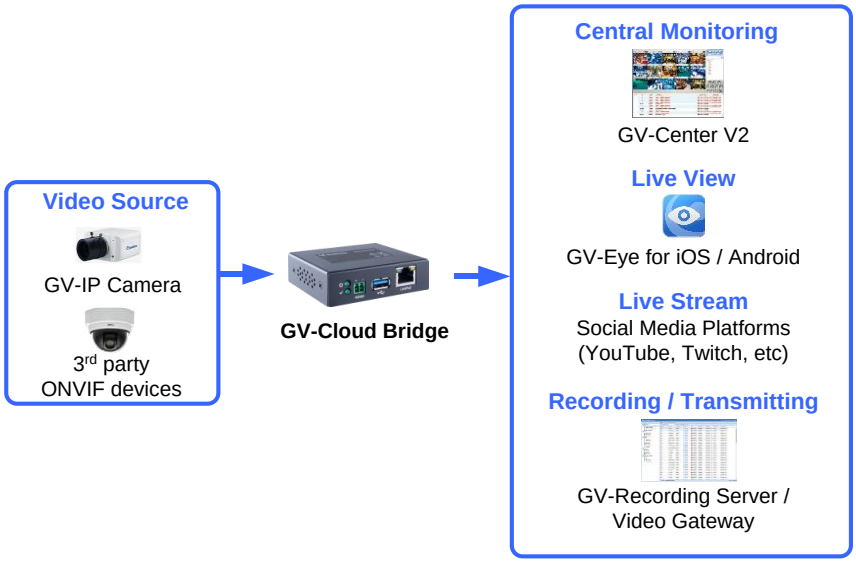
GV-Cloud Bridge

Contents

GV-Cloud Bridge

GV-Cloud Bridge is an encoder that connects any ONVIF or GV-IP camera to the GeoVision software and mobile app for integrated monitoring and administration. Using GV-Cloud Bridge, you can link the cameras to GV-Center V2 for central monitoring and to GV-Recording Server / Video Gateway for recording and streaming management. With a simple QR code scan, you can also link GV-Cloud Bridge to the mobile app, GV-Eye, for live monitoring anytime, anywhere. Additionally, you can use GV-Cloud Bridge to stream the cameras to social media platforms like YouTube, Twitch, and others to meet your live broadcasting demands.



1.1 Compatible Products

- **Camera:** Any ONVIF camera
- **Software:** GV-Center V2 V18.2 or later, GV-Recording Server / Video Gateway V2.1.0 or later, GV-Cloud (coming soon)
- **Mobile App:** GV-Eye

Note: For GV-IP Cameras not having GV-Center V2 settings, you can use GV-Cloud Cloud Bridge to connect these cameras to GV-Center V2.

1.2 Packing List

- GV-Cloud Bridge
- Terminal Block
- Download Guide

1.3 Overview

1.		This reboots the GV-Cloud Bridge, and keeps all current configurations.
2.		This resets all configurations to factory settings.
3.		Not functional.
4.		Connects to power using the supplied terminal block.
5.		Connects the USB flash memory.
6.		This LED indicates the power is supplied.
7.		This LED indicates the GV-Cloud Bridge is ready for connection.
8.		Connects to the network or a PoE adapter.

1.4 Connecting to PC

There are two ways to power and connect GV-Cloud Bridge to the PC. Only one of the two methods can be used at a time.

1. **GV-PA191 PoE Adapter (optional purchase required):** Through the LAN port (No. 7, *1.3 Overview*), connect to a GV-PA191 PoE Adapter, and connect to the PC.
2. **Power Adapter:** Through the DC 12V port (No. 3, *1.3 Overview*), use the supplied terminal block to connect to a power adapter. Connect to your PC through the LAN port (No. 7, *1.3 Overview*).

1.5 Accessing GV-Cloud Bridge

When GV-Cloud Bridge is connected to a network with DHCP server, it will be automatically assigned with a dynamic IP address. Follow the steps below to access your GV-Cloud Bridge.

Note:

1. The PC used to access the Web interface must be under the same LAN as the GV-Cloud Bridge.
2. If the network connected doesn't have DHCP server or is disabled, GV-Cloud Bridge can be accessed by its default IP address 192.168.0.10, see *1.5.1 Assigning a Static IP Address*.

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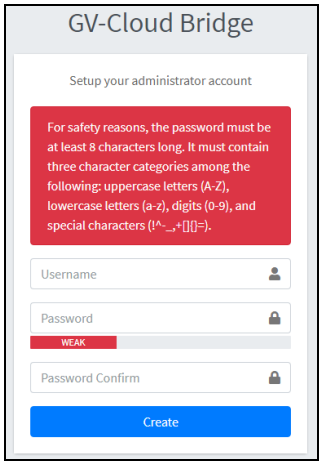
1. Download and install the GV-IP Device Utility program.
2. Find your GV-Cloud Bridge on GV-IP Device Utility window, click its IP address, and select **Web Page**. This page appears.

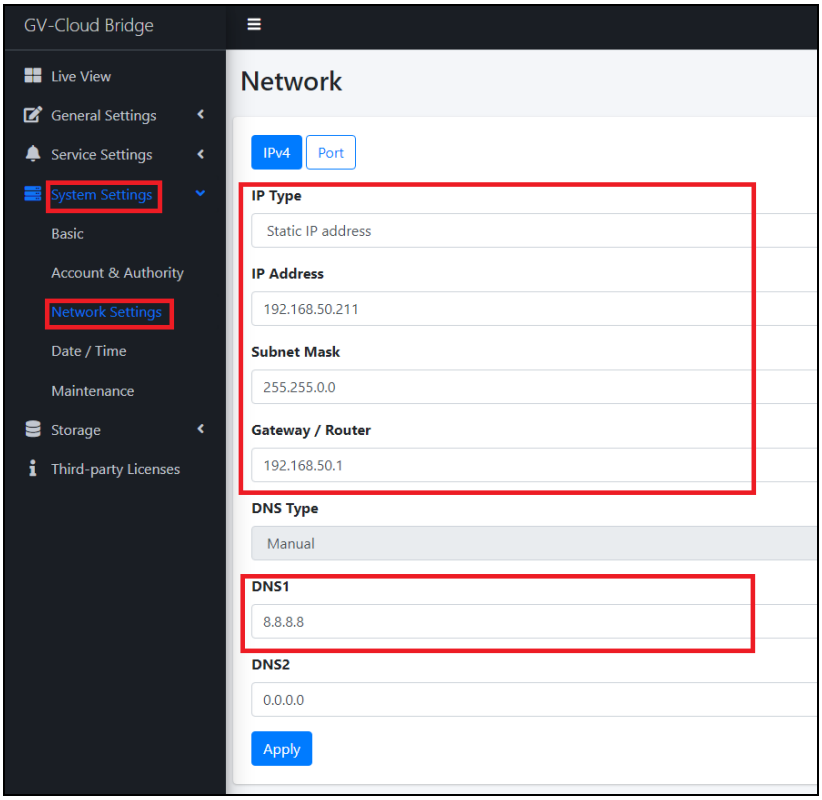


3. Type the necessary information and click **Create**.

1.5.1 Assigning a Static IP Address

By default, when GV-Cloud Bridge is connected to LAN without a DHCP server, it is assigned with a static IP address of **192.168.0.10**. Follow the steps below to assign a new IP address to avoid IP conflict with other GeoVision devices.

1. Open your Web browser, and type the default IP address **192.168.0.10**.
2. Type your username and password. Click **Login**.
3. Click **System Settings** in the left menu, and select **Network Settings**.

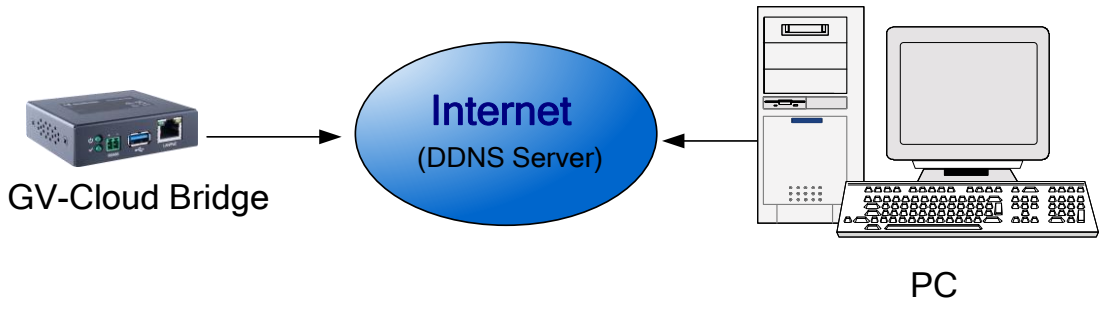


4. Select **Static IP address** for **IP Type**. Type the static IP address information, including IP Address, Subnet Mask, Default Gateway and Domain Name Server.
5. Click **Apply**. The GV-Cloud Bridge can now be accessed through the static IP address configured.

1.5.2 Configuring the DDNS Domain Name

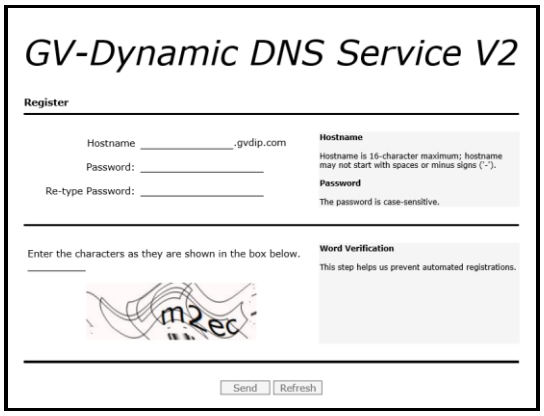
DDNS (Dynamic Domain Name System) provides another way of accessing GV-Cloud Bridge when using a dynamic IP from a DHCP server. DDNS assigns a domain name to GV-Cloud Bridge so that it can always be accessed using the domain name.

Follow the steps below to apply for a domain name from **GeoVision DDNS Server** and enable the DDNS function.



1. Select **Service Settings** in the left menu, and select **DDNS**. This page appears.

2. **Enable** the **Connection**, and click **Register**. This page appears.



3. In the **Hostname** field, type a desired name, which can be up to 16 characters containing “a ~ z”, “0 ~9”, and “-”. Note that a space or “-” cannot be used as the first character.
4. In the **Password** field, type a desired password, which is case-sensitive and must be at least 6 characters in length. Type the password again in the Re-type Password field for confirmation.
5. In the Word Verification section, type the characters or numbers shown in the box. For example, type *m2ec* in the required field. Word Verification is not case-sensitive.
6. Click **Send**. When the registration is complete, this page appears. The **Hostname** shown is the domain name, consisting of the registered username and “gvdip.com”, e.g. somerset01.gvdip.com.

Note: The registered username becomes invalid after not being used for three months.

7. Type the **Hostname** and **Password** that are registered on the DDNS Server.
8. Click **Apply**. The GV-Cloud Bridge can now be accessed with this domain name.

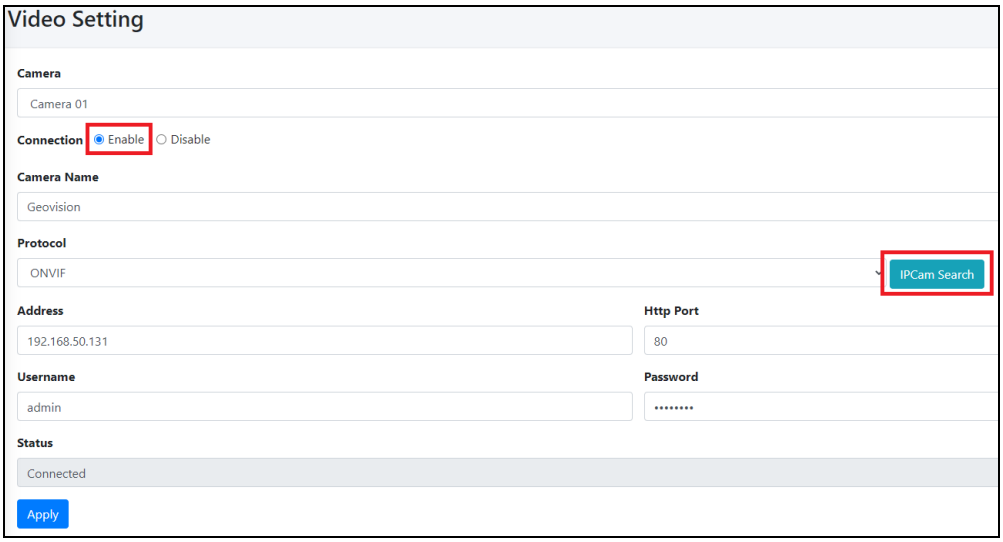
1.6 The Web Interface

Once logged in, you can set up connections to cameras and the supported GeoVision software or mobile app through the Web interface.

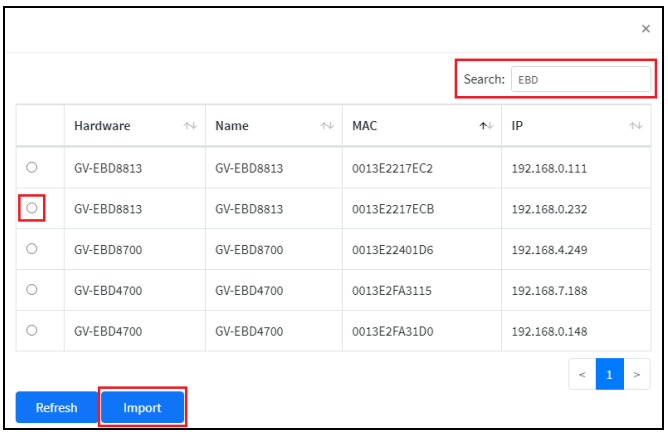
1.6.1 Connecting to IP Camera

To connect to a camera, follow the steps below.

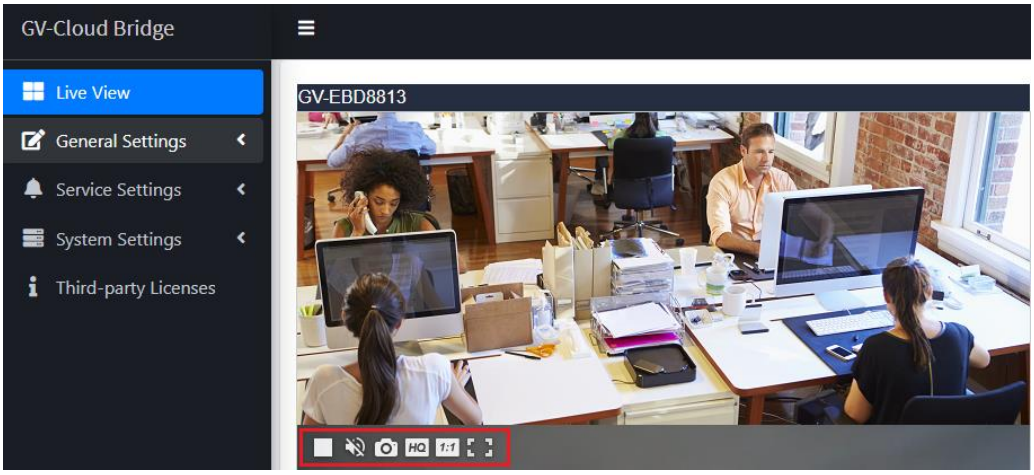
1. Select **General Settings** in the left menu, and click **Video Setting**.

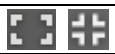


2. **Enable** the **Connection**. Select from **Camera 01 – Camera 04** for **Camera**.
3. Type the necessary information of the camera to be added. Click **Apply**.
4. Alternatively, you can click the **IPCam Search** button to add a camera under the same LAN as the GV-Cloud Bridge. In the search window, type the name of the desired camera in the search box, select the desired camera, and click **Import**. The camera information is automatically entered on the Video Setting page.

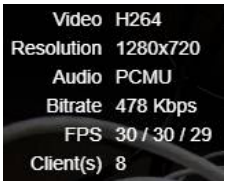


5. Once the live view is displayed, you can use the following functions for monitoring.



1.		The live view is enabled by default. Click to disable the live view.
2.		The audio is disabled by default. Click to enable the audio.
3.		Click to take a snapshot. The snapshot will be saved immediately to your PC's Downloads folder in .png format.
4.		The video resolution is set to sub stream by default. Click to set the video resolution to main stream of high quality.
5.		Picture-in-Picture (PIP) is disabled by default. Click to enable.
6.		Full Screen is disabled by default. Click to view in full screen.

6. Additionally, you can right-click the live view image, and select **Stats** to see the current **Video** (codec), **Resolution**, **Audio** (codec), **Bitrate**, **FPS**, and **Client** (total number of connections to the camera) in use.



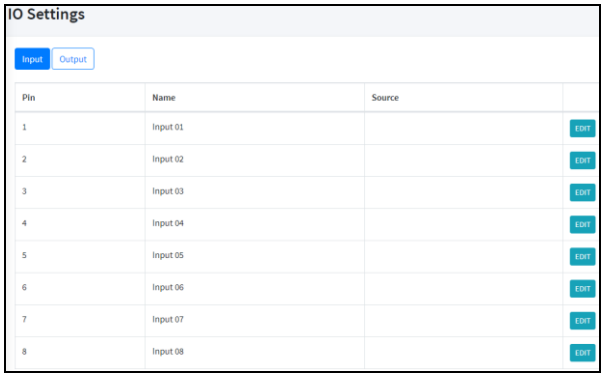
1.6.2 Configuring Input / Output Settings

GV-Cloud Bridge can configure and manage up to 8 input and 8 output devices connected from the cameras and GV-IO Box. To configure I/O devices from GV-IO Box, see *1.6.3 Connecting to I/O Box* to set up GV-IO Box in advance.

1.6.2.1 Input Settings

To configure an input, follow the steps below.

1. Select **General Settings** in the left menu, and click **IO Settings**. This page appears.



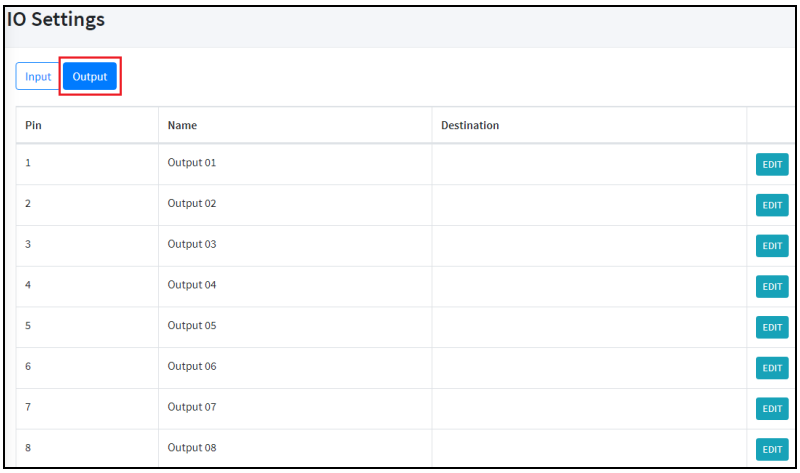
2. Click **Edit** for the desired input. This page appears.

3. Select **Camera** or **IO Box** for **Source**, and type a desired **Name**.
4. If Camera is selected in Step 3, select the camera and the Input's pin number from the **Camera** and **Camera PIN Number** dropdown lists respectively. If IO Box is selected in Step 3, select the I/O Box and the Input's pin number from the **IO Box** and **IO Box PIN Number** dropdown lists respectively.
5. To send video events to central monitoring software GV-Center 2 upon the input trigger, select the corresponding camera(s).
6. Click **Apply**.

1.6.2.2 Output Settings

To configure an output, follow the steps below.

1. Select **Output** on the IO Settings page. This page appears.

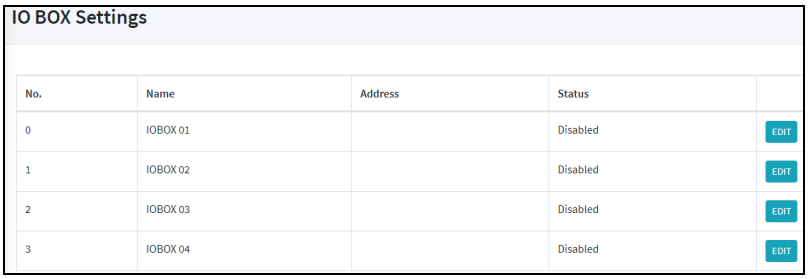


2. Follow Step 2 – 6 in *1.6.2.1 Input Settings*.

1.6.3 Connecting to I/O Box

Up to four pieces of GV-I/O Box can be added through the Web interface. To connect to a GV-I/O Box, follow the steps below.

1. Click **General Settings** in the left menu, and select **IO BOX Settings**. This page appears.



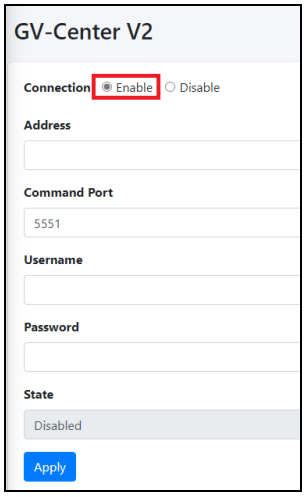
2. Click **Edit** for the desired GV-I/O Box. This page appears.

3. **Enable** the **Connection**, and type the necessary information for the GV-I/O Box. Click **Apply**.

1.6.4 Connecting to GV-Center V2

You can connect up to four cameras to GV-Center V2 using GV-Cloud Bridge. Follow the steps below to connect to GV-Center V2.

1. Click **Service Settings** in the left menu, and select **GV-Center V2**. This page appears.



2. Select **Enable** for **Connection**, and type the necessary information for GV-Center V2. Click **Apply**.

Note:

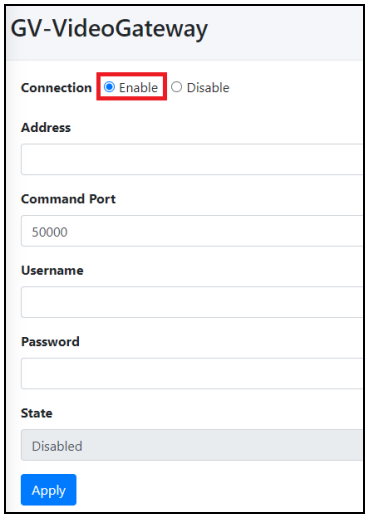
1. GV-Cloud Bridge allows alerts and video attachments to be sent to GV-Center V2 upon motion, input trigger, output trigger, video lost, video resumed, and tampering alarm events.
2. GV-Cloud Bridge supports sending alerts and video attachments to GV-Center V2 V18.3 or later upon Scene Change, Defocus, and AI events from AI-capable GV-IP cameras (Crossing Line / Intrusion / Entering Area / Leaving Area) and AI-capable UA-IP cameras (Cross Counting / Perimeter Intrusion Detection).
3. Enable **Attachment Mode** under **Subscriber Settings** on GV-Center V2 to activate video attachment function. See *1.4.2 Subscriber Settings* of *GV-Center V2 User's Manual* for details.

1.6.5 Connecting to GV-Recording Server / Video Gateway

You can connect up to four cameras to GV-Recording Server / Video Gateway using GV-Cloud Bridge through a passive connection. Follow the steps below to enable the connection to GV-Recording Server / Video Gateway.

Note: The connection function is only applicable to GV-Cloud Bridge V1.01 or later and GV-Recording Server / Video Gateway V2.1.0 or later.

1. To create passive connection, first follow the instructions in *4.2 Passive Connection* of *GV-Recording Server User's Manual*.
2. On GV-Cloud Bridge, click **Service Settings** in the left menu, and select **GV-Video Gateway**. This page appears.



3. Select **Enable** for **Connection**, and type the necessary information for GV-Recording Server / Video Gateway. Click **Apply**.

1.6.6 Connecting to GV-Eye

The cameras connected to the GV-Cloud Bridge can be conveniently monitored through GV-Eye installed on your mobile device. To do so, follow the steps below.

Note:

1. Connecting GV-Eye by GV-Relay QR-code is a paid service. For details, refer to *5. GV-Relay QR Code* in GV-Eye Installation Guide.
2. All GV-Relay accounts are given 10.00 GB of free data every month and additional data can be purchased as desired through GV-Eye mobile app.

1. Click **Service Settings** in the left menu, and select **GV-Relay**. This page appears.

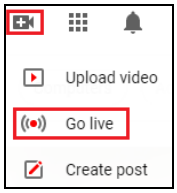
2. Select **On** for **Enable**. Tap **Add** on the Camera / Group List page of GV-Eye to access the **Add Device** page.
3. Tap **QR-code scan**, and hold your device over the QR code on the GV-Replay page.
4. When the scanning is successful, type the name and login credentials of your GV-Cloud Bridge. Click **Get Information**.
5. All cameras from your GV-Cloud Bridge are displayed. Select the cameras you want to view on GV-Eye and click **Save**. The selected cameras are added to GV-Eye under a Host Group.

1.6.7 Live Streaming

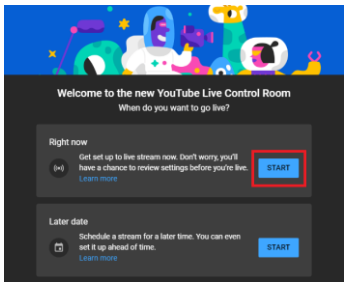
GV-Cloud Bridge supports live streaming from up to two cameras on YouTube, and Twitch. The user interfaces are different by platforms. Find the relevant settings corresponding to your platform. Here we use YouTube as an example.

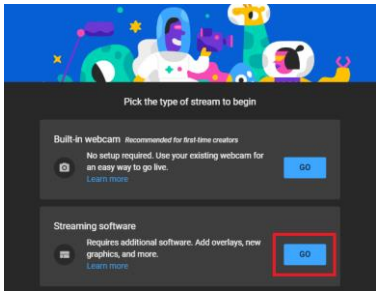
To set up your live stream on YouTube, follow the steps below.

1. Log in to your YouTube account, click the **Create** icon and select **Go live**.

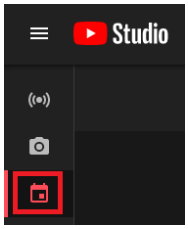


2. On the welcome page to Live control room, select **Start** for **Right now**, and then **GO** for **Streaming software**.

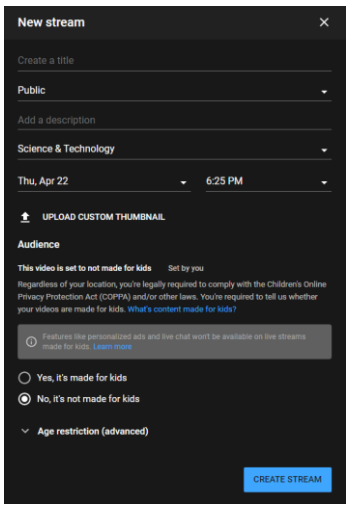




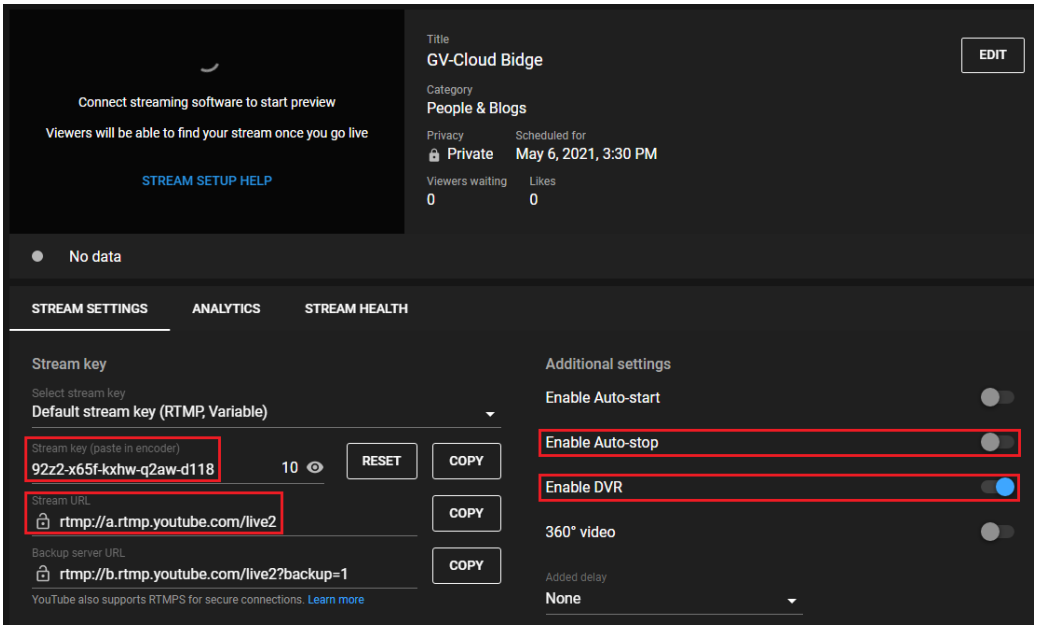
3. Select the **Manage** icon, and then **SCHEDULE STREAM**.



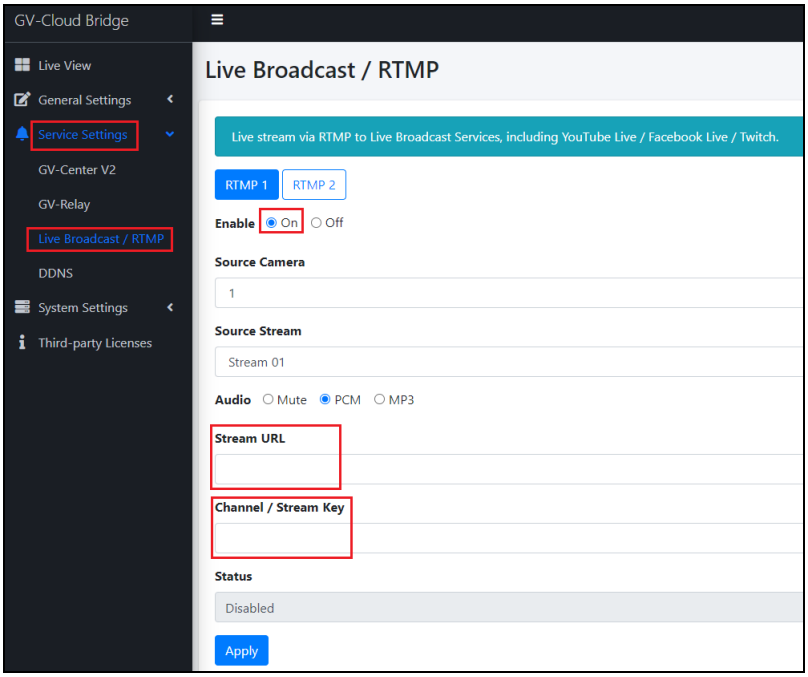
4. Specify the necessary information for your new stream. Click **CREATE STREAM**.



5. Make sure to disable the **Enable Auto-stop** setting, and enable the **Enable DVR** and **360° video** (optional) settings. The Stream key and Stream URL are now available.

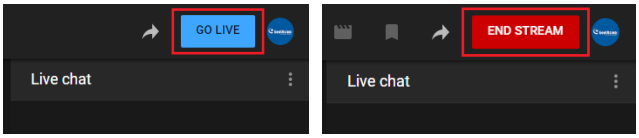


6. Once your YouTube live stream event is set, go to GV-Cloud Bridge's Web interface, click **Service Settings**, and select **Live Broadcast / RTMP**. This page appears.



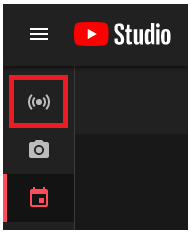
7. **Enable** the **Connection**, and copy and paste the **Stream key** and **Stream URL** from YouTube to the RTMP Settings page. Click **Apply**. The live video stream from GV-Cloud Bridge is now viewable to you in the preview window on YouTube.
   - **Stream URL**: YouTube Server URL
   - **Channel / Stream Key**: YouTube Stream key
8. Select **PCM** or **MP3** for Audio, or select **Mute** for no sound.

9. On YouTube, click **GO LIVE** to begin streaming, and **END STREAM** to end streaming.

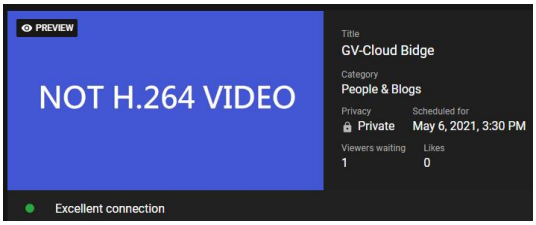


IMPORTANT:

1. In Step 3, do not select the **Stream** icon to set up the live stream. Doing so will enable the **Enable Auto-stop** setting by default, and disconnect from live stream upon unstable Internet connection.



2. Make sure to set your camera's video compression to **H.264**. If not, the live stream will appear as follow:

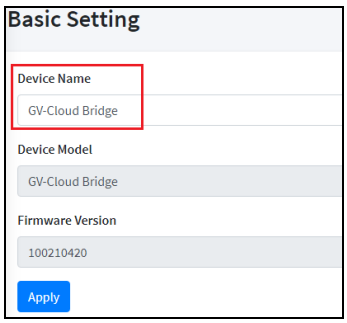


1.7 System Settings

1.7.1 Device Name

To change the device name of your GV-Cloud Bridge, follow the steps below.

1. Click **System Settings** in the left menu, and select **Basic**. This page appears.

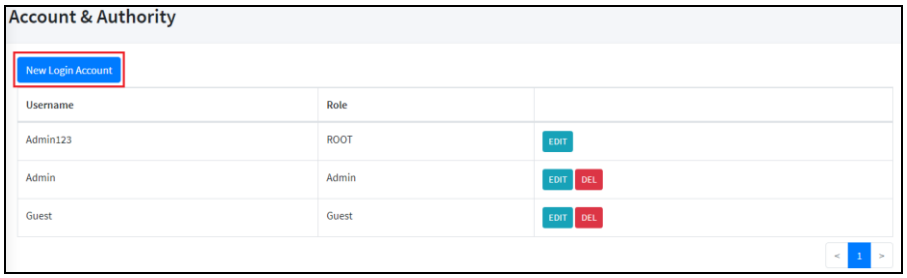


2. Type a desired **Device Name**. Click **Apply**.

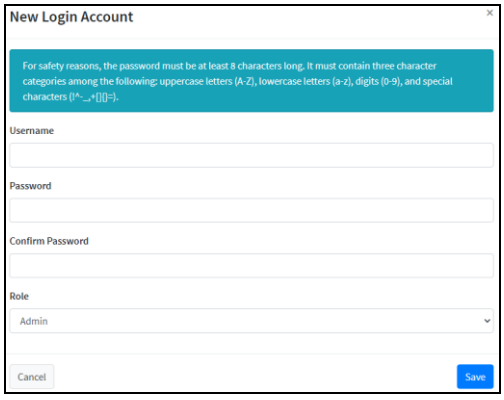
1.7.2 Account Management

GV-Cloud Bridge supports up to 32 accounts. To manage the accounts of your GV-Cloud Bridge, follow the steps below.

1. Click **System Settings** in the left menu, and select **Account & Authority**. This page appears.



2. To add a new account, click **New Login Account**. This page appears.

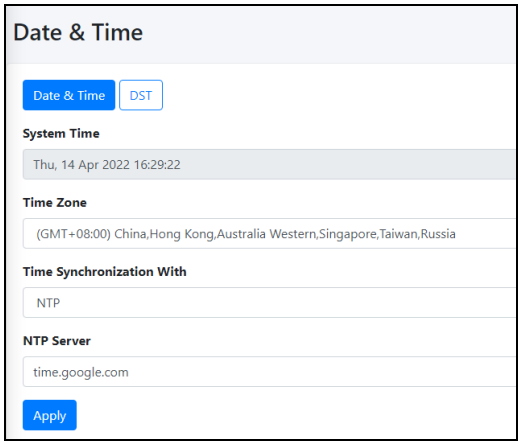


3. Type the necessary information and select a role as Admin or Guest. Click **Save**.
   - **ROOT:** This role is created by default and cannot be added or deleted. The ROOT account has full access to all functions.
   - **Admin:** This role can be added or deleted. The Admin account has full access to all functions.
   - **Guest:** This role can be added or deleted. The Guest account can only access the live view.
4. To modify the password or role of an account, click **Edit** for the desired account, and make your changes. Click **Save**.

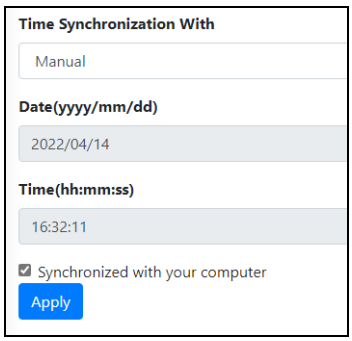
1.7.4 Configuring Date and Time

To configure the date and time of your GV-Cloud Bridge, follow the steps below.

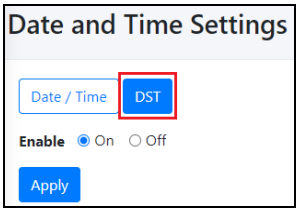
1. Click **System Settings** in the left menu, and select **Date / Time**. This page appears.



2. Select a desired **Time Zone** if necessary.
3. The **Time Synchronization With** is set to **NTP** by default. You can change the NTP server in use by typing another server under **NTP Server**.
4. To manually set the date and time for your device, select **Manual** under **Time Synchronization With**, and type the desired date and time. Or enable **Synchronized with your computer** to sync the device's date and time with those of the local computer.



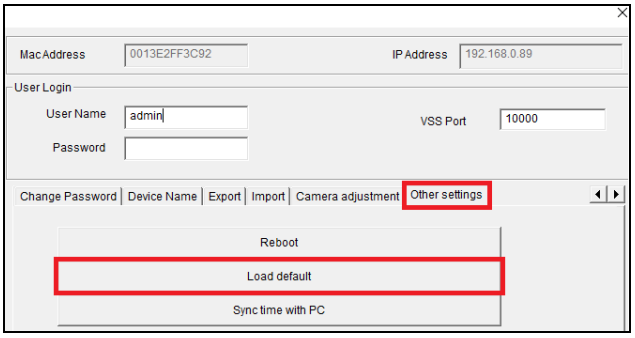
5. If necessary, you can also enable or disable Daylight Saving Time in the **DST** setting.



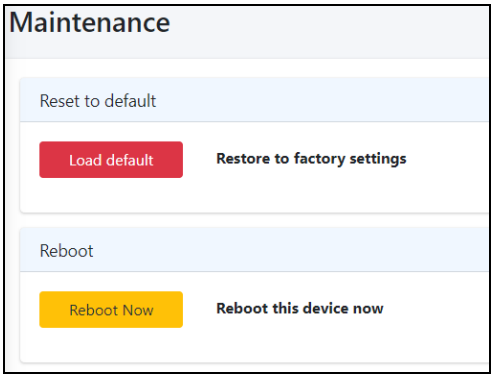
1.7.5 Loading Default

If for any reason the GV-Cloud Bridge is not responding correctly, you can reboot it or reset it to factory default settings by one of the methods below.

1. **Manual button:** Press and hold the **Reset** button (No. 1, *1.3 Overview*) to reboot, or **Default** button (No. 2, *1.3 Overview*) to load default.
2. **GV-IP Device Utility:** Find your GV-Cloud Bridge on GV-IP Device Utility window, click its IP address, and select **Configure**. Click the **Other settings** tab on the pop-up dialog box, type the User Name and Password, and then click **Load default**.



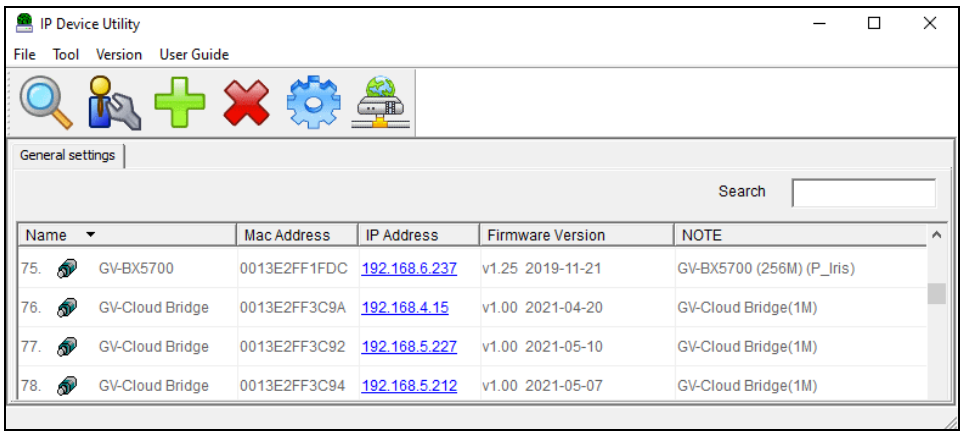
3. **Web interface:** Click **System Settings** in the left menu, and select **Maintenance**.
   - For **ROOT** account only, click **Load default** to restore to factory settings or **Reboot Now** to restart.
   - For **Admin** or **Guest** accounts, click **Reboot Now** to restart.



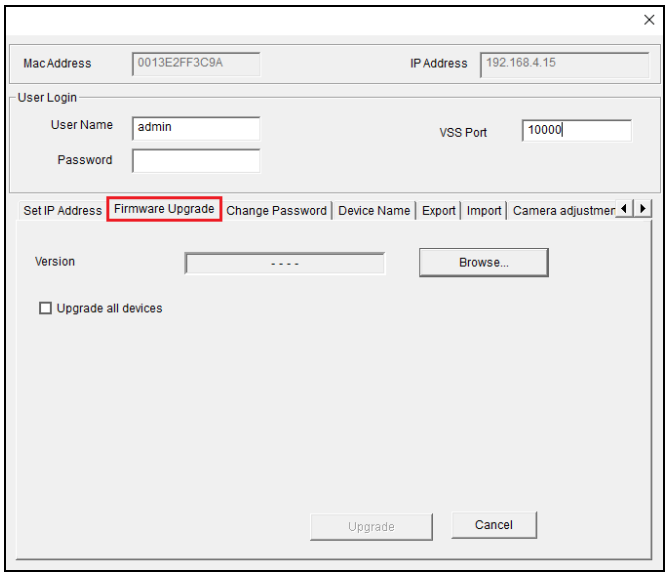
1.8 Updating Firmware

The firmware of GV-Cloud Bridge can only be updated through GV-IP Device Utility. To update your firmware, follow the steps below.

1. Download and install the GV-IP Device Utility.
2. Find your GV-Cloud Bridge on GV-IP Device Utility window, click its IP address, and select **Configure**.



3. Click the **Firmware Upgrade** tab on the pop-up dialog box, and click **Browse** to locate the firmware file (.img) saved at your local computer.



4. Type the **User Name** and **Password** of the ROOT or Admin account, and click **Upgrade**.

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[Warranty]

[Technical Support Policy]