ClareVision Camera Control4 Driver Integration Release Notes

Online Documentation

Manufacturer Website: http://www.clarecontrols.com/

Support Site: http://www.clarecontrols.com/contact

Change Log

Revision	Date	Description
1.0.0	04/5/2021	Initial Version
2.0.0	05/4/2021	Adding support for Smart Events and Notification Snapshots
3.0.0	06/02/2021	Added ability to choose the video stream used.
4.0.0	07/12/2021	Added support for cameras behind a CLR NVR using virtual host

Introduction

The ClareVision Camera Driver integrates CLR-V camera models with Control4 to add streaming video into a Control4 system. Cameras on the same network as the Control4 controller or cameras plugged directly into a NVR port can be integrated in a Control4 project. To integrate cameras behind an NVR please refer to the Integrating Cameras Behind an NVR section.

Notes:
- This driver requires Control4 OS 3.0.0 or later to operate.
- This driver requires that the ClareVision camera be on the same network as the Control4 system.
- This driver supports all ClareVision cameras with model numbers starting with "CLR-V".

Installation

Follow the installation instructions that came with your ClareVision camera and verify you can connect to the camera's web interface. Clare Controls does not assume responsibility for damages caused by improper installation, connection to the network, or use of the device.

For full ClareVision installation and configuration, see ClareVision User Manual.

Camera Setup

Install, configure, and test the ClareVision camera. Verify that the camera is on the same network as the Control4 system, configured, and fully functional in the camera's web interface before integrating with Control4.

Note: The driver .c4z file needs to be added to your **Control4/Drivers** folder or the driver can be added through Composer by navigating to the Driver menu, then **Add or Update Driver**.

To add the Camera to your project
1. Confirm Driver has been added to Composer.
2. Navigate to Items > Search
3. Search for ClareVision and double click on the "ClareVision Camera Driver"

4. Once added to the project, click on the newly added device. Enter the camera's IP address and confirm that the username is "admin" (case sensitive) and enter the camera's password and click **Set** for each item.

Notes:

1. The password for the camera is set by the user. The default password is the first 6 characters of the camera's serial number. The serial number is located on the camera's label and the box. If you have not done so, please navigate to the camera's IP address in a web browser and login with the username "admin**"** and the default password. The camera will prompt you to change the password.
2. Clare recommends using a static IP address or a DHCP reservation to prevent the camera's IP address from changing. If the camera's IP address changes the camera will not be accessible from Control4.

5. Confirm the camera is successfully connected by viewing the Properties tab under Advanced Properties in Composer Pro. The Camera's Model, Firmware, and Serial Number fields will be populated.
6. The ClareVision camera driver supports the ability for the integrator to choose which camera stream Control4 Navigators will use for streaming video. The driver is defaulted to use the Sub Stream, but can be changed to use the Main or Third stream by navigating to **Advanced Properties > Properties**. Select the camera stream and click **Set**.

Note: Value series cameras staring with model number CLR-V100 do not support a Third Stream. For Value series cameras please use the Sub or Main Streams.

Cameras Behind an NVR

ClareVision CLR model cameras plugged directly into an NVR port can be integrated by using virtual host. To setup your NVR and Control4 project:

1. Confirm your NVR firmware is update to date using the ClareVision mobile application and confirm virtual host is enabled by navigating to Configuration > System > Network > TCP/IP. If you do not see virtual host as an option, your NVR is not up to date.

2. Navigate to Configuration > Channel > Camera and note the port number at the end of the camera URL in the Connected column. For Channel 1, the port would be 10001.

Port	Protocol	Connected
80	Private	http://10.100.1.198:10001
80	Private	http://10.100.1.198:10002
80	Private	http://10.100.1.198:10003
80	Private	http://10.100.1.198:10004

3. In Composer add a ClareVision Camera Driver by navigating to Items > Search. Next, Search for Clarevision Camera Driver and double click on the search result to add a camera device to your Control4 project.
4. Enter the IP address of the NVR, the virtual host port for the HTTP port, and RTSP Port and click Set for each. The below is an example for NVR channel 1.

Camera Properties | Camera Test

Address

Hostname / IP Address:	10.100.1.198	Set
HTTP Port:	10001	Set
HTTPS Port:	443	Set
RTSP (H.264) Port:	10001	Set
Snapshot Refresh Rate:	60 Sec.	Set
Publicly Accessible:	☐	
Use HTTPS:	☐	

5. Enter the cameras password and click SET.

Username:	admin	Set
Password:	••••••••	Set

NOTE: The password used is the password of the camera, not the NVR. If the camera was plugged into the NVR new out of the box it may have the default password of the first six characters of its UUID. The UUID can be found the cameras box or the cameras label. Each cameras default password is unique. Alternatively, you can config the Camera with a password first. This needs to be done from the cameras web UI.

Supported Features

Once the camera is added to the project in Composer Pro, the Control4 user interface displays the camera under the security subsystem.

- **Snapshot**: The ability to get a snapshot image from the camera device.
- **RTSP Stream**: The ability to view the camera's live video stream.
- **Notification Snapshot**: The ability to attach a camera snapshot to a push notification.
- **Motion Events**: The ability to create programming actions based on motion events.
- **Smart Events**: The ability to create programming actions based on Line Crossing, Intrusion, Loitering, and People Gathering events.

Events

The ClareVision camera driver supports programming action on motion and smart events in a Control4 project. Examples of programming actions include turning on a light, sending a push notification, or triggering a camera stream to play on a Control4 Navigator such as T3/T4 Touchscreens and onscreen Navigators when an event is detected.

To start receiving events:
1. Navigate to the Camera Device's Advanced Properties.

   System Design > Camera Device > Advanced Properties > Properties

   Select "Enabled" from the dropdown menu and click **Set**.

Events	Enabled ⌄	Set Cancel

2. Navigate to the Sensors category.

   Items > My Drivers > Sensors

3. From the Sensors category, search for and double click a Motion Sensor for each sensor alarm type you are using to add a sensor device to the project. Rename the Motion Sensor to match the smart event.
4. Under the ClareVision Camera connection, drag the Control Outputs for the Motion Sensor and any Smart Event alarms you will be using to its corresponding item in the CONTACT_SESNOR Input Devices section below.

Notes:
- When the sensor is first added, it will read as "**State:** opened, **Verified:** No". Once it receives its first event, it will go to "**State:** Closed, **Verified:** Yes". This must be repeated for each sensor.
- The **Invert Sensor** and **Enable Debounce Timer** options should remain at their default values.

5. Now that the events are enabled, actions can be programmed for motion and smart sensor events.
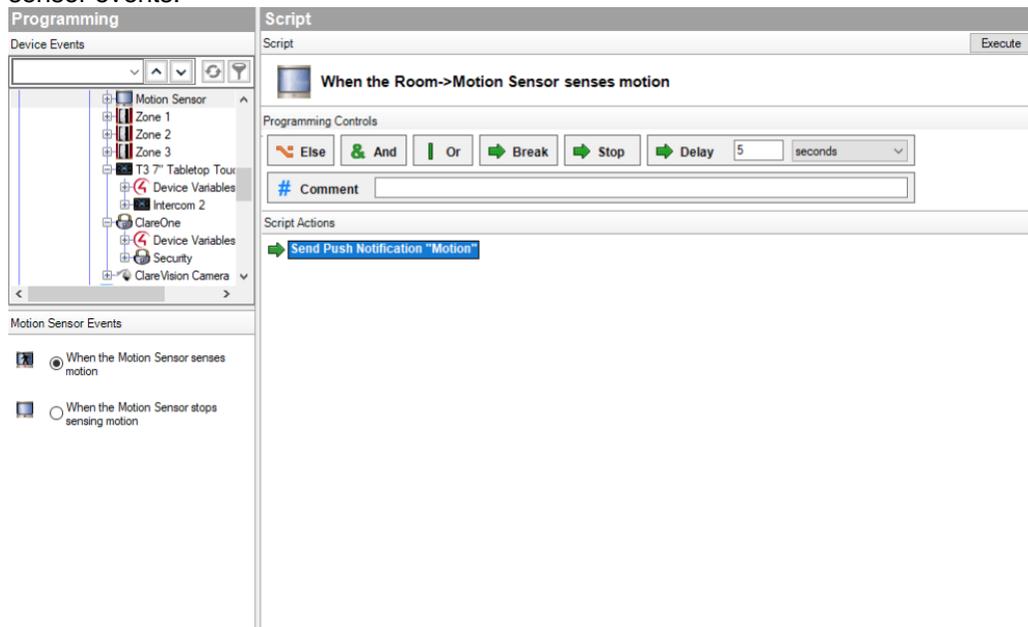
Properties

The ClareVision Camera Driver properties available in Control4 include:
- **Version**: The version of the Control4 driver.
- **Camera Model**: The model of the camera.
- **Firmware**: The version of firmware on the camera.
- **Serial Number**: The serial number of the camera.
- **Stream**: The camera RTSP stream Control4 will use for video.
  Main Stream
  Sub Stream
  Third Stream
- **Events**: The property selector to enable or disable camera events.
- **Log Level**: A list of logging levels (for example: debug, trace, critical).
- **Log Mode**: Allows the user to select the desired logging mode.
  1 – Off
  2 – Print
  3 – Log
  4 – Print and Log

Troubleshooting

Mobile user interface not working:
Refresh the project Navigator. Once refreshed, the mobile user interface updates and displays the correct status.
Director not receiving video or events:
1. Verify that the camera is working in the camera's web interface.
2. If the camera is functional, restart the main controller.
Note: Refresh Navigators, Refresh Project or restart of Composer will not resolve this.

Limitations
- MJPEG stream format is not supported.
- H.265 stream format is not supported.

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