GV-Face Recognition Camera FAQ

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GV-人脸识别摄像头常见问题解答

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Models of GV-Face Recognition Camera

GV-Face Recognition Camera includes **GV-VD8700** for outdoors and **GV-FD8700-FR** for indoors.

Basic FAQ

1. Can I plug a microphone with 3.5 mm jack into my camera?

No, you can only plug an external microphone with power supply to the camera .

2. Does the camera support two-way audio?

No, speaker interface will be supported in near future.

3. What is the maximum capacity of the micro SD card supported by the camera? Is the camera compatible with micro SD cards of lower capacity?

You can use a micro SD card with a storage capacity of up to 256 GB on your camera. It is recommended to use a micro SD card with a storage capacity of no lower than 3 GB — the recycling threshold of the camera. The data stored cannot be recycled when you use a micro SD card with a storage capacity lower than the recycling threshold.

4. Why is a firmware update file of the camera larger than that of a typical GeoVision IP camera? How long does the updating process take?

A firmware update file can be as large as approximately 487 MB since the firmware is based on Android. The upgrade process typically takes about 2’48” minutes.

GV-人脸识别摄像头型号

GV-人脸识别摄像头包括 **GV-VD8700**用于户外和**GV-FD8700-FR**用于室内。

基本常见问题

1.我可以将带有3.5毫米插头的麦克风插入我的摄像头吗?

不可以，您只能将带有电源的外部麦克风插入摄像头。

2.摄像头支持双向音频吗?

不，扬声器接口将在不久的将来支持。

3.摄像头支持的最大micro SD卡容量是多少？摄像头是否兼容较低容量的micro SD卡?

您可以在摄像头上使用容量高达256 GB的micro SD卡。建议使用容量不低于3 GB的micro SD卡 — 这是摄像头的回收阈值。当您使用容量低于回收阈值的micro SD卡时，存储的数据无法被回收。

4.为什么摄像头的固件更新文件比典型的GeoVision IP摄像头的文件大？更新过程需要多长时间?

固件更新文件的大小可以达到大约487 MB，因为固件基于Android。升级过程通常需要大约2’48”分钟。

Face Recognition FAQ

1. What is the recommended installation scenario for face recognition?

Install the camera at a height of approximately 2 m (6.56 ft). Make sure there is sufficient lighting and set the camera focus at the telephoto end. The recognition result is at its best when the recognition target is at a distance of approximately 4 m (13.12 ft) and walking straight to the camera.

Less Ideal Installation Scenario	Recommended Installation Scenario
Insufficient lighting	Sufficient lighting
A height of > 2 m or < 2 m	An approximate height of 2 m
A distance of > 4 m or < 4 m	An approximate distance of 4 m
Wide angle end	Telephoto end
> 15° of lateral deviation	< 15° of lateral deviation
Fast moving target	Target moving at a constant speed (1/60 second shutter speed)
Results	
Less Accuracy	**Better Accuracy**

2. Where can I acquire photos for face recognition?

Photos for face recognition can be acquired from one of the three following sources:

A. Use a portrait photo taken from your mobile phone or a digital camera.

B. Use a snapshot from live or recorded videos.

C. Use a cropped image from recognition events. For details, see Question No. 5 later.

人脸识别常见问题解答

1.人脸识别的推荐安装场景是什么?

将摄像头安装在大约2米（6.56英尺）的高度。确保有足够的照明，并将摄像头焦距设置在长焦端。当识别目标距离摄像头大约4米（13.12英尺）并直走时，识别结果最佳。

不理想的安装场景	推荐的安装场景
照明不足	照明充足
高度大于2米或小于2米	大约2米的高度
距离大于4米或小于4米	大约4米的距离
广角端	长焦端
> 15° 的横向偏差	< 15° 的横向偏差
快速移动目标	以恒定速度移动的目标 （1/60秒快门速度）
结果	
较低的准确性	**更好的准确性**

2.我可以从哪里获取人脸识别的照片?

人脸识别的照片可以从以下三种来源之一获取：

A.使用手机或数码相机拍摄的肖像照片。

B.使用实时或录制视频中的快照。

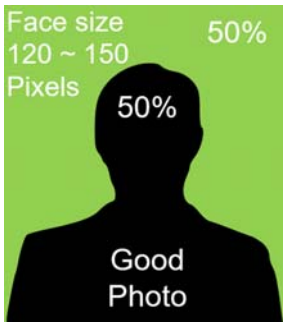
C.使用识别事件中的裁剪图像。有关详细信息，请参见后面的第5个问题。

3. What kind of photos are valid for face recognition?

For face recognition to work, it is required for the photos to meet the following criteria:

- Each photo should consist of only one face.
- Size of the face in the photo is around 120 ~ 150 pixels.
- The file size of the photo cannot exceed 350 KB.
- Only JPG / JPEG format is supported.
- Make sure the face of the person does not occupy more than 50% of the image.
- Enroll a maximum of 20 photos per Face ID.

See the examples below:

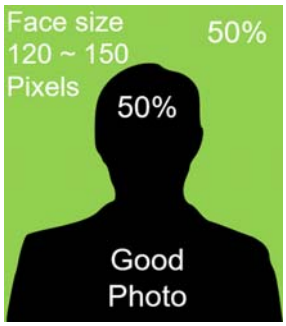
Best Example	Example of Failure - 1	Example of Failure - 2
		
The face occupies 50% of the image. The size of the person's face is around 120 ~150 pixels.	The face occupies more than 50% of the image.	The size of the person's face is less than 120 pixels.

3.什么样的照片适合人脸识别?

为了使人脸识别正常工作，照片必须满足以下标准：

- 每张照片应仅包含一个面孔。
- 照片中面孔的大小约为120 ~ 150像素。
- 照片的文件大小不能超过350 KB。
- 仅支持JPG / JPEG格式。
- 确保照片中人的面孔不占图像的50%以上。
- 每个面部ID最多可注册20张照片。

请参见以下示例：

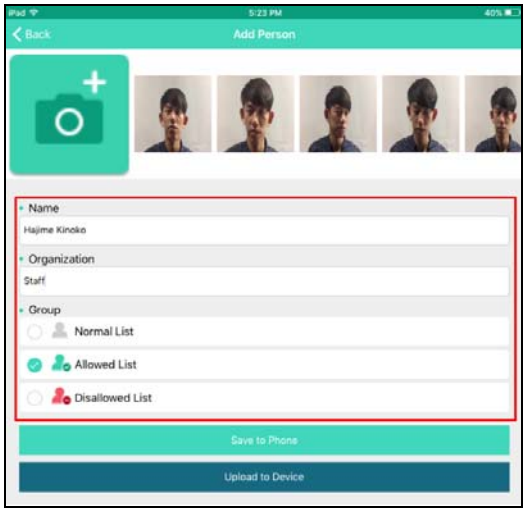
最佳示例	失败示例 - 1	失败示例 - 2
		
面孔占据了图像的50%。 人的面孔大小约为120 ~ 150像素。	面孔占据了超过50%的图像。	人的面孔大小小于120像素。

4. How do I enroll face data?

Face data can be enrolled through the GV-Face mobile app, the camera's Web interface, or GV-VMS.

Using GV-Face Mobile App

To enroll face data with your mobile phone, install the GV-Face mobile app from App Store or Google Play. For details, see *GV-Face Mobile App Installation Guide*.



Using Camera's Web Interface

To enroll face data with the Web interface, go to **System Settings** > **Event and Alerts** > **Face Recognition** > the **Management** tab > **Add New Record**.

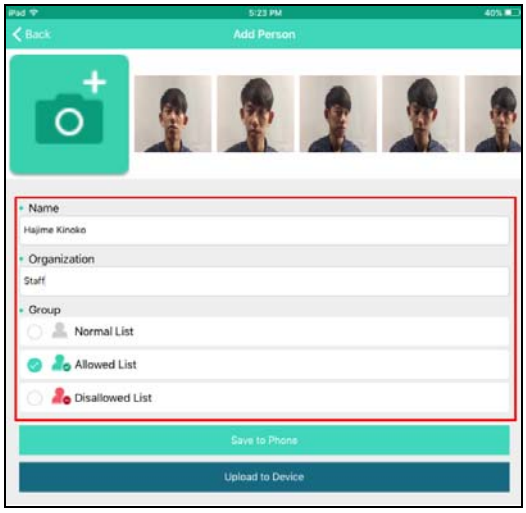
Create a face recognition data by filling out the **Name**, **Organization**, and select a **Group** for the person and click **Browse** to add portrait photos or snapshots. The photos need to meet all the requirements specified in *No. 3* of *Face Recognition FAQ*.

4.我该如何注册人脸数据?

人脸数据可以通过GV-Face移动应用程序、摄像头的Web界面或GV-VMS进行注册。

使用GV-Face移动应用

要使用手机注册人脸数据，请从App Store或Google Play安装GV-Face移动应用。有关详细信息，请参见*GV-Face移动应用安装指南*。



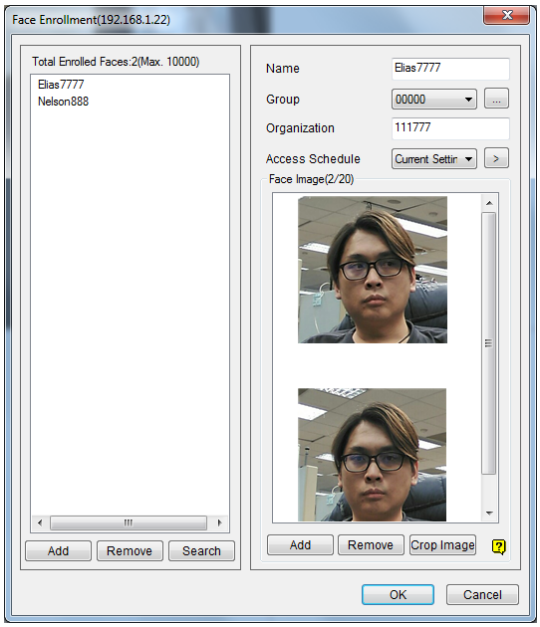
使用摄像头的Web界面

要通过Web界面注册人脸数据，请转到系统设置 >事件和警报 > 人脸识别 > 管理选项卡 > 添加新记录。

通过填写姓名、**组织**，并选择一个组为该人员创建人脸识别数据，然后点击浏览以添加肖像照片或快照。照片需要满足人脸识别常见问题解答中指定的所有要求，见第*3*条。

Using GV-VMS (V17.1 or later)

To enroll face data with GV-VMS, go to **Home** > **Toolbar** > **Configure** > **Video Process Video Analysis** > **IPCVA** > select a camera from the **Camera List** > **Setting** > select a channel from the top drop-down list > **Face Recognition** > the > Button > **Face Enroll**. For details, see *GV-VMS User's Manual*.



5. Can I use images from recognition events as a source for face data enrollment?

Yes. To save a cropped image from recognition events, follow the steps below.

A. Go to **Events and Alerts** > the **Events** tab > the **Event Enroll & Sync Database** button.

B. Specify the Start and End date and time and/or the filtering criteria, such as Name and Confidence range, to locate specific events.

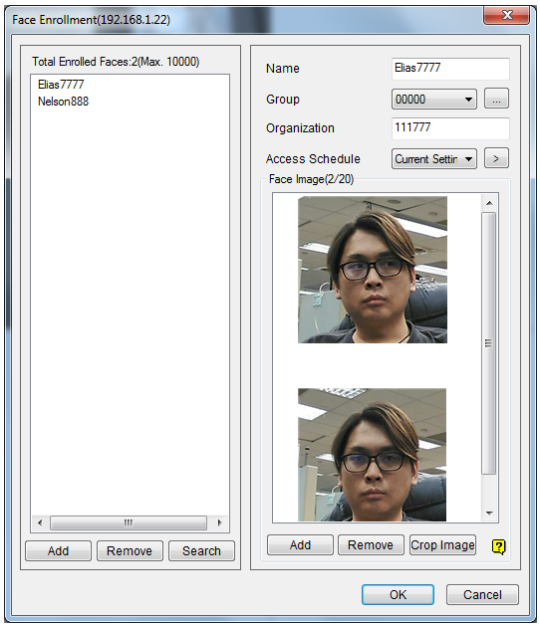
C. Click **Search** to display the search results.

D. To enroll a new face, click **ADD RECORD** at the right side of every entry.

E. On the pop-up dialog box, you can also include the new face into an existing face ID.

使用GV-VMS（V17.1或更高版本）

要使用GV-VMS注册人脸数据，请转到首页 > **工具栏** > **配置** > **视频处理视频分析** > **IPCVA**> 从**摄像头列表**中选择一个摄像头 > 设置> 从顶部下拉列表中选择一个通道 >**人脸识别**> 按钮 >**人脸注册**。有关详细信息，请参见*GV-VMS 用户手册*。



5.我可以使用识别事件中的图像作为人脸数据注册的来源吗?

可以。要保存识别事件中的裁剪图像，请按照以下步骤操作。

A.**转到事件和警报> 选项卡事件 > 按钮事件注册与同步数据库**

。

B.指定开始和结束日期及时间和/或过滤条件，例如名称和置信度范围，以定位特定事件

。

C.单击搜索以显示搜索结果。

D.要注册新的人脸，请在每个条目的右侧单击添加记录。

E.在弹出对话框中，您还可以将新的人脸添加到现有的人脸 ID 中。

6. Where are the face data stored? And is there a limit to how much data I can keep?

A maximum of 10,000 face data entries can be stored in the camera's storage space.

7. Will the amount of face data stored affect the accuracy and detection speed of face recognition?

No, the amount of face data stored does not affect the accuracy or the detection speed of face recognition.

8. Where are the recognition events stored and how frequent will they be recycled?

When connected to GV-VMS, the recognition events are stored in both the camera and the GV-VMS host, and each of the storage space has their own recycling threshold.

Camera's Storage Space

The recognition events are stored separately as texts and snapshot images in the camera's storage space and the memory card, respectively. The texts will be stored for 7 days while the snapshots will be recycled whenever the total of image stored reaches its 3 GB limit. As a result, some older events may be displayed as text-only events when the snapshots are removed due to the memory card reaching its 3 GB limit while the event texts are still in place.

GV-VMS Host

You can store as many recognition events as the storage space permits for as long as the number of days specified, between 1 to 999, in Database Settings. The recordings will be recycled when either the maximum capacity of the storage space or the Keep Days set is reached.

6.人脸数据存储在哪里？是否有我可以保留的数据量限制?

相机的存储空间最多可以存储 10,000 条人脸数据。

7.存储的人脸数据量会影响人脸识别的准确性和检测速度吗?

不，存储的人脸数据量不会影响人脸识别的准确性或检测速度。

8.识别事件存储在哪里，回收的频率是多少?

当连接到GV-VMS时，识别事件存储在摄像头和GV-VMS主机中，每个存储空间都有自己的回收阈值。

摄像头的存储空间

识别事件分别以文本和快照图像的形式存储在摄像头的存储空间和内存卡中。文本将存储7天，而快照将在存储的图像总数达到其

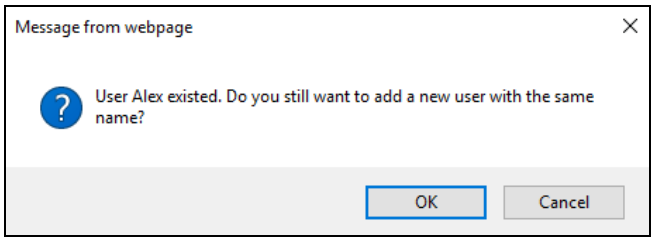
3 GB限制时进行回收。因此，当快照因内存卡达到3 GB限制而被移除时，一些较旧的事件可能会显示为仅文本事件，而事件文本仍然存在。

GV-VMS 主机

您可以根据存储空间的允许，存储尽可能多的识别事件，存储时间为数据库设置中指定的天数，范围为1到999天。当达到存储空间的最大容量或设置的保留天数时，录音将被循环使用。

9. Can I create face IDs with identical names?

It is possible to create two face IDs with identical names in the database. A pop-up message appears when the new face ID you are trying to save has the same name as an existing face ID. Click **OK**.



10. How many faces can the camra recognize simultaneously? And how fast can the camera detect the faces?

The camera can recognize up to 10 faces simultaneously with a recognition response time of less than 2 seconds.

11. Can I mark a specific event in the database as an important event to prevent it from being recycled?

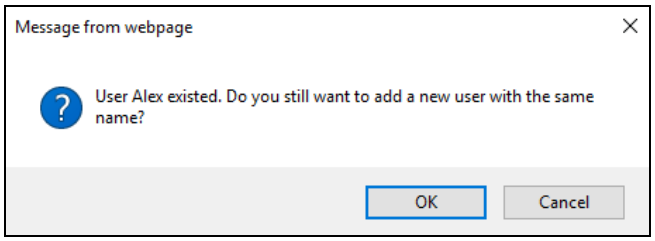
No, it is not possible to mark any events in the camera's database as unrecyclable.

12. How can I improve the recognition performance under special circumstances, such as night time, low illumination or extreme lighting conditions?

You can enroll additional face data under special lighting conditions, install additional IR LED tubes as lighting aid, or apply both methods simultaneously to improve recognition performance.

9.我可以创建具有相同名称的面部 ID 吗?

在数据库中可以创建两个具有相同名称的面部 ID。当您尝试保存的新面部 ID 与现有面部 ID 具有相同名称时，会出现弹出消息。点击确定。



10. 摄像头可以同时识别多少张面孔？摄像头检测面孔的速度有多快?

摄像头可以同时识别最多10张面孔，识别响应时间少于2秒。

11. 我可以将数据库中的特定事件标记为重要事件，以防止其被循环使用吗?

不，可以将摄像头数据库中的任何事件标记为不可循环使用。

12.在特殊情况下，例如夜间、低光照或极端光照条件下，我该如何提高识别性能?

您可以在特殊光照条件下登记额外的人脸数据，安装额外的红外LED灯管作为照明辅助，或者同时应用这两种方法来提高识别性能。

13. What are the limitations to effective face recognition?

Certain articles or angle of view can cause face recognition to be ineffective. Remove and avoid them:

- Masks
- Helmets
- Hats
- Sun Glasses
- Bangs that Obscure the Forehead or the Eyes
- Lowered Head or Side Face View
- Blurry or Out-Of-Focus View

Helmet	Lowered Head	Side Face View
		

14. Why do certain snapshots either don't appear, or appear as corrupted snapshots in my face database?

When a snapshot is not the face of a person, or when the snapshot does not match any existing data in the face database, the snapshot will not appear in the **Conf1** or **Conf2** column. Other than that, slow saving speed can also lead to corrupted snapshots in rare occasions.

13.有效的人脸识别有哪些限制?

某些物品或视角可能导致人脸识别无效。请移除并避免以下物品：

- 口罩
- 头盔
- 帽子
- 太阳镜
- 遮挡额头或眼睛的刘海
- 低头或侧脸视图
- 模糊或失焦的视图

头盔	低头	侧脸视图
		

14.为什么某些快照在我的人脸数据库中不出现，或者显示为损坏的快照?

当快照不是某个人的脸，或者快照与人脸数据库中的任何现有数据不匹配时，该快照将不会出现在 **Conf1**或 **Conf2**列中。除此之外，慢速保存速度也可能导致快照在极少数情况下损坏。

Surveillance System Related FAQ

1. Can e-mail alerts or output alarms be triggered by recognition results?

The output alarms of the camera can be triggered either by recognized persons or by unrecognized entities. For details, see *5.6.5 Trigger Area* in *GV-Face Recognition Camera User's Manual*.

However, the e-mail alerts from the camera is not supported currently. Instead, you can use GV-VMS (V17.1 or later) to send the alerts to up to 34 e-mail addresses.

2. Can e-mail alerts or output alarms be triggered upon the detection of unrecognizable entities?

The output alarms of the camera can be triggered by unrecognized entities. However, the e-mail alerts upon unrecognizable entitles are not supported currently.

3. How many groups are available for the classification of face data?

You can arrange face data into a maximum of 32 groups, including the default groups **VIP, Normal** and **Unwelcome**.

监控系统相关常见问题解答

1.识别结果是否可以触发电子邮件警报或输出警报?

摄像头的输出警报可以通过识别到的人或未识别的实体触发。有关详细信息，请参见*GV-*人脸识别摄像头用户手册中的*5.6.5* 触发区域。

然而，目前摄像头不支持电子邮件警报。相反，您可以使用GV-VMS（V17.1或更高版本）将警报发送到最多34个电子邮件地址。

2.未识别实体的检测是否可以触发电子邮件警报或输出警报?

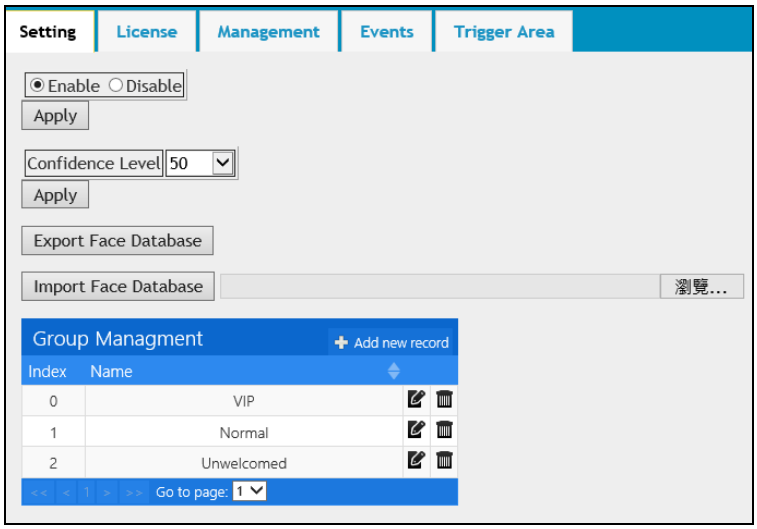
摄像头的输出警报可以通过未识别的实体触发。然而，目前不支持未识别实体的电子邮件警报。

3.可用于面部数据分类的组数有多少个?

您可以将面部数据安排为最多32个组，包括默认组 **VIP**、正常和不受欢迎。

4. Can I modify the group names for face data?

Yes, the function is supported by the camera firmware V1.02 or later. Go to **System Settings** > **Events and Alerts** > **Face Recognition** > click + Add new record from **Group Management**.



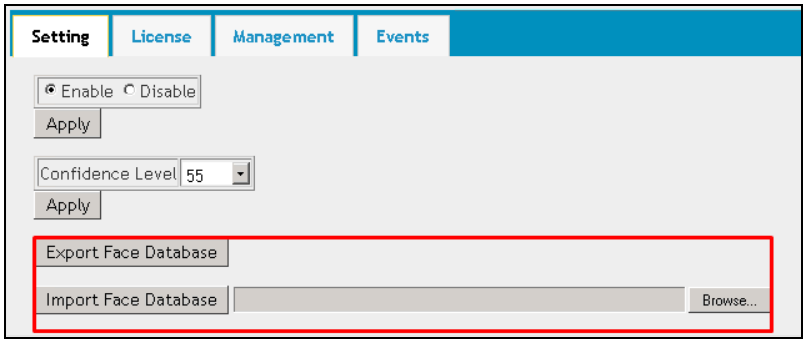
But notice that any changes made to the group name directly from the camera will not reflected on those of GV-VMS. If your camera is connected to GV-VMS, add or edit the groups on GV-VMS which will synchronize with the camera's database.

5. How do I export and import the camera's face database?

You can export the camera's face database to another camera, or import and apply another face database.

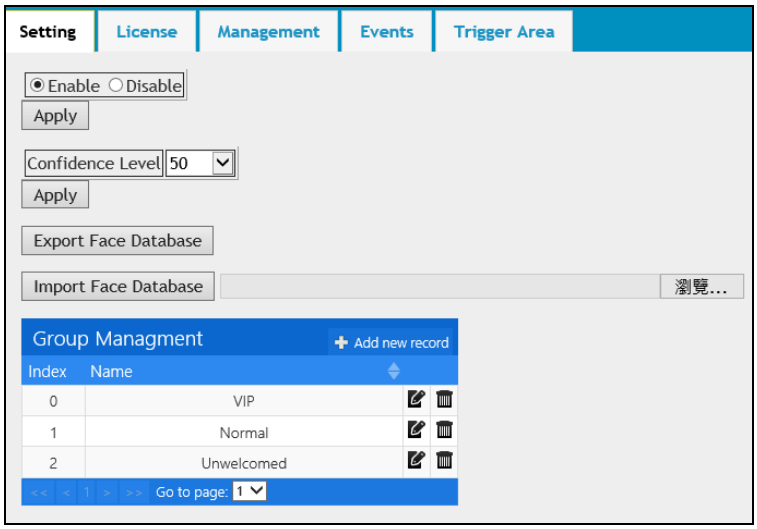
Exporting Face Database to a Single Camera

Go to **System Settings** > **Events and Alerts** > **Setting** > **Export Face Database**. You can also import another face database using this setting page. Make sure Adobe Flash Player is properly installed on your local computer. Otherwise, the imported face database and event log will become inaccessible.



4.我可以修改人脸数据的组名称吗?

是的，该功能由相机固件 V1.02 或更高版本支持。前往 系统 **设置 >事件和警报 >人脸识别> 点击** Add new record **从组管理**.



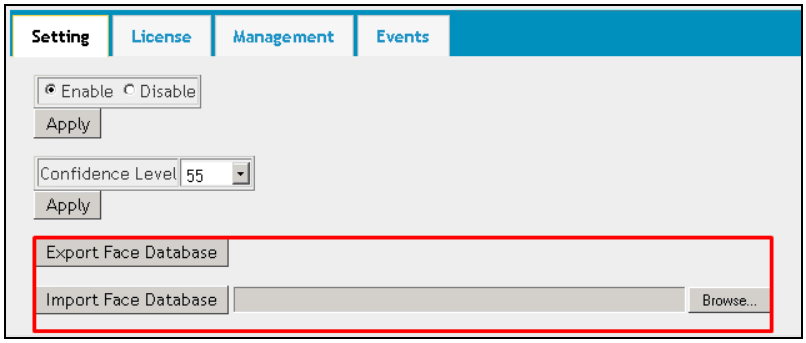
但请注意，直接从相机对组名称所做的任何更改不会反映在 GV-VMS 上。如果您的相机连接到 GV-VMS，请在 GV-VMS 上添加或编辑组，这将与相机的数据库同步。

5.我如何导出和导入相机的人脸数据库?

您可以将相机的人脸数据库导出到另一台相机，或导入并应用另一个人脸数据库。

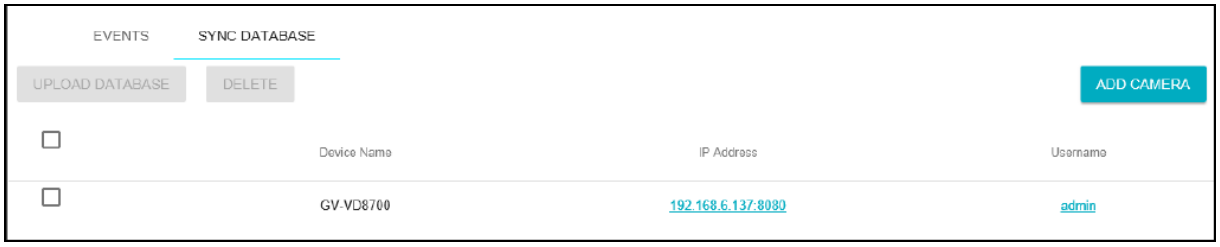
导出人脸数据库到单台相机

前往**系统设置 >事件和警报** >设置 >**导出人脸数据库**.您也可以使用此设置页面导入另一个人脸数据库。确保 Adobe Flash Player 已在您的本地计算机上正确安装。否则，导入的人脸数据库和事件日志将变得无法访问。



Exporting Face Database to Multiple Cameras

Go to **Events and Alerts** > the **Events** tab > the **Event Enroll & Sync Database** button > **SYNC DATABASE** at the top bar. Then add the cameras you want to transfer the face database to. For details, see *GV-Face Recognition Camera User's Manual*.



6. What is the format of the camera's face database? Can I access the face database without using GV-VMS or integrate the face database with other systems?

The face database exported by the camera is encoded in a format exclusively developed by GeoVision for backup and/or synchronization purposes. Therefore, it is improbable to access the events or face data with any third-party program. However, you may acquire an authorized API from GeoVision if you wish to integrate the face database into a video management system of your own.

7. Why can't I add face data or have access to recognition events?

Make sure Adobe Flash Player is properly installed if you're using the Internet Explorer for Windows 7 or earlier and your camera has the same date and time settings as your PC.

将人脸数据库导出到多个摄像头

前往事件和警报> 事件tab > 事件注册与同步数据库按钮 > 顶部栏的同步数据库。然后添加您想要将人脸数据库转移到的摄像头。有关详细信息，请参见GV-人脸识别摄像头用户手册。

6.摄像头的人脸数据库格式是什么？我可以在不使用GV-VMS的情况下访问人脸数据库，或者将人脸数据库与其他系统集成吗？

摄像头导出的人脸数据库采用GeoVision专门开发的格式进行编码，用于备份和/或同步目的。因此，使用任何第三方程序访问事件或人脸数据的可能性很小。但是，如果您希望将人脸数据库集成到您自己的视频管理系统中，可以从GeoVision获取授权的API。

7.为什么我无法添加人脸数据或访问识别事件？

如果您使用的是 Windows 7 或更早版本的 Internet Explorer，请确保正确安装了 Adobe Flash Player，并且您的摄像头与您的 PC 具有相同的日期和时间设置。