

[FAQ]

How do I create time lapse videos using GV-System or GV-IP Camera?

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Applied to

GV-System

GV-IP Camera

Question

How do I create time lapse videos using GV-System or GV-IP Camera?

Answer


To create a time lapse video, you need to lengthen the interval between each frame (low frame rate) and then play back the recordings in real-time frame rate. There are three ways to achieve this effect.

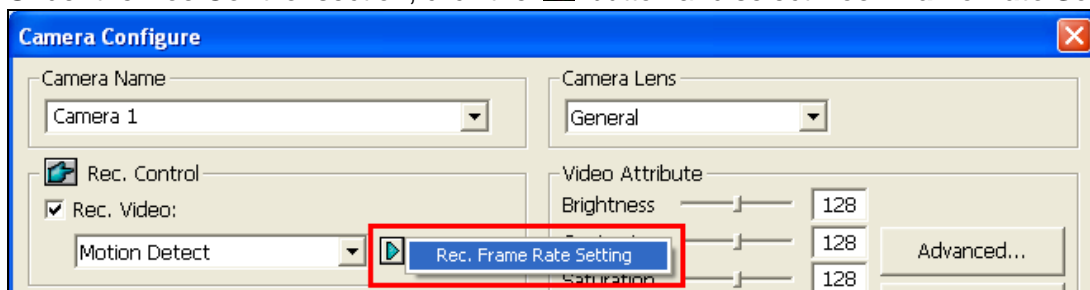
- **Method 1:** Set GV-System to record in low frame rate using Economic Mode, and play back with Smooth Playback in ViewLog.
- **Method 2:** Set GV-IP Camera to low frame rate, and play back recorded video with Smooth Playback in ViewLog.
- **Method 3:** Set automatic snapshot function in Object Index, and use third-party video editing software to create time lapse video.

Method 1: Economic Mode in GV-System + Smooth Playback

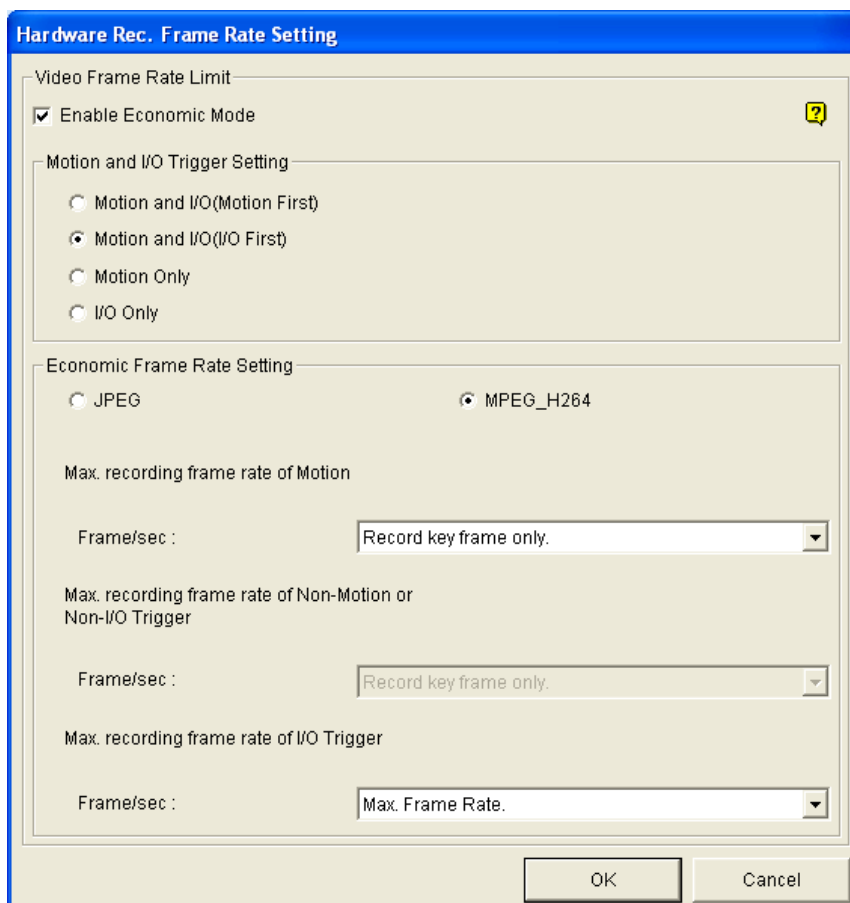
First, set the GV-System to record in a low frame rate or to record key frames only using Economic Mode. Next, use the Smooth Playback function in ViewLog to play back the recorded frames in real-time frame rate.

Setting GV-System to record in low frame rate:

1. In the main screen, click the **Configure** button, select **System Configure** and select **Camera Configure**.
2. Select an IP camera under **Camera Name**.
3. Under the **Rec Control** section, click the  button and select **Rec. Frame Rate Setting**.




4. Select **Enable Economic Mode**.



5. Select **JPEG** and set the maximum recording frame rate to a lower frame rate. For example, select **Record 1 FPS** if you only want to record 1 frame per second when recording in JPEG codec.
6. Select **MPEG_H264** and set the maximum recording frame rate to **Record key frame only**.
7. Click **OK** to apply the settings.

Playing Back with Smooth Playback

1. In ViewLog, select the recorded video.

2. Click the  button and select **Smooth Playback**.



When Smooth Playback is enabled, ViewLog will always play 30 frames in each second even if the video was recorded in much lower frame rate. The result is a time lapse video that appears to be fast forwarded.

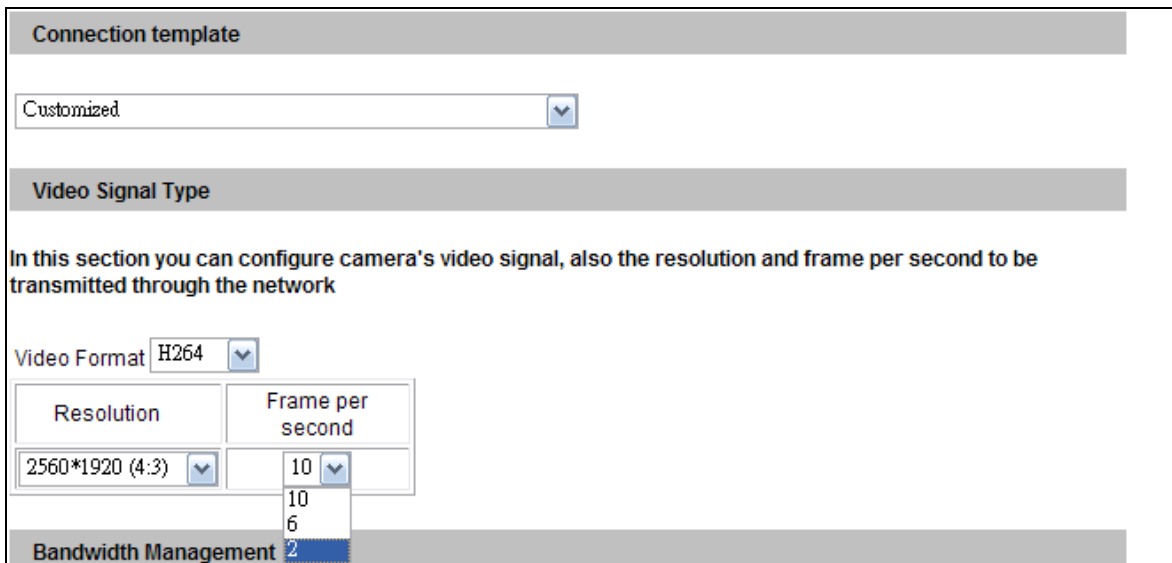
Method 2: GV-IP Camera's Frame Rate Setting + Smooth Playback

From the GV-IP Camera's Web interface, you can lower the camera's frame rate and set the Group of Picture (GOP) Size to reduce the number of key frames. Record the GV-IP Camera using software of your choice, and then play back the video using Smooth Playback in ViewLog or Remote ViewLog.

Setting the GV-IP Camera's Web Interface

1. Log in to the GV-IP Camera's Web interface.
2. In the left menu, select **Video and Motion**, click **Video Settings** and select a stream if needed.
3. Under **Connection Template**, select **Customized**. Otherwise, the frame rate setting will be grayed out.

- Under **Video Signal Type**, use the **Frame per second** drop-down list to lower the frame rate.



Connection template

Customized

Video Signal Type

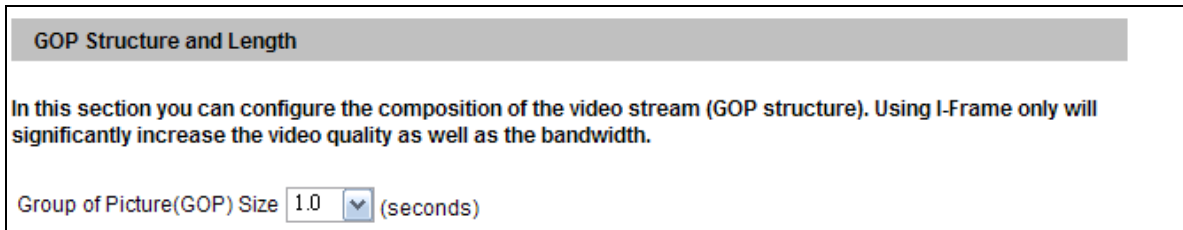
In this section you can configure camera's video signal, also the resolution and frame per second to be transmitted through the network

Video Format H264

Resolution	Frame per second
2560*1920 (4:3)	10
	6
	2

Bandwidth Management 2

- To further reduce the recording size, increase the interval between each key frame using the **Group of Picture (GOP) Size** under **GOP Structure and Length**. For example, if you set the GOP size to 5 seconds, only 1 key frame will be recorded every 5 seconds.



GOP Structure and Length

In this section you can configure the composition of the video stream (GOP structure). Using I-Frame only will significantly increase the video quality as well as the bandwidth.

Group of Picture(GOP) Size 1.0 (seconds)

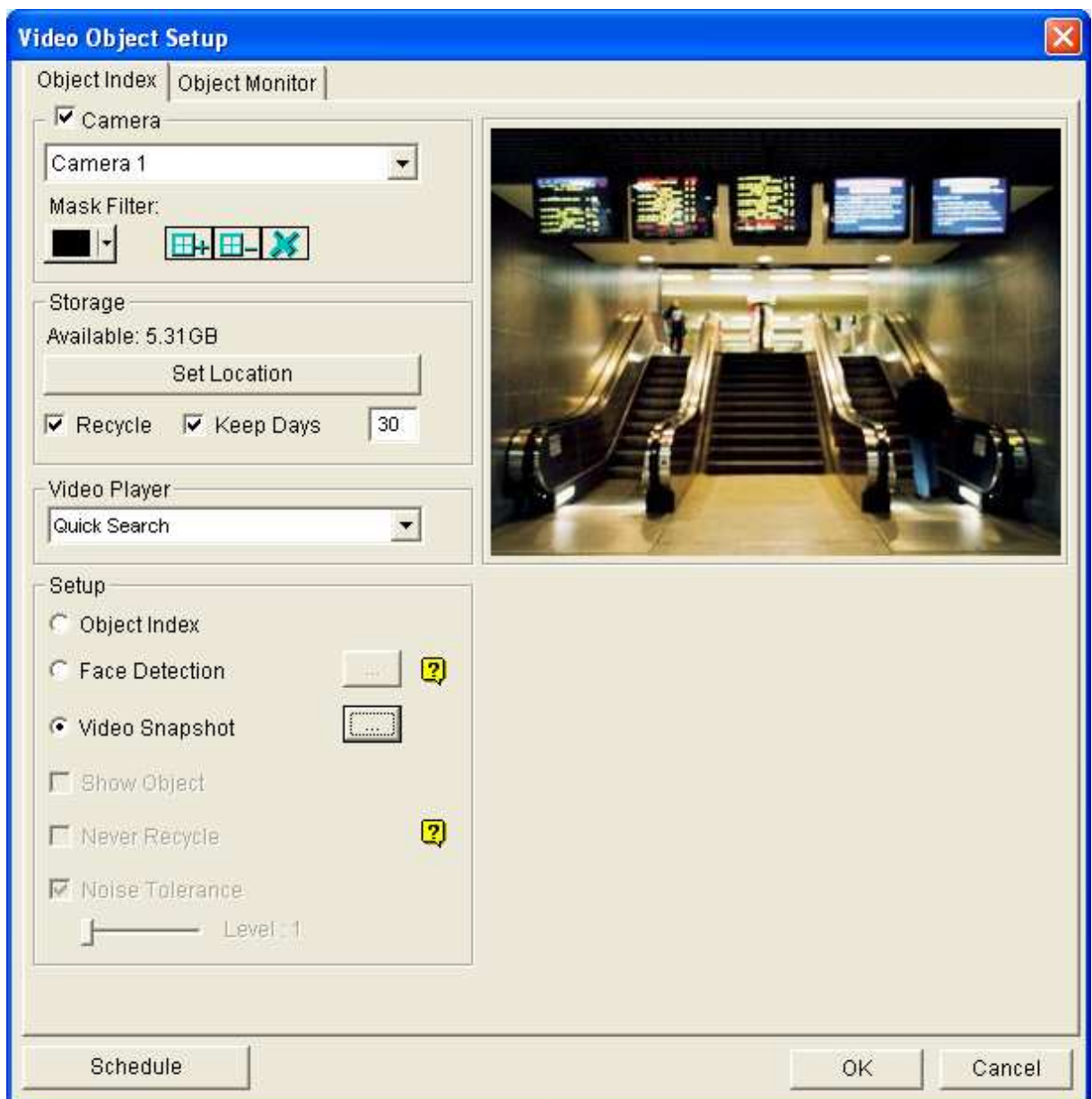
- Click **Apply**.


After you record videos from the GV-IP Camera, use the Smooth Playback function in ViewLog or Remote ViewLog to play back the video. Refer to Method 1 for more details on Smooth Playback.

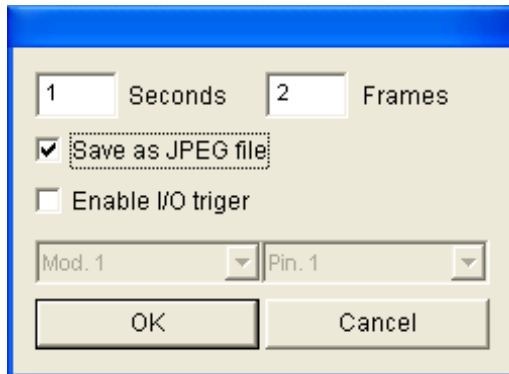
Method 3: Automatic Snapshots in GV-System + Third-Party Video Editing Software

The Object Index feature in GV-System comes with a Video Snapshot function to automatically take snapshots at the specified time interval. Set the GV-System to take snapshots in JPEG format and then use a third-party video editing software to create the time lapse video.

1. In the main screen, click the **Configure** button, select **Video Analysis** and select **Object Index / Monitor Setup**. The Object Index / Monitor Setup dialog box appears.
2. Select the cameras you want to configure and click the **Configure** button. This dialog box appears.



3. Select one camera from the drop-down list and enable **Camera**.
4. Select **Video Snapshot** to enable the function and click the  button. This dialog box appears.



5. Specify the frequency of the automatic video snapshots. For example, the system will take 2 frames per second when the frequency is set to 1 second per 2 frames.
6. Select **Save as JPEG file**.
7. Click **OK** to apply the setting.
8. To activate automatic snapshot function at certain times only, click the **Schedule** button and select **Enable**.
9. Start recording to begin taking snapshots.

You can now use third-party video editing software to create a time lapse video with the JPEG snapshots taken.