



SAFR Geutebruck Integration Guide

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Note: Documentation pertaining to the macOS platform is no longer being actively maintained.

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1 SAFR Geutebrueck Integration Guide

Integrated SAFR Geutebrueck is only available on Windows.

Integrating SAFR's facial recognition and analysis capabilities into Geutebrueck enables you to use SAFR's video feed information overlays within Geutebrueck camera video feeds, thus making it much easier to quickly and accurately separate unknown people from authorized people from known threats. You'll also have immediate access to additional information such as age, gender, sentiment, name, company, known associates, or any other configurable information you want to create.

Integrating the two systems also allows SAFR's information-rich events to trigger and populate Geutebrueck events, alerts, and videotagging/bookmarking.

A final benefit to integrating SAFR and Geutebrueck is that you'll be able to enroll individuals appearing in Geutebrueck cameras into SAFR's Identity Database.

1.1 Integration Overview

A typical deployment requires the following:

- A machine running Geutebrueck G-Core.
- One or more machines running the SAFR Desktop Client to process videos.
- If you're doing a SAFR on-premises deployment, you'll also need a machine running SAFR Server. SAFR Server can run on the same machine as one of the Desktop Clients, provided the host machine meets the system requirements.

Cameras are connected to the Geutebrueck G-Core. The SAFR Desktop Client can then connect to the G-Core to perform analysis of the video and add overlays. Depending on the number of cameras you need, one or more machines may be required to run the SAFR Desktop Client(s), each processing multiple video feeds. The Desktop Client is also used to perform various management activities.

1.2 Install and Configure Geutebrueck

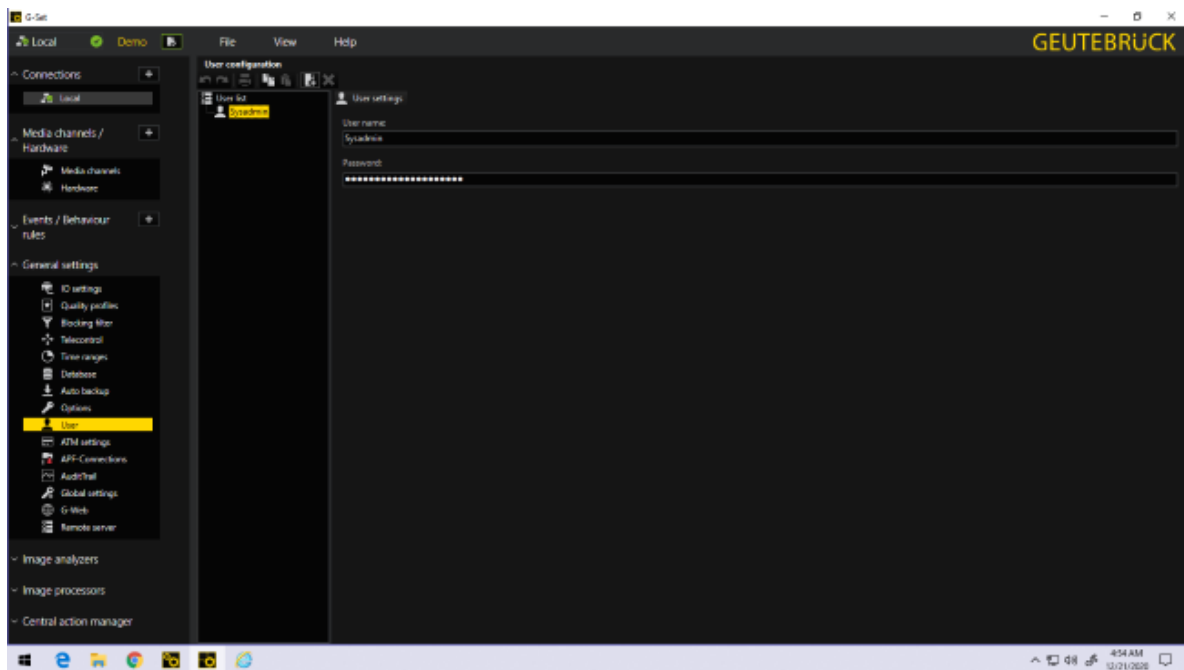
1.2.1 Install G-Core

1. Download the latest G-Core installer from the Geutebrueck Download Portal.
2. Run the installer, selecting the following options during installation:
 - Select all of the IP cameras.
 - Select **Plugin > GBF Streamer**.
 - Select **Plugin > Media Channel Simulator**.
 - Select **Plugin > Livestream Reader**.

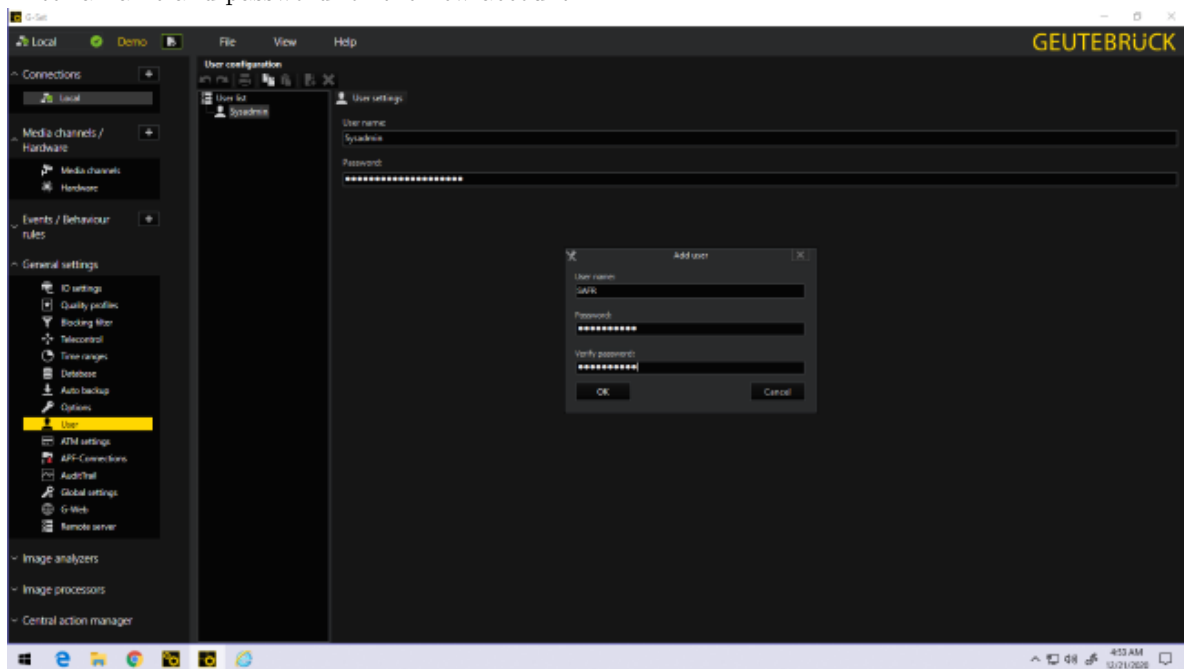
1.2.2 Add a SAFR User Account

You'll need to create a user account within Geutebrueck that SAFR will use to connect to Geutebrueck. To do this, do the following:

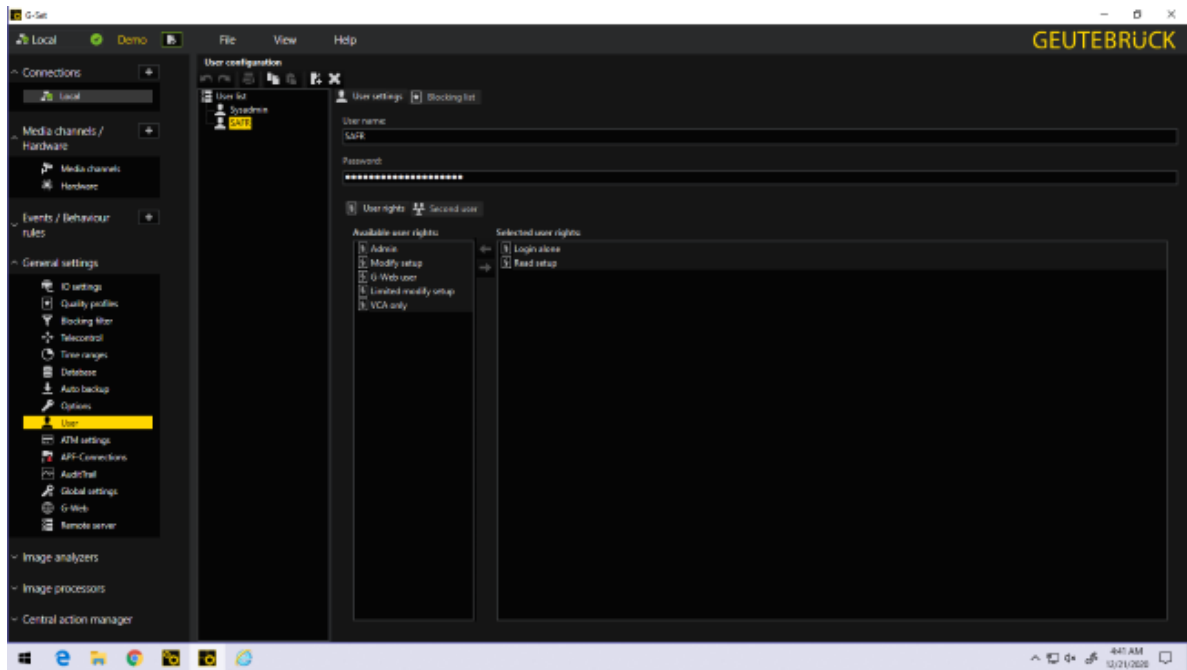
1. Open the **G-Set** application.
2. Go to **General settings -> User**.
3. On the **User configuration** window on the right, click on the **Add** button in the upper left corner of the window.



4. Enter a name and password for the new account.



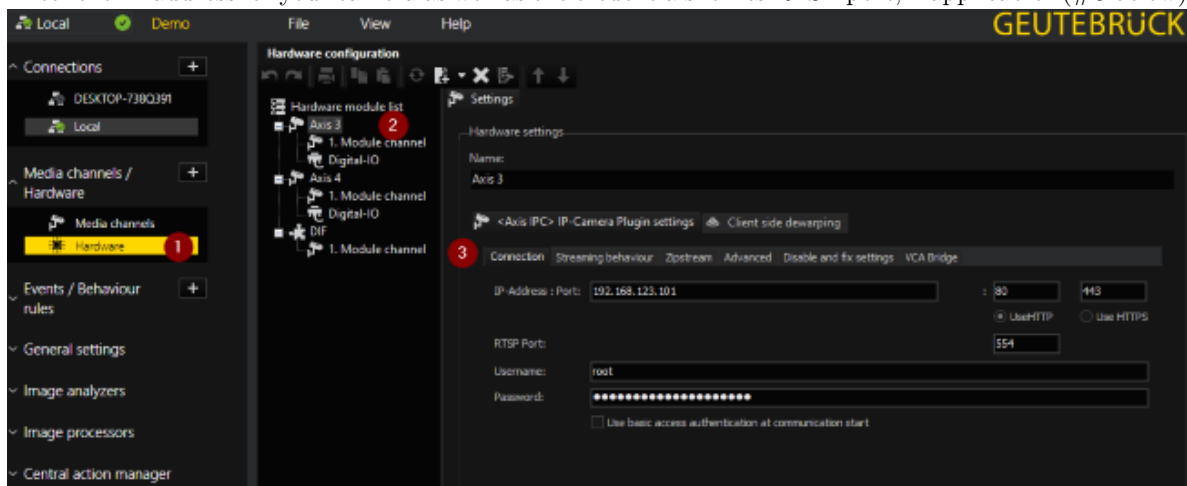
5. The new account will now be listed among the list of created user accounts.



1.2.3 Add a Camera

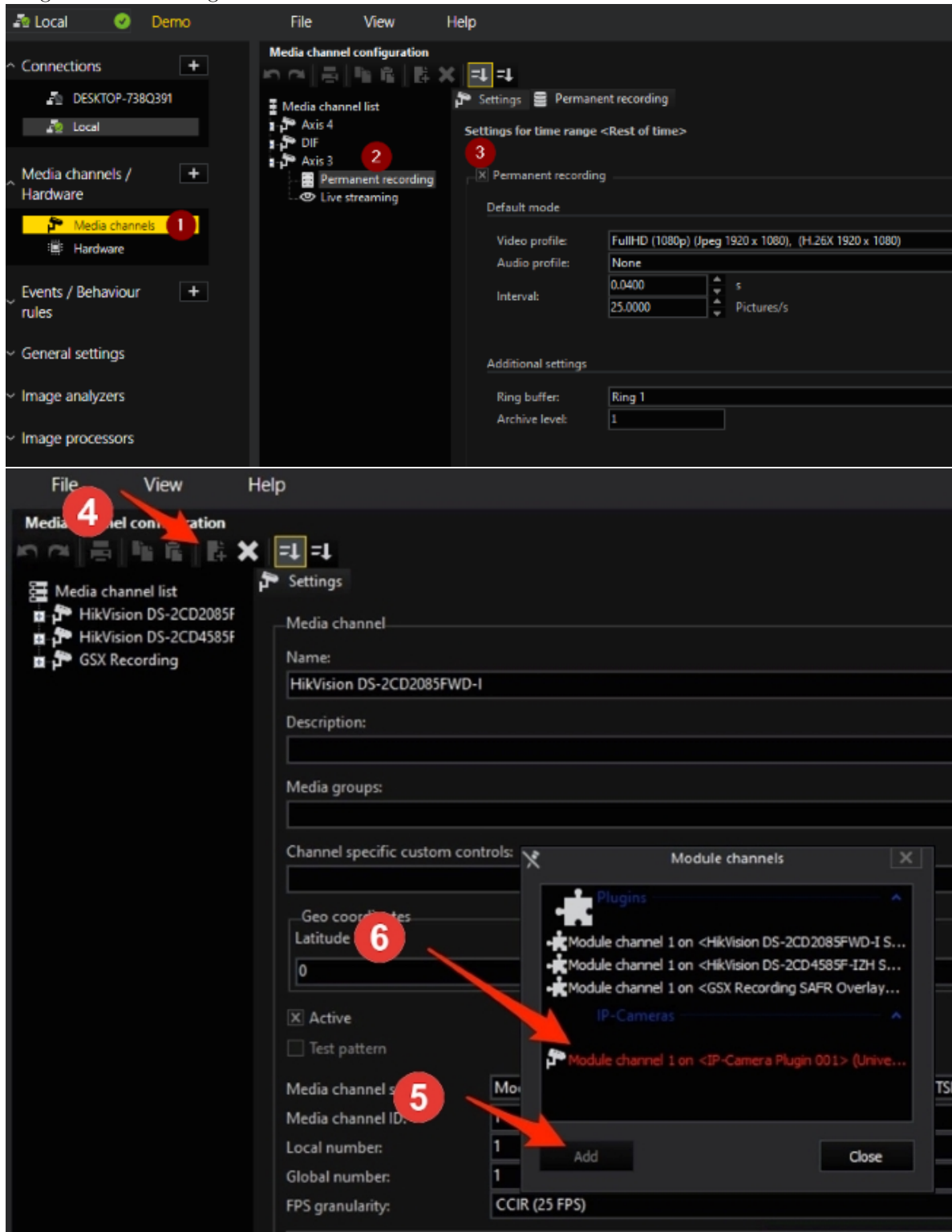
To add and configure a new camera to Geutebrueck, do the following:

1. Open the **G-Set** application.
2. Go to **Media channels/Hardware** -> **Hardware**. (#1 below)
3. Click on the **Add** button at the top of the **Hardware configuration** window. Select the type of camera you want to add from the list of IP camera plugins. A new IP camera plugin entry will appear in the **Hardware module list**. (#2 below)
4. Click on your new camera plugin entry. The right pane will now display various settings for the new plugin.
5. Enter the IP address for your camera as well as the credentials for its RTSP port, if applicable. (#3 below)



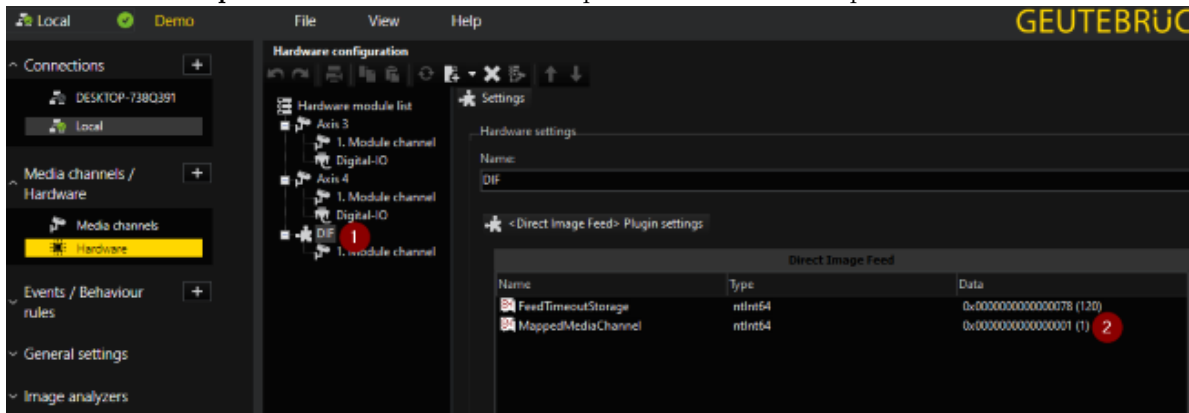
6. Go to **Media channels/Hardware** -> **Media channels**. (#1 below)
7. Click on **Add Media Channel**. (#4 below)
8. Click **Add** to add a new media channel. (#5 below)
9. The hardware you just added will be colored red since it's not yet selected or enabled. (#6 below)
10. Click on **Permanent recording** for the camera plugin you just added. (#2 below)

11. Tick the **Permanent recording** checkbox. (#3 below) This enables Geutebrueck to display reference images and event images.



12. Go to **Media channels/Hardware** -> **Hardware**.
13. Click on the **Add** button at the top of the **Hardware configuration** window. Select **Plugin <Direct Image Feed Plugin>** from the list of plugins, then press **Add**. A new IP plugin entry will appear in

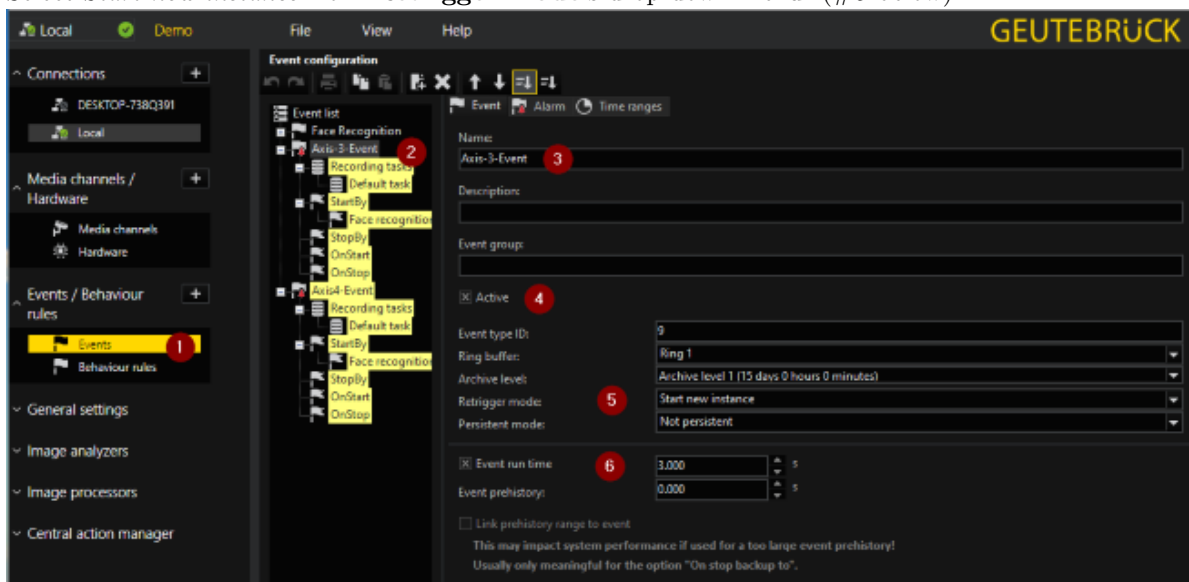
- the **Hardware module list**. (#1 below)
14. Click on the new plugin.
 15. Set the *MediaChannelID* of the *MappedMediaChannel* to the camera that's being used. (#2 below)
 16. Select **Send Setup to Server** from the **File** drop-down menu at the top of the window.



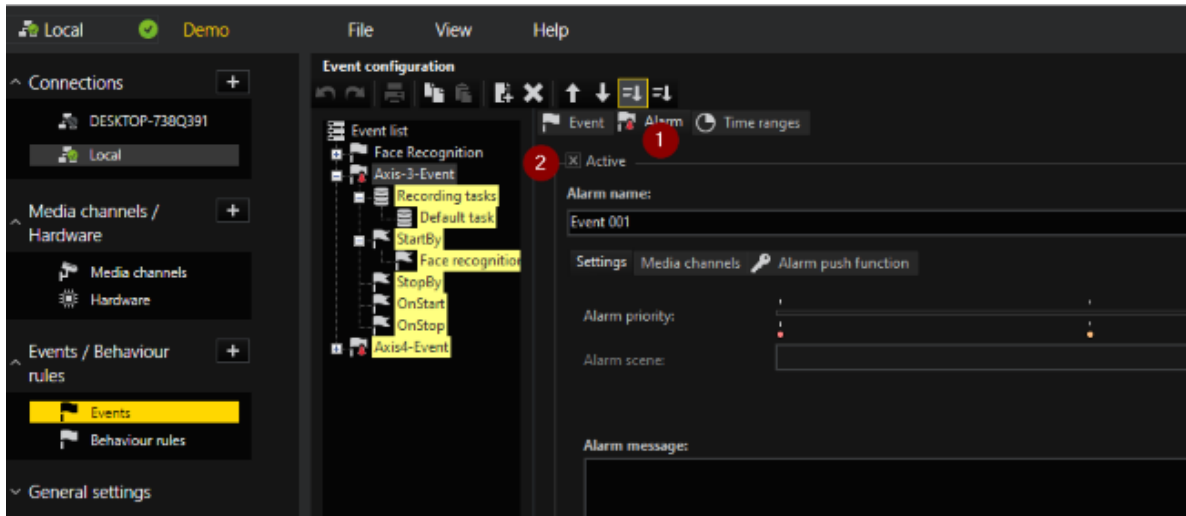
1.2.4 Configure Geutebrueck Events

To add and configure a new Geutebrueck event type, do the following:

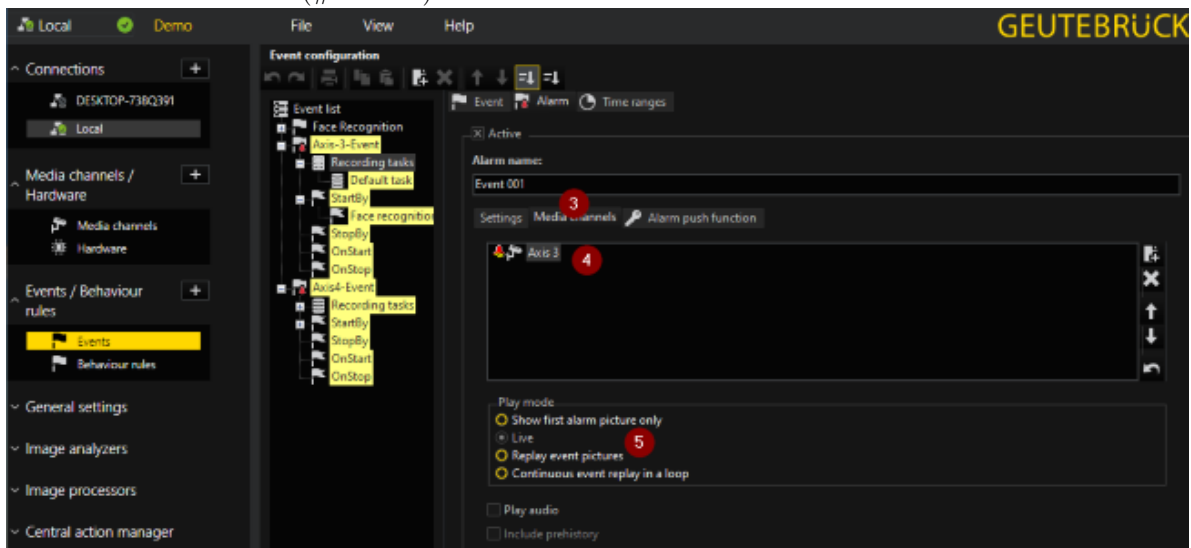
1. Open the **G-Set** application.
2. Go to **Events/Behaviour rules > Events**, (#1 below)
3. Click on the **Add** button at the top of the **Event Configurator** window. Your new event type will appear on the **Event list**. (#2 below)
4. Click on your new event type. The right pane will now display various settings for your new event type.
5. Select the **Event** tab, if it's not already selected.
6. Enter a name for your new event type. (#3 below)
7. Tick the **Active** and **Event run time** checkboxes. (#4 and #6 below, respectively)
8. Select *Start new instance* from **Retrigger mode**'s drop-down menu. (#5 below)



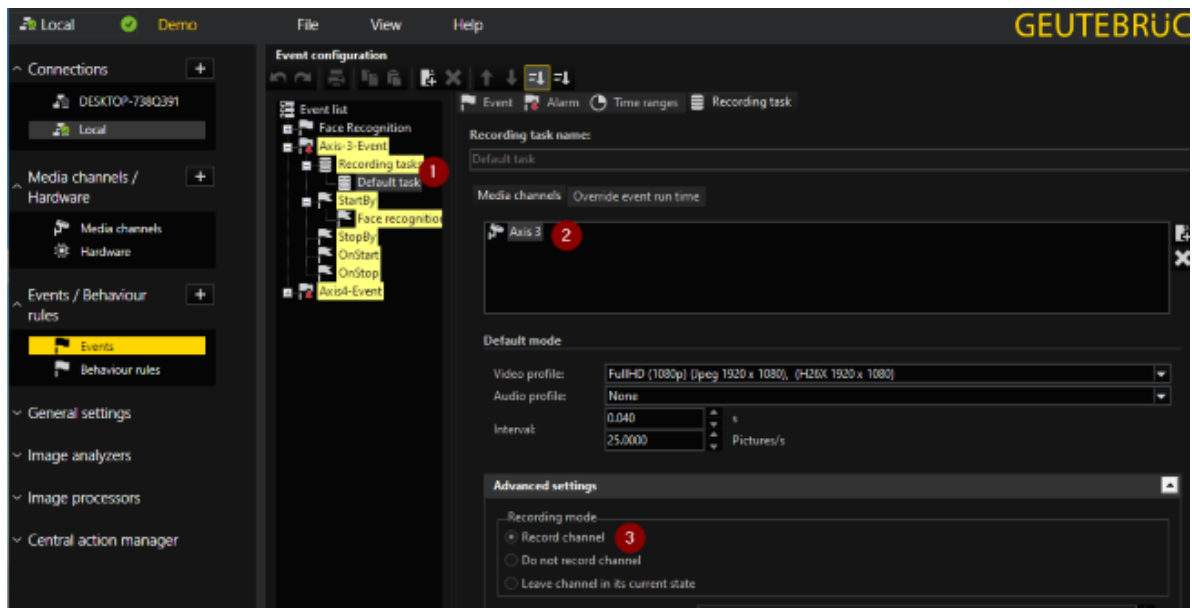
9. Select the **Alarm** tab. (#1 below)
10. Tick the **Active** checkbox. (#2 below)



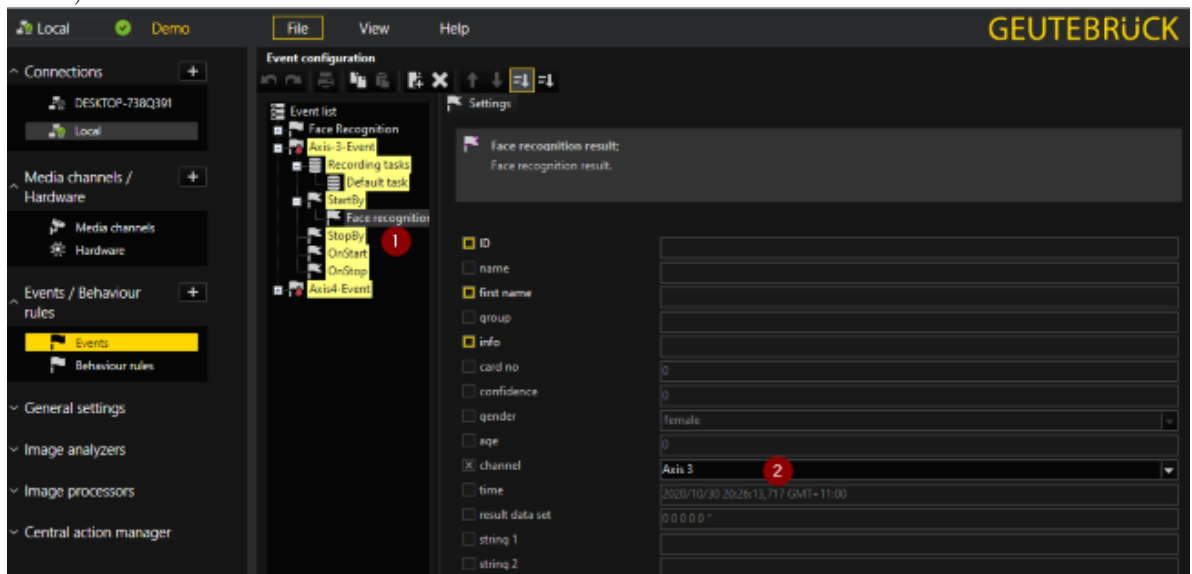
11. Select the **Media channels** tab. (#3 below)
12. Click on the **Add** button on the right of the **Media channels** window and select one of the listed cameras. The selected camera will now be a media channel for this alarm. (#4 below)
13. Tick the **Live** checkbox. (#5 below)



14. In the **Event list**, click on **Recording tasks** for your new event type. (#1 below) This will cause a new **Recording task** tab to appear on the right pane. Select that new tab.
15. Select the **Media channels** tab, if not already selected.
16. Click on the **Add** button on the right of the **Media channels** window and select one of the listed cameras. The selected camera will now be listed in the **Media channels** window. (#2 below)
17. Tick the **Record channel** checkbox. (#3 below)



18. In the **Event list**, click on **StartBy** for your new event type. (#1 below)
19. Click on the **Add** button near the top of the **Event configuration** window.
20. You will be prompted to select which action to add. Choose *Face Recognition Result*.
21. In the **Event list**, click on the newly added *Face Recognition Result*.
22. In the **Settings** window in the right pane, tick the **channel** checkbox.
23. Select the media channel that you added in the previous steps from **channel**'s drop-down menu. (#2 below)

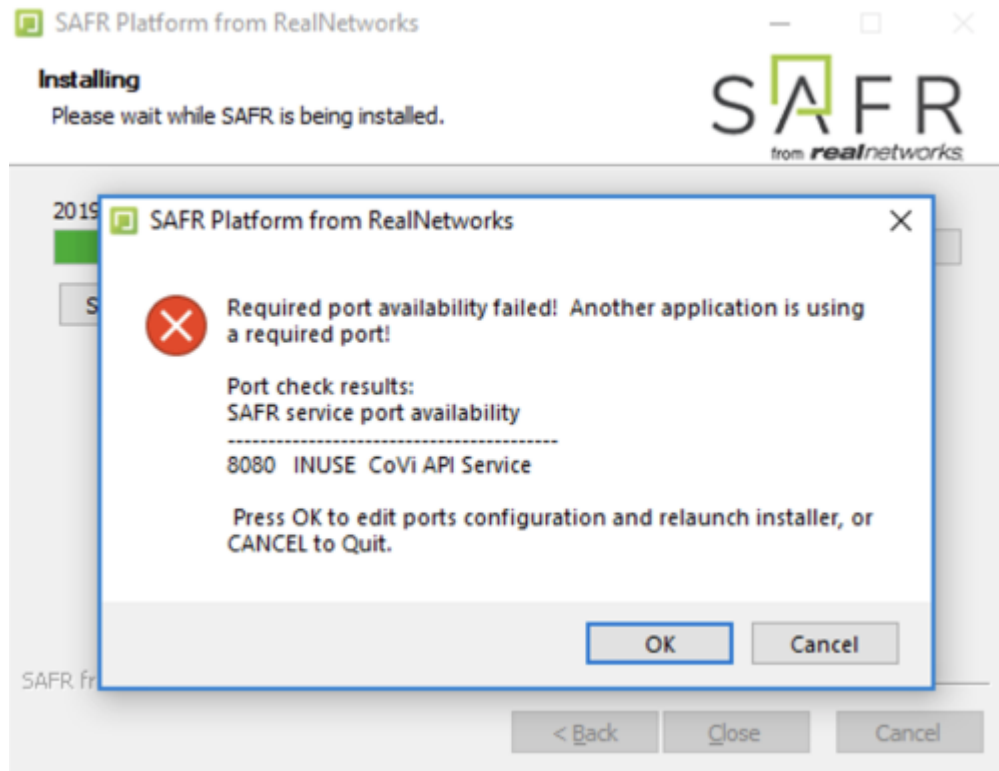


1.3 Install and Configure SAFR

To install SAFR, do the following:

1. Go to the SAFR Download Portal.
2. If you're doing a cloud deployment, download and install Windows SAFR Desktop. Make sure to select the Geutebrueck install option.
3. If you're doing an on-premises deployment, download and install Windows SAFR Platform. Make sure to select the Geutebrueck install option.

- When installing the SAFR Platform, the default SAFR port assignments sometimes conflict with other software port assignments. If a port conflict occurs, the error message shown below will pop up in the middle of your installation.



If this happens, do the following:

1. Click **OK** to edit port configurations.
2. **Notepad** will open, displaying the *safrports.conf* file.
3. Edit any conflicting ports to new values. (e.g. CoviHTTP=18080)
4. Save and exit **Notepad**.

The Platform installer will then restart and the new port values will be used. You can find the modified *safrports.conf* file at `C:\Program Files\RealNetworks\SAFR\`.

After the installation finishes, two icons will appear on your desktop: one labeled *SAFRActions* and another labeled *SAFR*. *SAFRActions* launches SAFR Actions, while *SAFR* launches the Desktop Client. The SAFR Server (when installed as part of a local deployment) automatically runs as a collection of background services.

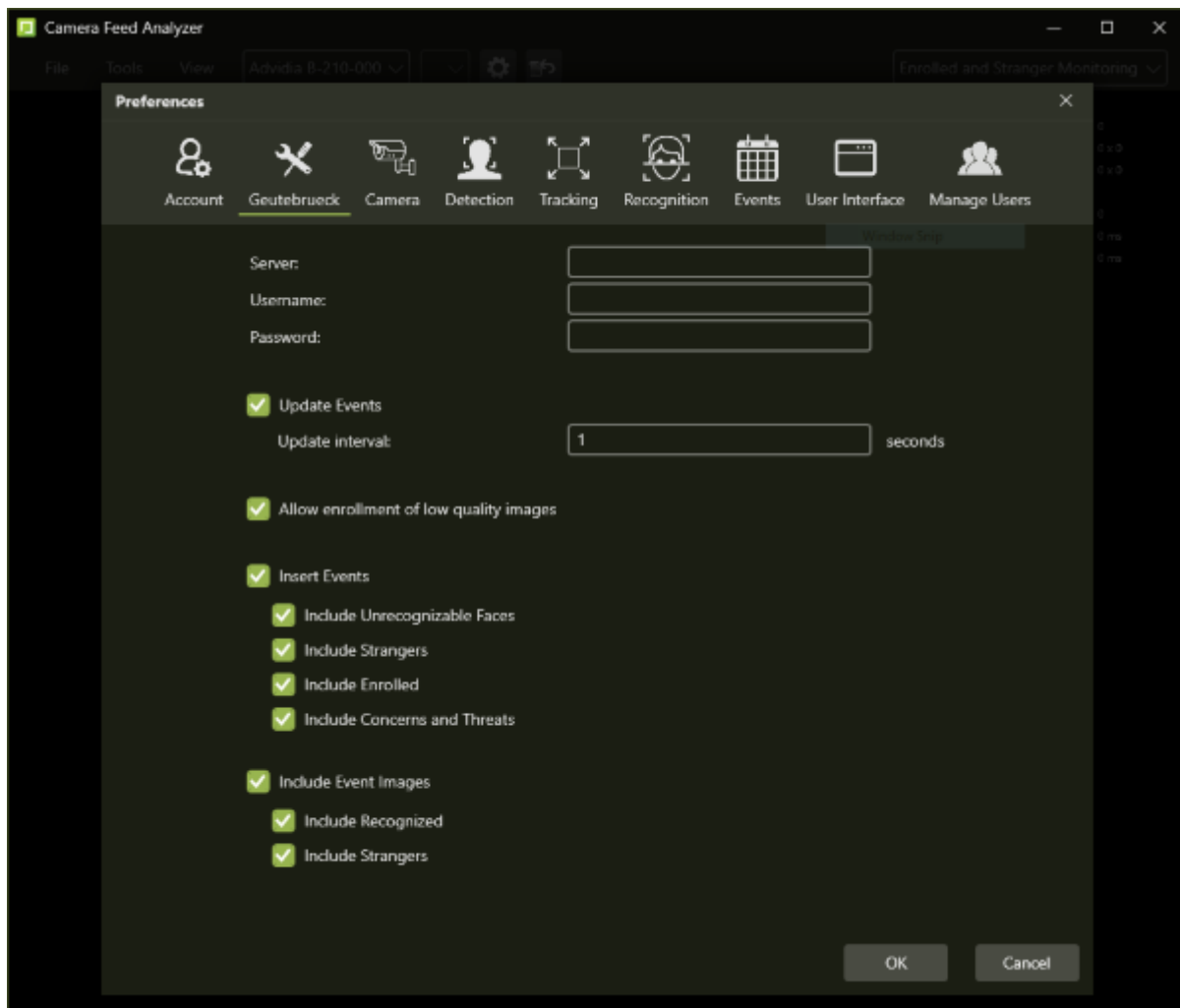
Immediately following installation, the installer opens the Desktop Client and prompts you to log in with your SAFR Account credentials. Make sure to log in; it's important in acquiring the SAFR license.

1.3.1 Connect SAFR to Geutebrueck

To connect SAFR to Geutebrueck, do the following:

1. Within your SAFR Desktop Client, select **Tools->Preferences->Geutebrueck**.
2. Enter information for the first three settings on the SAFR Geutebrueck Preferences menu: *Server*, *Username*, and *Password*. See below for information about the available SAFR Geutebrueck preference settings.

1.3.1.1 SAFR Geutebrueck Preferences You can configure several Geutebrueck-specific settings from the **Tools->Preferences->Geutebrueck** menu.



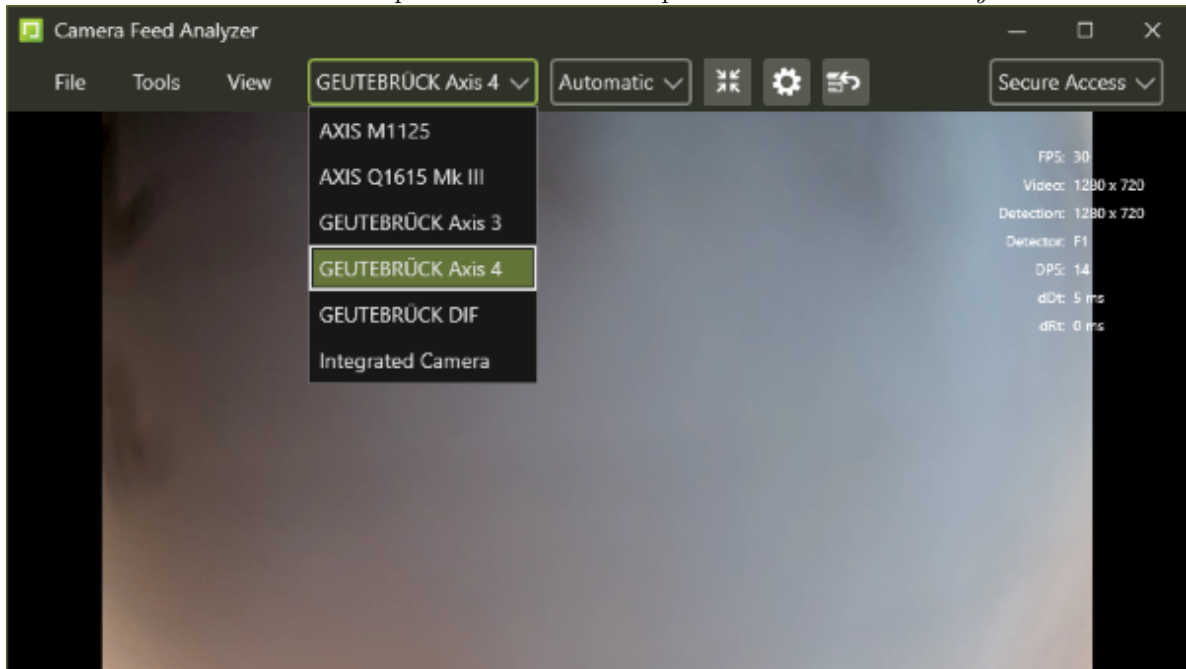
- **Server:** IP address or hostname of a Geutebrueck server.
- **Username:** Username of a Geutebrueck user that has sufficient permissions to allow SAFR to connect to the Geutebrueck system. See the Add a SAFR User Account section above for information about how to create and find this information.
- **Password:** Password of a Geutebrueck user that has sufficient permissions to allow SAFR to connect to the Geutebrueck system. See the Add a SAFR User Account section above for information about how to create and find this information.
- **Update Events:** Specifies if generated events should be updated if additional information is obtained. (e.g. A previously unidentified face becomes recognized, possibly due to improved lighting conditions, thus changing a Stranger Event to a Known Person Event.)
 - **Update Interval:** If *Update Events* is enabled, this setting specifies how frequently events are updated.
- **Allow enrollment of low quality images:** Enables enrollment of people with low quality facial images. See the Image Quality Metrics Guidance page in the SAFR documentation for information about face image quality.
- **Insert Events:** Enables insertion of events into Geutebrueck.
 - **Include Unrecognizable Faces:** Enables the inclusion of events triggered by unrecognizable faces.
 - **Include Strangers:** Enables the inclusion of events triggered by strangers.
 - **Include Enrolled:** Enables the inclusion of events triggered by enrolled persons that aren't persons of concern or known threats.

- **Include Concerns and Threats:** Enables the inclusion of events triggered by persons of concern or known threats.
- **Include Event Images:** Enables the inclusion of event images.
 - **Include Recognized:** Enables reference and event face images for events triggered by recognized persons.
 - **Include Strangers:** Enables events face images for events triggered by strangers.

1.3.2 Verify the Connection to Geutebrueck

To verify that your SAFR system successfully connected to the Geutebrueck system, do the following:

1. Open the Camera Feed Analyzer in the SAFR Desktop Client.
2. Click on the camera selection drop-down menu at the top of the *Camera Feed Analyzer*.



3. You should see the cameras connected to Geutebrueck among the available camera. **Note:** All Geutebrueck cameras will have "Geutebrueck" appended to the beginning of the camera name.
 - If you don't see any Geutebrueck cameras listed, try shutting down and then restarting your SAFR Desktop Client.

2 SAFR Geutebrueck Operation Guide

2.1 Person Enrollment

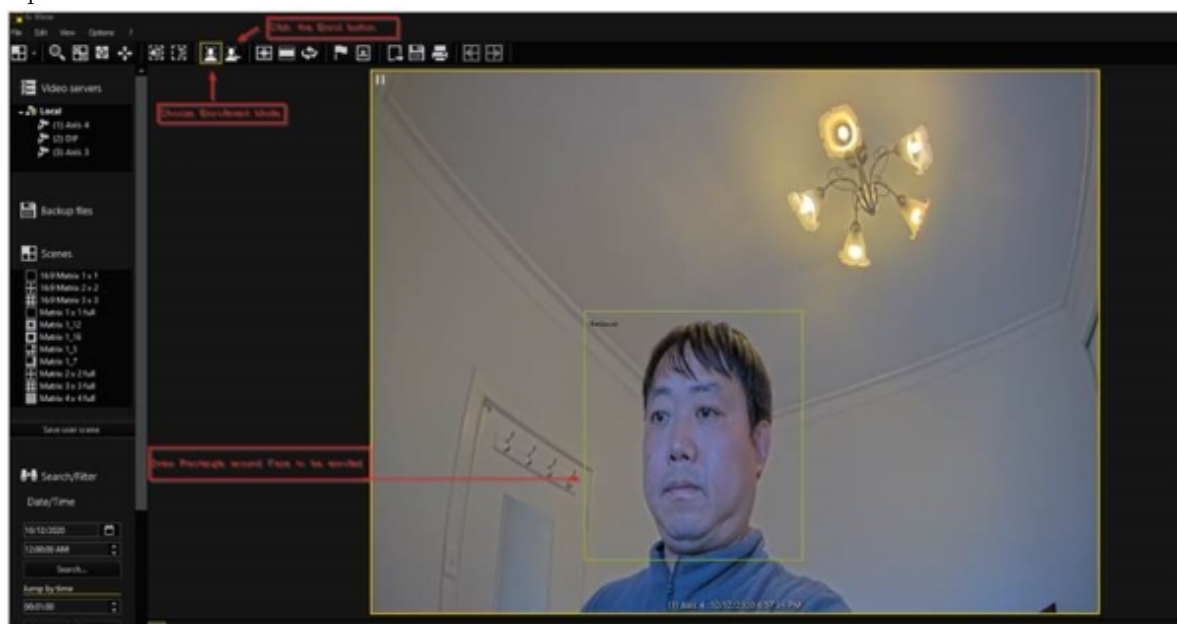
Most of the integrated SAFR Geutebrueck functionality requires that people are first enrolled in SAFR's Identity Database. There are 3 main ways that people can become enrolled in your SAFR system:

- Import people into SAFR using photos of faces.
- Import people into SAFR using video files. (e.g. saved CCTV footage)
- Enroll people into SAFR from within the Geutebrueck G-View client, as described in the section below.

2.1.1 Enroll People from Within Geutebrueck

To enroll people into SAFR from within Geutebrueck, do the following:

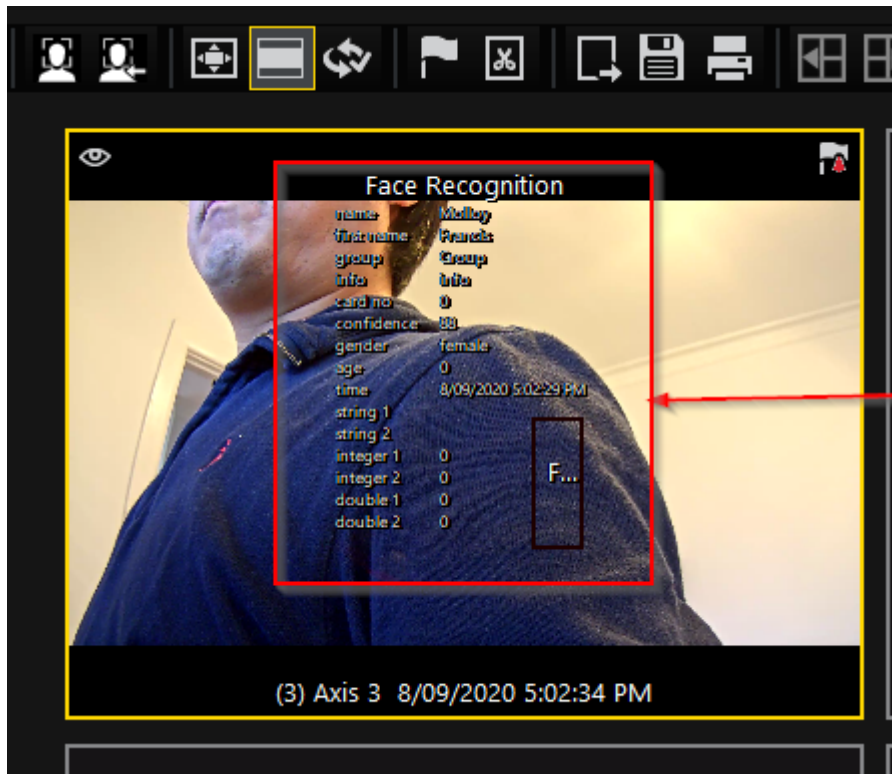
1. Open the Geutebrueck G-View client and run a recorded CCTV video file.



2. Click the button to enter *Face Enrollment* mode.
3. Draw a rectangle around the face to be enrolled.
4. Click the **Enroll** button. This will cause the person's face to be enrolled in SAFR.

2.2 Video Overlays

Geutebrueck supports displaying real-time overlays in the G-View Client and archived video on a periodic basis. The frequency and duration of display is managed in the G-View preferences. When SAFR and Geutebrueck are integrated, Geutebrueck's video overlays display additional information.



Geutebrueck Overlay Item	SAFR Equivalent	Additional Notes
ID	PersonId	If the person isn't enrolled in SAFR, this field is blank. (Persons who aren't enrolled don't have PersonIds.)
Name	Last Name	
FirstName	First Name	
Group	Person Type	
Info	Tags	This item is a boolean. It's set to true if the viewed person is enrolled in SAFR and has one or more tags defined. Otherwise, it's set to false .
CardNo	N/A	This item currently isn't used for anything.
Confidence	similarityScore	
Gender	Gender	This item is an integer; its possible values represent the following: 0 = Female 1 = Male 2 = Unknown
Age	Age	
Time	DateTimeOffset	
String 1	External Id	
String 2	Id Class	This item is a text string.

Geutebrueck Overlay Item	SAFR Equivalent	Additional Notes
Integer1	Id Class	This item is an integer; its possible values represent the following SAFR Id Classes: 0 = Unknown 1 = Unidentified 2 = Stranger 3 = NoConcern 4 = Concern 5 = Threat
Integer2	Sentiment value	
Double1	Mask	This item is an integer; its possible values represent the following: 0 = no mask 1 = masked face
Double2	SAFR Event Type	This item is an integer; its possible values represent the following SAFR event types: 0 = Unknown 1 = Person 2 = Badge 3 = Action 4 = RecognizedObject

See the SAFR documentation for details about the additional overlay information.