True Manager Manual

## User Manual ver.2

Table of Content

1. True Manager Software

True Manager is a program used for basic configuration, diagnostics and F/W upgrade of server.

True Manager provides the following features.

- Finding servers on the LAN and assigning IP address
- Monitoring server status: encoding/decoding, serial, sensor and etc.
- Diagnostic function: PING, network bandwidth measurement, video/audio output, port check, serial port check amd etc.
- F/W upgrade
- Setup of server and monitoring
- Web setup of server

2. Device Registration and Removal
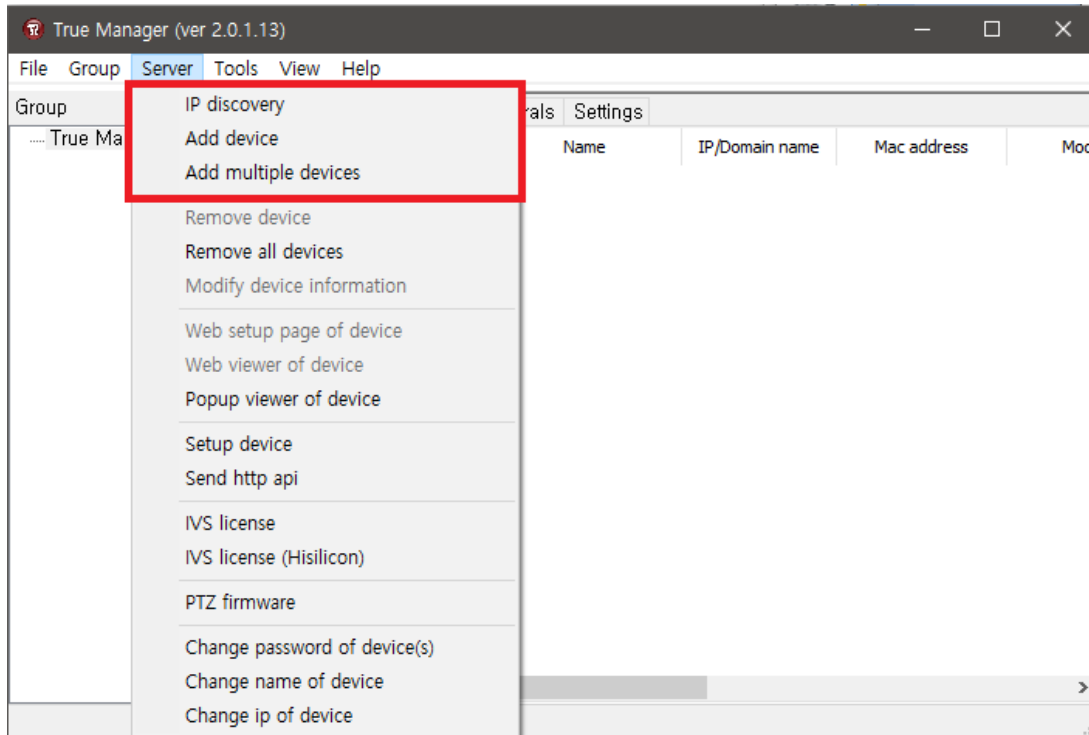
1) Device Registration

In order to manage servers using True manager, the first step is to register the server. The following steps describe the two ways to register a server.

Add device

① Select **Add device** on **Server** menu.

② Enter information for connecting to the server at **Add device** dialog.

If the server is registered on DDNS server, domain name can be used instead of IP address. When the IP address of the server is forgotten, it is possible to find the IP address of the server with IP Discovery function. (Please refer to IP Discovery section).

③ Press **Add** button.

- **Add Multiple devices**

This menu is used when specific IP range is registered and IP discovery is not discovered

① Select **Add Multiple devices** on **Server** menu.

② **Set up IP range:** Click one of 4 check boxes and rest 3 check boxes will be disabled.

The range which is selected in "From and To" are IP addresses to be registered.

③ **Server port and Authentication**: Enter information for connecting to the servers.

Same values are adjusted for all registered servers.

④ **Name**: They are named by 1 Prefix and 2 selections gradually.

⑤ Click **Generate** and then the server information in the registered range will be listed on the left.

⑥ Select the check box of the list which are actually needed or click **Select all servers** on the top of Add server table.

⑦ **Group**: Select the group on the list or enter new group name.

⑧ Click **Add** button.

● **IP Discovery**

Using **IP Discovery** function, all servers on the same LAN where the PC executing True Manager is located can be found. Furthermore, it is possible to change IP address of a server easily. **IP Discovery** dialog is invoked by pressing **IP Discovery** in Server menu , and it shows all servers on the same LAN.
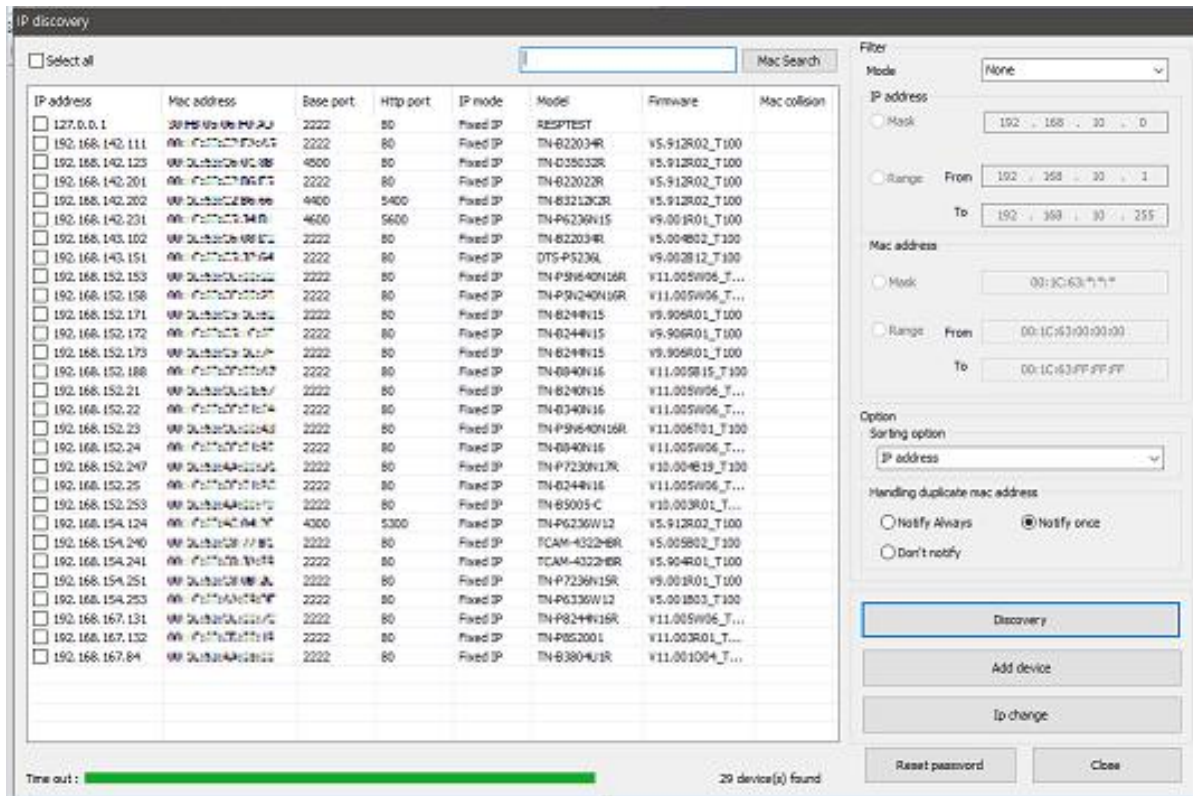
If you press **Add device** button after selecting a server, the information for the server is automatically entered on **Add Server** dialog. Pressing **IP Change** button after selecting a server invokes a dialog on which IP address of the server can be changed.

It is possible to change IP address of a server which has IP address of different subnet.
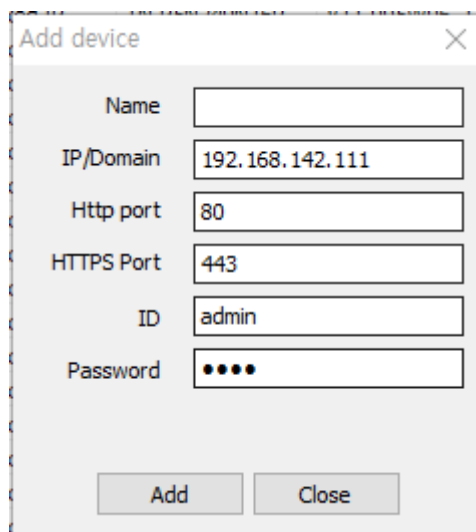
2) Removal of a device

A server can be removed by the following steps.

● **Remove device**

① Disconnect a device and right click then select Remove device

② Select a device and click remove on the bottom

③ Or select Remove device on Server menu
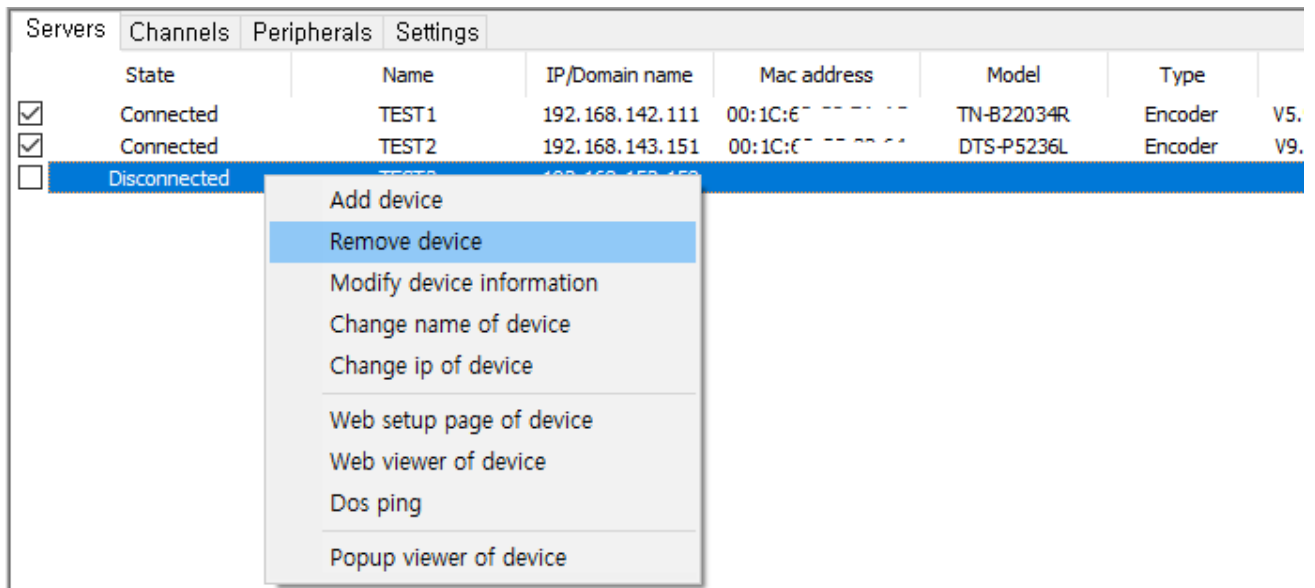
● **Remove All Server**

① Disconnect a device and right click then select Remove device

② Check Select all and click remove on the bottom

③ Or select Remove all devices on Server menu

3) Modify Device Information

Information for a server can be modified after devices are added.

① Disconnect a device and right click then select Modify Device Information on Server menu

② Select a device and right click, then select Modify Device Information

3. Remote Web Server Connection, Setup and Monitoring
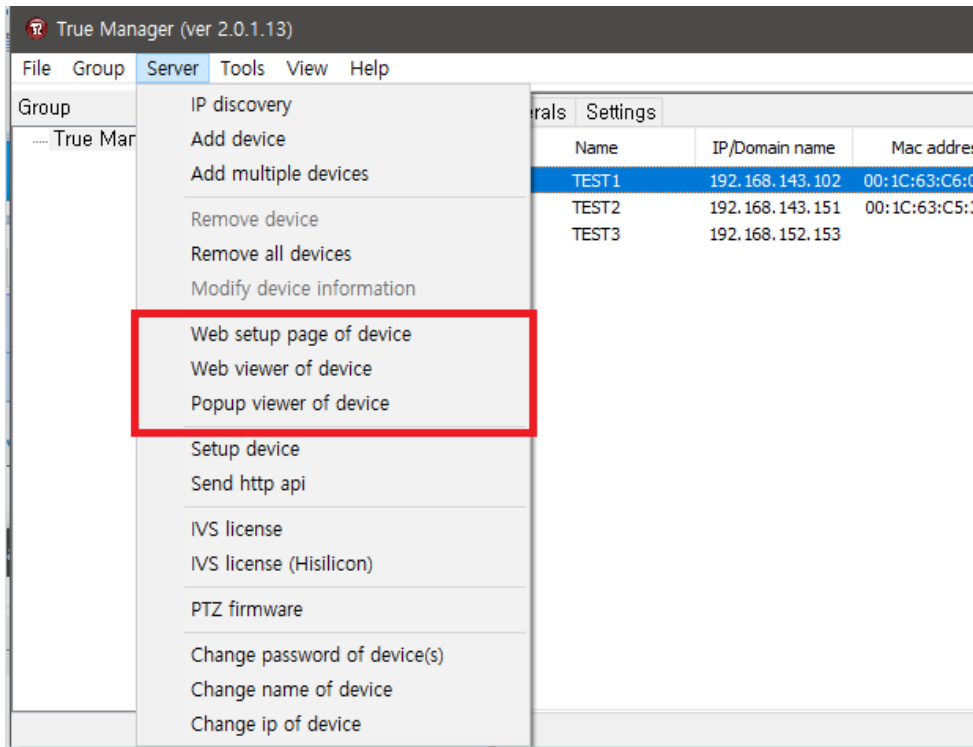
Server provides web setup page of device, Web viewer of device, Popup viewer of device.

1) Web setup page of device

It opens web setup page on Web browser.

2) Web Viewer

It opens web live view page on Web browser.

3) Popup Viewer

The popup viewer of the selected device will be displayed.
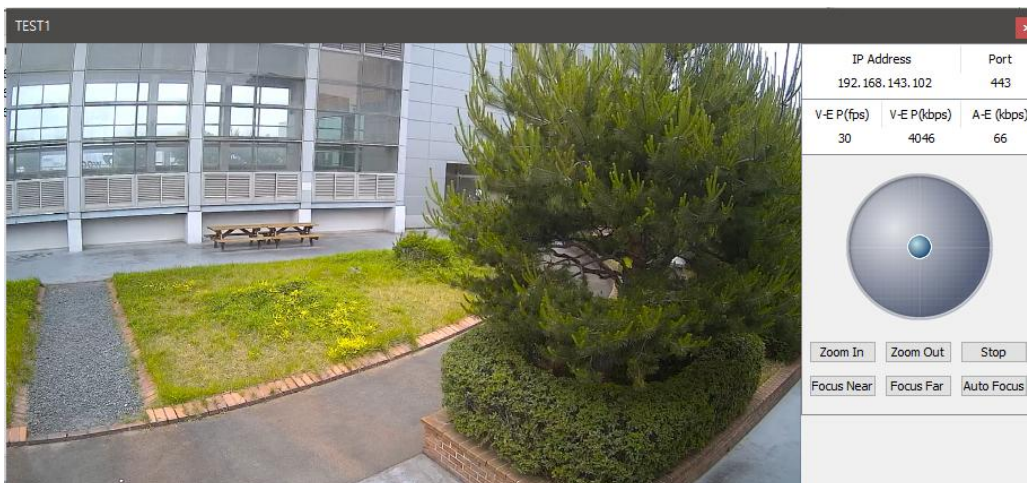
4. Setup device

Setup device allows you to configure System, Video, Audio and Network on True Manager easy and quick.

① Select **Setup device** on **Server menu.**

② Check the check box of the server to need setup.
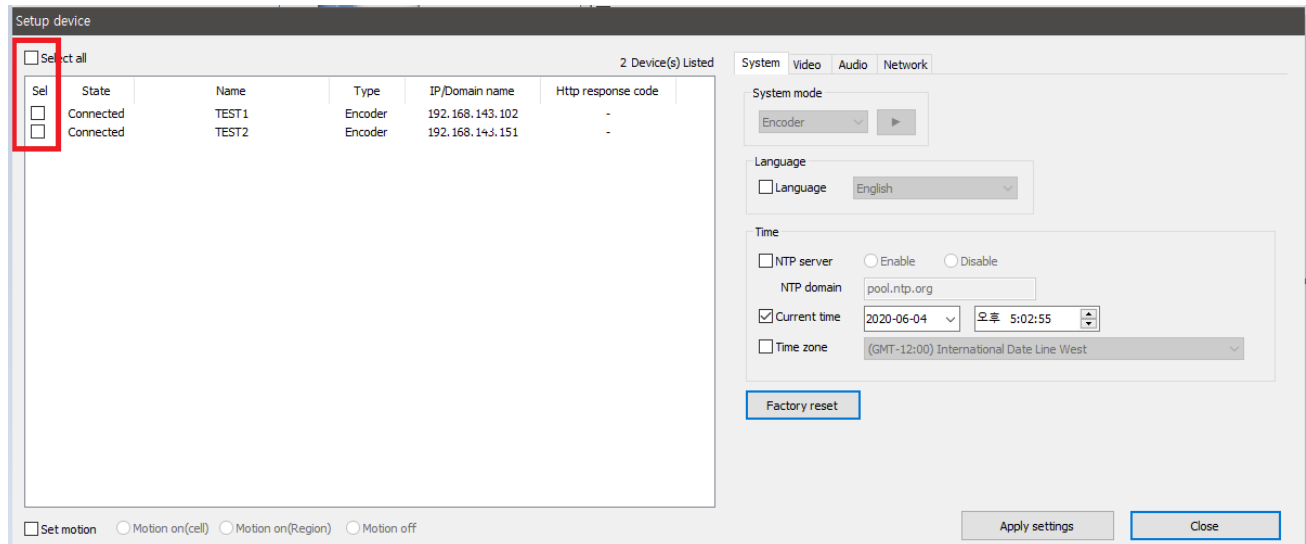
System

- **System Mode**

Select system of the server and click the apply button

- **Language**

Select the language to be used for web-based configuration

- **Time**

① **NTP server**

Select Enable and it automatically synchronized time with an NTP server.

② **Current Time**

Current date & time

Enter a new date and time and press **Set Current Time** button to update date & time

③ **Time Zone**

Select time zone of where the camera is installed.

Depending on the time zone, Daylight Saving Time will work automatically

- **Factory Reset**

All settings including user accounts and logs are cleared.

- **Video**

- **Enable Preview**
① Select **ON** to enable to display video on the monitor that is **connected to the composite or HD-SDI video port.**
② Select **Preview format** accordingly.

Note that when **Enable Preview is ON**, dual streaming is not available.

When the video is transmitted directly to the monitor through BNC cable, the video does not go thorough network and encoding. Therefore, there is less delay and no an effect from network limitation.

- **Primary**
① **Current input**

It shows current input format
② **Input Format**

Select Input Format
③ **Resolution**

Select video encoding resolution.

④ **Frame rate**

Determine the maximum number of frames per second for the video stream.

0.2, 0.4, 0.6, 1, 2, 3, 4, 5, 6, 8, 10, 15, 20, 25, 30 and 60 frame rate can be selected. The actual frame rate of video can be less than the maximum frame rate set due to the network bandwidth limitation

⑤ **Preference**

Select encoding mode to control video quality or bitrate mode.

⑥ **Quality**

Select Video quality. 7 levels of quality are available.

⑦ **Bitrate**

Determine bitrate value between 32 ~ 10240kbps.

⑧ **I-Frame Interval**

Determine I-frame Interval between 0 and 255.

There will be no I-frames if 0 is selected.

● **Audio**
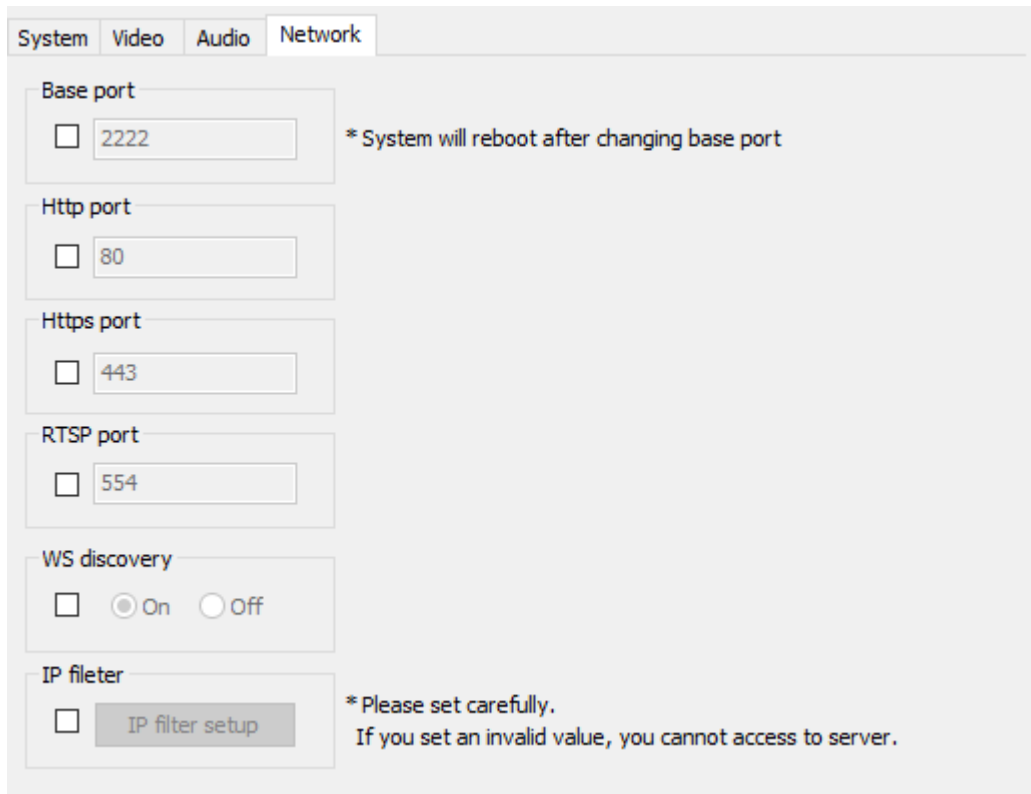
- Select the audio algorithm: G.711 or AAC

When AAC is selected, only camera to client delivery is supported. That is, web viewer can't send AAC to the camera.

- Select audio operation mode

Mode	Action
Off	No operation
Tx-Only	Transmit only
Rx-Only	Receive only
Tx & Rx	Transmit and Receive

- **Network**

- **Base Port (1025 ~ 65535)**

Enter the Base Port number.

Network base port is use for communication with remote clients. In order for camera and remote systems (decoder or VMS, NVR software) to be connected, the port number must be identically configured in camera side and client side.

- **HTTP Port (80, 1025 ~ 65535)**

Enter HTTP port used for web-based connection
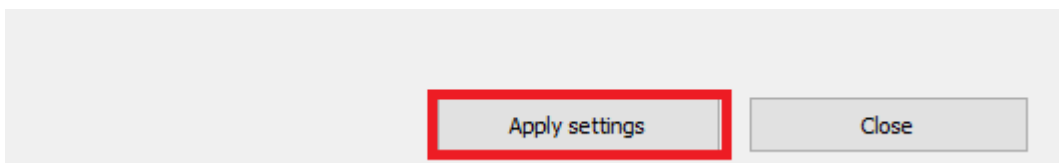
- **RTSP Port (554, 1025 ~ 65535)**

Enter RTSP port used for RTSP-based connection. The default RTSP port is 554

RTSP (Real Time Streaming Protocol) is a standard for media streaming between server and client.

- **Note :**

Before changing settings, check the box and after setting each sessions, click Apply Settings button under the sessions certainly and they settings are applied.

5. Device Connection Management

1) Device Connection

If the check box on the first column in **Servers** (or **Channels/Peripheral**) tab, True Manager tries to connect to the server. If the server is running and the network to the server is normal, it will be connected immediately and **State** will be changed to Connected.

Check box to connect or disconnect server

If it fails to connect to the server due to server or network failure, State displays **Trying connection**. As soon as the server or network is recovered, it will be connected automatically. That is, True Manager periodically retries connection to servers with check box checked.

2) Device disconnection

If the check box is unchecked, the connection to the server is released and **State** displays **Disconnected**.

6. Server Status Monitoring

1) Servers tab – General information

Servers tab shows general information for a connected server: IP/Domain name, MAC address, product model, Type, F/W version, startup time and Power Type. This information comes only for connected servers.

State	Name	IP/Domain name	Mac address	Model	Type	Firmware	Start up time	Power Type
☑ Connected	TEST1	192.168.143.102	00:1C:63._. _	TN-B22034R	Encoder	V5.004B02_T100	2020/06/03 17:25:28	PoE

2) Channels tab -   Monitoring of video/audio channel state

Channels tab displays how of video channel and audio channel of servers are working.

State	Name	Channel	Connection	Camera	Motion	Record	V-E P(kbps)	V-E P(fps)	V-E S(kbps)	V-E S(fps)	V-D (kbps)	V-D (fps)	A-E (kbps)	A-D (kbps)
☑ Connected	TEST1	1	1	Ok			4158	30	1049	30	0	0	57	0

Item	Displays
Channel	Channel no.
Connection	Number of clients connected to a server (including True Manager)
Camera	Video loss status
Motion	Motion status
Record	Record status
V-E-P(kbps)	Video encoding bitrate / Video RX / Primary
V-E-P(fps)	Video encoding framerate/ Video RX / Primary
V-E-S(kbps)	Video decoding bitrate/ Video RX / Secondary
V-E-S(fps)	Video decoding framerate/ Video RX / Secondary
V-D(kbps)	Video Decoding bitrate/ Video TX
V-D(fps)	Video Decoding framerate/ Video TX
A-E(kbps)	Audio RX
A-E(kbps)	Audio TX

Depending on the system mode, items which are not relevant to the mode may display 0 always. For example, V-D(kbps) and V-D(fps) are always 0, if the system mode is Encoder.

3) Peripherals tab – Monitoring of serial, sensor and relay port

Peripherals tab displays the status of serial, sensor and relay port.

	State	Name	COM1-TX	COM1-RX	COM2-TX	COM2-RX	Sensor 1	Sensor 2	Buzzer	Relay 1	Relay 2	SD card
☑	Connected	TEST1	0	0	0	0	Off	Off	Off	Off	Off	Unknown

Item	Displays

COM1-TX
COM1-RX
	Activity of RS-232C port
	  - TX: server -> external equipment
	  - RX: external equipment -> server

COM2-TX
COM2-RX
	Activity of RS-422/485 port
	  - TX: server -> external equipment
	  - RX: external equipment -> server

Sensor1 Sensor2	States of sensor ports
Buzzer	State of buzzer
Relay1 Relay2	States of relay ports

4) Settings tab – Monitoring of setting of servers

Settings tab displays the status of setting of servers

	State	Name	Mode	Preview	Output format	Input format	Resolution	Framerate	Preference	Quality	Bitrate	IF interval
☑	Connected	TEST1	Encoder	Off	480i60	HDMI 1080p60	1920x1080	30	CBR	-	4000	30

Use secondary	Algorithm(s)	Resolution(s)	Framerate(s)	Preference(s)	Quality(s)	Bitrate(s)	IF interval(s)	Audio algorithm	Audio mode	Audio gain
On	H.264	720x480	30	CBR	-	1024	30	G.711	Tx & Rx	25

7. Network and System Diagnostics

- True Manager provides various diagnostic features with which the reason for the following situations can be found.
- Connection between two servers, or between a server and VMS(Video Management System) is not established.
- Video, audio or serial data are not delivered as configured.
- Video and/or audio outputs don't come on output port.
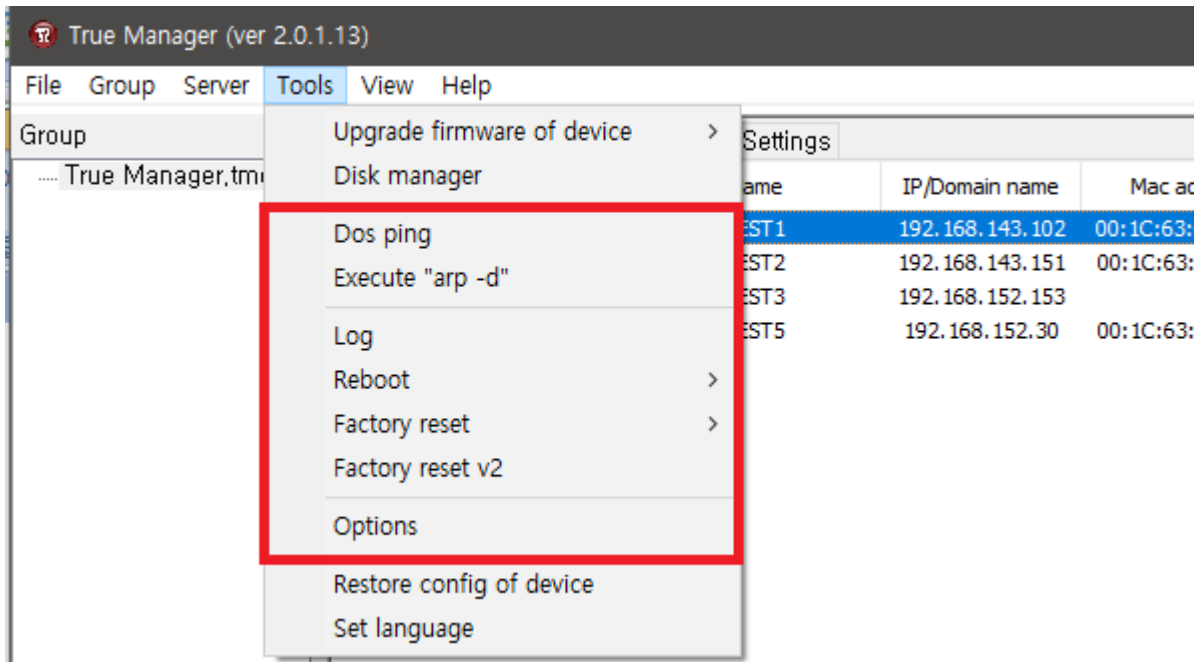
1) Dos Ping

Dos table is displayed with by selecting **Ping Test** on **Tools** menu after selecting a server.

It checks internet connection status of a server.

2) Execute "arp -d"

ARP (Address Resolution Protocol)

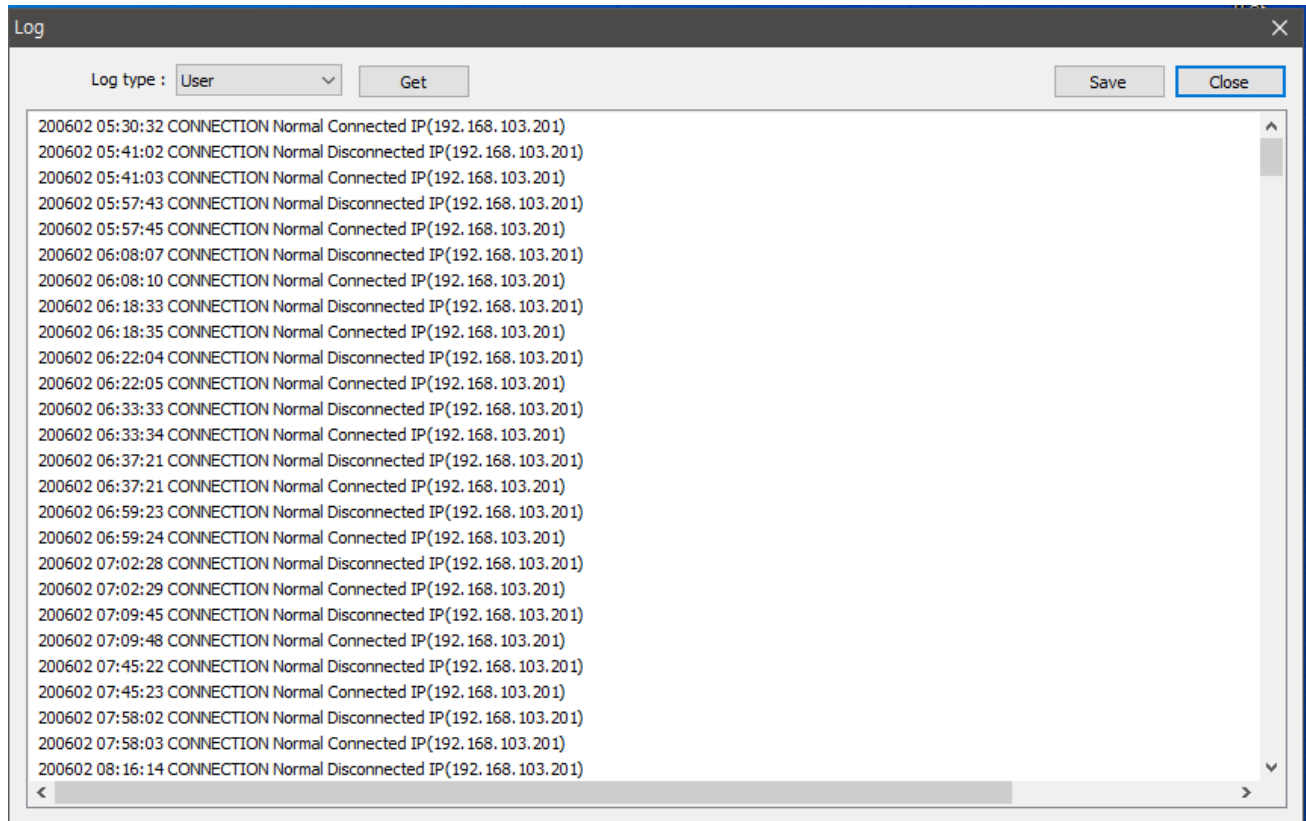Execute "arp-d" commend delete ARP information and reset ARP data and reset ARP data.

3) Log

The log in a server can be viewed by selecting **Log** on **Tools** menu.

System log, User, System status, dmesg, netstat, bmstat, df and ps logs are available.

```
Log                                                                          ×
Log type :  User         ∨        Get                          Save    Close
200602 05:30:32 CONNECTION Normal Connected IP(192.168.103.201)
200602 05:41:02 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 05:41:03 CONNECTION Normal Connected IP(192.168.103.201)
200602 05:57:43 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 05:57:45 CONNECTION Normal Connected IP(192.168.103.201)
200602 06:08:07 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 06:08:10 CONNECTION Normal Connected IP(192.168.103.201)
200602 06:18:33 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 06:18:35 CONNECTION Normal Connected IP(192.168.103.201)
200602 06:22:04 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 06:22:05 CONNECTION Normal Connected IP(192.168.103.201)
200602 06:33:33 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 06:33:34 CONNECTION Normal Connected IP(192.168.103.201)
200602 06:37:21 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 06:37:21 CONNECTION Normal Connected IP(192.168.103.201)
200602 06:59:23 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 06:59:24 CONNECTION Normal Connected IP(192.168.103.201)
200602 07:02:28 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 07:02:29 CONNECTION Normal Connected IP(192.168.103.201)
200602 07:09:45 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 07:09:48 CONNECTION Normal Connected IP(192.168.103.201)
200602 07:45:22 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 07:45:23 CONNECTION Normal Connected IP(192.168.103.201)
200602 07:58:02 CONNECTION Normal Disconnected IP(192.168.103.201)
200602 07:58:03 CONNECTION Normal Connected IP(192.168.103.201)
200602 08:16:14 CONNECTION Normal Disconnected IP(192.168.103.201)
```

4) Reboot

A device or all devices can be rebooted by selecting **Reboot** on **Tools** menu.

5) Factory Reset

All settings including user accounts and logs will be cleared.

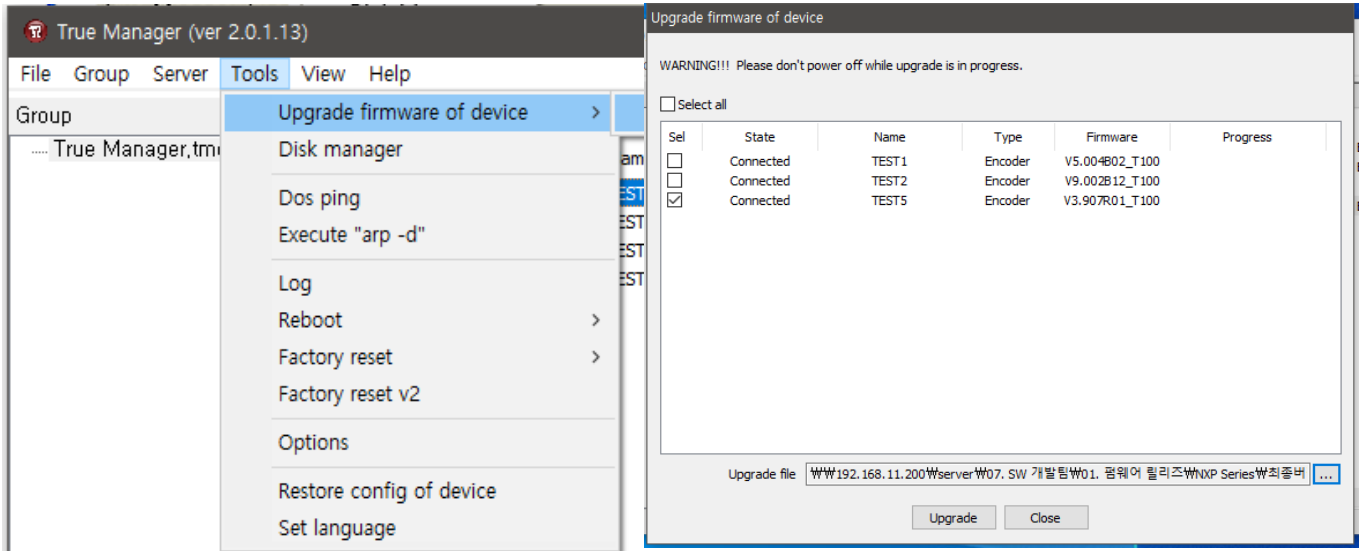A device or all devices can be factory reset by selecting **Factory Reset** on **Tools** menu.

6) Options

Designate the OS explorer program to use for web connection.

In case of using 64bit OS program, the explorer should be changed to the 32bit.

8. F/W Upgrade

When **Update** is selected on **Tools** menu, the dialog for F/W upgrade comes.

① Select a server to upgrade (check the check box in **Sel** column). More than one server can be upgraded simultaneously.

② Select an upgrade file.

③ Press **Upgrade** button.

④ Wait until **Progress** is changed to **Upgrade succeeded**.

When network condition is poor, upgrade may fail. In such case, please retry above procedure after network condition is   recovered.

> **Caution: Don't power-off the server while upgrade is in progress. The server may go to irrecoverable state.**
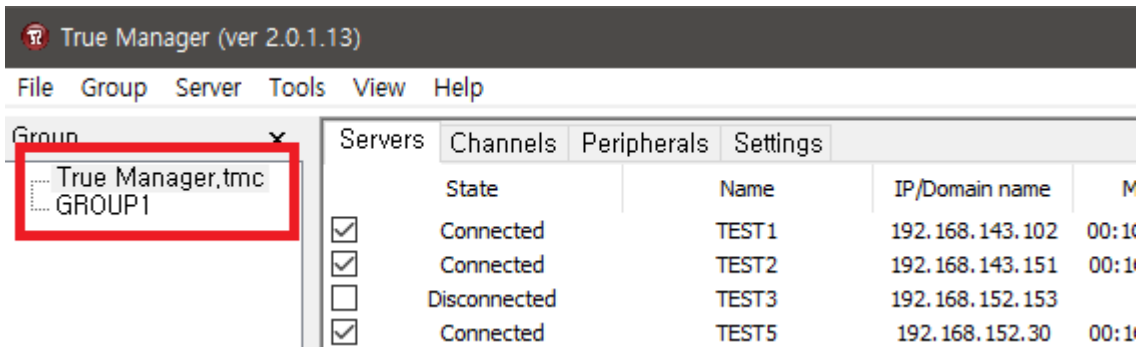
# 9. Other Functions

1) Grouping of servers
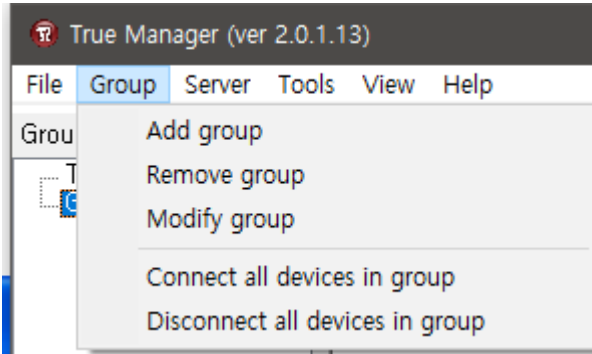
When there is large number of servers, it is convenient to manage servers in several groups. Using **Add Group** and **Remove Group** on **Group** menu, server group can be created and deleted. **Modify Group** menu is used to add servers to a group or to remove servers from a group.

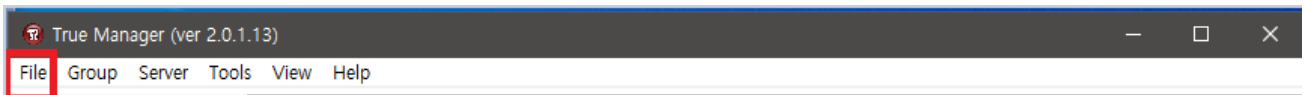And the Group is appeared on the left of true manager page.

2) Checking Disk

Verify the status of the selected server.
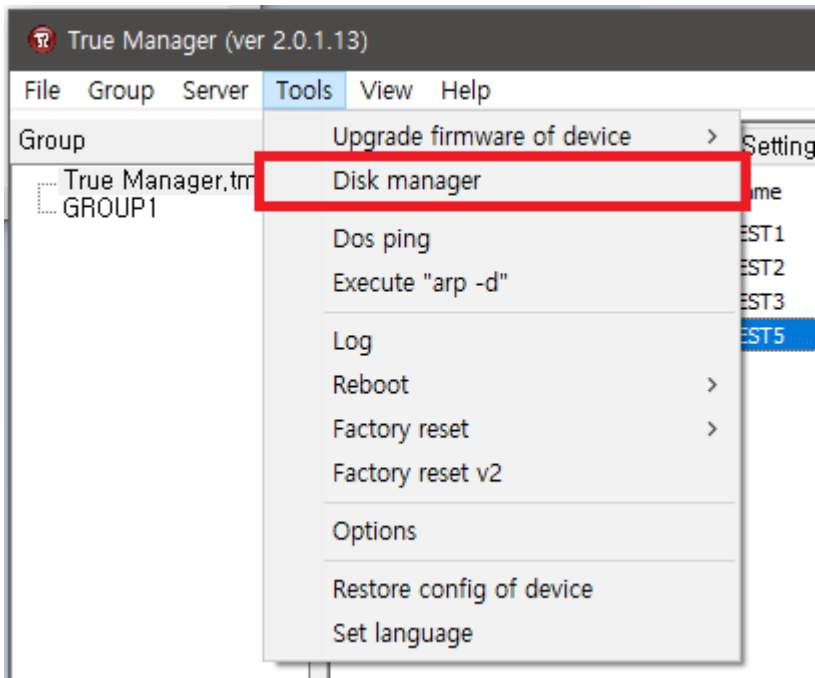
3) File Setup

- **New**

New true manager file is created.

- **Save as**

A true manager file is saved and the file is appeared on the left of true manager page.

- **Open**

Open the saved files.

- **Exit**

Exit from the using true manager.