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Why provide self-verification demonstration?

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Preface

If I'm going to use Genius Vision NVR to verify my camera, what basic knowledge should I have for this software

Please refer to following link for a short version of Genius Vision NVR manual for ONVIF self-verification.

Setup Genius Vision NVR for ONVIF Testing

ONVIF Testing Procedures

How to Generate Instant ONVIF Testing Report

Step. 1

Properly add an ONVIF camera to the NVR software. (For more software instruction, please refer to <u>Documentation</u> portal)

Genius Vision ONVIF Instructions

Camera Setup	
🖵 Camera Setup	Camera Setup Clone Settings
🚊 🗤 🖶 Video Setup	Camera Driver Information
Preview	Channel name OV_002
PTZ Setup	Please input a name that is unique throughout the domain.
External PTZ moc	Driver P Cam Webcam(DirectShow)
	RTSP video source Remote channel
Access Control	ONVIF Series 🔻
	Description SPD970-N2-US-MES
	Domain name
	Enter camera IP address 192 168 1 30 Port 80 Channel 1
	Enter login information admin Password ••••
	Basic Recording 🔲 Unconditional recording
۰ III ا	Others 🔲 Disabled
	Apply OK Cancel

Step. 2 Enter Video Setup=>Advanced tab, adjust Test.Report to proper value.

-	· •	
Camera Setup	8-0715-412	
Camera Setup	Channel	I DYNA Driver ONVIF
Video Setup Video Setup Preview Scheduled Recording	Configuration Sets	Default
PTZ Setup	Description	Default Based On v
	Record Video Adjustment	t RTSP RTSP Advanced Stream 2 Advanced
Access Control	Event.Template	loff VP.ONVIF.Event.Template
	Test.Report	on on VP.ONVIF.Test.Report
		off level2 level3 level4 event1
	,	Apply OK Cancel

Step. 3

Use mouse right-click of context menu on video player and select "ONVIF test report", like following screenshot:



Step. 4

An instance of browser will pop-up. Enter NVR password to see the comprehensive technical report:



NOTE: If browser window does not pop-up, you can retrieve the report from NVR server at following path:

• C:\SystemBriefcase\Report

How to view event report

Find "view report" in ONVIF report and click it to view Event report.

(→) (→) (→) (→) (→) (→) (→) (→) (→) (→)	☆ (3 ();
× Find: view report Previous Next Ø Options ▼ 1 match		
<pre><soap-env:envelope xmlns:soap-<br="" xmlns:soap-env="http://www.w3.org/2003/05/soap-envelope">ENC="http://www.w3.org/2003/05/soap-encoding" xmlns:xsi="http://www.w3.org/2001/XMLSchema- instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xmime="http://tempuri.org/xmime.xsd" xmlns:tns1="http://www.onvif.org/ver10/topics" xmlns:wsrf-bf2="http://docs.oasis-open.org/wsrf/bf- 2" xmlns:wstop="http://docs.oasis-open.org/wsn/t-1" xmlns:xop="http://www.w3.org/2004/08/xop/include" xmlns:tt="http://www.onvif.org/ver10/schema" xmlns:wsrf-r="http://docs.oasis-open.org/wsrf/r-1" xmlns:wsrf-bf="http://docs.oasis- open.org/wsrf/bf-1" xmlns:wsa="http://schemas.xmlsoap.org/ws/2004/08/addressing" xmlns:ds="http://www.w3.org/2000/09/xmldsig#" xmlns:wsa5="http://www.w3.org/2005/08/addressing"</soap-env:envelope></pre>	-	*
CreatePullPointSubscription succeeded		
Subscription reference endpoint: http://192.168.1.30:80/onvif/subscribe_service?subsid=0		11
Generating subreport: Event		
View report		
10. Request <ver10 device="">GetDigitalInputs</ver10>		
URL: http://192.168.1.30:80/onvif/device_service		-
۲. III III III III III III III III III I	•	

Supported topics are listed in each response.

C http://127.0.0.1:8086/report/onvif-report-OV_(𝒫 ▾ ≧ ♂ ×)
× Find: view report Previous Next ⑦ Options ▼
<pre><?xml version="1.0" encoding="UTF-8"?> <soap-env:envelope enc="http://www.w3.org/2003/05/soap-encoding" xmlns:soap-="" xmlns:soap-env="http://www.w3.org/2003/05/soap-envelope" xmlns:tns1="http://www.onvif.org/ver10/topics" xmlns:tsawg="http://www.avigilon.com/onvif/ver10/topics" xmlns:tt="http://www.onvif.org/ver10/schema" xmlns:ttev="http://www.onvif.org/ver10/events/wsdl" xmlns:wsa5="http://www.w3.org/2005/08/addressing" xmlns:wsnt="http://docs.oasis-open.org/wsn/b-2"><soap-env:header><wsa5:to env:mustunderstand="true" soap-="">http://www.w3.org/2006/05/addressing/wsdl" xmlns:tnsavg="http://www.avigilon.com/onvif/ver10/topics"><soap-env:header><wsa5:to env:mustunderstand="true" soap-="">http://www.w3.org/2006/05/addressing/wsdl" xmlns:tnsavg="http://www.avigilon.com/onvif/ver10/topics"><soap-env:header><wsa5:to env:mustunderstand="true" soap-="">http://www.avigilon.com/onvif/ver10/topics"><soap-env:header><wsa5:to env:mustunderstand="true" soap-="">http://www.avigilon.com/onvif/ver10/topics"><soap-env:header><wsa5:to env:mustunderstand="true" soap-="">http://www.avigilon.com/onvif/ver10/topics"><soap-env:header><wsa5:to env:mustunderstand="true" soap-="">http://www.avigilon.com/onvif/ver10/topics"><soap-env:header><wsa5:to env:mustunderstand="true" soap-="">http://www.avigilon.com/onvif/ver10/topics"><soap-env:header><wsa5:to env:mustunderstand="true" soap-="">http://www.avigilon.com/onvif/ver10/topics"><soap-env:header><wsa5:to env:mustunderstand="true" soap-="">http://www.avigilon.com/onvif/ver10/topics">http://www.avigilon.com/onvif/ver10/topics"> ENV:mustUnderstand="true">http://www.avigilon.com/onvif/ver10/topics"> ENV:mustUnderstand="true">http://www.avigilon.com/onvif/ver10/topics"> ENV:mustUnderstand="true">http://www.avigilon.com/onvif/ver10/topics"> ENV:mustUnderstand="true">http://www.avigilon.com/onvif/ver10/topics"> ENV:mustUnderstand="true">http://www.avigilon.com/onvif/ver10/topics"> ENV:mustUnderstand="true">http://www.avigilon.com/onvif/ver10/topics"</wsa5:to></soap-env:header></wsa5:to></soap-env:header></wsa5:to></soap-env:header></wsa5:to></soap-env:header></wsa5:to></soap-env:header></wsa5:to></soap-env:header></wsa5:to></soap-env:header></wsa5:to></soap-env:header></wsa5:to></soap-env:header></soap-env:envelope></pre>
Number of messages pulled: 5 Bare topic extracted: VideoAnalytics/MotionDetection Bare topic extracted: VideoSource/MotionAlarm Bare topic extracted: Device/Trigger/DigitalInput Bare topic extracted: Device/Trigger/Relay Bare topic extracted: Device/Trigger/DigitalInput
11. Request <ver10 events="">PullMessagesRequest</ver10> URL: http://192.168.1.30:80/onvif/subscribe_service?subsid=0

How to verify ONVIF motion detection

Step. 1

Connect and configure ONVIF camera property to enable motion detection function. The process to enable motion detection is outside the scope of ONVIF verification and is vendor-dependent.



Step. 2

Enter **VideoSetup=>Advanced=>Event.Template**, select a proper value for **Event.Template** (as <u>explained here</u>). The proper choice and definition of each **Event.Template** can be <u>found here</u>. ONVIF only defines the event architecture. Details of the event content might vary from vendor to vendor. That is why we offer the **Event.Template** option to accommodate minute differences among vendors.

Camera Setup			×
Camera Setup	Channel	CH_004	Driver ONVIF
Preview	Configuration Sets Add Delete	Default	
External PTZ moc	Description	Default	Based On 📃 👻
····· Video Analytics Setup ····· (1) IO module	Record Video Adjustment	RTSP RTSP Advanced Stree	am 2 Advanced
Ŭ	Event.Template 📝	ET01 ET01	Select proper Event Template. Refer to instruction for more info.
	UsePTZ 📃		Select ONVIF PTZ mode.
	Test.Report	off	Choose to enable ONVIF verification report
		Compatibility Optic	ons
	ullMessageTimeout 📃	PT305	PullMessage timeout
< >			
			Apply OK Cancel

Step. 3

Enable time-bar to see motion event by right click on the timeline area.



There are various modes in timeline to display different information. It can be set by right click on the timeline.

Note: For live video, the timebar might not update in time. You can try to use mouse to pan the timebar left or right to force refresh the timebar information display.

Туре	GUI Example	Description
Activity		The height of the orange block is the counts of activities in a fixed timespan, which depends on the scale of the timeline.
Event		Orange: activity Green: recording Purple: unexpected system off Gray: normal system off

If the recording can be triggered by motion and the event timebar shows orange slices of activities, then we can say that the camera supports motion detection. You must put the system to run for a fair amount of time and check to see if the motion detection still works even after long hours of running to verify the reliability of the function. And static scene should also be tested. Constant alarm even when there's no moving object is **not acceptable** as functioning motion detection.

See also

• User's manual - Using playback timeline

Self-verification demonstration (Check #E1.1 for ET01 motion-detection)

<u>When asked</u>, the applicant should provide self-verification demonstration (<u>screenshots, screen</u> <u>recordings, etc</u>) to show that Genius Vision NVR (instead of other tools) is used to verify the applicant's camera by the applicant himself **manually & visually** with following steps:

- 1. Properly configure **Event.Template**
- 2. Implement no motion state to motion triggered state. (OFF=>ON)
- 3. Implement motion triggered state to no motion state. (ON=>OFF). Some implementation bugs does not allow motion to stop, this step will verify this.
- 4. Repeat step 2 and 3 for several times to confirm short-term reliability

See also

• How to implement MotionAlarm event (ET01)

Self-verification demonstration (Check #E1.2 for ET01 motion-detection with IE interface)

<u>When asked</u>, the applicant should provide self-verification demonstration (<u>screenshots, screen</u> <u>recordings, etc</u>) to show that Genius Vision NVR (instead of other tools) is used to verify the applicant's camera by the applicant himself **manually & visually** with following steps:

- 1. Configure motion detection in camera IE interface
- 2. Show motion indicator in camera IE interface
- 3. Trigger motion with moving object
- 4. Remove moving object and wait until motion indicator shows inactive
- 5. Repeat step 2 and 4 for several times to confirm short-term reliability

See also

How to implement MotionAlarm event (ET01)

How to verify dual stream

Genius Vision NVR ONVIF dual stream utilizes the concept ONVIF media profiles. Users are allow to choose any selected media profile as secondary stream (as well as primary stream).

Step. 1

Open Video Setup window of a camera:

Camera Setup	Char	nel CH_0	002	Driver ONVIF	
Scheduled Recording	Configuration S Add Delete	iets Defa	ult		
External PTZ moc	Descript	tion Defa	ult	Based On *	
IO module	Record Video Adjustr	nent RTS	P RTSP Advanced S	tream 2 Advanced	
Access Control			Select streaming	mode	
542	MediaProfile	Profile	2 Profile2	Select ONVIF media profile	
	Encoding		Profile 1 Profile 2	Select compression codec	
	Resolution	1	Profile3 Profile4	Select video resolution	
	Quality	***	Same	Select video quality	
	FrameRateLimit	***	0	Select frame-rate limit	
	BitrateLimit		Q	Select bitrate limit (in Kilobits)	
	GovLength		ç	Group of Video frames length. Determines typically the interval in which the I-Frames will be coded. An entry of 1 indicates I-Frames are continuously generated. An entry of 2 indicates that every 2nd image is	

If dual stream is supported, there're at least 2 profiles to be selected. Select 2 different profiles for stream 1 (in **Video** page) and stream 2.

Step. 2

Select layout 2x2.



Step. 3

Drag the same camera to two windows, and use player right-click menu to select different substream.

	N/R		A Balakti kili (1. 1. 1.
	CH_002		
Carlos and	Zoom In		
left and a	Aspect 🕨	36	
1	Actual Size	1988	
	 Show timestamp 		
1.01Mbps(720x4	✓ Show play state	18	
Time: 2013-09	Multi-Stream 🕨		Auto
lo Channel Attached	Live video feed		Main
	Manual Recording	\checkmark	Secondary
	Reset Channel		,, ,
NO	Viewing earliest recorded data		
	Stop		
Stor	Detach		

Enable Full OSD from the main toolbar to see video statistics information.



Step. 5

As the example below shows, the two window display different video statistics information, according to the stream selected.

- Window on the left shows: 1920x1080 30fps H264
- Window on the right shows: 720x480 29fps H264.

This proves the camera support dual stream.



You must put the system to run for a fair amount of time and check to see if the dual streaming still works even after long hours of running to verify the reliability of the function.

How to setup & verify ONVIF DIO (Digital Input/Relay Output)

Enabling DIO

To use DIO of ONVIF cameras, in **Advanced** tab of **Camera Setup** dialog, select appropriate **Event.Template** (as <u>explained here</u>). There're different implementations of ONVIF spec so users may have to try different settings. Usually **ET01** will work. (The definition of **ET01** can be looked up <u>here</u>).

Camera Setup	
Camera Setup Camera Setup Video Setup Common Preview Common Scheduled Recording Common Processing	Channel CH_009 Driver XTS Configuration Sets Add Delete
External PTZ moc	Description Default Based On
	Record Video Adjustment RTSP RTSP Advanced Stream 2 Advanced
Access Control	Event.Template I ET01 Select proper Event Template. Refer to instruction for more info.
	UsePTZ Select ONVIF PTZ mode.
	Test.Report ETN01 Choose to enable ONVIF verification report
	Compatibility Options
۰ III ا	ullMessageTimeout 🔲 PT30S 🔹 PullMessage timeout
	Apply OK Cancel

If **Event.Template** is set correctly, after applying, DIO will be listed in **Tree View**. Channels with DIO have a plus mark, which can be clicked to expand the list of DIO. Relay (digital output) can be operated with right-click menu. For more information about DI/DO operation on NVR software, please refer to <u>User's Manual - IO Ports</u>.



Unlike some ONVIF testing utilities, we don't use just software protocol to verify ONVIF functions. Digital input must be actually wired to verify its function. Wiring scheme should be provided by camera manufacturers. Switch it ON/OFF few times to make sure both active/inactive state is updated in NVR correctly. Remember to test all ports and check if they are mapped correctly.



Some cameras require users to enable digital inputs/outputs with IE first. (interface varies from camera to camera)



Generating Test Report

Please refer to How to Generate Instant ONVIF Testing Report

Self-verification demonstration (Check #E2.1 for ET01 digital inputs)

<u>When asked</u>, the applicant should provide self-verification demonstration (<u>screenshots, screen</u> <u>recordings, etc</u>) to show that Genius Vision NVR (instead of other tools) is used to verify the applicant's camera by the applicant himself **manually & visually** with following steps:

- 1. Properly configure **Event.Template**
- 2. Change physical digital input to OFF and demonstrate GUI reflection (icon should turn grey)
- 3. Change physical digital input to ON and demonstrate GUI reflection (icon should turn red)
- 4. Repeat step 2 and 3 for 2~3 times to confirm short-term reliability

See also

How to implement Digital Input (ET01)

Self-verification demonstration (Check #E2.2 for ET01 digital inputs with IE interface)

<u>When asked</u>, the applicant should provide self-verification demonstration (<u>screenshots, screen</u> <u>recordings, etc</u>) to show that Genius Vision NVR (instead of other tools) is used to verify the applicant's camera by the applicant himself **manually & visually** with following steps:

- 1. Show digital inputs state indicator in camera's IE (browser) interface.
- 2. Change the state of the indicator to ON. (must be the indicator itself, not state in configuration)
- 3. Change the state of the indicator to OFF. (must be the indicator itself, not state in configuration)
- 4. Repeat step 2 and 3 for all inputs if there're more than one.

See also

How to implement Digital Input (ET01)

Self-verification demonstration (Check #E3.1 for ET01 relay outputs control)

<u>When asked</u>, the applicant should provide self-verification demonstration (<u>screenshots, screen</u> <u>recordings, etc</u>) to show that Genius Vision NVR (instead of other tools) is used to verify the applicant's camera by the applicant himself **manually & visually** with following steps:

- 1. Properly configure **Event.Template**
- 2. Switch ON a relay output and see if GUI has reflected the change. Also measure the physical response to see if relay is actually turned ON (icon should turn green).
- 3. Switch OFF a relay output and see if GUI has reflected the change. Also measure the physical response to see if relay is actually turned OFF (icon should turn grey).
- 4. Repeat step 2 and 3 for 2~3 times to confirm short-term reliability

See also

How to implement Relay Output (ET01)

Self-verification demonstration (Check #E3.2 for ET01 relay outputs event)

<u>When asked</u>, the applicant should provide self-verification demonstration (<u>screenshots, screen</u> <u>recordings, etc</u>) to show that Genius Vision NVR (instead of other tools) is used to verify the applicant's camera by the applicant himself **manually & visually** with following steps:

- 1. Properly configure **Event.Template**
- 2. Switch ON a relay by other means (not in the software). See if GUI has reflected the change (icon should turn green).

- 3. Switch OFF a relay by other means (not in the software). See if GUI has reflected the change OFF (icon should turn grey).
- 4. Repeat step 2 and 3 for 2~3 times to confirm short-term reliability

See also

• How to implement Relay Output (ET01)

How to operate ONVIF PTZ?

To activate ONVIF PTZ functionality, please perform following setup on your camera.

Camera Setup		
Camera Setup Camera Setup Camera Setup Video Setup Scheduled Recording PTZ Setup Camera Setup Ca	Channel CH_004 Driver ONVIF Configuration Sets Default Add Delete Description Default Based On Image: Configuration Sets Record Video Adjustment RTSP RTSP Advanced	
I() IO module	Event.Template off Select proper Event Template. Refer to instruction for more info. UsePTZ • Select ONVIF PTZ mode. Off • • • Test.Report • • Compatibility (uptor s) • • ullMessageTimeout • •	
4	Apply OK Cancel	

Quick Manual for Genius Vision NVR

Setup Genius Vision NVR for ONVIF Testing

Download and install

Download NVR at http://geniusvision.net/onvif.html

Latest Software (v874)



Please note latest software might not be fully tested.

Run downloaded file and follow the dialog to install NVR. No need to change any default value for the options.



During installation, you need internet connection to activate NVR software.



After installation, a triangle appears in taskbar. Green triangle indicates that NVR engine is running. If not, right click to activate it. In the same menu, click **Local console** to invoke user interface.



If tray icon is not seen, click small white triangle on taskbar to show it.



Setup storage

You should see this if everything goes well.

▶ NVR - 127.0.0.1	
Enter user inform	ation to login
User name	
Password	
Save	ogin information.)
Auto k	vgin.
	OK Cancel

Input default username/password admin/1234 to login...

NVR - 127.0.0.1		1			x
8 0 0 🖬 🖬 📰 📰 🛤	5. 8. 10. 12. 13 IX	🕨 🗶 Std. timebar	▼ Simple OSD	-	
Standard (Pattern Sets)					
Live Playback SyncPlay	LIVE 📲 IÞ 🖣	(4 4 4 4		0	
Live Mode	🔲 📼 🗘				
Cornig System Cornig Console	Page5 Page8	Page9	Page6	Ē	4 >
Config Storage Find Cameras	No Channel Attached	No Cha	nnel Attached		
Nev 🕕 Recording is disabled	CHANNEL (P1.2) pped		NO CHANNEL (P1.2) Stopped		
This is due to no video stora Click here to configure.	ge is configured.				
±					
	0				
	No Channel Attached	No Cha	nnel Attached		
	NO CHANNEL (P1.3)		NO CHANNEL (P1.4)		
	Stopped		Stopped		
	0				
ServerTime:2014-07-28 18:14:10 CPU:25%	Memory(engine/free):47.0MB/2.3GB	FPS(record/total):0/0	bitrate:0/0 Red	orded:??~??	HDD(

Click **Config Storage** and enable a drive for recording.

System Configuration	A PROPERTY OF TAXABLE	ALTERNATION OF THE	×
Local Console Configu Local Console Configur System Configura Calculator Calculator All Channels Cocal Channel	Directories Add Delete Directory Storage Advanced	(Default) (C:\gyrec\ D:\gyrec\ E:\gyrec\ F:\gyrec\ G:\gyrec\ H:\gyrec\ I:\gyrec\ C:\gyrec\	Based On Default
Find Cameras Trigger Policy Maps	Enabled In or MaxSize_GB V 18	o no → 1 362 yes	Enables recording and playback on this directory Defines maximum used size in GB
Pattern Page Users User Groups	SafeFreeSize_GB 5 FileSize_MB V 19	5 I 907 1907 I	Defines minimum safe free space in GB. Defines the size of a single file in MB.
	,		Apply OK Cancel

Setup channel

If the camera supports WS-Discovery, click **Find Cameras** to find connected ONVIF cameras. Double click on found items to add them to NVR.

System Configuration			a second a		and a grant of the	×
Local Console Configu				Ren	ame Add Selected Add A	ll Scan
System Configura	_			Found Devi	ices	
	Channel Name	Added	IP	Driver	Description	MAC ^
🛆 Hotkey List	OV_001	YES	192.168.0.200	ONVIF	LILIN IPG1022E-000ffc24d636	00:0F:FC:24:D6:
Calculator	CH_001	YES	192.168.1.30	ONVIF	SPD970-N2-US-MES	18:4E:94:00:77:3
NVR Connections 👻	CH_002	YES	192.168.1.2	ONVIF	Network Camera (192.168.1.2)	A8:1B:18:2D:E2:4 👻
· · · · · · · · · · · · · · · · · · ·	•			III		•
					Apply	Cancel

If WS-Discovery is not supported (or it's not found for unknown reasons), click **New Channel** and fill necessary parameters:

Camera Setup	C mat Law C R	×
Camera Setup	Camera Setup Clone Settings	5
🚊 🖶 Video Setup		Camera Driver Information
Preview	Channel name	
PTZ Setup		Please input a name that is unique throughout the domain.
External PTZ moc	Driver	IP Cam O Webcam(DirectShow)
IO module		RTSP video source Remote channel
······ 🚹 Access Control		Garias
	Description	
	Domain name	
	Domain name	
	Enter camera IP address	0 . 0 . 0 . 0 Port 80 Channel 1
	Enter login information	Password
	Basic Recording	Unconditional recording
	Others	Disabled
		Apply OK Cancel

Drag the channel to any player to view live video. If video streams correctly, proceed to <u>ONVIF Testing</u> <u>Procedures</u>. Otherwise, <u>camera connectivity</u> need to be verified first.

NVR - 127.0.0.1				4		
		8 10 12 13		Simple toolbar	▼ Simple OSD	•
Standard	tern Sets) 🔻					
Live Playback SyncP Live M	Nay Node		I I I €	4 4 > >>		i0
Config System	Config Console	Page1	Page2	Page3	Page4	Pag 4 >
Config Storage	Find Cameras	CH_001 (SPD970)-N2-US-MES)			∞-{{ \overline\$
New Channel	New Objects	Live S				
All channels	70-N2-US-MES) vork Camera (192.168.1.2 ↓ IPG 1022E-000ffc24d63€	Time: 201-	4-07-28 17:	02:01.287		
ServerTime: 2014-07-28 17	:02:01 CPU:23% Mer	mory(engine/free):	37.9MB/2.6GB	FPS(record/total):0/50	bitrate:0/8.66Mbps	Recorded: 201

Testing camera connectivity

Press WIN+R on keyboard, input cmd and click OK.



This should bring up the command prompt window.



Input "ping <IP address of the camera>" and hit Enter. A working camera should reply to the ping.

1	Administrator: C:\Windows\System32\cmd.exe	x	
	Microsoft Windows [Version 6.1.7600]		~
ľ	Copyright (c) 2009 Microsoft Corporation. All rights reser	٩v	
1	C:\Windows\system32>ping 192.168.1.30		
	Pinging 192.168.1.30 with 32 bytes of data:		
	Reply from 192.168.1.30: bytes=32 time<1ms TTL=64		
	Reply from 192.168.1.30: bytes=32 time<1ms TTL=64		
	Reply from 192.168.1.30: bytes=32 time<1ms TTL=64		
]	Reply from 192.168.1.30: bytes=32 time<1ms TTL=64		
	Ping statistics for 192.168.1.30:		
	Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),		
	Approximate round trip times in milli-seconds:		
•	Minimum = Oms, Maximum = Oms, Average = Oms		
	C:\Windows\system32>		
			÷
	(III)	Þ.	
Ľ			1

If camera does not respond, connectivity issue need to be resolved before proceeding to ONVIF testing.

```
- 0 X
Administrator: C:\Windows\System32\cmd.exe
Reply from 192.168.1.30: bytes=32 time<1ms TTL=64
Ping statistics for 192.168.1.30:
   Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
   Minimum = Oms, Maximum = Oms, Average = Oms
C:\Windows\system32>ping 192.168.2.30
Pinging 192.168.2.30 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.2.30:
   Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\Windows\system32>
     ь.
```

Also please use IE to connect to the camera to verify its functionality. A camera without IE interface is very difficult to be tested with NVR. Because IE interface eliminates compability issue and can be used to check if the camera works alone.

Live View Configuration		Network Camera	^ Los	ະ ເ
Englich	Current Compression Mode			
English	Current Profile	Profile 1		
	Edit Profile	Profile 1		
Image Parameters	Profile 1			
Network Settings	Stream1			
System Settings	Resolution	1920x1080 🔻		
Event Settings	Codec	H264 💌		
Pan/Tht Control	Frame Rate (1~30)	30		
SD Card Information	GOP Length (1~254)	30		
	Rate Control	CBR		
	CBR (100~12000)	8000		
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Independent ONVIF Verification Policies

Why should applicants provide self-verification demonstration? When and how?

Why provide self-verification demonstration?

Genius Vision Independent ONVIF Verification service, albeit free, is a resource consuming task, because we willingly devote our expertise and time to do the verification **manually & visually**, just in order to help IP video industry developing toward global standardization.

However, it may come to some scenarios that repeated and similar problems occur during verification process and the IP camera manufacturer does not know how to solve it, thus employ a *trial-and-error* strategy to submit verification requests over and over again without visible improvement. This will consequently lead to improper exhaustion of Genius Vision R&D resources.

As a policy update, after July 2014, Genius Vision will mandate the submission of self-verification demonstration from the applicants <u>if the camera has already been tested once and failed in some parts</u>. This means the applicants are required to *at least* learn how to use Genius Vision NVR to do certain level of verification by themselves and be able to submit the evidence of such self-verification to Genius Vision, in order to apply for continuation of remaining verification process.

When should applicants due to provide self-verification demonstration?

When asked to submit self-verification demonstration, the applicants are required to **respond within 2 weeks**, either with the required self-verification demonstration, or an explanation of why such demonstration couldn't be completed in a timely manner. The explanation, if any, will be reviewed by Genius Vision to decide further actions.

Failed to respond within 2 weeks will be treated as *mischievous withdraw* from the verification service and might be banned from future free verification service. (paid verification is still possible).

How to provide self-verification demonstration?

The applicants can provide one or more following items as the self-verification demonstration.

- 1. Screen recording (most preferred) of user operation and result, should be uploaded to YouTube
- 2. Screenshots, series of user operation and result pictures or photos
- 3. Assertion, a mere claim that the required self-verification demonstration is done.

Example of an "assertion":

To Genius Vision:	
	I have completed the DI/DO testing and got correct GUI result.

Please be advised that if only assertions are provided and which can be disproved, it could lead to ban from future free verification service. (paid verification is still possible).

Notes

- 1. It's recommended that the applicants should provide as more evidence as possible to increase credibility to continue remaining verification process.
- 2. Please focus the demonstration on the user operation and GUI feedback, rather than XML communcation technicals, because from user's perspective, ONVIF is simply a stuff that makes software and camera works together, and nothing more.