SAFR Genetec FaceRec Integration Guide
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1 SAFR Genetec FaceRec Integration Guide

Integrated SAFR Genetec FaceRec is only available on Windows.

Integrating SAFR’s facial recognition and analysis capabilities into Genetec enables you to use SAFR’s video feed information overlays within Genetec 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 about individuals to trigger Genetec alerts and other actions within the Genetec system.

1.1 Integration Overview and Requirements

A typical deployment requires the following:

- A machine running Genetec Security Center.
- One or more machines running the SAFR Desktop Client to process videos.
- If you’re doing a SAFR local 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 Genetec Security Center. The SAFR Desktop Client(s) can then connect to the Genetec Security Center 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, each processing multiple video feeds. The Desktop Client processes the video and returns information to Genetic to overlay the video feeds and generate events. The Desktop is also used to perform various management activities.

1.1.1 System Requirements

Genetec has the following system requirements:
• One machine running Genetec Security Center Version 5.7 or later.
• One machine running Genetec Security Desk and Genetec Config Tool.
• Each machine running a Genetec product must meet the following system requirements:
  • Windows 10.
  • Additional system requirements as described here.
  • Genetec FaceReq plugin. Note: The installation of this plugin is performed when you install SAFR. See the Install and Configure SAFR section below for details.

SAFR has the following system requirements:

• One or more machines running Windows SAFR Desktop Client 1.3.228 or later.
• Each machine running the SAFR Desktop Client must meet the following requirements:
  • Windows 10.
  • Additional system requirements as described here.
• Local SAFR deployments require at least one machine running SAFR Platform 1.3 or later.
• Each machine running SAFR Server must meet the following requirements:
  • Windows 10.
  • Additional system requirements as described here.

1.1.2 Licensing and the Genetec Part Number

An accompanying Genetec part number must be added to your Genetec connection license. Do the following to discover and add the Genetec part number:

1. Go to the Genetec Portal and sign in using your Genetec credentials.
2. In the applications section, search for SAFR. From the results, click SAFR Facial Recognition.
3. On the SAFR Facial Recognition Solution Details page, in the right column, the Genetec Part Number is displayed.
4. Contact Genetec and have them add the part number to your license. You need a quantity of the part number equal to the number of cameras SAFR will be processing plus one additional license for the metadata channel SAFR creates. In other words, if SAFR will be processing cameras, then you need quantity of the part number added to your license.

You’ll need the following licenses: each Genetec camera where SAFR face detection and recognition is used, you’ll need:

• A Genetec connection license with the accompanying Genetec part number is required for each connected Genetec camera.
• One additional Genetec connection license for the metadata channel SAFR creates.
• A SAFR license for each camera is required.

For example, if you have 300 cameras but only need face detection on 30 cameras at a time, then you would obtain a 31 connection license from Genetec and a 30 camera license from RealNetworks. Having a 31 connection Genetec license does not mean you are limited to face detection on a fixed set of 30 cameras. At any time, you can choose to connect the SAFR Desktop Client to a different camera. You may have cameras in your parking garage that you were not previously monitoring with SAFR recognition. You can use a few of your licenses that are connected to other cameras to connect to garage cameras instead.

1.2 Install and Configure Genetec Products Security Center

1. Download the latest version of Genetec Security Center from the Genetec Portal.
2. Run the installer. For details about which install options to select, see the Security Center Installation and Upgrade Guide.
3. Download and install the latest Genetec SDK package.

1.2.1 Create a SAFR User

To create a user with the permissions that SAFR will require:
1. Open the Genetec Config Tool.

2. Click **Tasks > User Management**.

3. Create a new user (with a username of, for example, *SAFR*) with the following permissions:

   **All privileges**
   - Application privileges
     - Log on using the SDK

   **Administrative privileges**
   - Physical entities
     - View camera properties

   **Access control management**
   - View cardholder group properties
   - View cardholder properties
   - View visitor properties

   **System management**
   - View general settings
     - Modify custom events

   **Action Privileges**
   - Cameras
     - View live video
1.2.2 Add Permissions for Event-to-Archive Actions

In order to create Event-to-Actions in the Genetec Config Tool, one or more of the following Action permissions must also be added to the SAFR user created in the previous section. Only those actions you want to trigger with SAFR events are needed:

**All privileges**
- Action privileges
  - Set threat level
- Cameras
  - Protect video from deletion
  - Save/modify/print snapshots
- Access control
  - Doors
    - Explicitly unlock doors
    - Override unlock schedules
  - Elevators
• Override elevator schedules
• Alarms
  • Trigger alarms
• Users
  • Send a message
  • Send an email
  • Send/clear task
• Macros
  • Execute macros
• Zones
  • Arm/disarm zones
• Areas
  • Modify people count

1.2.3 Set Minimum Cardholder Image Size

Do the following:
1. Open the Genetec Config Tool.
2. Open Tasks > Administration > Access Control > General Settings.
3. Set Maximum Picture File Size to 128k or larger.

1.2.4 Configure the Media Gateway

Do the following:
1. Open the Genetec Config Tool.
2. Open Tasks > Administration > Video.
3. Click the arrow next to the Video Unit button in the bottom left corner, and select Media Gateway.
4. Click Next, and in the Create Media Gateway wizard, click Create. Accept the default values; no changes are needed.
5. Select Media Gateway, and click the Properties task.
  • This adds a Media Gateway entry in the list on left side.
6. Determine the user to be granted access to the media gateway.
   - This can be the SAFR user or a different user; we recommend using the same SAFR user unless you already have one configured to use the Media Gateway.
   - This user does not need to have specific permissions. The permissions for media gateway are granted to this user in the next step.

7. To add this user to the **Accessible To** section, click the + icon. In the bottom right, click **Apply** to save the changes.

8. When prompted, enter a password for the user you are adding.
   - This password can be the same as the user’s normal password or it can be different.

9. Save the **username** and **password**.
   - This is the password that must be used in the Media Gateway credentials fields in the SAFR preferences window.

### 1.3 Configure the Genetec FaceReq Plugin

- Click **Add an entry**, choose **Plugin**, then choose **FaceRec**.
- Click **Next**, **Next**, then **Create** to create the new unit.
- Select **FaceRec entity**, click **Add an entry**, then choose **FaceRec Unit**.
  - Enter “safr” as the same and click **Save**.
  - Select **Properties**.
    - Set the following features to OFF:
      - **Face recognition**: Enable subject overlay
      - **Hitlists**: Enable hitlists matched overlay
      - **Face detection**: Enable overlay
- Select **safr** unit.
  - Select **Properties**.
    - In the API dialog area click the + button to add a new API Key entry.
• Name it “safr” and make a note of the API Key value. (The value is only available once.)
  Note: API Key is used later when configuring the SAFR Desktop Client.
• Click Apply.

• Select Cameras.
  • Click the + button and add all relevant cameras which require face recognition.

1.4 Install and Configure SAFR

1. On the machine(s) where you plan to install the SAFR Desktop Client, install the Genetec SDK from the Genetec Portal.
2. Go to the SAFR Download Portal.
3. If you’re doing a cloud deployment, download and install Windows SAFR Desktop. Make sure to select the Genetec Security Center with FaceRec install option.
4. If you’re doing a local deployment, download and install Windows SAFR Platform. Make sure to select the Genetec Security Center with FaceRec 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\`.

5. After the installation finishes, a message will appear saying where you can locate the Genetec FaceReq plugin installer on your machine. Make a note of the installer location.
6. 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.
7. Go to the location specified in Step #5. Copy the installer (FaceRecSetup621.exe) to every machine running Genetec Security Center, and then run the installer on each of those machines.

Two icons will have appeared on your desktop: one labeled “SAFRActions” and another labeled “SAFR”. **SAFRActions** launches SAFR Actions, while **SAFR** launches the Desktop Client. If you did a local deployment, SAFR Server will be automatically running as a collection of background services.

### 1.4.1 Connect SAFR to Genetec

1. Within your SAFR Desktop Client, select **Tools->Preferences->Genetec**.  
   **Note:** If the Genetec preference tab is not showing, it means that the Genetec SDK was not properly installed on your machine.

2. Enter the following information in the Genetec preferences tab:
   - **Username:** Enter the SAFR user you created earlier.
   - **Password:** Enter the *Password* you created for the SAFR user.
   - **Directory:** IP address of the server running the Genetec Security Center server.
   - **Media Gateway:** Used for acquiring video streams.
• **Username**: Enter the SAFR user you created earlier.
• **Password**: Enter the *Password* you created for the SAFR user.
• **Port**: Enter the port on which to connect to the Media Gateway. You can use the default value of 654 unless that would create a port conflict.

This should cause your SAFR system to establish a connection with the Genetec system.

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

1. On the SAFR Desktop Client, open **Tools -> Preferences -> Camera**.
2. Cameras connected to Genetec system should be visible.
3. All cameras connected to Genetec have the *Genetec* prefix in their names.

### 1.5 Troubleshooting

#### 1.5.1 How do I Resolve a Certificate Registration Error when Logging in from SAFR to Genetec?

This error is caused by a mismatch between the SAFR Genetec certificate and the Genetec Security Center license. SAFR builds have either a Genetec production certificate or a development certificate. The production certificate can be used only with Security Center installations that use a production or demonstration license. The development certificate can be used only with Security Center installations that use a development license.

Here are some steps you can take to try to diagnose the issue:

1. Use the Genetec Config Tool to connect to the Genetec Security Center server.
2. Click **About** on the left side.
3. Click the **Certificates** tab.
4. If you see a line that says, “Generic certificate for developers” then the Security Center server is using a developer license. You must use a SAFR build that uses a developer certificate. Builds with developer certificate are available only from SAFR build farm and should be used only by developers.
5. If that line is not present, then Security Center is using a production or demonstration license. You must use a SAFR build that uses a production certificate. Download SAFR build with production certificate from the SAFR Download Portal.

   • Click on the **Purchase Order** tab. Production or demonstration licenses must also have a license for SAFR attached to it. There should be a line with **Part #GSC-1SDK-RealN-FaceRec**. The quantity must be equal to or greater than the number of cameras that SAFR will be processing.

#### 1.5.2 How do I Resolve a Connection Error when Logging in from SAFR to Genetec?

There can be many different causes for a Connection Timeout error from SAFR. However, if you are in a situation where this consistently happens and no cameras are connecting, then doing the following will most likely resolve the error:

1. Connect to the Security Center server using the Genetec Config Tool.
2. Go to the **Video** task.
3. In the left pane, right-click on the **Media Gateway** role.
4. Select the **Maintenance->Deactivate** role.
5. After the role turns gray, right-click on it again.
6. Select the **Maintenance->Activate** role.
7. The Media Gateway will go through a startup routine. It will turn red, yellow, and eventually white.
8. After it turns white, try connecting again.
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2.1 SAFR Genetec Preferences

You can set several Genetec-specific preferences by opening the SAFR Desktop Client and clicking on Tools -> Preferences -> Genetec.

- **Username**: Person with the credentials to connect the SAFR system to the Genetec Security Center Server.
- **Password**: Password of a person with credentials to connect the SAFR system to a Genetec Security Center Server.
- **Directory**: IP address or hostname of the Genetec server.
- **Media Gateway**: Used for acquiring video streams.
  - **Username**: Person with the credentials to connect the SAFR system to a Genetec Security Center Server.
  - **Password**: Password of a person with credentials to connect the SAFR system to a Genetec Security Center Server.
  - **Port**: The port at which SAFR will connect to the Genetec Security Center Server. The default is 654.
- **Face Recognition Plugin**:
  - **API key**: The API key set within the Face Recognition Activities section of the Genetec Security Desk.
  - **Port**: The port value used by the API key specified within the Genetec Security Desk.
- **Enforce Secure Connection**: When enabled, it requires that a TSL/SSL connection be established with the FaceReq server. Although this setting is enabled by default, it is automatically disabled if the
user chooses “Switch to Insecure Connection” during an error dialogue that pops up if the client fails to establish a secure connection with the FaceReq server.

- **Draw Overlays**: Enables the drawing of ovals, names, and other details within Genetec camera video stream. The overlays match what would be shown in the SAFR Desktop Client, so SAFR settings affecting SAFR overlays also affect what is drawn in Genetec.

  **Note**: If you enable SAFR’s overlays, you should disable Genetec’s overlays. You can do this by opening the Genetec Security Desk, then going to Options->Visual, and then disabling the **Display overlay video controls** option.

- **Report Events**: Enables reporting SAFR events to Genetec. If this setting isn’t checked, Include Event Details is automatically greyed out.

  - **Include Event Details**: When enabled, all of the technical details of the event are attached to events. This option is especially useful if an operator uses macros to handle events for decision making.

- **Cardholders**
  - **Import Every 24 Hours**: When enabled, all the Genetec cardholders not already in SAFR’s Person Directory are imported and registered to SAFR every 24 hours.
  - **Import now...**: Clicking this causes all the Genetec cardholders not already in SAFR’s Person Directory to be imported and registered to SAFR.

### 2.2 Connect and Use Cameras and Video Feeds

1. To connect cameras to Genetec, you need to add the cameras to the Genetec Video Archiver using the Genetec Config Tool. For details, please see the Genetec Security Center Administrator Guide.

2. After a camera has been added to the Video Archiver, it should be displayed as a Genetec camera in SAFR. If it’s not, try closing and re-opening the SAFR Desktop Client.

   To get SAFR video feed overlays to be displayed on Genetec camera feeds, do the following:
   1. Open the SAFR Desktop Client.
   2. Select the Genetec version of the camera from the menu in the main windows (upper left). The word “Genetec” will be the first part of the camera name.
   3. After the client has successfully connected to the Genetec camera, video from the Genetec camera is displayed in the SAFR Desktop Client video feed window.
   5. Go to the **Monitoring** Task.
   6. Drag and drop a camera from the left side into one of the tiles in the middle.
   7. The camera feed should appear and show the same video feed overlays that are in SAFR.

   To connect additional cameras:
   1. Open another instance of the Desktop Client by selecting **File > New** on the client.
   2. Repeat steps 2-6 above.
   3. You can keep repeat this procedure to add overlays to as many video feeds as desired.

   **Note**: Most machines can only support up to 16 video feeds. If you want to connect more feeds than that, you’ll need to install the SAFR Desktop Client on additional machines.

   By default, the SAFR Desktop Client operates in the **Enrolled Monitoring** video processing mode and generates events and bookmarks into the Genetec system for every registered person. If you want a different mode for a given camera, choose a different mode from that camera’s **Camera window Mode Selector** menu.

### 2.3 Genetec Cardholders and SAFR People

Genetec cardholders can be registered to SAFR by doing the following:

1. Increase the Genetec Security Center setting for thumbnail size to make sure SAFR has access to high quality images to use for face recognition.
2. On the SAFR Desktop Client, click **Tools > Preferences > Genetec**.
3. In the Cardholders section click **Import Now...**. Pressing this button causes the following to occur:
• Each imported cardholder is given a Person Type based on their assigned group.
• If a cardholder has multiple group memberships, the cardholder group with the highest access privilege is used to define the group.
• After import, SAFR updates the events in Genetec to make sure Genetec has one event for each Person Type.

4. You can configure SAFR to import new cardholders every 24 hours by selecting the Import Every 24 Hours check box.

You can also register people to SAFR by using SAFR’s native functionality. For more information, see Importing and Registering People. Although people registered with SAFR are never synchronized to Genetec, you may want to register people to SAFR anyways when you want to add threats, concerns, or other registered people who may not be suitable as Genetec cardholders.

2.3.1 Edit Cardholder Data

You may want to edit people’s properties to better manage which events get triggered when that person is recognized. For example, setting a person’s ID Class to Concern or Threat triggers the corresponding alarms, while changing a cardholder group can allow you to trigger a VIP alert for specific cardholder groups. The most important people attributes are the Name, Image, Person Type, and ID Class.

Attributes should be edited through Genetec Security Center whenever possible. Person Type defines a person’s role (for example, staff or visitor) while the ID Class defines the risk level (No-Concern, Stranger, Concern, or Threat). Person Type and Image can be edited in Security Center by changing the cardholder group a person belongs to.

To edit these attributes, open Cardholder Management in Genetec Config Tool and update the desired users. After making changes, make sure to either manually synchronize users or set automatic synchronization as described previously in the “Register Cardholders”.

ID Class and any other attributes of a person must be edited in SAFR’s People dialog accessed through the Desktop Client > Tools menu. All cardholders imported from Genetec Security Center are assigned an ID Class of Normal. To edit the ID Class of a person, click Tools > People in the Desktop Client. The following window is displayed:

The Person Type and Name attributes can be edited by clicking their respective fields in the People window. To edit ID Class, in the People Edit dialog, double-click the user and choose the desired value from the ID Class menu as shown in the following image:
2.4 SAFR Events

You can use SAFR to generate events. When enabled on the Events Preferences page, events occur when a person appears in the view of a connected camera. When a person appears in the camera’s view, they’re immediately assigned an ID Class attribute, although that ID Class may change if the system successfully recognizes them and assigns them a more appropriate ID Class. The types of ID Classes are listed below.

- Unrecognizable: A face was detected but it wasn’t of sufficient quality to attempt recognition.
- Stranger. The person has been recognized, but they’re not in Genetec’s cardholder database nor in SAFR’s Person Directory.
- Registered person without a name.
- Registered person with a name.
- Registered person marked as a Concern.
- Registered person marked as a Threat.

There are several different combinations of the conditions that are triggered. The following image shows multiple events populated in the Genetec alerts panel. Clicking any of the events allows the video from that event to be replayed:
The following table lists the available events that are SAFR makes available to Genetec.

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Id Class</th>
<th>Named</th>
<th>Person Type</th>
<th>Condition</th>
<th>People Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrecognizable face detected</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Face detected but insufficient information for recognition</td>
<td>idClass=&quot;unidentified&quot;</td>
</tr>
<tr>
<td>Stranger detected</td>
<td>Stranger</td>
<td>N/A</td>
<td>N/A</td>
<td>Face detected but not found in registered people</td>
<td>idClass=&quot;stranger&quot;</td>
</tr>
<tr>
<td>Registered person detected without name</td>
<td>Normal</td>
<td>No</td>
<td>None</td>
<td>Registered person without name or person type assigned</td>
<td>idClass=&quot;noconcern&quot; &amp; person-Type=&quot;&quot; &amp;&amp; name=&quot;&quot;</td>
</tr>
<tr>
<td>Registered person detected with name</td>
<td>Normal</td>
<td>Yes</td>
<td>None</td>
<td>Registered person with name but no person type</td>
<td>idClass=&quot;noconcern&quot; &amp; person-Type=&quot;&quot; &amp;&amp; name=&quot;&quot;</td>
</tr>
<tr>
<td>Registered person detected of type</td>
<td>Normal</td>
<td>No</td>
<td>Defined</td>
<td>Registered person with person type but no name</td>
<td>idClass=&quot;noconcern&quot; &amp; person-Type=&lt;personType&gt; &amp;&amp; name=&quot;&quot;</td>
</tr>
<tr>
<td>&lt;name&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;personType&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Event Message</td>
<td>Id Class</td>
<td>Named</td>
<td>Person Type</td>
<td>Condition</td>
<td>People Attributes</td>
</tr>
<tr>
<td>---------------</td>
<td>----------</td>
<td>-------</td>
<td>-------------</td>
<td>-----------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Registered person detected of type <code>&lt;person-Type&gt;</code> with name <code>&lt;name&gt;</code></td>
<td>Normal</td>
<td>Yes</td>
<td>Defined</td>
<td>Registered person with person type and name</td>
<td><code>idClass=&quot;noconcern&quot; &amp;&amp; person-Type=&lt;personType&gt; &amp;&amp; name=&lt;name&gt;</code></td>
</tr>
<tr>
<td>Concern person detected without a name</td>
<td>Concern</td>
<td>No</td>
<td>None</td>
<td>Same as above for Concern</td>
<td><code>idClass=&quot;concern&quot; &amp;&amp; person-Type=&quot;&quot; &amp;&amp; name=&quot;&quot;</code></td>
</tr>
<tr>
<td>Concern person detected with name <code>&lt;name&gt;</code></td>
<td>Concern</td>
<td>Yes</td>
<td>None</td>
<td>Same as above for Concern</td>
<td><code>idClass=&quot;concern&quot; &amp;&amp; person-Type=&quot;&quot; &amp;&amp; name=&lt;name&gt;</code></td>
</tr>
<tr>
<td>Concern person detected of type <code>&lt;personType&gt;</code></td>
<td>Concern</td>
<td>No</td>
<td>Defined</td>
<td>Same as above for Concern</td>
<td><code>idClass=&quot;concern&quot; &amp;&amp; person-Type=&lt;personType&gt; &amp;&amp; name=&quot;&quot;</code></td>
</tr>
<tr>
<td>Concern person detected of type <code>&lt;person-Type&gt;</code> with name <code>&lt;name&gt;</code></td>
<td>Concern</td>
<td>Yes</td>
<td>Defined</td>
<td>Same as above for Concern</td>
<td><code>idClass=&quot;concern&quot; &amp;&amp; person-Type=&lt;personType&gt; &amp;&amp; name=&lt;name&gt;</code></td>
</tr>
<tr>
<td>Threat person detected without a name</td>
<td>Threat</td>
<td>No</td>
<td>None</td>
<td>Same as above for Threat</td>
<td><code>idClass=&quot;threat&quot; &amp;&amp; person-Type=&quot;&quot; &amp;&amp; name=&quot;&quot;</code></td>
</tr>
<tr>
<td>Threat person detected with name <code>&lt;name&gt;</code></td>
<td>Threat</td>
<td>Yes</td>
<td>None</td>
<td>Same as above for Threat</td>
<td><code>idClass=&quot;threat&quot; &amp;&amp; person-Type=&quot;&quot; &amp;&amp; name=&lt;name&gt;</code></td>
</tr>
<tr>
<td>Threat person detected of type <code>&lt;personType&gt;</code></td>
<td>Threat</td>
<td>No</td>
<td>Defined</td>
<td>Same as above for Threat</td>
<td><code>idClass=&quot;threat&quot; &amp;&amp; person-Type=&lt;personType&gt; &amp;&amp; name=&quot;&quot;</code></td>
</tr>
<tr>
<td>Threat person detected of type <code>&lt;person-Type&gt;</code> with name <code>&lt;name&gt;</code></td>
<td>Threat</td>
<td>Yes</td>
<td>Defined</td>
<td>Same as above for Threat</td>
<td><code>idClass=&quot;threat&quot; &amp;&amp; person-Type=&lt;personType&gt; &amp;&amp; name=&lt;name&gt;</code></td>
</tr>
</tbody>
</table>
2.4.1 SAFR Video Processing Modes

SAFR has different video processing modes that control what events are generated. Below is a short summary of the modes most relevant to Genetec Security Center integration. For a complete description, see Connect to a Video Feed in the SAFR Documentation.

- **Secure Access**: Only triggers events when cardholders and people registered in SAFR’s Person Directory are identified with a high degree of certainty. This mode is useful when the system is being used to manage physical access. (i.e. when the system is responsible for unlocking doors for authenticated people)
- **Secure Access with Smile**: Similar to Secure Access mode, except that registered people must smile in order to cause the system to grant them access.
- **Enrolled Monitoring**: Similar to Secure Access mode, but events are triggered at a lower recognition confidence level.
- **Enrolled and Stranger Monitoring**: Similar to Enrolled Monitoring mode, but events are also triggered for strangers.

2.4.2 Add and Configure Alerts

To trigger the alert as a result of a SAFR-generated event, do the following:

1. Open the Genetec Config Tool, and go to the System Panel.

![Genetec Config Tool](image)

2. Click the + icon to add a new alarm, and click the When menu. Type SAFR and press Enter to see the list of SAFR-enabled alarms.

![SAFR-enabled alarms](image)
3. Choose the desired entry from the list.

4. Under **From**, choose the camera you want to use to trigger the event. Under **Action**, choose a desired action. (e.g. Trigger Alarm)

5. Click **Save** when done.

SAFR Events can be tied to Actions which can then trigger an Alarm. Initially create an alarm you want to trigger, and then use Genetec Event-to-Action dialog to tie SAFR Events to any action that can be defined in the Genetec system (for example, Trigger Alarm).

**2.4.3 Add an Alarm**

An alarm can be used to make sure an important event is noticed. In this example, we show how to create an alarm that is triggered when someone who has been marked as a threat is recognized on one of the cameras. For more information on triggering events, refer to Genetec support documentation.

To create an alarm, do the following:

1. Open the Genetec Config Tool, and open the Alarms screen.
2. Click **Add Alarm**, and type a **Name** as shown in the following image:

3. Click **Save** to save the alarm.

2.4.4 Recommended Settings for Alarms
Properties task
Choose priorities based on circumstances and your organization guidelines (1=high, 255=low)
- Stranger: 100 (If infrequent, set high)
- Concern: 50
- Threat: 10

Video display option
Set to Live to see the live view when alarm loads video
Playback may be useful for short events where the subject may have walked off the screen by the time the video loads
- If playback mode, set to at least 4 seconds to avoid buffering

Advanced task
Auto-Acknowledge: Good for stranger events; enter the number of seconds to stay in the view before returning to the view you were on prior to the event
Choose color to match the SAFR colors (add ref to section in manual that describes colors)
Reactivate threshold: Suppresses additional alarm if another similar alarm triggered within this time
- Adjust as needed for use case.

2.4.5 Trigger Macros
When SAFR is configured to Include Event Details in reported events, highly customized actions can be programmed using macros in the Genetec system. Event details include all information associated with the detected face (e.g. Name, Person Type, Age, Gender, Sentiment, etc.). For more information on macros, refer to the Genetec support documentation.

2.5 Troubleshooting Tips
Note: When closing SAFR, use the Quit SAFR option on the File menu. Closing SAFR using the Window Close button will cause you to lose the SAFR state settings and connected cameras for that window.

- If detection or recognition is poor (not many faces found or recognized), make sure the Genetec video feeds are set for a sufficiently large frame size.
- If events are not being triggered, check the following:
  - Permissions are set correctly on Event-to-Actions.
  - Make sure the applicable SAFR Video Processing Mode is selected.