



# VAIDIO CORE 9.0.0

**CORE FUNCTIONS USER GUIDE** 

#### **OVERVIEW**



Vaidio Core offers Search, Alert, and Statistics for all videos and camera streams.

- Search: Search for objects (e.g., Person, Truck, Wild Animal) in all selected footage and live streams.
- ☐ Alerts: Set rules, triggers, and receive real-time alerts on any device.
- □ Statistics: Generate business insights from large-scale video data over time.

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## **SEARCH**

- Overview
- Dashboard
- Search Filters: Source and Time
- Search Filters: Object Types
- Search Filters: Camera ROI
- Detail Screen

#### **OVERVIEW**

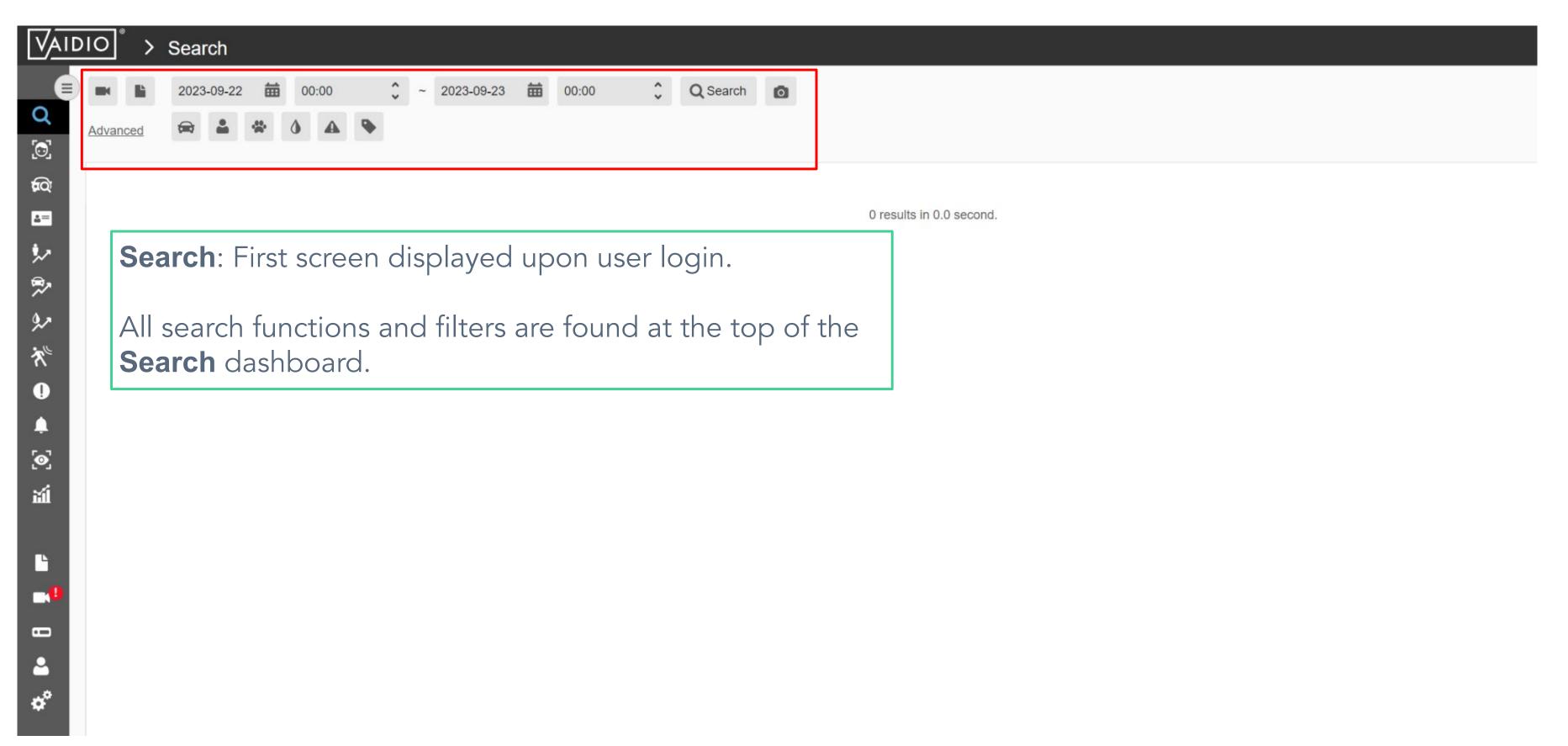


#### Search in Vaidio Core:

- Available with ALL analytic engines.
- Begins object detection once a video source (e.g., camera, file) is connected (see <u>Vaidio Core Setup</u> <u>Guide</u> for information on configuring camera(s) and managing object detection profile(s)).
- ☐ Stores metadata for users to search detected objects.
- Auto-enabled when cameras are activated (see Object Detection User Guide for more information).

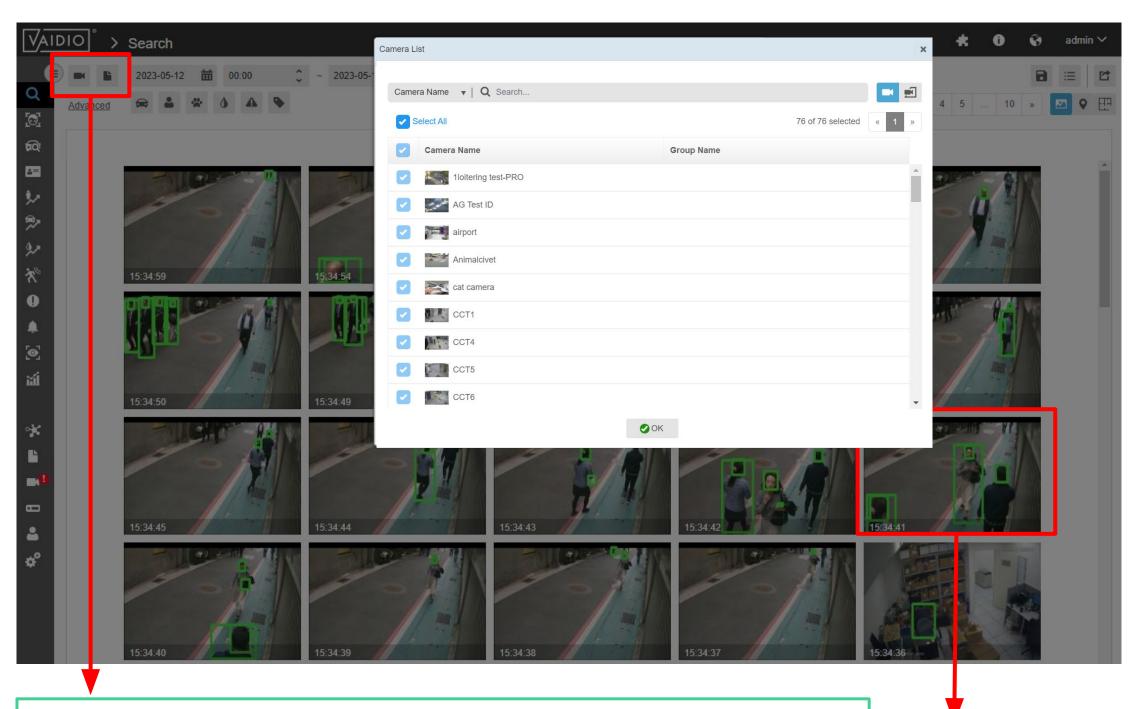
# **DASHBOARD**





### **SEARCH FILTERS: SOURCE AND TIME**





Set Time Period for Search:

- Ensure the file's **upload date/time** falls within the selected range.
- ☐ Verify the correct **time zone** is set in **System** > **Time** and syncs with the **camera/NVR** (if connected).



Click the **camera icon** to upload an image from local drive and search for **detected objects**.

Note

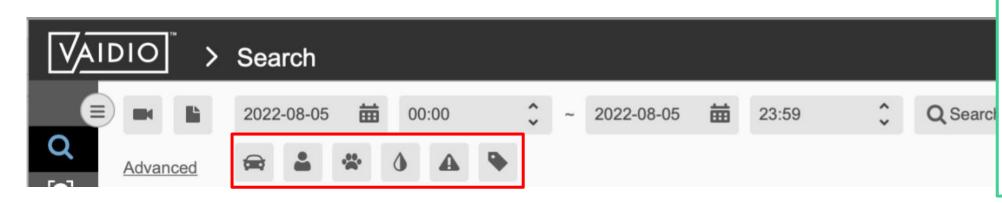
Works best with **one** to **two** clear objects (e.g., a person in red).

- Select the **Camera icon** to select/deselect cameras on which to perform **Search**
- Select the **File icon** to perform **Search** on uploaded files
  - ☐ Default: Search through all cameras (live streams)

Click on a **thumbnail** to view the **Detail screen** of the detected event.

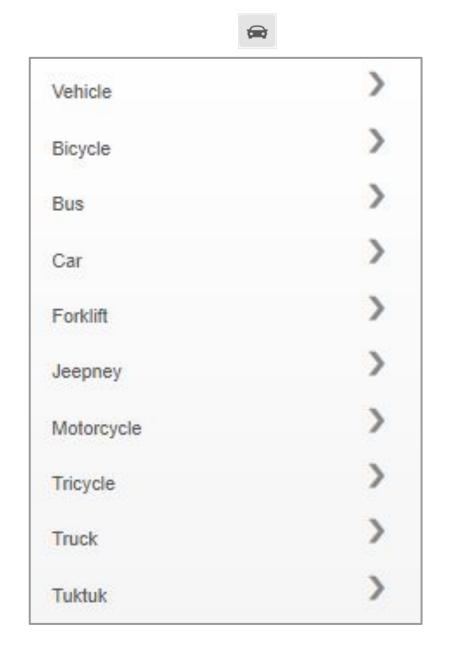
### **SEARCH FILTERS: OBJECT TYPE**

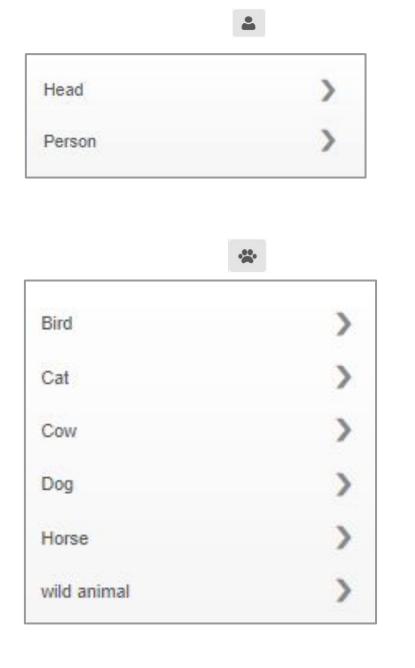


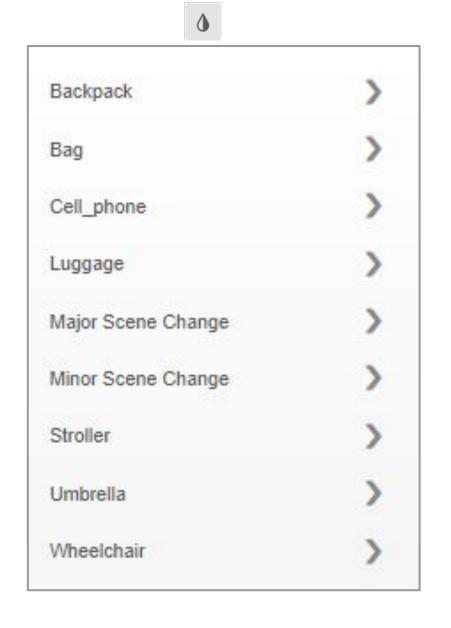


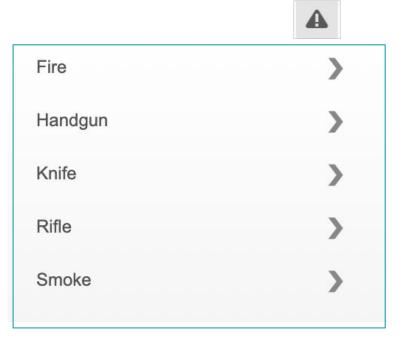
Click category icons to search Object Types & attributes: Vehicle, People, Animal, Object, Dangerous Object.

Available **object types** depend on the **Al Model(s)**. Below are those in the **default PowerModel**.







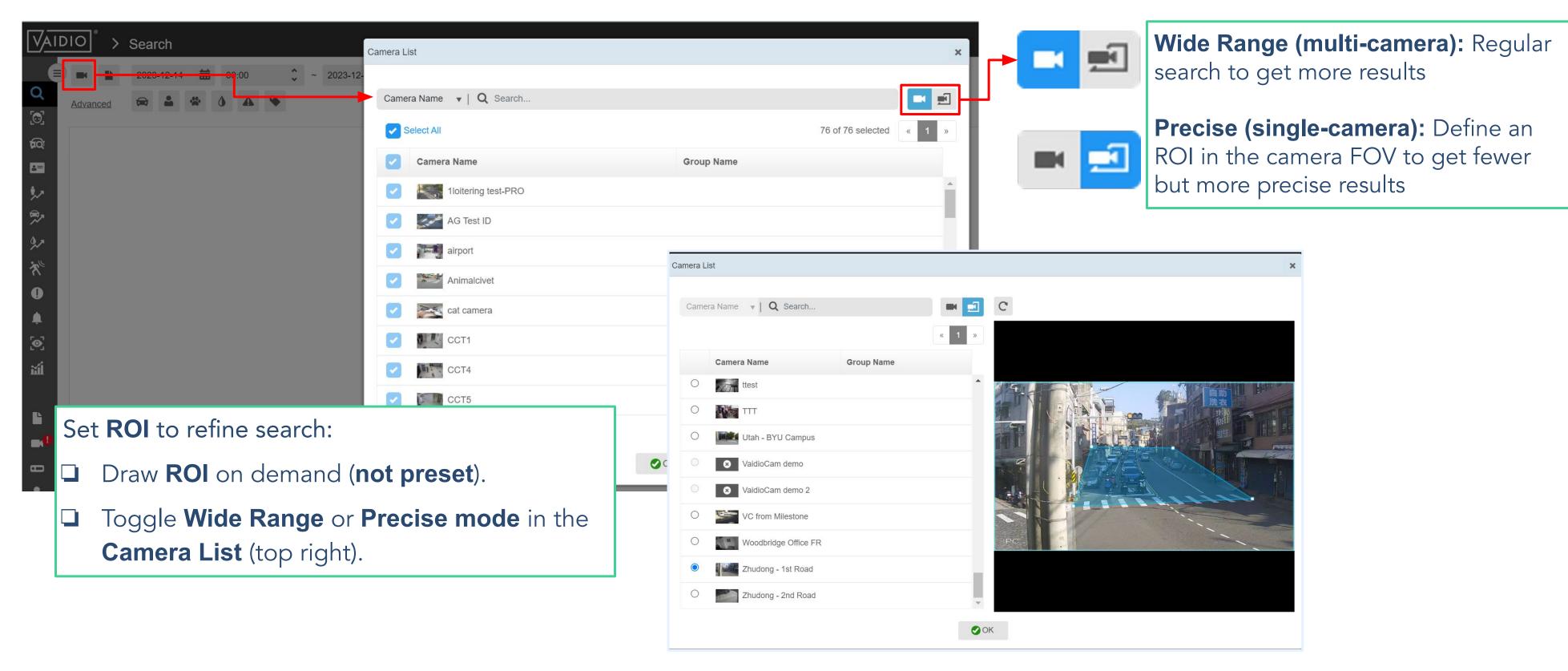


For more information on uploading additional Al Models, see the <u>Core Setup User Guide</u>.

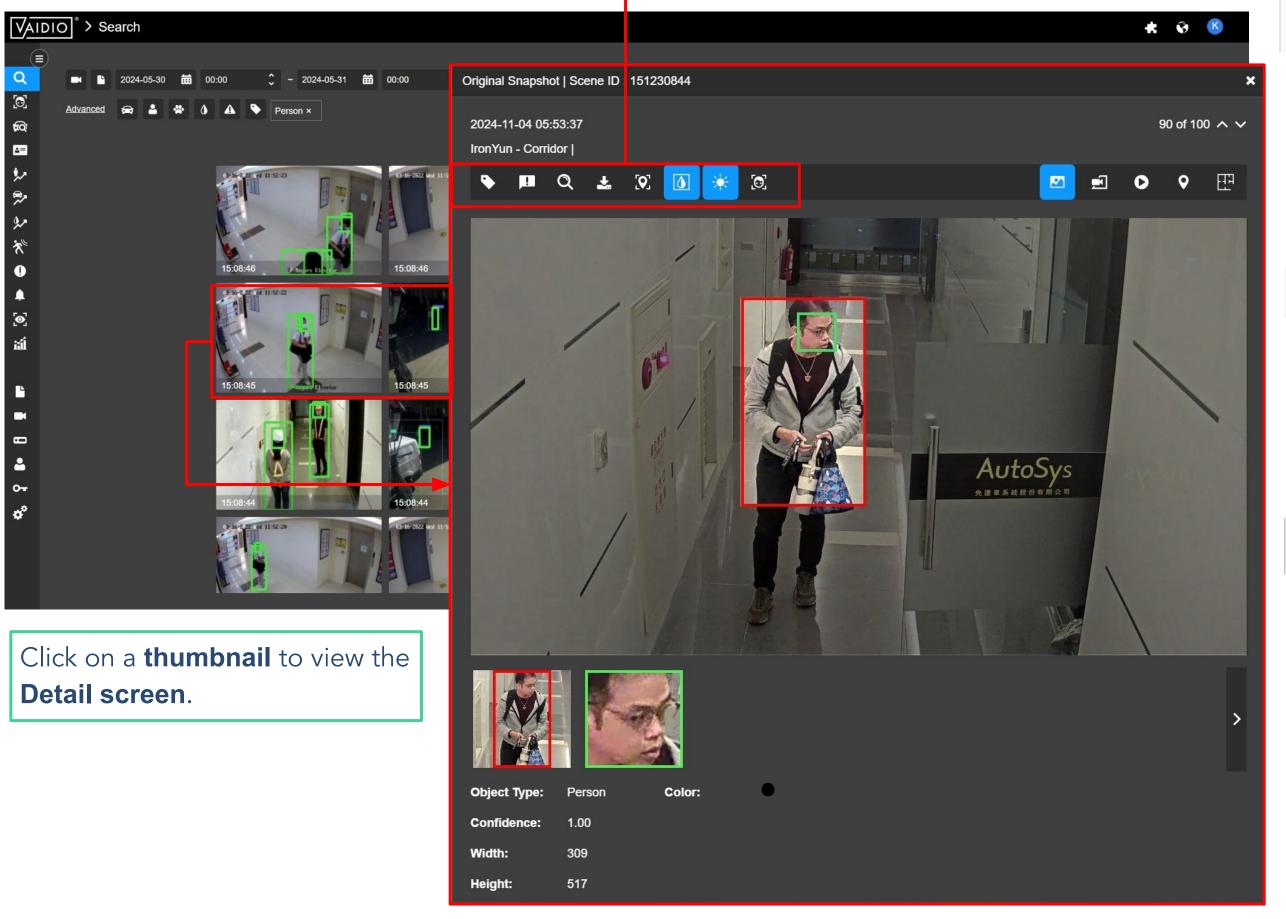
Return to <u>Search</u>

### **SEARCH FILTERS: CAMERA ROI**





#### **DETAIL SCREEN**



#### **Icons:**

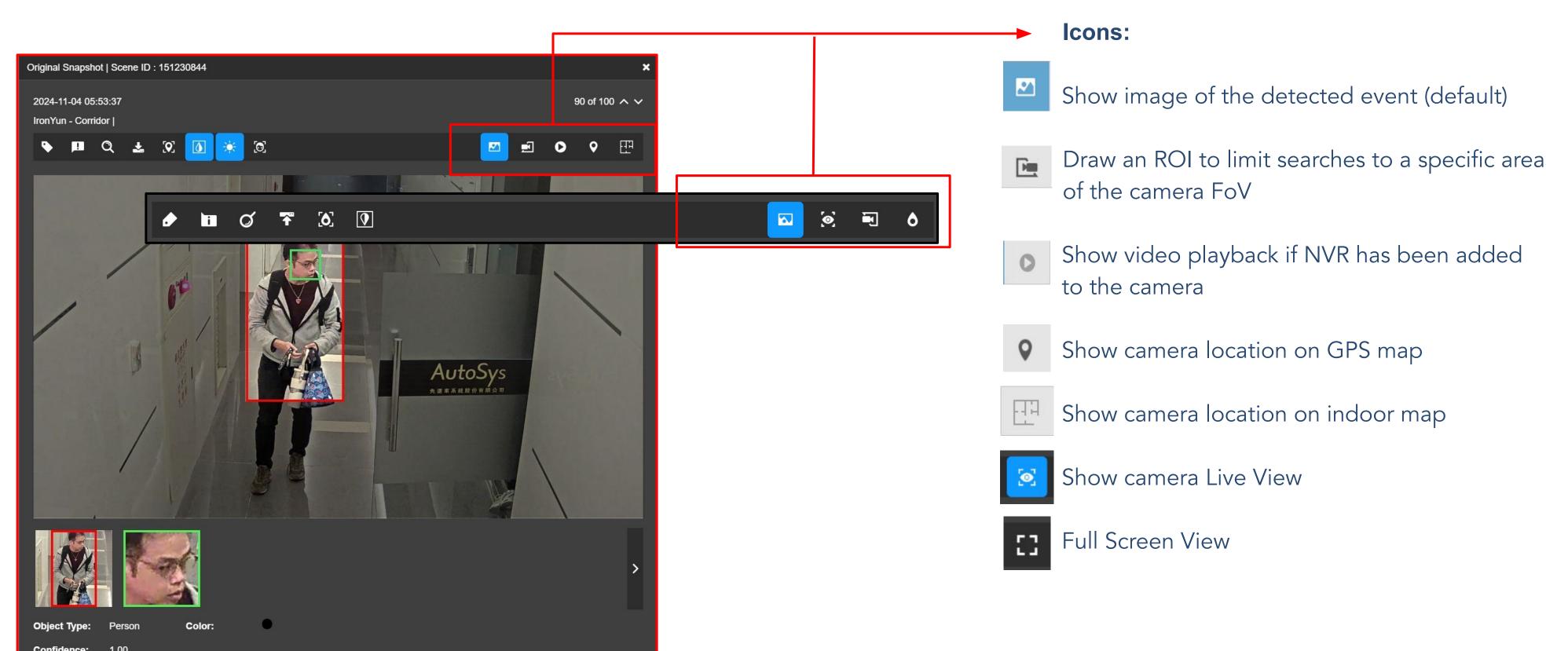


- Add <u>hashtag</u> to search for the detected event in the future; e.g., #caraccident
- False Detection Report if connected to internet (see Report False Detection for more information)
- Enlarge an area in the image
- **▲** Download the image
- Show Cross Camera Tracking
- Show the bounding box of the detected objects
- Show spotlight mode (focus on object of search)
- Conduct Face Search for an individual
- Blur/unblur faces/people in the image

Return to <u>Search</u>

# DETAIL SCREEN (CONT.)

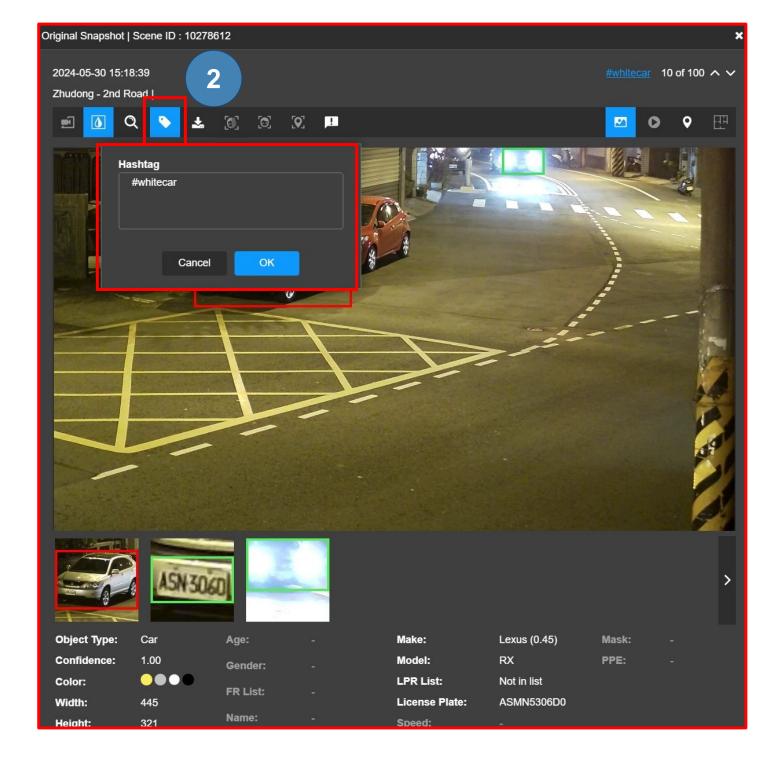


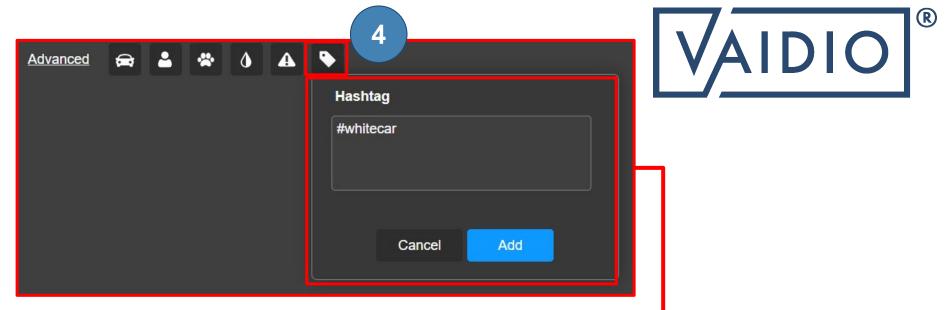


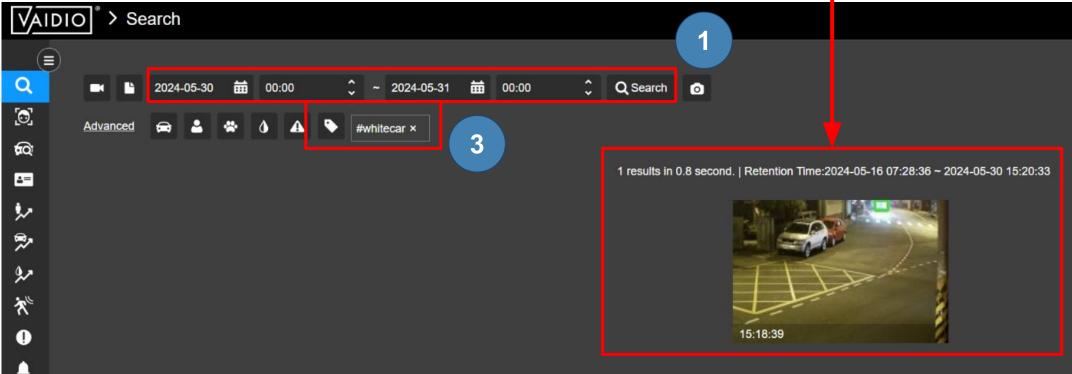
#### **SMART TAG**

Add a **Smart Tag** to the **detected events** (results) to **bookmark** a **specific situation**.

Smart Tag(s) can be added to all analytic results, including object search, intrusion, face recognition, abnormal event, etc.







- 1. **Search Dashboard** > search for an **event** > select the **event thumbnail** to access its **Detail screen**.
- 2. Select **Hashtag** and enter a **name** for the **Smart Tag** (e.g., #whitecar) to **bookmark** the **specified event**.
- . From the Search Dashboard, select Hashtag > Add the Smart Tag name.
- 4. Click Search to return ONLY results with the same tag (e.g., #whitecar).

Return to **Search** 



## **ALERTS**

- Overview
- Alert Types
- Add New Alert
- Alert Scheduling

- Copy Existing Alert Trigger Action
- Alert Dashboard
- Alert History
- Alert Acknowledgement

#### **OVERVIEW**



Vaidio Core enables multiple real-time alerts via Alert Rules.

- ☐ View live alerts from the Alerts Dashboard and search past alerts in History.
- Create Alert Rules for ANY configured Al Engine (see <u>Vaidio Core Setup Guide and applicable Al Engines guides</u> for configuration instructions).
- Send alerts via email, HTTP/HTTPS, Vaidio Mobile App, or 3rd-party VMS/NVR.
- Enable Al Engines before adding alerts.
- Update alerts if adding new analytics or cameras.

#### **ALERT TYPES**



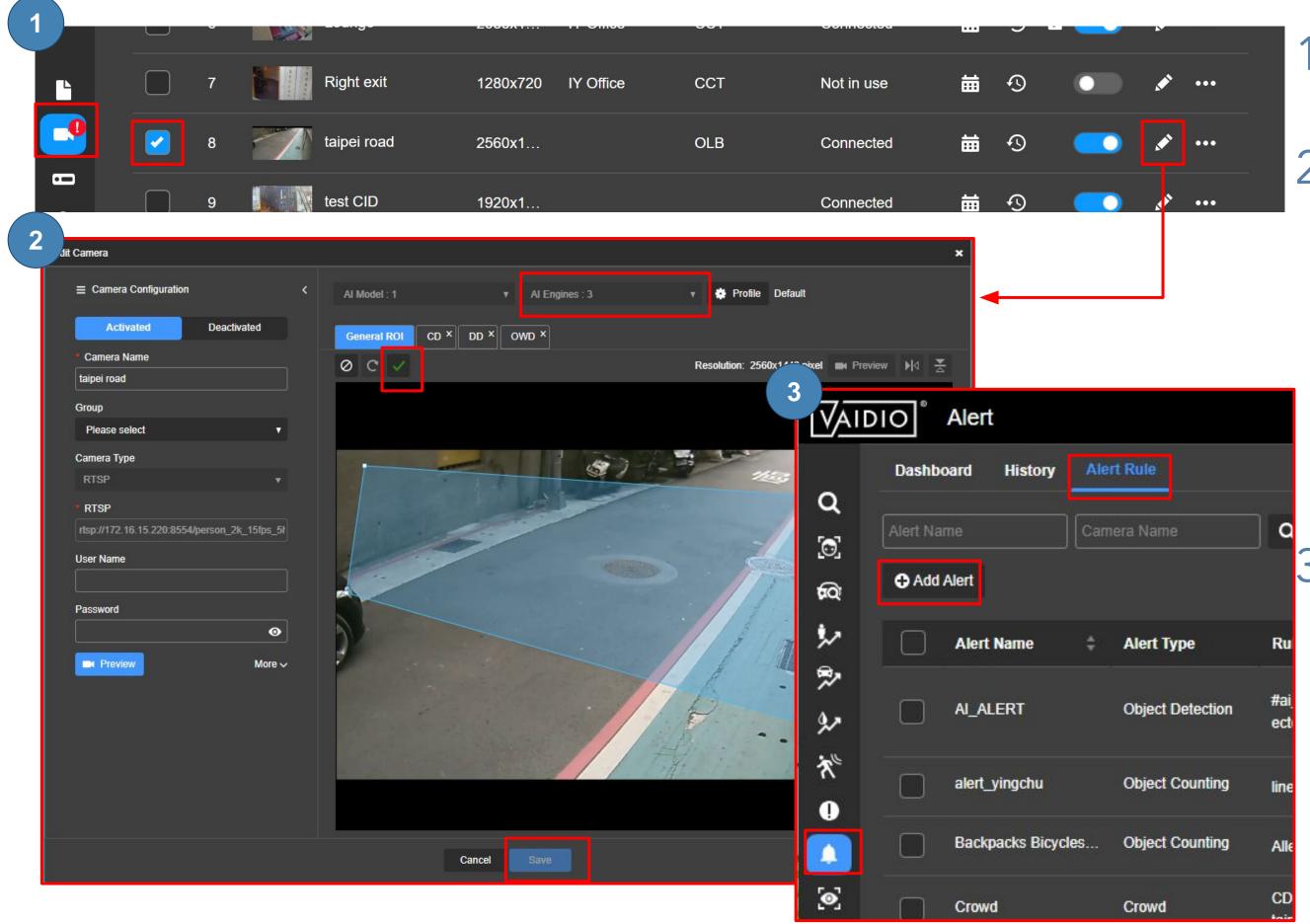
Create alerts for the following analytics (in alphabetical order):

- Camera Abnormal: Disconnected, Blurry/Blocked/ Repositioned; Camera Resolution Change
- 2. **Crowd Detection:** Tracks large crowds (>30 people) in a camera field of view (FoV)
- 3. **Dwell:** Sub-engine of Object Tracking (OT) counts how long a user-specified object type stays in the ROI and creates an event alert when a specified object type stays in the ROI for more/less than a user-defined time length
- 4. **Face Recognition:** Tracks when a person's face is in an existing list and/or not in any list (unidentified person)
- 5. Intrusion Detection
- 6. **License Plate Recognition:** Tracks when a vehicle license plate is in an existing list and/or not in any list (unidentified vehicle)
- 7. **Object Counting (OC):** Sub-engine of OT applies when the number of a specified object type exceeds or is less than a specified value

- 8. **Object Detection (OD):** Detects all object types and attributes (e.g., color, quantity, etc.)
  - a. OD ROI is the General ROI
  - b. Set alerts for objects with/without others (e.g., forklift without person). See the <u>Object Detection User Guide</u> for details
- 9. **Object Left Behind (OLB):** Detects unattended objects in a defined area for a set time (1–3,600 seconds)
- 10. **Object Wrong Direction (OWD):** Sub-engine of OT triggers an alert when an object moves in a user-defined direction, which may be incorrect or restricted
- 11. **Person Fall:** Tracks when a person lies down, crouches, squats, kneels, or is in other abnormal positions on the floor for more than 10 seconds
- 12. Scene Change: Applies to an anomaly in the field of view

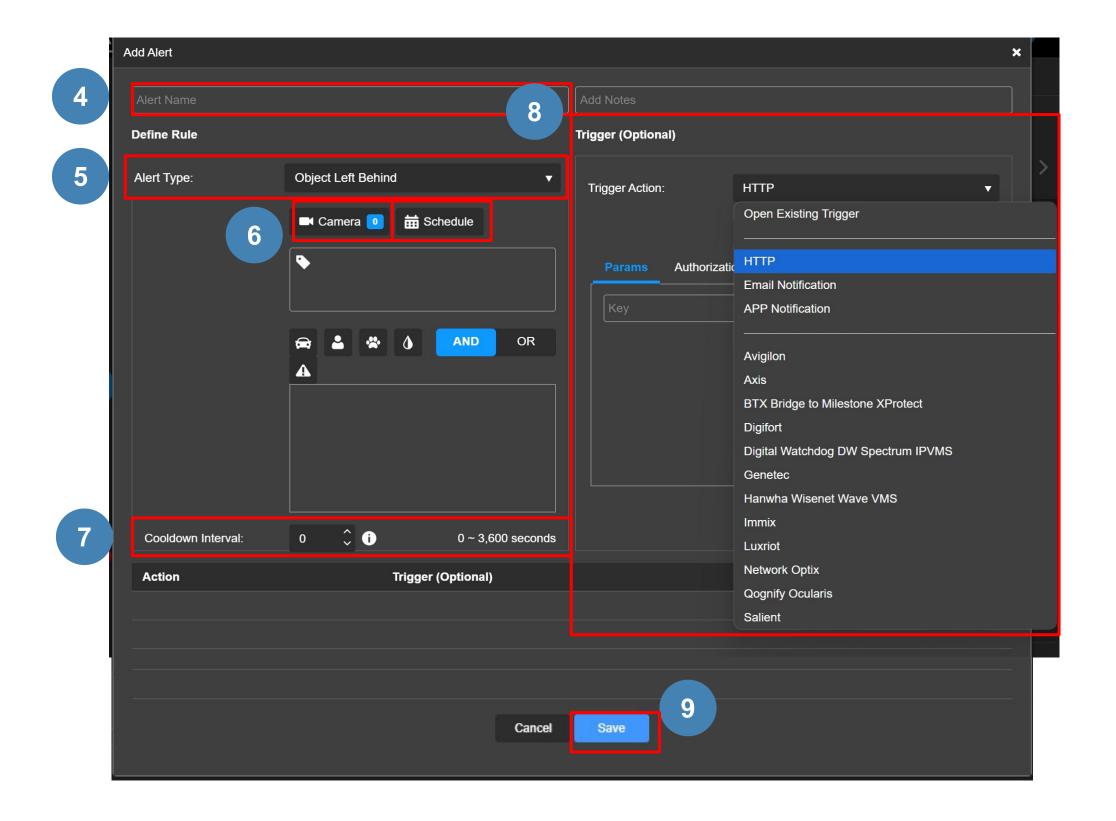
#### **ADD NEW ALERT**





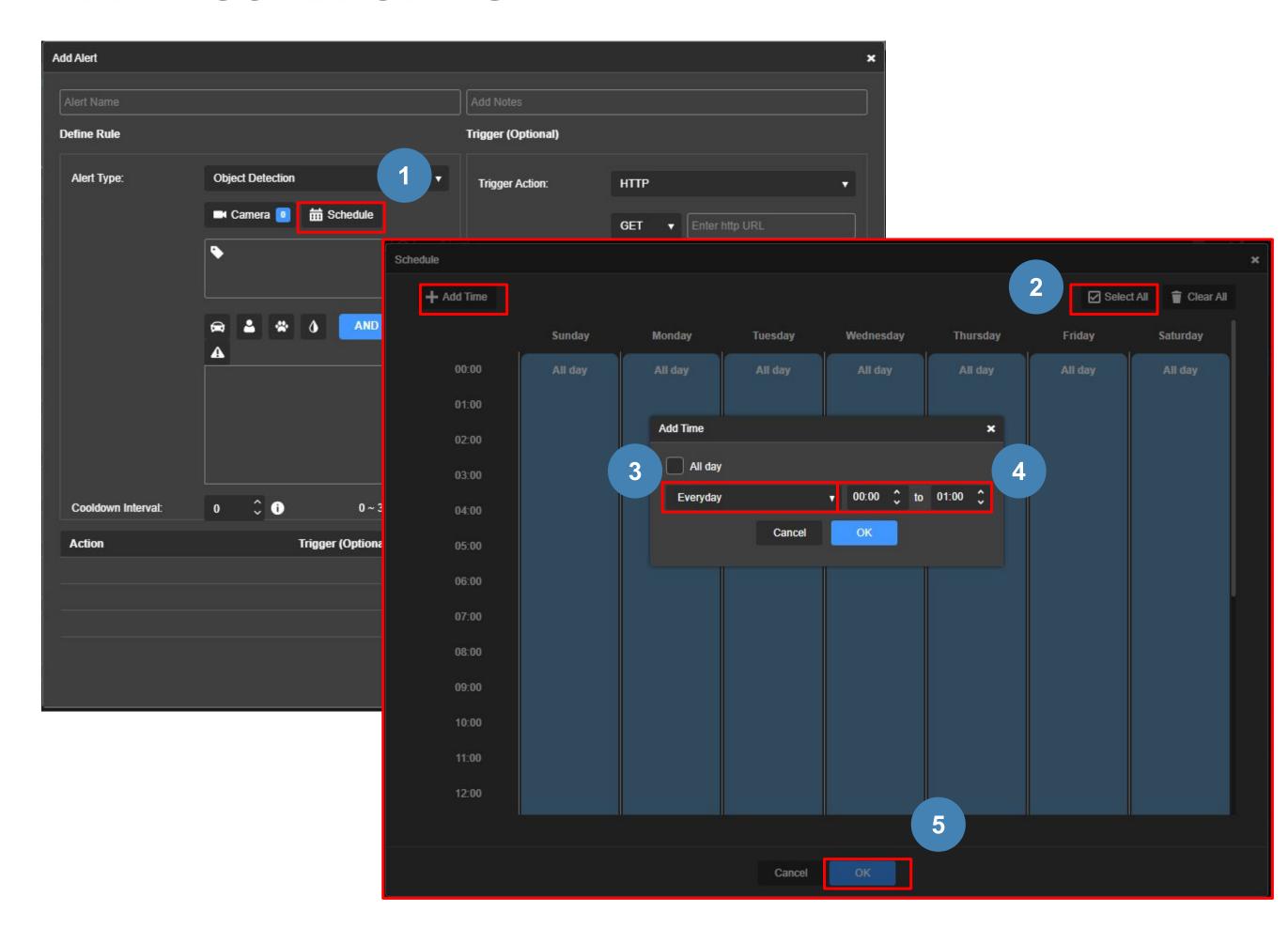
- 1. Camera > Edit to configure camera(s) for Alerts.
- 2. From the Al Engine
  drop-down menu of the
  Edit Camera screen,
  select/deselect Al Engines
  and draw an ROI(s). Select
  the checkmark to complete
  ROI(s), then click Save.
- From the sidebar
   navigation, select Alert >
   Alert Rule > Add Alert.

# **ADD NEW ALERT (CONT.)**



- 4. Enter an Alert Name.
- 5. Select <u>Alert Type</u> from the drop-down and define rules for **object types** and **scenarios.** Include:
  - □ Camera Abnormal Type for Camera Abnormal
  - ☐ List for FR/LPR
  - ROIs for ID, OLB, etc.
  - ☐ Line Sets for OT
- 6. Select camera(s) and ROI(s).
- 7. Optionally, <u>Schedule</u> alerts or set an optional **Cooldown Interval** (0 3,600 seconds).
  - A Cooldown Interval is the time between alerts.
- 8. Configure optional **Alert Triggers** to push the alert to an external device (e.g., Video Management System, mobile phone, etc.). See <a href="Copy Existing Alert Trigger Actions">Copy Existing Alert Trigger Actions</a> for information on copying **existing** <a href="Trigger configurations">Trigger configurations</a> to newly created **Alerts**.
- 9. Click **Save** to enable the alert.

#### **ALERT SCHEDULING**



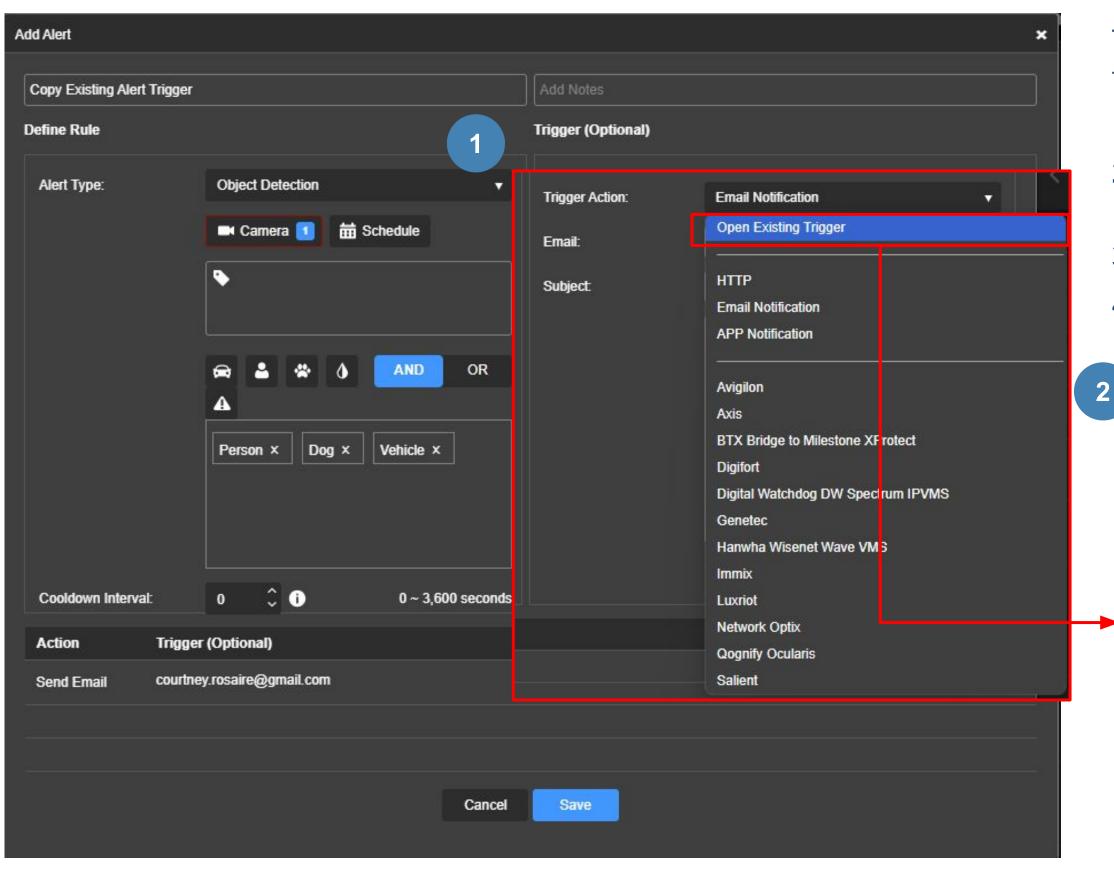
- 1. Click **Schedule** to display a weekly Schedule.
- 2. Select one or more days, or click Select ALL.
- 3. Alternatively, select days from the **Add Time** drop-down menu.
- 4. Set a **timeframe** or check the **All Day** box to configure alerts to run all day.
- 5. **OK** > **OK** to enable scheduled alerts.

Note

Alert Scheduling is optional.

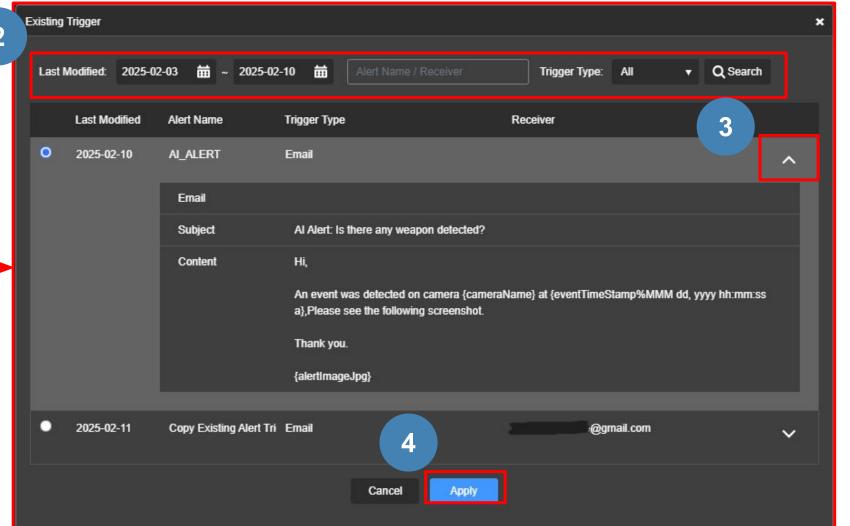
### **COPY EXISTING ALERT TRIGGER ACTION**





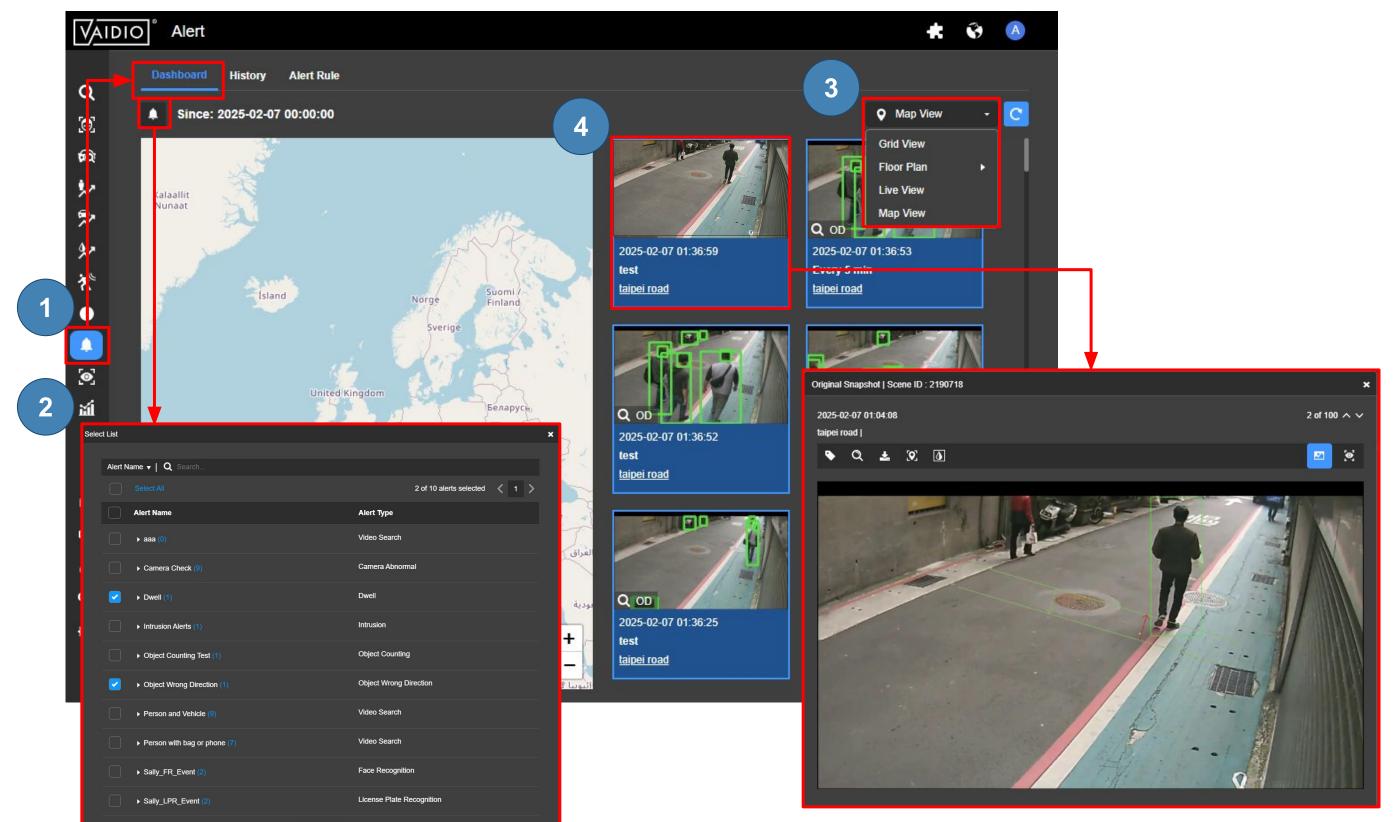
To reuse a configured alert trigger (e.g., email or HTTP trigger) for a new alert:

- 1. Add Alert > Trigger (Optional) > Open Existing Trigger.
- 2. Select a trigger by **Last Modified** date, **Alert Name**, or **Trigger Type**.
- 3. Click the arrow associated with the listed trigger for details.
- 4. Click **Apply** to assign the trigger.



Return to Alerts

### **ALERT DASHBOARD**





#### Alert Dashboard:

Displays alerts received in real-time.

- 1. Alerts > Dashboard.
- 2. From the **Select Alerts** screen, filter by **Alert Name** or **Type**, select an **Alert Name(s)**, then click **OK** to display filtered events.
- 3. Select a **View** from the drop-down to display on the left-hand side of the screen (e.g., **Grid**, **Floor Plan**, **Live**, or **Map View**).
- 4. Select a **thumbnail** to view a <u>Detail Screen</u> screen that provides additional information on the event alert.

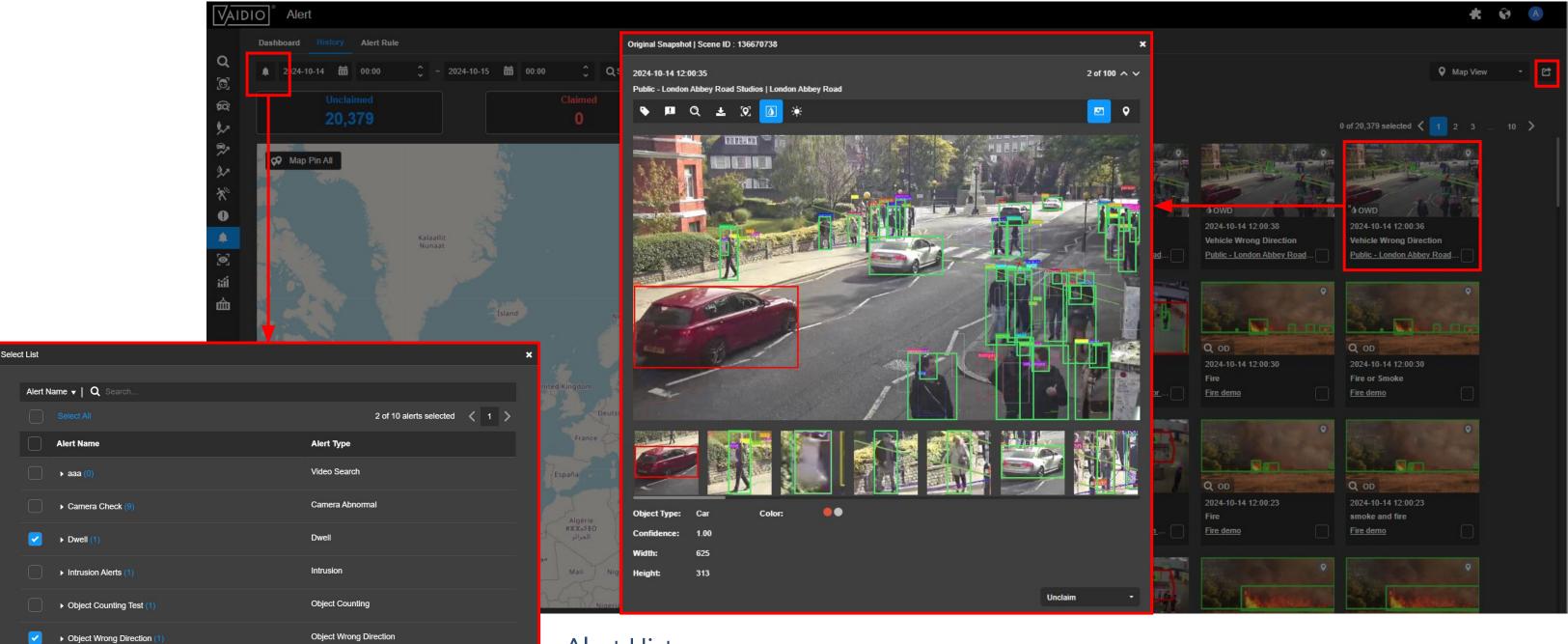
Alert Display Modes (Default: Map View):

- Grid View: Snapshot alerts, no map
- Floor Plan: Alerts on an indoor map (See Vaidio Core Setup Guide for map setup)
- Live View: Live feed of the selected camera

## **ALERT HISTORY**

▶ Sally\_LPR\_Event (





Alert History:

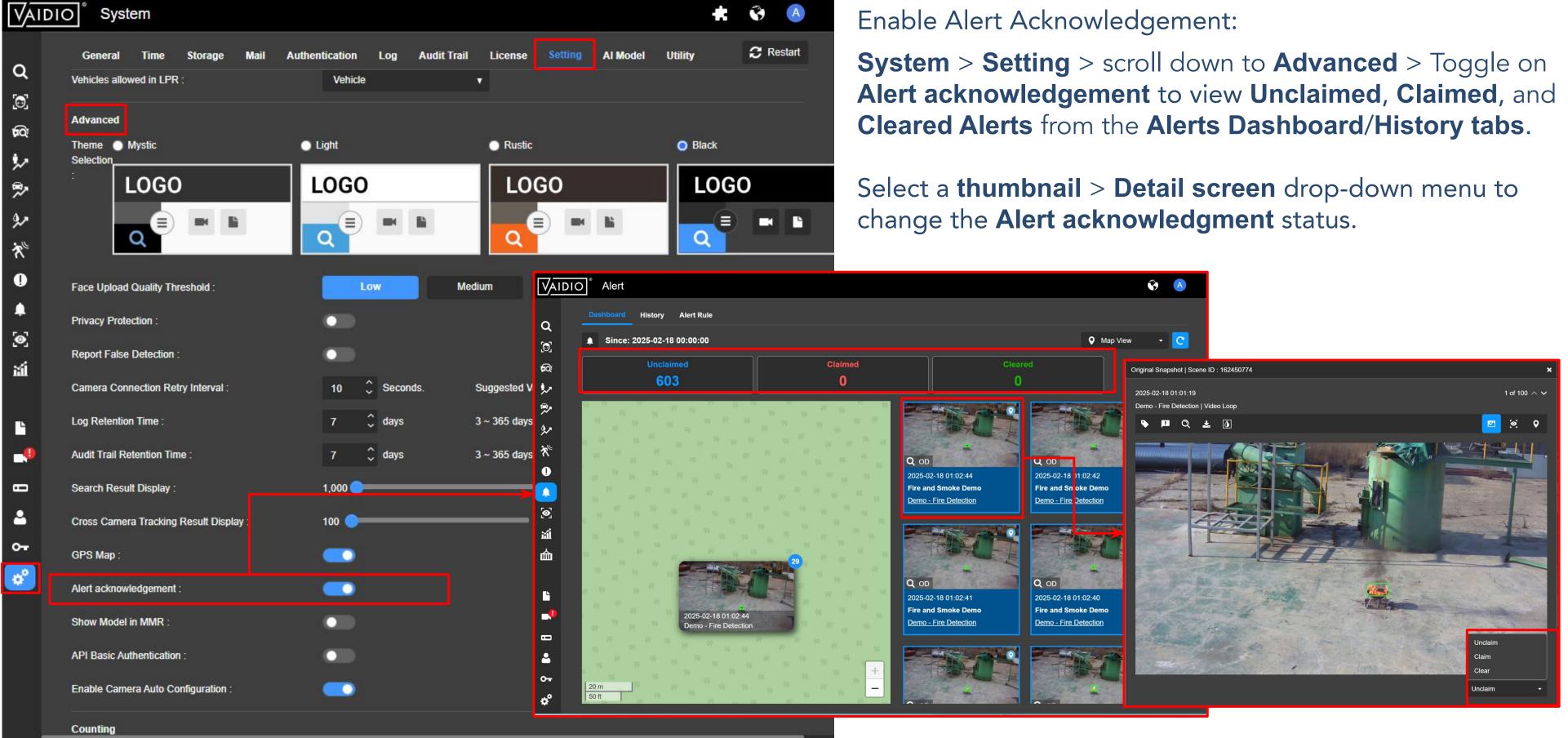
- Displays historical alerts.
- Users can filter by date/time, Alert Name, or Type, view details via selecting thumbnails, and export selected alerts to .xlsx format.

Note

See Alert Dashboard and Detail Screen for more information.

### **ALERT ACKNOWLEDGEMENT**

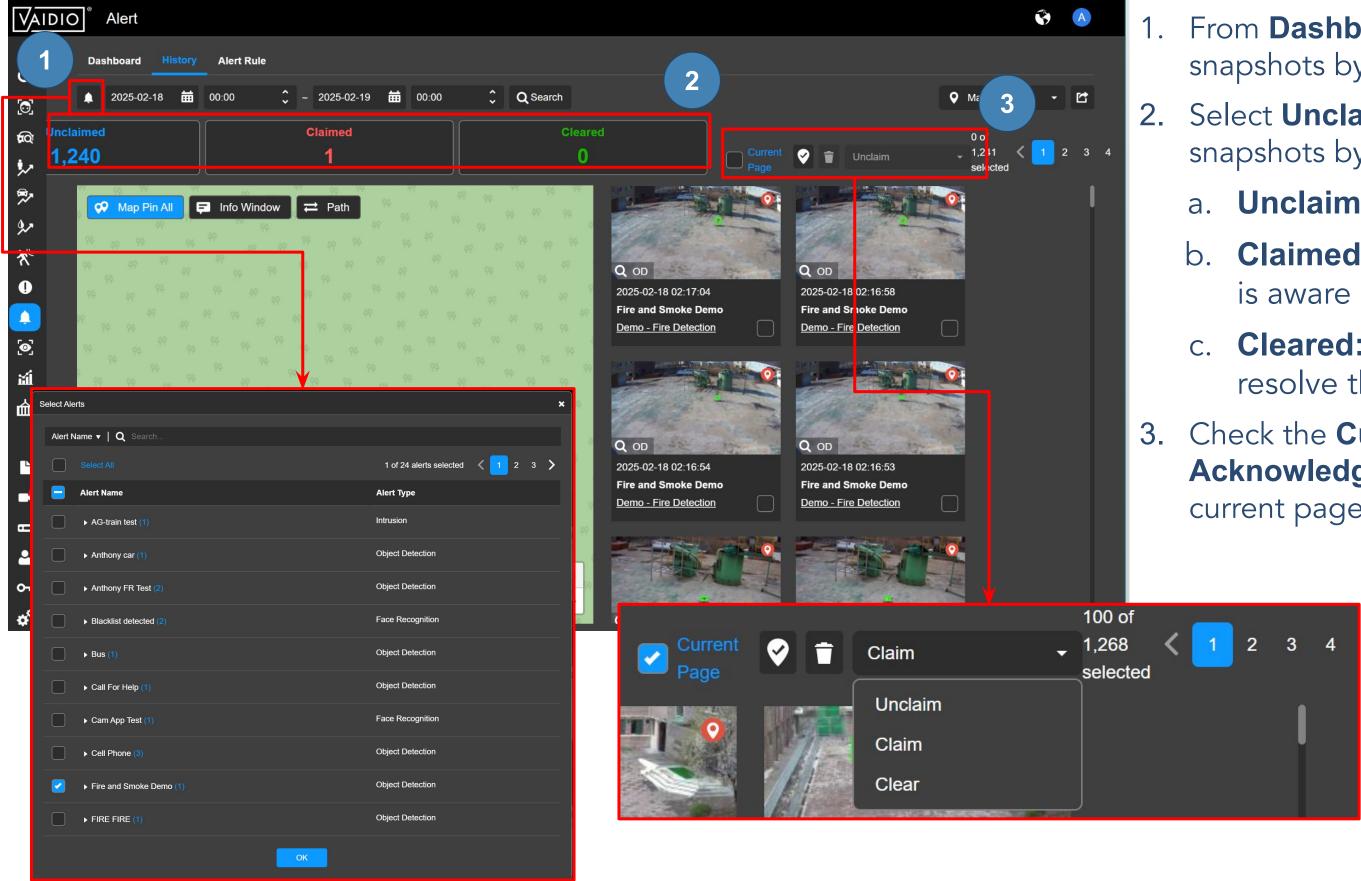




Return to Alerts

# **ALERT ACKNOWLEDGEMENT (CONT.)**





- 1. From **Dashboard** or **History**, click **Select Alerts** to filter snapshots by one or more **Alert Rules**, then click **OK**.
- 2. Select **Unclaimed**, **Claimed**, or **Cleared** to filter snapshots by **Alert Acknowledgement** status:
  - a. Unclaimed: Alerts that are unread
  - b. **Claimed:** The user has acknowledged the alert and is aware of the situation
  - c. **Cleared:** Necessary actions have been taken to resolve the alert
- 3. Check the **Current Page** box, then select an **Alert Acknowledgment** category to apply to ALL alerts on the current page. Deselect individual snapshots if needed.



# **STATISTICS**

- Overview
- Heatmap
- Demographics Age & Gender
- Demographics Chart Types

#### **OVERVIEW**

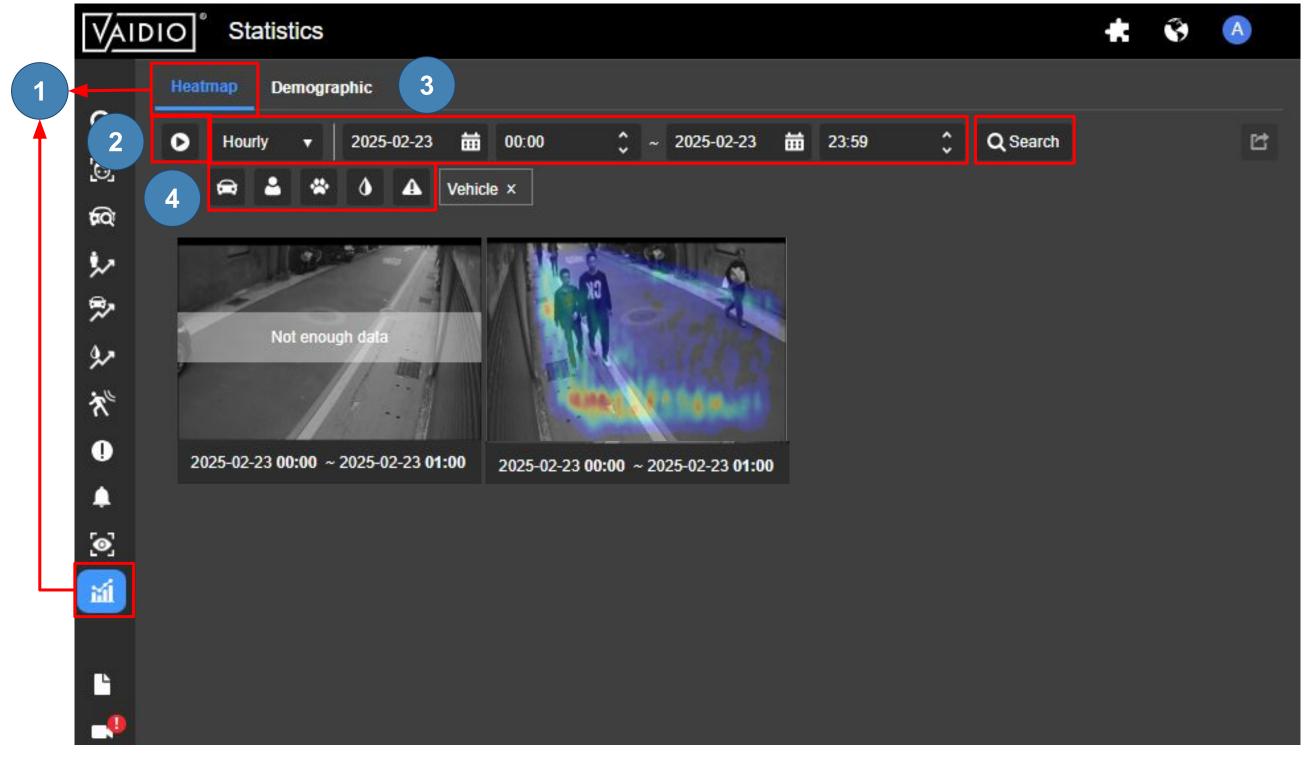


Video Core supports heatmaps and statistics for detection results.

- Heatmap: Visualizes object data from an Al model on one video source for up to 24 hours (hourly or aggregate).
- Demographics: Age & Gender stats require a separate license (available with or without Face Recognition AI).

#### **HEATMAP**





#### Heatmap Function:

Generates heatmaps for selected object types over a **24-hour** period. Results display in the **Hourly** or **Aggregated** (one image per **24-hour** period) mode.

- 1. Statistics > Heatmap.
- 2. Click the **Play** icon to select a **camera** from a list of available cameras configured for **Heatmap**, then click **OK**.
- 3. Select from the drop-down menu, **Hourly** or **Aggregated** and select a **timeframe**.
- 4. Select one or more object types.
- 5. Click **Search** to display heatmap images.

#### Notes

- Selected object types display next to their icons.
- Select up to **five** object types.
- One video source per search (e.g., the real-time stream from a camera or an uploaded video).
- Videos should be longer than **one hour** for more accurate results.

### **DEMOGRAPHICS - AGE & GENDER**

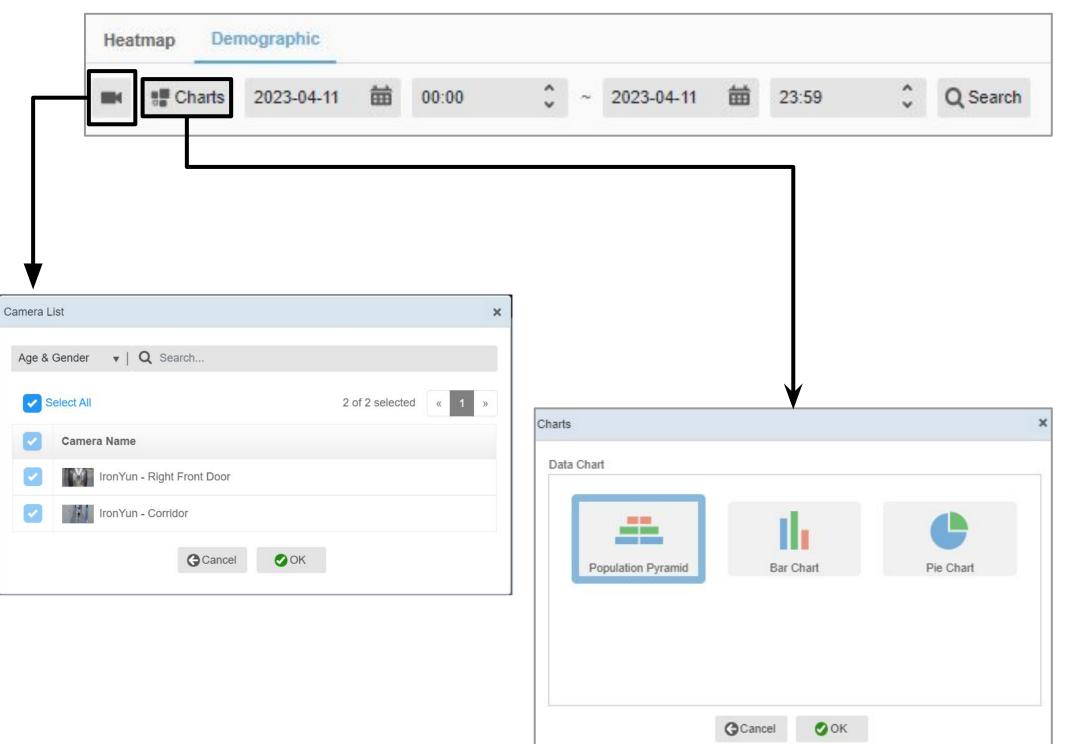


In **Statistics** > **Demographic**, select the **Camera icon** to select the **video source(s)** 

- ☐ Cluster: Select Vaidio server(s) in network
  - **Default:** ALL Vaidio servers
- Age & Gender: Display all cameras with Age & Gender activated
  - Counts duplicates (i.e., the same person appearing in several frames is counted several times).
- FR Age & Gender: Display only cameras with both Face Recognition (FR) and Age & Gender
  - Counts fewer duplicates

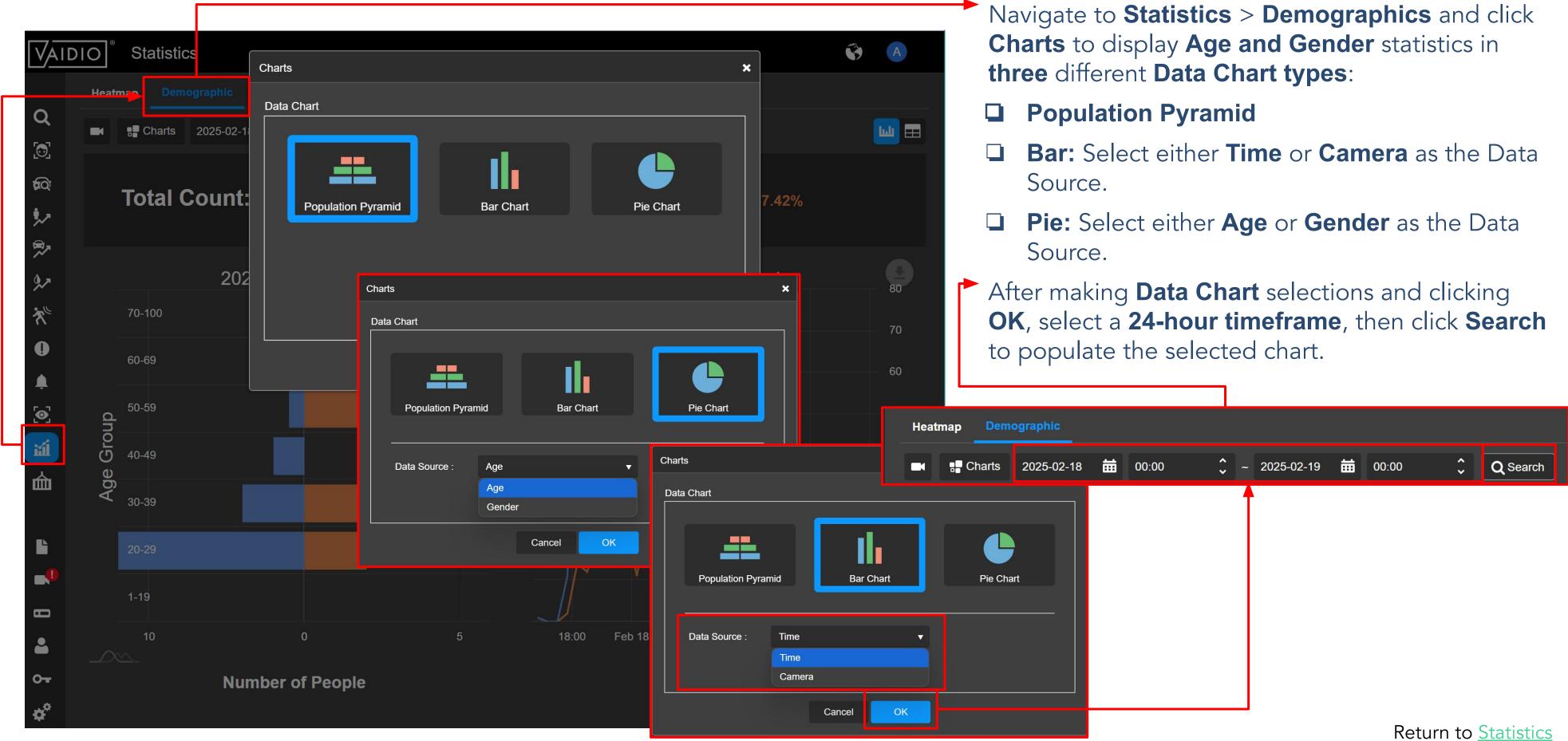
#### Note

Demographic stats may have duplicates unless deployed at a choke point (e.g., check-in kiosk) with custom check-in software.



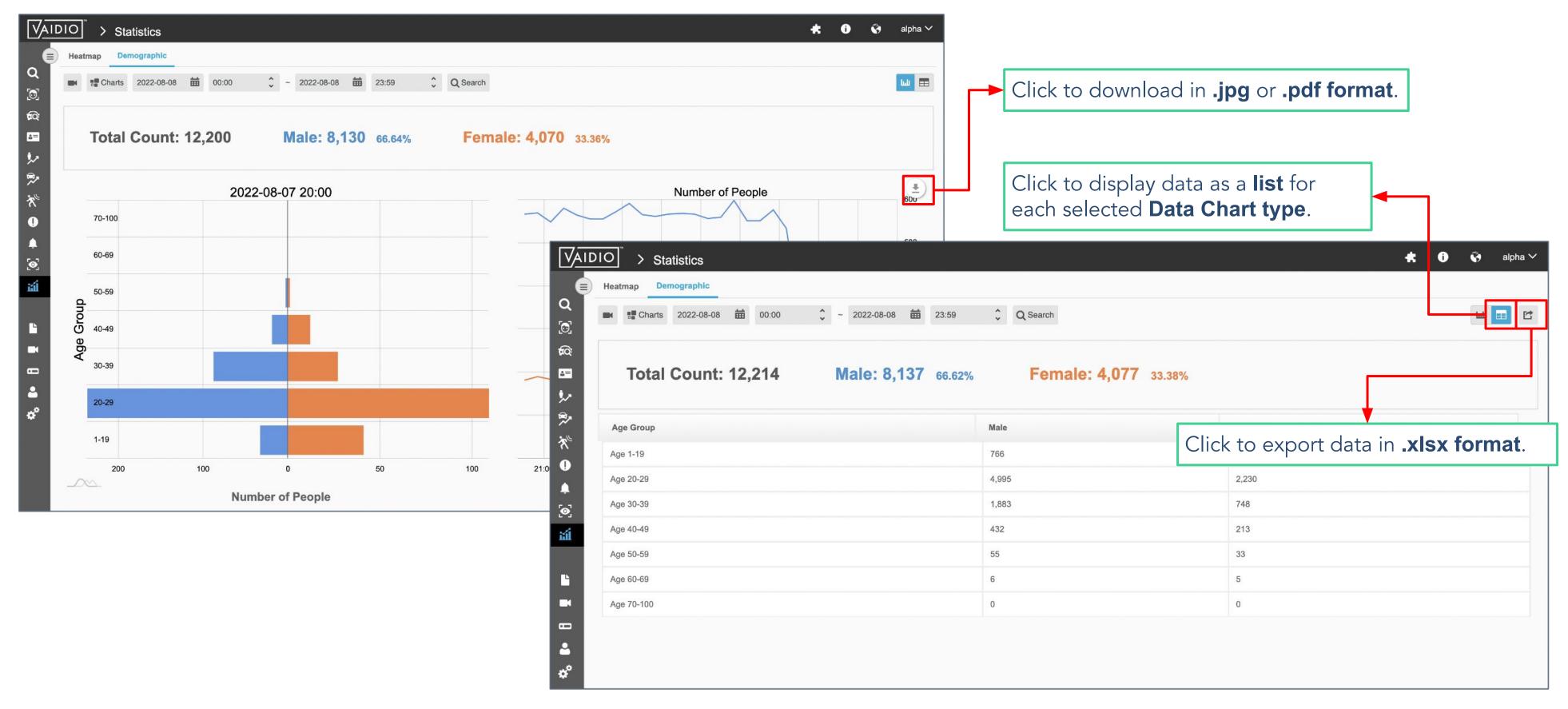
### **DEMOGRAPHICS - CHART TYPES**





# **DEMOGRAPHICS - CHART TYPES (CONT.)**





Return to **Statistics** 

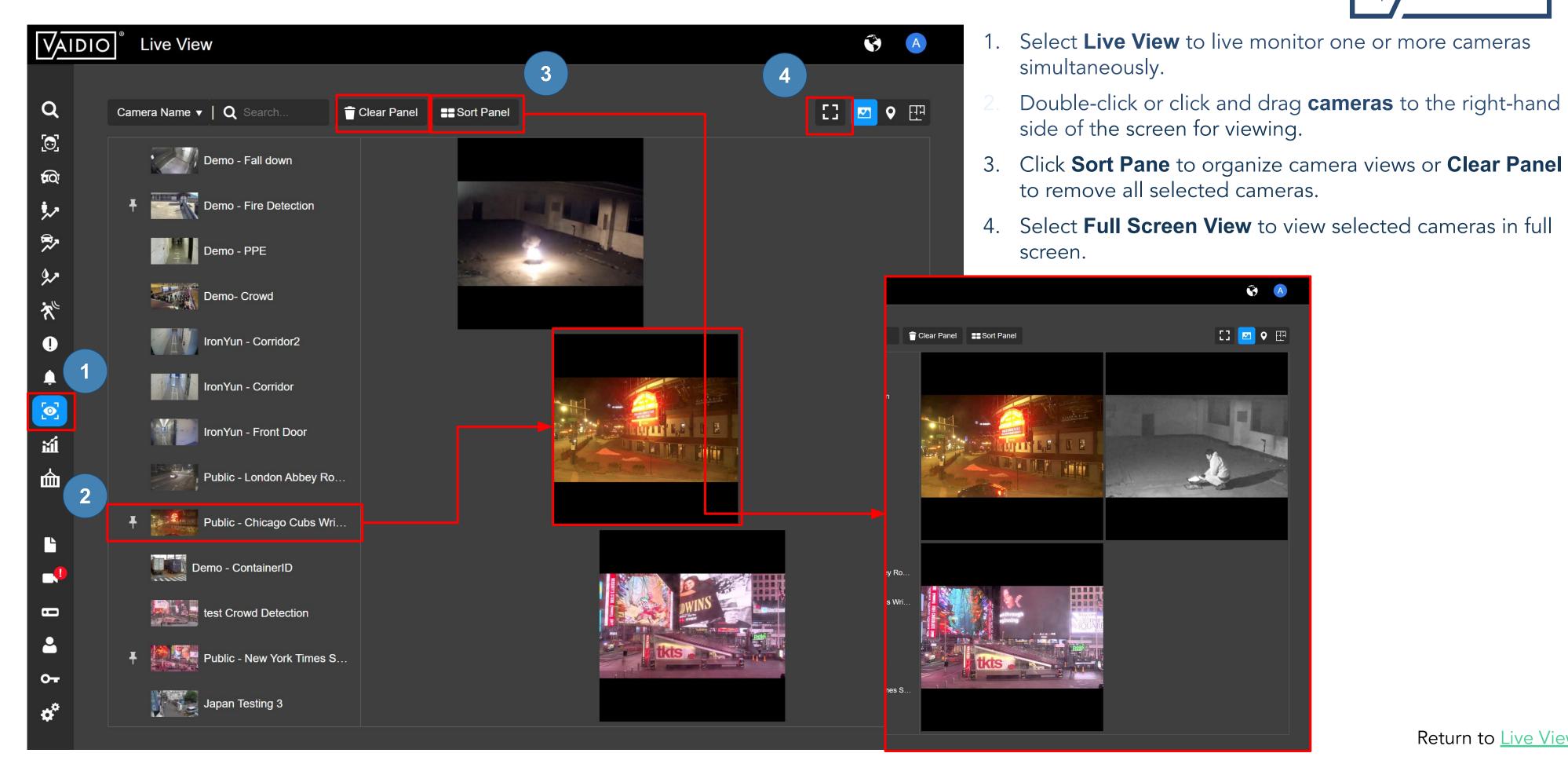


# **LIVE VIEW**

- Live View Select & Sort Cameras
- Live View Map & Floor Plan Views

## LIVE VIEW - SELECT & SORT CAMERAS

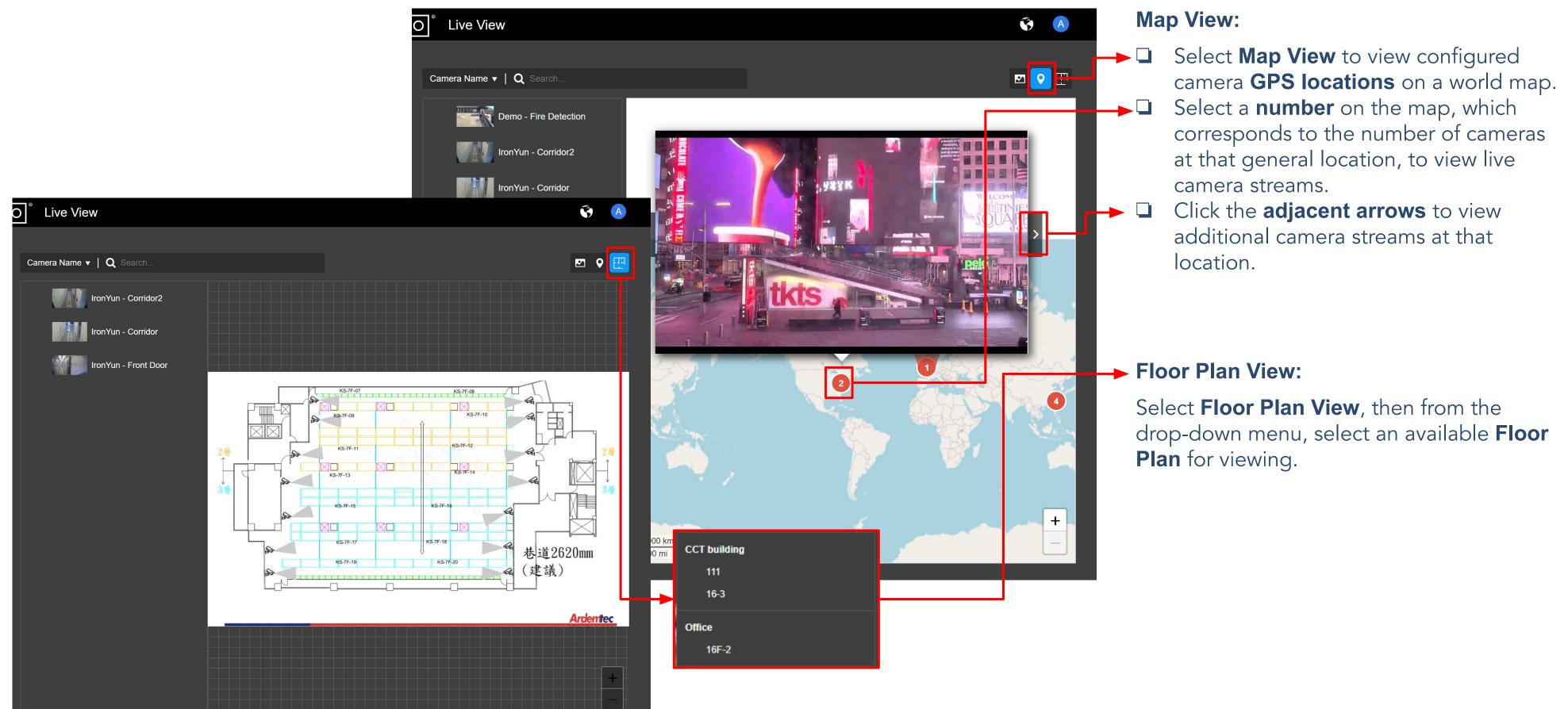




Return to <u>Live View</u>

## **LIVE VIEW - MAP & FLOOR PLAN VIEWS**







# **FALSE DETECTION REPORT**

- Overview
- Enable False Detection
- Report False Detection

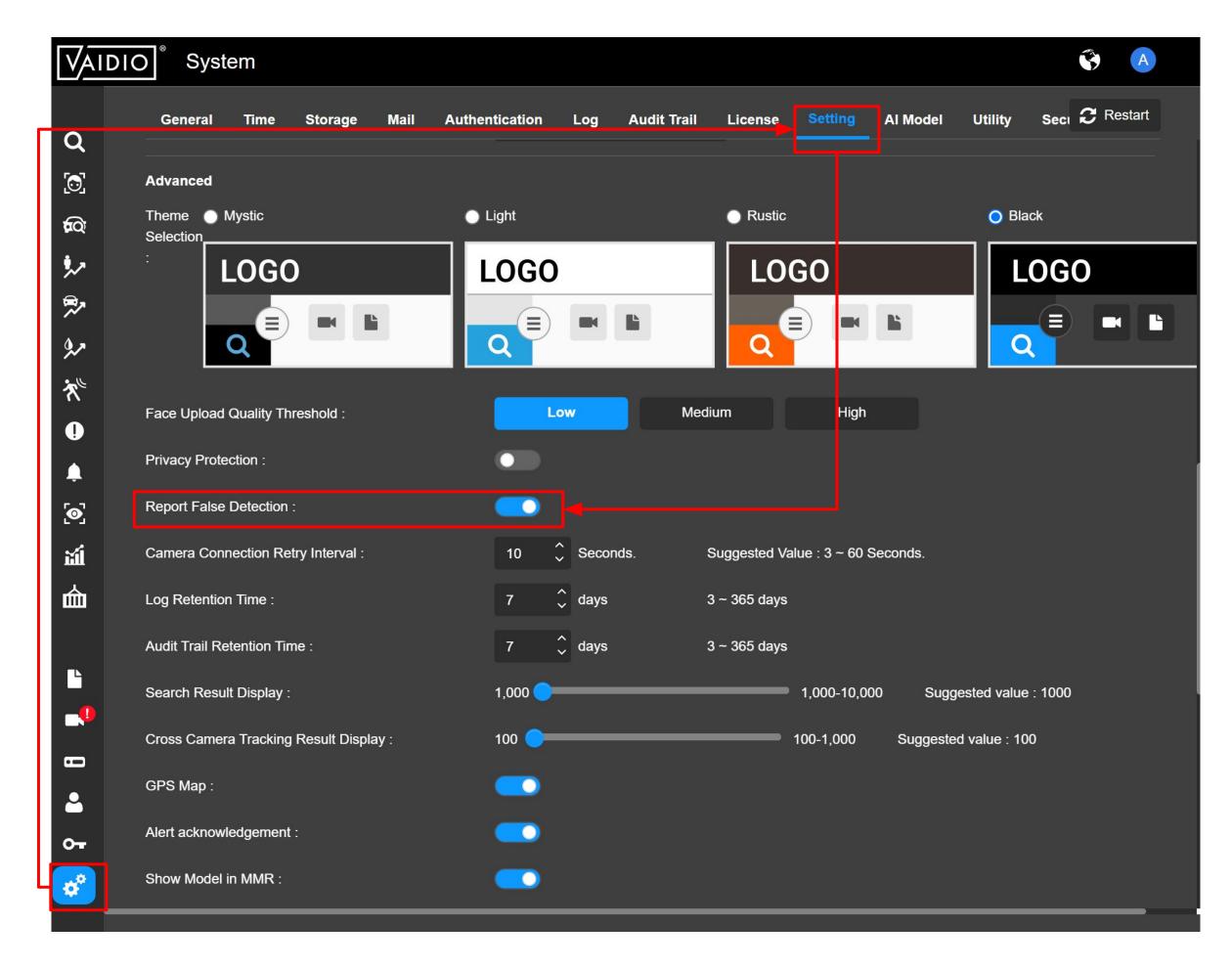
### **OVERVIEW**



The False Detection Report helps improve accuracy by reporting incorrect detections to Vaidio.

- Applies to ALL analytics.
- Submit reports via the **Detail Page** in any dashboard (e.g., Search, LPR, Alert, etc.).
- Internet connection REQUIRED to send snapshots to Vaidio.

### **ENABLE FALSE DETECTION**

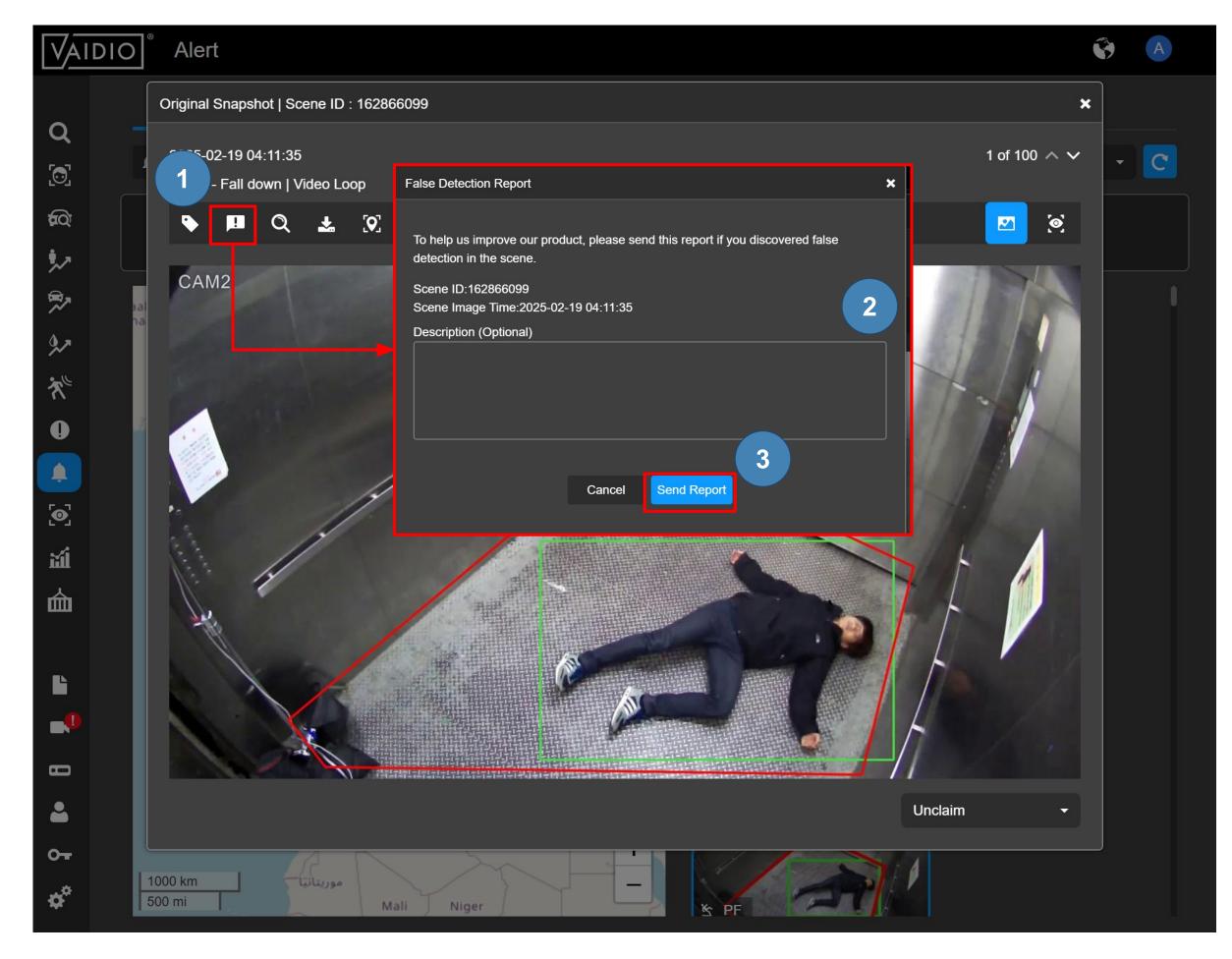




To report false detection results, the feature must be enabled in **System** > **Setting** > **Advanced** section > **Report False Detection** and toggle **ON**.

## REPORT FALSE DETECTION





- 1. From any **Detail Page** screen (e.g., Alert, Intrusion, Abnormal, etc.), click **Report False Detection** to access a **False Detection Report** popup.
- 2. Enter a **Description** of the false detection event (Optional).
- 3. Click **Send Report** to log the report.

#### Note

An **internet connection** is required to log **False Detection Reports**.

### **SUPPORT**



For technical support, please go to the Support Portal to fill out a ticket.

For additional guides and training, please visit the Vaidio Partner Portal.

Request access at <u>vaidio.ai/support</u> to register for an account.





# **THANK YOU**

For more information, visit <u>Vaidio</u> <u>Support Page</u> on the Partner Portal