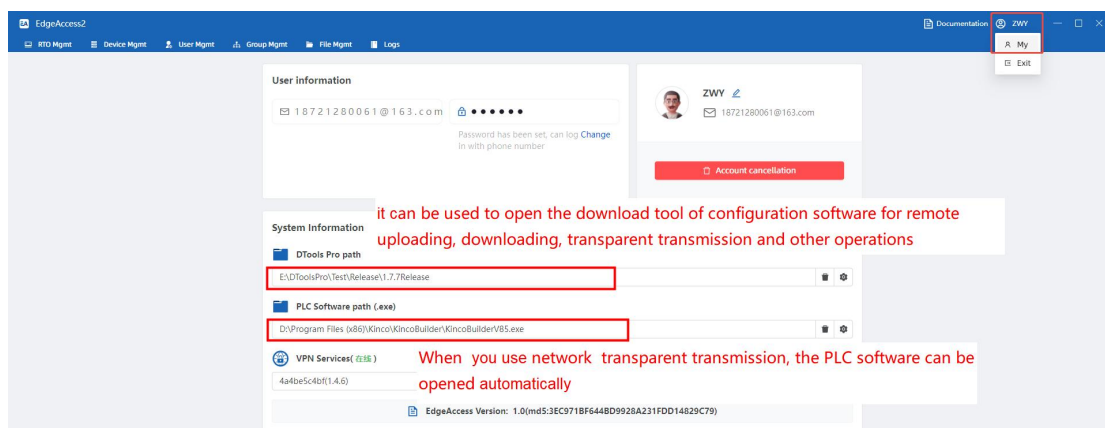


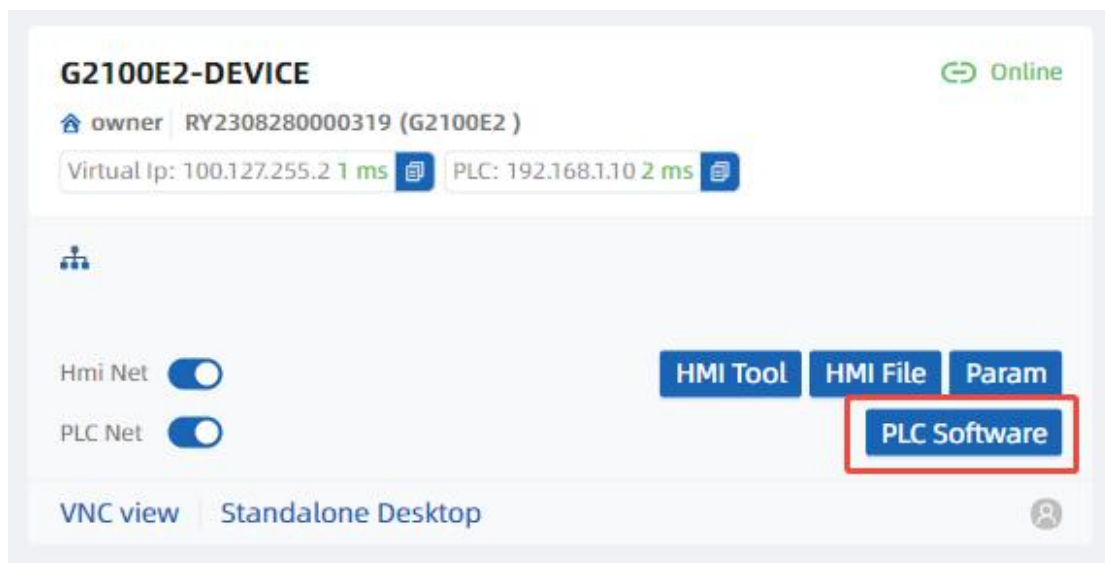
Open [HMI Connection] and click [Independent Desktop] to access without password



2.6 RTO Mgmt-Remote PLC PassThrough

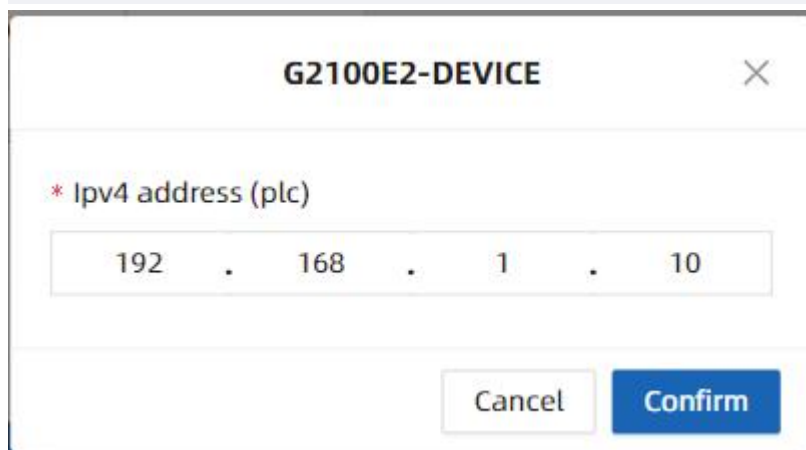
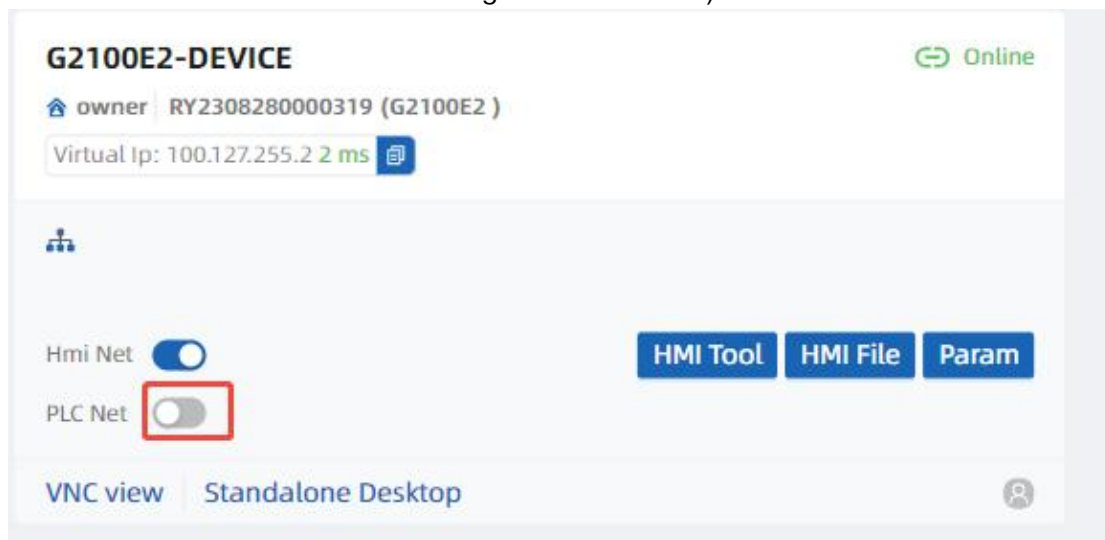
Configure the executable file path of the PLC programming software in the EA Personal Center to enable direct software launch during PassThrough



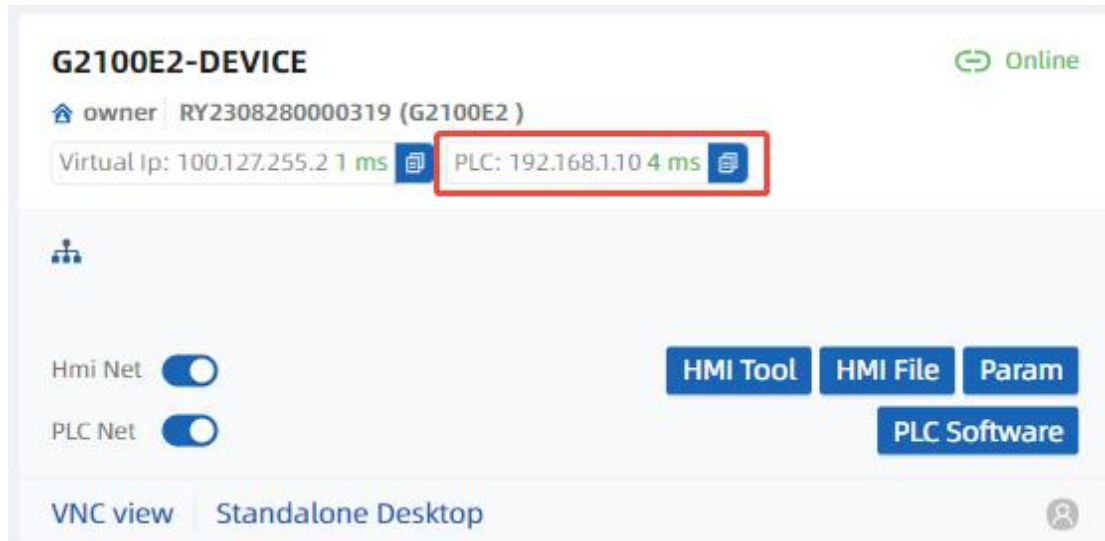


2.6.1 Network port PassThrough

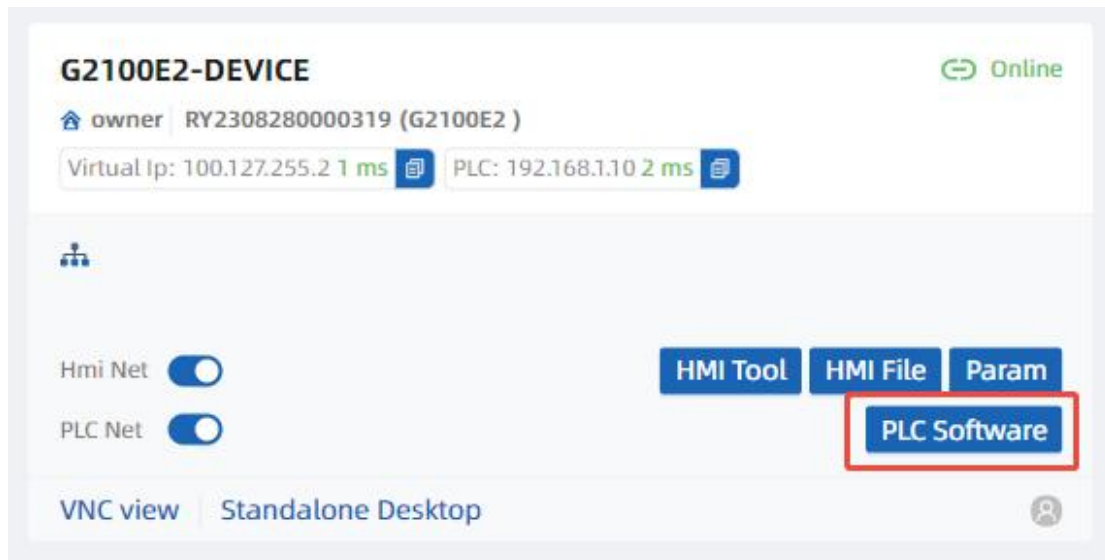
Turn on [PLC Connection] and enter the IP of the PLC on the network port to perform VPN port passThrough to the PLC (note: that at least one of the physical network ports on the HMI is on the same network segment as the PLC).



After the PLC is connected successfully, You will see the network status of the PLC



Click [PLC Software] to open the PLC software and perform operations such as uploading and downloading to the PLC



In the online settings of the PLC software, Select the "ZeroTier One Virtual Port" network card and enter the IP of the PLC to connect

Communications

COM Port

☐ Use COM Port

Address

Remote: 1

Local Parameters

Port: COM3

Baudrate: 9600

Parity: None

Data Bits: 8

Stop Bits: 1

Auto-detecting



Slave ID range:

1 — 127

Start Stop

Ethernet

Adapter: 100.127.255.254 - (ZeroTier One Virtual Port)

Refresh ScanNet Help ☐ Show all adapters

☒ Use TCP

IP: 192.168.1.10 Port: 502

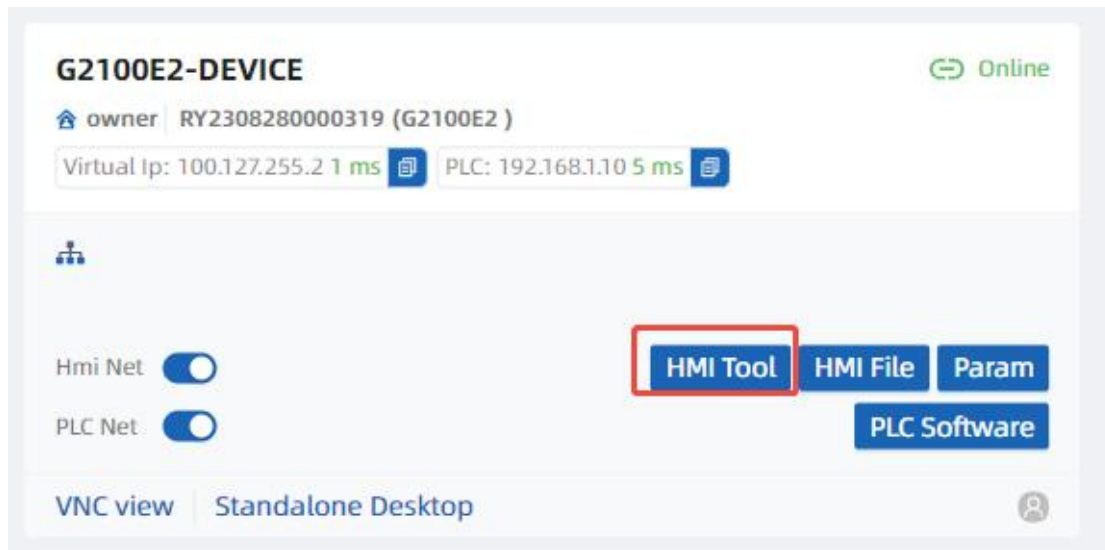
☐ Use UDP

IP: 192.168.0.252 Port: 503

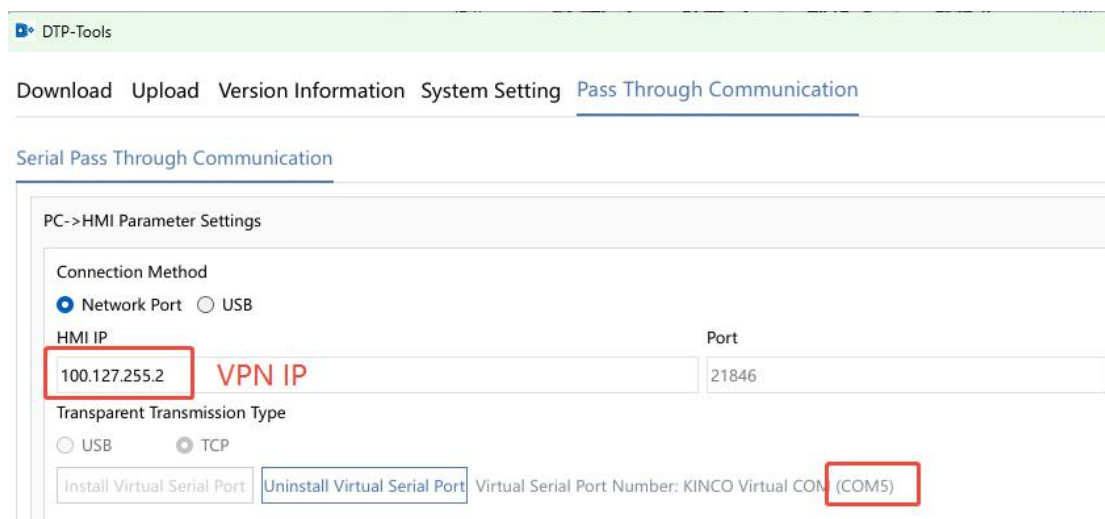
Advanced Comm Settings OK Cancel Help

2.6.2 Serial port passThrough

Click [HMI Software], [PassThrough]



You can see that the virtual serial port number is COM7



Set the communication parameters of PLC and HMI, and click to start pass-through

DTP-Tools

Download Upload Version Information System Setting Pass Through Communication

Serial Pass Through Communication

PC->HMI Parameter Settings

Connection Method
☒ Network Port ☐ USB

HMI IP: 100.127.255.2 **VPN IP** Port: 21846

Transparent Transmission Type
☐ USB ☒ TCP

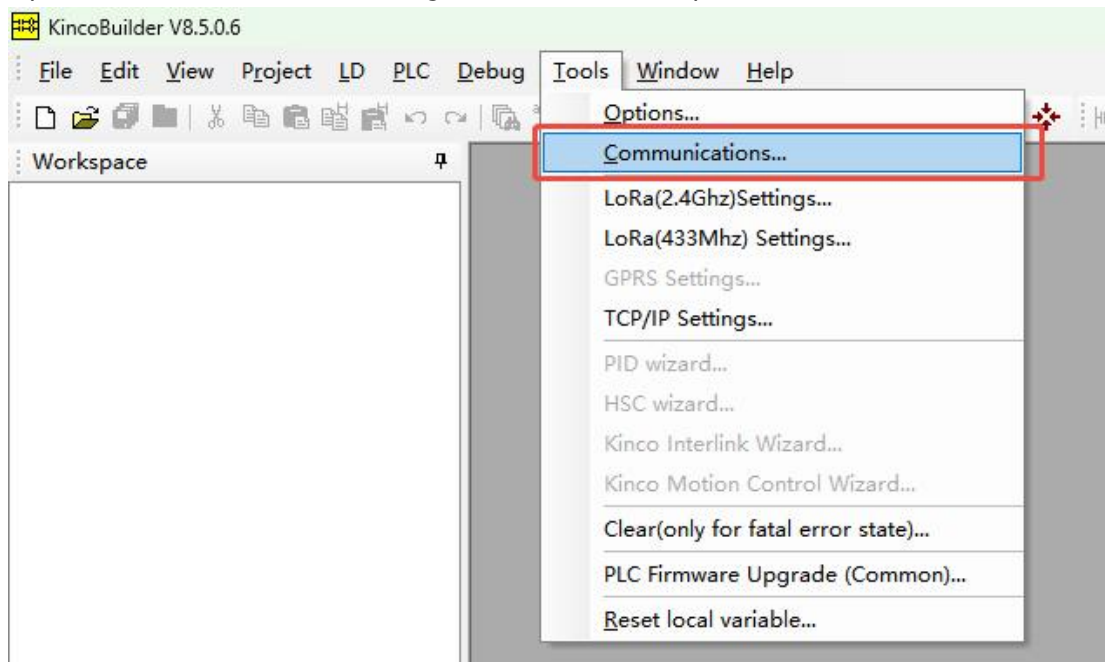
Install Virtual Serial Port Uninstall Virtual Serial Port Virtual Serial Port Number: KINCO Virtual COM COM5

HMI->PLC Parameter Settings

Communication Method	Serial Port Number	Baud Rate
RS232	COM0	9600
Data Bits	Parity Bits	Stop Bits
7	No Parity Bit	1

Start Pass Through Communication End Pass Through Communication

Open the PLC software and configure the virtual serial port connection



After the detection in the PLC software is successful, You can upload and download operations on the PLC

Communications

COM Port

☒ Use COM Port

Address

Remote: 1

Auto-detecting

Local Parameters

Port: COM5

Baudrate: 9600

Parity: None

Data Bits: 8

Stop Bits: 1

Slave ID range:

1 — 127

Start Stop

Ethernet

Adapter: 100.127.255.254 - (ZeroTier One Virtual Port)

Refresh ScanNet Help ☐ Show all adapters

☐ Use TCP

IP: 192.168.0.252 Port: 502

☐ Use UDP

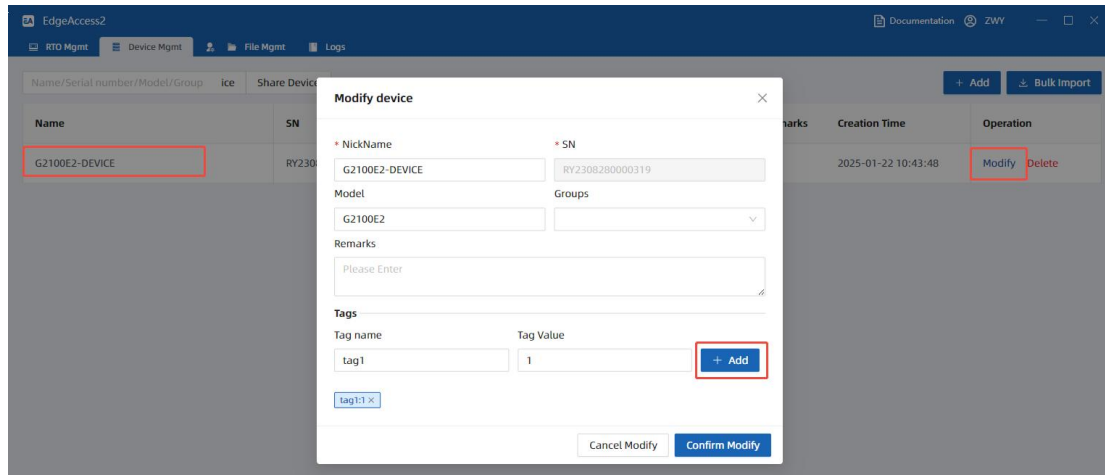
IP: 192.168.0.252 Port: 503

Advanced Comm Settings OK Cancel Help

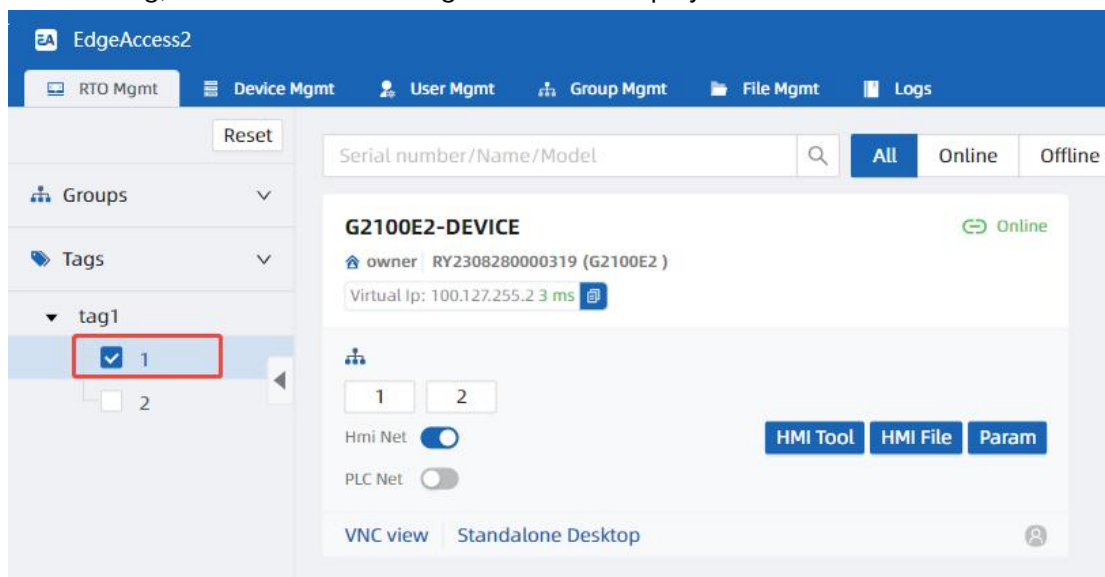
Virtual COM5

2.7 Device Mgmt

You can edit the device here and set the device's label

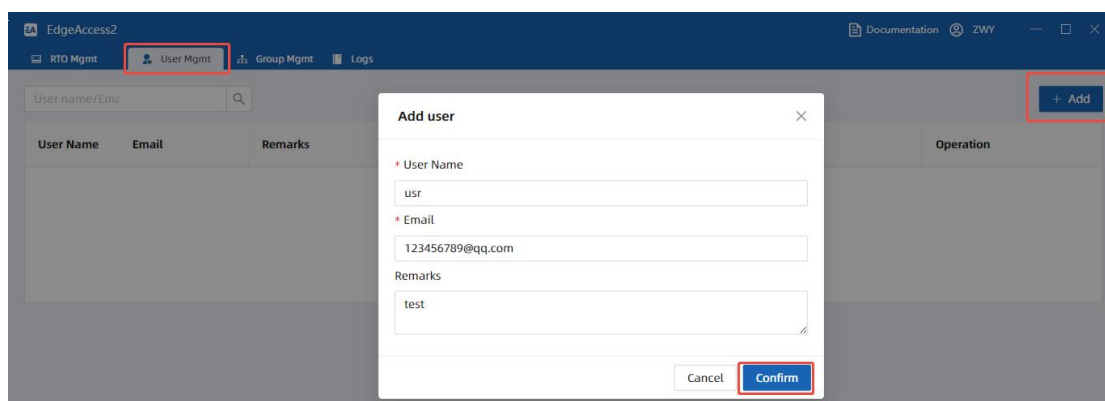


After setting, You can check the tag to filter and display

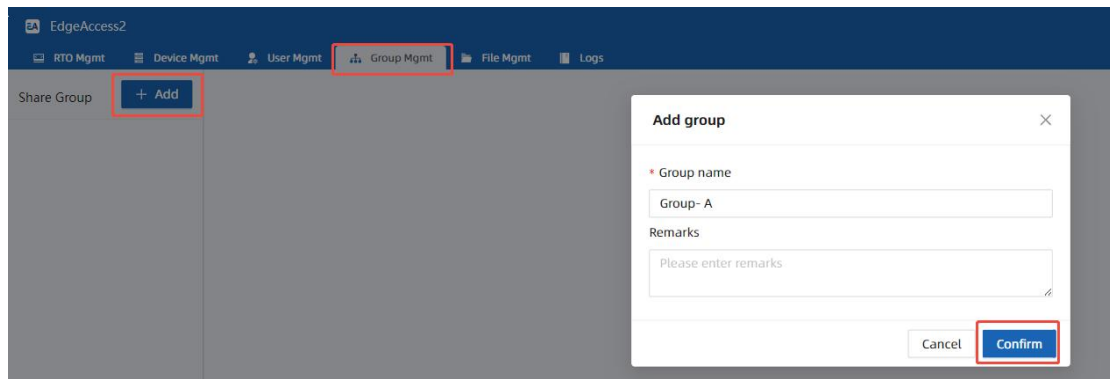


2.8 User and Group Management

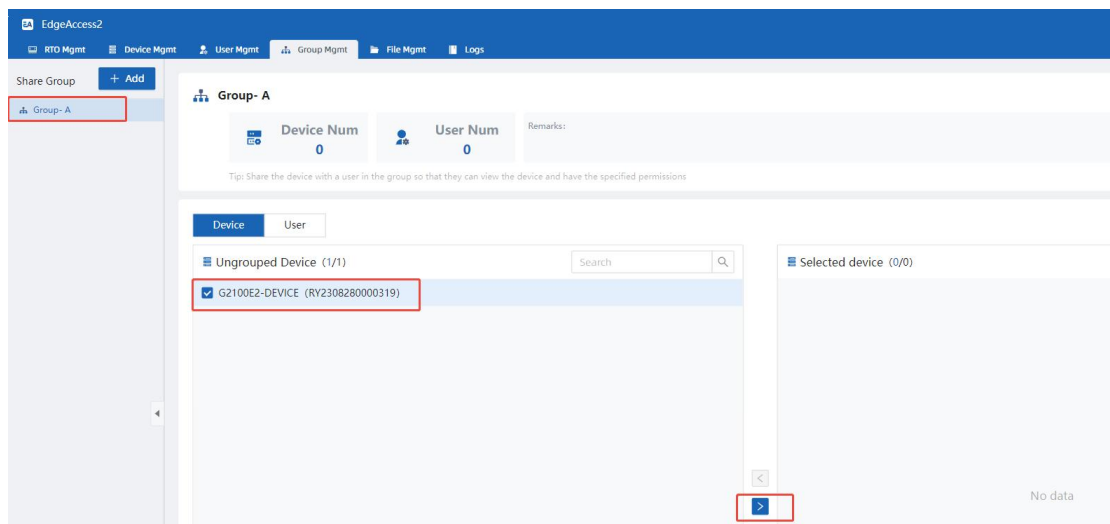
Click [User Management] to add other users and give them permissions to share device operation, monitoring, etc



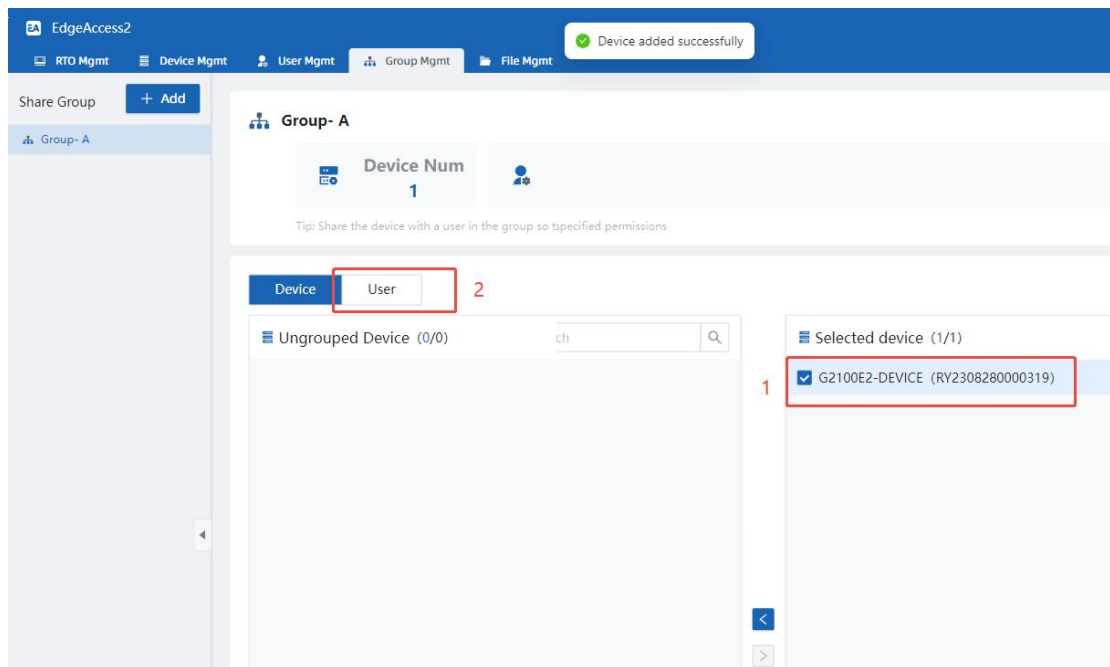
Click [Group Management], then click [Add] to add a group and assign devices to the group

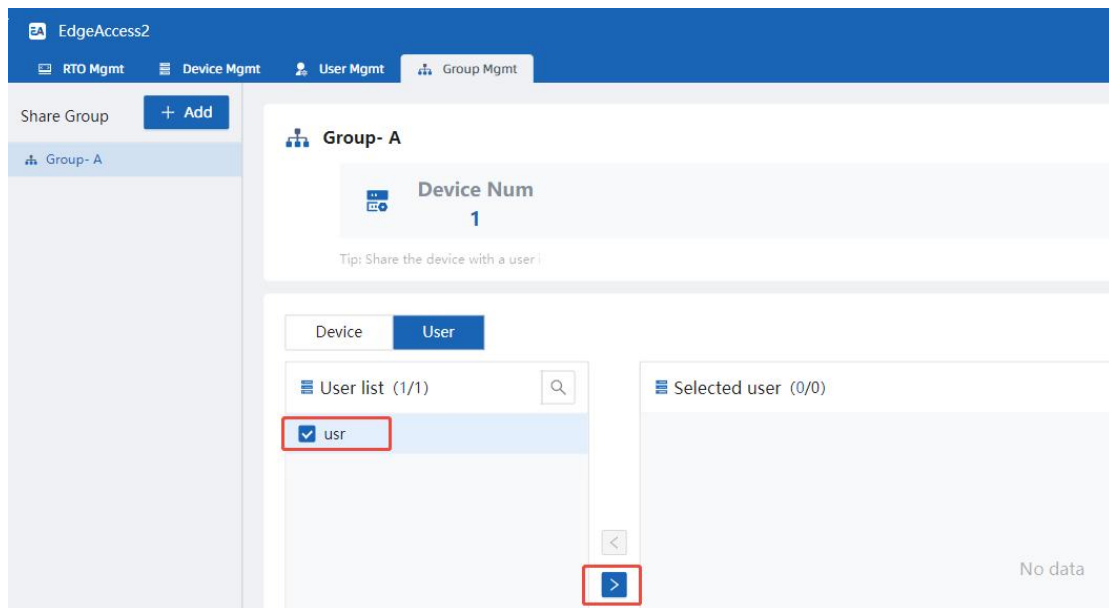


Move ungrouped devices into the currently selected group

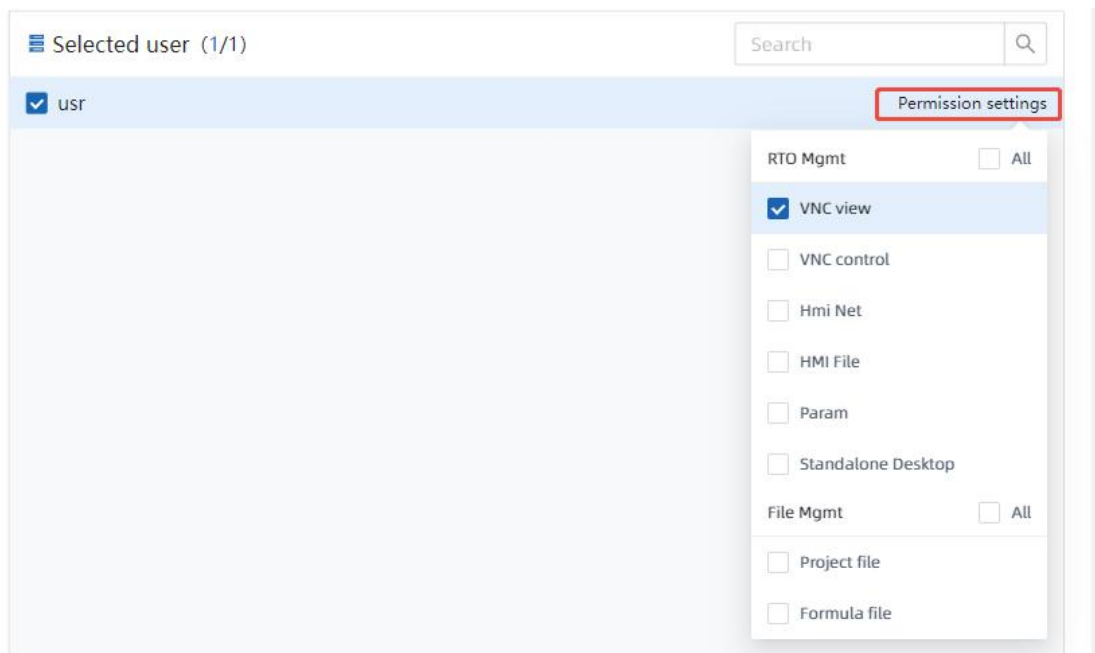


After selecting the device, click [User]

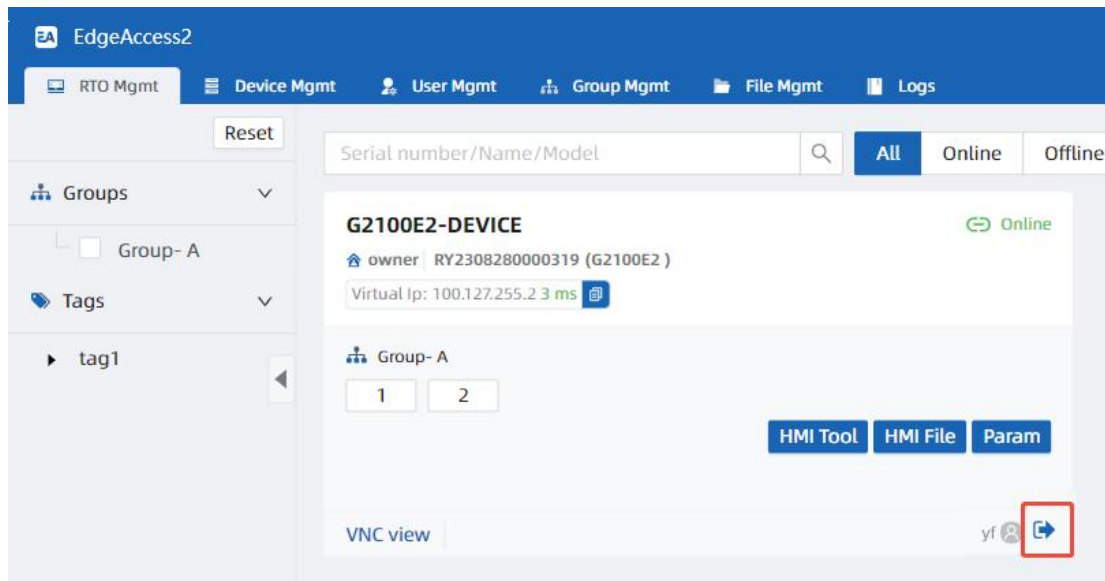




Click [Permission Settings] to assign corresponding operation permissions to the user



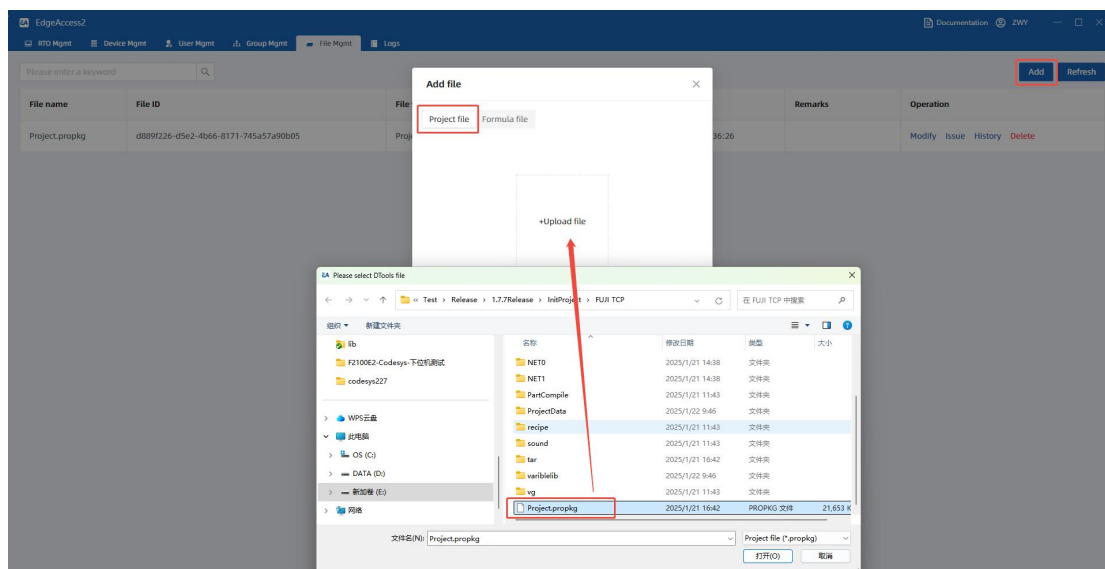
When other people are operating this device, you can see it in the lower right corner and kick them out



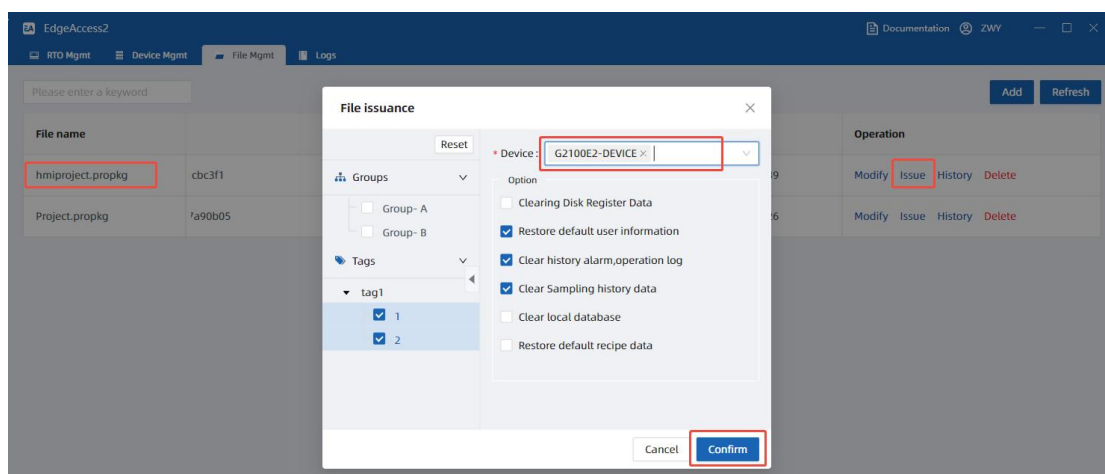
2.9 File Management-Batch Issue File

2.9.1 Batch issue project file

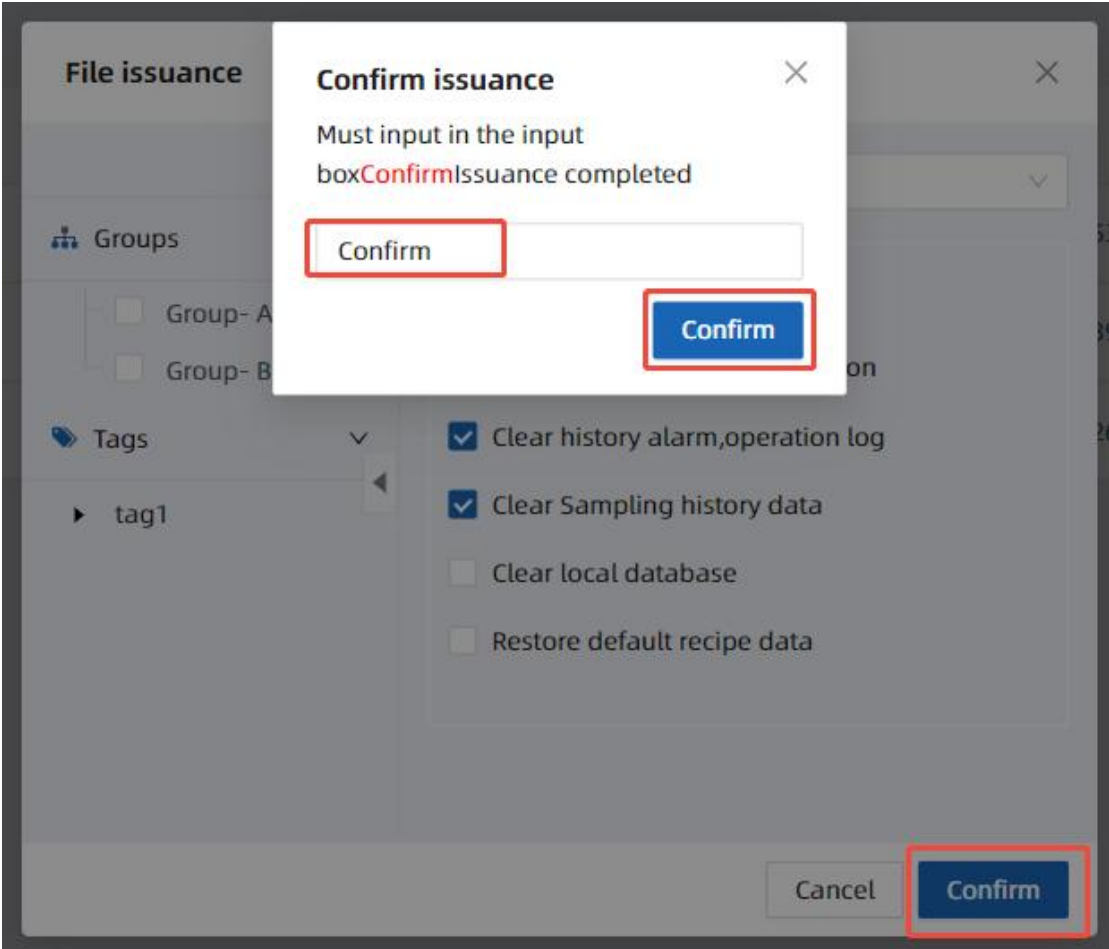
Click [File Management], [Add], and add the project file (.propkg) to the file list



After adding, Click Issue to filter the devices and download the same HMI program to multiple devices at the same time



After entering "Confirm", Click OK and the HMI will download the project file



Click [Refresh], and when the download is complete, the download status will show [Successful]

The screenshot shows the 'File Mgmt' interface. At the top, there is a search bar and a 'Refresh' button. Below is a table with the following columns: File name, File ID, File size, Last issuance, Upload date, and Operation. The table contains three rows of data. The 'Last issuance' column for the first row shows 'Success'. The 'Operation' column for each row has links for 'Modify', 'Issue', 'History', and 'Delete'. At the bottom of the table are 'Page Up' and 'Page Down' buttons.

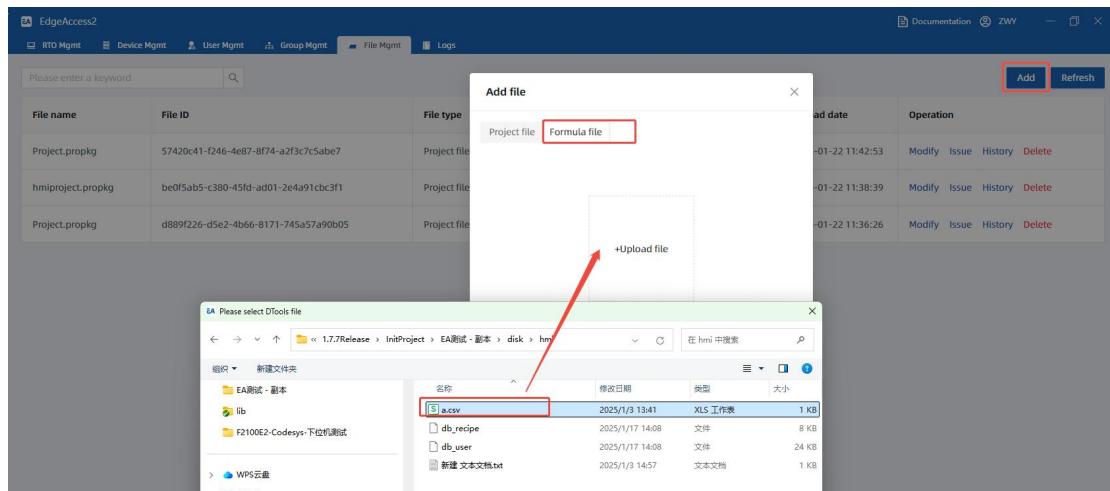
File name	File ID	File size	Last issuance	Upload date	Operation
Project.propkg	57420c41-f246-4e87-8f74-a2f3c7c5abe7	58.05 MB	2025-01-22 12:23:55 Success	2025-01-22 11:42:53	Modify Issue History Delete
hmiprject.propkg	be0f5ab5-c380-45fd-ad01-2e4a91cbc3f1	21.15 MB		2025-01-22 11:38:39	Modify Issue History Delete
Project.propkg	d889f226-d5e2-4b66-8171-745a57a90b05	21.15 MB		2025-01-22 11:36:26	Modify Issue History Delete

Click [History] to view the file issue log

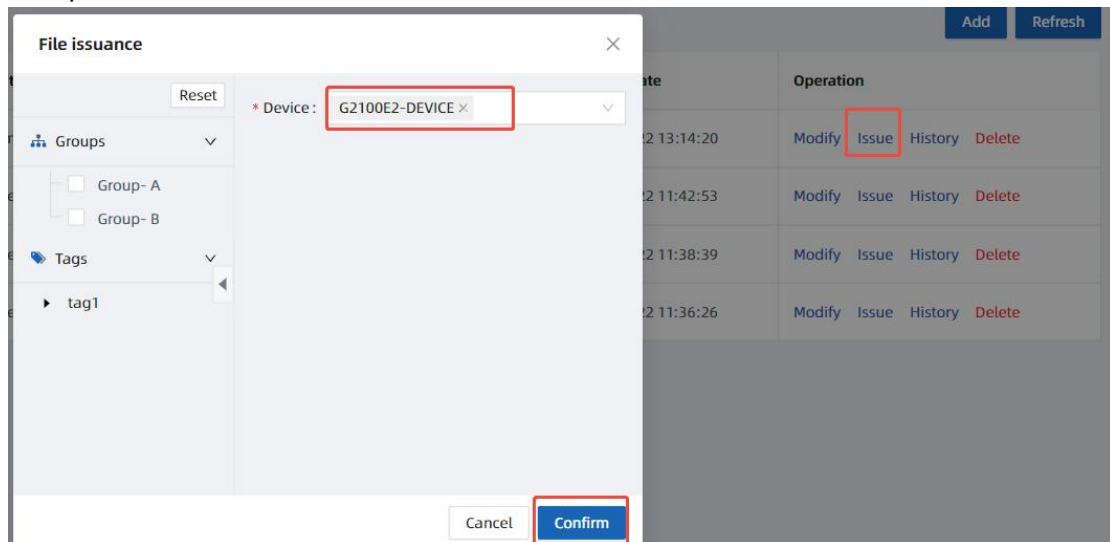
The screenshot shows the 'History' dialog box. It has a search bar and a table with the following columns: Issuance time, Issuance result, and Operation. The table contains two rows of data. The 'Issuance result' column for both rows shows 'Success'. The 'Operation' column for each row has a link for 'Details'. The background shows the 'File Mgmt' interface with the 'History' button highlighted in the 'Operation' column of the first row.

Issuance time	Issuance result	Operation
2025-01-22 12:23:55	Success: 1Unit Exception: 0Unit	Details
2025-01-22 11:44:33	Success: 1Unit Exception: 0Unit	Details

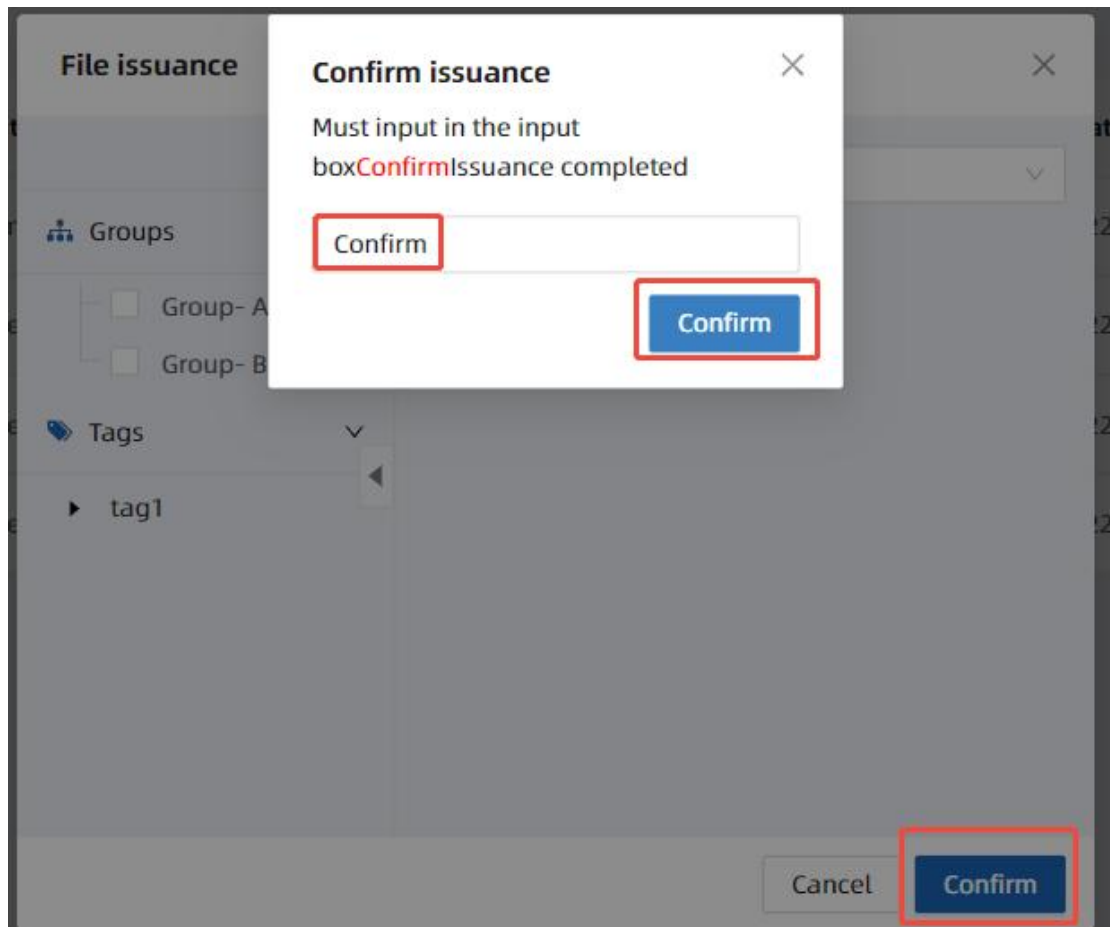
2.9.2 Batch issue recipe file



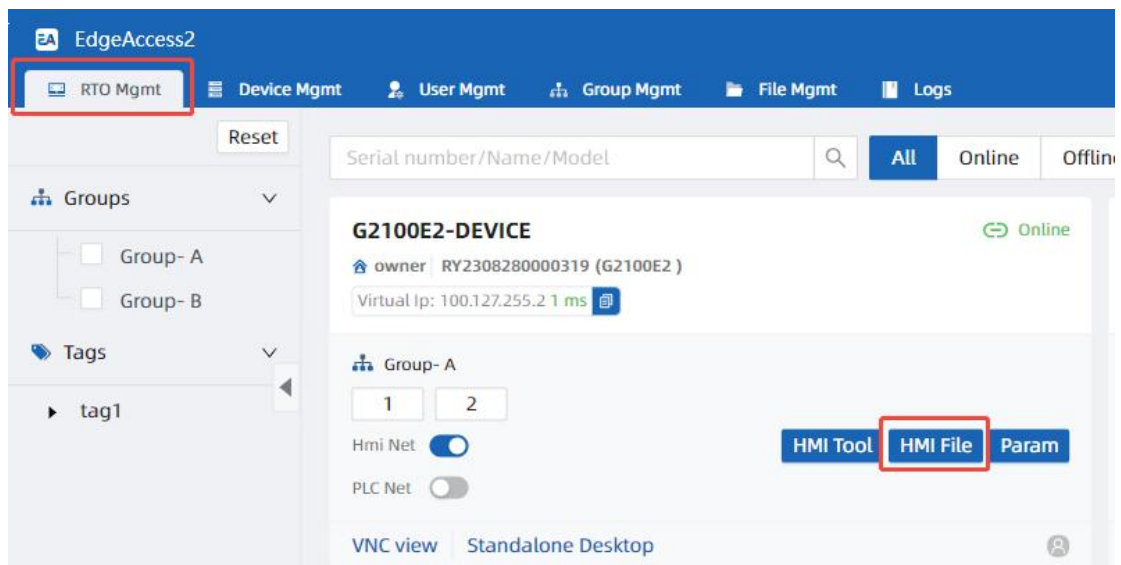
Click [Issue] to filter multiple selected devices to download the same recipe file to multiple devices at the same time



After entering "Confirm", Click OK and the HMI will download the recipe file



After successful download, You can see the csv file in [Remote Operation and Maintenance] - [HMI File]



G2100E2-DEVICE Online

X

Home

/hmi

Name	Modification date	Type	Size
1	2025-01-15 13:48:00	Folder	
ccvb	2025-01-14 14:11:00	Folder	
MCP.docx	2025-01-15 11:35:00	File	12 K
a.csv	2025-01-22 13:17:00	File	34 B
a.mp4	2025-01-16 13:22:00	File	50 M
db_event	2025-01-21 16:38:00	File	4 K

Then the user can import the csv into the recipe through the recipe import action

Button[BL_0004]

SwitchFunction

LampSet

Label

Graphics

Touching Enabled Setting

Display Set

No.

Add Function

Web

Browse

FTP

Function

Run All

Send no

Action Set

ButtonDown

Recipe action

Import recipe

Import recipe group

Default Recipe

Import device

☐ Use dynamic devices

HMI

Imported subfolder

☐ Use dynamic subfolder

Import file name

☐ Use dynamic file name

a.csv

☐ Encrypted file

Conflict data process

☒ Cover
 ☐ Discard

☒ Import title bar

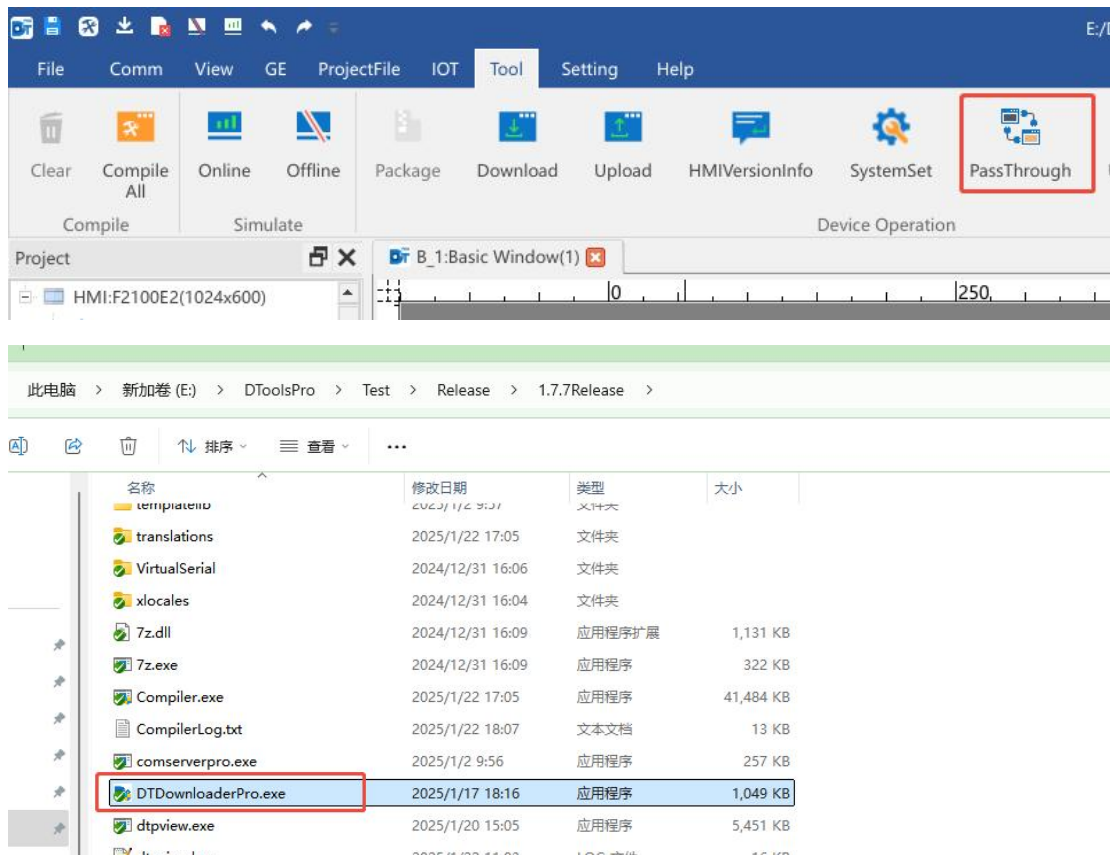
OK

Cancel

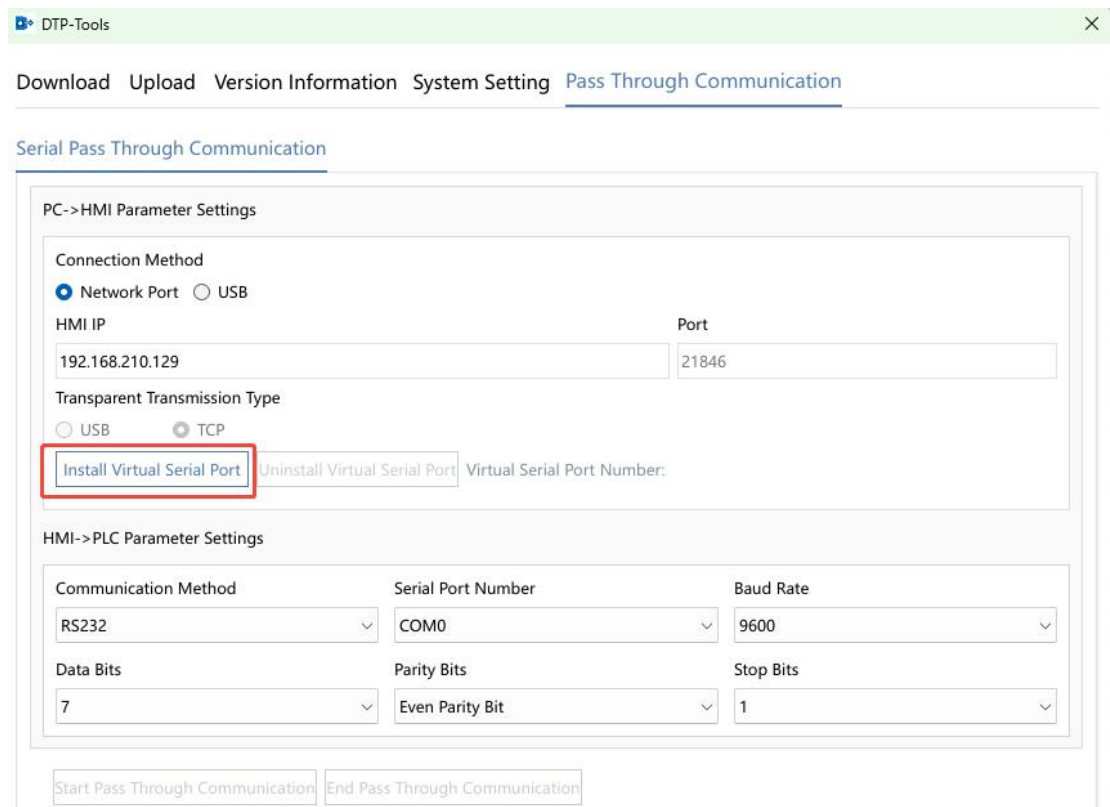
3. Serial Port PassThrough Detailed Introduction

3.1 Open the passThrough tool

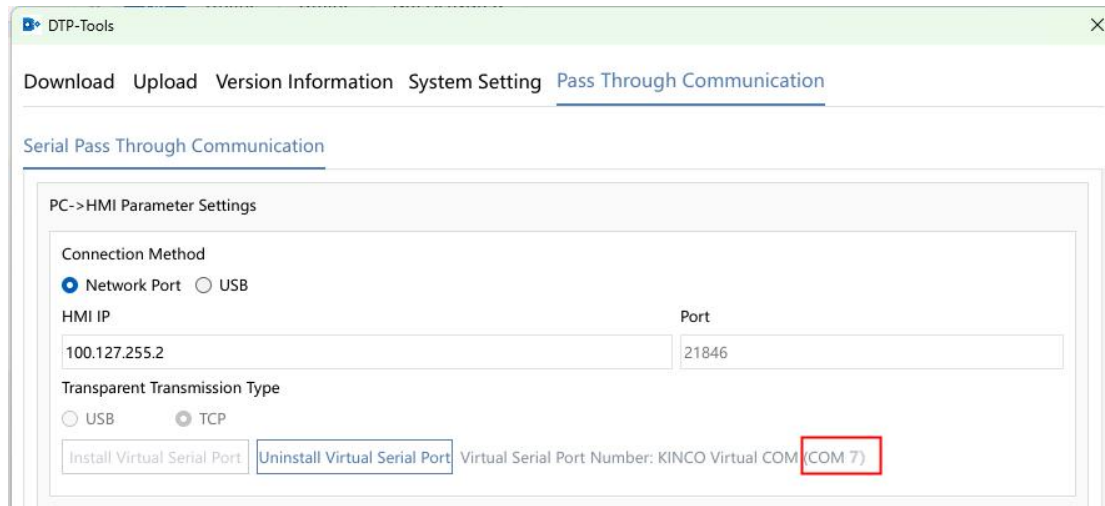
After installing software version 1.7.5 or above, you can open the tool from the [PassThrough Settings] of the configuration software, or directly open the "DTdownloaderPro" tool from the software installation directory and switch to passThrough.



3.2 Install the virtual serial port driver

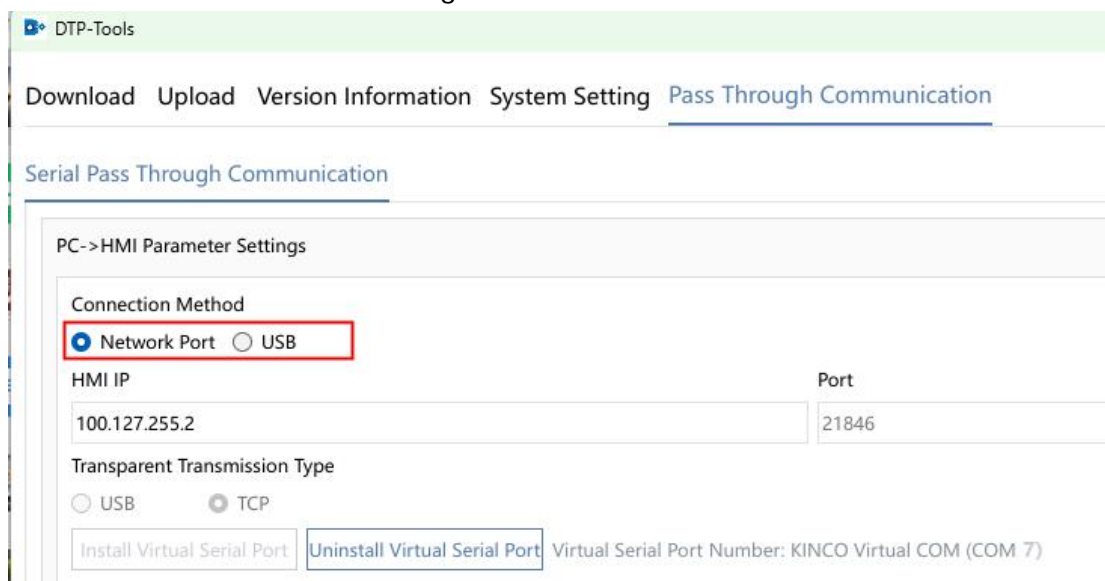


You Can See that the Virtual Serial Port Number is COM7



3.3 Configure PassThrough parameters

Connection method: The connection method between the HMI and the computer can be selected as the network port (the IP Address of the HMI) or the USB port. The network port connection can be the LAN IP or the VPN IP of the HMI. If it is a VPN IP connection, refer to VPN Serial Port PassThrough



Set the communication parameters between PLC and HMI, click to start PassThrough

DTP-Tools

Download
Upload
Version Information
System Setting
Pass Through Communication

Serial Pass Through Communication

PC->HMI Parameter Settings

Connection Method

☒ Network Port
☐ USB

HMI IP

100.127.255.2

Port

21846

Transparent Transmission Type

☐ USB
☒ TCP

Install Virtual Serial Port

Uninstall Virtual Serial Port

Virtual Serial Port Number: KINCO Virtual COM (COM 7)

HMI->PLC Parameter Settings

Communication Method	Serial Port Number	Baud Rate
RS232	COM0	9600
Data Bits	Parity Bits	Stop Bits
8	No Parity Bit	1

Start Pass Through Communication

End Pass Through Communication

DTP-Tools

Download
Upload
Version Information
System Setting
Pass Through Communication

Serial Pass Through Communication

PC->HMI Parameter Settings

Connection Method

☒ Network Port
☐ USB

HMI IP

100.127.255.2

Port

21846

Transparent Transmission Type

☐ USB
☒ TCP

Install Virtual Serial Port

Uninstall Virtual Serial Port

Virtual Serial Port Number: KINCO Virtual COM (COM5)

HMI->PLC Parameter Settings

Communication Method

RS232

Data Bits

8

Parity Bits

No Parity Bit

Baud Rate

9600

Stop Bits

1

Start Pass Through Communication

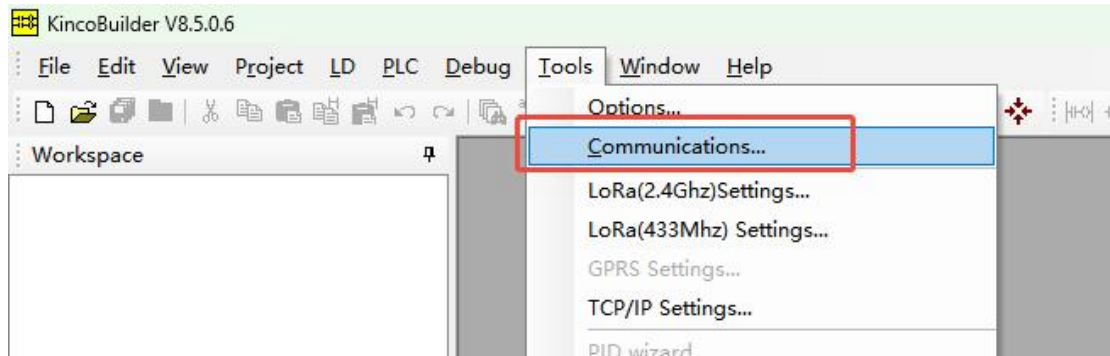
End Pass Through Communication

Tip

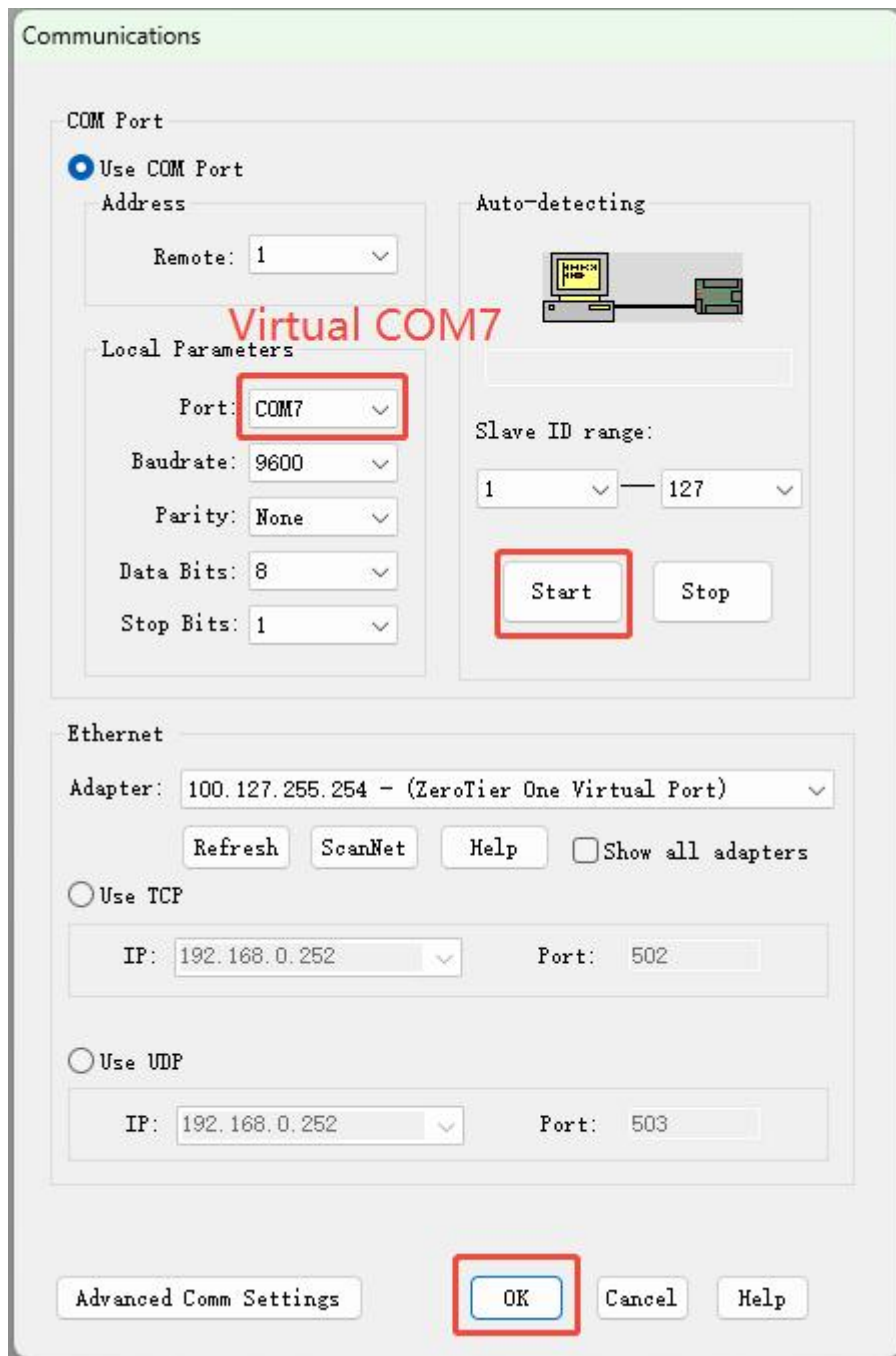
HMI is in pass through communication...

OK

3.4 PLC software starts PassThrough



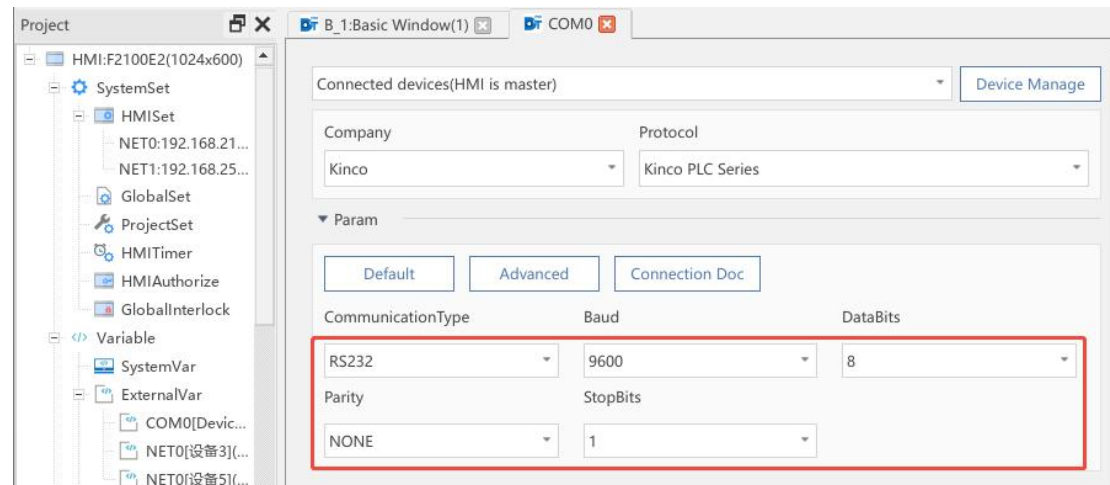
After the detection is successful in the PLC software, you can upload and download the PLC



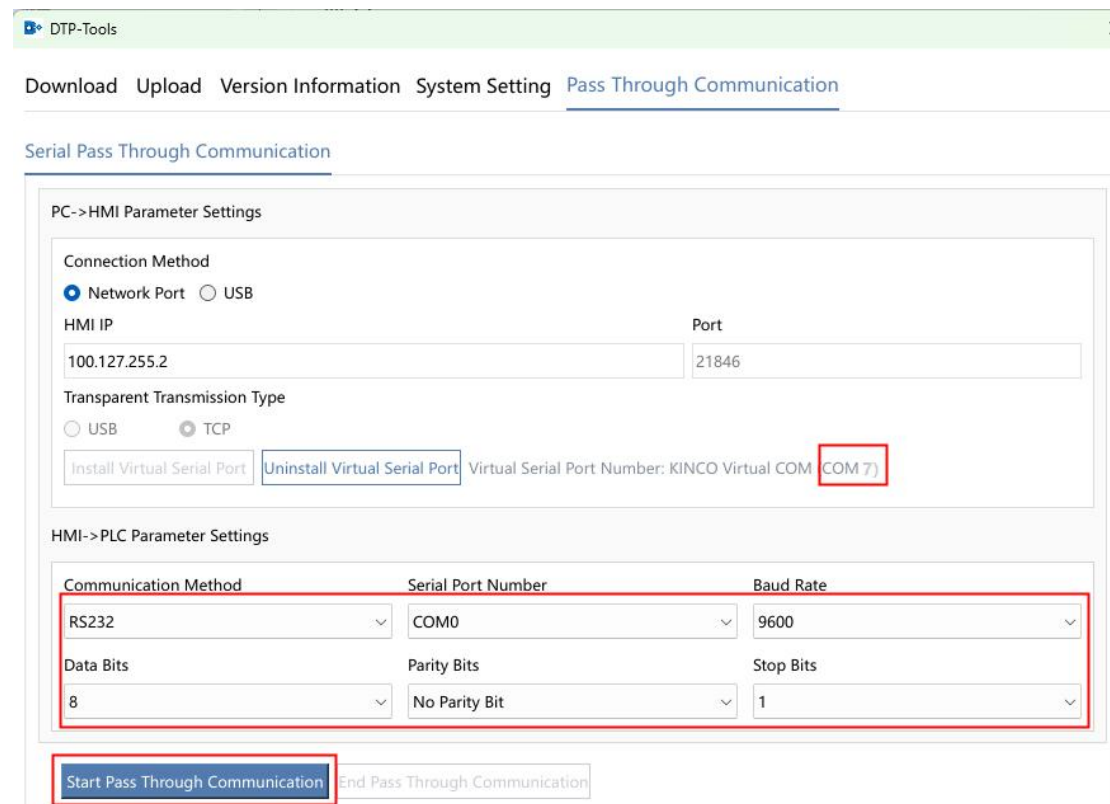
3.5 Introduction to Serial Port PassThrough by Manufacturers

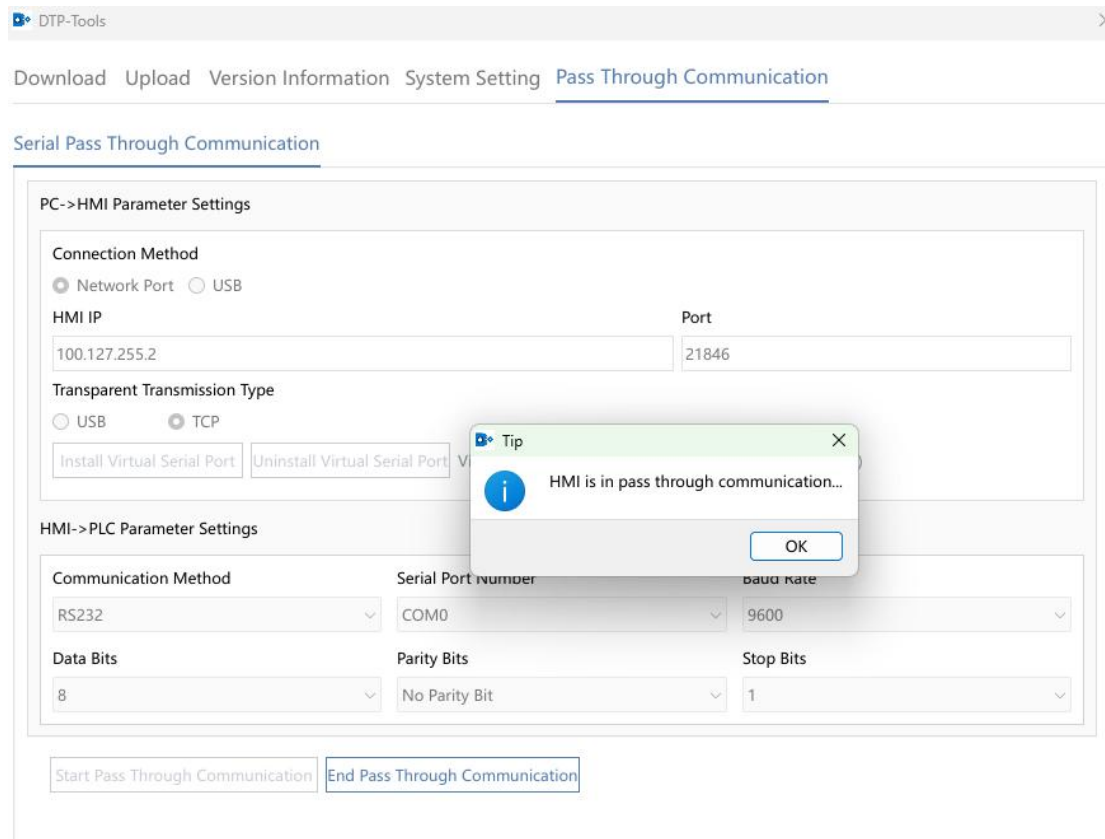
3.5.1 Kinco PLC

The communication parameters between the HMI and PLC are RS232, 9600, 8, 1, NONE, and ensure that the communication between the HMI and PLC is normal.

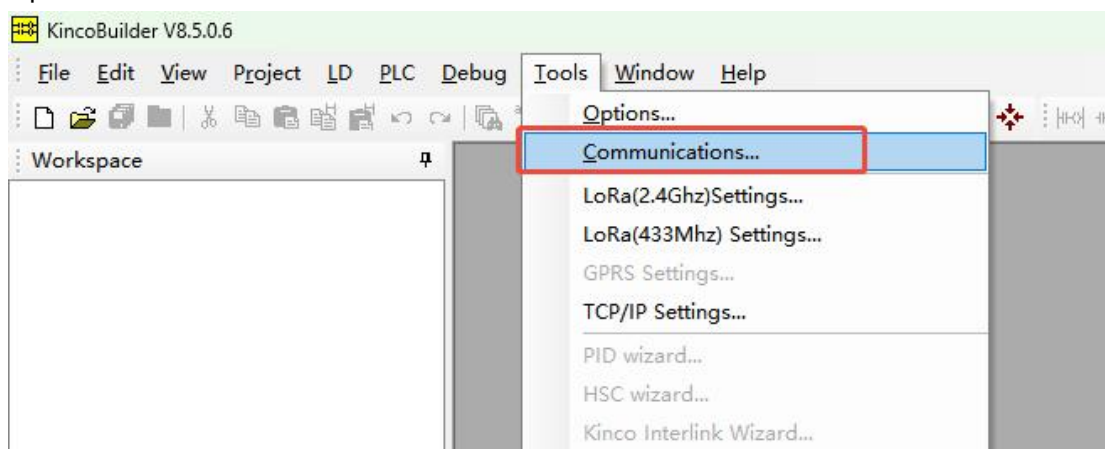


DTP-Tools sets the communication parameters between HMI and PLC, and click Start Pass Through Communication





Open PLC software



Set the COM port to virtual serial port driver COM7. After the detection is successful, you can upload and download the PLC

Communications

COM Port

☒ Use COM Port

Address

Remote: 1

Local Parameters

Port: COM7

Baudrate: 9600

Parity: None

Data Bits: 8

Stop Bits: 1

Auto-detecting

Slave ID range:

1 — 127

Start Stop

Ethernet

Adapter: 100.127.255.254 - (ZeroTier One Virtual Port)

Refresh ScanNet Help ☐ Show all adapters

☐ Use TCP

IP: 192.168.0.252 Port: 502

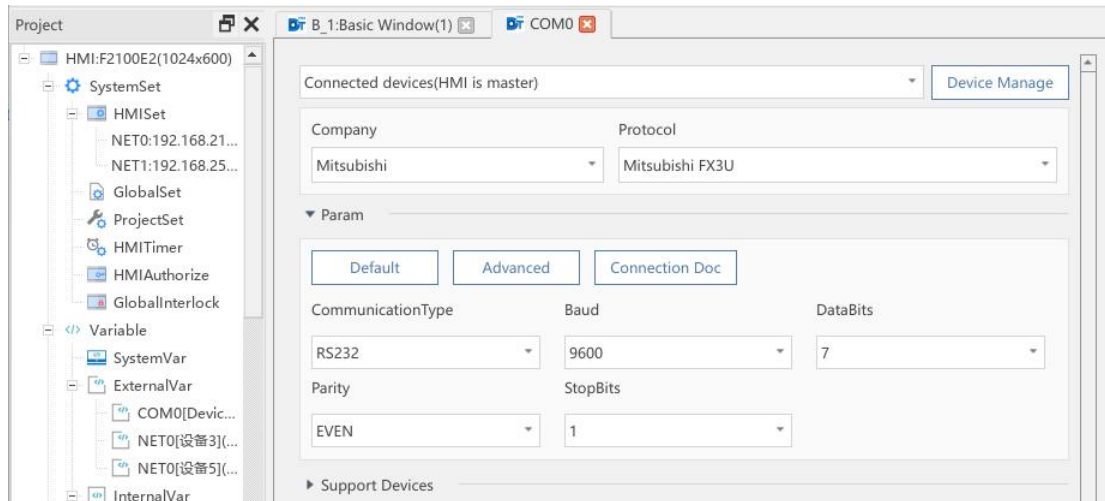
☐ Use UDP

IP: 192.168.0.252 Port: 503

Advanced Comm Settings OK Cancel Help

3.5.2 Mitsubishi FX PLC

The communication parameters between the HMI and PLC are RS232, 9600, 7, 1, EVEN, and ensure that the communication between the screen and PLC is normal.



DTP-Tools

[Download](#) [Upload](#) [Version Information](#) [System Setting](#) [Pass Through Communication](#)

Serial Pass Through Communication

PC->HMI Parameter Settings

Connection Method

☒ Network Port ☐ USB

HMI IP 100.127.255.2

Port 21846

Transparent Transmission Type

☐ USB ☒ TCP

[Install Virtual Serial Port](#) [Uninstall Virtual Serial Port](#)

HMI->PLC Parameter Settings

Communication Method	Serial Port Number	Baud Rate
RS232	COM0	9600

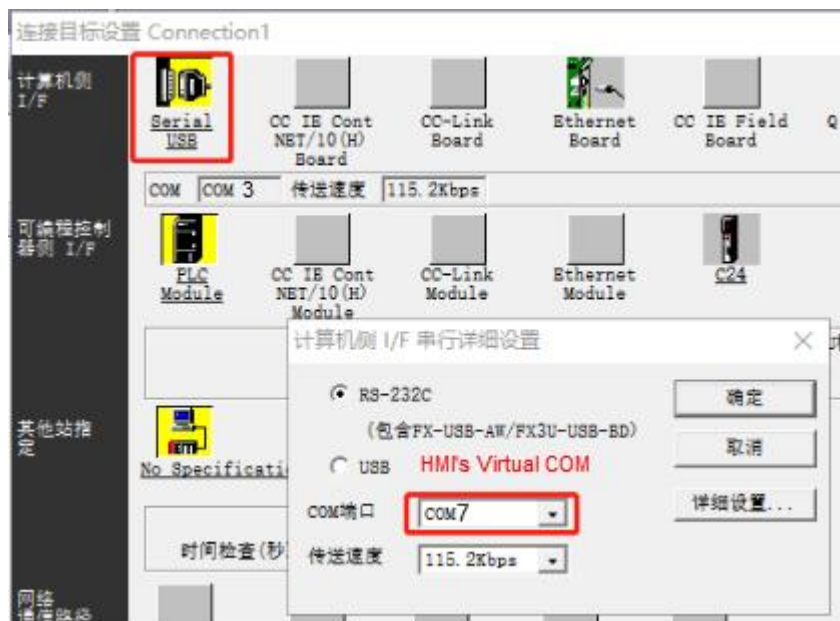
Data Bits	Parity Bits	Stop Bits
7	Even Parity Bit	1

[Start Pass Through Communication](#) [End Pass Through Communication](#)

Tip

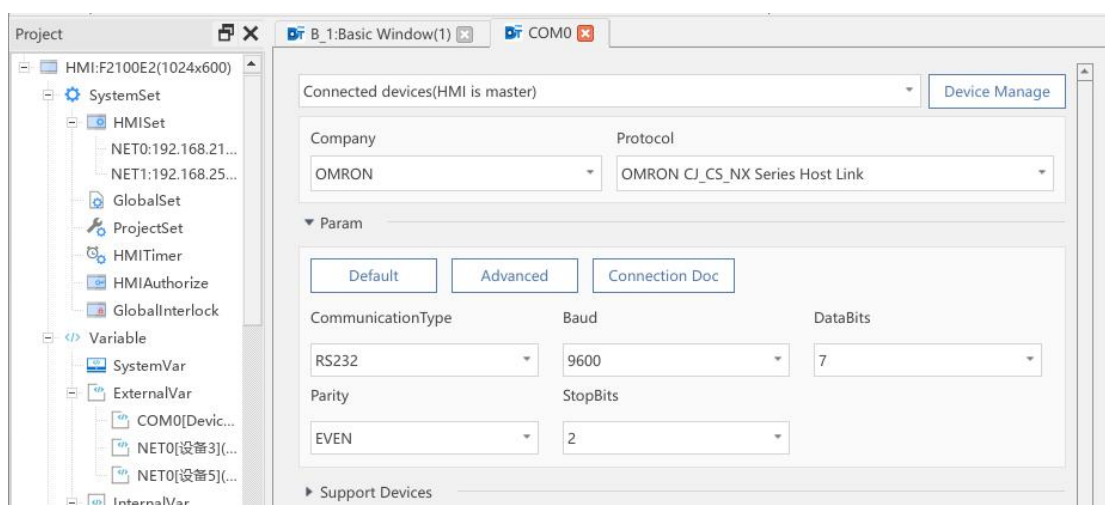
HMI is in pass through communication...

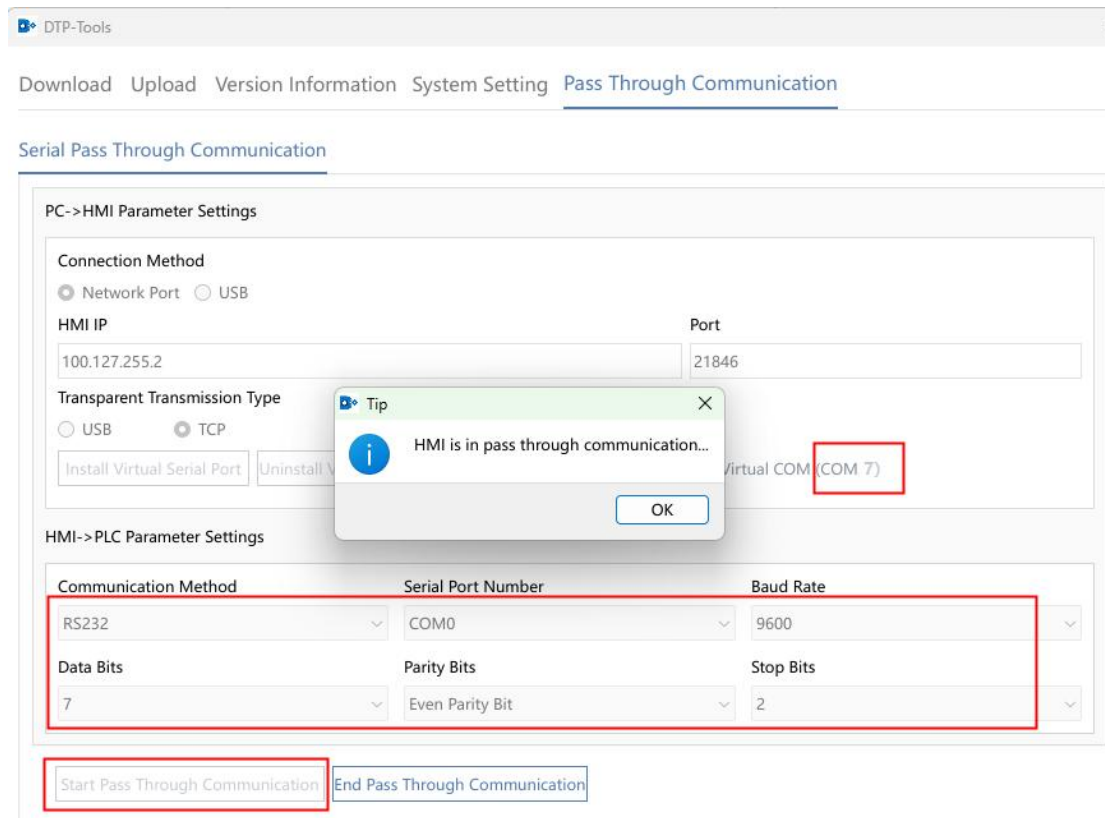
OK



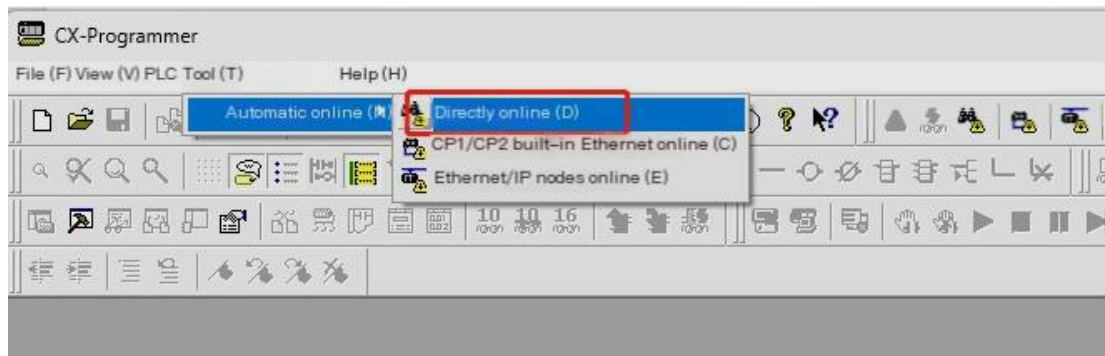
3.5.3 Omron C series PLC

The communication parameters between the HMI and PLC are RS232, 9600, 7, 1, EVEN, and ensure that the communication between the screen and PLC is normal.





You can upload programs from PLC



Directly online

✕

Execute automatic online. Select a connection type and click the [Connect] button.

line type

☒ Serial port connection
(including when using a USB
serial port conversion
cable)

PC serial port

COM7

▼

Connect at a baud rate of 115200bps

☐ USB connection



Connect PLC series

Narrowing down the PLC series connection

☒ CS/CJ/CP series, NSJ series

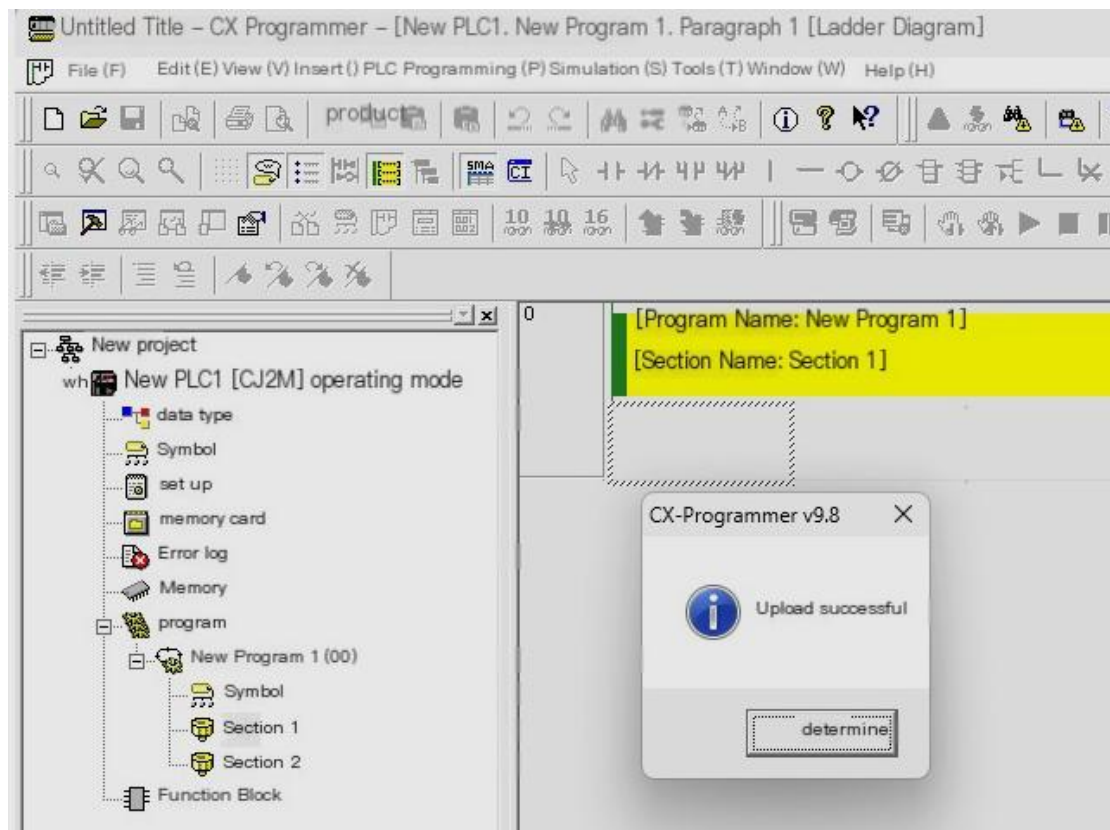
☐ CV/CVM1 series

☐ C C series (including CPM *)

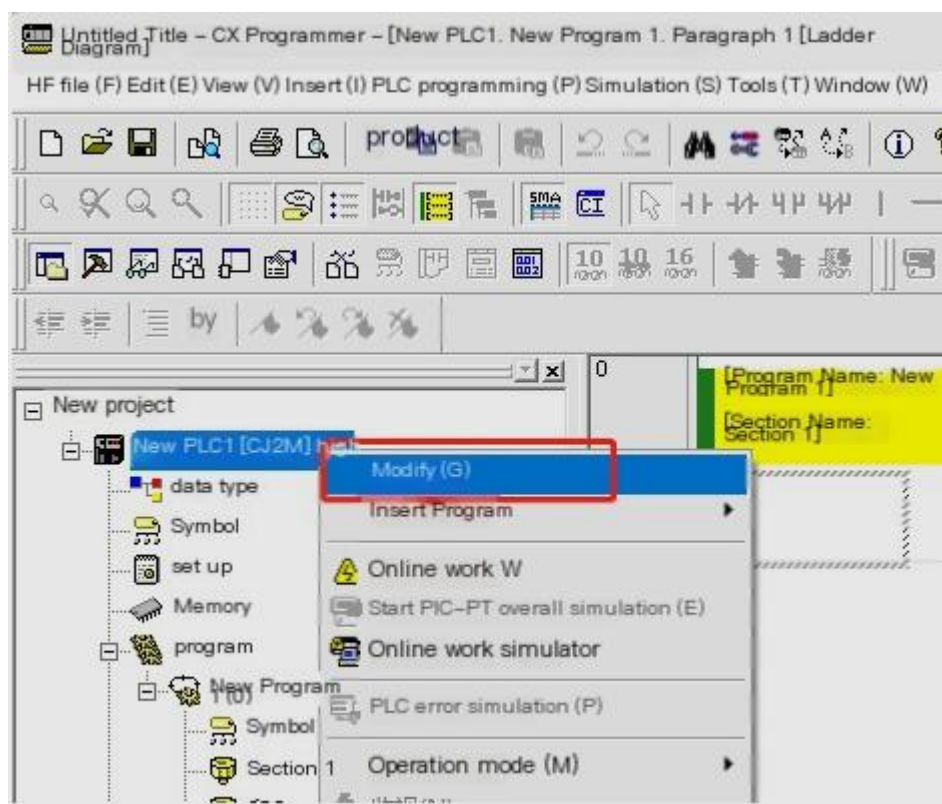
The PLC will automatically connect directly to the PC through a serial cable. Automatically connecting to CompoWay/F components is not feasible.

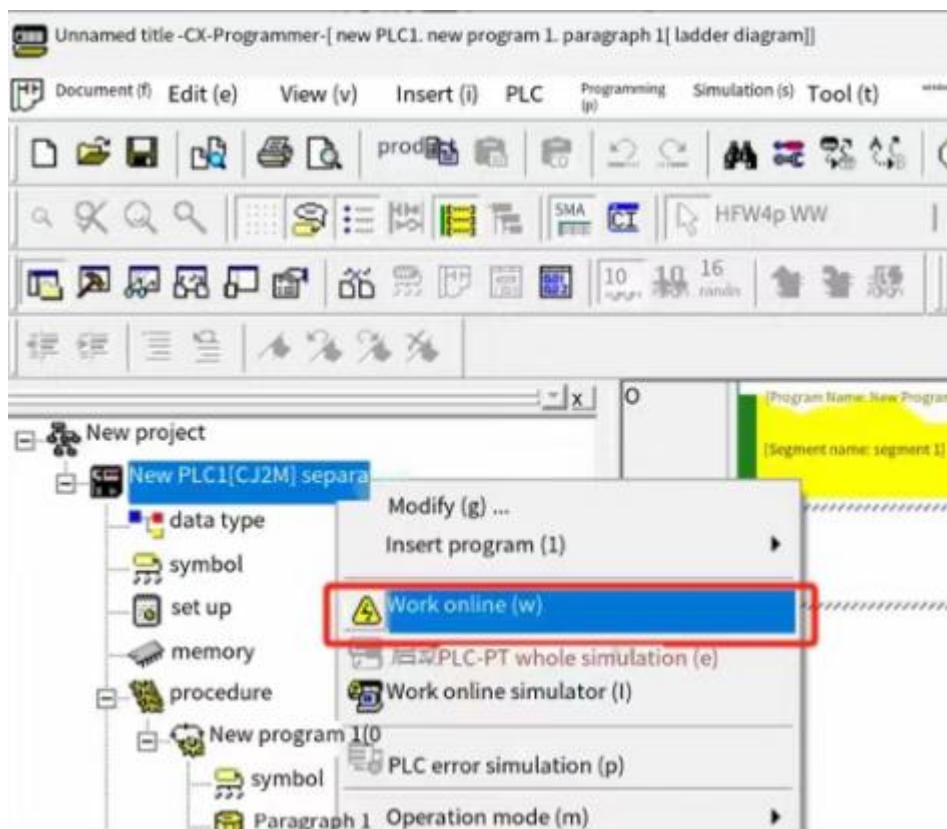
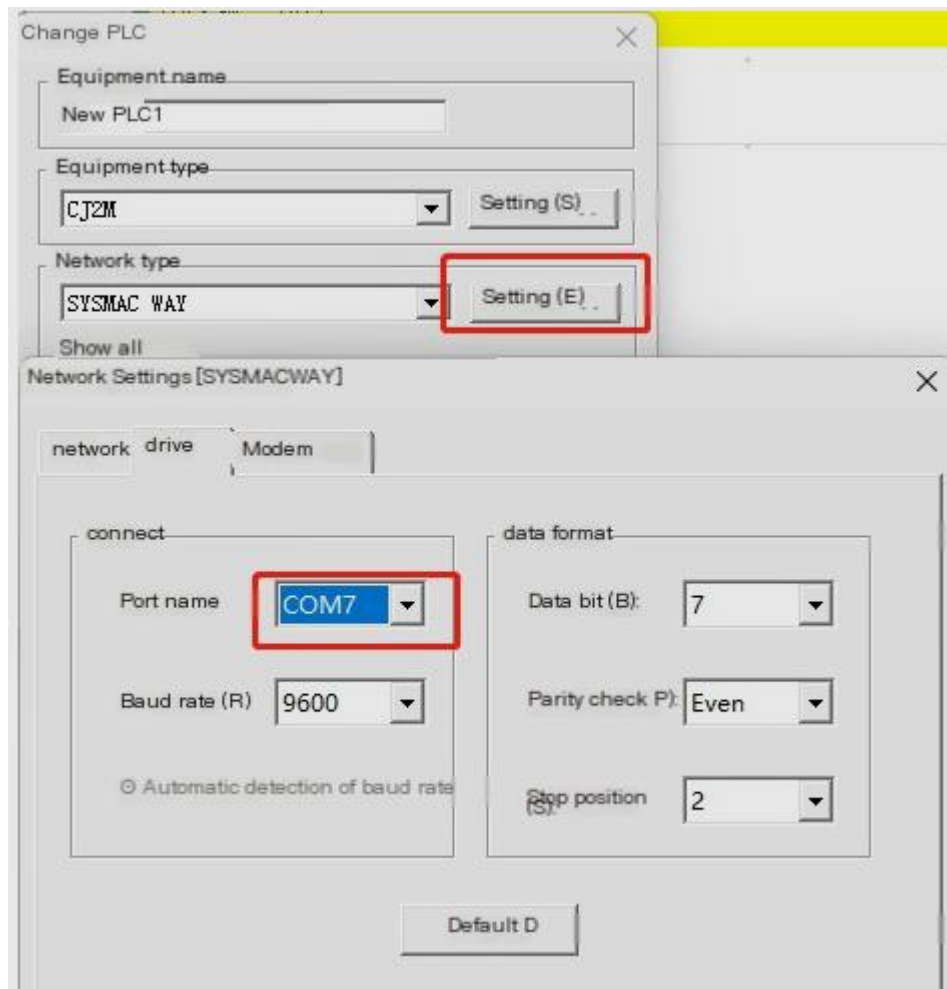
connect

cancel



You can also open the PLC program and modify the online configuration





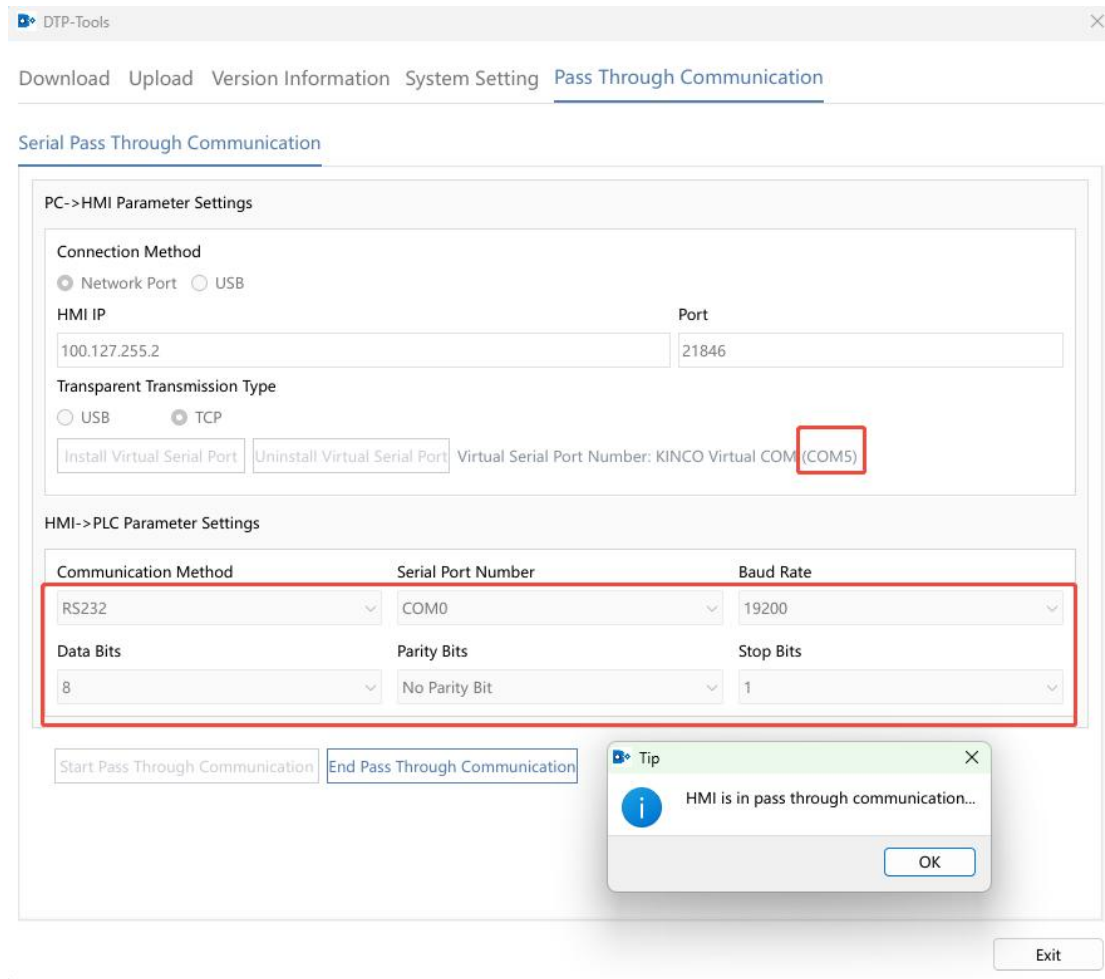
3.5.4 Delta DVP

The communication parameters between the HMI and PLC are RS232, 19200, 8, 1, NONE, and ensure that the communication between the HMI and PLC is normal.

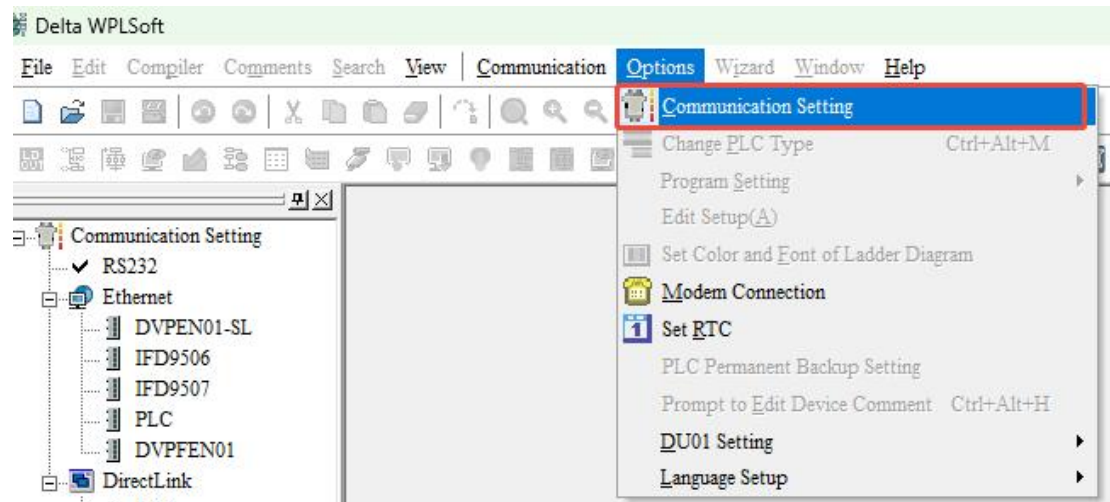
The screenshot shows the 'COM0' configuration window in DTP-Tools. At the top, there's a dropdown for 'Connected devices(HMI is master)' and a 'Device Manage' button. Below this, 'Company' is set to 'Delta' and 'Protocol' is set to 'Delta DVP'. A 'Param' section contains three tabs: 'Default', 'Advanced', and 'Connection Doc'. Under 'Default', 'CommunicationType' is 'RS232', 'Baud' is '19200', 'DataBits' is '8', 'Parity' is 'NONE', and 'StopBits' is '1'. Below the tabs are sections for 'Support Devices' and 'Communication status settings'. The 'Communication status settings' section includes an 'Add Controller' button and a text field 'Number of controllers/PLC allowed' set to '1'. A table lists the configured controller:

Number	Controller Name	Setting	Operation
1	Device2	StationNo=0;	Set Delete

DTP-Tools sets the communication parameters between HMI and PLC, and click Start Pass Through Communication



Open PLC software



Set the COM port to virtual serial port driver COM5. After the detection is successful, you can upload and download the PLC

Communication Setting

Connection Setup

Type RS232

Communication Setting

COM Port COM5

Data Length 8

Parity Even

Stop Bits 1

Baud Rate 19200

Station Address 1

Auto-detect

Default

Ethernet Setting

☐ Assign IP 192.168. 1.115

Port 502

Baud Rate Decided by

☒ PLC Setting

☐ WPL Setting

Setup Responding Time

Times of Auto-retry 3

Time Interval of Auto-retry (sec.) 3

OK

Cancel

USB Serial Port (COM3)

通信端口 (COM1)

KINCO Virtual COM (COM5)

Communication Setting

Connection Setup

Type: RS232

Communication Setting

COM Port: COM5

Data Length: 8

Parity: Even

Stop Bits: 1

Auto-detect

Communication detection

PLC: EH3-L

Communication protocol: 19200,8, Even, 1

PC COM: five

Communication mode: ASCII

Detection succeeded.

close

Setup Responding Time

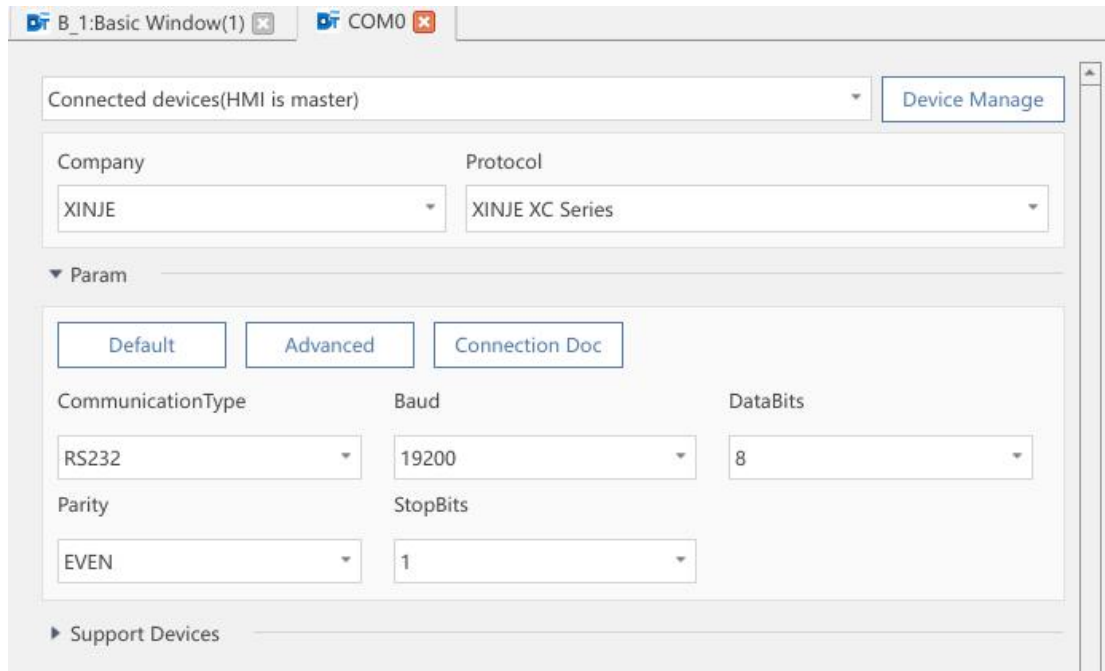
Times of Auto-retry: 3

Time Interval of Auto-retry (sec.): 3

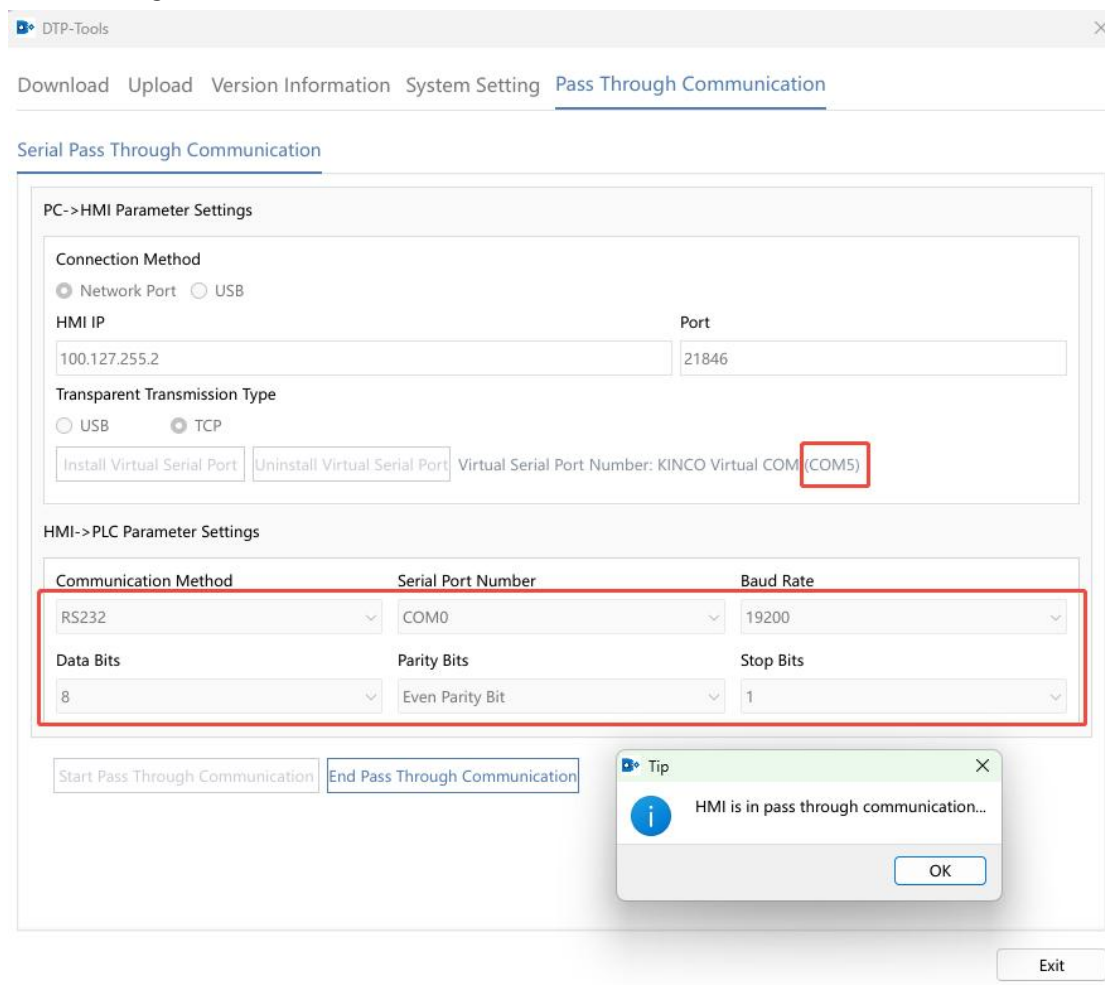
OK Cancel

3.5.5 XINJE XC Series

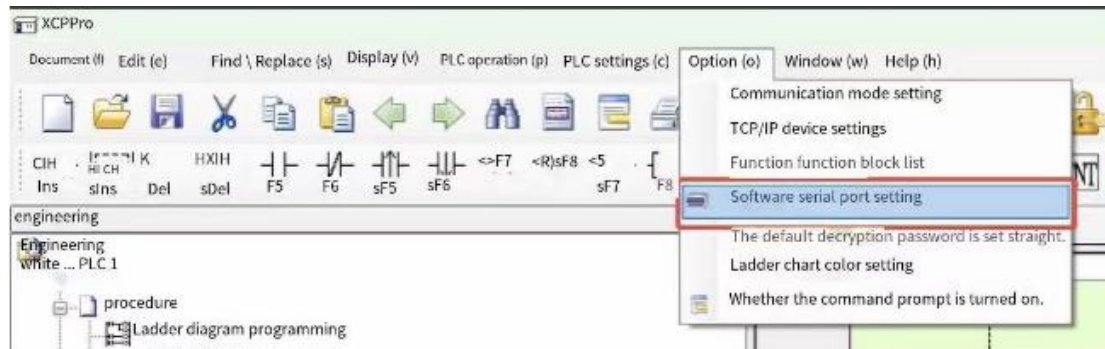
The communication parameters between the HMI and PLC are RS232, 19200, 8, 1, EVEN, and ensure that the communication between the screen and PLC is normal.



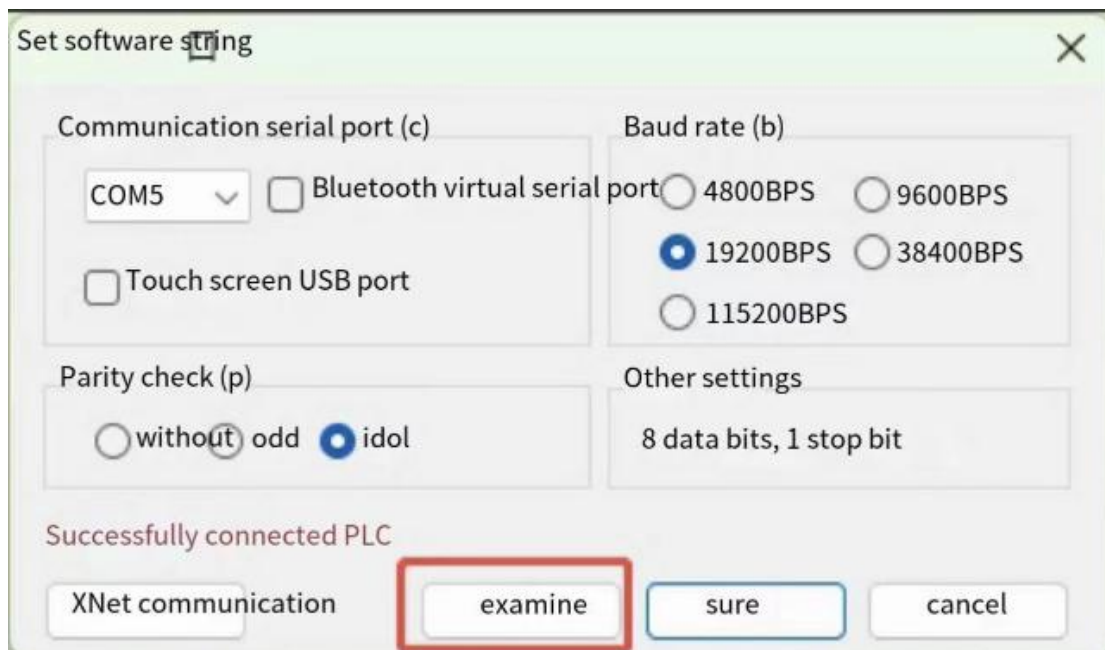
DTP-Tools sets the communication parameters between HMI and PLC, and click Start Pass Through Communication



Open PLC software



Set the COM port to virtual serial port driver COM5. After the detection is successful, you can upload and download the PLC



3.5.6 FATEK FB Series

The communication parameters between the HMI and PLC are RS232, 9600, 7, 1, EVEN, and ensure that the communication between the screen and PLC is normal.

B_1:Basic Window(1) x COM0 x

Connected devices(HMI is master) Device Manage

Company: FATEK Protocol: FATEK FB

▼ Param

Default Advanced Connection Doc

CommunicationType: RS232 Baud: 9600 DataBits: 7

Parity: EVEN StopBits: 1

► Support Devices

DTP-Tools

Download Upload Version Information System Setting Pass Through Communication

Serial Pass Through Communication

PC->HMI Parameter Settings

Connection Method: ☒ Network Port ☐ USB

HMI IP: 100.127.255.2 Port: 21846

Transparent Transmission Type: ☐ USB ☒ TCP

Install Virtual Serial Port Uninstall Virtual Serial Port Virtual Serial Port Number: KINCO Virtual COM COM5

HMI->PLC Parameter Settings

Communication Method: RS232 Serial Port Number: COM0 Baud Rate: 9600

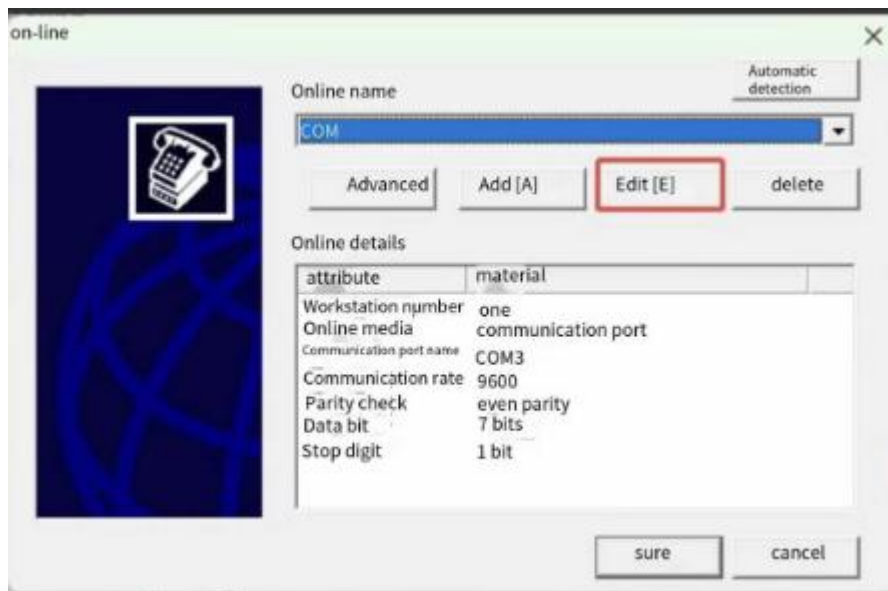
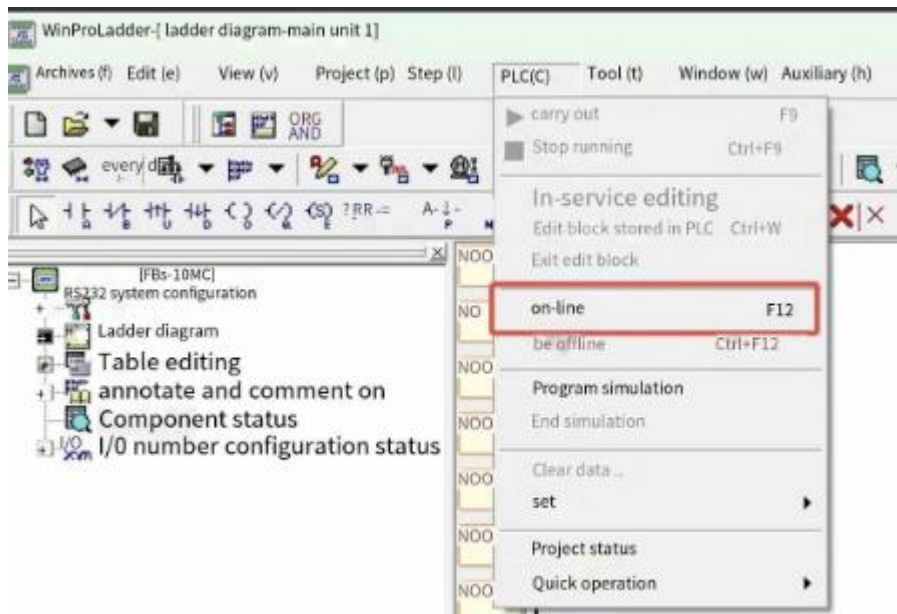
Data Bits: 7 Parity Bits: Even Parity Bit Stop Bits: 1

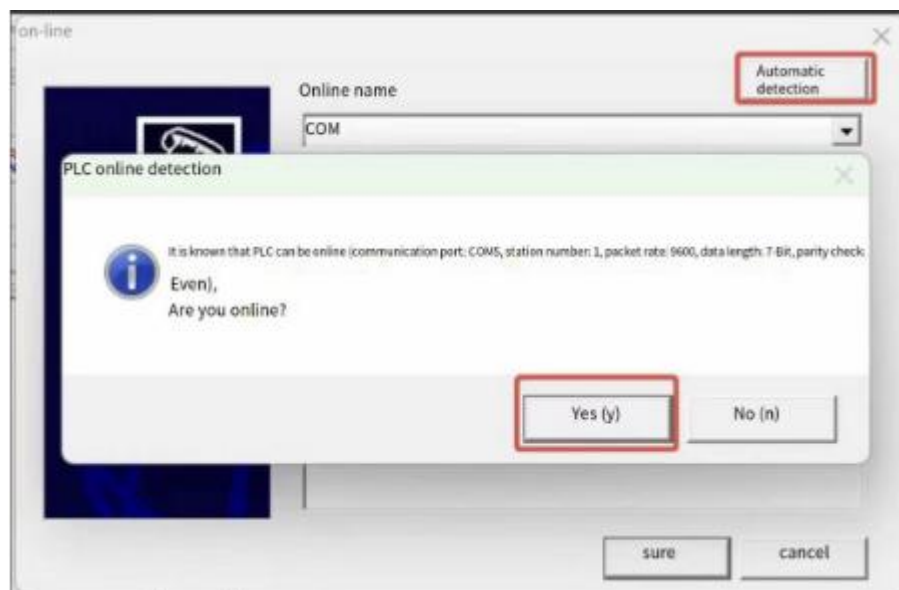
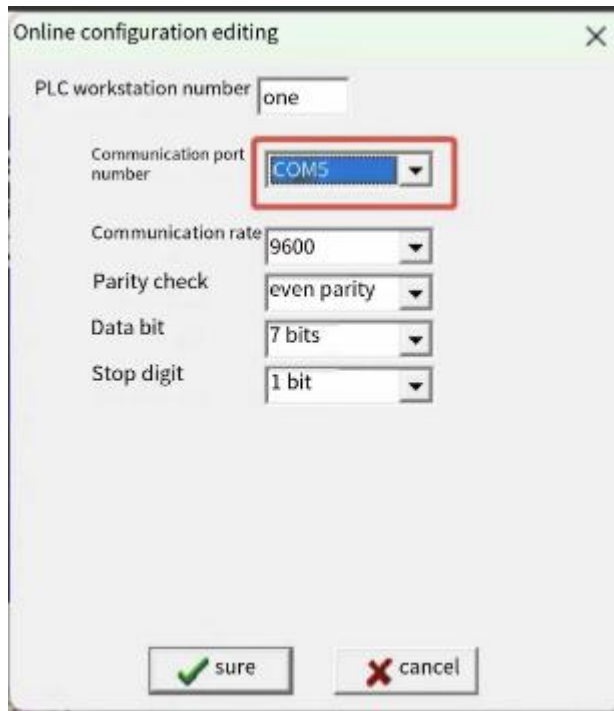
Start Pass Through Communication End Pass Through Communication

Tip: HMI is in pass through communication... OK

Exit

Open PLC software





4. Network Port PassThrough Detailed Introduction

4.1 Detailed Introduction

1. The LAN IP of the physical network port of the HMI must be in the same network segment as the PLC.
2. Multiple PLCs can be passThrough at the same time. For example, if the Kinco PLC and Siemens PLC and HMI are in the same LAN, when transparently passThrough EA, enter the IP of any PLC to enter the passThrough. Both Kinco and Siemens PLCs can use PLC software to passThrough and upload and download projects.

4.2 Network topology diagram of network port passThrough

Figure 1:

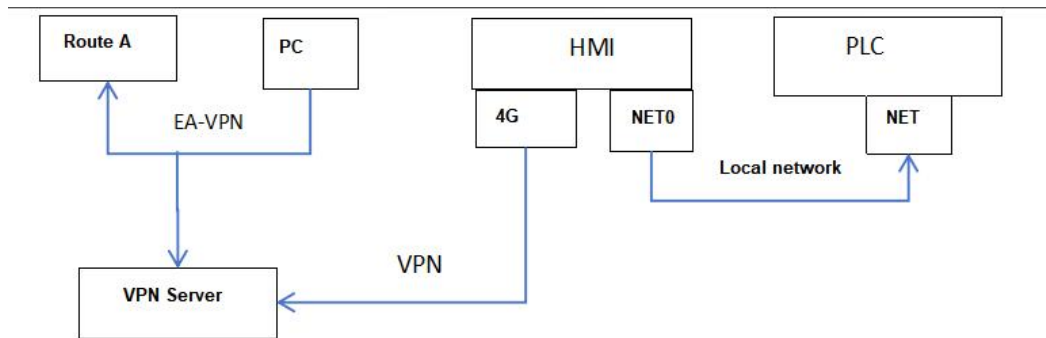


Figure 2:

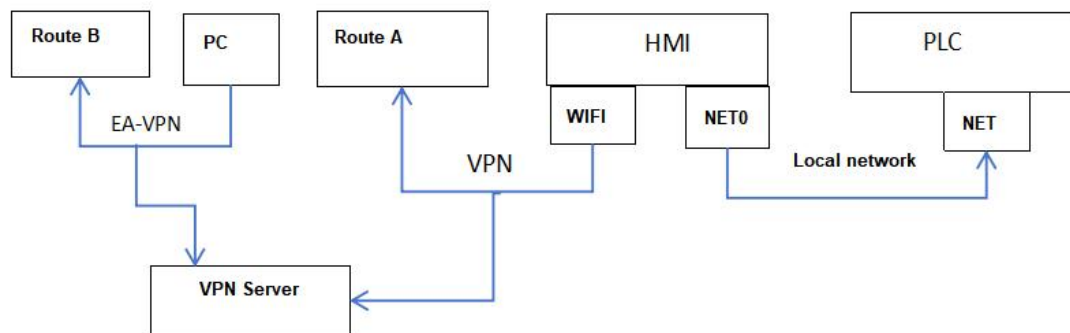


Figure 3:

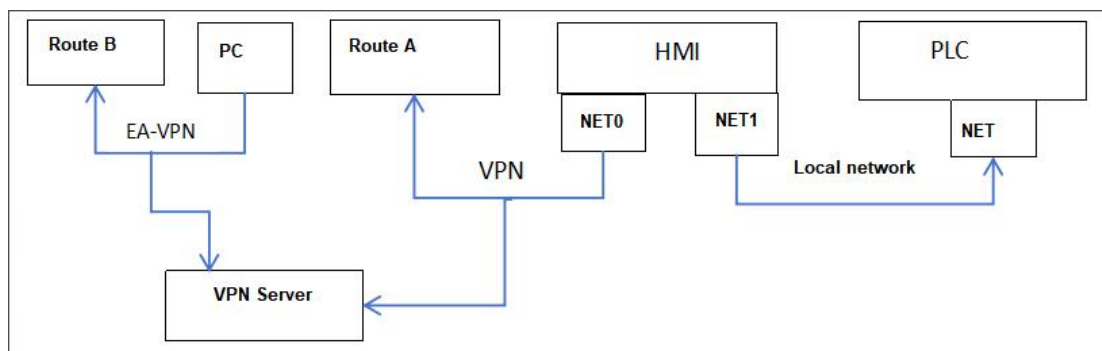
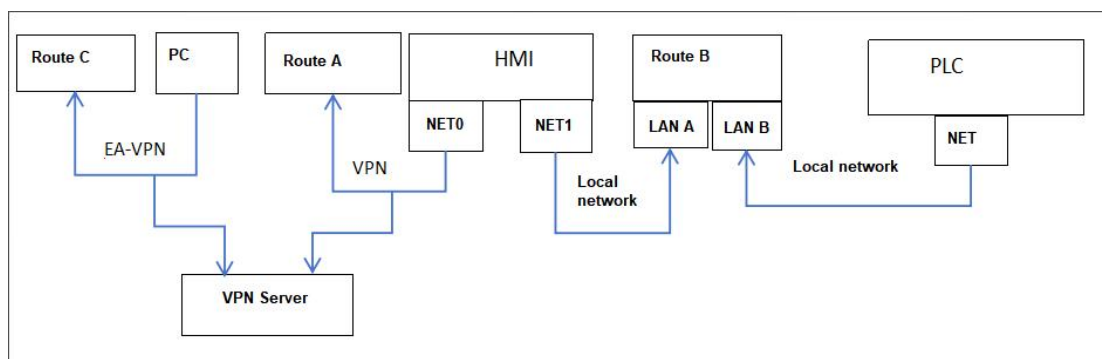


Figure 4:

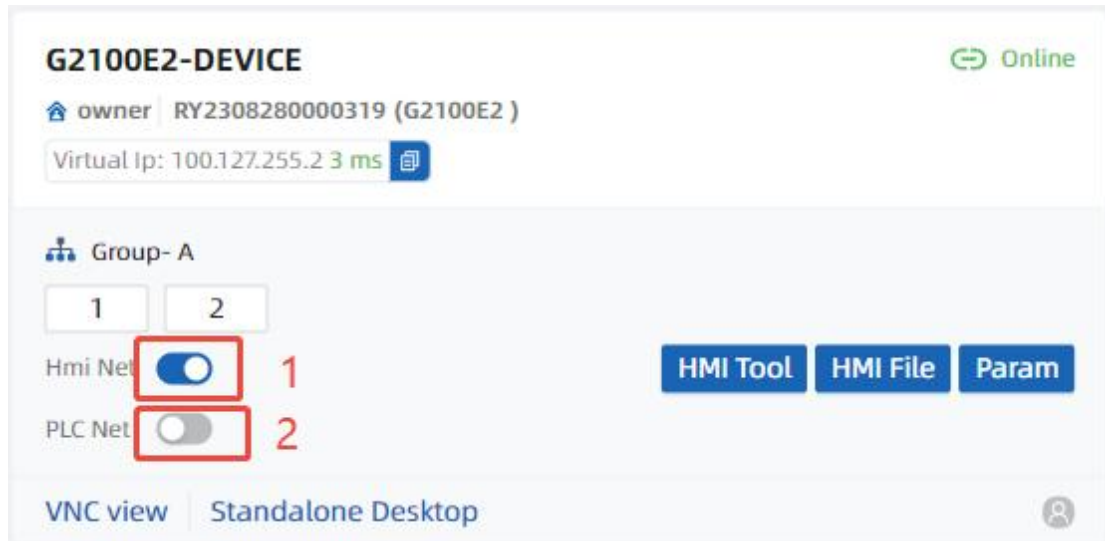


4.3 Introduction to Network Port PassThrough by Manufacturers

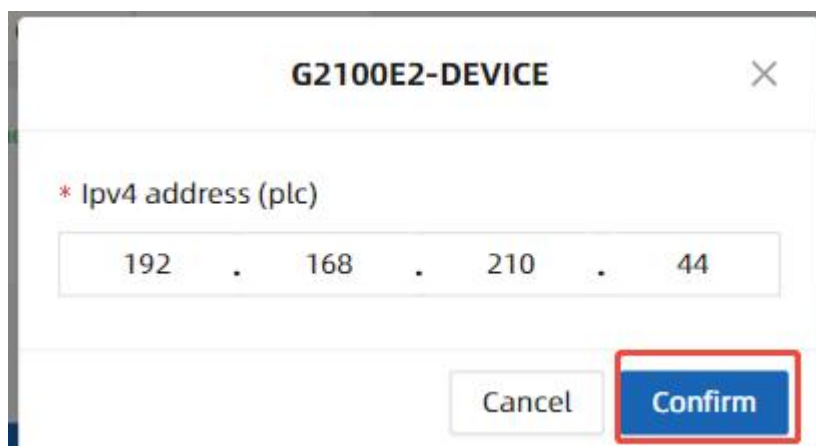
4.3.1 Kinco PLC

e.g. The IP of PLC is 192.168.210.44, and the IP of HMI is 192.168.210.86

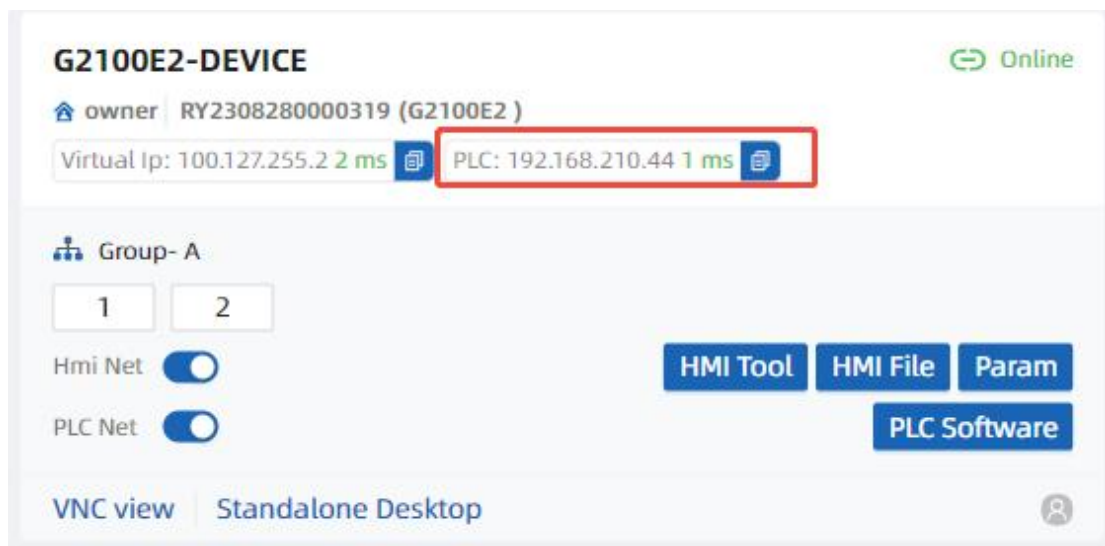
Open the EA software, connect to the HMI VPN, click PLC connection, and enter the PLC IP



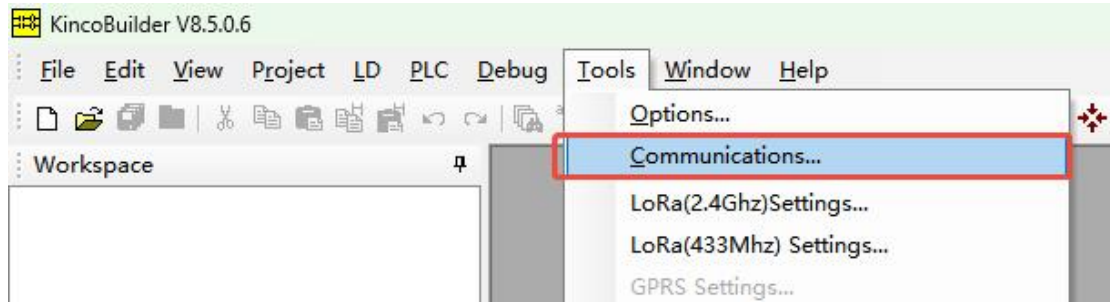
Enter the IP address of the PLC



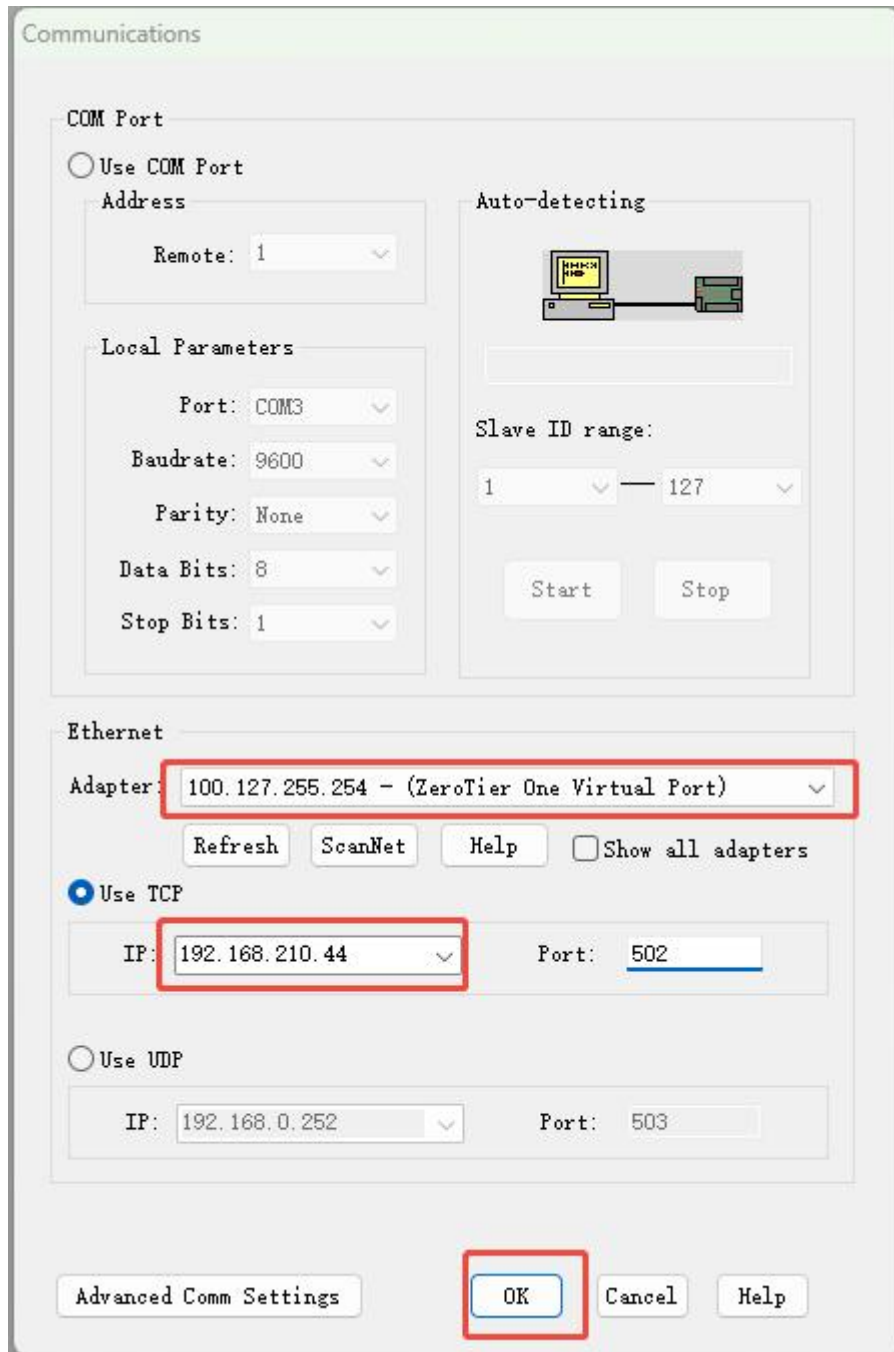
You can see the network status of the PLC after connection

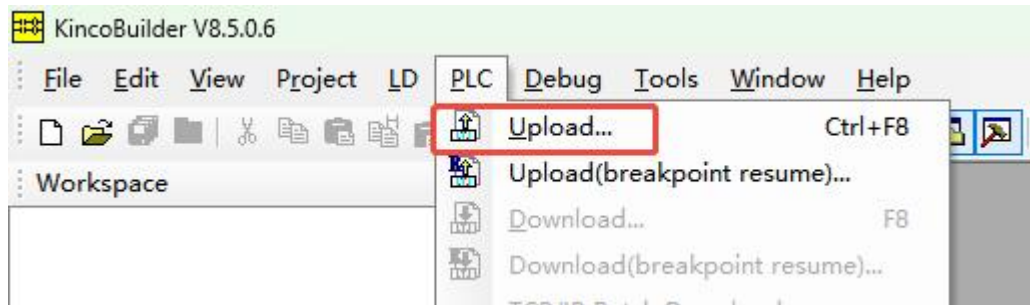


Open the PLC software



Select the ZeroTier one virtual port network card, enter the IP of the PLC to connect

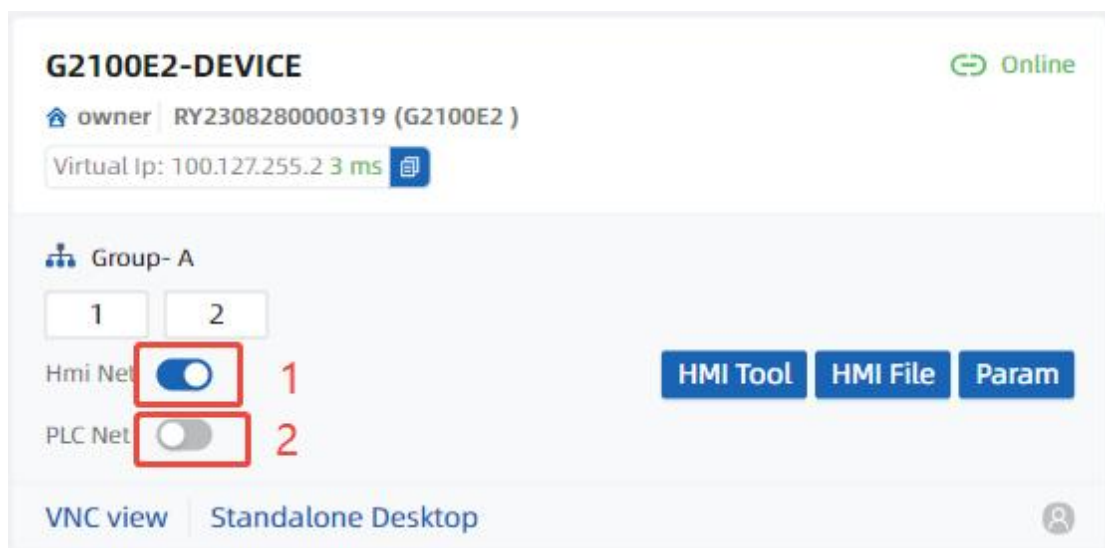




4.3.2 Siemens - 1500 PLC

e.g. The IP of PLC is 192.168.210.140, and the IP of HMI is 192.168.210.86

After the VPN connection is successful, open the EA software, turn on the HMI, turn on the PLC connection, and enter the PLC IP



G2100E2-DEVICE ✕

* Ipv4 address (plc)

192 . 168 . 210 . 140

Cancel **Confirm**

After connecting, you can see the network status of the PLC

G2100E2-DEVICE Online

owner RY2308280000319 (G2100E2)

Virtual Ip: 100.127.255.2 4 ms **PLC: 192.168.210.140 1 ms**

Group- A

1 2

Hmi Net ☒

PLC Net ☒

HMI Tool **HMI File** **Param**

PLC Software

VNC view Standalone Desktop

Open the TIA Portal software and click go to online

Siemens - C:\Users\18721\Desktop\UJJJ\1214\1214

Project Edit View Insert Online Options Tools Window Help

Save project **Go online** Go off

Project tree

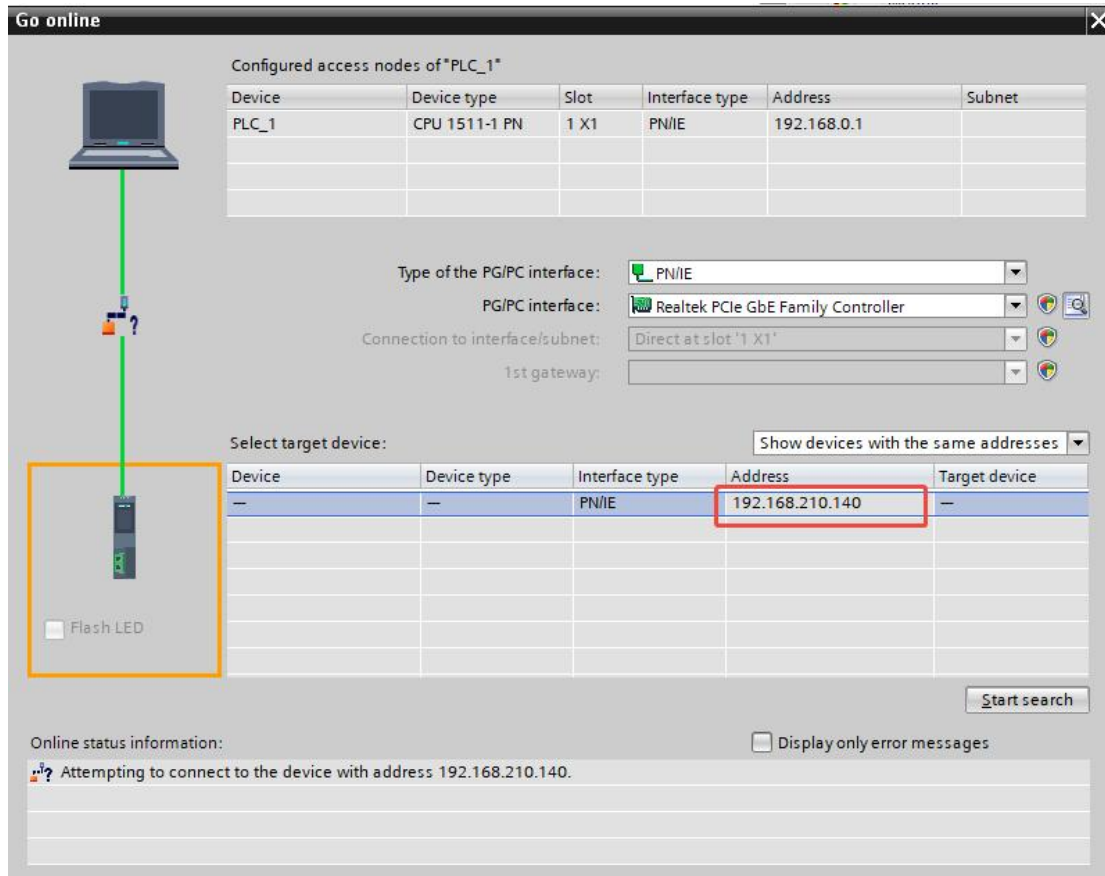
1214 ▶ PLC_1 [CPU 1511-1

Devices

1214

- Add new device
- Devices & networks
- PLC_1 [CPU 1511-1 PN]
- Device configuration
- Online & diagnostics

PLC_1 [CPU 1511-1 PN]



If it is not this IP, you can manually enter the PLC IP to connect

Go online

Flash LED

Configured access nodes of "PLC_1"

Device	Device type	Slot	Interface type	Address	Subnet
PLC_1	CPU 1511-1 PN	1 X1	PN/IE	192.168.0.1	

Type of the PG/PC interface:

PN/IE

PG/PC interface:

Realtek PCIe GbE Family Controller

Connection to interface/subnet:

Direct at slot "1 X1"

1st gateway:

Select target device:

Show devices with the same addresses

Device	Device type	Interface type	Address	Target device
PLC_1	CPU 1511-1 PN	PN/IE	192.168.210.140	PLC_1
—	—	PN/IE	Enter address here	—

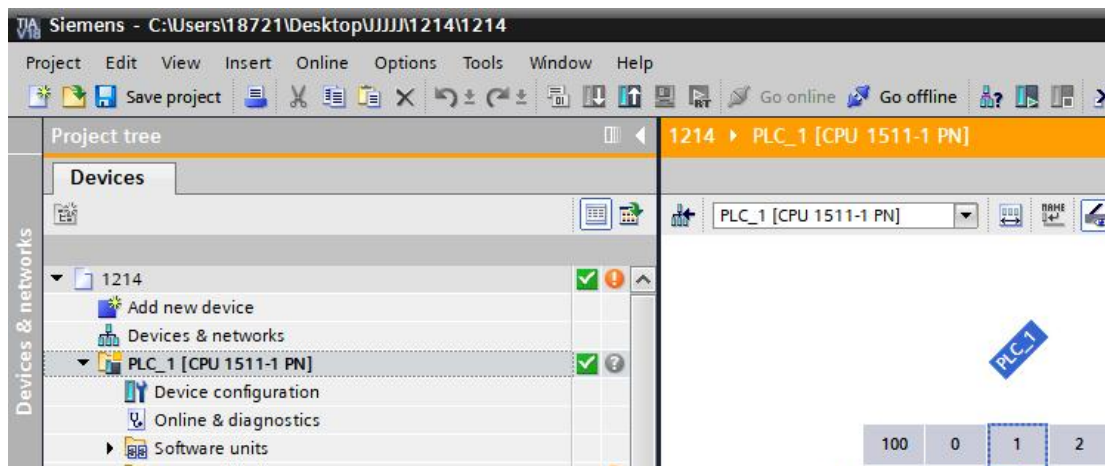
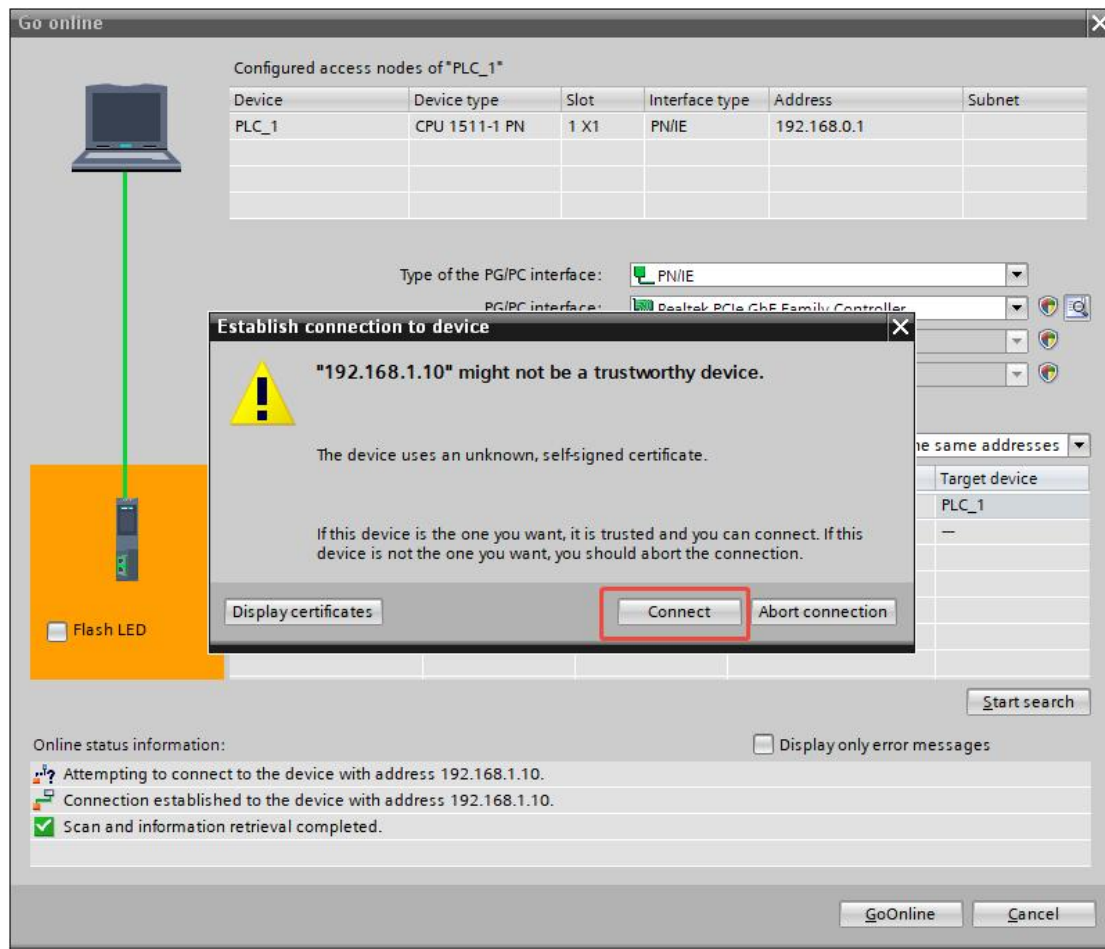
Start search

Online status information:

Display only error messages

GoOnline

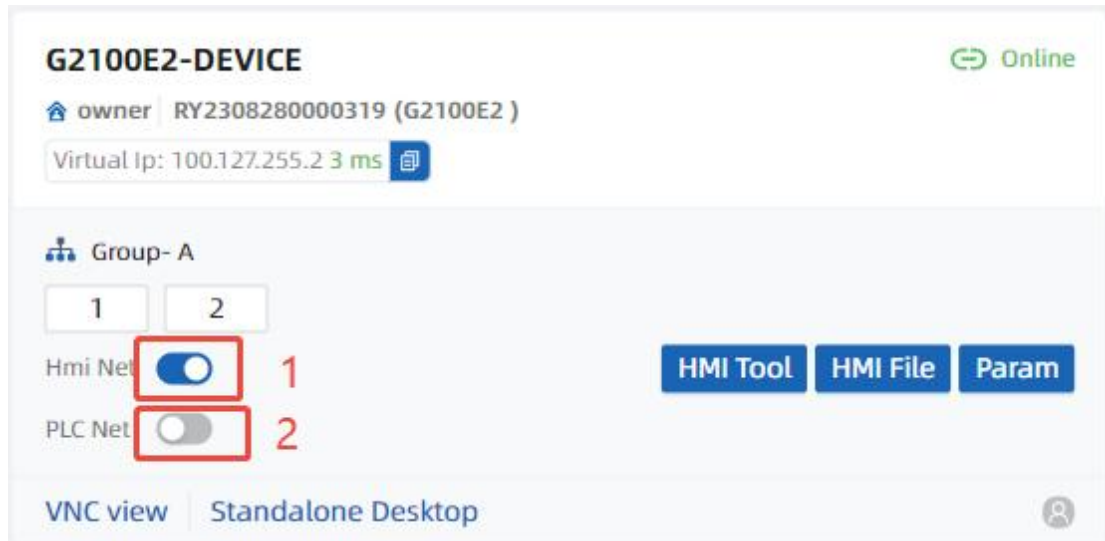
Cancel



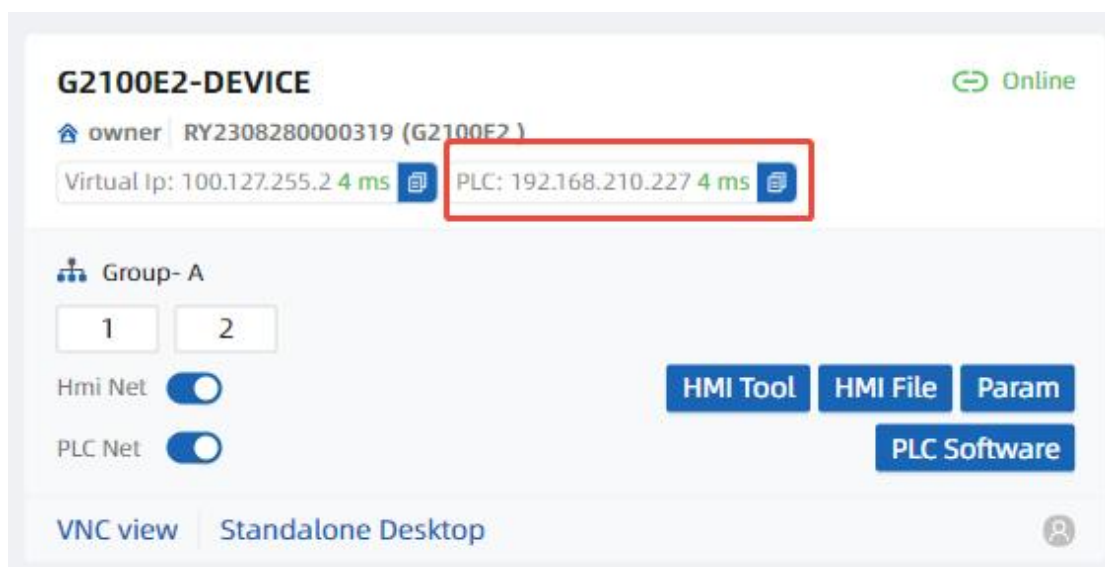
4.3.3 Inovance AC series PLC

e.g. Inovance's AC series PLC, IP is 192.168.210.227, the HMI's IP is 192.168.210.86

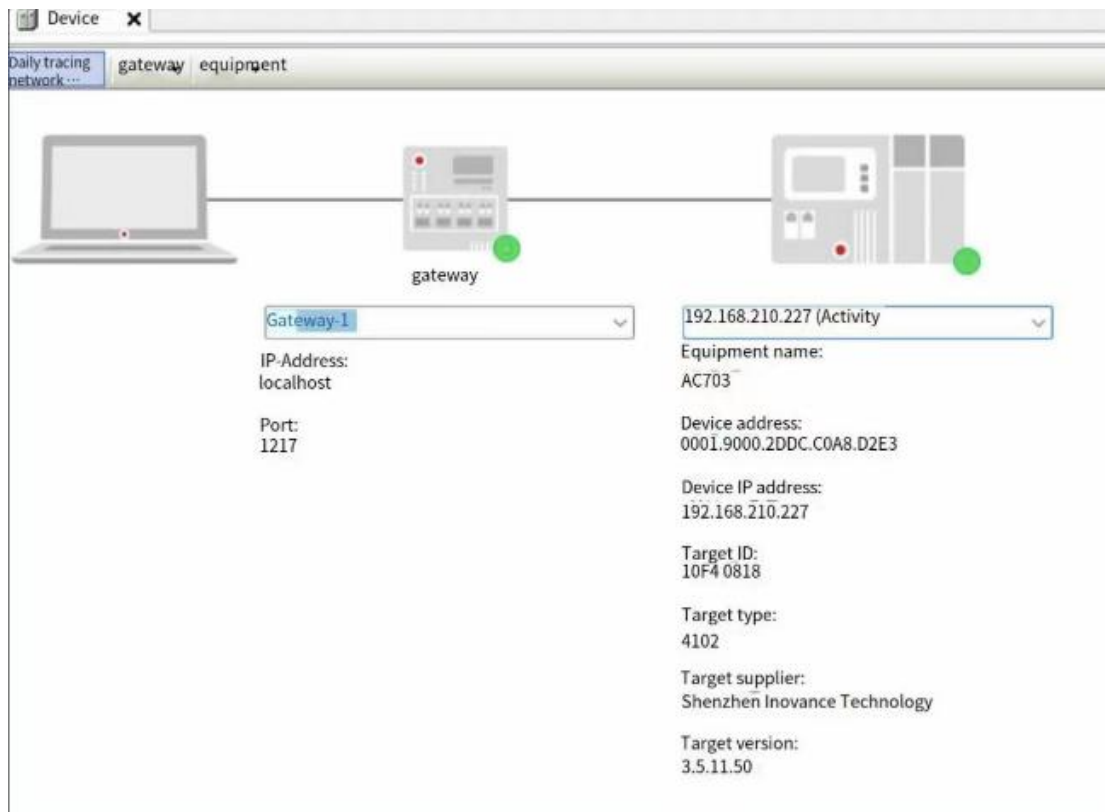
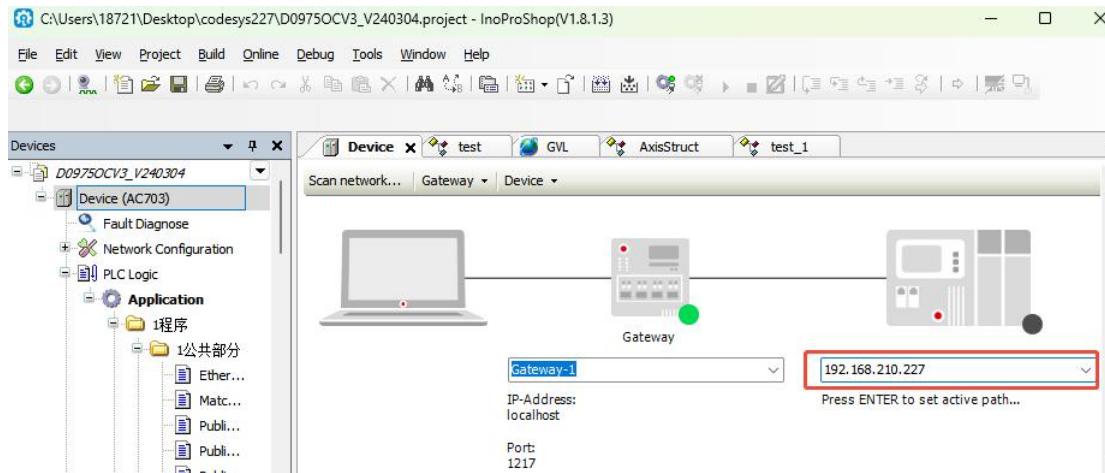
After the VPN connection is successful, open the EA software, turn on the HMI, turn on the PLC connection, and enter the PLC IP



You can see the network status of the PLC after connecting



Open the PLC software, enter the PLC IP and press enter



4.3.4 VEICHI VC series PLC

e.g. VEICHI VC series PLC, IP is 192.168.1.10, HMI IP is 192.168.1.199

After the VPN connection is successful, open the EA software, turn on the HMI, turn on the PLC connection, and enter the PLC IP

G2100E2-DEVICE

Online

owner RY2308280000319 (G2100E2)

Virtual Ip: 100.127.255.2 3 ms

Group- A

1

2

Hmi Net ☒ 1

PLC Net ☐ 2

HMI Tool HMI File Param

VNC view Standalone Desktop

Enter the PLC IP 192.168.1.10, and click OK

G2100E2-DEVICE

* Ipv4 address (plc)

192 . 168 . 1 . 10

Cancel Confirm

You can see the network status of the PLC after connecting

G2100E2-DEVICE

Online

owner RY2308280000319 (G2100E2)

Virtual Ip: 100.127.255.2 4 ms

PLC: 192.168.1.10 1 ms

Group- A

1

2

Hmi Net ☒

PLC Net ☒

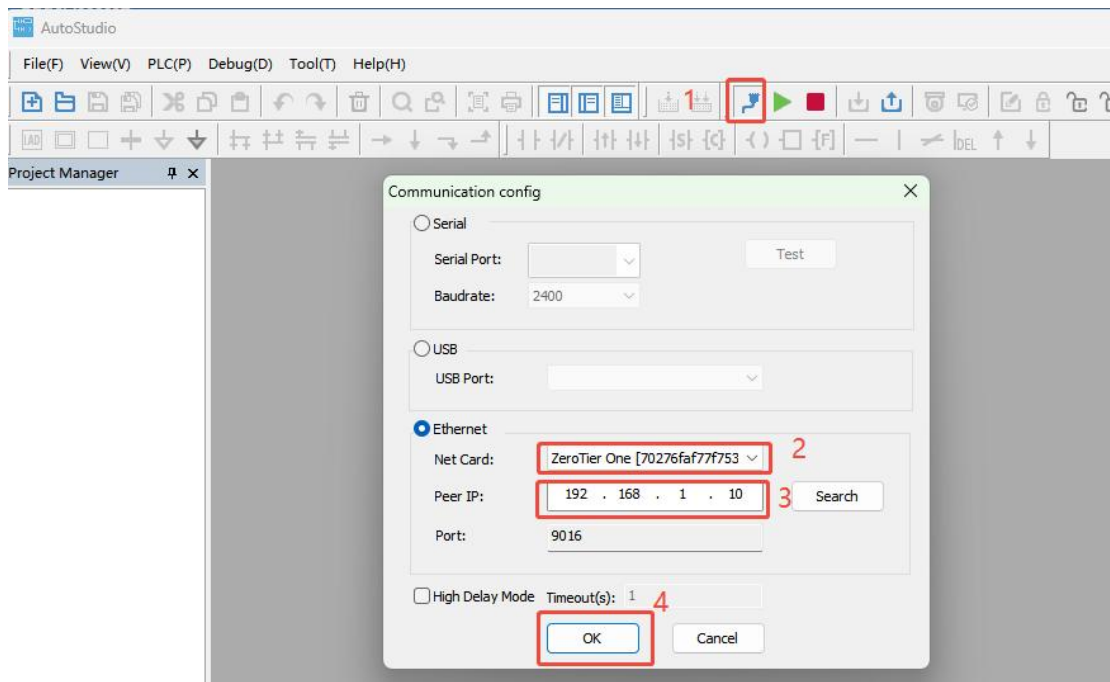
HMI Tool HMI File Param

PLC Software

VNC view Standalone Desktop



Open the PLC software, select the ZerTier One network card in the connection settings, and enter the PLC IP



Or enter the LAN IP range to search

PLC Search

☐ Search in local area network

☒ Search in range

Start Address 192 . 168 . 1 . 8

End Address 192 . 168 . 1 . 11

Search

Cancel

Search Result

	IP	PLC	Name	MAC
1	192.168.1.10	VC3		46:16:00:36:00:28

OK

Close

4.3.5 Mitsubishi FX5U series PLC

e.g. Mitsubishi FX5U series PLC, IP is 192.168.3.201, HMI IP is 192.168.3.199

After the VPN connection is successful, open the EA software, turn on the HMI, turn on the PLC connection, and enter the PLC IP

G2100E2-DEVICEOnline

owner RY2308280000319 (G2100E2)

Virtual Ip: 100.127.255.2 3 ms

Group- A

12

Hmi Net ☒ 1

PLC Net ☐ 2

HMI ToolHMI FileParam

VNC viewStandalone Desktop

G2100E2-DEVICE

* Ipv4 address (plc)

192 . 168 . 3 . 201

CancelConfirm

After connecting, you can see the network status of PLC

G2100E2-DEVICEOnline

owner RY2308280000319 (G2100E2)

Virtual Ip: 100.127.255.2 1 ms

PLC: 192.168.3.201 2 ms

Group- A

12

Hmi Net ☒

PLC Net ☒

HMI ToolHMI FileParam

PLC Software

VNC viewStandalone Desktop

Open GX Works3 PLC software

Specify Connection Destination Connection

PC side I/F


Serial
USB


Ethernet
Board

PLC side I/F


PLC
Module


Ethernet
Module


GOT

Network No.

-

Station No.

-

Protocol

TCP

IP Address/Host Name

192.168.3.201

PLC Mode

FX5CPU

Other
Station
Setting


No Specification


Other Station(Single
Network)

Time Out (Sec.)

30

Retry Times

0

Connection Channel List...

CPU Module Direct Coupled Setting

Connection Test

PLC Type

System Image...

Network
Communication
Route


CC IE TSN
CC IE Field


Ethernet


CC-Link

OK

Cancel

PLC side I/F Detailed Setting of PLC Module

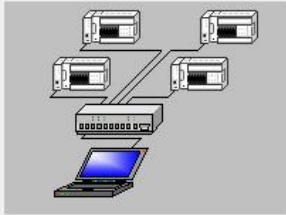
PLC Mode

FX5CPU

☐ Ethernet Port Direct Connection



☒ Connection via HUB



* Please select 'Connection via HUB' when you use HUB even if there is only one target device to communicate. If HUB is connected to other devices and also 'Ethernet Port Direct Connection' is selected during communication, the line becomes overloaded. This might affect other devices' communication.

☒ IP Address

1921683201

IP Input Format

DEC

☐ Host Name

Search for the FX5CPU on network.

Response Wait Time

2

sec.

☐ Display Only CPU Type of Project(V)

Find(S)

Selection IP Address Input

Search for FX5CPU on the same network. Unable to search for the following causes:

- No response within a specific time period.

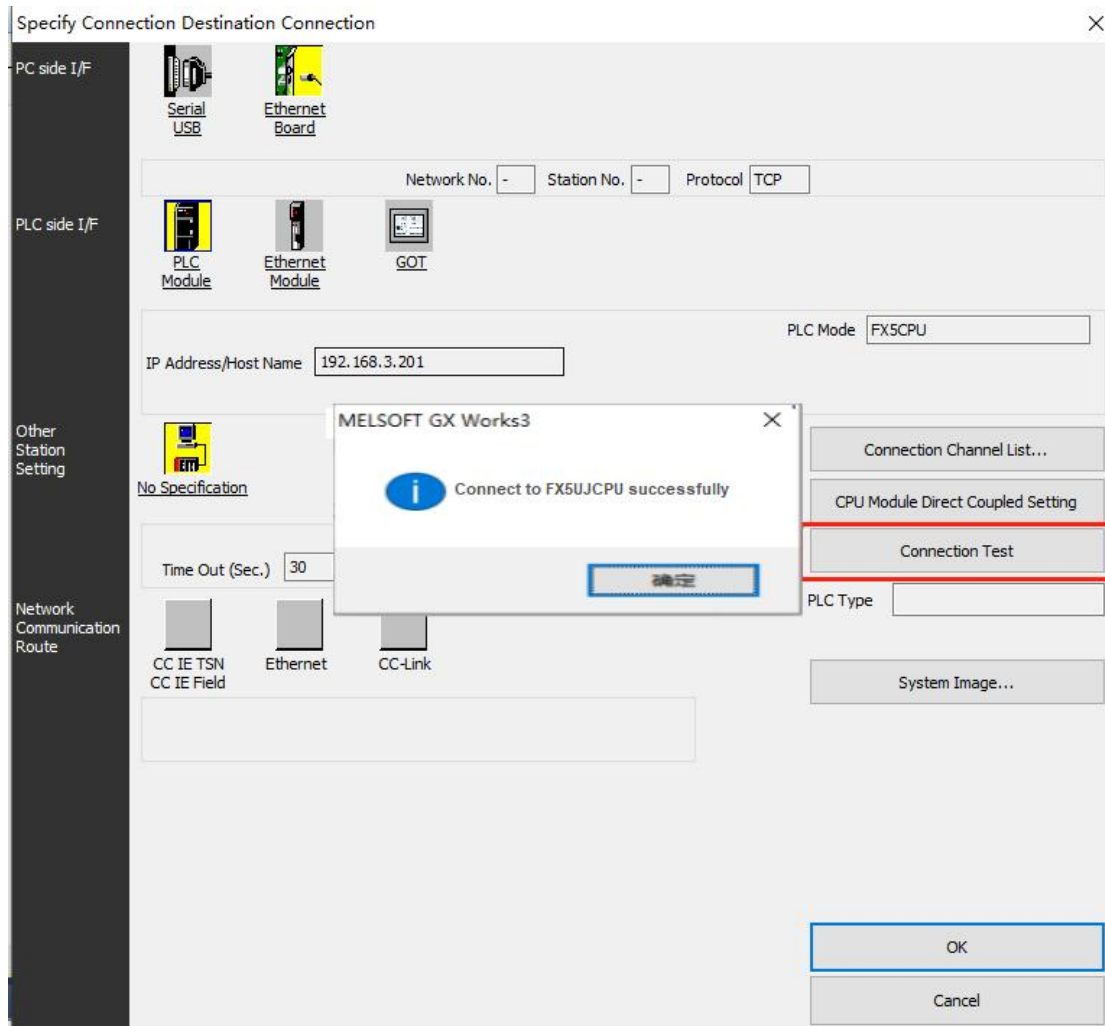
- Connected via a router or subnet mask is different.

- 'No response to search for CPU module on network' is set in module parameter.

IP address	CPU Type	Label	Comment
------------	----------	-------	---------

OK

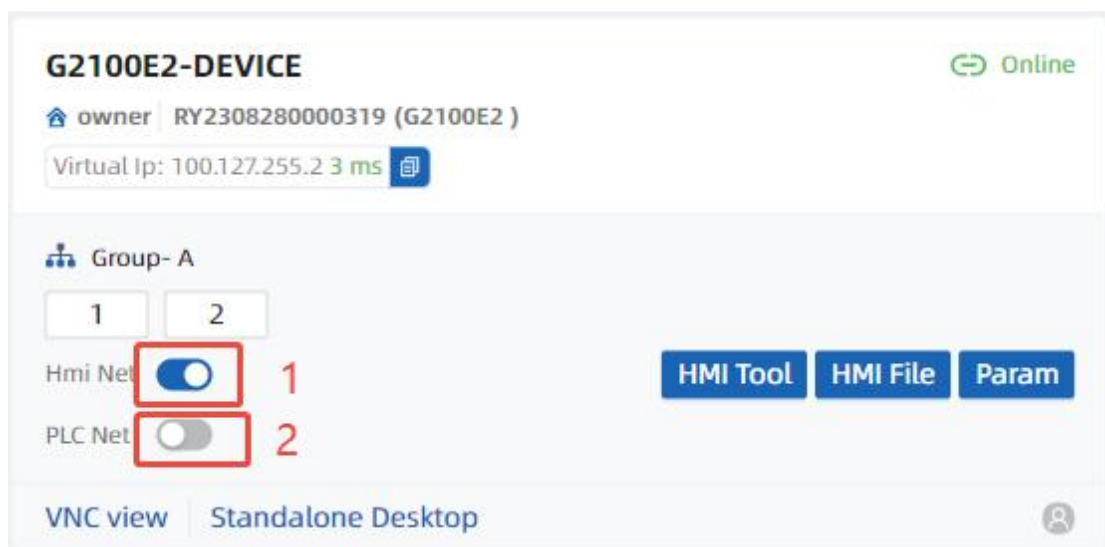
Cancel



4.3.6 Omron CP series PLC

e.g. Omron CP2E Series PLC, IP is 192.168.250.2, HMI IP is 192.168.250.199

After the VPN connection is successful, open the EA software, turn on the HMI, turn on the PLC connection, and enter the PLC IP



G2100E2-DEVICE

* Ipv4 address (plc)

192 . 168 . 250 . 2

Cancel

Confirm

After connecting, you can see the network status of PLC

G2100E2-DEVICE

Online

owner RY2308280000319 (G2100E2)

Virtual Ip: 100.127.255.2 2 ms

PLC: 192.168.250.2 3 ms

Group- A

1 2

Hmi Net

PLC Net

HMI Tool

HMI File

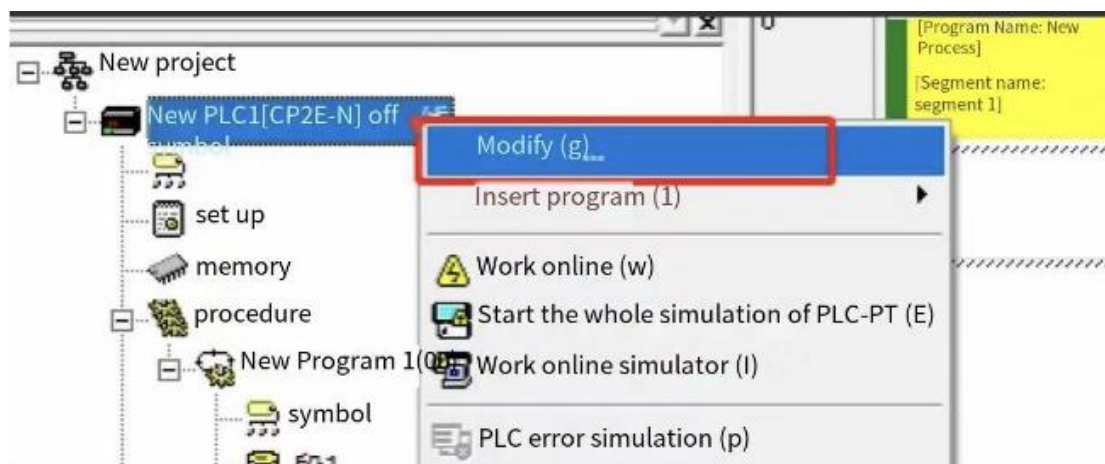
Param

PLC Software

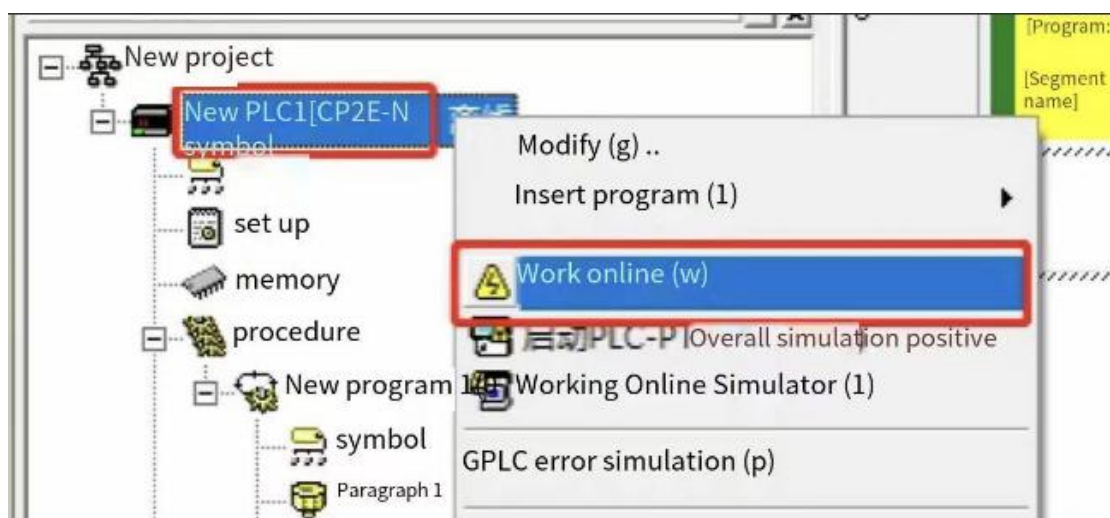
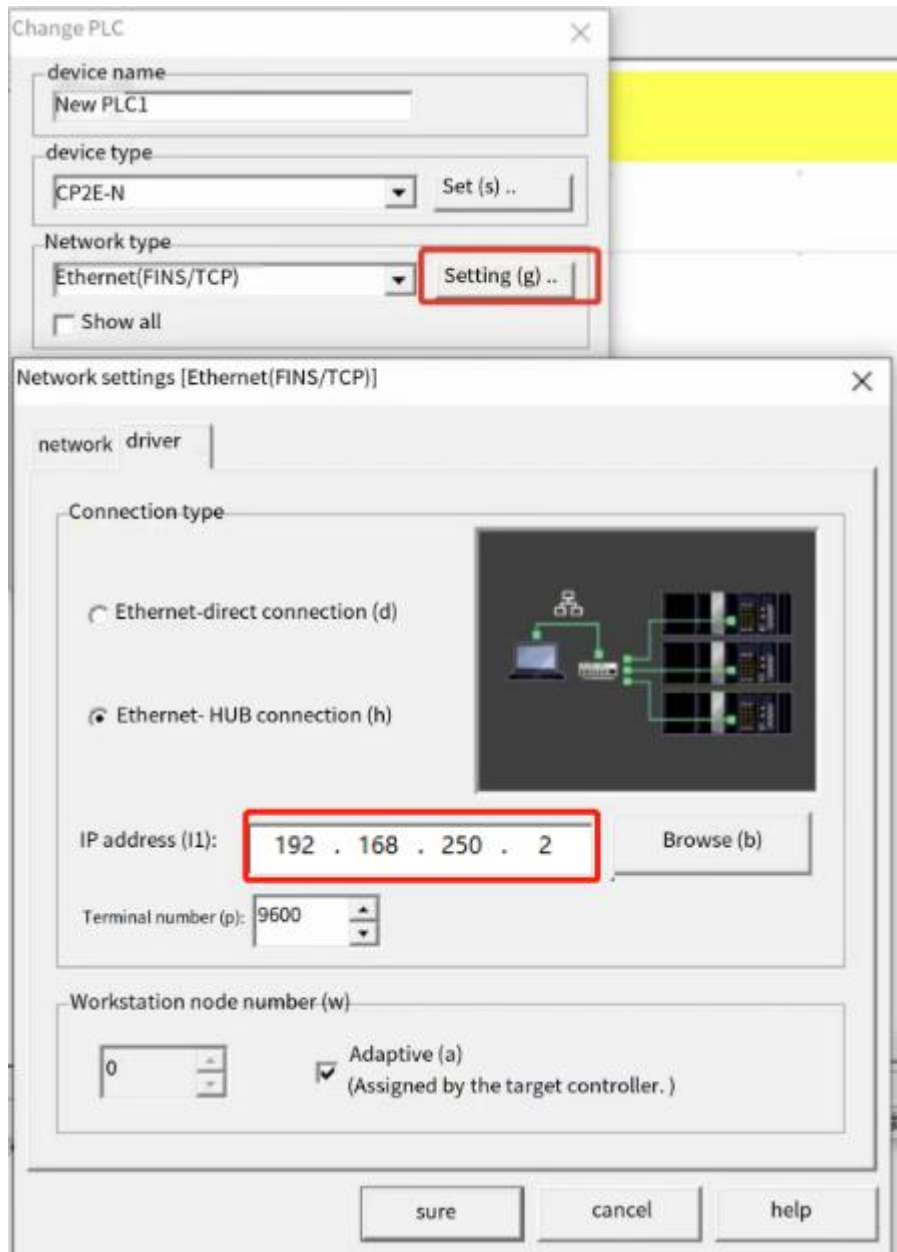
VNC view

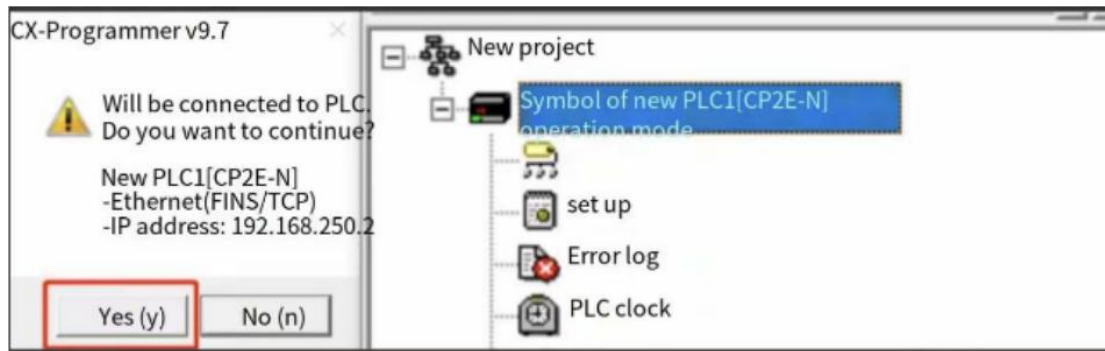
Standalone Desktop

Open CX-P PLC software

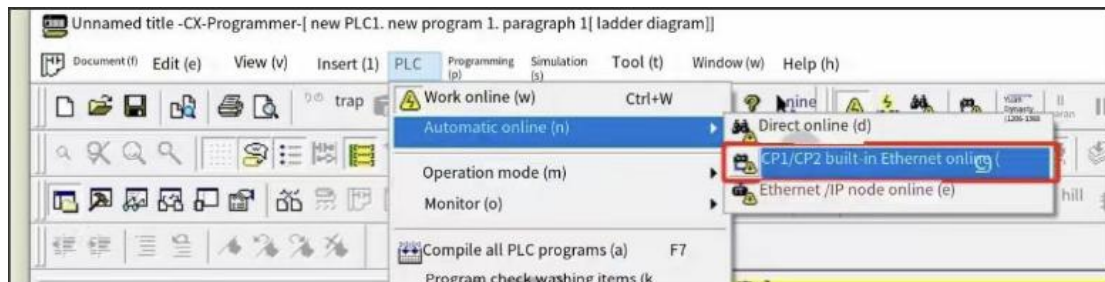


Enter the IP of PLC

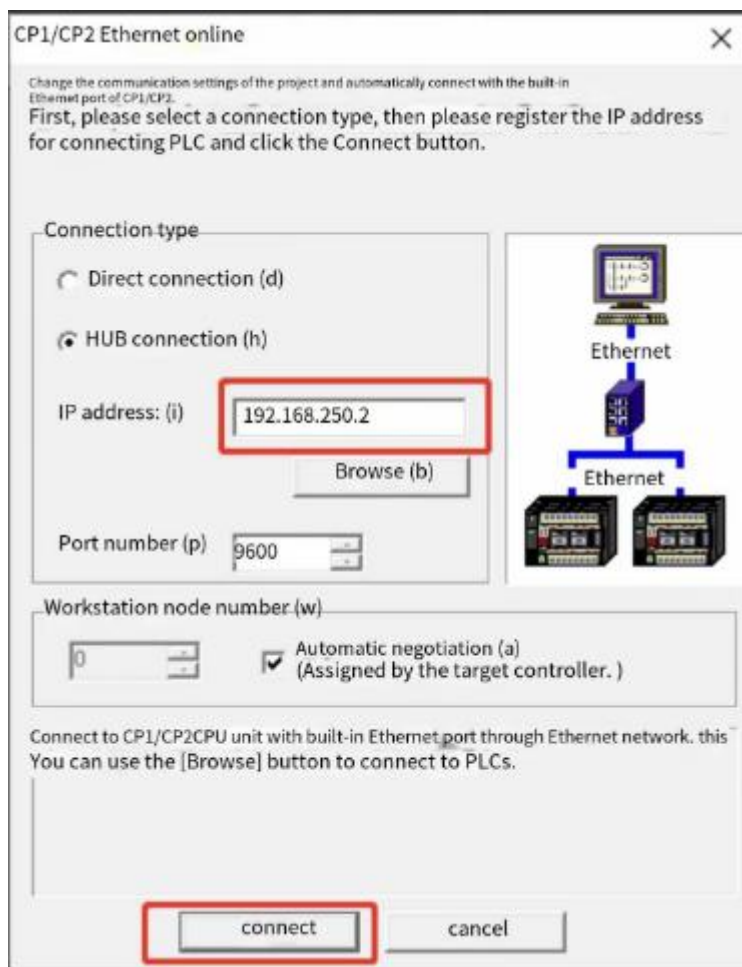


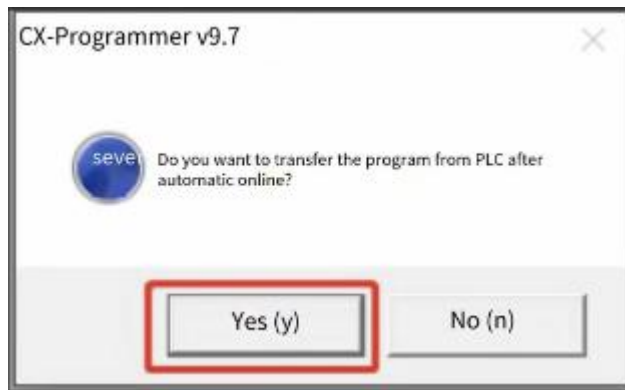


You can also automatically go online and upload from PLC



Enter the IP of PLC





4.3.7 Omron NX_NJ series PLC

e.g. Omron NX1P2-9024DT PLC, IP is 192.168.10.10, HMI IP is 192.168.10.199

After the VPN connection is successful, open the EA software, turn on the HMI, turn on the PLC connection, and enter the PLC IP

G2100E2-DEVICE

owner RY2308280000319 (G2100E2)

Virtual Ip: 100.127.255.2 3 ms

Group- A

1

2

Hmi Net ☒ 1

PLC Net ☐ 2

HMI Tool

HMI File

Param

VNC view

Standalone Desktop

G2100E2-DEVICE

* Ipv4 address (plc)

192 . 168 . 10 . 10

Cancel

Confirm

After connecting, you can see the network status of PLC

G2100E2-DEVICE

owner RY2308280000319 (G2100E2)

Virtual Ip: 100.127.255.2 1 ms

PLC: 192.168.10.10 7 ms

Group- A

1

2

Hmi Net ☒

PLC Net ☒

HMI Tool

HMI File

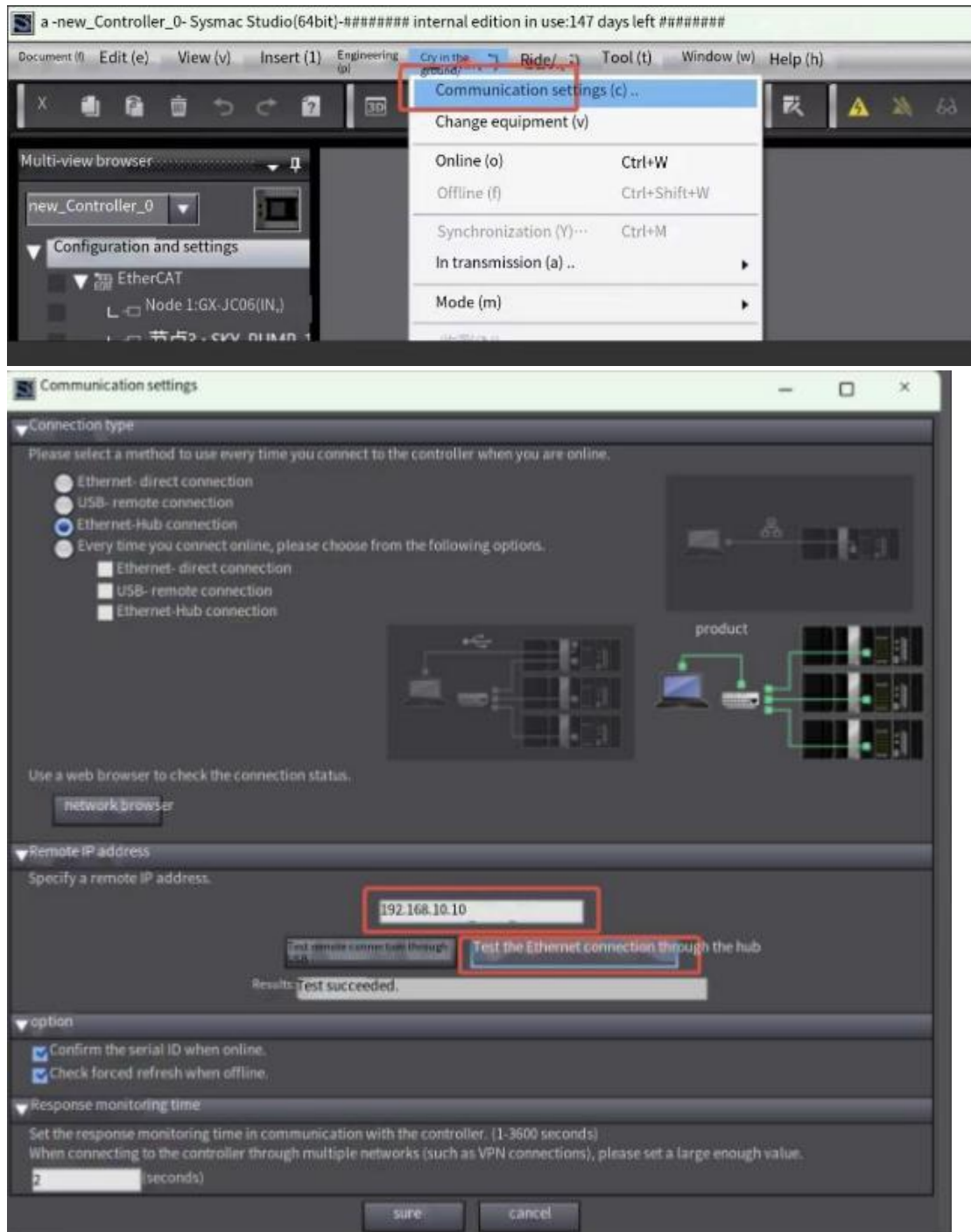
Param

PLC Software

VNC view

Standalone Desktop

Open Sysmac Stuidio PLC software



4.3.8 Beckhoff TwinCat series PLC

e.g. TwinCat3 CX9020 PLC, IP is 192.168.200.16, HMI IP is 192.168.200.199

After the VPN connection is successful, open the EA software, turn on the HMI, turn on the PLC connection, and enter the PLC IP

G2100E2-DEVICEOnline

owner RY2308280000319 (G2100E2)

Virtual Ip: 100.127.255.2 3 ms

Group- A

12

Hmi Net ☒ 1

PLC Net ☐ 2

HMI ToolHMI FileParam

VNC viewStandalone Desktop

G2100E2-DEVICE ×

* Ipv4 address (plc)

192

.

168

.

200

.

16

Cancel

Confirm

After connecting, you can see the network status of PLC

G2100E2-DEVICEOnline

owner RY2308280000319 (G2100E2)

Virtual Ip: 100.127.255.2 81 ms

PLC: 192.168.200.16 5 ms

Group- A

12

Hmi Net ☒

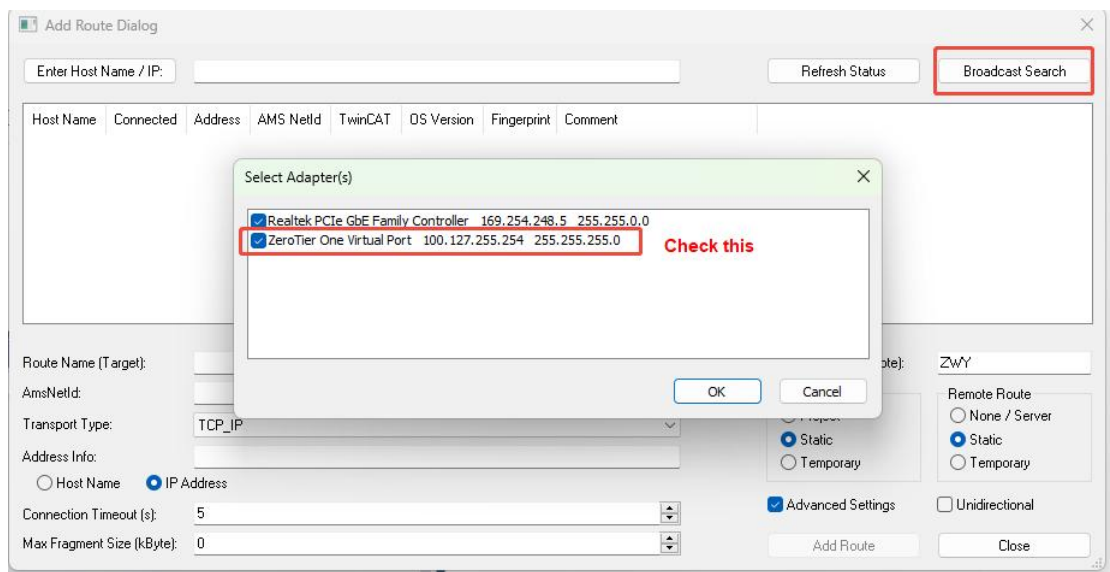
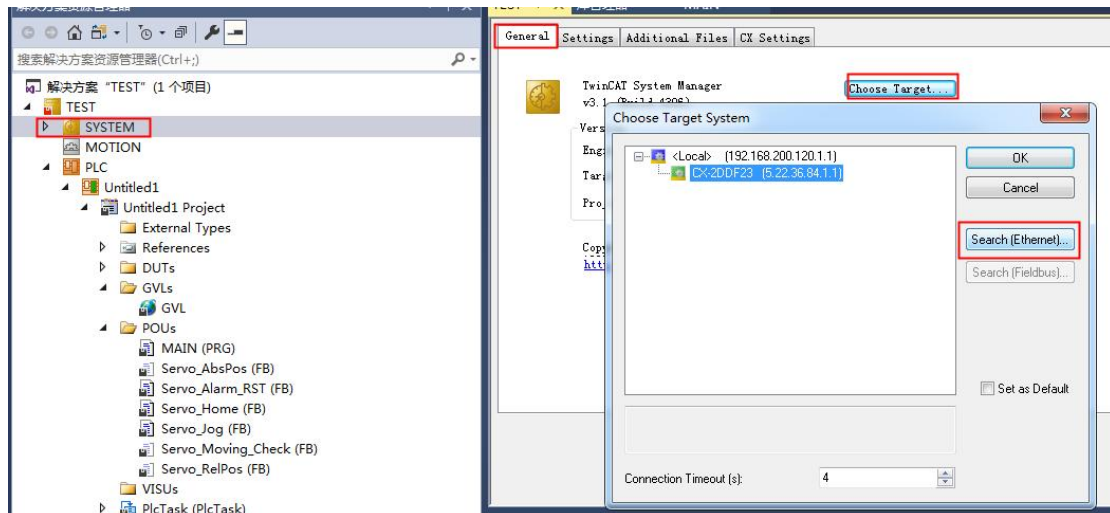
PLC Net ☒

HMI ToolHMI FileParam

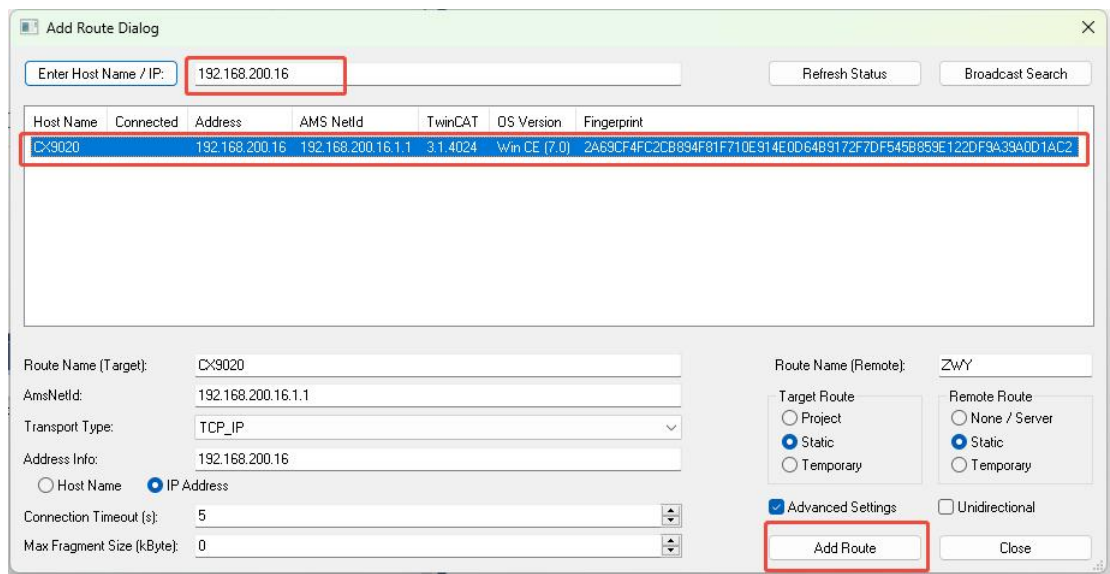
PLC Software

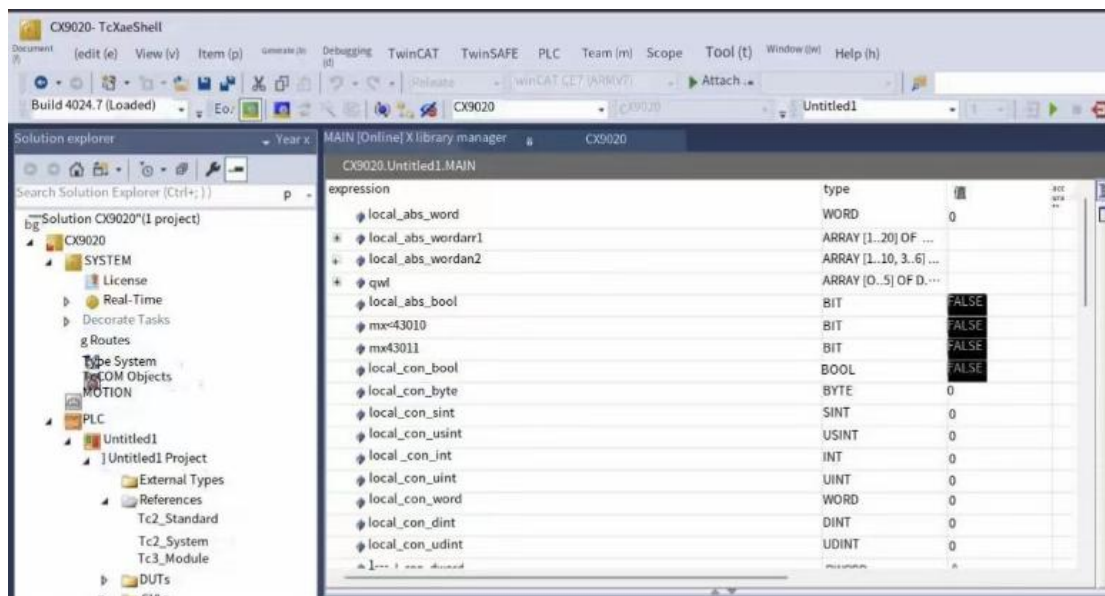
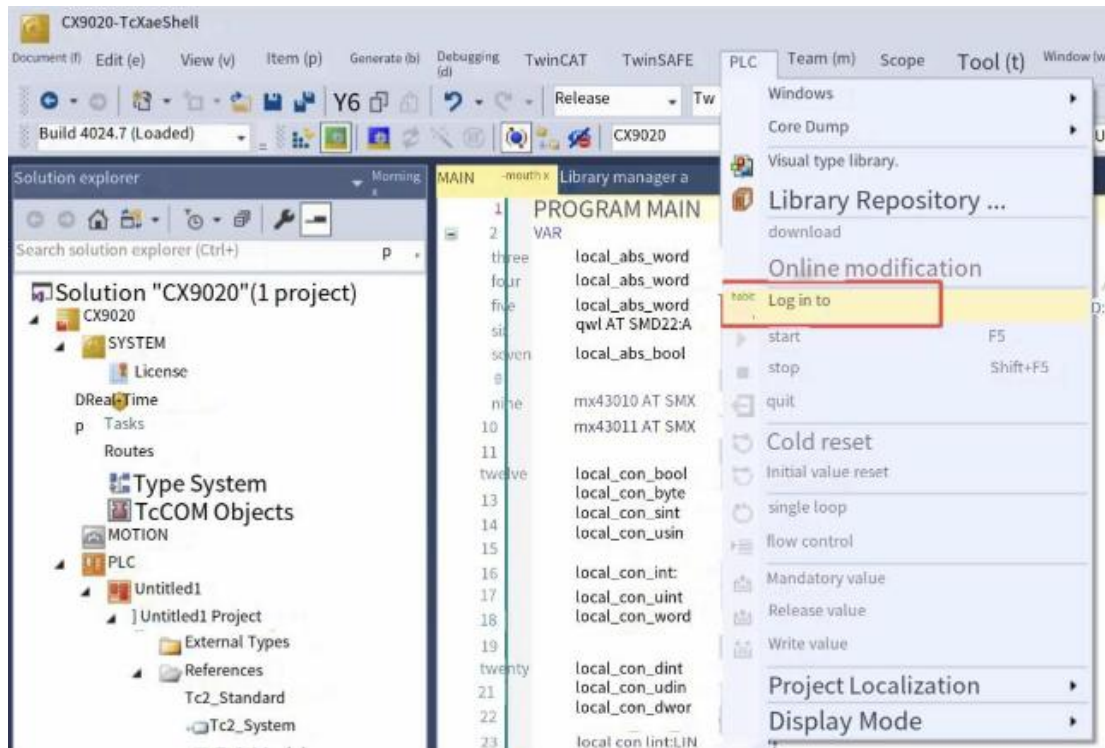
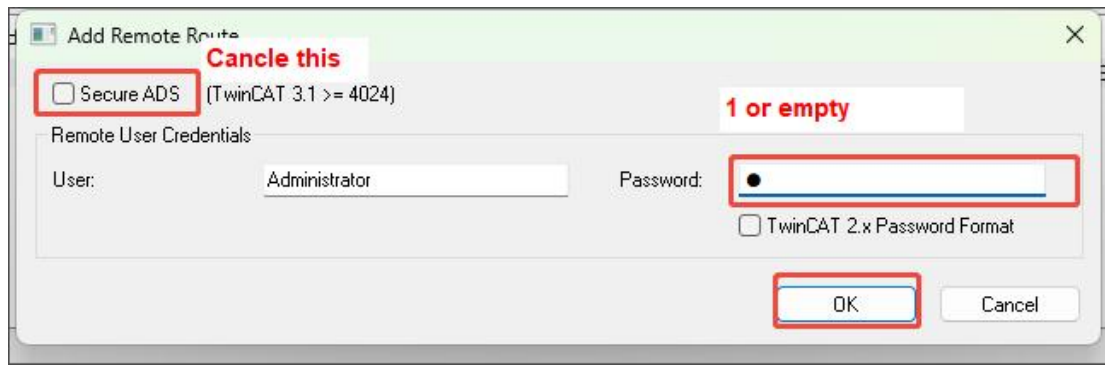
VNC viewStandalone Desktop

Open PLC software



Enter the IP of PLC and search, click "Add Route"

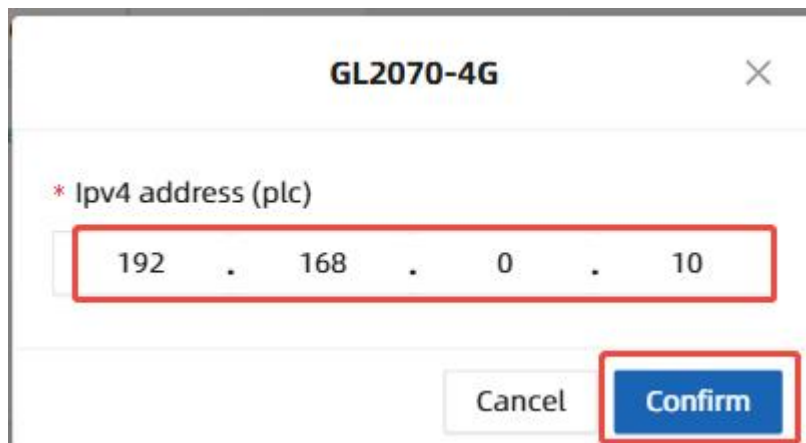
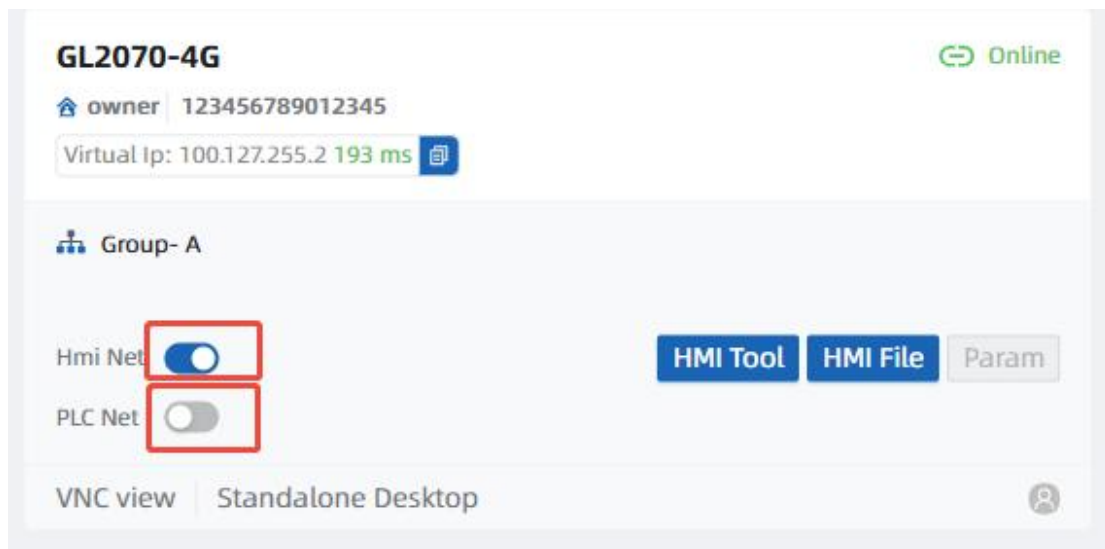




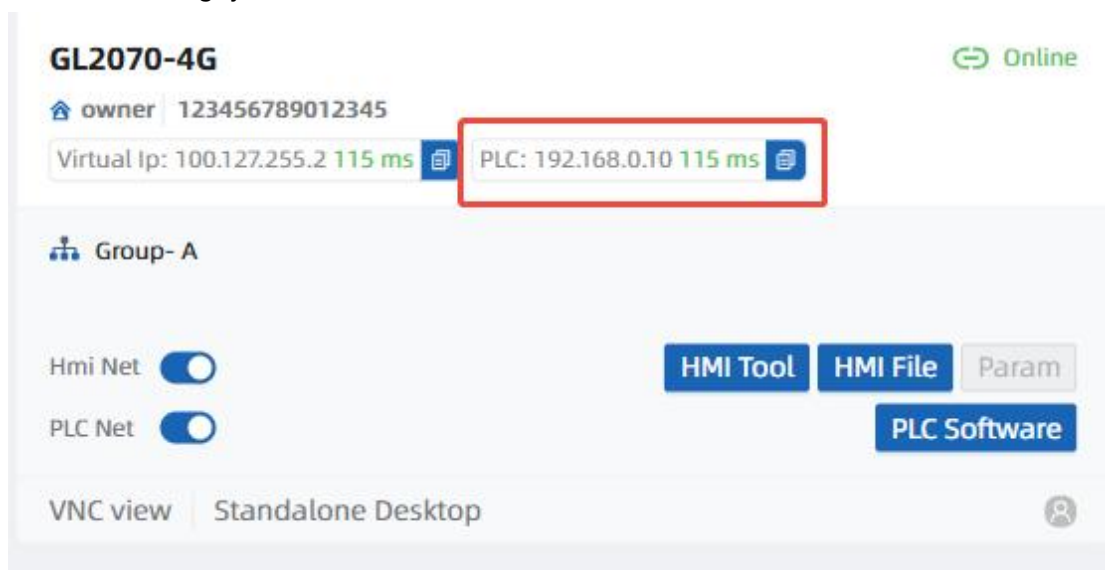
4.3.9 Keyence KV-X/KV8000 Series PLC

e.g. Keyence KV-X310 PLC, IP is 192.168.0.10, HMI IP is 192.168.0.40

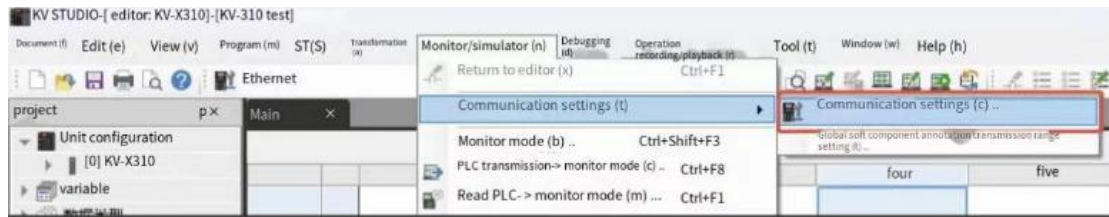
After the VPN Connection is Successful, Open the EA Software, Turn on the HMI, Turn on the PLC Connection, and Enter the PLC IP



After connecting, you can see the network status of PLC



Open PLC software



After entering the IP of PLC, click connection test, click ping

