



Merit LILIN Ent. Co., Ltd.

LILIN ONVIF SDK for Motion and Alarm Events

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Chapter 1. INTRODUCTION

Chapter 1-1. Overview

This document describes ONVIF integration for motion, alarm, and digital input & output interfaces.

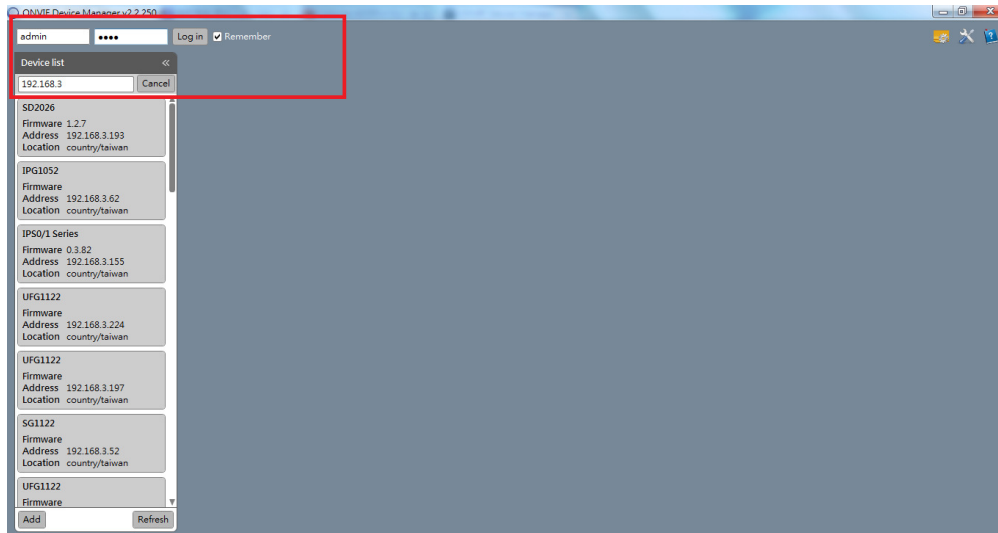
Chapter 1.1. Firmware versions

The support for this HTTPAPI document is highly dependent on the firmware release.

Chapter 1.2. ONVIF Device Manager

LILIN uses ONVIF Device Manager for calibrating and testing purpose. ONVIF Device Manager is the product of Synesis. ONVIF Device Manager is a free software distributed under the GNU General Public License. For more detail, visit <http://synesis.ru>.

After login to ONVIF Device Manager, use default username "admin" and password "pass" to login LILIN IP cameras.



Chapter 2. ONVIF for Motion and Alarm Notification

LILIN uses ONVIF events for motion and alarm notifications.

Chapter 2.1. ONVIF Event of ONVIF Device Manager

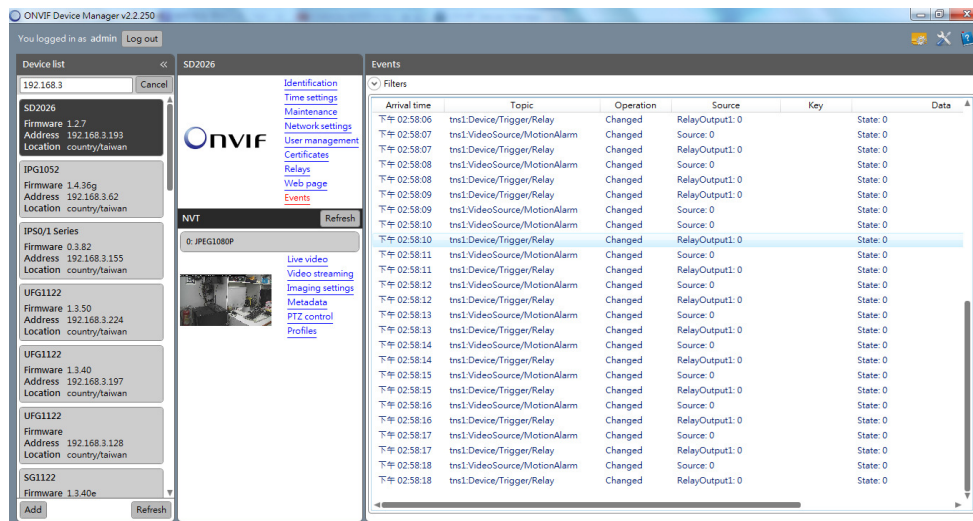
By default, LILIN's ONVIF events are enable on LILIN IP cameras. Third party software can receive motion and digital input information from LILIN IP cameras. LILIN's ONVIF event protocol details are described below:

Digital input of a camera

Topic	Source	Note
tns1:Device/Trigger/Relay	RelayOutput1: 0/1	1: triggered, 0: not triggered

Motion detection of a camera

Topic	Source	Note
Tns1:VideoSource/MotionAlarm	Source: 0/1	1: motion detected, 0: not detected



Chapter 2.2. ONVIF Metadata of ONVIF Device Manager

LILIN's IP cameras support metadata for event notification. Visit Advance Mode->Network->HTTP/RTSP Server and turn on metadata option.

System	Video / Audio	Network	Maintenance
General	Basic >> Network >> HTTP/RTSP Service		
General IPv6			
HTTP/RTSP Service			
DDNS			
SNMP			
SIP			

HTTP Port	<input type="text" value="80"/>
RTSP Port	<input type="text" value="554"/>
ONVIF	<input type="text" value="Standard"/>
RTSP Package Size	<input type="text" value="1"/> KB
METADATA	<input checked="" type="radio"/> On <input type="radio"/> Off
RTCP Check	<input type="radio"/> On <input checked="" type="radio"/> Off
Repeated delivery of SPS/PPS	<input type="radio"/> On <input checked="" type="radio"/> Off
RTSP Authentication	<input type="radio"/> On <input checked="" type="radio"/> Off
Video Port	<input checked="" type="radio"/> HTTP Port <input type="radio"/> RTSP/UDP Port
Profile Name H264 1920x1080	<input type="text" value="stream0"/>
Profile Name JPEG 720x480	<input type="text" value="stream1"/>
Profile Name H264 720x480	<input type="text" value="stream2"/>
Profile Name JPEG 352x240	<input type="text" value="stream3"/>

The results of motion and digital input can be trapped by ONVIF Device Manager.

```
<?xml version='1.0' encoding='UTF-8'>  
<!DOCTYPE NotificationMessage [ <!-- Schema for the ONVIF metadata stream --> ]>  
<NotificationMessage xmlns="http://www.onvif.org/ONVIF" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.onvif.org/ONVIF http://www.onvif.org/ONVIF.xsd" >  
<MetadataStream >  
<Event>  
<Topic >http://www.onvif.org/ONVIF/VideoSource/MotionAlarm</Topic>  
<Message>  
<Message.UtcTime>2014-12-19T16:36:34Z</Message.UtcTime>  
<PropertyOperation>Changed</PropertyOperation>  
<Source>  
<SimpleItem Name="Source" Value="0"/>  
</Source>  
<Data>  
<SimpleItem Name="State" Value="0"/>  
</Data>  
</Message>  
</Event>  
</MetadataStream >  
</NotificationMessage >  
</!DOCTYPE ></?xml>
```

meta type: Event	tns1:Device/Trigger/Relay:
meta type: Event	tns1:VideoSource/MotionAlarm:
meta type: Event	tns1:Device/Trigger/Relay:
meta type: Event	tns1:VideoSource/MotionAlarm:
meta type: Event	tns1:Device/Trigger/Relay:
meta type: Event	tns1:VideoSource/MotionAlarm:
meta type: Event	tns1:Device/Trigger/Relay:
meta type: Event	tns1:VideoSource/MotionAlarm:
meta type: Event	tns1:Device/Trigger/Relay:
meta type: Event	tns1:VideoSource/MotionAlarm:
meta type: Event	tns1:Device/Trigger/Relay:

Chapter 3. Relay Output

To trigger IP camera's relay output, please use ONVIF Device Manager to verify the result. Select Relays in ONVIF Device Manager. Click Active button that can trigger the relay of the camera. Relay mode and idle state of the relay can also be programmed via ONVIF Device Manager.

