

Vista-CCTV Qulu Server

Device Driver Specification. DYNAMICALLY GENERATED; DO NOT MODIFY.

04/04/2018 14:02:49



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1 Document Versions

Version	Date	Name	Change
1.0	2018-04-04	RS	Document Created.

2 Referenced Documents

Document	Version	Description
Driver Project Requirements (DDK-PR)	1.0	The Vista-CCTV Qulu Server driver must conform to all the requirements detailed in this document.
Driver Connection and Online States Requirements (DDK-DC)	1.0	The Vista-CCTV Qulu Server 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 Vista-CCTV Qulu Server driver must conform to all requirements in this document detailed in the section: Video

3 Manufacturer

Name Vista-CCTV



Website <http://vista-cctv.com/>

Description Vista, the UK's most popular brand of CCTV equipment, is headquartered in Reading, UK. Vista focuses exclusively on the development of high quality, functionally rich and competitively positioned CCTV products.

4 IPSecurityCenter Versions

The driver must be compatible with the following IPSecurityCenter versions:

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

5 Operating Systems

5.1 Client Side Functionality

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

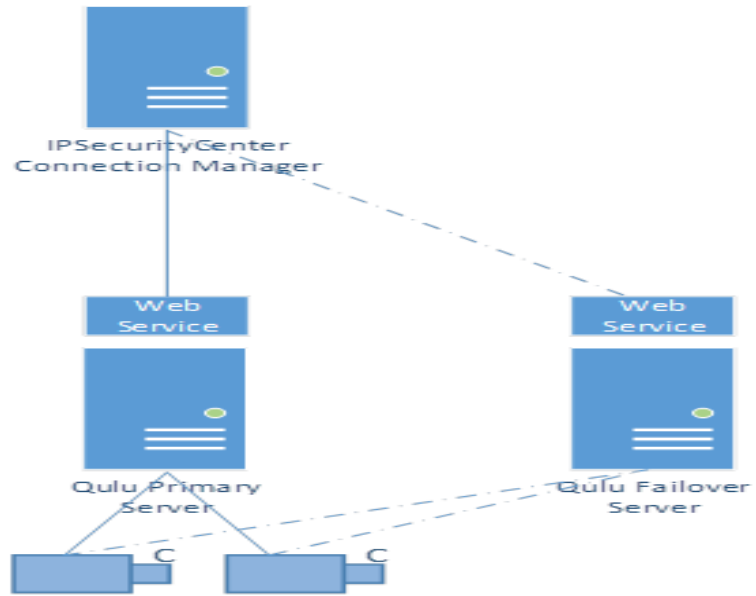
5.2 Server Side Functionality

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
Qulu Software	2.4.1.10278	2.4.1.10278

7 Hardware Configurations



8 Driver Package

The driver package is named:

ArrowLabs.IPSecurityCenter.Driver.Vistacctv.Qulu.Version.[BUILD-VERSION].ipsedriver

9 Driver Features

9.1 Qulu Server

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

This device does not support video.

9.1.3 Properties

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

Name	Type	Description	Default Value & Ranges
Poll Interval	int	The interval in milliseconds at which to poll the events through API	Default: Min: Max:
Last History Time	DateTime	Last history time request for the new alarms	Default: Min: Max:
Video Export Format	ExportVideoType	Video export file format available mpeg-2/ts (.ts) and matroska (.mkv)	Default: ExportVideoType.Mkv Min: Max:
Snapshot Directory	string	Directory to save the snapshots from cameras.	Default: Min: Max:
ServerIdentifier	string	Server Identifier	Default: Min: Max:

9.1.4 Methods

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

9.1.4.1 *Check Cameras*

Used to detect if the populated cameras do not belong to the server and raises a state change event.

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
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9.1.5 Events

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

9.1.5.1 Generic Event

Raised when an event that has not otherwise been defined is generated.

Performance

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

Event Properties

Name	Type	Description
Identifier	string	The ID of the event
Name	string	Name of the event
Event Type Description	string	Description of the event
Creation Time	DateTime	Time of the event

9.1.5.2 Failover Server

Raised when failover starts or stops between Qulu servers.

Performance

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

Event Properties

Name	Type	Description
Server State	string	Server state is Started / Ended
Creation Time	DateTime	Time of the event
Current Server	string	Active Server

9.1.5.3 Server Conflict

Occurs if a new Server is connected to another Server on the same network and pulls data from same Cameras.

Performance

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

Event Properties

Name	Type	Description
Conflicting Server IP	string	IP of the other server

Conflicting Server Name	string	Name of the other server
Creation Time	DateTime	Time of the event

9.1.5.4 *License Issue*

Occurs if no Licenses are active.

Performance

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

Event Properties

Name	Type	Description
License State	string	State is Licensed / Unlicensed
Creation Time	DateTime	Time of the event
Event Description	string	Description of the event

9.1.5.5 *Storage Failure*

Raised when an issue is detected with storage.

Performance

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

Event Properties

Name	Type	Description
Issue Type	string	Description of the issue
Storage	string	The Storage where the issue exists
Creation Time	DateTime	Time of the event

9.2 Qulu Camera

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

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"/>
VID2.2 Snapshot	<input checked="" type="checkbox"/>
VID2.3 PTZ	<input checked="" type="checkbox"/>
VID2.4 Set Preset	<input type="checkbox"/>
VID2.5 Get Preset	<input 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> 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30
VID3.6 Slow Motion	<input type="checkbox"/> <i>Play Speeds:</i> 0
VID3.7 Time Bar Population	None
VID4.0 Video Export	<input type="checkbox"/>
VID5.0 Web Client Support	<input type="checkbox"/>

9.2.3 Properties

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

Name	Type	Description	Default Value & Ranges
Camera Name	string	Camera name	Default: Min: Max:
Camera model	string	Camera model	Default: Min: Max:
Camera Identifier	string	Camera unique identifier. This identifier is used in all requests related to a camera. For instance, in RTSP requests	Default: Min: Max:
Camera Manufacturer	string	Camera manufacturer	Default: Min: Max:
Parent Id	string	Cameras server ID	Default: Min: Max:
Resolution	Resolution	Turn on video transcoding to the specified resolution.	Default: Min: Max:
Rotation	Rotation	Rotate item. Can be 0, 90, 180 or 270 degree.	Default: Min: Max:
Codec Type	Codec	Defines video codec used for transcoding.	Default: Min: Max:
Stream Quality	StreamQuality	Open high quality stream if parameter is 0 or low quality stream if parameter is 1.	Default: Min: Max:
MAC Address	string	camera MAC address	Default: Min: Max:
IP Address	string	IP address of the	Default: Min:

		camera	Max:
Resource Id	string	Unique identifier for each resource	Default: Min: Max:

9.2.4 Methods

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

9.2.4.1 *Save Snapshot*

Returns file path to the image from a recorded source at the specified time .

Returns string.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
Time	DateTime	The time at which the snapshot is needed.	Default: Min: Max:

9.2.5 Events

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

9.2.5.1 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
Motion State	string	State is Started / Stopped
Creation Time	DateTime	Time of the event

9.2.5.2 Network Issue

Occurs if network is unable to transfer data between Camera and Server and packet loss is detected.

Performance

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

Event Properties

Name	Type	Description
Creation Time	DateTime	Time of the event

9.2.5.3 Camera IP Conflict

Raised when IP conflict is detected on the camera.

Performance

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

Event Properties

Name	Type	Description
Camera IP	string	IP of the camera
Creation Time	DateTime	Time of the event
Event Description	string	Description of the event

9.2.5.4 Input Signal

Occurs if input signal is detected on Camera.

Performance

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

Event Properties

Name	Type	Description
Creation Time	DateTime	Time of the event

9.2.5.5 *Camera Disconnect Event*

Raised when camera is disconnect.

Performance

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

Event Properties

Name	Type	Description
Creation Time	DateTime	Time of the event

9.2.5.6 *Generic camera event*

Raised when an event that has not otherwise been defined is generated.

Performance

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

Event Properties

Name	Type	Description
Identifier	string	The ID of the event
Name	string	Name of the event
Event Type Description	string	Description of the event
Creation Time	DateTime	Time of the event

10 Installation

10.1 Prerequisites

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

- Client
- Connection Manager

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 Vista-CCTV Qulu Server 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

Kindly install the VLC Player on the client or server where you to see the live video or playback. We are using the VLC Player for streaming.

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 **Vista-CCTV** in the **Device Manufacturer** list
- Select **Qulu Server** in the Available Devices list
- Click **Next** to enter the device details: Enter the Vista-CCTV Qulu Server 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

Kindly download and install the latest version of VLC player. Currently we are using version 2.2.2 Weatherwax.

10.2.2 Driver Compatibility

The following devices are known to be incompatible with the Vista-CCTV Qulu Server.

Model
