

Avigilon Avigilon Control Center Server 4

Device Driver Specification. DYNAMICALLY GENERATED; DO NOT MODIFY.

14/04/2016 04:43:32 PM



A Whole World of Integration



Table of Contents

1	Document Versions.....	5
2	Referenced Documents	6
3	Manufacturer	7
4	IPSecurityCenter Versions	8
5	Operating Systems.....	9
5.1	Client Side Functionality	9
5.2	Server Side Functionality	9
6	Models / Firmware Versions.....	10
	Control Center	10
7	Hardware Configurations.....	11
8	Driver Package	12
9	Driver Features	14
9.1	Avigilon Control Center Server 4	14
9.1.1	Device Connection and Online States.....	14
	DC1.0 Device Online Status	14
	DC2.0 Authentication.....	14
9.1.2	Video	15
	VID1.0 Camera Population.....	15
	VID2.0 Live Video	15
	VID2.1 Display Live Video	15
	VID2.2 Snapshot.....	15
	VID2.3 PTZ.....	15
	VID2.4 Set Preset	15
	VID2.5 Get Preset.....	15
	VID3.0 Recorded Video	15
	VID3.1 Display Recorded Video	15
	VID3.2 Seek	15
	VID3.3 Pause	15
	VID3.4 Snapshot.....	15
	VID3.5 Fast Forward/Rewind	15
	VID3.6 Slow Motion	15
	VID3.7 Time Bar Population.....	15
	VID4.0 Video Export.....	15

VID5.0 Web Client Support	15
9.1.3 Properties	16
Show Unsorted Events.....	16
Child Devices State Update Delay.....	16
9.1.4 Methods.....	17
9.1.4.1 Acknowledge Alarm	17
9.1.4.2 Assign Alarm	17
9.1.4.3 Purge Alarm	18
9.1.4.4 Trigger Alarm	18
9.1.4.5 Unassign Alarm	19
9.1.5 Events.....	20
9.1.5.1 Digital Input Changed	20
9.1.5.2 License Expiry.....	20
9.1.5.3 Database	21
9.1.5.4 Storage Backup Ended	22
9.1.5.5 Low Disk Space.....	22
9.1.5.6 Storage Volume Changed	23
9.1.5.7 Storage Write Problem	24
9.1.5.8 Alarm.....	24
9.1.5.9 Plugin Load Error.....	25
9.1.5.10 Network Interface Removed	25
9.1.5.11 User Login State Changed.....	26
9.1.5.12 Alarm Recording State Changed	26
9.1.5.13 Unsorted Events.....	27
9.2 Avigilon Control Center Camera 4	28
9.2.1 Device Connection and Online States.....	28
DC1.0 Device Online Status	28
DC2.0 Authentication.....	28
9.2.2 Video	29
9.2.3 Properties	30
Device Id	30
9.2.4 Methods.....	31
9.2.4.1 Snapshot	31
9.2.5 Events.....	32

9.2.5.1	License Plate	32
9.2.5.2	Device Connection Changed	32
9.2.5.3	Firmware Upgrade Error	33
9.2.5.4	Motion Detection Changed	34
9.2.5.5	Missing Data	35
9.2.5.6	Video Signal Changed	35
9.2.5.7	Snapshot	36
9.2.5.8	Recording State Changed.....	37
10	Installation	38
10.1	Prerequisites	38
10.2	Driver Installation	39
10.2.1	Device Configuration	40
10.2.2	Driver Compatibility	41

1 Document Versions

Version	Date	Name	Change
1.0	2016-04-14	JK	Document Created.

2 Referenced Documents

Document	Version	Description
Driver Project Requirements (DDK-PR)	1.0	The Avigilon Avigilon Control Center Server 4 driver must conform to all the requirements detailed in this document.
Driver Connection and Online States Requirements (DDK-DC)	1.0	The Avigilon Avigilon Control Center Server 4 driver must conform to all requirements in this document detailed in the section: Device Connection and Online States
Driver Video Requirements (DDK-VID)	1.0	The Avigilon Avigilon Control Center Server 4 driver must conform to all requirements in this document detailed in the section: Video

3 Manufacturer

Name Avigilon

The Avigilon logo consists of the word "AVIGILON" in a bold, blue, sans-serif font, followed by a smaller "AVI" in the same font style.

Website <http://avigilon.com/>

Description Avigilon (TSX: AVO) is defining the future of protection through innovative high-definition surveillance solutions.

4 IPSecurityCenter Versions

The driver must be compatible with the following IPSecurityCenter versions:

IPSecurityCenter Version	Supported
4.9.8	<input checked="" type="checkbox"/>

5 Operating Systems

5.1 Client Side Functionality

Operating Systems	Supported
Windows 7 64 bit	<input checked="" type="checkbox"/>

5.2 Server Side Functionality

Operating Systems	Supported
Windows Server 2008 R2	<input checked="" type="checkbox"/>
Windows Server 2012	<input checked="" type="checkbox"/>

6 Models / Firmware Versions

Model	Versions	SDK
Control Center		4.12

7 Hardware Configurations

TODO

**Build configuration diagram
linking servers together.**

(ConfigurationDiagram.png)

8 Driver Package

CNL.IPSecurityCenter.Driver.Avigilon.ControlCenter.CC4.Version.[BUILD-VERSION].ipsedriver

9 Driver Features

9.1 Avigilon Control Center Server 4

9.1.1 Device Connection and Online States

The full requirements for these features can be found in the [Device Connection and Online States Requirements](#)

Feature	
DC1.0 Device Online Status	None
DC2.0 Authentication	None

9.1.2 Video

The full requirements for these features can be found in the [Driver Video Requirements](#).

Feature	
VID1.0 Camera Population	<input checked="" type="checkbox"/> None
VID2.0 Live Video	
VID2.1 Display Live Video	<input checked="" type="checkbox"/>
VID2.1.1 Digital Zoom	<input checked="" type="checkbox"/>
VID2.1.2 Audio Support	<input checked="" type="checkbox"/>
VID2.1.3 Microphone Support	<input checked="" type="checkbox"/>
VID2.2 Snapshot	<input checked="" type="checkbox"/>
VID2.3 PTZ	<input checked="" type="checkbox"/>
VID2.4 Set Preset	<input checked="" type="checkbox"/>
VID2.5 Get Preset	<input checked="" type="checkbox"/>
VID3.0 Recorded Video	
VID3.1 Display Recorded Video	<input checked="" type="checkbox"/>
VID3.2 Seek	<input checked="" type="checkbox"/>
VID3.3 Pause	<input checked="" type="checkbox"/>
VID3.4 Snapshot	<input checked="" type="checkbox"/>
VID3.5 Fast Forward/Rewind	<input checked="" type="checkbox"/> <i>Play Speeds:</i> -8, -4, -2, -1, 0, 1, 2, 4, 8
VID3.6 Slow Motion	<input checked="" type="checkbox"/> <i>Play Speeds:</i> -0.5, -0.2, -0.1, 0, 0.1, 0.2, 0.5
VID3.7 Time Bar Population	None
VID4.0 Video Export	<input checked="" type="checkbox"/>
VID5.0 Web Client Support	<input type="checkbox"/>

9.1.3 Properties

General requirements for properties can be found in [Driver Project Requirements](#).

Name	Type	Description	Default Value & Ranges
Show Unsorted Events	bool	Shows Unsorted Events	Default: true Min: Max:
Child Devices State Update Delay	int	Time delay in milliseconds after the device goes Online to ensure the child devices set to a right state.	Default: 2000 Min: 1000 Max:

9.1.4 Methods

General requirements for methods can be found in [Driver Project Requirements](#).

9.1.4.1 Acknowledge Alarm

Acknowledges an alarm. Nothing will happen if the alarm is already triggered. Alarms of type Normal can only be acknowledged with the Normal permission. Alarms of type GrantDeny can only be acknowledged with the Grant or Deny permissions. When acknowledging an alarm, it make take a few moments before the operation is processed and the state changes. Returns true if the alarm is successfully acknowledged.

Returns bool.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
Identifier	string	The unique identifier of the alarm.	Default: Min: Max:
Acknowledge Permission	Enums.AlarmAcknowledgePermission	The permission to set when acknowledging the alarm.	Default: Min: Max:
Note	string	A note indicating why the alarm was acknowledged.	Default: Min: Max:

9.1.4.2 Assign Alarm

An alarm can only be assigned from the Active state. When assigning an alarm, it make take a few moments before the operation is processed and the state changes. Returns true if the alarm is successfully assigned.

Returns bool.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
------	------	-------------	--------------------------

Identifier	string	The unique identifier of the alarm.	Default: Min: Max:
-------------------	--------	-------------------------------------	--------------------------

9.1.4.3 Purge Alarm

Purges an alarm. An alarm can only be purged from the Acknowledged and AcknowledgedAutomatic states. When purging an alarm, it may take a few moments before the operation is processed and the state changes. Returns true if the alarm is successfully purged.

Returns bool.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
Identifier	string	The unique identifier of the alarm.	Default: Min: Max:
Note	string	A note indicating why the alarm was purged.	Default: Min: Max:

9.1.4.4 Trigger Alarm

Triggers an alarm. Returns true if the alarm is successfully triggered. Returns false if the alarm is already triggered.

Returns bool.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
Identifier	string	The unique identifier of the alarm.	Default: Min: Max:
Note	string	A note indicating why the alarm was triggered.	Default: Min: Max:

9.1.4.5 Unassign Alarm

Un-assign the alarm from the current user. An alarm can only be unassigned from the Assigned state. When un-assigning an alarm, it may take a few moments before the operation is processed and the state changes. Returns true if the alarm is successfully unassigned.

Returns bool.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
Identifier	string	The unique identifier of the alarm.	Default: Min: Max:

9.1.5 Events

General requirements for events can be found in [Driver Project Requirements](#).

9.1.5.1 Digital Input Changed

Raised when a digital input changes state.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Device Identifier	string	The identifier of the device that raised the input state change event.
Device Name	string	The name of the device that raised the input state changed event.
Device Display Name	string	The display name of the device that raised the input state changed event.
State On	bool	The new state of the input. TRUE if on, or FALSE if off.
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.
Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.

9.1.5.2 License Expiry

Raised when a license expiration notice is available.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.

Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
Days Till Expiry	string	The number of days until the license expires.
Valid	string	Defines if the license is still valid after this event.
Remaining Audio Channels	int	The number of audio channels clients available in the license after this point.
Remaining Device Connections	int	The number of device connections available in the license after this point.
Remaining Integration Clients	int	The number of integration clients available in the license after this point.
Remaining LAN Clients	int	The number of LAN clients available in the license after this point.
Remaining LPR Channels	int	The number of license plate recognition channels available in the license after this point.
Remaining SDK Clients	int	The number of SDK clients available in the license after this point.
Remaining Text Transact Sources	int	The number of text transaction sources available in the license after this point.

9.1.5.3 Database

Raised when a database event occurs.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.
Name	string	The name of the event.

NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
Database Event Type	Enums.DatabaseEventType	The type of database event this represents.
Database Name	string	The name of the database that the event relates to.

9.1.5.4 *Storage Backup Ended*

Raised when a backup ends.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.
Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
Flags	Enums.BackupStateFlags	The flags resulting from the backup, containing the result of the backup and allowing determinism of success.

9.1.5.5 *Low Disk Space*

Raised when low disk space is available for recording.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Category	Enums.EventCategory	The category of this event.

Message	string	The message of the event.
Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
Percentage Full	int	The percentage of used space.
Volume Root	string	The root of the volume that is low on disk space.

9.1.5.6 Storage Volume Changed

Raised when a storage volume changes to a restored, or a failed state.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.
Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
Device Sdk Identifier	string	The Device Identifier of the device that the event occurred on.
Device Name	string	The name of the device that the event occurred on.
Device Display Name	string	The display name of the device that the event occurred on.
Available	bool	Determines if the storage volume is currently available.
Unavailable Reason	Enums.StorageVolumeFailedReason	The reason why the storage volume is unavailable.

Related Device	Guid	The Avigilon server child device associated with the motion.
-----------------------	------	--

9.1.5.7 Storage Write Problem

Raised if a problem occurs while writing device recordings to storage.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.
Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.

9.1.5.8 Alarm

Raised if an alarm comes in from the system.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Identifier	string	The alarms unique ID, unique per NVR.
Name	string	The name of the alarm.
NVR Identifier	string	The UUID of the NVR the alarm occurred on.
Type	Enums.AlarmType	The type of the event.
State	Enums.AlarmState	The current state of the alarm.
Last Changed	DateTime	The time when the state was last changed.
Valid	bool	Determines if the alarm is valid or not.

9.1.5.9 *Plugin Load Error*

Represents a plugin load error.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Name	string	The device name.
Plugin Name	string	The name of the plugin that failed to load.
Category	Enums.EventCategory	The category of this event.
Link Mode	Enums.EventLinkModes	The link mode of this event.
Linked Event Type	Enums.EventType	The linked event type of the plugin failure.
Message	string	The message reported by the NVR.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Timestamp	System.DateTime	The time at which the event occurred.
Type	Enums.EventType	The type of the event.

9.1.5.10 *Network Interface Removed*

Fired when a network interface is removed from within Avigilon

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Name	string	The device name.
Interface	string	The name of the Interface that was removed.
Category	Enums.EventCategory	The category of this event.
Link Mode	Enums.EventLinkModes	The link mode of this event.
Linked Event Type	Enums.EventType	The linked event type of the plugin failure.
Message	string	The message reported by the NVR.
NVR Identifier	string	The UUID of the NVR the event occurred on.

Timestamp	System.DateTime	The time at which the event occurred.
Type	Enums.EventType	The type of the event.

9.1.5.11 *User Login State Changed*

Fired when a User Login state changes.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Name	string	The device name.
Client Name	string	The name of the client involved.
Category	Enums.EventCategory	The category of this event.
Link Mode	Enums.EventLinkModes	The link mode of this event.
Linked Event Type	Enums.EventType	The linked event type of the plugin failure.
Message	string	The message reported by the NVR.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Timestamp	System.DateTime	The time at which the event occurred.
Type	Enums.EventType	The type of the event.
Client UUID	string	The unique identifier of the client involved.
Logged In	bool	The users logged in status.

9.1.5.12 *Alarm Recording State Changed*

Represents a change in the Alarm recording state.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
AlarmName	string	The name of the Alarm.
AlarmId	string	The id of the Alarm.
Category	Enums.EventCategory	The category of this event.

Link Mode	Enums.EventLinkModes	The link mode of this event.
Linked Event Type	Enums.EventType	The linked event type of the plugin failure.
Message	string	The message reported by the NVR.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Timestamp	System.DateTime	The time at which the event occurred.
Type	Enums.EventType	The type of the event.
Name	string	The name of the recording state changed event.

9.1.5.13 Unsorted Events

Shows events which have been raised by Avigilon but have not been filtered into their correct categories within IPSC.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Message	string	The message of the event.
Category	Enums.EventCategory	The category of this event.
Link Mode	Enums.EventLinkModes	The link mode of this event.
Name	string	The name of the event as reported from Avigilon.
NVR Identifier	string	The UUID of the NVR the event occurred on.
TimeStamp	DateTime	The time that the unsorted event was raised.
Type	Enums.EventType	The type of the event.

9.2 Avigilon Control Center Camera 4

9.2.1 Device Connection and Online States

The full requirements for these features can be found in the [Device Connection and Online States Requirements](#)

Feature	
DC1.0 Device Online Status	None
DC2.0 Authentication	None

9.2.2 Video

This device does support video.

9.2.3 Properties

General requirements for properties can be found in [Driver Project Requirements](#).

Name	Type	Description	Default Value & Ranges
Device Id	string	The camera device id, used in the ODD design to identify which camera raised an event.	Default: Min: Max:

9.2.4 Methods

General requirements for methods can be found in [Driver Project Requirements](#).

9.2.4.1 Snapshot

Exports a Snapshot

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
DateTime	DateTime	The date time value for which you wish to export a snapshot.	Default: Min: Max:

9.2.5 Events

General requirements for events can be found in [Driver Project Requirements](#).

9.2.5.1 License Plate

Raised when a license plate detection state changes.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Identifier	string	The events unique ID, unique per NVR.
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.
Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
DeviceSdkIdentifier	string	The Device Identifier of the device that the event occurred on.
Device Name	string	The name of the device that the event occurred on.
Device Display Name	string	The display name of the device that the event occurred on.
Match Type	Enums.PlateMatchType	The type of match that occurred.
Candidate License Plate	string	The candidate (watch list entry) license plate.
Confidence	int	The confidence of the match, from 0 to 100.
License Plate	string	The license plate that was detected.
Related Device	Guid	The Avigilon server child device associated with the motion.

9.2.5.2 Device Connection Changed

Raised when a connection to a device changes.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Identifier	string	The events unique ID, unique per NVR.
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.
Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
Device Sdk Identifier	string	The Device Identifier of the device that the event occurred on.
Device Name	string	The name of the device that the event occurred on.
Device Display Name	string	The display name of the device that the event occurred on.
Problem Type	Enums.ConnectionProblemType	The type of connection problem that has occurred.
Related Device	Guid	The Avigilon server child device associated with the motion.

9.2.5.3 Firmware Upgrade Error

Raised when a firmware upgrade failed on a device.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Identifier	string	The events unique ID, unique per NVR.
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.

Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
Device Sdk Identifier	string	The Device Identifier of the device that the event occurred on.
Device Name	string	The name of the device that the event occurred on.
Device Display Name	string	The display name of the device that the event occurred on.
Related Device	Guid	The Avigilon server child device associated with the motion.

9.2.5.4 *Motion Detection Changed*

Raised when motion is detected, or stops being detected on a device.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Identifier	string	The events unique ID, unique per NVR.
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.
Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
Device Sdk Identifier	string	The Device Identifier of the device that the event occurred on.
Device Name	string	The name of the device that the event occurred on.
Device Display Name	string	The display name of the device that the event occurred on.

Motion Detected	bool	Determines if there is currently motion being detected on this camera. TRUE if there is, FALSE if there isnt.
Related Device	Guid	The Avigilon server child device associated with the motion.

9.2.5.5 *Missing Data*

Raised when no data is received from a device for a specified period of time.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Identifier	string	The events unique ID, unique per NVR.
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.
Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
Device Sdk Identifier	string	The Device Identifier of the device that the event occurred on.
Device Name	string	The name of the device that the event occurred on.
Device Display Name	string	The display name of the device that the event occurred on.
Duration	int	The duration for which the device has received no data, in milliseconds.
Related Device	Guid	The Avigilon server child device associated with the motion.

9.2.5.6 *Video Signal Changed*

Raised when the availability of a signal for a device changes.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Identifier	string	The events unique ID, unique per NVR.
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.
Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
Device Sdk Identifier	string	The Device Identifier of the device that the event occurred on.
Device Name	string	The name of the device that the event occurred on.
Device Display Name	string	The display name of the device that the event occurred on.
Signal Available	bool	Determines if a video signal is available for the device specified. TRUE if signal is available, FALSE if not.
Related Device	Guid	The Avigilon server child device associated with the motion.

9.2.5.7 Snapshot

Raised when the camera snapshot method returns frames.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Folder Path	string	The location where the exported frames are stored.
Frames Exported	int	The number of frames exported from the NVR.
Time	DateTime	The date time value that the frames were exported from.

StartFrame	string	The first frame from the video export.
-------------------	--------	--

9.2.5.8 Recording State Changed

Raised when recording for a device is interrupted.

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Identifier	string	The events unique ID, unique per NVR.
Category	Enums.EventCategory	The category of this event.
Message	string	The message of the event.
Name	string	The name of the event.
NVR Identifier	string	The UUID of the NVR the event occurred on.
Type	Enums.EventType	The type of the event.
LinkMode	Enums.EventLinkModes	The link mode of this event.
Device Sdk Identifier	string	The Device Identifier of the device that the event occurred on.
Device Name	string	The name of the device that the event occurred on.
Device Display Name	string	The display name of the device that the event occurred on.
Last Recording Time	DateTime	The last time that recording was available.
Related Device	Guid	The Avigilon server child device associated with the motion.

10 Installation

10.1 Prerequisites

Install the SDK on all machines running the following services / software:

- Client
- Video Export Server
- Connection Manager
- Server

10.2 Driver Installation

- Start the IPSecurityCenter™ client and any supporting services
- Open the Device Driver Manager from the System Configuration
- Click the **Install** button
- Select the Avigilon Avigilon Control Center Server 4 Driver Package in the Open file dialog
- Wait for the driver to be uploaded

The driver packages should be listed in the Device Driver Manager.

Additional Installation Details

Note: You may not need to install the SDK (its shipped within the driver), but you must ensure that the following prerequisites are available on each machine running the driver package. These prerequisites are Direct X 9c and VC++ 2008 x86.

Known issues/limitations:

- * The SDK supports only fast-forward and fast-backward playback speeds up to 8x.
- * In playback, when jumping to a time with no footage available, the last shown frame will be displayed (e.g. as if playback was “frozen”) while the time bar will keep progressing normally. The normal playback will restart as soon as a time with some footage available is reached. This behavior is consistent with the one of the native software.
- * There is an issue when clients are in a different time zone to the server. This is within the Avigilon SDK which only accepts local times. To resolve the issue, move all clients/services to the same time zone.
- * Presets can be retrieved and updated from the native Avigilon server, but they cannot be deleted from outside of the native Avigilon software.
- * In playback, footage must be viewed 60 second after it has been recorded. This is caused by a limitation within the Avigilon system, where writing the video file to disc occasionally takes longer than expected.
- * There is still some functionality within IPSC which is not yet supported within the Avigilon SDK. One such limitation is the ability to recall the timeframe of archived footage, as such we spoof the timeline bar simulating 4 months of archiving. However, this is problematic when attempting to view playback on a camera which has not been recording. In such an event a spinning wheel will appear in the middle of the tile, symbolizing that the Avigilon SDK player is in a buffering state.
- * There is no error message displayed when user display camera in playback if there is no video feed available

10.2.1 Device Configuration

- Right click in a folder (e.g. Devices) in the System Configuration: **New** → **Device On** → **Server**
- Click **Next** on the introduction
- Select **Avigilon** in the **Device Manufacturer** list
- Select **Avigilon Control Center Server 4** in the Available Devices list
- Click **Next** to enter the device details: Enter the Avigilon Avigilon Control Center Server 4 hostname or IP address, the port (use 0 to use the default port), and user name and password if integrated security is not being used.
- Click **Next** and **Finish** to add the device.
- Enable the device to bring it online.

Additional Configuration Details

Limitations:

The driver is not tested with Web client, so it doesn't support web client for this release

10.2.2 Driver Compatibility

The following devices are known to be incompatible with the Avigilon Avigilon Control Center Server 4.

Model
