



## INTEGRITI DW SPECTRUM CCTV INTEGRATION

*DOCUMENT CREATED WITH REFERENCE TO INTEGRITI PROFESSIONAL SOFTWARE  
VERSION V23.1.021141*



**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>**

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# *Integrati DW Spectrum CCTV Integration*

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## CCTV Capabilities

### Core 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 Integrati client.                                                                                                             | 22  | ✓   |
| <i>Select Custom Aspect Ratio</i>                     | Select the aspect ratio to use when streaming CCTV footage on a per-camera or per-recorder basis.                                                                                                            | 22  | ✓   |
| <i>Stream Archived CCTV Footage</i>                   | Archived CCTV footage can be streamed from online cameras in the CCTV system to an Integrati client.                                                                                                         | 22  | ✓   |
| <i>Control Archived CCTV Playback Speed</i>           | Playback speed of archived CCTV footage can be controlled from the Integrati client.                                                                                                                         | 22  | ✓   |
| <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 Integrati System on a specific client workstation.                                                 | 22  | ✓   |
| <i>Create Child Devices from Camera Configuration</i> | Child CCTV Cameras will be created based on the Camera configuration on Refreshing Child Devices                                                                                                             | 22  | ✓   |
| <i>Associate Cameras With Entities</i>                | Cameras loaded from the CCTV system can be associated with Integrati Entities to allow direct control of one from the other.                                                                                 | 22  | ✓   |
| <i>Show Associated CCTV From Event</i>                | Associated CCTV Footage can be directly accessed and viewed from any event occurring in Integrati that has an associated Camera (either a direct association or through the Entity that triggered the event) | 22  | ✓   |
| <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.                                                                      | 22  | ✓   |
| <i>Send Cameras to PTZ Preset</i>                     | Send supported PTZ cameras on the CCTV system to preconfigured PTZ presets directly from the video stream.                                                                                                   | 22  | ✓   |
| <i>Digital PTZ Control</i>                            | Digitally zoom the CCTV stream's image for non-PTZ cameras and archived footage.                                                                                                                             | 22  | ✓   |

|                                                        |                                                                                                                                                                                                   |    |   |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|
| <i>CCTV Layouts</i>                                    | Store a collection of Cameras with an specific viewer layout to be brought up at a later point in time                                                                                            | 22 | ✓ |
| <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.         | 22 | ✓ |
| <i>Trigger Actions in the CCTV System</i>              | Trigger actions or commands in the CCTV system directly from Integrati.                                                                                                                           | 22 | ✓ |
| <i>View and Control Cameras on Schematics</i>          | Cameras can be added to Schematics Maps in Integrati and directly viewed and controlled directly from the Schematic. Each camera's state is immediately visible on the Schematic where available. | 22 | ✓ |
| <i>Sync Time (via NTP)</i>                             | Sync the time of the CCTV system and Integrati to match via an NTP.                                                                                                                               | 22 | ✓ |
| <i>Display Connection Status to CCTV System</i>        | Display whether or not Integrati is currently connected to the CCTV system.                                                                                                                       | 22 | ✓ |
| <i>Receive Events/Alarms from the CCTV System</i>      | Log events/alarms occurring on the CCTV system to Integrati's Review.                                                                                                                             | 22 | ✓ |
| <i>Trigger Integrati Actions on CCTV Events/Alarms</i> | Trigger actions to automatically occur in Integrati whenever specific events/alarms are received from the CCTV system.                                                                            | 22 | ✓ |
| <i>Generate Alerts from CCTV Events/Alarms</i>         | Automatically generate and restore Alerts tied to a specific Camera in Integrati whenever specific events/alarms are received from the CCTV system.                                               | 22 | ✓ |

## 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 Integrati when run. If not supported, camera configuration will need to be manually entered into Integrati. | 22  | ✓   |
| <i>64-bit Integration Server Support</i>       | The integration supports being run on the 64-bit integration server.                                                                                                                                            | 22  | ✓   |
| <i>Show Camera Status</i>                      | The current online/offline status of configured cameras will be visible directly through Integrati.                                                                                                             | 22  | ✓   |
| <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                                                               | 22  | ✓   |
| <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.                                                                                | 22  | ✓   |
| <i>Trigger Inputs on CCTV Event</i>            | Inputs in Integrati can be automatically triggered and restored when specified types of events are received from the CCTV system.                                                                               | 22  | ✓   |
| <i>Control Iris and Focus</i>                  | Control the iris and focus of supported cameras on the CCTV system directly from the video stream                                                                                                               | 22  | ✗   |
| <i>Control PTZ Tours</i>                       | PTZ Tours can be started and stopped directly from the video stream.                                                                                                                                            | 22  | ✓   |
| <i>Display Video Frame Times</i>               | When viewing archived CCTV footage, the time of the current frame will be displayed on the viewer control.                                                                                                      | 22  | ✗   |
| <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.                                                                                   | 22  | ✗   |
| <i>Reverse Playback</i>                        | When viewing archived CCTV footage, the footage can be played in reverse.                                                                                                                                       | 22  | ✗   |
| <i>Step Forward/Backward</i>                   | When viewing archived CCTV footage, the footage can be stepped through one frame at a time.                                                                                                                     | 22  | ✗   |
| <i>Export CCTV Clips</i>                       | Export video clip of archived CCTV footage to the Evidence Vault or to a file directly from Integrati.                                                                                                          | 22  | ✓   |

|                                  |                                                                                                                                 |    |   |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----|---|
| <i>Export CCTV Snapshots</i>     | Export still snapshot of archived CCTV footage to the Evidence Vault or to a file directly from Integrati.                      | 22 | ✖ |
| <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. | 22 | ✖ |
| <i>Stream Audio With Video</i>   | Receive audio from the microphone on a supported CCTV camera through an Integrati client workstation                            | 22 | ✖ |
| <i>Send Audio to CCTV Camera</i> | Send audio from an Integrati client workstation out of the speakers on a supported CCTV camera.                                 | 22 | ✖ |

## Integriti DW Spectrum CCTV Integration Compatibility

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### Important Notes

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Integriti DW Spectrum Integration requires the digest authentication feature to be enabled in the DW Spectrum server for all the users connecting to DW Spectrum Server v5 and above.

### Required Integriti Version License

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The Integriti DW Spectrum CCTV Integration requires an Integriti Pro/Infiniti v23 license or higher to be present on the product key running the integration.

### Minimum Installed Integriti Version

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The Integriti DW Spectrum CCTV integration is only compatible with an installation of Integriti Pro or Infiniti that is v22 or higher.

### Licensing Requirements

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Integriti CCTV Integrations require Integriti Business or Integriti Corporate Software Edition.

For Integriti Business, one CCTV License is required per camera to be used in the system. Integriti Business supports 32 Cameras initially, and additional cameras can be added in lots of 8 using the 996921 CCTV - Extra 8 Cameras license. Any unlicensed Cameras will still show up in Integriti; however, they will not be useable.

For Integriti Corporate, unlimited cameras are supported with no additional licenses required.

### Tested Against

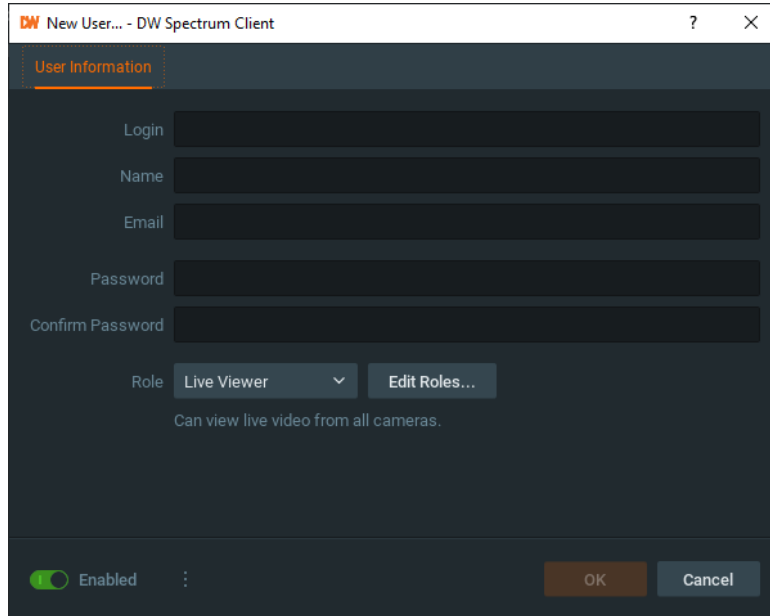
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The Integriti DW Spectrum CCTV plugin was built and tested against the following versions of software:

- DW Spectrum VMS Client 5.0.0.35271
- DW Spectrum VMS Server 5.0.0.35271
- DW Spectrum VMS Client 4.2.0.32842
- DW Spectrum VMS Server 4.2.0.32842

## DW Spectrum Server Configuration

Integrati DW Spectrum Integration requires the digest authentication feature to be enabled in the DW Spectrum server for the user when connecting to DW Spectrum Server v5 and above. This section outlines how to configure it.



1. Open the 'System Administration' window from the 'Main Menu' and click on the 'Users' tab
2. Either add a new user or edit an existing one
3. Click on the three vertical dots towards the bottom left of the User dialog and click the 'Allow digest authentication for this user', then click ok

## Integrati Configuration

### Ports Used

The following ports are used for communication between the Integrati DW Spectrum integration and the DW Spectrum server/cameras. These ports should be configured in the Integrati Integration Server and any Integrati Client Machine's firewalls to allow the integration to be used.

- TCP port 7001

|                             |                                     |
|-----------------------------|-------------------------------------|
| ▼ Connection Configuration  |                                     |
| ▼ Connection Configuration  | admin@127.0.0.1                     |
| ▼ Connection                |                                     |
| Address                     | 127.0.0.1                           |
| Login Name                  | admin                               |
| Password                    | *****                               |
| Port                        | 7001                                |
| Use HTTPS                   | <input checked="" type="checkbox"/> |
| Certificate Validation Mode | Specified Thumbprint ▼              |
| Certificate Thumbprint      |                                     |
| ▼ Logging                   |                                     |
| Log Verbosity               | Debug ▼                             |
| ▼ Monitoring                |                                     |
| Processing Interval (s)     | 5                                   |
| ▼ Export                    |                                     |
| File Format                 | .ts ▼                               |
| ▼ PTZ Control               |                                     |
| Pan Speed                   | 0.5                                 |
| Tilt Speed                  | 0.5                                 |
| Zoom Speed                  | 0.5                                 |

### Connection

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

**Login Name** – The Username of the DW Spectrum User to connect to the Server with. This User should have sufficient permissions configured in DW Spectrum to allow all of the features of the plugin to be used.

**Password** - The Password of the DW Spectrum User to connect to the Server with.

**Port** - The Port used to connect to the Server. This is 7001 by default. This port should be configured in the Integrati Integration Server and any Integrati Client Machine's firewalls to allow it to be used.

**Use HTTPS:** Set to true to use HTTPS rather than HTTP for connections.

**Certificate Validation Mode:** Select the validation mode to use when connecting with an invalid certificate.

**Certificate Thumbprint:** Enter the thumbprint of the certificate used by the HTTPS connection.

### 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

**Event Processing Interval** - How often to process events from the VMS. Specify a time interval between 1 to 60 seconds.

## Export

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**File Format** - Select the required format of the video archive file to be exported from the server.

## PTZ Control

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**Pan Speed** - Select the speed of Pan PTZ Operations. Specify a speed value between 0 & 1.

**Tilt Speed** - Select the speed of Tilt PTZ Operations. Specify a speed value between 0 & 1.

**Zoom Speed** - Select the speed of Zoom PTZ Operations. Specify a speed value between 0 & 1.

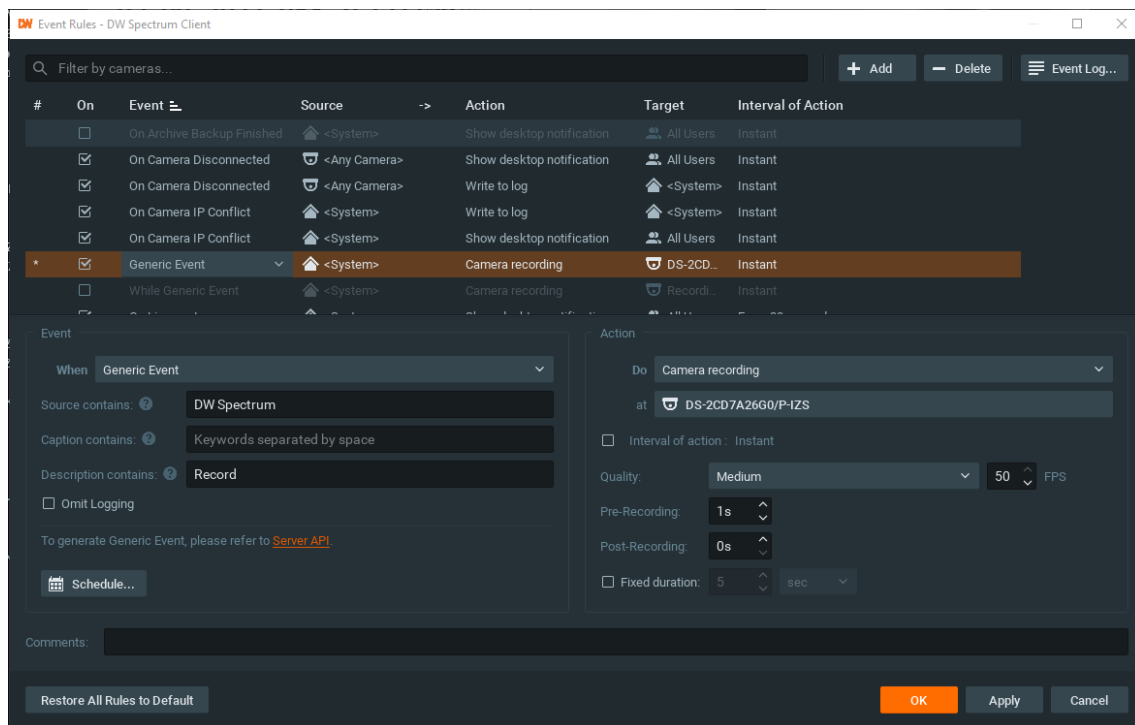
## Commands

### CCTV Recorder Commands

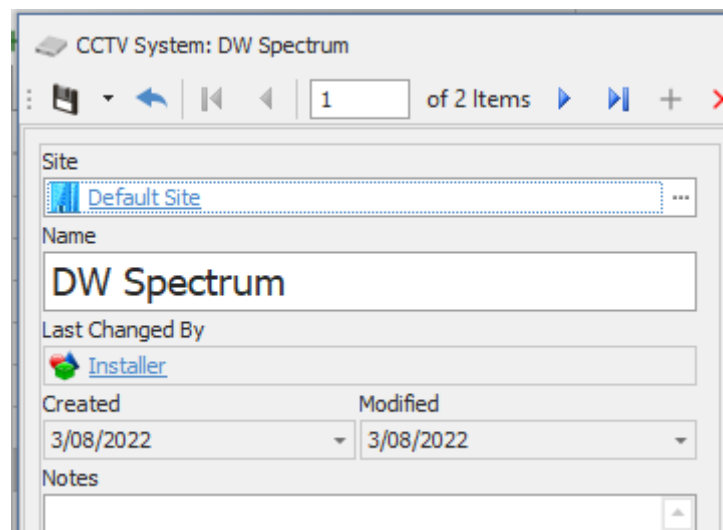
The following commands can be performed on a CCTV Recorder:

#### Trigger a Generic Event

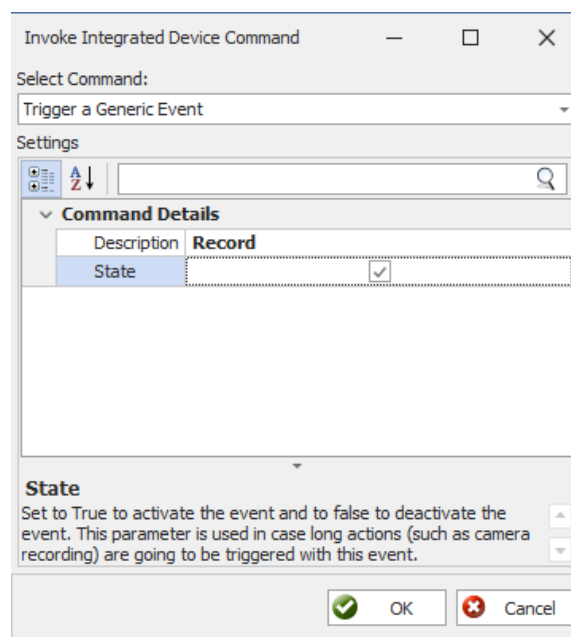
Generic Events can be configured in the VMS to perform an action from a variety of different action types available in response to being triggered by Integrity. The Generic Event must be preconfigured in the VMS first before it can be triggered by Integrity. The below steps outline the configuration process to trigger a “Camera Recording” action as an example. The same steps apply to triggering other action types in the VMS.



1. Open the 'Event Rules' editor in DW Spectrum Client and click 'Add'.
2. Under the 'Event' options select 'Generic Event' from the drop down menu next to 'When'.
3. The 'Source contains' field must contain the recorder name given in Integrity in the 'Configuration' steps above.



4. Specify a brief description for the event in the 'Description contains' field
5. Under the 'Action' options select 'Camera recording' from the drop down menu next to 'Do'.
6. Select a camera to start recording on and other relevant options then click 'Ok' to save the event rule and exit.



7. When triggering the event the 'Description' field in Integrati's 'Invoke Integrated Device Command' editor must be contained in 'Description contains' field specified in Event Rules editor above, in this case 'Record'. Set the 'State' option to start recording or leave unchecked to stop recording. Click 'OK' to trigger the event and exit.

## CCTV Camera Commands

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The following commands can be performed on a CCTV Camera:

|                                  |                                                                                                         |
|----------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Send Camera To PTZ Preset</b> | Sends the selected camera to a preset identified by Ptz Id. Ptz Id can either be the preset id or name. |
| <b>Run PTZ Tour On Camera</b>    | Runs a tour identified by Ptz Id on the selected camera. Ptz Id can either be the tour id or name.      |
|                                  |                                                                                                         |

## Troubleshooting

|                                        |                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Integrity doesn't play archived video  | <ul style="list-style-type: none"> <li>• Are the user credentials correct?</li> <li>• Did Integrity establish a connection with the VMS?</li> <li>• Does the archived footage exist in the VMS?</li> </ul>                                                                                                                             |
| Integrity cannot export archived video | <ul style="list-style-type: none"> <li>• Is it possible to play the archived video in the VMS for the selected time?</li> <li>• Does the user have permission to view or export archive?</li> </ul>                                                                                                                                    |
| PTZ operations do not work             | <ul style="list-style-type: none"> <li>• Are the user credentials correct?</li> <li>• Did Integrity establish a connection with the VMS?</li> <li>• Does the user have permission for PTZ operations?</li> </ul>                                                                                                                       |
| Integrity is not receiving events      | <ul style="list-style-type: none"> <li>• Are the user credentials correct?</li> <li>• Did Integrity establish a connection with the VMS?</li> <li>• Does the user have permission to view event log?</li> <li>• Is persisted connection enabled?</li> <li>• Are the relevant review transitions enabled in recorder editor?</li> </ul> |