



INTEGRITI AVIGILON CCTV PLUGIN



INNER RANGE recommends that all Inner Range systems be installed & maintained by FACTORY CERTIFIED TECHNICIANS.

For a list of Accredited Dealers in your area refer to the Inner Range Website.

<http://www.innerrange.com>

Integrati Avigilon CCTV Integration Manual

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CCTV Capabilities

Feature	Feature Description	Ver	Y/N
<i>Stream Live CCTV Footage</i>	Live CCTV footage can be streamed from online cameras in the CCTV system to an Integriti client.	20	✓
<i>Select Custom Aspect Ratio</i>	Select the aspect ratio to use when streaming CCTV footage on a per-camera or per-recorder basis.	20	✓
<i>Stream Archived CCTV Footage</i>	Archived CCTV footage can be streamed from online cameras in the CCTV system to an Integriti client.	20	✓
<i>Control Archived CCTV Playback Speed</i>	Playback speed of archived CCTV footage can be controlled from the Integriti client.	20	✓
<i>Auto-Play CCTV Footage from Events</i>	Live or archived CCTV footage can be configured to be automatically displayed when an event occurs in the Integriti System on a specific client workstation.	20	✓
<i>Create Child Devices from Camera Configuration</i>	Child CCTV Cameras will be created based on the Camera configuration on Refreshing Child Devices	20	✓
<i>Associate Cameras With Entities</i>	Cameras loaded from the CCTV system can be associated with Integriti Entities to allow direct control of one from the other.	20	✓
<i>Show Associated CCTV From Event</i>	Associated CCTV Footage can be directly accessed and viewed from any event occurring in Integriti that has an associated Camera (either a direct association or through the Entity that triggered the event)	20	✓
<i>Control PTZ Cameras</i>	Send PTZ commands to support cameras on the CCTV system to control the Pan, Tilt and Zoom of the camera directly from the video stream.	20	✓
<i>Send Cameras to PTZ Preset</i>	Send supported PTZ cameras on the CCTV system to preconfigured PTZ presets directly from the video stream.	20	✓
<i>Digital PTZ Control</i>	Digitally zoom the CCTV stream's image for non-PTZ cameras and archived footage.	20	✓
<i>CCTV Layouts</i>	Store a collection of Cameras with an specific viewer layout to be brought up at a later point in time	20	✓

<i>CCTV Surrounding Cameras View</i>	Show a selected camera, as well as the cameras configured to be N, NE, E, SE, S, SW, W and NW of the selected camera, quickly jumping between surrounding streams directly from the view.	20	✓
<i>Trigger Actions in the CCTV System</i>	Trigger actions or commands in the CCTV system directly from Integriti.	20	✓
<i>View and Control Cameras on Schematics</i>	Cameras can be added to Schematics Maps in Integriti and directly viewed and controlled directly from the Schematic. Each camera's state is immediately visible on the Schematic where available.	20	✓
<i>Sync Time (via NTP)</i>	Sync the time of the CCTV system and Integriti to match via an NTP.	20	✓
<i>Display Connection Status to CCTV System</i>	Display whether or not Integriti is currently connected to the CCTV system.	20	✓
<i>Receive Events/Alarms from the CCTV System</i>	Log events/alarms occurring on the CCTV system to Integriti's Review.	20	✓
<i>Trigger Integriti Actions on CCTV Events/Alarms</i>	Trigger actions to automatically occur in Integriti whenever specific events/alarms are received from the CCTV system.	20	✓
<i>Generate Alerts from CCTV Events/Alarms</i>	Automatically generate and restore Alerts tied to a specific Camera in Integriti whenever specific events/alarms are received from the CCTV system.	20	✓

NOTE: Support for any feature listed above may be model or version specific – further consultation with Inner Range and the CCTV manufacturer is highly recommended.

Advanced CCTV Capabilities

Feature	Feature Description	Ver	Y/N
<i>Automatically Load Camera Configuration</i>	Refreshing Child Devices will automatically populate all cameras configured in the CCTV System into Integriti when run. If not supported, camera configuration will need to be manually entered into Integriti.	20	✓
<i>64-bit Integration Server Support</i>	The integration supports being run on the 64-bit integration server.	20	✓
<i>Show Camera Status</i>	The current online/offline status of configured cameras will be visible directly through Integriti.	20	✓
<i>Categorised Review Records</i>	Review generated by the integration will have a different category for different event types, allowing for easy filtering of specific CCTV events	20	✓
<i>License Plate Recognition</i>	License plates recognised by supported cameras in the CCTV system can be used to automatically allow access to configured Doors.	20	✓
<i>Trigger Inputs on CCTV Event</i>	Inputs in Integriti can be automatically triggered and restored when specified types of events are received from the CCTV system.	20	✓
<i>Control Iris and Focus</i>	Control the iris and focus of supported cameras on the CCTV system directly from the video stream	20	✓
<i>Control PTZ Tours</i>	PTZ Tours can be started and stopped directly from the video stream.	20	✗
<i>Display Video Frame Times</i>	When viewing archived CCTV footage, the time of the current frame will be displayed on the viewer control.	20	✓
<i>Show On-Screen Display</i>	Enable additional information (such as camera name and current playback time) to be displayed as an overlay on video streams.	20	✓
<i>Reverse Playback</i>	When viewing archived CCTV footage, the footage can be played in reverse.	20	✓
<i>Step Forward/Backward</i>	When viewing archived CCTV footage, the footage can be stepped through one frame at a time.	20	✓
<i>Export CCTV Clips</i>	Export video clip of archived CCTV footage to the Evidence Vault or to a file directly from Integriti.	20	✗

<i>Export CCTV Snapshots</i>	Export still snapshot of archived CCTV footage to the Evidence Vault or to a file directly from Integriti.	20	✘
<i>Export Current Frame</i>	Export still snapshot of the current frame in the CCTV Viewer to the Evidence Vault or to a file directly from the CCTV Viewer.	20	✘
<i>Stream Audio With Video</i>	Receive audio from the microphone on a supported CCTV camera through an Integriti client workstation	20	✓
<i>Send Audio to CCTV Camera</i>	Send audio from an Integriti client workstation out of the speakers on a supported CCTV camera.	20	✓

NOTE: Support for any feature listed above may be model or version specific – further consultation with Inner Range and the CCTV manufacturer is highly recommended.

Integrati Avigilon CCTV Plugin Compatibility

Required Integrati Version License

Integrati Pro/Infiniti v20 license

Minimum Installed Integrati Version

Integrati Pro/Infiniti v19.0 or higher

Licensing Requirements

Integrati CCTV integrations require 1 CCTV camera license per Camera to be used in the system. Any Cameras that are unlicensed will still show up in Integrati, however will not be able to be used.

Tested Against

The Integrati Avigilon CCTV plugin was built and tested against the following versions of software:

- Avigilon Control Center Server v7.12.0.30
- Avigilon Control Center Client v7.12.0.30
- Avigilon LPRV2 Plugin v7.12.0.30

Installing the Avigilon LPR V2 Plugin

The Integrati Avigilon CCTV Plugin's License Plate Recognition functionality requires the Avigilon LPR V2 plugin to be installed along with the Avigilon Control Center Server. If it is not installed, then the other features of the Integrati plugin will still function.

Note that Avigilon does not allow for the installation of the LPR plugin of a different version to the Avigilon Control Center Server.

Using the Integrati Avigilon CCTV Plugin Over RDP

Viewing video streams over Windows RDP is not supported by the Avigilon SDK, so it is likely that video streams will not load correctly while there are any open RDP connections on the computer attempting to open the video stream.

If this issue is encountered, all open RDP connections must be closed before loading the video stream.

If RDP is a necessity, it is possible to use an alternative RDP protocol to Windows RDP in order to avoid this issue.

Commands

CCTV Recorder Commands

The following commands can be performed on a CCTV Recorder:

<p>Control Alarm</p>	<p>Selects an Avigilon alarm to trigger, acknowledge or purge. A note can be added to the alarm, and if the control type is 'Acknowledge,' the permission type can be selected ('Normal', 'Grant' or 'Deny').</p>
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CCTV Camera Commands

The following commands can be performed on a CCTV Camera:

<p>Send Camera To PTZ Preset</p>	<p>Sends the selected Camera to the PTZ Preset with the 'PTZ Id' given. The selected Camera must be online at the time the command is sent and have a PTZ Preset configured with the given Id for this command to work.</p>
<p>Run PTZ Pattern on Camera</p>	<p>Runs the PTZ Pattern with the given 'PTZ Id' on the selected Camera. The selected Camera must be online at the time the command is sent and have a PTZ Pattern configured with the given Id for this command to work.</p>

Configuration

▼ Connection Configuration	
▼ Connection Configuration	@
▼ Connection	
Address	
Login Name	
Password	
Connection Port	0
▼ Logging	
Log Verbosity	Debug ▼
▼ Monitoring - Alarms	
Duplicate Alarm Frequency (ms)	1000
▼ License Plate Recognition	
LPR Monitoring	Smart LPR ▼
▼ Overlays	
Camera Name	<input type="checkbox"/>
Image Time	<input type="checkbox"/>
License Plate	<input type="checkbox"/>
▼ Video Stream Settings	
Stream Quality	Max ▼

Connection

Address – The IP Address of the Server to connect to.

User Name – The Username of the Avigilon Control Center Server User to connect to the Server with.

Password - The Password of the Avigilon Control Center Server User to connect to the Server with.

Port – The port used to connect to the server. Using '0' will match the port to the default port configured in Avigilon.

Logging

Log Verbosity - Only logs of the specified level or higher will be logged. If Warning is selected, only Warning, Error and Fatal logs will be written to the log.

Monitoring - Alarms

Duplicate Alarm Frequency (ms) – The minimum amount of time (in milliseconds) that must pass before duplicate alarms are logged. A value of 0 means all alarms are logged instead.

License Plate Recognition

LPR Monitoring – Changes how LPR events should be processed and received. If 'Smart LPR' is selected, any detected license plates will simulate a virtual card badge at the configured reader for enabled Cameras, as well as log a Review message. Only logs in review if 'Review Only' is selected or neither if 'Disabled' is selected. Requires Integrیتی v18 or higher and License Plate Recognition Interface license.

Overlays

Camera Name – Whether or not to show an overlay of the Camera's name while viewing a child Camera of this recorder.

Image Time – Whether an overlay containing the current timestamp of the video playback will be shown in video streams of the child Cameras of this recorder.

License Plate – Whether an overlay showing any detected license plates will be present on video streams of the child Cameras of this recorder.

Video Stream Settings

Stream Quality – The quality of the video streams that the child Cameras of this Recorder will use.

Troubleshooting

<p>Plugin doesn't appear in 'New Integrated Device' List</p>	<p>Restart the Integriti Integration Server and restart any instances of Integriti System Designer or Integriti Gatekeeper open on the computer experiencing the problem</p>
<p>Live video not streaming from camera</p>	<ul style="list-style-type: none"> • Is the camera is correctly configured in the Avigilon server? • Can live video be viewed from the Avigilon software? • Does the logged in Avigilon User have sufficient permissions for viewing live video? • Are there any open RDP connections on the computer attempting to stream the video on? The Avigilon SDK does not support viewing video streams over RDP and all RDP connections must be closed for a video stream to be opened.
<p>Archived video not streaming from camera</p>	<ul style="list-style-type: none"> • Is the camera is correctly configured in the Avigilon server? • Can archived footage be viewed on the Avigilon server for the selected time (and does archived footage exist at the selected time)? • Does the logged in Avigilon User have sufficient permissions for viewing archived video? • Are there any open RDP connections on the computer attempting to stream the video on? The Avigilon SDK does not support viewing video streams over RDP and all RDP connections must be closed for a video stream to be opened.
<p>Archived video going to the wrong time</p>	<ul style="list-style-type: none"> • Does archived footage exist at the selected time? • Is the time the same on both the Avigilon server and the client computer viewing archived video from?
<p>Unable to connect to Avigilon System</p>	<p>If the following error is shown in the Integriti log file, it may be necessary to install DirectX 9C: '[Avigilon] Unable to create a ControlCenter object, some SDK components might be missing' DirectX 9C can be downloaded from the following link: DirectX End-User Runtime Web Installer</p>