



Grandstream Networks, Inc.

GSurf_Pro v2

User Manual



GSurf_Pro v2 - User Manual

WELCOME

Thank you for using Grandstream GSurf_Pro v2 Network Video Surveillance System. Based on TCP/IP, Gsurf_Pro v2 utilizes C/S architecture on a distributed system, managing up to 10*36 channels. It can effectively reduce the network traffic and cameras' workload by providing a transferring mechanism. Also, users could search and download the recording files remotely via file management. Featuring functions of an electronic map, preview, search, recording, alarm, playback, PTZ etc., Gsurf_Pro v2 is a powerful monitoring and recording system with an intuitive interface as well as easy operation.

This user manual is designed to help you understand how to integrate your cameras and digital video servers with GSurf_Pro v2 software.

Note

This document is subject to change without notice. The latest electronic version of this user manual is available for download here:

<http://www.grandstream.com/support>

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PRODUCT OVERVIEW

Feature Highlights

- Built-in transfer server to forward the front-end real-time video streaming across the network
- Capability to configure primary stream and secondary stream display according to the PC platform
- Embedded file-sharing server for searching and downloading recorded files remotely
- PTZ control
- Integrated tools to synchronize time on the cameras, transform format for the recording files
- 72 channels video streams for group viewing or patrol mode
- Two-way audio/video monitoring and alarm
- Flexible alarm mechanism including relay output control and email alarm



Figure 1: GSurf_Pro v2 Overview

INSTALLATION GUIDE

Minimum Computer System Requirements

SERVER:

- **Operating System:** Windows 2003/2008 Server; Windows XP SP2/SP3; Windows 7 32bit/64bit, Windows 8/10, Windows 11
- **Minimum Processor Requirement:** Intel® Core™ i3; 2.6GHz or above recommended
- **Minimum Memory Capacity (RAM):** 4GB or above
- **Minimum Hard Drive Capacity:** 320G (depending on video recording requirement)
- **Graphics Card Type:** Discrete Graphics Card (nVIDIA GEFORCE® GTX660 or above recommended)
- **Network Adapter:** 1000Mbps network adapter

CLIENTS:

- **Operating System:** Windows XP SP2/SP3; Windows Vista; Windows 7 32bit/64bit; Windows 8/10; Windows 11
- **Minimum Processor Requirement:** Intel® Core 2 Duo™ or above
- **Minimum Memory Capacity (RAM):** 2GB or above
- **Minimum Hard Drive Capacity:** 120G (depending on recording requirement)
- **Graphics Card Type:** Discrete Graphics Card recommended
- **Network Adapter:** 100Mbps network adapter, 1000Mbps recommended

Note

UPS is required for SERVER to prevent database or video record file corruption caused by a power outage.

Install GSurf Pro v2

Click to run the GSurf_Pro v2 installation .exe file. Follow the instructions in the prompted windows to start the installation. Once done, the following screen will show.

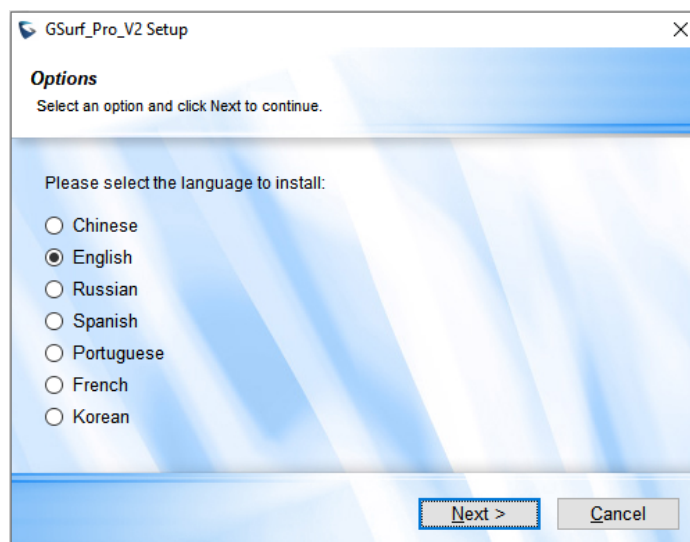


Figure 2: GSurf_Pro v2 Installation

Note

- The initial installation only supported English.
- Once the program is installed, the user can switch to supported different languages.

Uninstall Gsurf Pro v2

To uninstall GSurf_Pro v2, in your Windows PC Start **Menu->Programs->GSurf_Pro v2**, click on **Uninstall GSurf_Pro v2** to start the uninstall process. Or you could uninstall the program from your Windows PC's Control Panel.

Login Gsurf_Pro v2

Click to run GSurf_Pro v2. The login page will prompt for your User ID and Password. The administrator User ID and Password are both set to **admin** at the factory default settings.

For security purposes, please change the password after the first time you log in to GSurf_Pro v2.



Figure 3: GSurf_Pro v2 Login

Gsurf Pro v2 Main Window

The GSurf_Pro v2 user interface is designed for ease of use to offer quick access to cameras and recording in the system. Please refer to the following figure and table for main window descriptions.

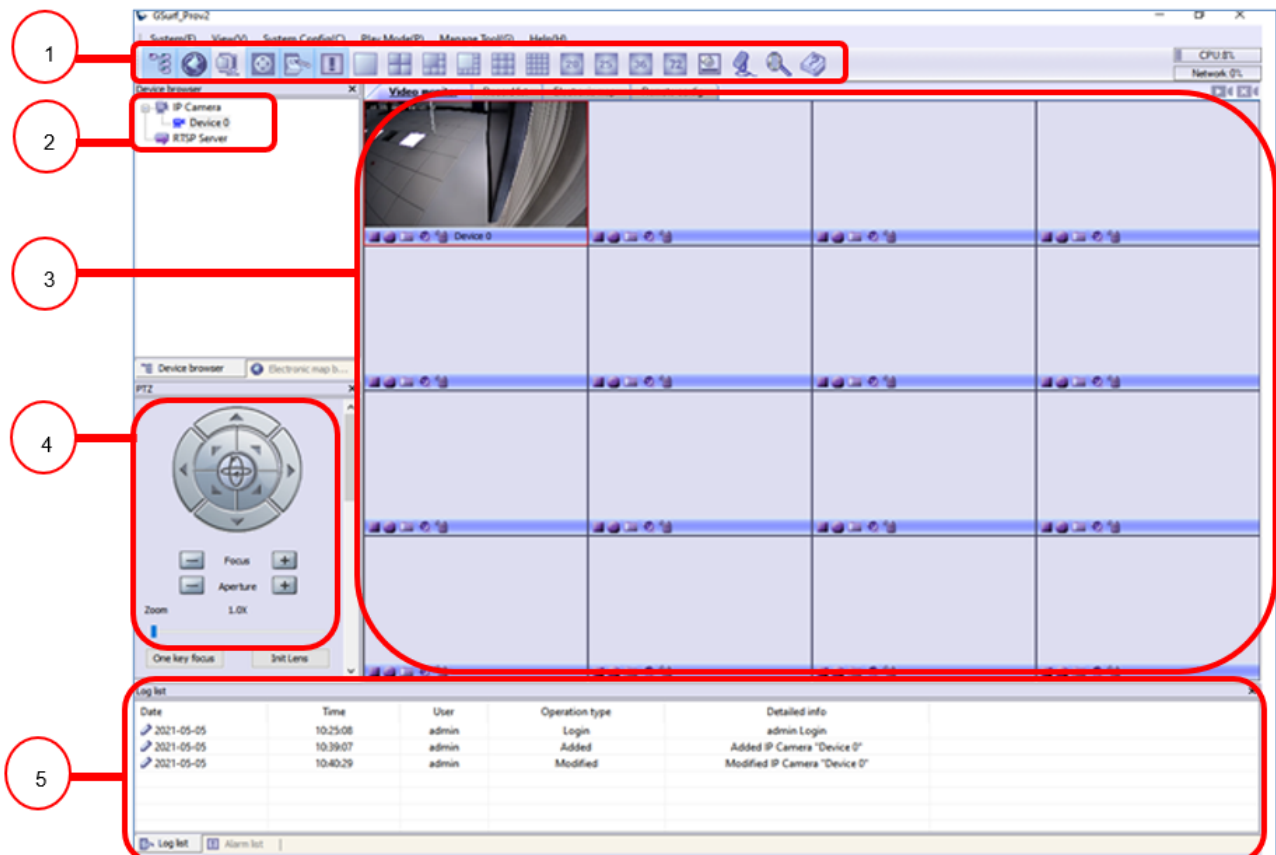













Figure 4: GSurf_Pro v2 Main Window

1	Toolbar	Quick access to designated functions
2	Device Browser	View, add, and manage devices; view electronic map
3	Video Display	Display up to 72 video streams. Double-clicking on one video will display its primary stream in a full window.
4	PTZ Control	PTZ control (PTZ device is required on the camera)
5	Log List	View the operation log and alarm log

Gsurf_Pro v2 Main Window Items

Gsurf Pro v2 Toolbar

	Browse and manage the connected DVS or cameras
	Open Electronic Map Browser. Right-click to add a new map
	Open the Group View panel, and manage groups and video channels.
	Open RS-485 panel for PTZ control
	Display log list
	Display alarm list
	Choose the different number of channels to be displayed on the main window (max number 72).
	Open/hide the play bar in each video display window.
	Send audio (broadcasting) to the selected device in the list
	Search all the cameras' IPs within the same LAN
	Show GSurf_Pro v2 software information

GSurf_Pro v2 Toolbar Icons

Gsurf Pro v2 Video Play Bar

In the video display window, each video channel has a play bar on the bottom.

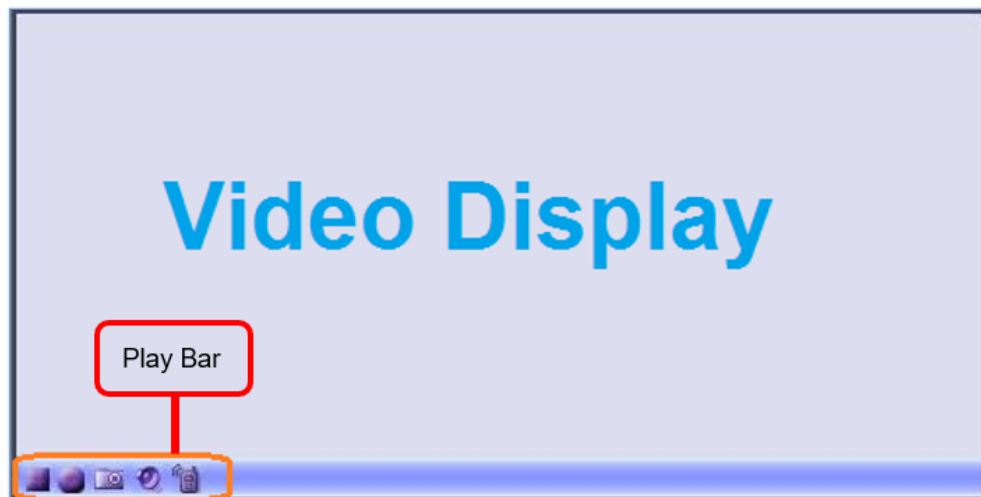







Figure 5: GSurf_Pro v2 Video Display Window – Play Bar

	Stop the displayed video in the channel
	Start recording the video on the channel. By default, the recorded video file will be saved in the directory C:\Record
	Capture a snapshot of the current video in the channel. By default, the captured snapshot will be saved in directory C:\Snapshot
	Turn on/off the sound of the current channel. The default setting is off
	Turn on/off two-way audio of the current channel. The default setting is off

GSURF_Pro v2 Video Play Bar Icons

CONFIGURATION GUIDE

After installing GSurf_Pro v2, it must be configured for your network cameras or digital video servers. This section describes how to configure GSurf_Pro v2, as well as how to set up auto recording, motion detection, alarms, etc.

Add/Delete Device

Add Device

1. In the top Menu bar, click **System Config(C)**->**Device Config(D)**.
2. In the Device Configuration window, click the **Add** button to open the **Add Device** dialog.
3. Enter the device information.
 - **Device Name:** Enter a name for the device.
 - **Device Type:** Select the device type, DVS or IPCAM.

- **Count of channels:** Select the number of channels that your device supports. For example, the GSC3610 has 2 channels.
- **IP:** Enter the IP address of the device.
- **Domain Name:** Enter the domain name of the device.
- **Username/Password:** Enter the Device's Admin Credentials.
- **RTSP Port:** Enter the RTSP port for video streaming. If the device's web access port is 80, enter 554 as the RTSP Port. Otherwise, add 2000 to the device's web access port and enter here.

4. Click **OK** to save.

After successfully adding the device, users could view the video by double-clicking on the device name in the **Device browser** panel on the left.

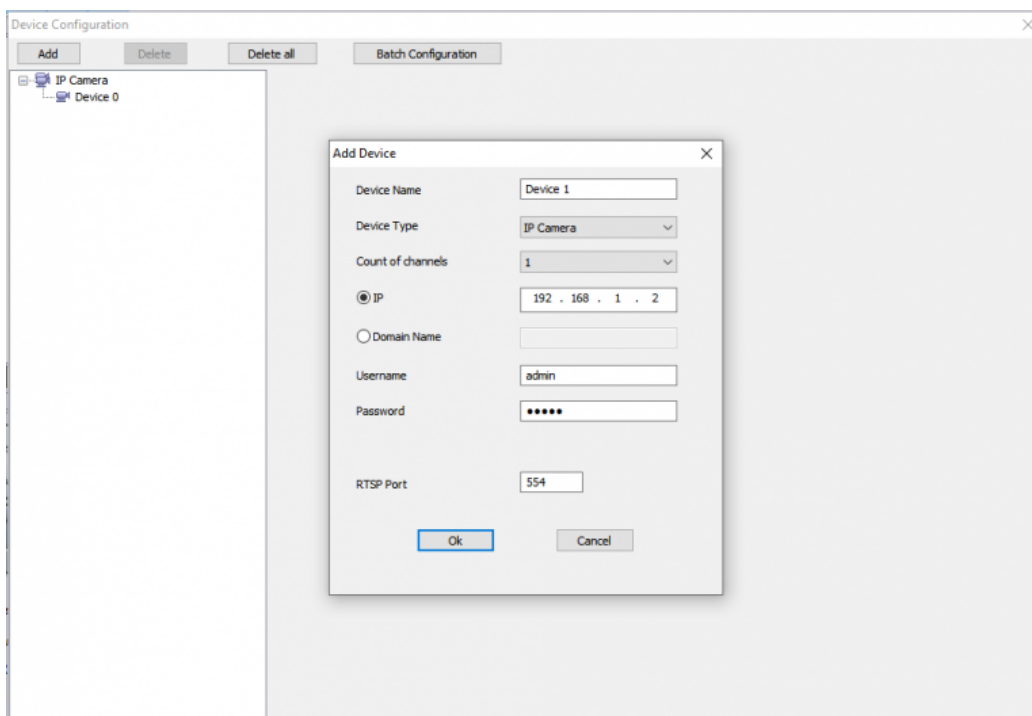


Figure 6: Add Device

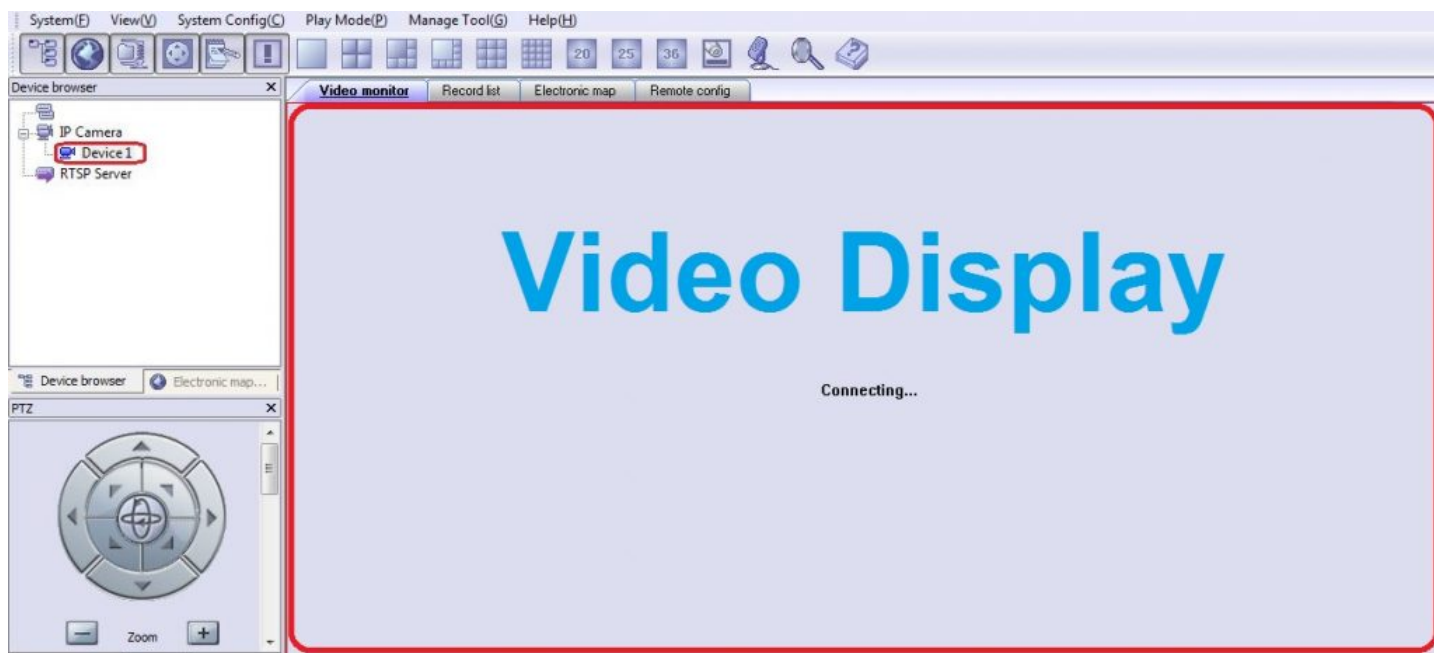


Figure 7: Video Display After Adding Device

Delete Device

1. In the top Menu bar, click **System Config(C)**->**Device Config(D)**.
2. In the **Device Configuration** window, Select the device to be deleted.

3. Click the **Delete** button.

4. Or, users could click on **Delete All** to remove all the added devices.

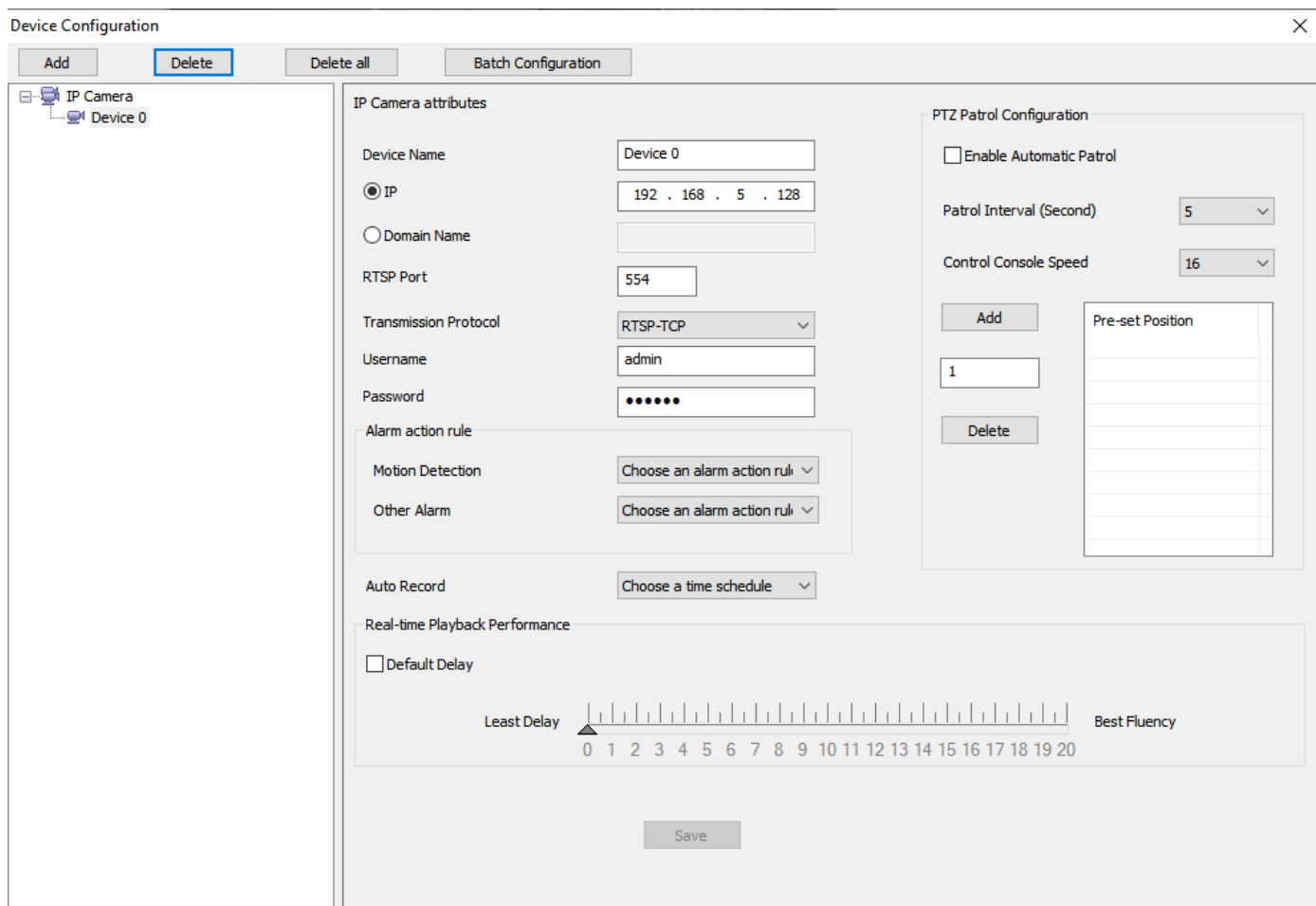



Figure 8: Delete Device

Search Device

The built-in Search tool in GSurf_Pro v2 allows the user to search all the DVS and IP Camera devices within the same LAN. Additionally, users could modify the IP address for the devices listed in the search result.

How to search A Device

1. In the GSurf_Pro v2 toolbar, click  button.
2. In the Search tool, click the Search button. A list of surveillance devices will be displayed in the list.

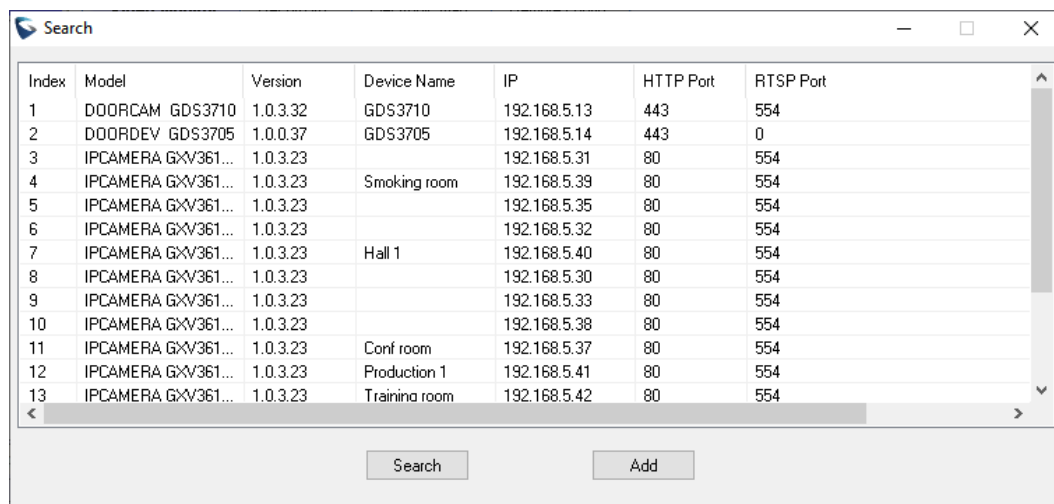


Figure 9: GSurf_Pro v2 Search Tool – Search Devices

Configure Time Schedule

The GSurf_Pro v2 schedule is used to configure automatic recording. Up to 10 schedules can be configured.

1. In the top Menu bar, click **System Config(C)**->**Time Schedule(T)**.
2. The **Time Schedule** window will pop up.
3. Select a schedule on the left panel to be configured.
4. Select the time frame for each day. The scheduled interval will be marked in blue (See Figure 10: Gsurf_Pro v2 Time Schedule).
5. Click the **Save** button.

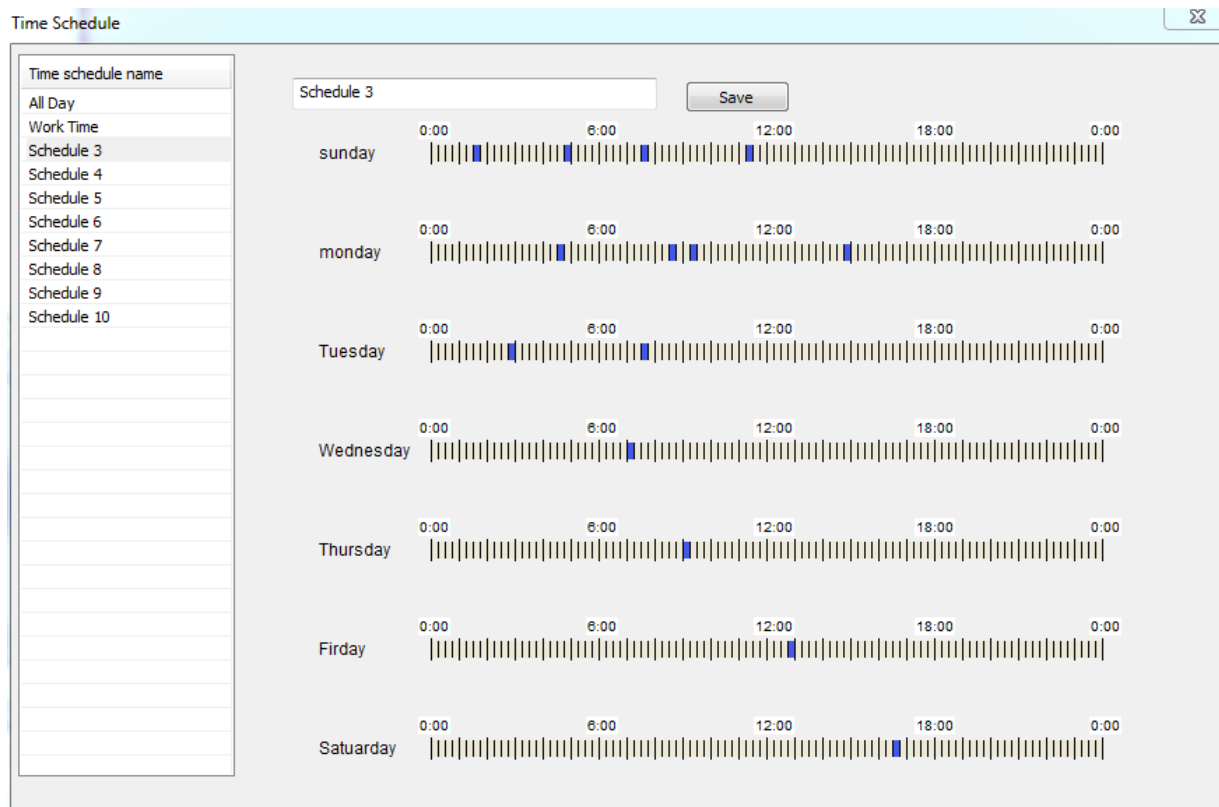


Figure 10: Gsurf_Pro v2 Time Schedule

6. To assign this schedule to a device, open **System Config->Device Config**.
7. Select the device from which you would like to record the videos.
8. In the **Auto Record** option, select Schedule from the drop-down list.
9. Click the **Save** button.

This channel will then start automatically recording as specified in the designated schedule.

Additionally, users could select **Batch Configuration** to assign the same schedule to multiple devices.

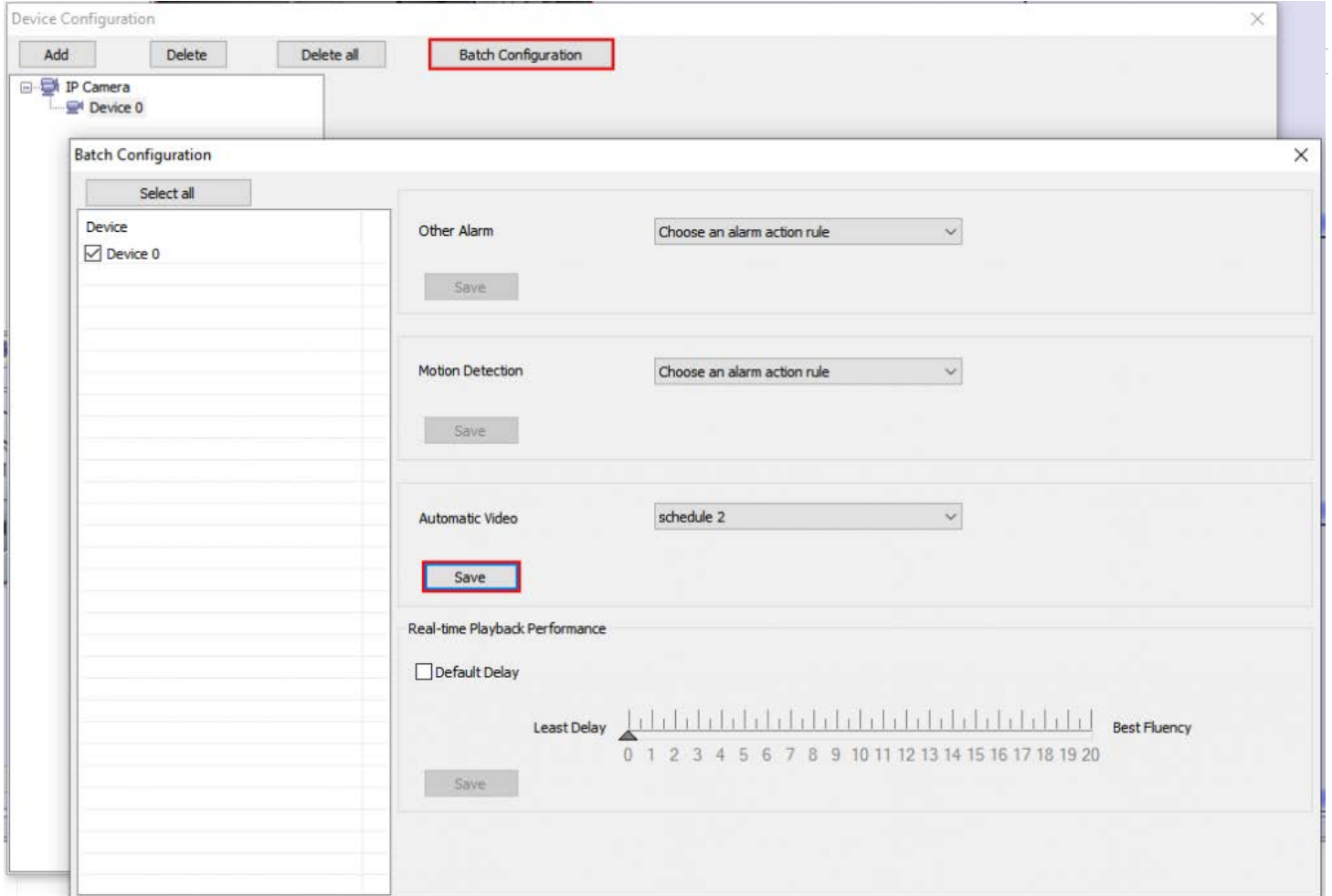


Figure 11: GSurf_Pro v2 Auto Record Time Schedule

Configure Alarm Triggers and Rules

Grandstream's network cameras and digital video servers support motion detection and alarm events. They can report motion detection or alarm events to GSurf_Pro v2. On the GSurf_Pro v2 side, it can be configured to take actions, i.e., to notify such events to users. Up to 10 rules can be set up with different alarm actions. The instructions below will assist you with this setup.

1. In the top Menu bar, click **System Config**->**Alarm Config**.
2. In the **Alarm action rule** window, select the Alarm index and configure the action.
 - **Sound:** If it's checked, GSurf_Pro v2 will play a sound when receiving an alarm report. Make sure to select a sound file and the duration for it to play.
 - **Warning on the E-map:** If it's checked, the corresponding icon of that channel in the electronic map will flash in red upon receiving an alarm report.
 - **Save to database:** If it's checked, the alarm event will be written to the alarm log.
 - **Record:** If it's checked, GSurf_Pro v2 will record the video upon receiving an alarm report. Users could also select the duration for the recording.
 - **Pop-up video window:** If it's checked, a pop-up video window will appear on receiving an alarm report.
3. Click the **Save** button to save the settings.

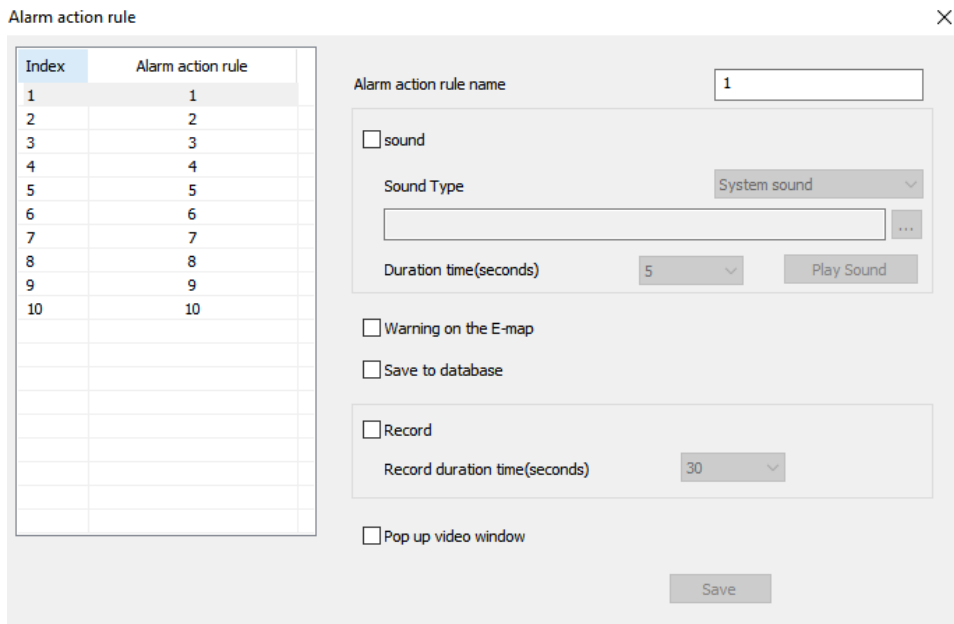


Figure 12: GSurf_Pro v2 Alarm Action Rule

4. To assign this alarm action rule to a device, open **System Config-> Device Config**.
5. In the **Device Configuration** window, select the device.
6. Select an Alarm action rule for **Motion Detection** to monitor motion detection events. Or to **Other Alarm** for other types of conditions such as abnormal reboot.
7. Click the **Save** button to save the settings.

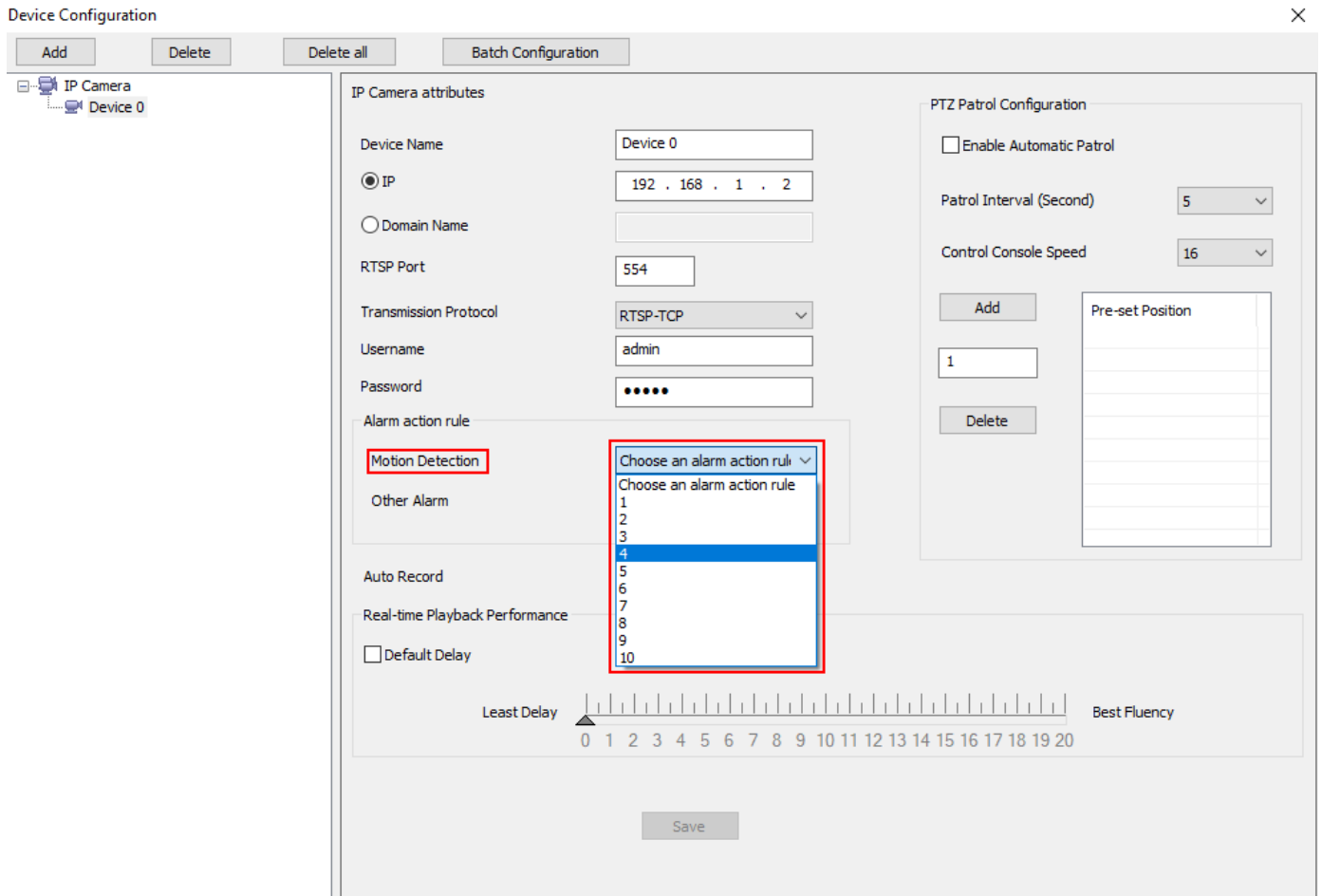


Figure 13: Assign Alarm Action Rule To Device

Additionally, users could select **Batch Configuration** to assign the same alarm action to multiple devices.

Local Configuration

Click on **System Config**->**Local Config** to configure software and local recording features for GSurf_Pro v2.

Software Configuration

Configure log reserved days, video window layout, and startup options.

Record Config

- **Record Path:** This section displays the name, total space, and free space of the local disks. Users could select the local disk to store recorded video files. If users select multiple disks, GSurf_Pro v2 will start from the first disk until the free space equals the reserved space, and then go to the next one.
- Reserved free space: Configure the reserved free space for the disk. When the disk free space is less than the reserved free space (1 GB in this example), the video will be recorded in the next selected disk.
- Record file duration time: Configure the duration for each recording file.
- Disk Full: When the disk is full, users can choose to stop recording, or keep recording while storing new recordings by deleting the old files.
- **Capture Path:** Configure the path to save the snapshot pictures.

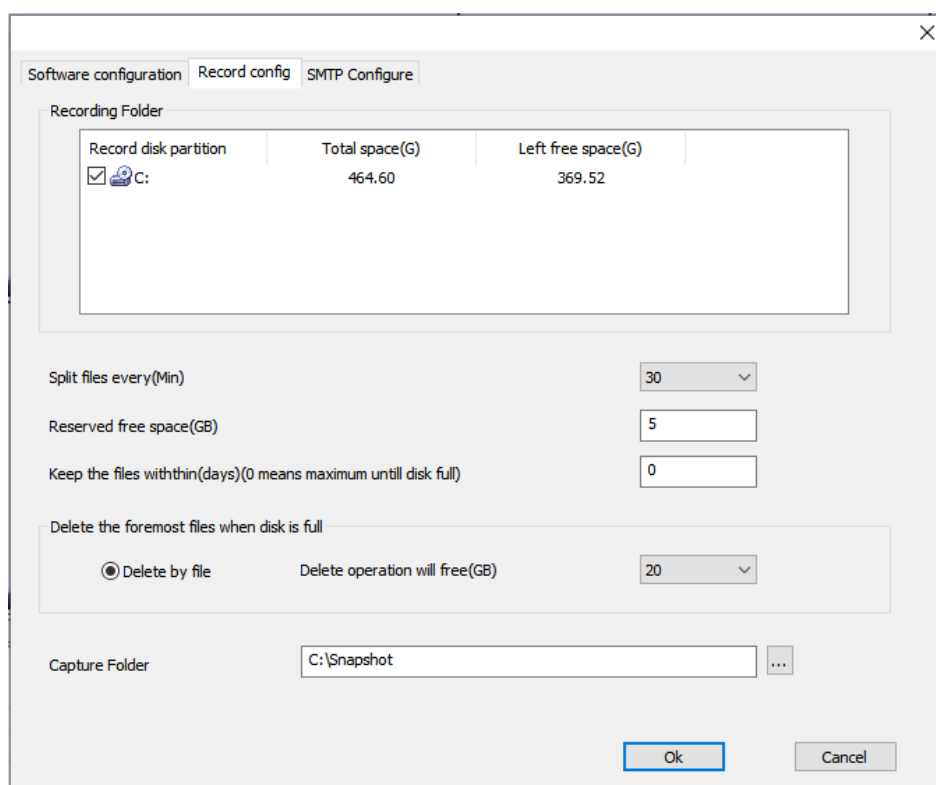


Figure 14: GSurf_Pro v2 Local Configure – Record Configure

Device Configuration

Click **System Config**->**Device Config**, and the device configuration window will prompt users to add, delete, and edit devices. Once a device is selected, users can configure the device properties, alarm action rule, and record option.

- **Device Properties:** Device Name, Device IP, Domain Name, RTSP Port and Transport protocol.
- **Alarm Action Rule:** Select the alarm action rule for motion detection and alarm input.
- Auto Record: Select the schedule for the auto record.

Language Display

In the GSurf_Pro v2 interface, users can switch languages at any time. Go to **System Config**->**Language** and select the language to be displayed.

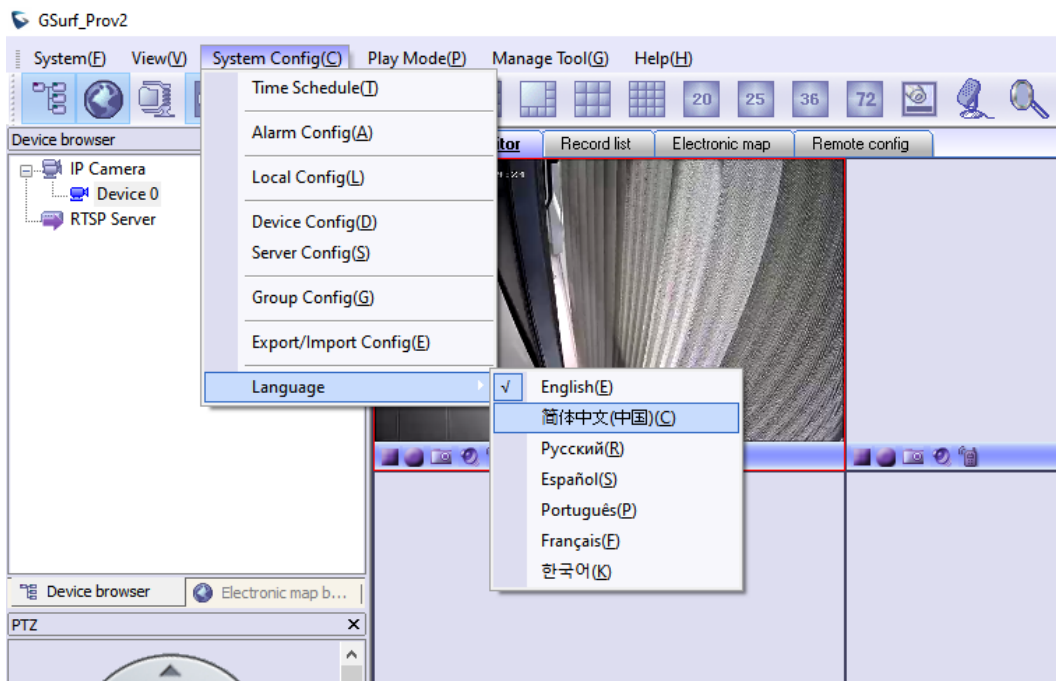


Figure 15: Language Display

Record Configuration

Manual Record


In the video display window, click on the Record button  to start recording.



Figure 16: Manual Record

Automatic Record

The automatic record will be running in the background. The recording time is specified in the **Auto Record** option after selecting the device under **System Config->Device Config**.

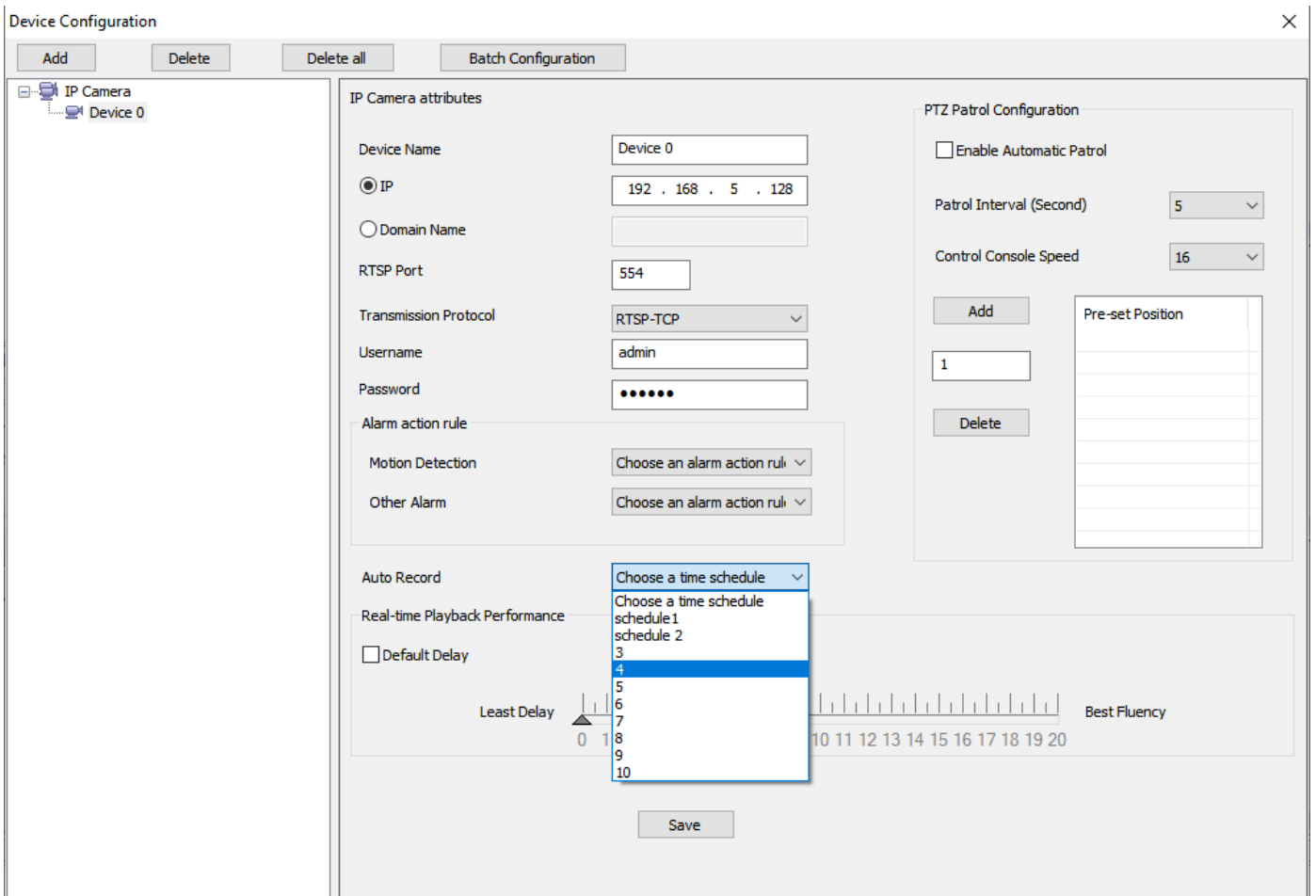


Figure 17: Automatic Record

Note

It is recommended to use continuous recording only and not combine it with recording by motion detection.

Replay

Both the GSurf_Pro v2 Replay v2 (GXV36xx Models) and Replay v3 (For GSC36xx Models) tools provide the ability to replay recorded videos. These tools also provide a search function that allows you to perform a search based on start time, end time, IP address, channel, etc. To replay the recorded video, in the top Menu bar, go to Manage Tool->Replay Tool to open the Replayer. Select the time, device, channel, file type, and disk to search the video. Then click on the video file to play.

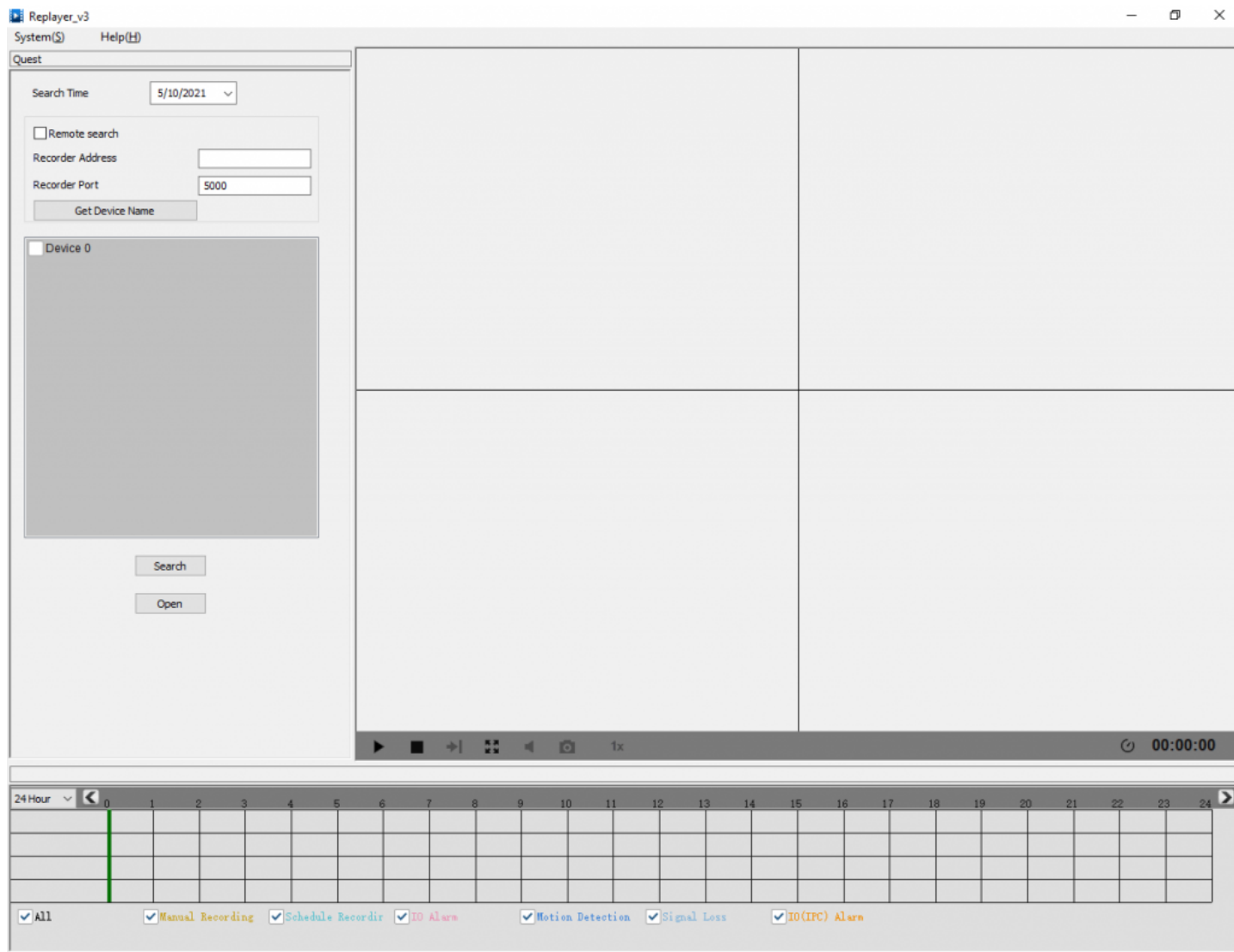



Figure 18: Replayer v3

In the Replayer, users could also open up the Time selection tab to specify the recorded files by filtering the start time. All the configured start times will be marked in green in the time chart.

Electronic Map

E-map is an important feature in video surveillance systems to provide users with a visual overview of the cameras in your installation. A map is an image file on which you place cameras and views. GSurf_Pro v2 supports an electronic map for users to identify the locations of their cameras and the status of their alarms.

To configure E-map on GSurf_Pro v2, open the map browser by clicking  in the toolbar.

Add Map

1. In the Electronic map browser, right-click, and the **Add map** option will show up.
2. Choose a map image from your local PC to upload. Then it will be displayed in the electronic map field.

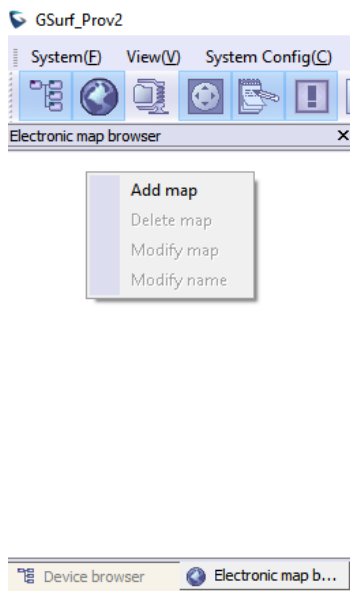


Figure 19: Add Map

Note

The supported image files are bmp, jpg, or gif. GSurf_Pro v2 will display the electronic map in full resolution. The users can use the scroll bars to view the whole image.

Add Device to Map

1. Open your map in the main window.
2. In the left side panel, click on **Device Browser** so your devices will show in the list.
3. Click on the device/channel, and drag and drop it to the preferred destination on the map.
4. An icon with the device name and the channel number will now be shown on the map. Right-click on the icon to change the icon settings.

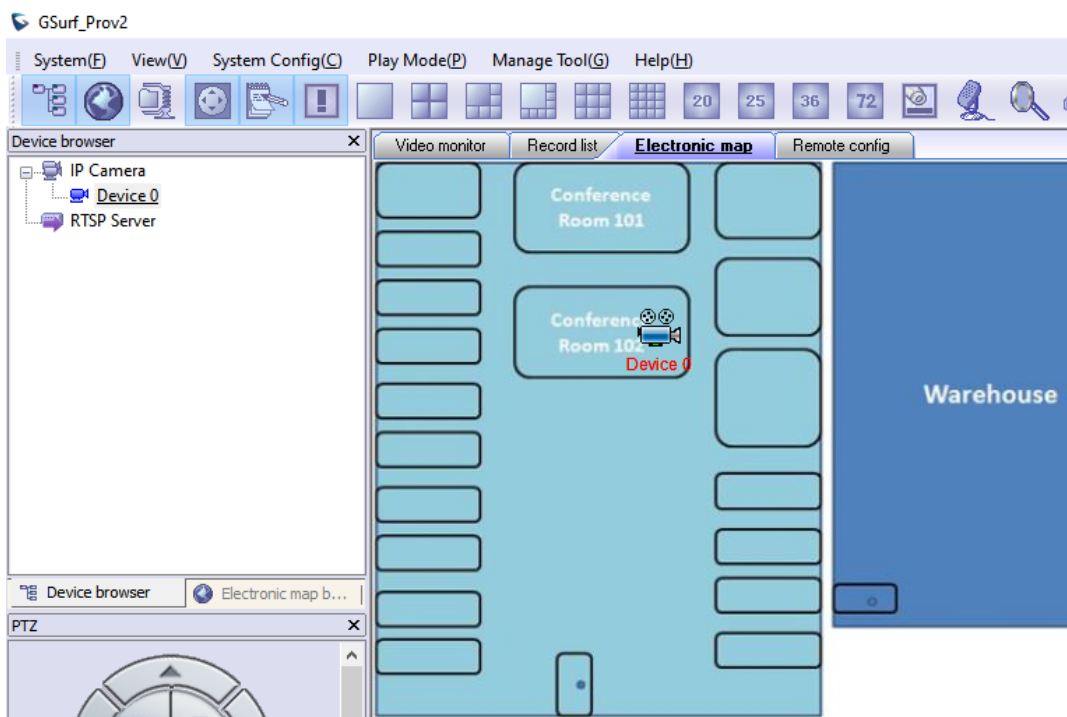


Figure 20: Add Map Alarm

Set Alarm on Map

1. After adding the device to the map, go to **System Config->Alarm Config** to configure the alarm action rule. Make sure the option **Warning on the E-map** is checked.
2. Go to **System Config->Device Config**. Select your device and configure the alarm action rule set up in step 1.
3. When GSurf_Pro v2 receives an alarm report, the corresponding icon on the map will flash in red.

Lock/Unlock Map

To avoid changing the positions of cameras on the map accidentally, the users can lock the map after adding all devices.

Right-click on the map, lock/unlock option will be available in the pop-up menu, When the map is unlocked, users can drag devices to the map. When the map is locked, double-clicking on the camera will open up a new window for real-time video from this camera.

Remove Device from Map

On the map, right-click on the icon and click **Delete Icon** to remove the device from the map.

Remote Configuration

The IP Camera devices can be remotely accessed via a web browser. Select a device on the left side panel and click on the Remote config tab to access the camera's web GUI.

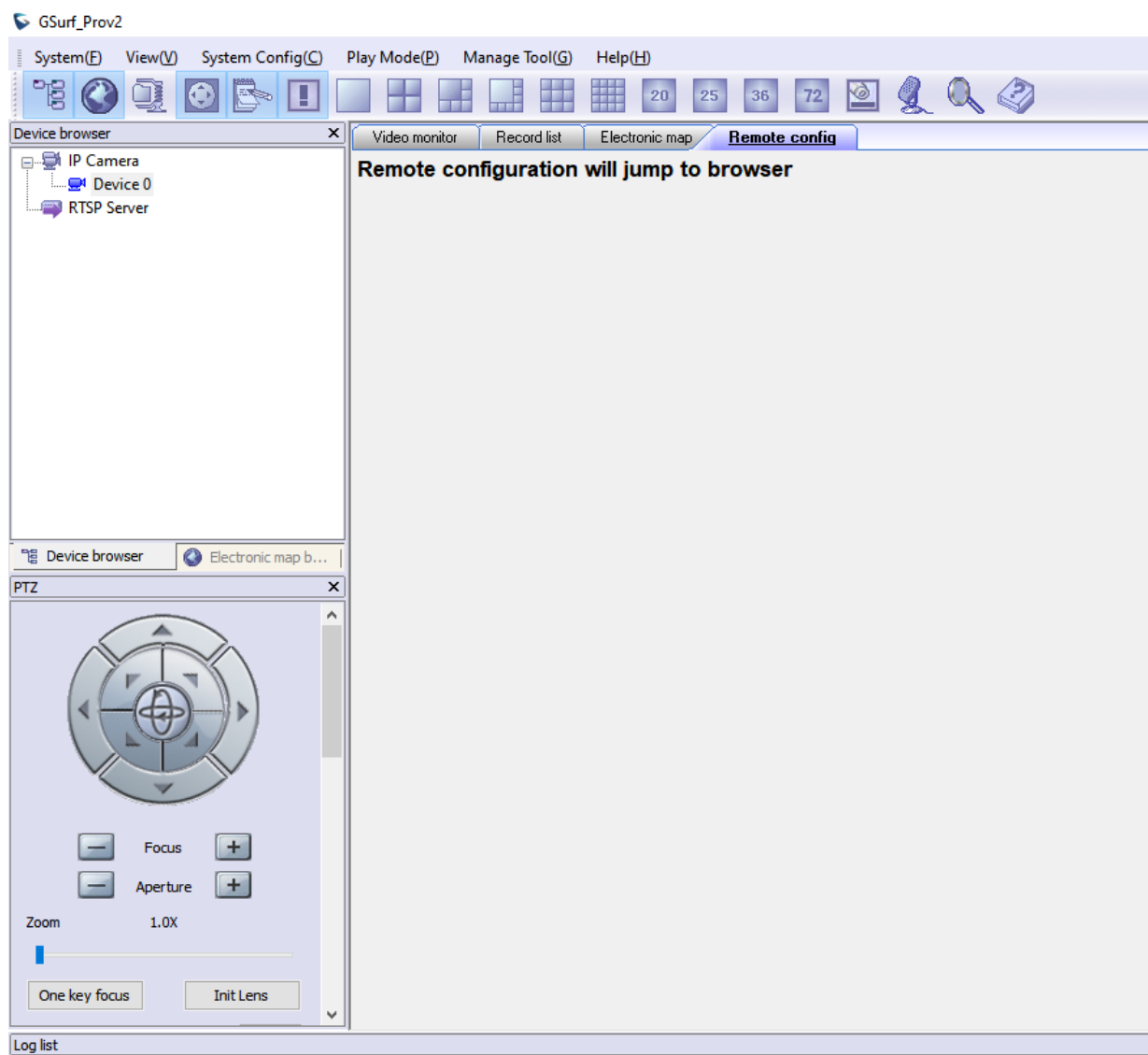



Figure 21: Remote Configuration

PTZ Control

In the toolbar, click  to open the PTZ control panel. If the connected devices are PTZ cameras or have a PTZ device connected, users can use the console to adjust the focus, brightness, contrast, rotating speed, IRIS, and also pan/tilt the devices.

Note


Before using PTZ control, the PTZ device needs to be set up in the RS-485 port and properly configured.

Video Monitor

Individual View

Drag the device from the device browser to the video display window to watch the video immediately.

Group View/Patrol Mode

1. In the toolbar, click on  to open the Group view panel.
2. Drag the device in the Device browser panel to the group in the Group view panel.

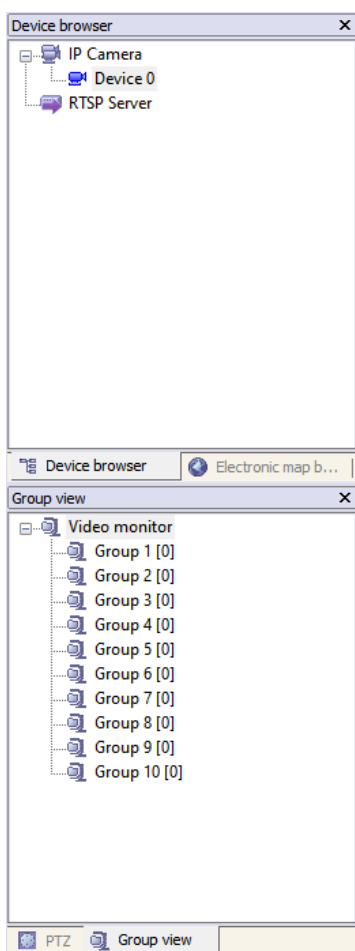


Figure 22: Add Device To Group

3. Right-click on the group to configure the group attributes. Check the **Allow Patrol** option and configure **Pause time** which is the patrol interval for the group.

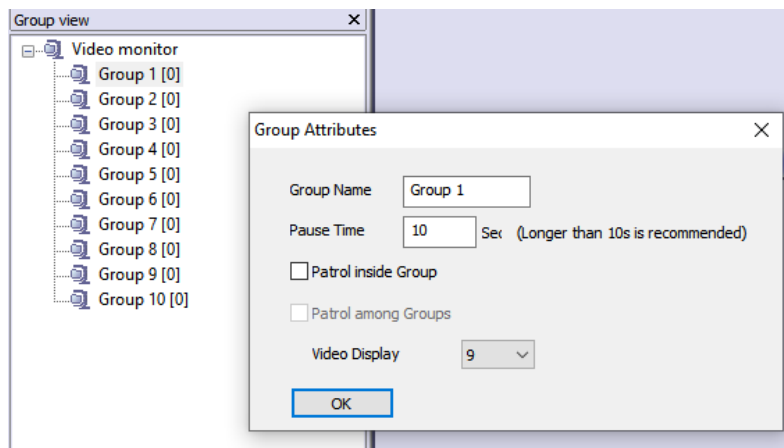


Figure 23: Configure Group Attributes For Patrol Mode

4. Click **OK** to save the settings.

5. In the top Menu bar, click on **Play Mode->Patrolling View** to start playing videos from different groups in a loop.

Synchronize Device Time

In the top Menu bar, click on **Manage tool->Synchronize device time**. Then users could sync up the device time with local PC time.

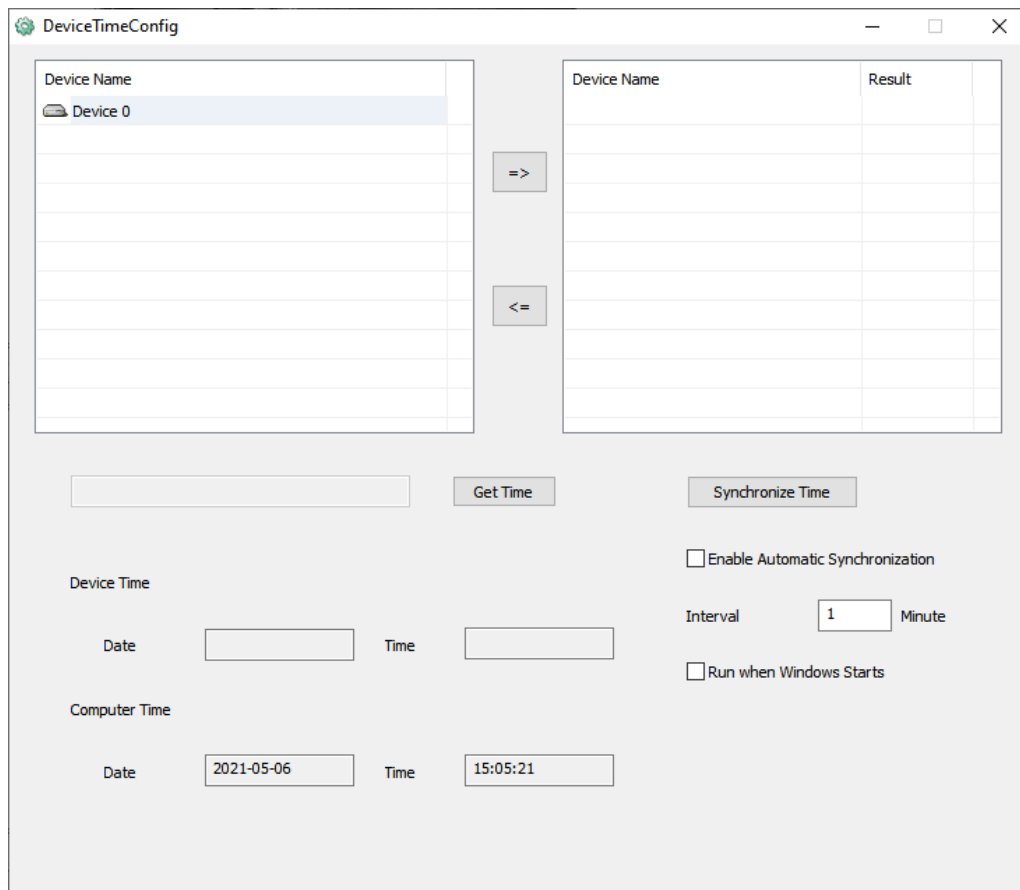


Figure 24: Device Time Configuration

Convert Video Format

The recorded video is saved in H264 format, which might not be supported by certain video players. An AVI converter tool is provided in GSurf_Pro v2. Click on **Manage tool->AVI Conversion Tool** to open the converter. Add video to be converted and the output file will be saved in the configured directory in AVI format.

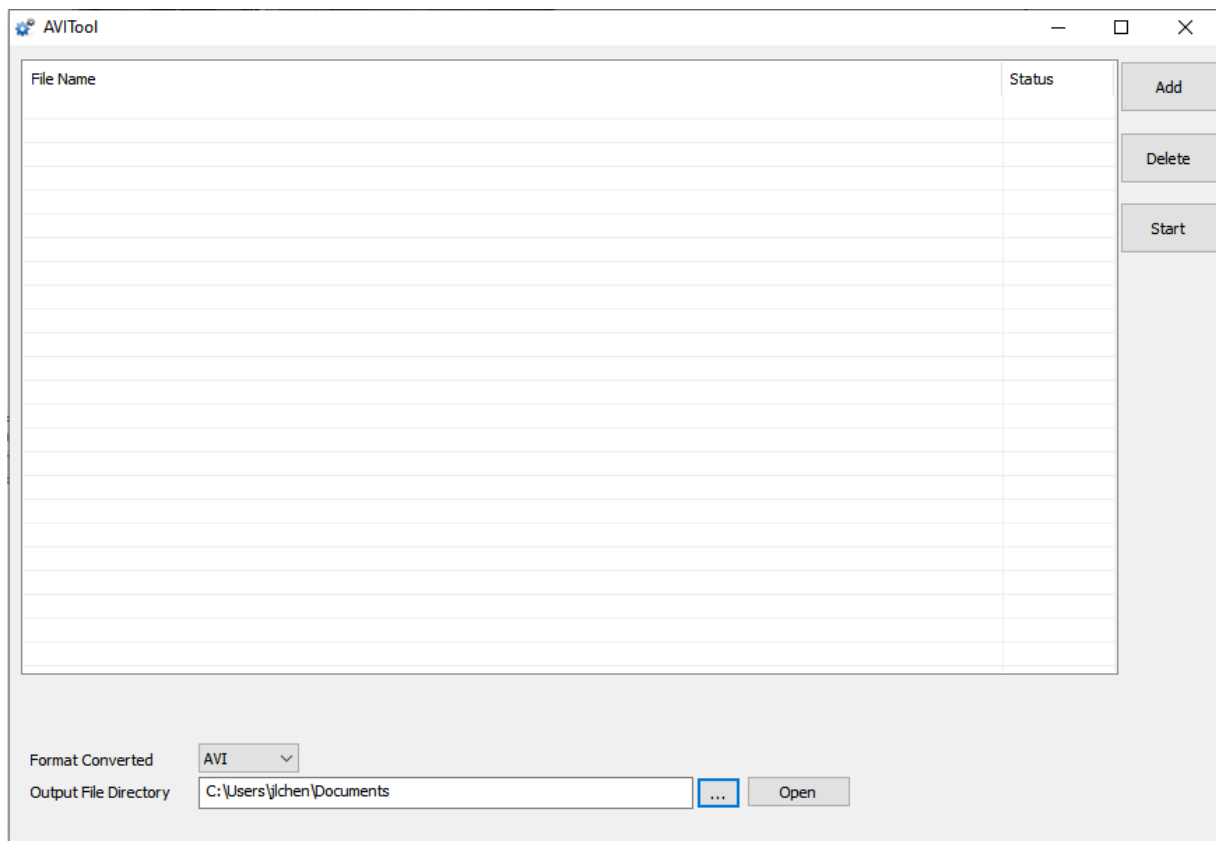


Figure 25: Media Convert Tool

User Management

The GSurf_Pro v2 administrator can add, modify, and delete users as well as issue users different privilege levels.

1. Click on the **Manage tool**->**User Manage**.
2. In the User Manage window, users can add, edit, and delete users. A list of configuration authorities is provided so each user can be assigned different privileges.

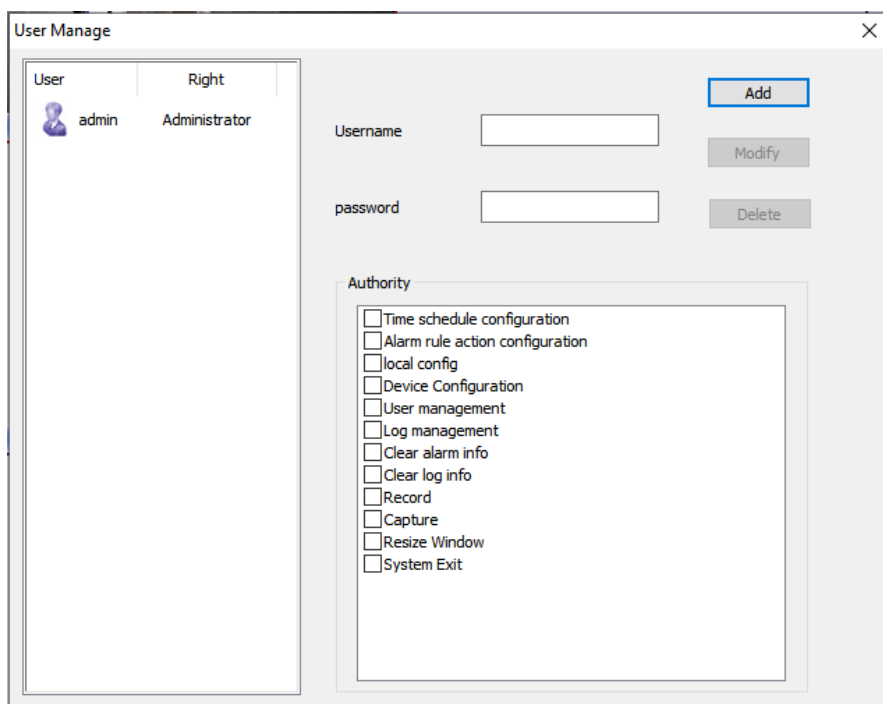


Figure 26: User Management

Import/Export Configuration

The GSurf_Pro v2 configuration can be imported or exported for backup and restore purposes. Click on **System Config->Export/Import Config** to open the import/export window. Users could also select the configurations for the backup file.

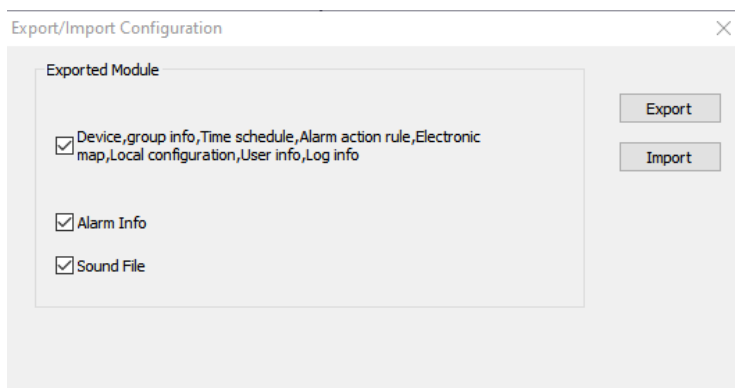


Figure 27: Configuration Import and Export

GSURF_PRO V2 TRANSFER SERVER

The GSurf_Pro v2 embedded transfer server can cooperate with the client side to effectively reduce the workload on the front-end cameras. The surveillance system utilizes the transfer server as the medium to monitor the devices in a distributed manner.

Server Side

1. Open the Transfer server from **Manage Tool->Tran Server**. A login window will pop up.

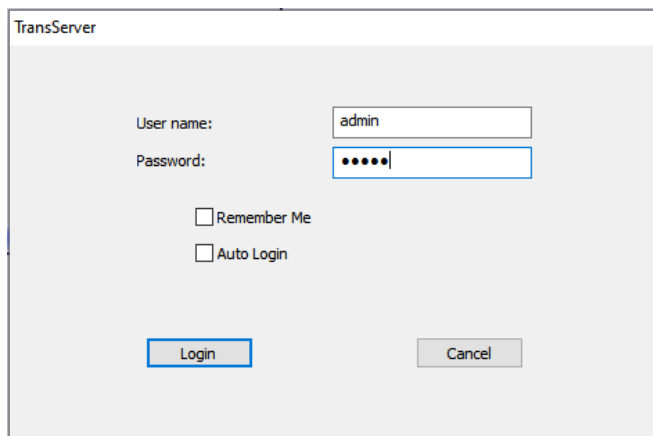


Figure 30: Transfer Server Login

2. After login, click on **Config->System Config** to open the following server configuration window. The listening IP address is the PC's IP address. For the port number, it is recommended to use default value or big value.

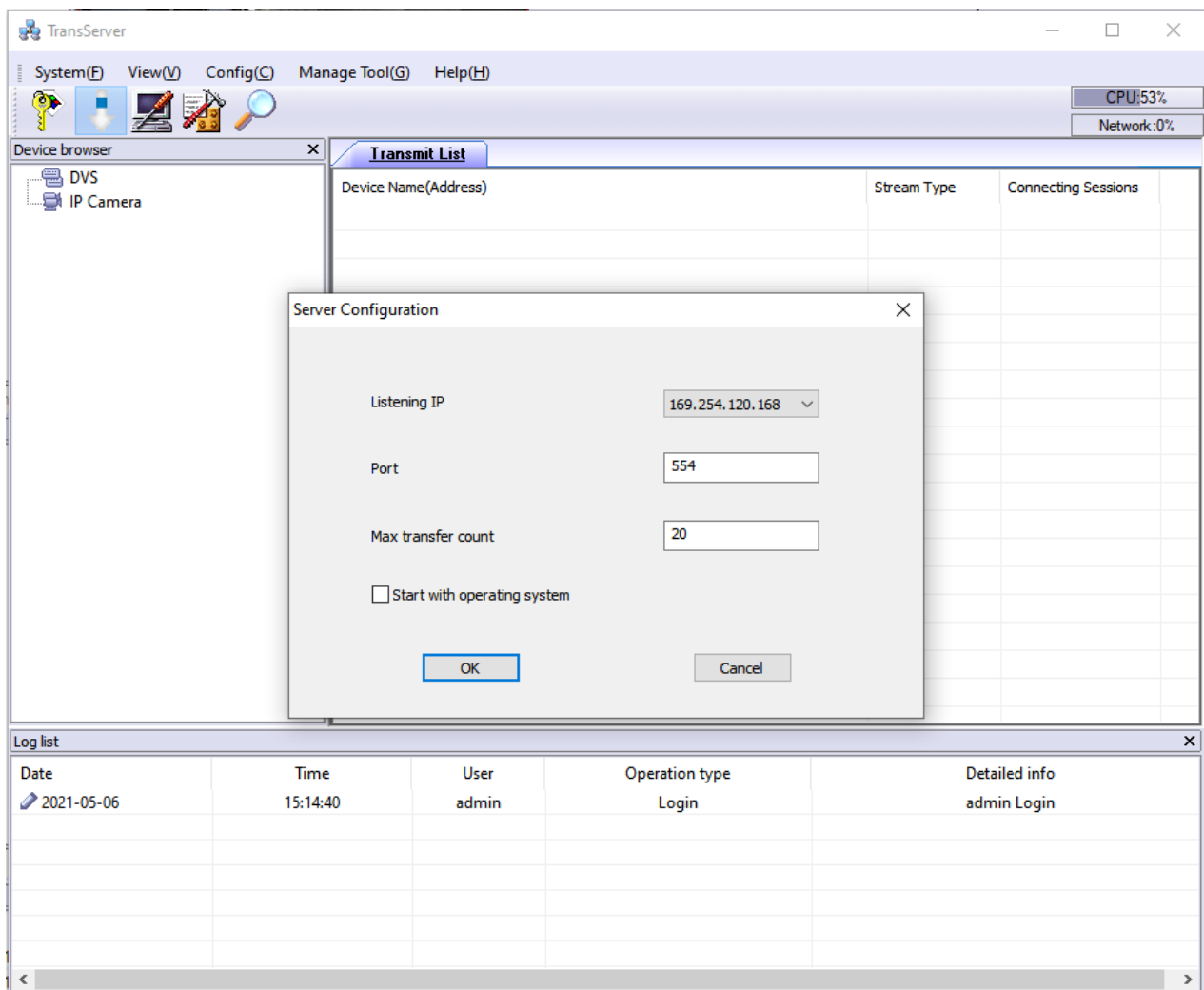



Figure 28: Transfer Server Configuration

3. Click on  to open the search tool.
4. In the search tool, press the **Search** button to get a list of devices in the same LAN.
5. Select the devices in the result list and click **Add**.

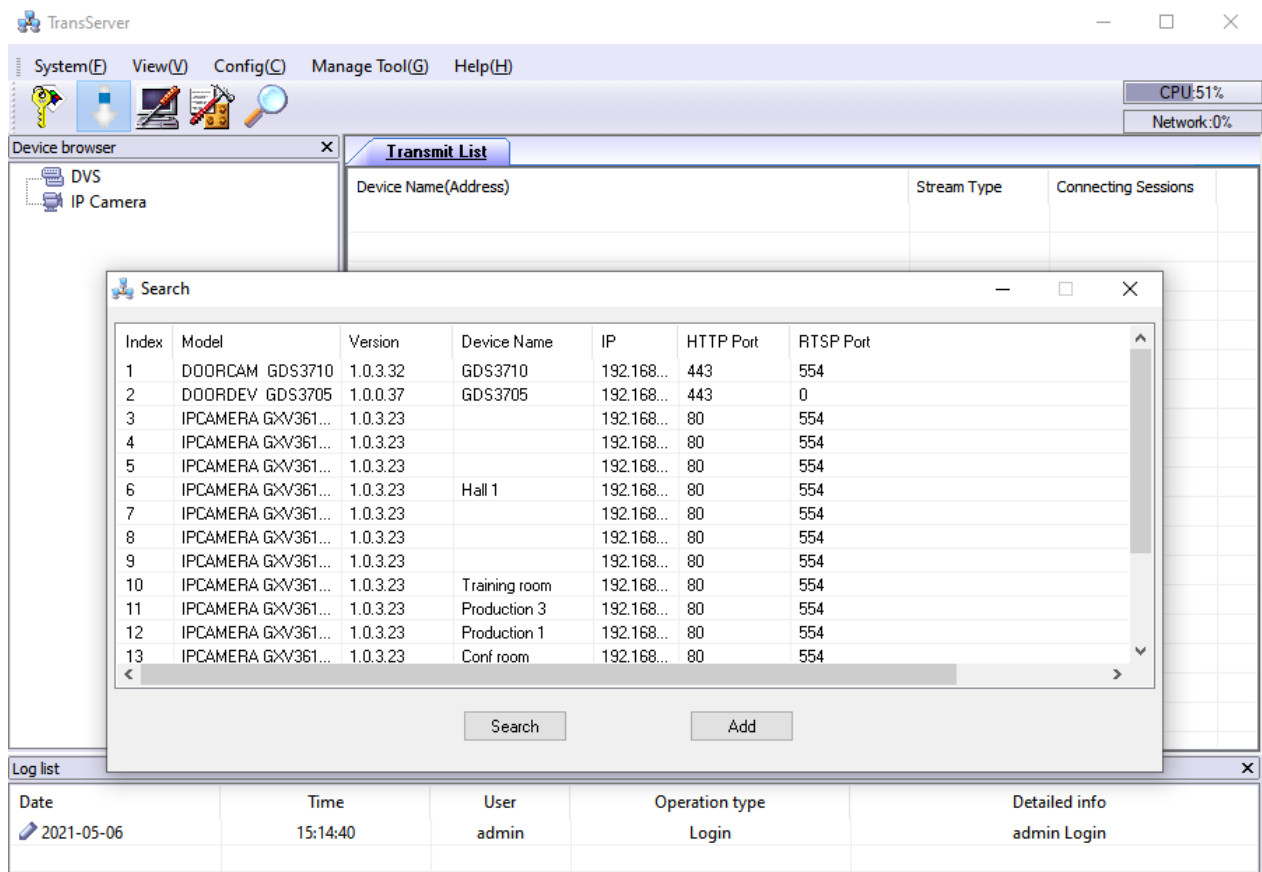


Figure 29: Add Devices to Transfer List

6. Those devices will then be displayed in the transfer list.

The main display window will show the traffic status when the traffic starts.

Client Side

The client side is the GSurf_Pro v2 RTSP server.

1. In the **Device browser**, right-click on the **RTSP server**.
2. Click **Server Config** to add devices to the local list.

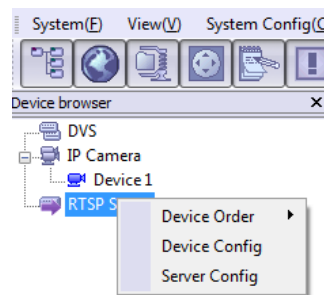


Figure 30: RTSP Server

GSURF_PRO V2 FILE SERVER

Server Side

The file server can provide the record files on a local disk to other hosts within the network for search, download, and replay. To configure the GSurf_Pro v2 as the file server, go to Manage Tool->File Server. Click on the Configuration button to set up the listening IP and port. Then start the server.

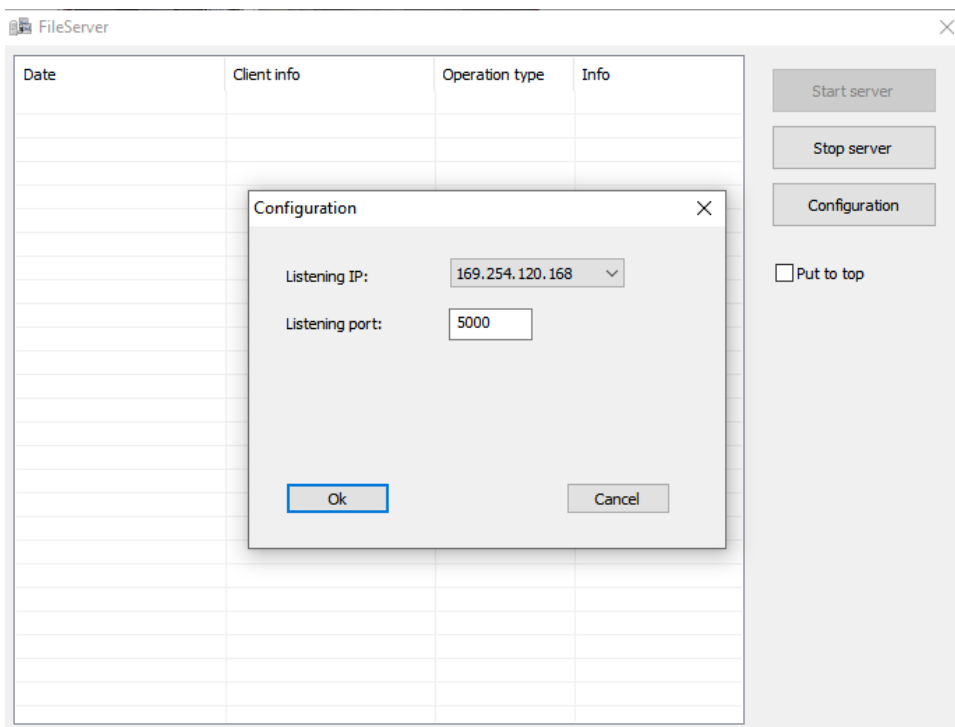


Figure 31: GSurf_Pro v2 File Server

Client Side

The client side is the replay tool in the GSurf_Pro v2. Go to **Manage Tool**->**Replay Tool** to open the Replayer. Once searching is done, the record files can be downloaded and played locally.

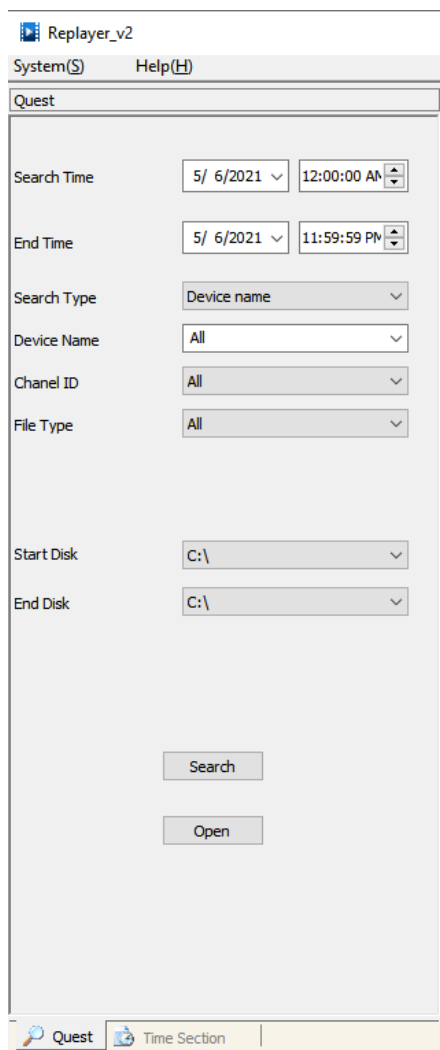


Figure 32: Replayer Remote Search

HTTP SERVER

GSUpgrade Tool

This HTTP server allows users to configure a local HTTP server on the same machine running GSurf Pro which can be used to execute firmware updates from this tool on IP Cameras either one by one or via batch upgrade by selecting them all. Go to **Manage Tool->HttpServer**. Click on the Configuration button to set up the listening IP and port. Then start the server.

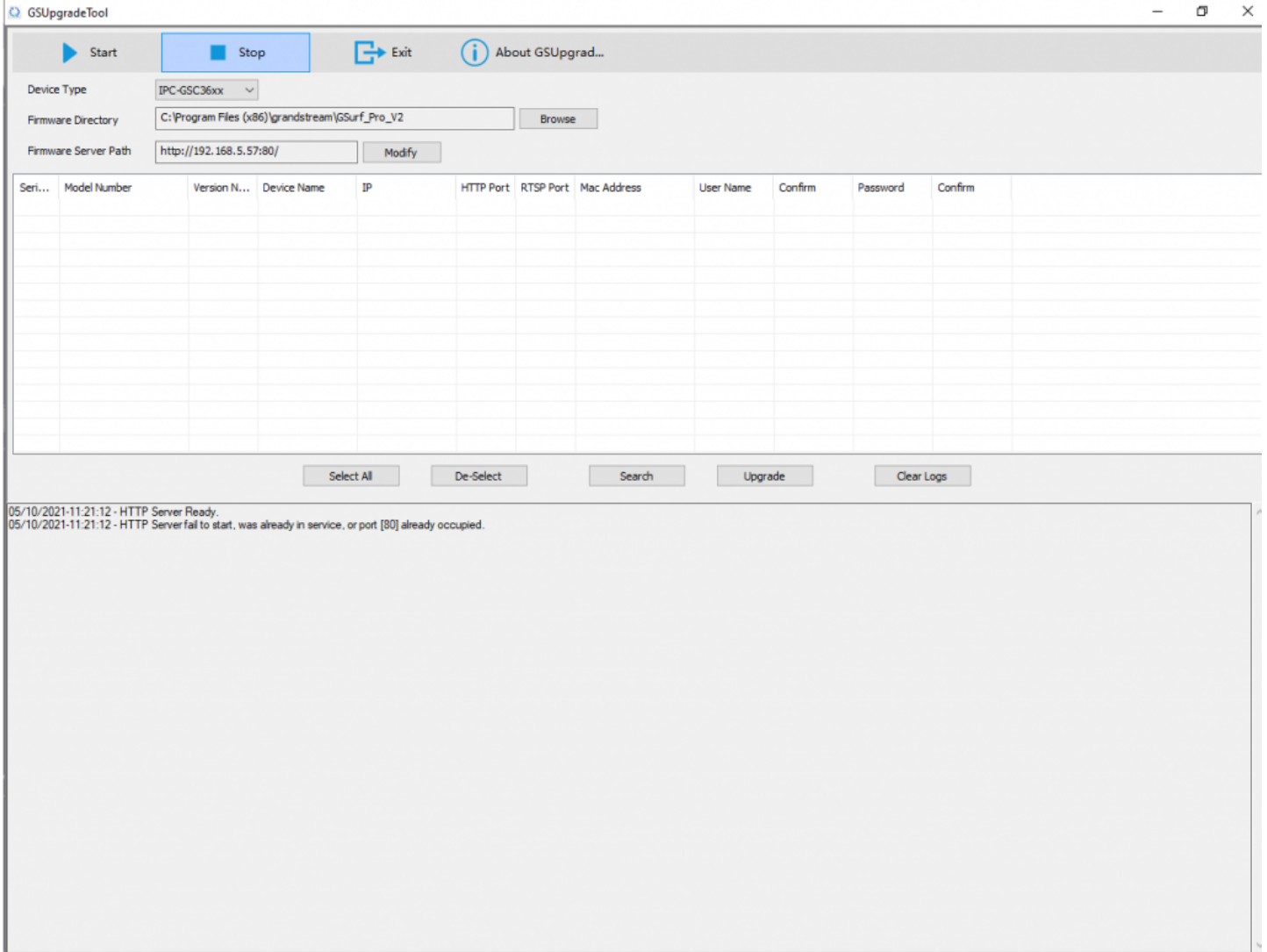


Figure 33: GSurf_Pro v2 HTTP Server

FREQUENTLY ASKED QUESTIONS

Q: How many cameras does GSurf_Pro v2 support?

A: The GSurf_Pro v2 can support up to 10 groups or 72 cameras at the same time. However, when using an HD camera (720P and up), the maximum number might be limited by the PC processor. When displaying multiple videos, the GSurf_Pro v2 will adjust the display to a secondary stream to increase system resource efficiency. If users click on one of the videos, the display will be automatically converted to a primary stream for better quality.

Q: Does GSurf_Pro v2 have any requirement on the PC where it's installed?

A: Yes. Please refer to section [Minimum Computer System Requirement] for details. Before installing GSurf_Pro v2, it is recommended to evaluate the system requirements (network traffic, disk space, file directory, etc.).

Q: Is there any requirement on the transfer server?

A: In most of the cases, the transfer server will have a large amount of network flow going through. Therefore, it is recommended to use the machine with a Gigabyte network interface card.

Q: What are the factors that might affect the disk space?

A: The disk space is mainly affected by the primary stream bit rate. Normally HD video will take more space than standard definition video.

Q: I have configured the alarm action on GSurf_Pro v2 already but I still didn't get the alarm. Why?

A: Besides configuring alarm action on the GSurf_Pro v2 side, the alarm has to be activated on the camera side and configured to report to the alarm center. Users could configure this by directly accessing the camera's web GUI or via GSurf_Pro v2's remote configure interface.

EXPERIENCING THE GRANDSTREAM GSURF_PRO V2

Please visit our website: <https://www.grandstream.com> to receive the most up-to-date updates on firmware releases, additional features, FAQs, documentation, and news on new products.

We encourage you to browse our [product-related documentation](#), [FAQs](#), and [User and Developer Forum](#) for answers to your general questions. If you have purchased our products through a Grandstream Certified Partner or Reseller, please contact them directly for immediate support.

Our technical support staff is trained and ready to answer all of your questions. Contact a technical support member or [submit a trouble ticket online](#) to receive in-depth support.

Thank you again for using the Grandstream GSurf_Pro v2 Network Video Surveillance System.

CHANGE LOG

This section documents significant changes from previous versions of the user manual for GSurf Pro. Only major new features or major document updates are listed here. Minor updates for corrections or editing are not documented here.

Software Version 1.0.3.34

- Added sliding bar of Zoom In/Out for new AF IP Camera GSC36xx. [[Gsurf_Pro v2 Main Window](#)]
- Added support for abnormal reboot alarm action. [[Configure Alarm Triggers and Rules](#)]
- Added Replay Tool v3 for new IP cameras. [[Replay](#)]

Software Version 1.0.3.24

- Added support for GSC3610 and GSC3615 IP Cameras.

Software Version 1.0.3.19

- No major changes.

Software Version 1.0.3.18

- No major changes.

Software Version 1.0.3.13

- No major changes.

Software Version 1.0.0.6

- This is the initial version.

Need Support?

Can't find the answer you're looking for? Don't worry we're here to help!

