

# Infinova Infinova Server

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Device Driver Specification. DYNAMICALLY GENERATED; DO NOT MODIFY.

04/22/20 7:27:43 PM



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## 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
7	Hardware Configurations.....	11
8	Driver Package .....	12
9	Driver Features.....	14
9.1	Infinova Server .....	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
	License.....	16
	Enable Camera Caching.....	16
	Vms Id .....	16
	Enable HWAcceleration .....	16
9.1.4	Methods.....	17
	9.1.4.1 Update Cameras.....	<b>Error! Bookmark not defined.</b>
9.1.5	Events.....	18
	9.1.5.1 General Alarm .....	18
	9.1.5.2 Disk state.....	18
	9.1.5.3 Recording State Changed.....	18
	9.1.5.4 Network interface removed.....	19
	9.1.5.5 Low Disk Space .....	19
9.2	Infinova Camera.....	20
	9.2.1 Device Connection and Online States.....	20
	DC1.0 Device Online Status.....	20
	DC2.0 Authentication.....	20
	9.2.2 Video .....	21
	9.2.3 Properties.....	22
	9.2.4 Methods.....	23
	9.2.4.1 Focus .....	23
	9.2.4.2 Iris.....	23
	9.2.4.3 Washer .....	23
	9.2.4.4 Wiper.....	24
	9.2.4.5 GotoPreset .....	24
	9.2.4.6 IR .....	25
	9.2.4.7 Start Tour .....	25
	9.2.4.8 Get Tours.....	25
	9.2.4.9 Stop Tour.....	26
	9.2.5 Events.....	27
	9.2.5.1 Video Signal Changed.....	27
	9.2.5.2 Tamper .....	27
	9.2.5.3 Video Analytics.....	27
	9.2.5.4 Motion Detection.....	28

9.2.5.5	Camera IO .....	28
9.2.5.6	Scene Change .....	28
9.2.5.7	Tour .....	29
9.2.5.8	Camera General Alarm .....	29
10	Installation .....	30
10.1	Prerequisites .....	30
10.2	Driver Installation.....	31
10.2.1	Device Configuration.....	32
10.2.2	Driver Compatibility .....	34

## 1 Document Versions

Version	Date	Name	Change
<b>1.0</b>	2020-04-22	JA	Document Created.
<b>1.1</b>	2020-07-07	AG	Document updated

## 2 Referenced Documents

Document	Version	Description
<b>Driver Project Requirements (DDK-PR)</b>	1.0	The Infinova Infinova Server driver must conform to all the requirements detailed in this document.
<b>Driver Connection and Online States Requirements (DDK-DC)</b>	1.0	The Infinova Infinova Server driver must conform to all requirements in this document detailed in the section: <a href="#">Device Connection and Online States</a>
<b>Driver Video Requirements (DDK-VID)</b>	1.0	The Infinova Infinova Server driver must conform to all requirements in this document detailed in the section: <a href="#">Video</a>

### 3 Manufacturer

**Name** Infinova

The logo for Infinova, featuring the word "Infinova" in a large, bold, red, italicized sans-serif font. A registered trademark symbol (®) is located at the top right of the word.

The Integrator's Manufacturer

**Website** <http://www.infinova.com/>

**Description** The Infinova Group is an ISO 9001 certified American security products manufacturer focused on quality, reliability and technology.

## 4 IPSecurityCenter Versions

The driver must be compatible with the following IPSecurityCenter versions:

IPSecurityCenter Version	Supported
4.9, 5.0	<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
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## 7 Hardware Configurations

**TODO**

**Build configuration diagram  
linking servers together.**

**(ConfigurationDiagram.png)**

## 8 Driver Package

The driver package is named: CNL.IPSecurityCenter.Infinova[BUILD-VERSION].ipsc



## 9 Driver Features

### 9.1 Infinova 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	
<b>DC1.0 Device Online Status</b>	None
<b>DC2.0 Authentication</b>	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"/>
VID2.2 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> -16, -4, -1, 0, 1, 4, 16
VID3.6 Slow Motion	<input checked="" type="checkbox"/> <i>Play Speeds:</i> -0.5, -0.25, 0, 0.25, 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
<b>License</b>	string	Paste the license in	Default: Min: Max:
<b>Enable Camera Caching</b>	bool	Enable camera caching to avoid reconnection	Default: true Min: Max:
<b>Vms Id</b>	int	Unique ID to identify the VMS	Default: 0 Min: Max:
<b>Enable HWAcceleration</b>	bool	Enable hardware acceleration	Default: true Min: Max:



#### 9.1.4 Methods

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

### 9.1.5 Events

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

#### 9.1.5.1 General Alarm

Raise general alarm

##### Performance

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

##### Event Properties

Name	Type	Description
Description	string	The description of the event from the server
Generator Id	string	Alarm generator Id.
Camera Name	string	The name of the camera associated with the event
Server	string	Server
additionalInfo1	string	additionalInfo1
additionalInfo2	string	additionalInfo2

#### 9.1.5.2 Disk state

Raised when issues are detected or resolved with disks

##### Performance

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

##### Event Properties

Name	Type	Description
Description	string	The description of the event from the server

#### 9.1.5.3 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
------	------	-------------

<b>Description</b>	string	The description of the event from the server
<b>Device Identifier</b>	Guid	The device id of the camera

#### 9.1.5.4 *Network interface removed*

Represents a network interface being removed

##### **Performance**

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

##### **Event Properties**

Name	Type	Description
<b>Description</b>	string	The description of the event from the server

#### 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
<b>Description</b>	string	The description of the event from the server

To raise: Go to System Administration > Data Management > Recording Devices. Set the minimum warning disk space to the same amount or less that is available.

## 9.2 Infinova 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	
<b>DC1.0 Device Online Status</b>	None
<b>DC2.0 Authentication</b>	None

## 9.2.2 Video

This device does not support video.

### 9.2.3 Properties

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

## 9.2.4 Methods

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

### 9.2.4.1 Focus

Controls the focus (Far or Near) of a camera.

This method is exposed as an operator action.

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
<b>Focus Speed</b>	int	The speed to controls the Focus of the camera. To far focus need to set value in negative and to Near focus set the value in positive integer	Default: 0 Min: Max:

### 9.2.4.2 Iris

Controls the Iris of a camera.

This method is exposed as an operator action.

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
<b>Mode</b>	Enums.IrisMode	Iris mode to activate.	Default: Min: Max:

### 9.2.4.3 Washer

Controls the washer.

This method is exposed as an operator action.

Returns bool.

### Performance

The method must complete within 2 seconds.

### Parameters

Name	Type	Description	Default Value and Ranges
<b>State On</b>	bool	Whether the washer state is on or off.	Default: 0 Min: Max:

#### 9.2.4.4 *Wiper*

Controls the wiper.

This method is exposed as an operator action.

Returns bool.

### Performance

The method must complete within 2 seconds.

### Parameters

Name	Type	Description	Default Value and Ranges
<b>State On</b>	bool	Whether the wiper state is on or off.	Default: 0 Min: Max:

#### 9.2.4.5 *GotoPreset*

Controls the preset of a camera.

This method is exposed as an operator action.

Returns bool.

### Performance

The method must complete within 2 seconds.

### Parameters

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



<b>Preset Number</b>	int	The preset number of the camera	Default: 0 Min: Max:
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#### 9.2.4.6 *IR*

Controls the infrared.

This method is exposed as an operator action.

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
<b>State On</b>	bool	Whether the infrared is on or off.	Default: 0 Min: Max:

#### 9.2.4.7 *Start Tour*

Start tour specified by the tour name.

This method is exposed as an operator action.

Returns void.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
<b>Name</b>	string	Tour name.	Default: 0 Min: Max:

#### 9.2.4.8 *Get Tours*

Return all tours defined as Tour events.

This method is exposed as an operator action.

Returns void.

### Performance

The method must complete within 2 seconds.

### Parameters

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

#### 9.2.4.9 *Stop Tour*

Stop current tour.

This method is exposed as an operator action.

Returns void.

### Performance

The method must complete within 2 seconds.

### Parameters

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

## 9.2.5 Events

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

### 9.2.5.1 Video Signal Changed

Raised when the availability of a signal for a device changes

To raise: In the native software client go to settings > settings. Expand Video Devices and click Reconnect to All Channels

#### Performance

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

#### Event Properties

Name	Type	Description
Description	string	The description of the event from the server
Camera Name	string	The name of the camera associated with the event
Device Identifier	Guid	The device id of the camera

### 9.2.5.2 Tamper

Raised when tamper is detected on the unit

#### Performance

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

#### Event Properties

Name	Type	Description
Description	string	The description of the event from the server
Camera Name	string	The name of the camera associated with the event
Device Identifier	Guid	The device id of the camera

### 9.2.5.3 Video Analytics

Raised when a type of video analytic is detected on a camera

Raised when a person is in camera view for an extended period of time

#### Performance

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

#### Event Properties

Name	Type	Description
<b>Description</b>	string	The description of the event from the server
<b>Camera Name</b>	string	The name of the camera associated with the event
<b>Device Identifier</b>	Guid	The device id of the camera

#### 9.2.5.4 *Motion Detection*

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
<b>Description</b>	string	The description of the event from the server
<b>Camera Name</b>	string	The name of the camera associated with the event
<b>Device Identifier</b>	Guid	The device id of the camera

#### 9.2.5.5 *Camera IO*

Raised when the camera IO/tamper detect for a device

##### **Performance**

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

##### **Event Properties**

Name	Type	Description
<b>Description</b>	string	The description of the event from the server
<b>Camera Name</b>	string	The name of the camera associated with the event
<b>Device Identifier</b>	Guid	The device id of the camera

#### 9.2.5.6 *Scene Change*

Raised when the camera scene changed

##### **Performance**

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

## Event Properties

Name	Type	Description
Description	string	The description of the event from the server
Camera Name	string	The name of the camera associated with the event
Device Identifier	Guid	The device id of the camera

### 9.2.5.7 Tour

Raised as response to Get Tours method.

## Performance

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

## Event Properties

Name	Type	Description
Index	int	Tour index.
Name	string	Tour name.

### 9.2.5.8 Camera General Alarm

Raise general alarm on camera

Go to Security Management System > Alarm management > Generate test alarms. Create an alarm against a camera drop down

## Performance

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

## Event Properties

Name	Type	Description
Description	string	The description of the event from the server
Camera Name	string	The name of the camera associated with the event
additionalInfo1	string	additionalInfo1
additionalInfo2	string	additionalInfo2

## 10 Installation

### 10.1 Prerequisites

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

- Client
- Video Export Server
- 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 Infinova Infinova 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

### **SDK installation Path :**

```
\\fileserver\SDK\Infinova\2217_Enterprise\SDK\20021002\SecurityManagementSystem_Client_SDK  
_OCX_x86_20021002_Deployment_Infinova\SecurityManagementSystem_Client_SDK_OCX_x86_20  
021002_Deployment_Infinova\_Installers\SecurityManagementSystem_ClientSDKOCXVersion_x86_  
20021002.exe
```

### **Sample application Path :**

```
\\fileserver\SDK\Infinova\2217_Enterprise\SDK\20021002\SampleApp
```

### 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 **Infinova** in the **Device Manufacturer** list
- Select **Infinova Server** in the Available Devices list
- Click **Next** to enter the device details: Enter the Infinova 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.

### Limitations and Known Issues

- Infinova VMS uses camera name as the unique identifier for the camera. But still camera name can be changed over the time, keeping the names unique. Unfortunately, this can break how IPSC works and therefore camera names should follow strict naming convention from the beginning.
- Infinova VMS requires each camera to be connected before calling any camera function (Preset, Washer\Wiper, IRIS) or getting camera meta data such as PTZ enable status or preset names. And connecting to a camera takes several seconds and because of that user is getting very bad UI experience when invoking camera methods through the CM. As a solution for this, camera caching has been introduced with the driver but downside of this is, when camera caching is enabled, device sever is taking several minutes to come online.

Following guidelines will help you to decide when and how to enable camera caching,

- When first time or any time VMS camera configuration changes it is must to enable camera caching at least once.

- When camera caching is enabled, make sure to set device timeout to a higher value

- If Infinova keyboard is being used to invoke camera methods, it is not required to enable camera caching.

- Infinova calls preset by name. Preset names should be in the format of "P1, P2 ... Pn" and home position should be named as "Home".
- Infinova keyboard operator uses auto populated camera label displayed in the tile layout to figure out the camera number to be keyed in, therefore it is recommended not to change the camera label manually.
- Please refer Infinova keyboard driver RDIN on how to use the keyboard with the CCTV driver.
- Infinova current ActiveX version has been coded into the driver, therefore upgrading SDK without updating the driver may failed to load the driver.



- Infinova SDK doesn't report current playback time during playback operation. Therefore only a simulated timebar is available in the tile window. Details shows in the timbar is approximate. (Exact playback time is displayed within the ActiveX video display)
- Video export is currently not working. This is same behaviour with the SDK sample application.
- When generated some alarms(i.e disk alarms) from Test Alarm generation UI in infinova admin tool , it incorrectly putting a camera ID which causes event to be raised on camera device instead of server device.
- With IPSC 4.x playback speed slider in the video tile is having following limitations,
  - Slider need to be keep pressed to FFD or REW to start and when released, playback switch back to normal speed.
  - Sometimes speed change in the actual video may not get into effect immediately or you may need to try again.

## 10.2.2 Driver Compatibility

The following devices are known to be incompatible with the Infinova Infinova Server.

Model
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