PURPOSE

TECHNICAL BULLETIN

PURPOSE AV / CONTROL4 CAMERA DRIVER (CONNECTED TO NVR)

STAUB ELECTRONICS

Provided by the Staub technical services department

OVERVIEW

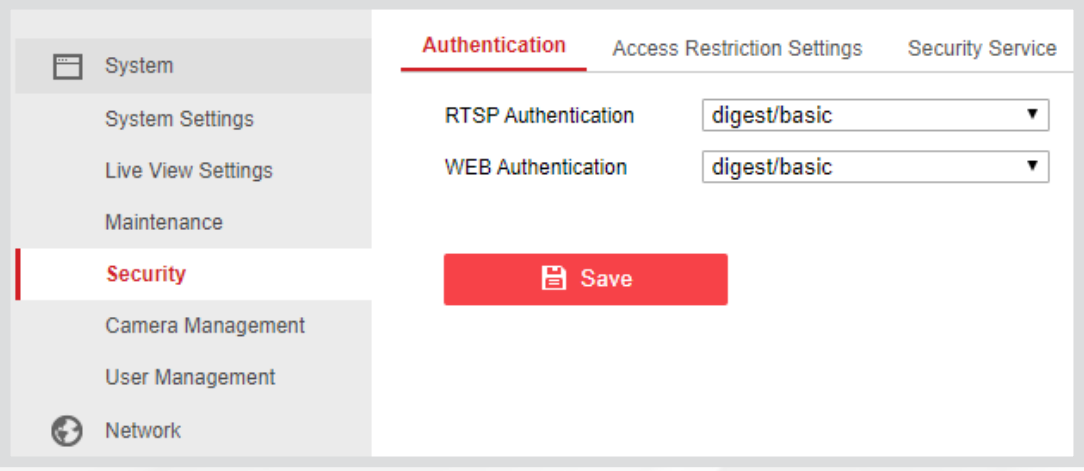
- Ability to integrate your PAV camera(s) into Control4
- Access IP camera live streams when behind an NVR
- See the live stream in the Security > Cameras section of the UI
- Receive alerts on mobile devices using the Push Notification Agent
- Access to currently active, basic and smart events that you can use to program Control4 actions against including bindings on the Connections tab
- Choose which stream to utilize with the driver
- The driver will automatically update its name to reflect the device name set in the web UI
- Set presets via Composer
- Trigger camera commands via the Programming tab
- Ability to change the camera resolution to better match Control4's preferred resolution

Configure the NVR and ensure it is fully functional as an independent system before adjusting settings and attempting to integrate with Control4. An simple NVR setup guide can be found here.

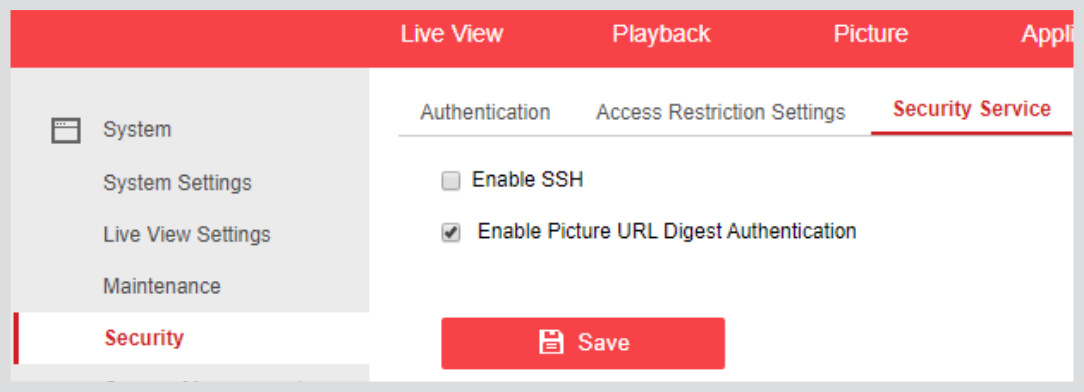
To expose the camera to the network and allow this driver to connect to it, you need to configure the NVR with the following;

CONFIGURE CAMERAS

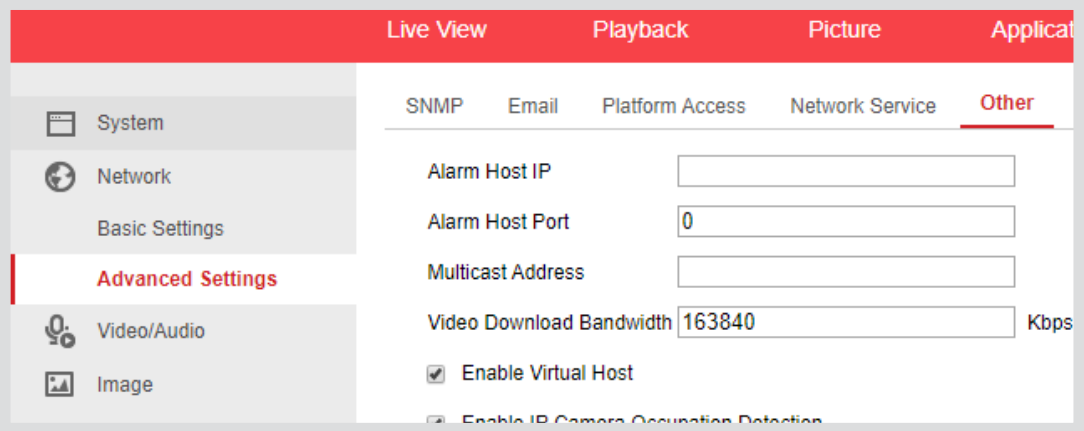
1. Configuration > System > Security > Authentication > RTSP Authentication = digest/basic
2. Configuration > System > Security > Authentication > WEB Authentication = digest/basic



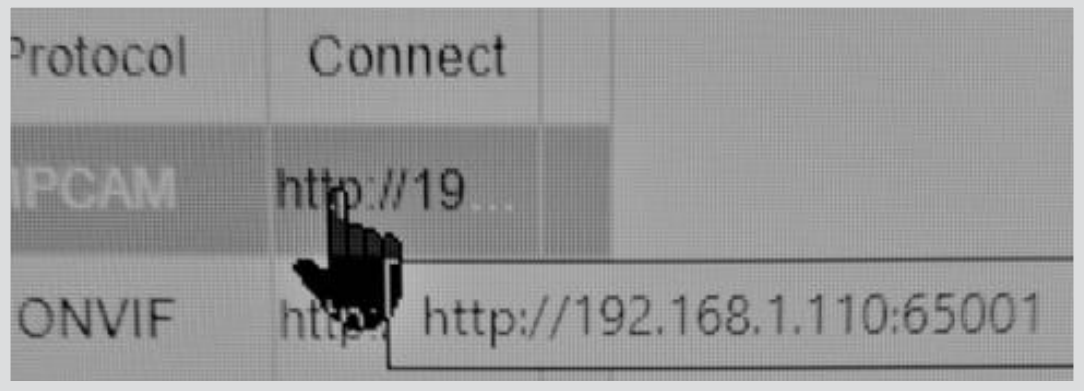
3. Configuration > System > Security > Security Service > Enable Picture URL Digest Authentication= Ticked



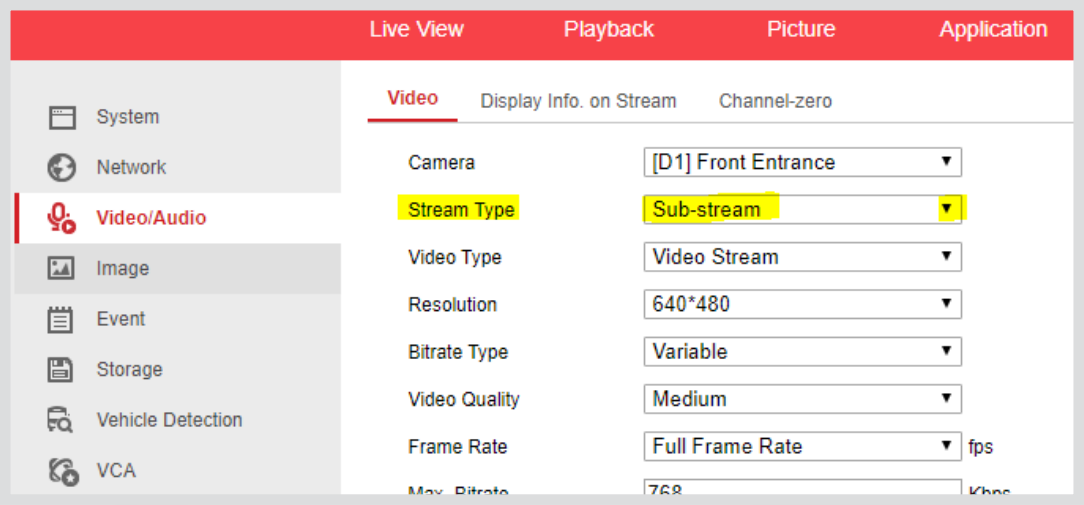
4. Configuration > Network > Advanced Settings > Other > Enable Virtual Host = Ticked



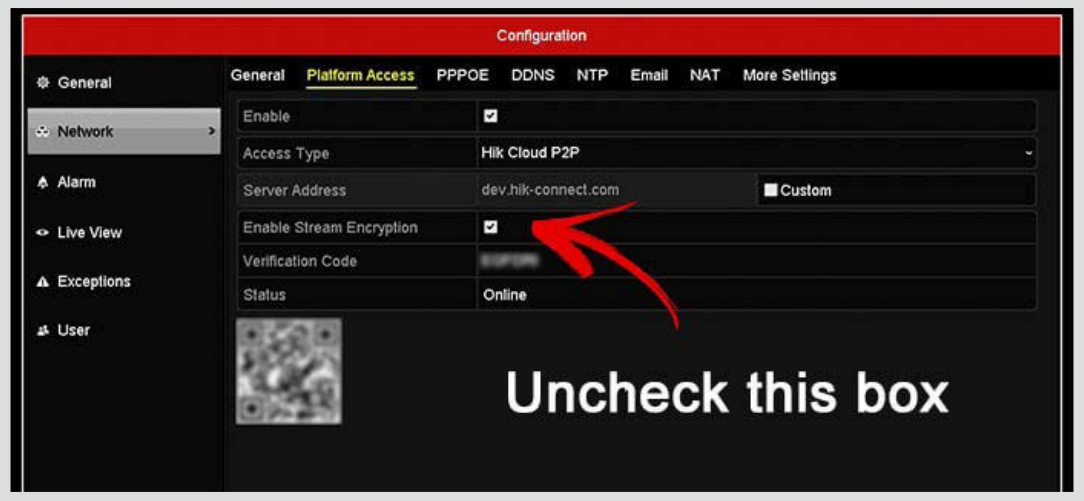
5. Configuration > System > Camera Management > Make a note of the port used under “Connect”. The port will either be 80 or 650xx. You will need to hover the mouse over the link to see the URL



6. Configuration > Video/Audio > Video > Camera = Select the camera you want to access
7. Configuration > Video/Audio > Video > Resolution = This needs to be 720P or less
    a. It is highly recommended to utilize the camera's sub stream to ensure maximum recording resolution for the mainstream

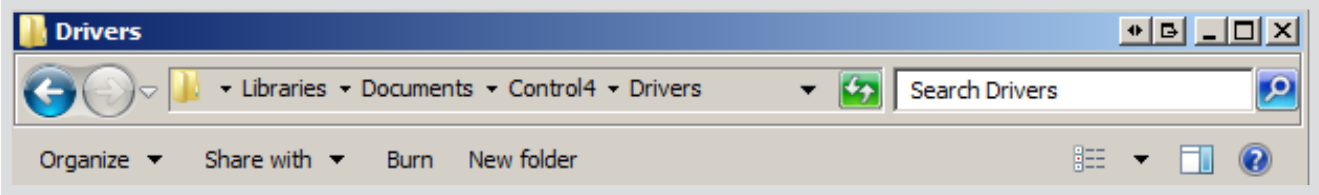


8. Lastly you will need to disable the stream encryption created by the NVR. This function can only be achieved via the local display output of the NVR. Connect a mouse and monitor to the NVR and navigate to Network > Platform Access > Enable Stream Encryption = UnTicked



DRIVER INSTALLATION

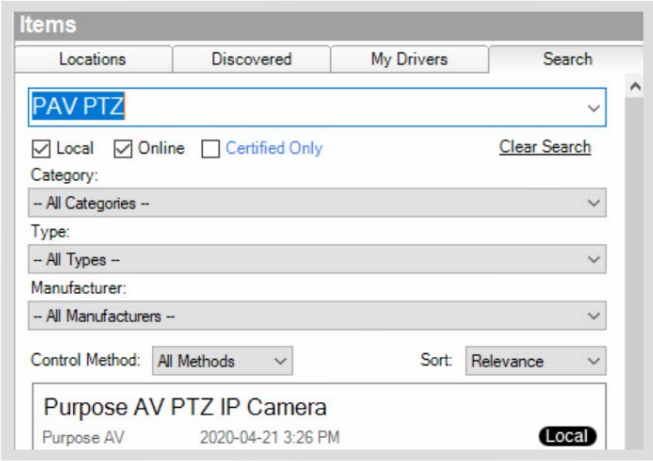
1. The driver you have downloaded will be in a zip file. Double click on this file to open it in your preferred zip program (WinZip, WinRar, etc.).
2. Extract the c4z file to the My Documents\Control4\Drivers directory. If you are using Windows this will be extracted to the Libraries\Documents\Control4\Drivers directory.



3. You are now ready to add and configure the driver via the Composer Pro software.

Adding the driver to your project:

1. Launch the Composer Pro application and connect to your project
2. In the 'System Design' page select the 'Search' tab on the right-hand side
3. Type in 'purposeav' into the search bar
4. Double click on the 'PAV PTZ' driver to add it to your project
5. Highlight the 'PAV PTZ' driver on the left-hand side



CONTROL4 CONFIGURATION

Before installing the driver, make sure you have:

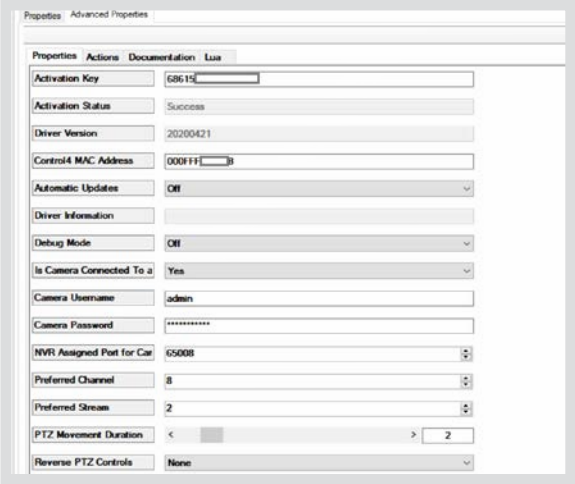
- Performed the camera/NVR activation using the SADP Tool application and all surveillance equipment is operating fully independent of Control4

Follow the steps in this section if you wish to access a camera that is simply connected to the network (No NVR).

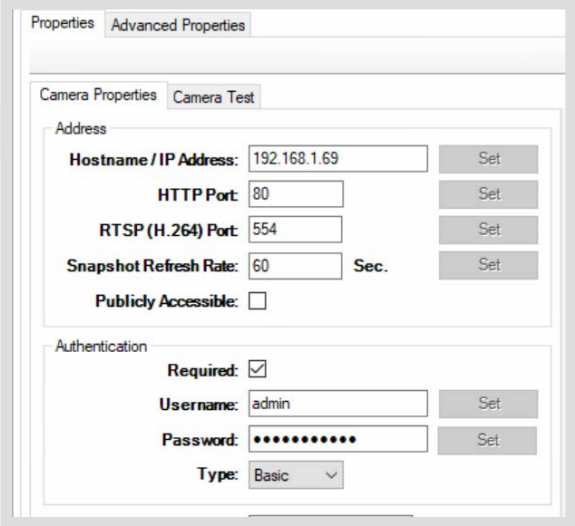
CONFIGURE DRIVER

It is important to add the details in the following order:

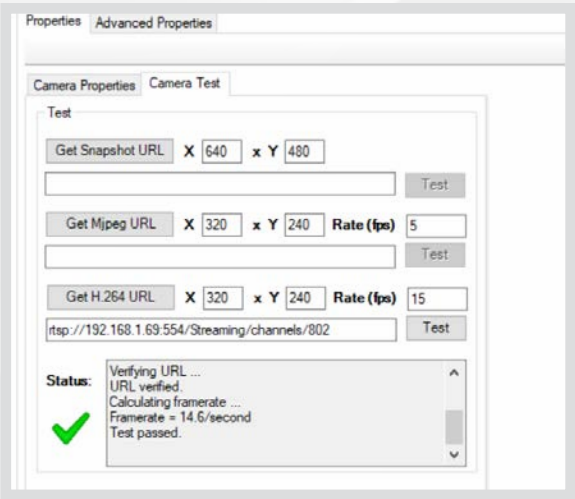
1. Advanced Properties > Properties
   a. Enter the “Activation Key” provided by Staub Electronics. If you require a license, please visit www.staub.ca/pavdriver
   b. Is Camera Connected to an NVR: YES
   c. Preferred Stream: 1) Main Stream 2) Sub Stream
      i. It is recommended to use the Sub Stream
   d. PTZ Movement Duration: You can adjust this later as required
   e. Reverse PTZ Controls: Flips the direction of the pan and tilt



2. Properties > Camera Properties
   a. Hostname / IP Address: IP address of the NVR
   b. HTTP Port Change as required (default 80)
   c. RTSP Port Change as required (default 554)
   d. Required This must be ticked
   e. Username: Username for the CAMERA
   f. Password: Password for the CAMERA
   g. Type: Basic



3. Refresh Navigators
4. Confirm and test connections



POST CONFIGURATION

When the configuration has been successful, the driver will populate the Properties fields and re-name the driver in the System

Use the PTZ Movement Duration scroll bar to adjust how long each PTZ button press should last. A smaller number is better suited to when your camera is always zoomed in

The Preferred Stream allows you to choose which stream you want to use for the snapshot and stream, the Main Stream, Sub Stream or 3rd Stream (if it is configured)

(PLEASE REFRESH NAVIGATOR FOR THIS SETTING TO TAKE EFFECT!)

Use Reverse PTZ Controls if you find that panning or tilting is the reverse of what is expected

ACTIONS TAB

Re-build Bindings - If you find that you don't have any bindings for the alert triggers and are confident that the camera is configured correctly, pressing this button will recreate these bindings

Configure Camera resolution for Control4 - You can use this option to set the stream you have selected in Preferred Stream on the Properties tab to a supported resolution that is optimal for

Set Current Position as a Preset - Set the current position of the camera as a preset with a label

Set Current Position as Home - Set the current position of the camera as the 'Home' preset

Restart Event Listener - Use this option to reinitialize the smart and basic alert streams should this stop working. This usually occurs if you have changed the any of the connection or authentication settings on the Camera Properties tab

Print Configuration Data - Use this to output the settings of the driver into the Lua tab

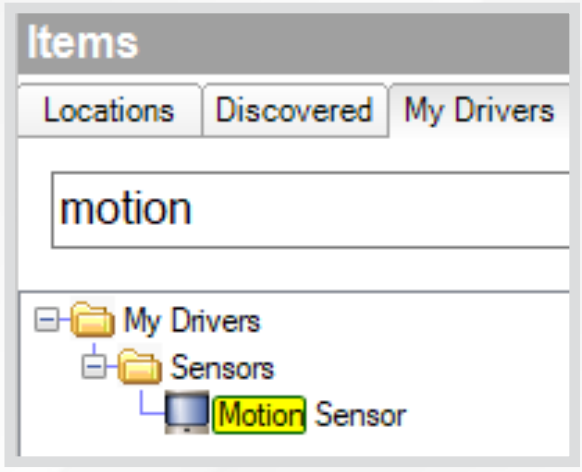
Camera Reboot - Quick way to reboot the camera

Driver Update - Forces the driver to recheck all the data for the Properties tab and Connections bindings

ADVANCED FUNCTIONS (OPTIONAL)

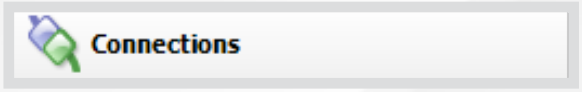
BINDINGS ON THE CONNECTIONS TAB

1. Search for Motion in My Drivers and add it to your project
2. Give the sensor a name like Driveway VMD
3. Select Connections
4. Select your camera from the Tree on the left.
5. The Control Outputs should now be populated with all the available contact sensors
6. Make the binding between the Driveway contact sensor and the camera VMD



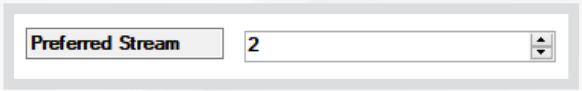
CONTACT_SENSOR Input Devices

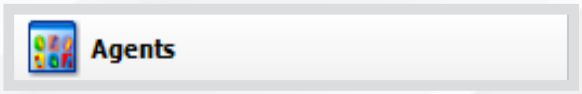
Device	Name	Location	Connections
Driveway VMD	Contact Sensor	Justin's Room	IP DOME->VMD

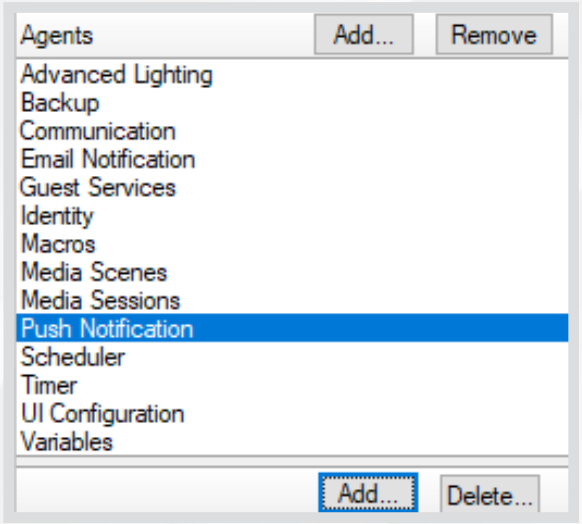


CONFIGURING PUSH NOTIFICATION AGENT

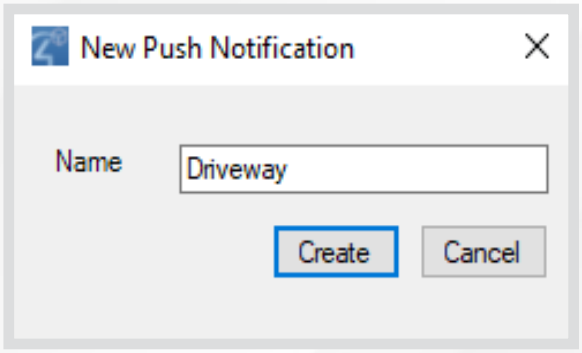
1. On the Properties tab, choose the Preferred Stream number and press Set
2. On the Actions tab, press the Configure Camera Resolution for Control4 (optional)
3. Open Agents
4. Select Push Notification and press Add... below

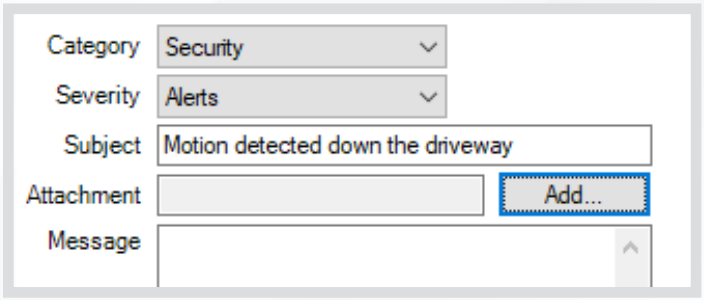


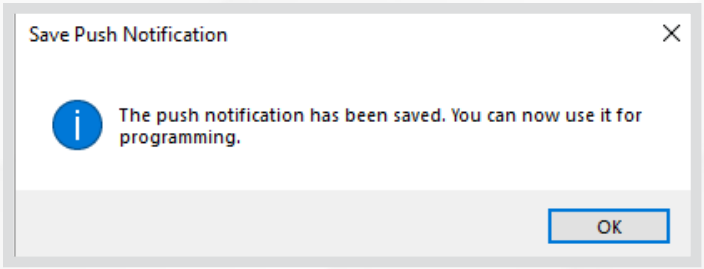


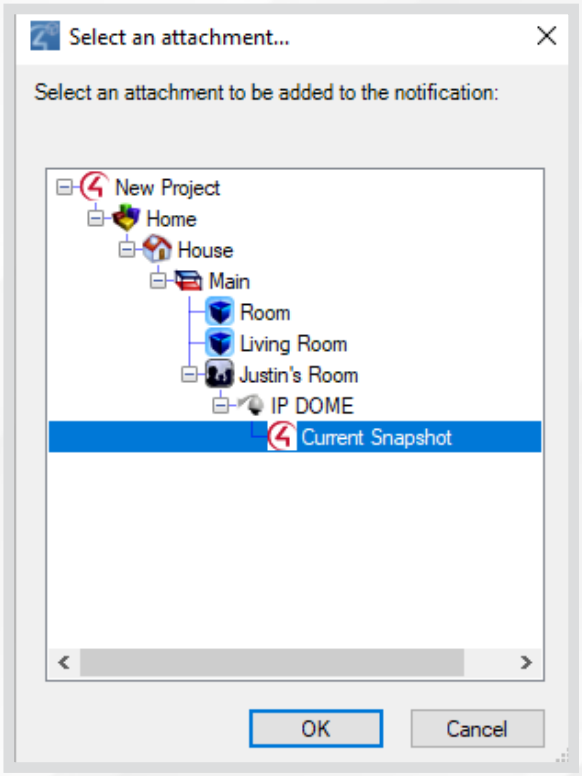


5. Enter the name of the notification and press Create
6. Add the Subject line and press Add... to select the snapshot
7. Expand the tree to your camera and select Current Snapshot
8. Select Save
9. Press OK





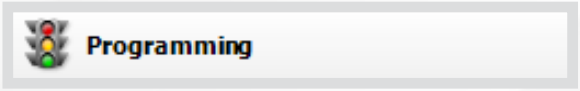


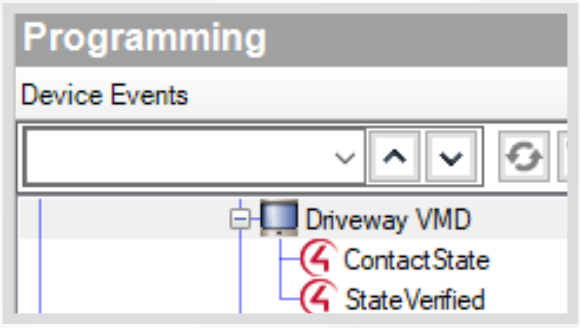


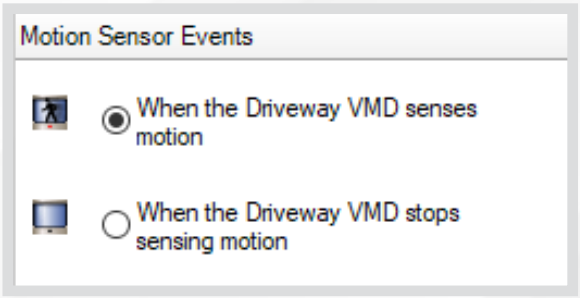
SEND PUSH NOTIFICATIONS WHEN A BINDING IS TRIGGERED

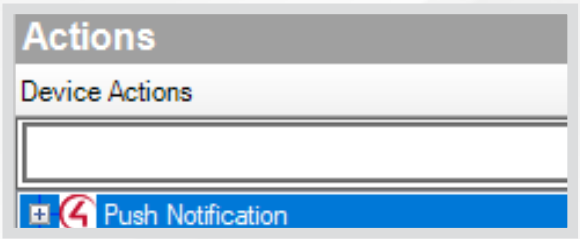
Once you have successfully set up Bindings on the Connections tab you can tie that in with the Programming tab:

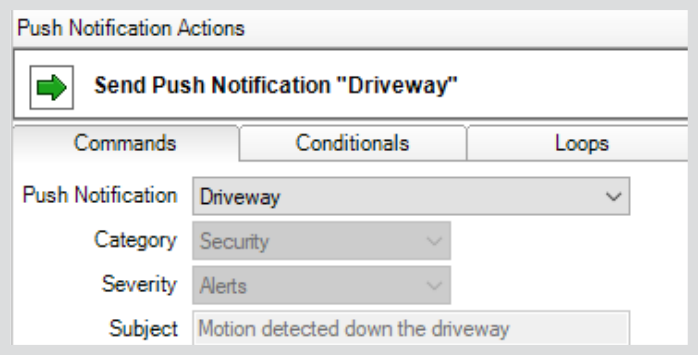
1. Select Programming
2. Under Device Events select your Driveway VMD motion sensor
3. Select When the Driveway VMD senses motion
4. Now, under Actions select Push Notification
5. Select Driveway from the Push Notification
6. Now drag the green arrow across to the Script Actions

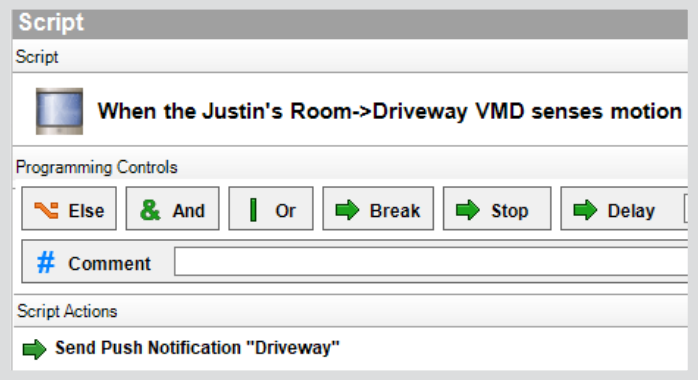




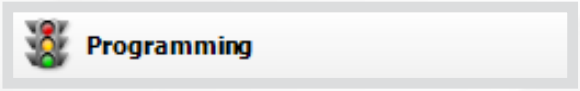




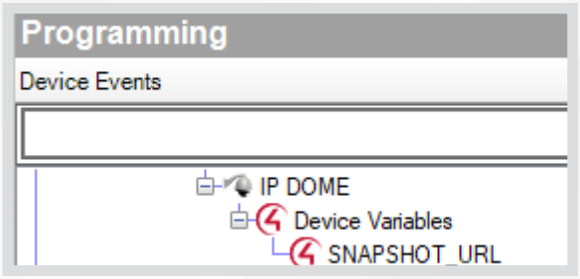




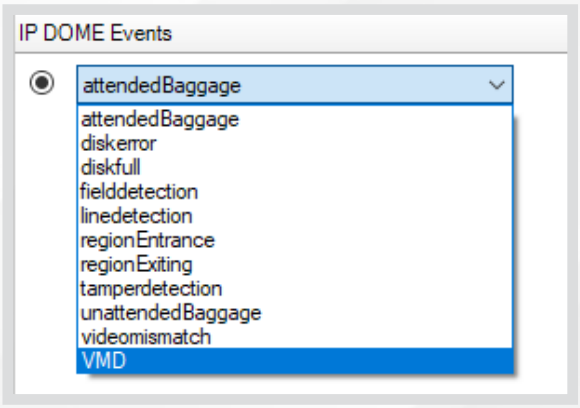
PROGRAMMING AGAINST ACTIVATED ALERTS



1. Once the Active Events Properties field has been populated, you are ready to program against the activated alerts
2. Select the camera from the Device Events window



3. Select the event from the drop down list



4. The below screenshot utilizes the Push Notification Agent Action to only send a snapshot when the camera triggers the specified event, rather than using “When SNAPSHOT_URL changes”