



How to Perform Time Sync for GV-IP Cameras

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Applied to

- GV-IP Cameras
- GV-VMS V17.4.8.1 / V18.3.5 / V20.0.2 or later
- GV-Recording Server V2.1.1 or later
- GV-Edge Recording Manager (Windows) V2.3.1 or later
- GV-SNVR0412 (FW V1.21 or later), GV-SNVR0812 (FW V1.27 or later), GV-SNVR1612 (FW V1.09 or later), GV-SNVR3203 / 6403 (V1.03 or later), GV-TNVR1620-P (FW V1.00 or later), GV-RNVRL810-P (FW V1.02 or later), GV-RNVR3240-N / 256G0-N (FW V1.01 or later)

Introduction

This document explains how to synchronize GV-IP Camera time with an NTP server (Internet required) or with GV-Software and GV-SNVRs over a LAN without Internet access.

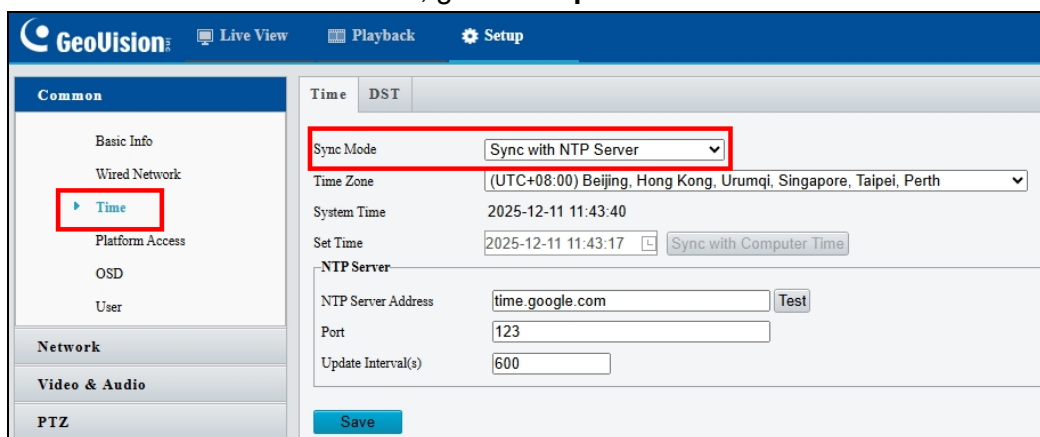


1. Syncing with NTP Server

To sync GV-IP Cameras with an NTP Server, follow the steps below.

For GV-ABL / ADR / AVD / EBD / EBDP / TBL / TBLP / TDR / TFD / TMS / TVD Series and GV-BLFC5800 / EBFC5800 / FER5702 / PTZ5810-IR / SD4825-IR / SD4834-IR Cameras:

1. On the GV-IP Camera's Web UI, go to **Setup > Common > Time**.



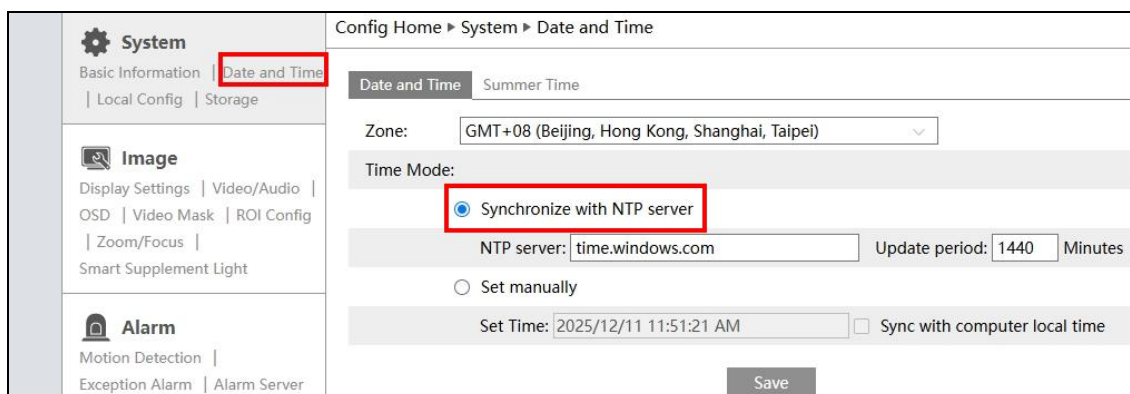
2. Set **Sync Mode** to **Sync with NTP Server**.

Note: This mode requires an Internet connection to access an NTP server for time synchronization.

3. Click **Save** to apply the settings. The camera time syncs with an NTP server immediately upon connection.

For GV-G Series and GV-BX2802 / BX4802 / TMEB5800 Cameras:

1. On the GV-IP Camera's Web UI, go to **Config Home > System > Date and Time**.





2. Select **Synchronize with NTP server** for Time Mode


Note: This mode requires an Internet connection to access an NTP server for time synchronization.





3. Click **Save** to apply the settings. The camera time syncs with an NTP server immediately upon connection.

2. Syncing with GV-Software and GV-SNVRs

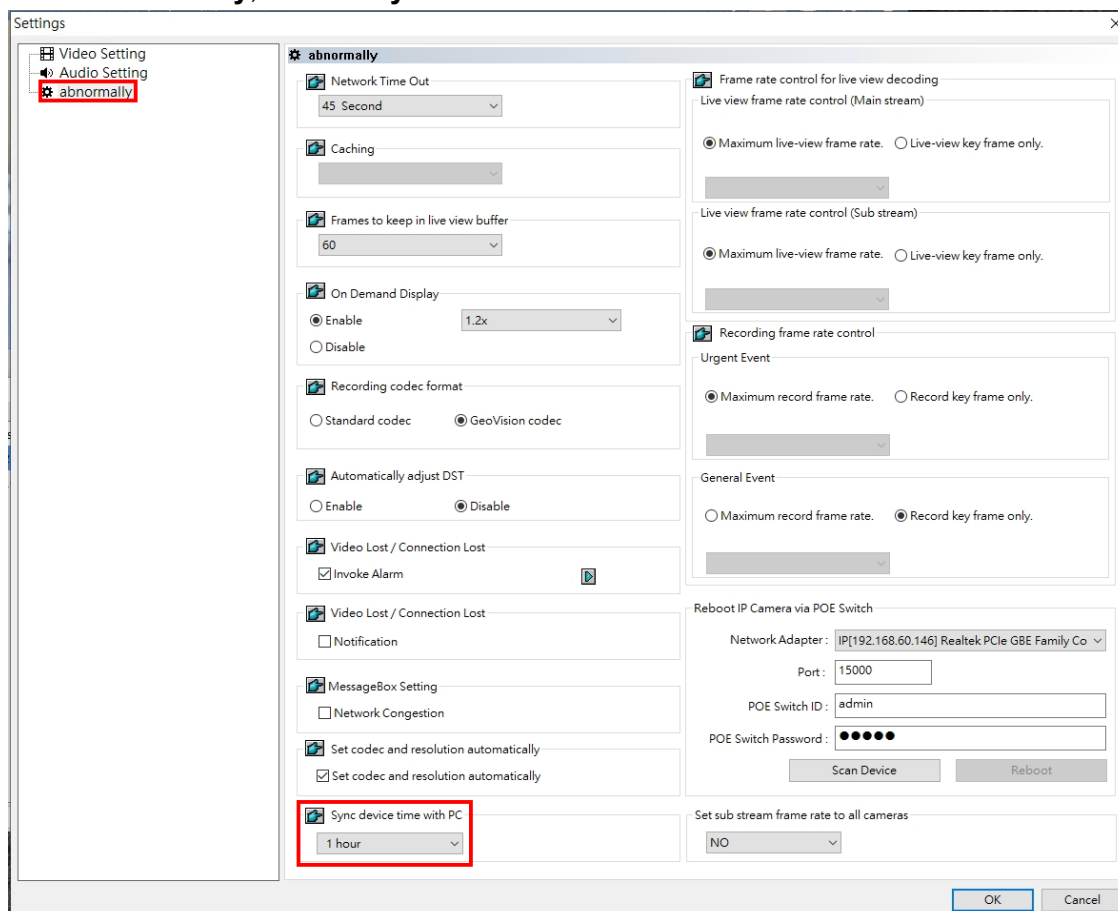
To sync GV-IP Cameras with GV-Software and GV-SNVRs, follow the steps below.

GV-VMS V17 / V18

1. In GV-VMS V17 / V18, go to **Home > Toolbar > Configure > Camera Install**, and click the **Setup** button  of the connected camera. The Settings dialog box appears.

ID	Status	Server address	Port	Video Resolution	Bitrate	Brand	Location	Settings
1		192.168.60.214	80	2880X1620(H265) / 640X360(H264)	128 / 29 kbps	GeoVision_GV-PTZ5810-IR	Camera1	
2		192.168.60.163	80	2560X1440(H265) / 1280X720(H264)	3185 / 966 kbps	GeoVision_GV-GBLF4813	Camera2	

2. Go to **Abnormally**, and set **Sync Device Time with PC** to 1 – 24 hours.




The screenshot shows the 'Settings' dialog box with the 'abnormally' tab selected. The 'Sync device time with PC' option is checked and set to '1 hour'. Other settings include 'Network Time Out' (45 Second), 'Caching', 'Frames to keep in live view buffer' (60), 'On Demand Display' (Enable, 1.2x), 'Recording codec format' (GeoVision codec), 'Automatically adjust DST' (Disable), 'Video Lost / Connection Lost' (Invoke Alarm), 'Video Lost / Connection Lost' (Notification), 'MessageBox Setting' (Network Congestion), 'Set codec and resolution automatically' (Set codec and resolution automatically), 'Frame rate control for live view decoding' (Maximum live-view frame rate), 'Recording frame rate control' (Maximum record frame rate), and 'Reboot IP Camera via POE Switch' (Network Adapter: IP[192.168.60.146] Realtek PCIe GBE Family Co, Port: 15000, POE Switch ID: admin, POE Switch Password: ●●●●, Scan Device, Reboot).

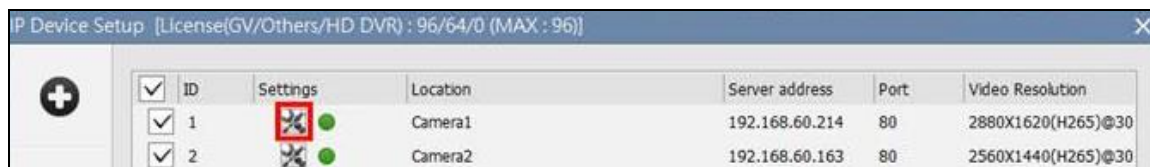




Note: Click  to apply this setting to all GV-IP Cameras connected to GV-VMS.

- Click **OK** to apply the settings. The camera time syncs with GV-VMS immediately upon connection and re-syncs automatically at the specified interval.

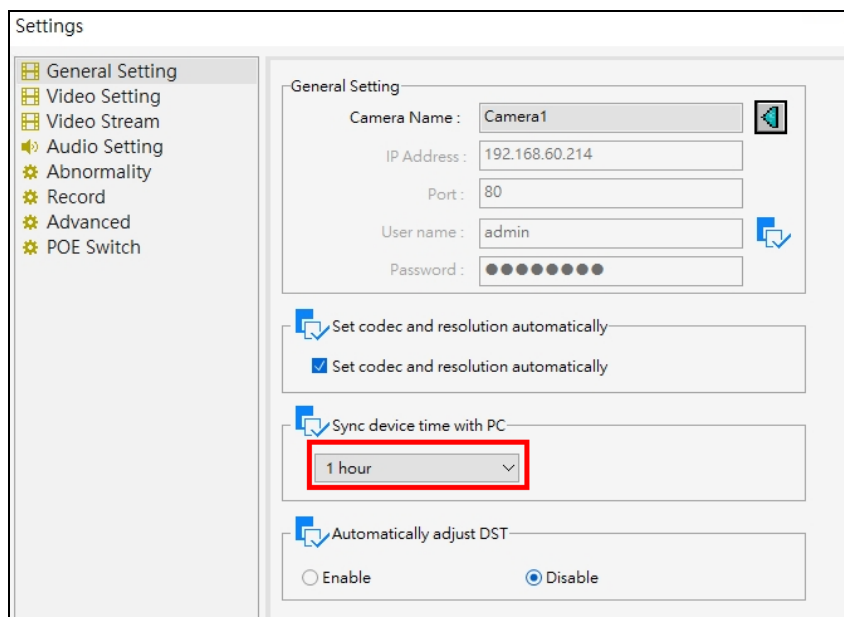
GV-VMS V20

- In GV-VMS V20, go to **Home > Toolbar > Configure > Camera Install**, and click the **Setup** button  of the connected camera. The Settings dialog box appears.



ID	Settings	Location	Server address	Port	Video Resolution
1		Camera1	192.168.60.214	80	2880X1620(H265)@30
2		Camera2	192.168.60.163	80	2560X1440(H265)@30


- Go to **General Setting**, and set **Sync Device Time with PC** to 1 – 24 hours



Settings


- General Setting
- Video Setting
- Video Stream
- Audio Setting
- Abnormality
- Record
- Advanced
- POE Switch

General Setting

Camera Name: Camera1 

IP Address: 192.168.60.214

Port: 80

User name: admin 

Password: ●●●●●●●●

Set codec and resolution automatically

Set codec and resolution automatically

Sync device time with PC

1 hour

Automatically adjust DST

Enable Disable

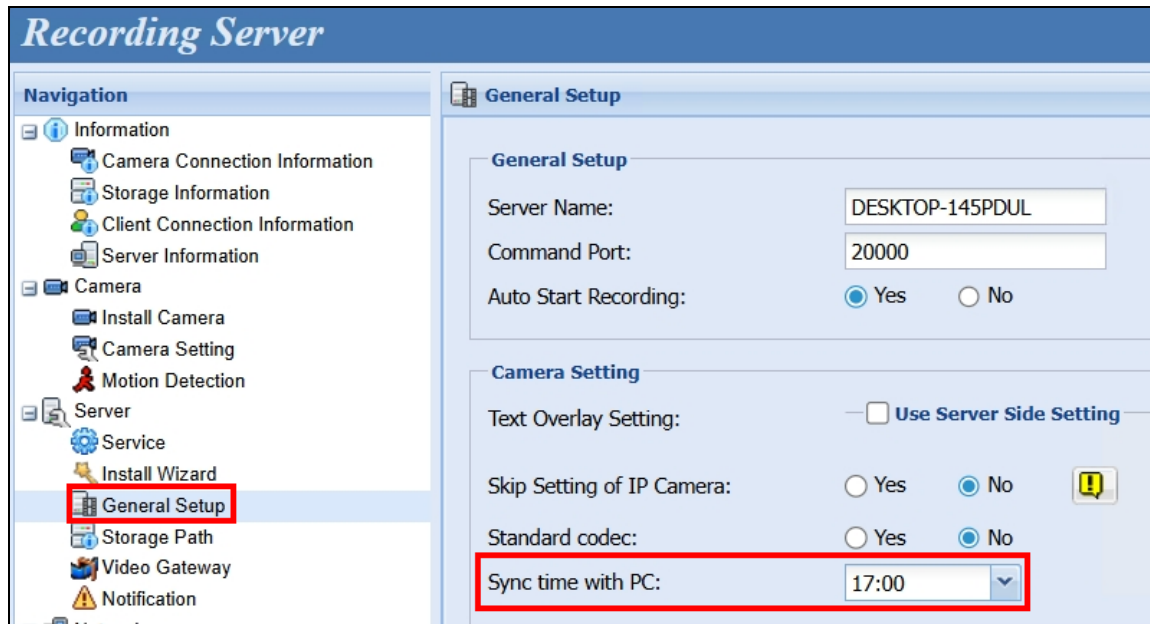
Note: Click  to apply this setting to all GV-IP Cameras connected to GV-VMS.

- Click **OK** to apply the settings. The camera time syncs with GV-VMS immediately upon connection and re-syncs automatically at the specified interval.



GV-Recording Server

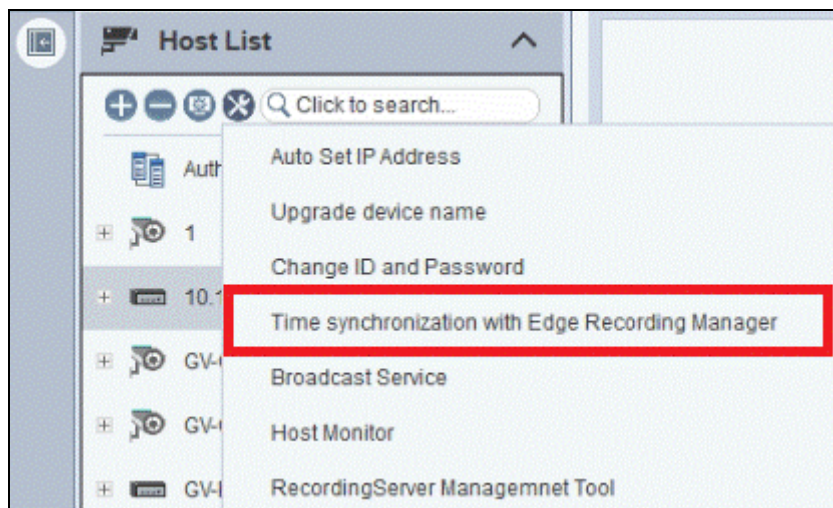
1. In GV-Recording Server, go to **Server > General Setup**



2. Select a time between 00:00~23:00 for **Sync time with PC** under **Camera Setting**.
3. Click **Save** to apply the settings. The camera time syncs with GV-Recording Server at the selected time.

GV-Edge Recording Manager (Windows)

1. In GV-Edge Recording Manager, go to **Host List > Tools** .

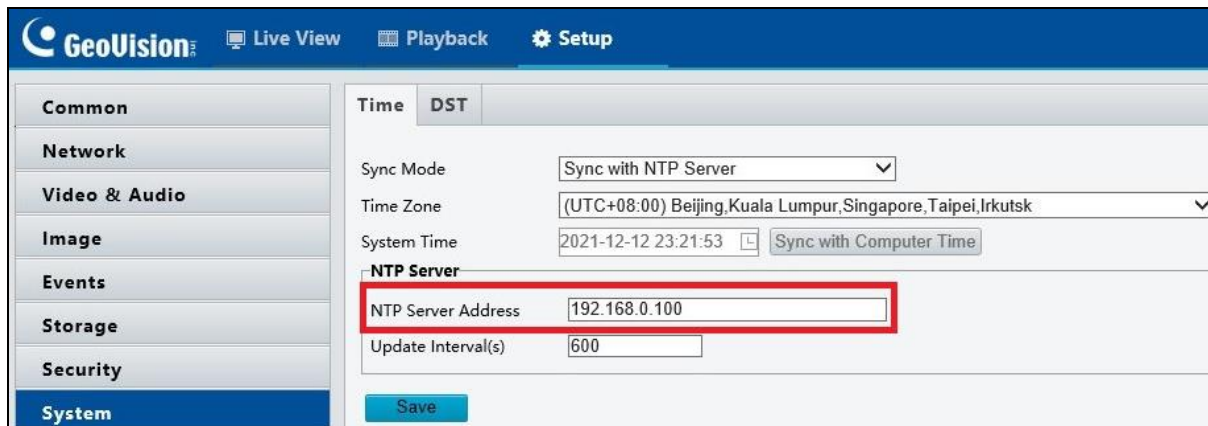


2. Select **Time synchronization with Edge Recording Manager**. After selection, the camera time syncs with GV-Edge Recording Manager immediately upon connection.



GV-SNVR0412 / 0812 / 1612

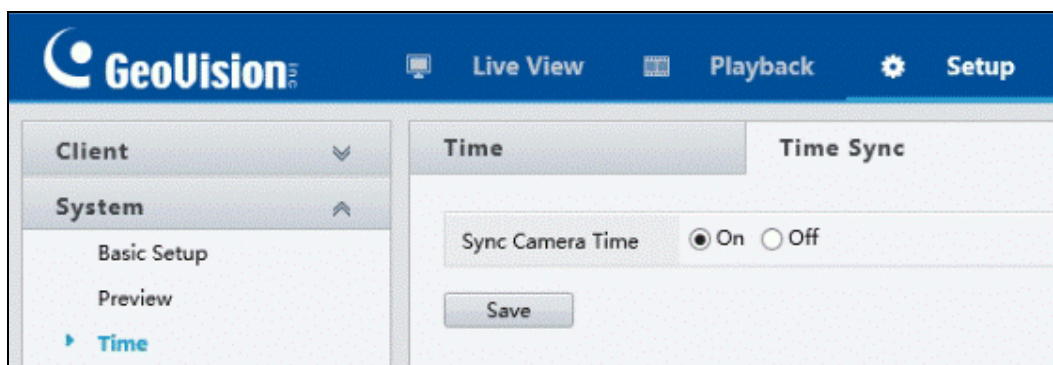
1. On the GV-IP Camera's Web UI, go to **Setup > System > Time**.



2. Set **Sync Mode** to **Sync with NTP Server**, and type the IP address of the GV-SNVR into the **NTP Server Address** field.
3. Click **Save** to apply the settings. The camera time syncs with the GV-SNVR immediately upon connection.

GV-SNVR3203 / 6403 and GV-TNVR1620-P

1. On the GV-IP Camera's Web UI, go to **Setup > System > Time**.



2. Go to the **Time Sync** tab, and enable **Sync Camera Time**.
3. Click **Save** to apply the settings. The camera time syncs with the GV-SNVR immediately upon connection.

GV-RNVRL810-P / 3240-N / 256G0-N

The GV-RNVR Series SNVRs have a built-in time server (with no UI for configuration). The camera time syncs with the GV-SNVR immediately upon connection.