



GUARDIAN

Indoor Shooter Detection System

GUARDIAN SYSTEM EXACQVISION®
INTEGRATION GUIDE

VERSION 1.0

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1.0	1 Jun 17	Initial Release	RE	All
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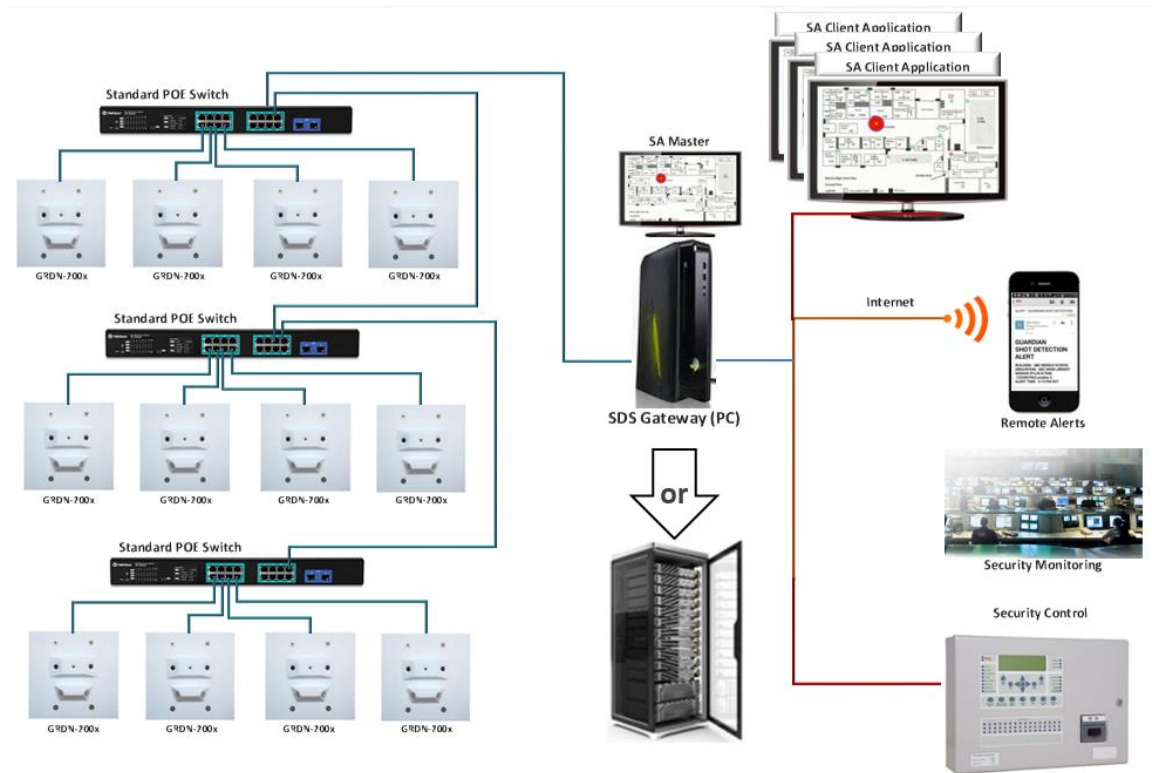
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Contents

1	Guide Overview	4
2	Understanding the Integration	5
2.1	GUARDIAN SENSOR EVENTS	5
2.2	SOFTWARE COMPONENTS	6
2.2.1	<i>exacqVision® Interface</i>	<i>6</i>
2.2.2	<i>Guardian Output Connection</i>	<i>6</i>
3	Configuring the exacqVision® Application Integration	7
3.1	EXACQVISION® APPLICATION CONFIGURATION	7
3.2	ACTIVATE EVENT MONITORING FROM LIVE VIEW PAGE	14
4	Validating the Integration	16

1 Guide Overview

The Guardian Gunshot Detection System can interface with the exacqVision® Video Monitoring System. This Integration Guide, provides the configuration steps to interface to the exacqVision® Application. The integration between the systems is designed to be easy to complete and is described fully in this guide.



Note: The Guardian Gunshot Detection System to exacqVision® Application integration detailed in this guide was done using exacqVision® **Version 7.8.1.98221**

2 Understanding the Integration

2.1 Guardian Sensor Events

Each Guardian Sensor can report four different types of events. The events vary in importance from a Gunshot Detection (immediate action and location information are important) to a Health/Environment issue (maintenance action). The four specific events are shown below.

1. Gunshot Detected: A shot in the near vicinity has been detected. In this case, the event requires immediate action and some level of physical location; as an example, a zone within the building is important information.
2. Tamper Detected: The sensor has detected an attempt to disable or degrade its performance. In this case, an action is required but conveying the exact physical location within the building is not crucial.
3. Sensor Offline: The system has detected a sensor that is not operating. In this case, a maintenance action is required but the immediate physical location information is not as important, because the maintenance engineer can use other tools -- for example, the Guardian SA -- to determine the specific sensor and its location.
4. Sensor Degraded: The sensor has detected an internal issue or/and an environmental issue, which could cause it to operate abnormally. Similar to the Offline event, a maintenance action is required but reporting the physical location is not time-critical.

Note: The Guardian System/exacqVision® integration is currently designed to allow for the mapping of a Gun Shot Detected Event to be passed from each Guardian Sensor to the exacqVision® Application. The result of this Event being seen within exacqVision® Application can result in a number of configurable actions.

The actions within exacqVision® Application can be numerous, and range from generating an audible alert, triggering an alarm, logging the time of the gun shot event, and activating security cameras.

2.2 Software Components

2.2.1 exacqVision® Interface

The Guardian Gunshot Detection System integrates with the exacqVision® Video Surveillance System through the use of “**Regular Expressions**”. The Guardian Gunshot Detection System/exacqVision® integration is accomplished through configuration implemented entirely within the exacqVision® Application. No additional software or licensing beyond the standard exacqVision® Application is required.

2.2.2 Guardian Output Connection

As of the current release of this interface, exacqVision® can connect directly to the Guardian GW application with no additional Guardian software components. As new functionality is added this may change in the future.

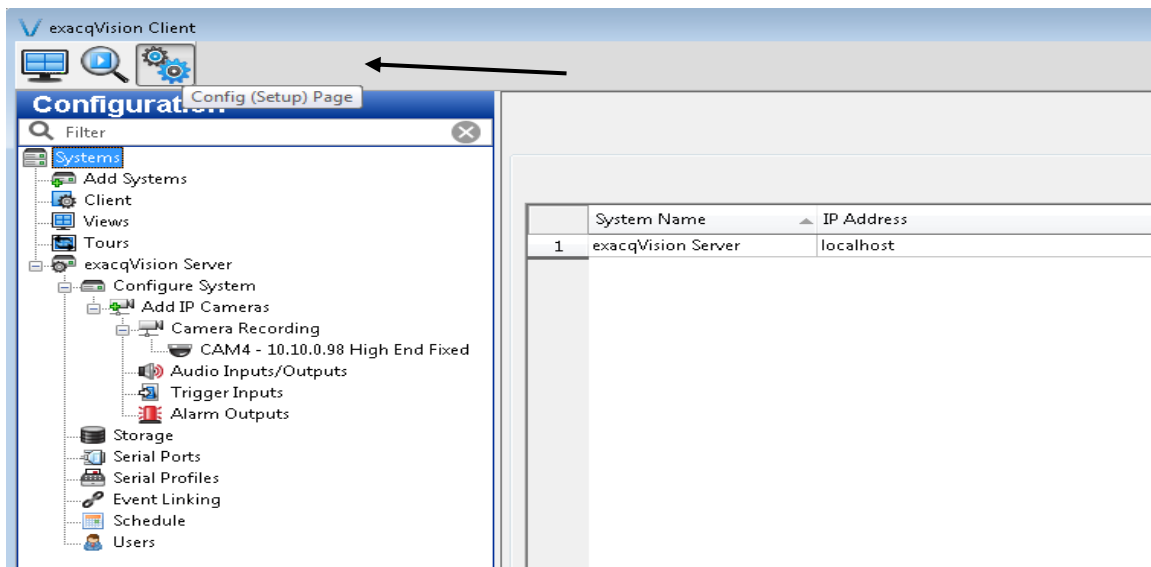
Note: The Guardian Gunshot Detection System, and exacqVision® Application can be installed on a single server platform. In larger video installations, consideration must be given to the amount of video data and processing so that Guardian is not delayed in performing its processing and notification.

3 Configuring the exacqVision® Application Integration

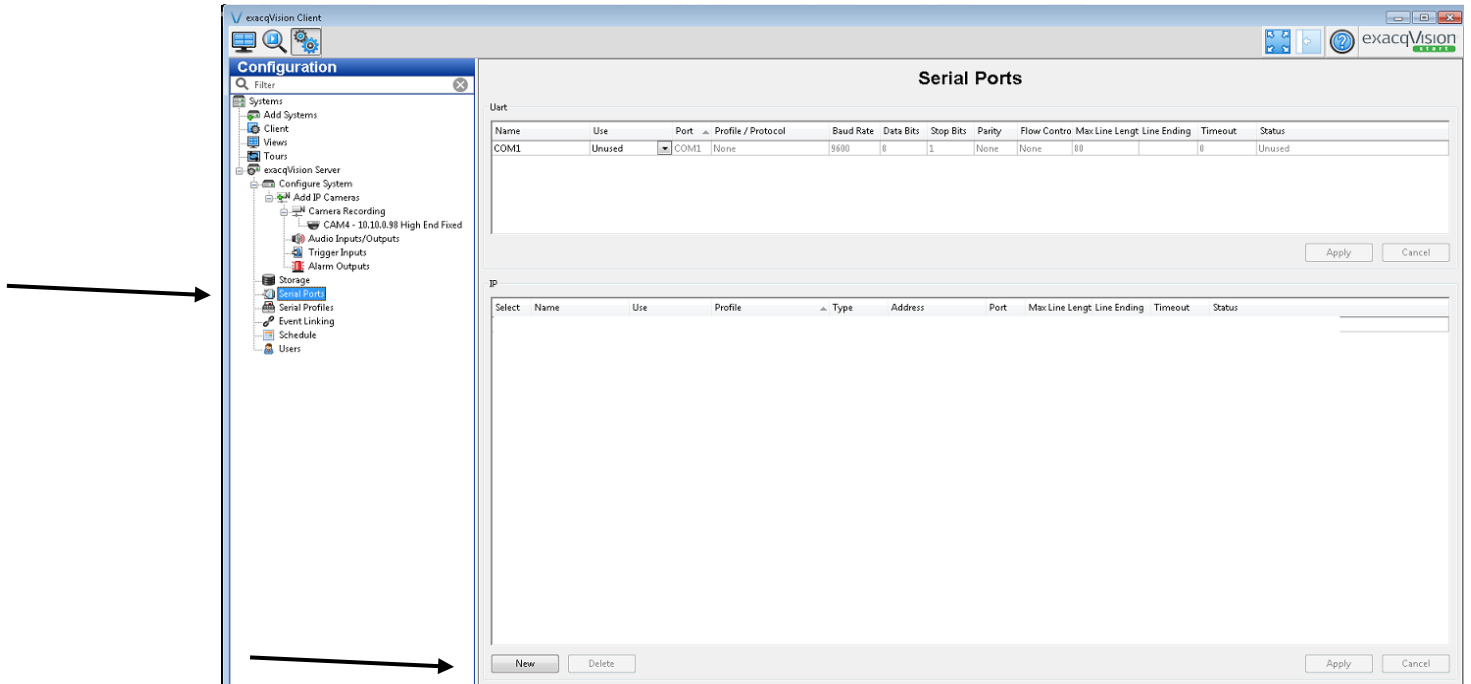
3.1 exacqVision® Application Configuration

Note: The following section assumes that the Guardian Gunshot Detection System and exacqVision ® Applications have previously been installed. **This integration requires that exacqVision be licensed at the Professional or Enterprise level.**

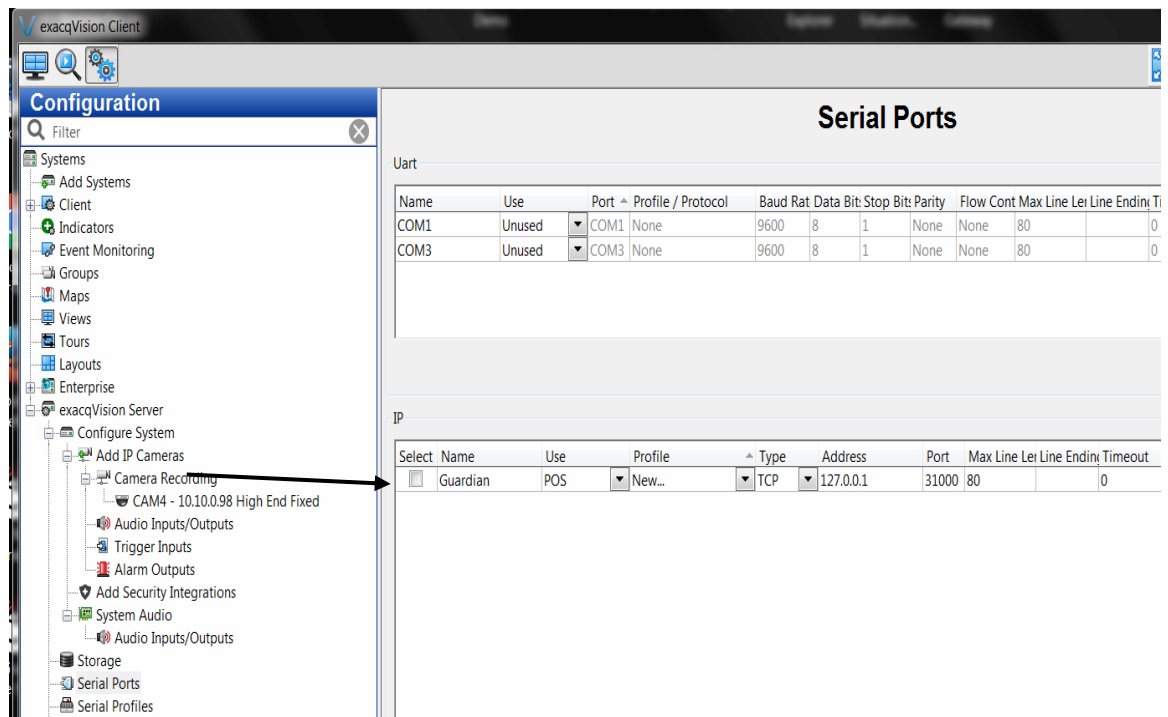
- Launch the exacqVision Client.
- Once logged on to the exacqVision Client Add an IP interface which will be used to establish communications with the Guardian Gateway Application.
- From the exacqVision Client access the Config Setup Page.



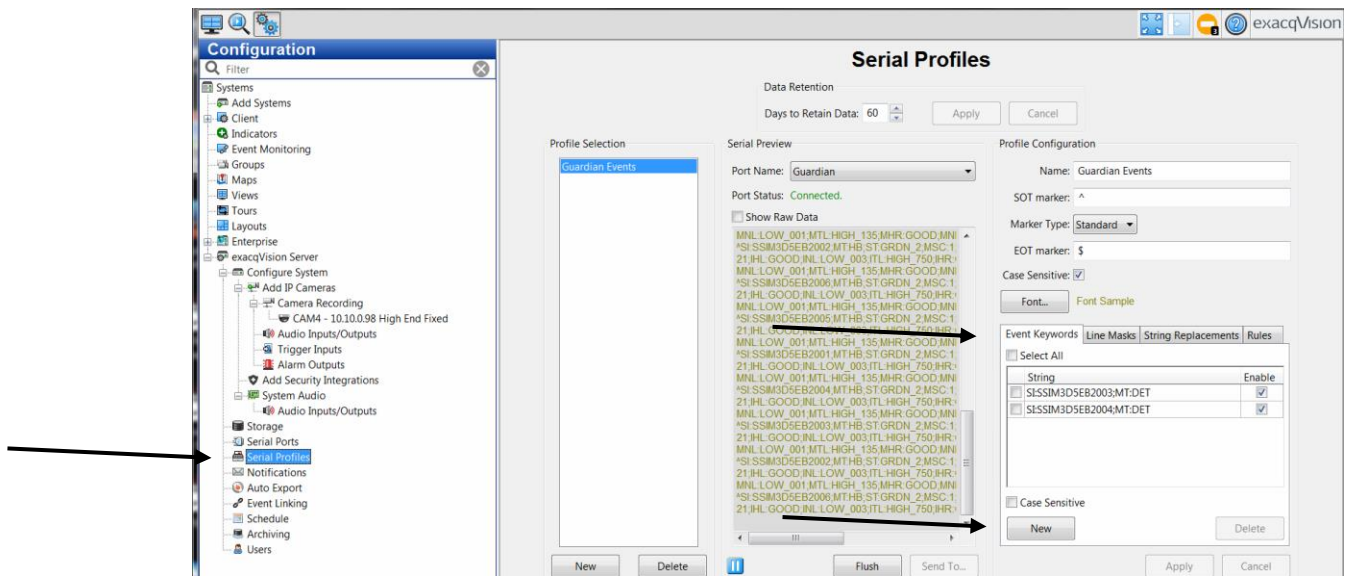
- From Config Setup Page, select Serial Port and add an IP Interface by clicking on “New”.



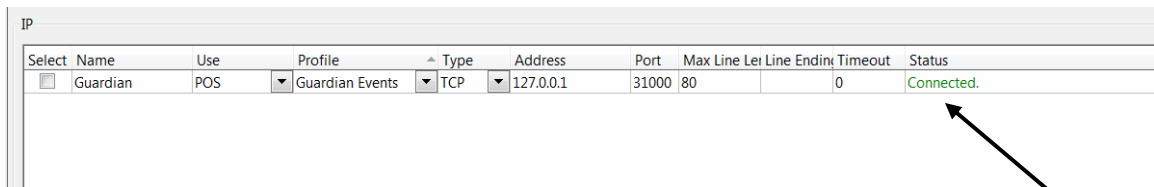
- Configure the exacqVision to Guardian Gateway interface:
 - a. Name: Guardian.
 - b. Use: From the dropdown select POS.
 - c. Profile: From the dropdown select “New”.
 - d. Type: TCP.
 - e. Address: IP Address of Guardian Gateway. The local host address, 127.0.0.1 if the Gateway and Exacq Applications are installed on same platform, or the real IP address (e.g 10.10.0.2) of Gateway if the applications are installed on separate platforms.
 - f. Port: 31000.
 - g. Click Apply.



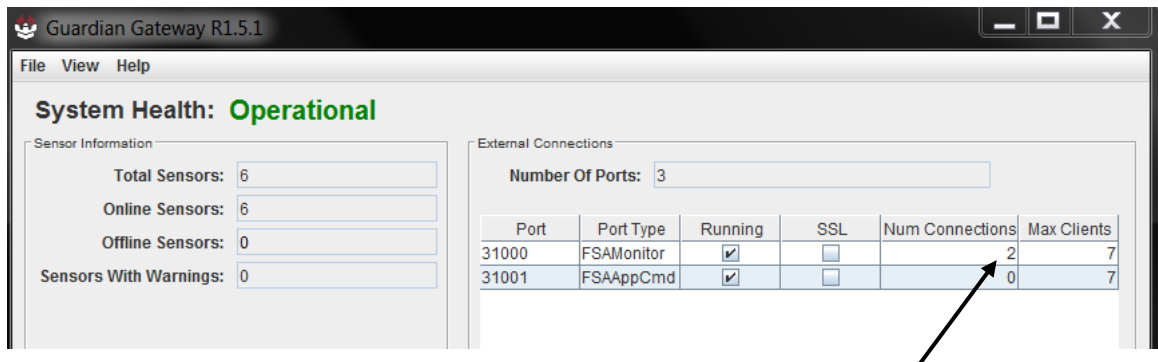
- Create a create a serial profile for Guardian:
 - a. From the “Serial Profiles Window, Click on New.
 - b. Name the profile “Guardian Events”.
 - c. From the Port Name dropdown, select Guardian.
 - d. For SOT marker enter ^
 - e. Set Marker Type to Standard.
 - f. For EOT marker enter \$
 - g. Create an Event Keyword by clicking on New.
 - h. Enter the appropriate Guardian Sensor string (e.g. **SI:70B3D5EB2222;MT:DET**) to trigger an event within the exacqVision® Application. (Note, the string will be similar to string show under the Event Keyword Tab, on the screenshot below. Each String represents a Guardian Sensor
 - i. Click Apply



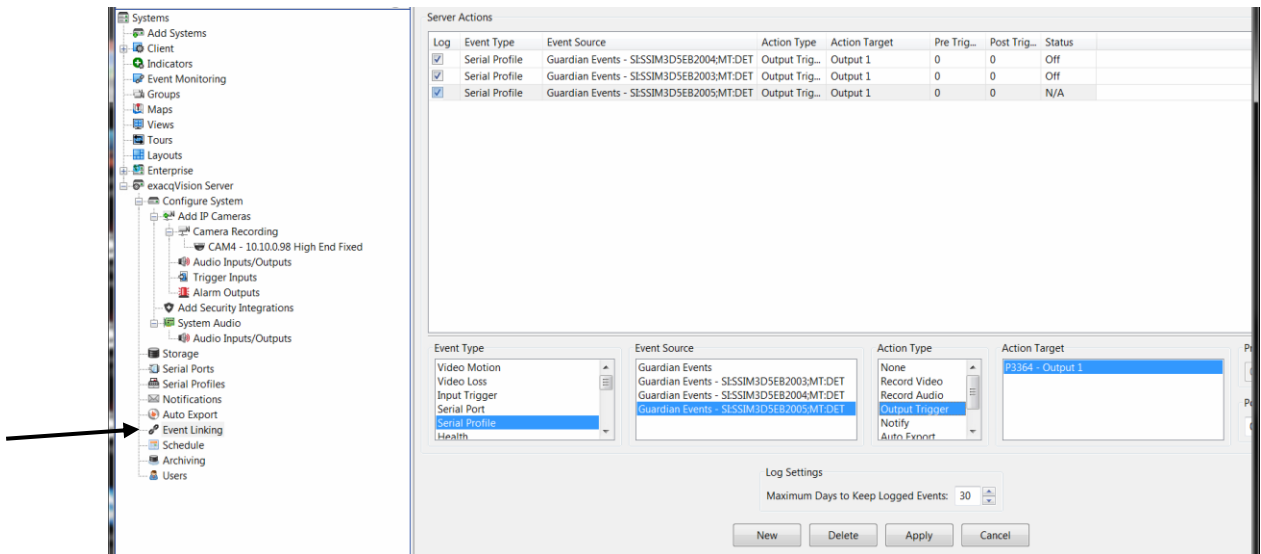
- Return to the Serial Ports Window and ensure that the Guardian IP Interface is showing a connection status of Connected. This indicates that the exacqVision Application is communicating with the Guardian Gateway.



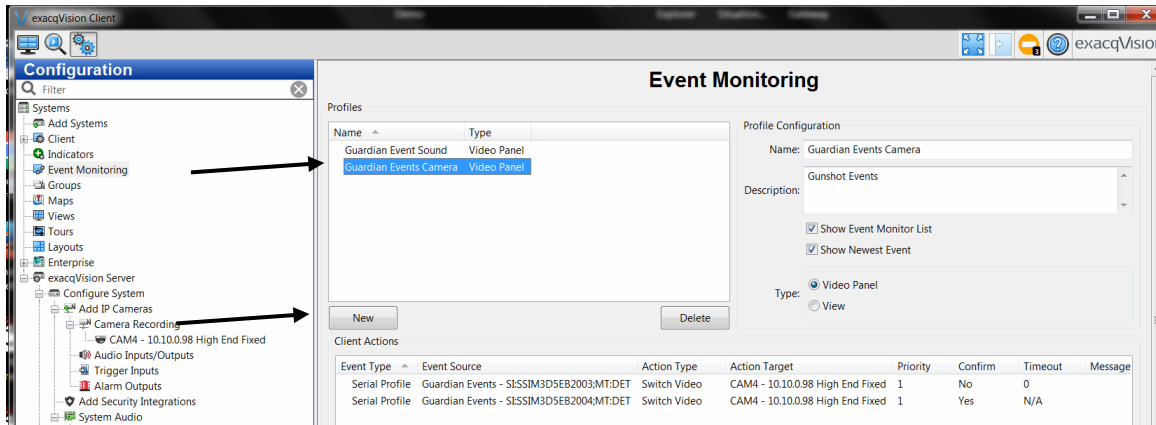
- Verify the Guardian Gateway Application shows an established client connection from the exacqVision® Application



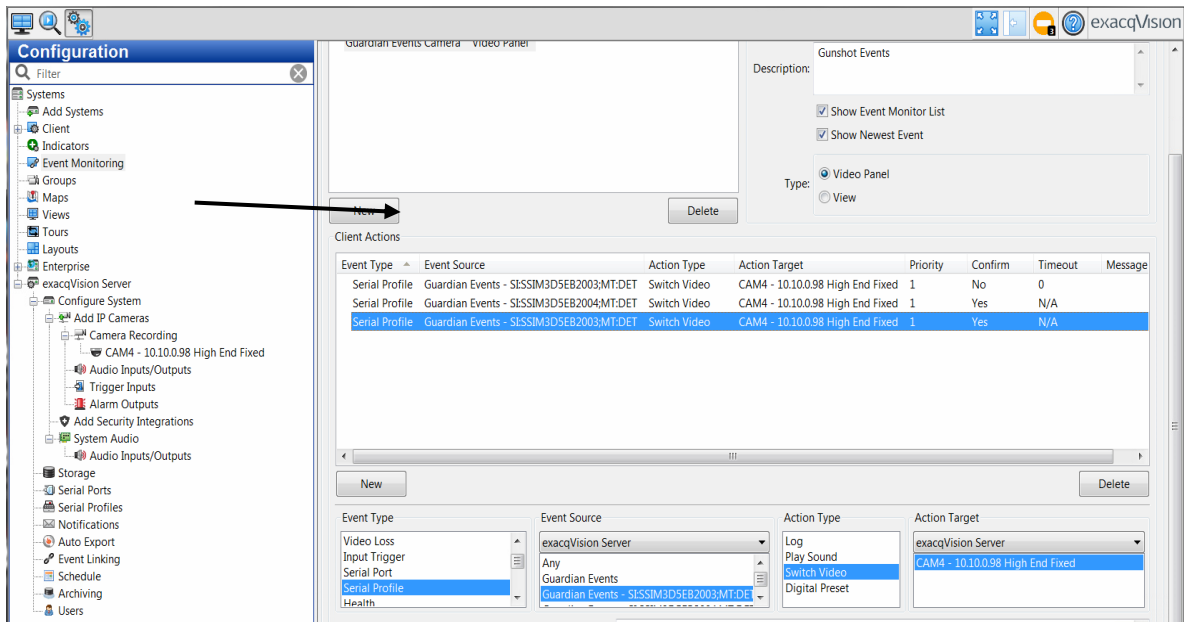
- Link Events:
 - a. From the Event Linking configuration window, click on New.
 - b. Event Type: Serial Profile.
 - c. Event Source: Guardian Events (select the string that maps to a specific Guardian Sensor).
 - d. Action Type: Output Trigger.
 - e. Action Target: Select available target.
 - f. Click Apply.



- Configure Event Monitoring from the Event Monitoring configuration window:
 - a. Create Guardian Event Profiles by clicking on New
 - b. Name the Profiles accordingly
 - c. For Type, select Video Panel.

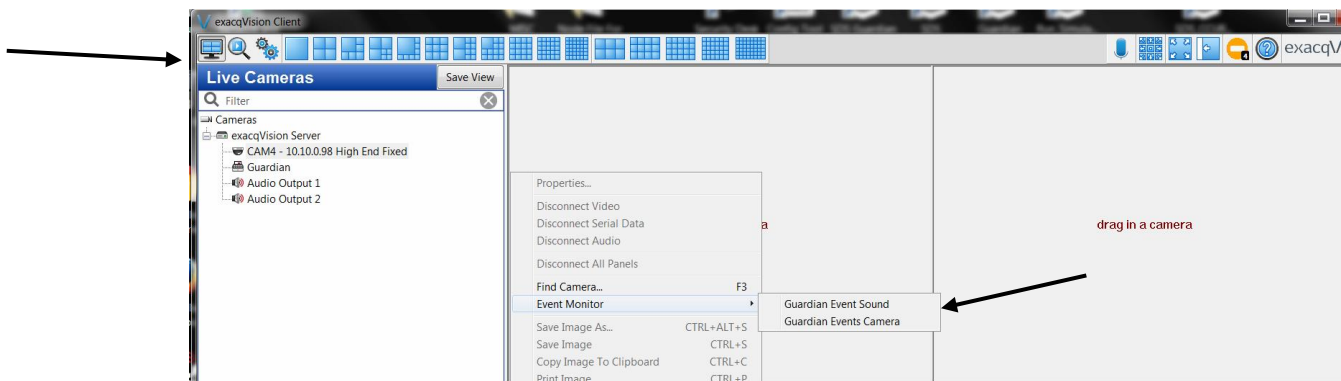


- d. From the Client Actions section of the Event Monitoring Window, click on New, and map an Event Type, Event Source, Action Type, and Action Target to your Guardian Event Profiles as shown in the screenshot below. (Note, the mappings must be done per Profile).
- e. Click Apply.



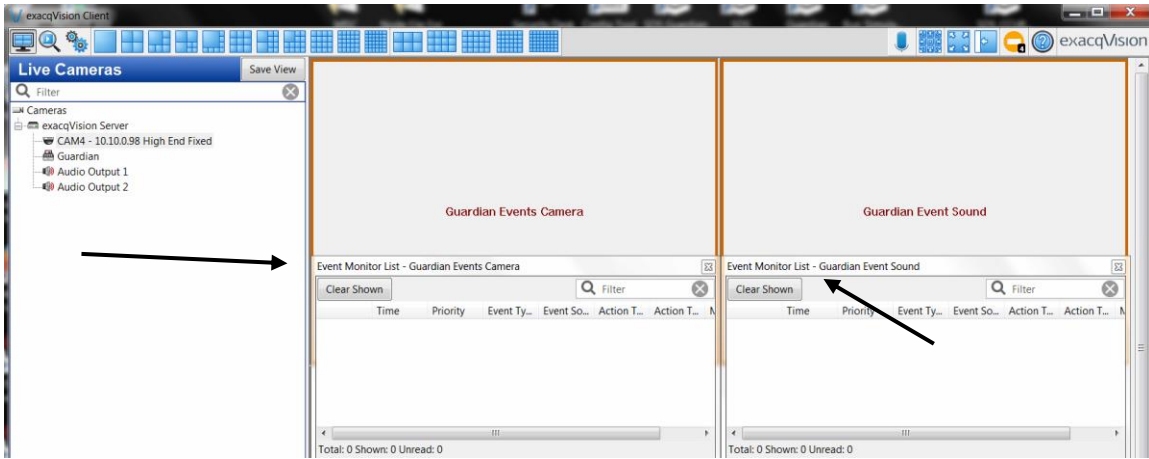
3.2 Activate Event Monitoring from Live View Page

- Access the Live Page on top-left of menu bar



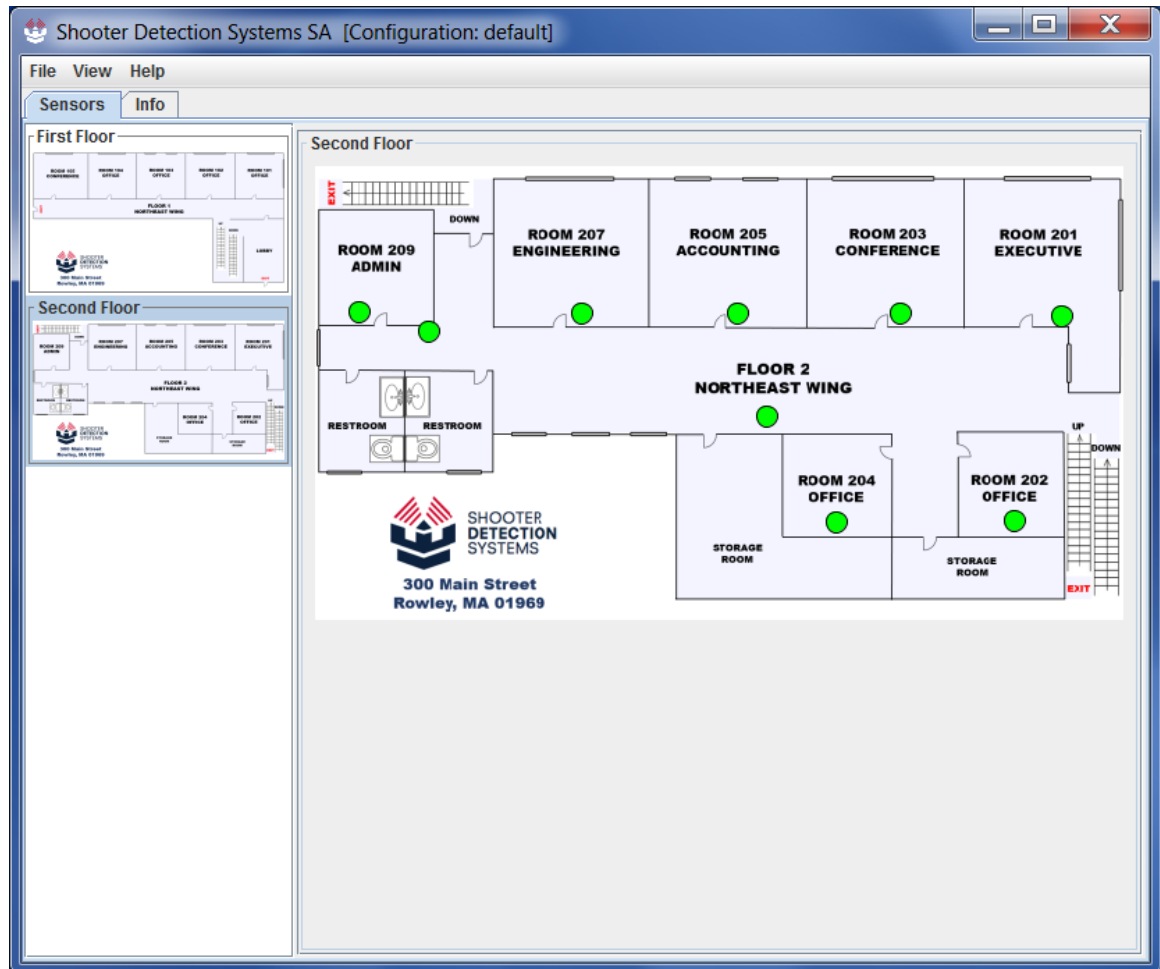
- Right click in the Live Page Window and set Event Monitor.

Note: Event Monitor must be selected in order to view alarms being activated within the exaccqVision Client. If Event Monitor is not selected for viewing, alarms will not display

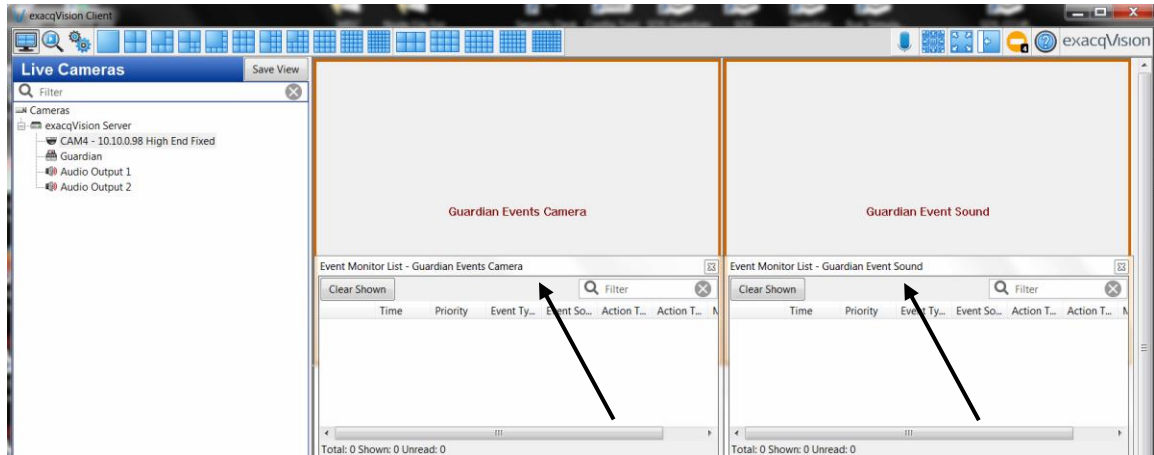


4 Validating the Integration

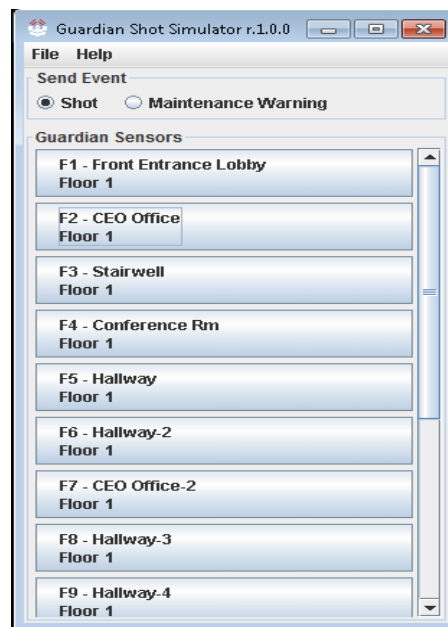
- Launch Guardian Situational Awareness Map



- Launch exacqVision Client Live Page, ensure Event Monitoring is set for your Guardian Events:



- Simulate gunshots against your Guardian Sensors using the Guardian Shot Simulator.



- Verify the gunshot event is visible on exacqVision Client Live Page.

Contact and Support Information

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