



Enrolling and Managing User Faces for GV-FR Devices with GV-ASManager

Article ID: GV4-21-1-19
Release Date: 1/19/2021

Applied to

Access Control Software: GV-ASManager V5.3.1 or later

GV-FR Devices:

- **Camera:** [GV-FD8700-FR](#), [GV-VD8700](#)
- **Server/Software:** [GV-AI FR](#) (for face recognition)
- **Reader:** [GV-FR Panel V1](#), [GV-FR Panel V2](#)

In the document, the above 3 face recognition devices – camera, software, reader -- are collectively referred as GV-FR devices

Summary

GV-ASManager is able to add face photos to users to be uploaded to the GV-FR devices, and in turn regulate the related FR-based access control. That is, the face databases of all connected GV-FR devices can be directly accessed and managed by the GV-ASManager software.

Refer to the procedures below for enrolling faces and uploading user data to GV-FR devices with GV-ASManager.

Note:

1. All the instructions herein are for users to enroll face data directly on GV-ASManager to be uploaded to the connected GV-FR devices.
2. Prior to enrolling face data, make sure the GV-FR devices have been properly connected to GV-ASManager. For details on connecting GV-Face Recognition Cameras and GV-AI FR to GV-ASManager, see *Chapter 14 Face Recognition* in [GV-ASManager User's Manual](#).

IMPORTANT: GV-ASManager directly accesses and manages the face databases of GV-FR devices, thus all changes are done directly to the devices' databases.



Contents

1. Face Enrollment	3
1.1 Adding Faces	3
1.1.1 Adding Faces Manually	3
1.1.2 Batch Enrolling Users and Faces	5
1.2 Synchronizing to GV-FR Devices	10



1. Face Enrollment

To enroll faces from GV-ASManager to the connected GV-FR devices, follow the steps below:

- **Step 1 Adding Faces to GV-ASManager**

To add face photos to users on GV-ASManager, see *1.1 Adding Faces*.

- **Step 2 Uploading User Data to GV-FR Devices**

To upload users, along with their face photos and access card numbers, to GV-FR devices from GV-ASManager, see *1.2 Synchronizing to GV-FR Devices*.

1.1 Adding Faces

There are two ways to add faces to users on GV-ASManager:

- **Adding Face Photos Manually:** To manually add face photos to users on GV-ASManager, see *1.1.1 Adding Faces Manually*.
- **Batch Enrolling Multiple Faces:** To batch enroll faces to multiple users simultaneously, see *1.1.2 Batch Enrolling User Faces*.

Note: All face photos used must meet the criteria as specified in [GV-Face Recognition Camera FAQ](#).


1.1.1 Adding Faces Manually

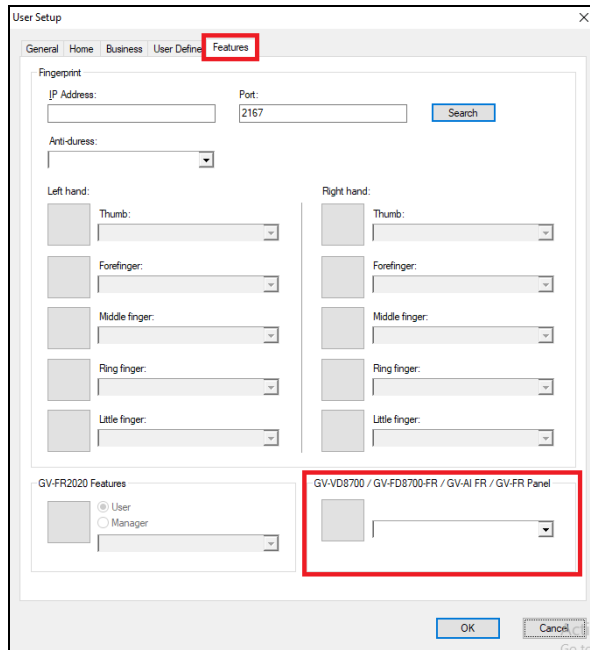
1. On the menu bar, click **Personnel** and select **Users**. The User List window appears.
 - A. To create a new User, click **New**.
 - B. To add face photos to existing Users, select a desired User and click **Edit**.




The User Setup dialog box appears.

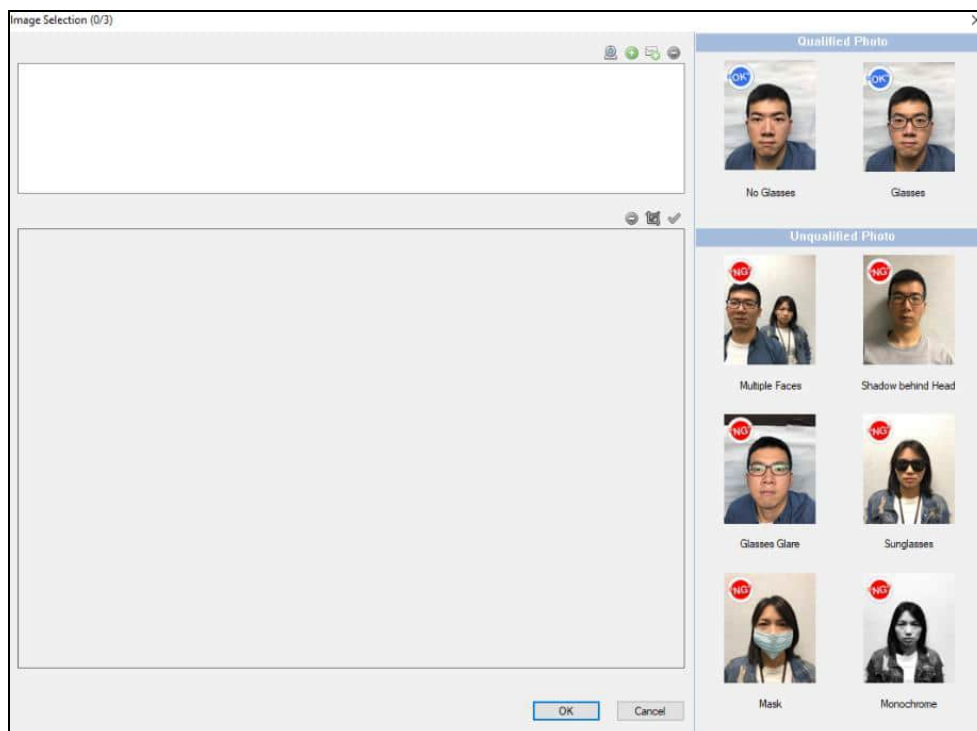




2. Select the **Features** tab and click on the image column  under **GV-VD8700 / GV-FD8700-FR / GV-AI FR / GV-FR Panel**.



3. In the Image Selection window, use one of the following three options to add a face photo for the User. Up to 3 photos for one User can be added.
 - Click **Webcam Capture**  to take a face photo with a connected webcam camera.
 - Click **Add**  to browse for a face photo from the PC.
 - Click **Add from Logs**  to use a snapshot captured within the ASManager's logs.





4. Optionally crop the face photo if needed. Click **OK**.
5. After the photo has been added, select an access card number of the User within the dropdown list next to the face photo. The paired access card number can be used in *Card* or *Face* mode or *Card + Face* mode when applicable.

6. Click **OK** to apply the settings.

The face photo has now been added to the User and paired to the access card number selected for face recognition-based access control.

Note:

1. For FR-based access control to work, the same Users, along with their face photos and access card numbers, must also be uploaded to the GV-FR devices, see the next section, *1.2 Synchronizing to GV-FR Devices*.
 2. When uploading Users to GV-FR devices, their **Display Names**, set up in the User Setup dialog box, will be the names of the Face IDs in the GV-FR device database.
-

1.1.2 Batch Enrolling Users and Faces

Note: The following procedures can only be used to batch enroll multiple faces while creating a new User and assigning a new access card for each, and cannot be used to add face photos to existing Users.

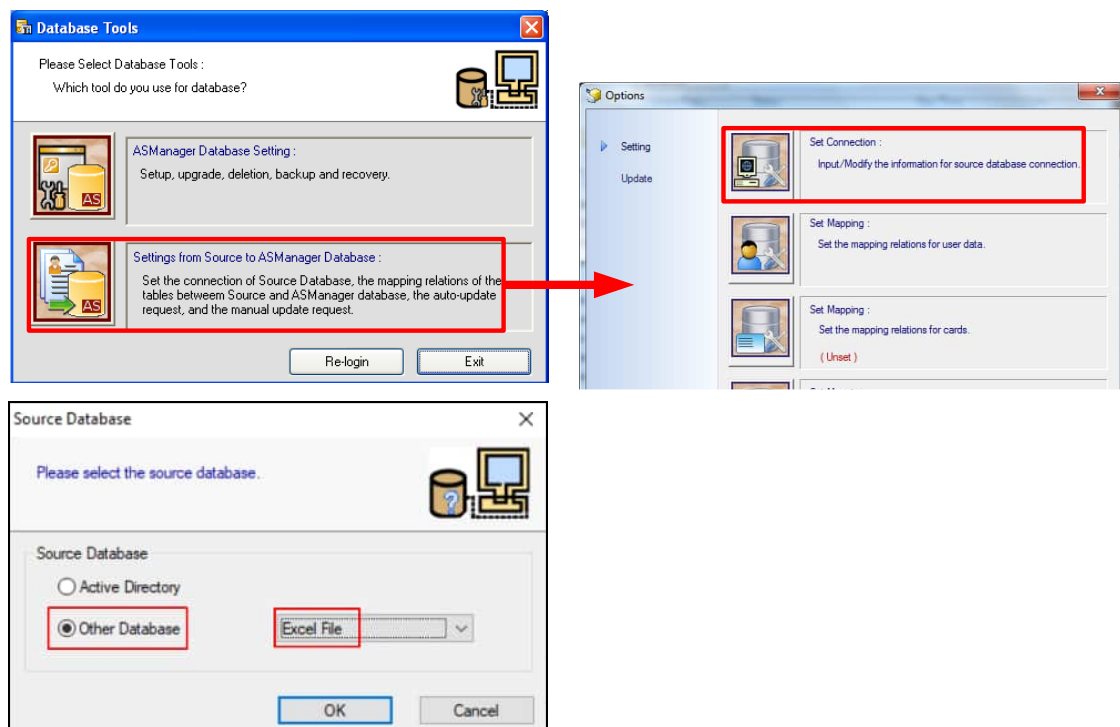
1. First, save all of the face photos to be added in the same folder.
2. Create an Excel file with the following columns to contain the necessary information:
 - **User:** Type the names of the Users to be added to GV-ASManager, which will also be used as the Face ID names in the GV-FR device database when uploaded.
 - **Card Number:** Type the access card numbers to be assigned to each User.
 - **Card Code:** Type the card code of the access cards to be assigned to the Users.
 - **Photo:** Type the file names of the face photos saved from Step 1, corresponding to each User.



	A	B	C	D
1	CardNo	CodeType	User	Photo
2	000-00003	Wiegand26	Alvin	Alvin.jpg
3	000-00004	Wiegand26	Ray Chen	Ray_Chen.jpg
4	049-20068	Wiegand26	Walter	Walter.jpg
5	050-38724	Wiegand26	Lisber	Lisber.jpg
6	074-00084	Wiegand26	Kevin	Kevin.jpg
7	089-59300	Wiegand26	Johnny	Johnny.jpg
8	112-32068	Wiegand26	Invers	Invers.jpg

Note: All of the Users within the Excel file must have identical Card Codes, e.g. all Wiegand26. For any Users with same Card Codes but different from the rest, cut and paste their entire rows to be saved as another Excel file to be enrolled separately.

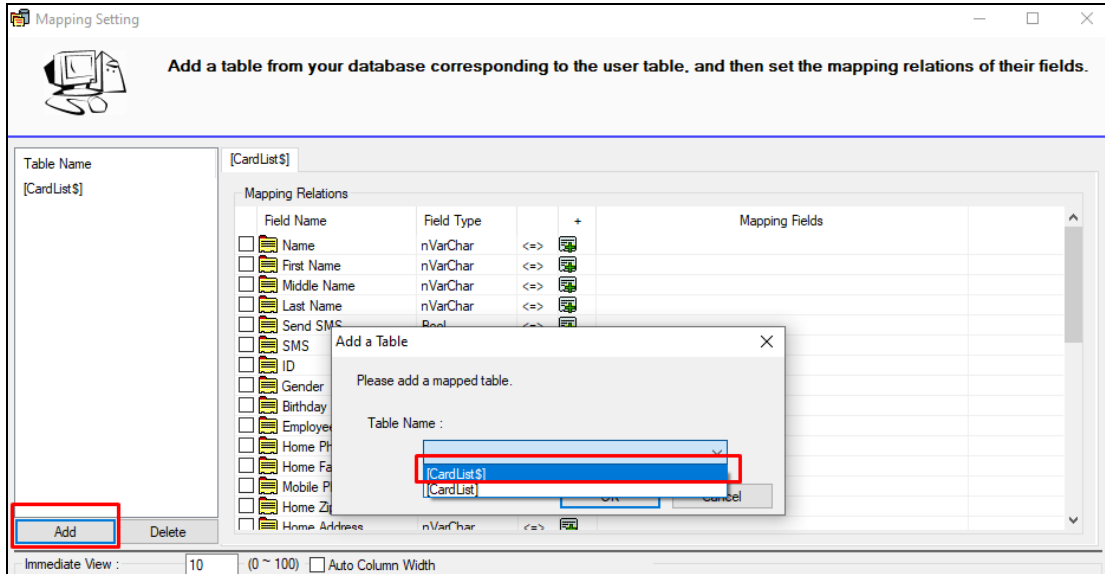
- Once all of the necessary information have been added into the Excel file, save it, open the GV-ASManager directory (default is C:\Access Control\ASManager) and run **ASDBManager.exe**.
- Click **Settings from Source to ASManager Database > Set Connection**, select **Other Database**, select **Excel File** from the dropdown list and click **OK** to browse for the Excel file saved from Step 3.



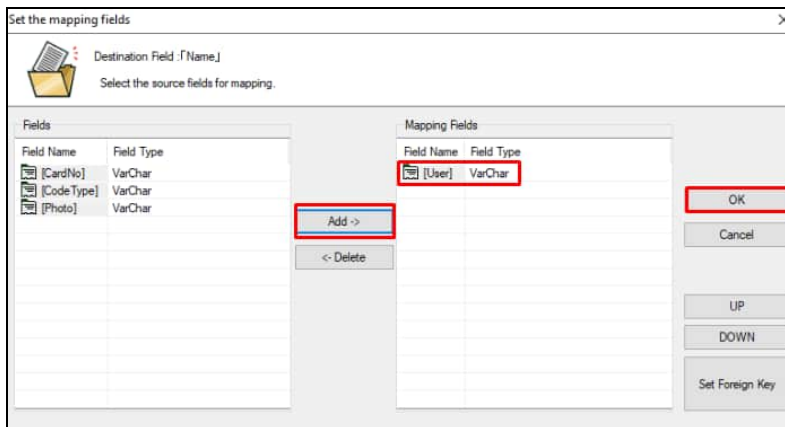
- After the Excel file has been selected, click **Set Mapping: Set the mapping relations for user data**. The Mapping Setting window appears.





- Under Table Name, click **Add**, select the name of the tab within the Excel file plus a dollar sign '\$' from the dropdown list and click **OK**.

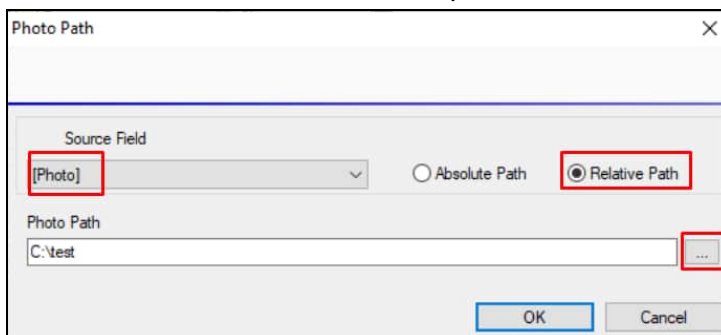


- Map the **Name** field to correspond to the *User* column from the Excel file.



- Click the **Add** button  next to the Name field, select **User** within Fields.
- Add it to Mapping Fields by clicking **Add->**, then click **OK**.

- Map the **Photo** field to correspond to the *Photo* column from the Excel file by clicking the **Add** button  and selecting **Photo**, then select **Relative Path** and click **Browse** to locate the folder in which the face photos are saved, from Step 1. Click **OK**.





9. Select the checkbox next to the **Photo** field and click **Save**.

Field Name	Field Type		+	Mapping Fields
<input type="checkbox"/> Separation Date	DateTime	<->		
<input type="checkbox"/> Division	nVarChar	<->		
<input type="checkbox"/> Department	nVarChar	<->		
<input type="checkbox"/> Office	nVarChar	<->		
<input type="checkbox"/> Office Phone	nVarChar	<->		
<input type="checkbox"/> Office Ext	nVarChar	<->		
<input type="checkbox"/> Office Fax	nVarChar	<->		
<input type="checkbox"/> Office Company Name	nVarChar	<->		
<input type="checkbox"/> Office ZipCode	nVarChar	<->		
<input type="checkbox"/> Office Address	nVarChar	<->		
<input type="checkbox"/> Office EMail	nVarChar	<->		
<input type="checkbox"/> Office Website	nVarChar	<->		
<input type="checkbox"/> Office Notes	nVarChar	<->		
<input checked="" type="checkbox"/> Photo	nVarChar	<->		[Photo]

10. Click **Set Mapping: Set the mapping relations for cards** and select the same tab as that of Step 6 under the **Select a source table** dropdown list.

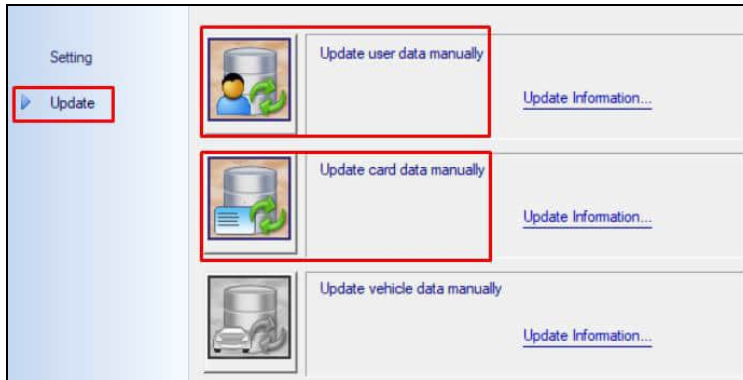
11. Click the blank field next to the **Cardholder** field, select **User** and **Name**, respectively under Source Field and Mapping the User Field. Click **OK**.

12. Next to the **Card Number** and **Code Type** fields, respectively select **CardNo** and the **Card Type** of the access cards to be assigned to the users.

Field Name	Field Type	<->	Field Name	Field Type
Cardholder	Integer	<->	[User] => Name	VarChar => nVarChar
Card Number	nVarChar	<->	[CardNo]	VarChar
Code Type	Integer	<->	Wiegand26	
Activation Date	DateTime	<->		
Deactivation Date	DateTime	<->		
Deactivate (Yes/No)	Bool	<->		
Pin Code	nVarChar	<->		
Access Groups	nVarChar	<->		
Card Status (0: Normal, 1: Disable)	Integer	<->		

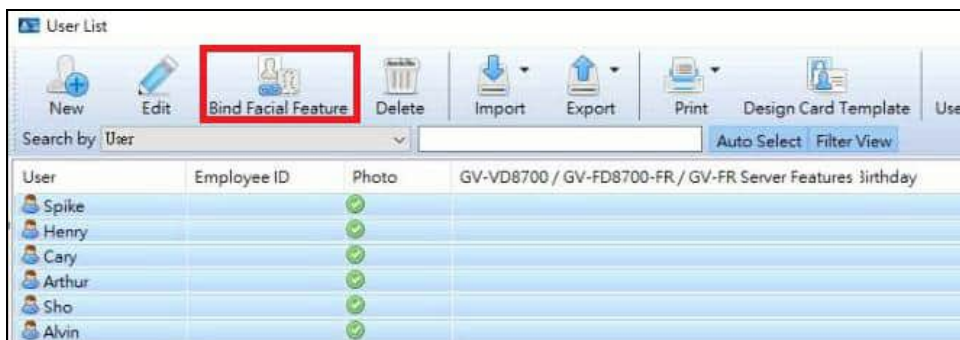


13. Click **OK**, select **Update** and click **Update user data manually** and **Update card data manually** each once.

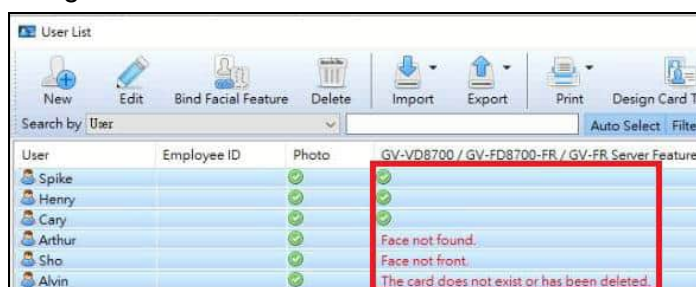


14. Exit the Database Tools and select **Personnel > Users** on GV-ASManager.

15. Select all of the Users that's been created through batch enrollment and click **Bind Face Feature**, as exemplified below. Each of the User's face photo is paired to his/her access card.



- For GV-ASManager installed on Intel CPU 6th-generation or above with Windows 10 or later, it will automatically check if the face photos paired are suitable for face recognition.



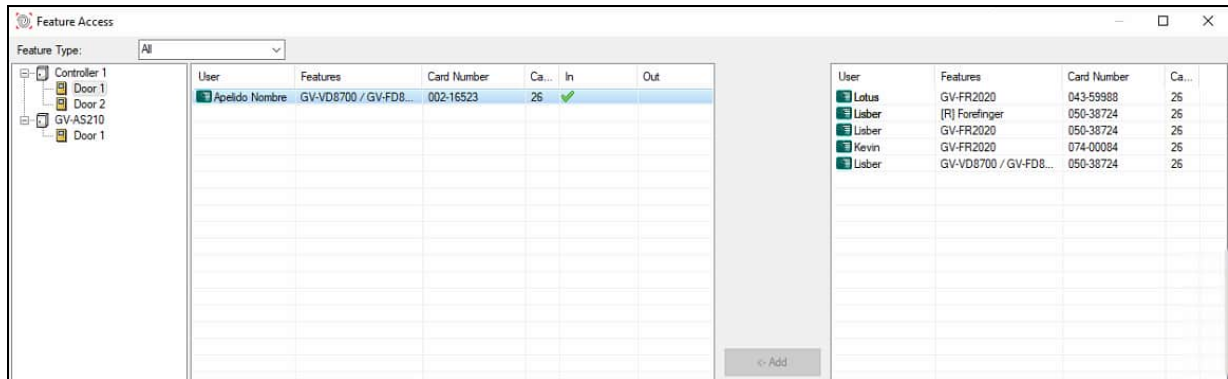
Once finished, all of the Users added also have their face photos corresponding to their assigned access cards for FR-based access management.


Note: For FR-based access management to work, the same Users, along with their face photos and access card numbers, must also be uploaded to the GV-FR devices, see [1.2 Synchronizing to GV-FR Devices](#).



1.2 Synchronizing to GV-FR Devices

To upload Users to GV-FR devices, along with their face photos and access card numbers, click **Setup > Feature Access** and select the **Door** to which the desired GV-FR device is connected to.



From the right column, select the Users to be added to the GV-FR device database and click **Add**. A green tick  is then displayed to every User that has been successfully uploaded to the GV-FR device.

Note:

1. For GV-AI FR, all of its camera channels, to which separate Doors may be connected to, share the same face database, therefore whenever a User is uploaded to or removed from any of its channels, the same changes will be made to all of its other channels simultaneously.
2. If you are unable to upload User data due to unstable network, you can optionally reupload the same data while replacing the current database of the GV-FR device by right-clicking the Door it is connected to and selecting **Sync GV-VD8700 / FD8700-FR** or **Sync GV-AI FR / GV-FR Panel**.