# EKI-7700 Series Managed Switch IGMP Configuration SOP

IGMP Snooping ConfigurationVLC Media Player Setting

Revision Date	Revision	Description	Author
March/2018	V1.0	Initial release	ICG AE Eddie / Raimen

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### Abstract

\* This SOP contains two parts, one is how to configure IGMP Querier / IGMP Snooper on Advantech EKI-7700 series industrial managed switch, and another is how to use VLC media player to be Server and Client.

#### Related products:

EKI-7428, EKI-7706, EKI-7708, EKI-7710, EKI-7712, EKI-7716, EKI-7720.

- Requirement: Advantech managed switch, RJ45 ethernet cable, PC, Console cable
- How to select Advantech managed switch console cable:

http://support.advantech.com/support/KnowledgeBaseSRDetail\_New.aspx?SR\_ID=1-1IOM96L&Doc\_Source=Knowledge+Base



# **IGMP Snooping Configuration**



### **IGMP Configuration on EKI-7710G**

Topology: Create IGMP Snooper and IGMP Querier on EKI-7710G and use VLC media player to get video stream from VLC server. (About VLC media player setting, please refer next part.)





## Enable IGMP Snooping – (1/2)

- Both IGMP Querier and IGMP Snooper must enable IGMP Snooping.
- The "IGMP Snooping Operation State " also need to be enabled by Edit.

AD\ANTECH	EKI Intellige	- <b>7712G</b> - nt Indus	4FI-AE trial Switch								L	147	Welcome, admin
⇒ I 2 Switching	🌣 IGI	MP Sno	oping Settings								^		
Port Configuration		IGMP Snooping State O Enable O Disable											
Port Mirror			IGMP Snooping \	/ersion 💿 v	2	<b>O</b> v3							
Link Aggregation		IGMP	Snooping Report Suppr	ression O E	nable	O Disable	)						
				Appl	ly .								
⊕ GARP	Informa	ation N	ame					Information V	alue		^		
802.3az EEE	IGMP S	Snoopin	g State					Enable					
<ul> <li>Multicast</li> </ul>	IGMP S	Snoopin	g Version					v2					
Multicast Filtering	IGMP S	Snoopin	g V2 Report Suppression	1				Enable					
IGMP Snooping								1					
IGMP Settings	Entry	Entry VLAN IGMP Snooping Router Ports Query Query Query Max Response Last Member Last Member Query							r Querv	Immedia	nte		
IGMP Querier	No.	ID	Operation State	Auto Learn	Robustness	Interval(sec.)	Interval(sec.) Query count Interval(sec)				)	Leave	Modify
IGMP Static Groups	1	1	enabled	enabled	2	125	10		2	1		disabled	Edit

#### **Operation edit**

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## **Enable IGMP Snooping – (2/2)**

				Edit	IGMP Snooping			×					
					VLAN ID	100							
	EK	I-7712G-∕	IFI-AE	ĸ	GMP Snooping State	O Disable O Enable	$\longrightarrow$	Enal	ble I(	<b>GMP State</b>	147	Welcome,	
AD\-\NTECH	Intellig	ent Indust	rial Switch	Rout	ter Ports Auto Learn	O Disable O Enable	-				4 147	admin	
Port Mirror			IGN	1	Query Robustness	2	(1 - 7)						
Link Aggregation		IGMP S	nooping	Оре	r Query Robustness	2 sec							
					Query Interval	125	(30 - 18000)						
● Q-in-Q	⊞lG	MP Snot	opina Info		Oper Query Interval	125 sec				•			
● GARP	Inform	ation Na	me		uery Max Response	10	(5 - 20)						
802.3az EEE	IGMP S	Snooping	State		Interval	10	(0 20)						
Multicast	IGMP S	Snooping	Version	-	Oper Query Max	10 sec							
Multicast Filtering	IGMP S	Snooping	V2 Repo	2	Response Interval		_						
● IGMP Snooping				-	Last Member Query Counter	2	(1 - 7)						
IGMP Settings	Entry	MP Snoo	ping Tab	Oper	Last Member Query	2			Mombor	Last Member Query	Immodiate	~	
IGMP Querier	No.	ID	Operat		Counter				y count	Interval(sec)	Leave	Modify	
IGMP Static Groups	1	1	enable	c	Last Member Query	1	(1 - 25)			1	disabled	Edit	1
Multicast Groups				0	Lest Marshar Oren	1 sec							1
Router Ports				Oper	Last Member Query Interval	1 300							
					Immediate Leave	O Disable O Enable		→ In	med	iately Lea	ve		
							Appl	Cancel					
					Enabling	an intelliger	n runer						

## **IGMP Querier Configuration**

• Only Querier need to enable it.

AD\ANTECH	EKI-7712G-4FI-A Intelligent Industrial S	E 🚯						
	IGMP Querier	Settings			^			
Port Configuration		VLANID	× 1					
Port Mirror		Querier State	O Disable O I	Enable				
Link Aggregation		Querier Version	• v2	3				
€ 802.1Q VLAN			Apply					
😌 Q-in-Q								
	IGMP Querier	Status						
U GARP	VLAN ID	Querier State	Querier Status	Querier Version	Querier IP			
802.3az EEE	1	enabled	Querier	v2	192.168.1.1			
<ul> <li>Multicast</li> </ul>								
Multicast Filtering								
➡ IGMP Snooping								
IGMP Settings	•							
IGMP Querier								



# **VLC Media Player Setting**



## VLC Server Setting (1/7)





### VLC Server Setting (2/7)

🛓 Open Media	
File 💿 Disc 📲 Network 📑 Capture Device	
File Selection You can select local files with the following list and buttons.	<b>1.</b> Resource
C:\Users\raimen.liu\Desktop\IGMP Video.mp4	Add selection
	Keniove
Use a subtitle file	
	Browse
	2. Click Stream for
Show more options	Stream Cancel

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### VLC Server Setting (3/7)

🛓 Stream Output	?	X
Set up media sources to stream		
This wizard will allow you to stream or convert your media for use locally, on your private network, or on the Internet. You should start by checking that source matches what you want your input to be and then press the "Next" button to contin	nue.	
Reconfirm the resource go to next step	ce an	d
Source: file:///C:/Users/raimen.liu/Desktop/IGMP Video.mp4 Type: file		
Back Next	Car	ncel

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## VLC Server Setting (4/7)

🛓 Stream Output	?	x
Destination Setup Select destinations to stream to		
•		]
Choose a video type	e and click "Add" ling that the format is compatible with the	
>>e.g. use RTP in th	nis case	
New destination	RTP / MPEG Transport Stream   Add	JI
Display locally		
		1
	Back Next Cancel	

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### VLC Server Setting (5/7)

🛓 Stream Output		?	x
Destination Setu Select destinatio	<b>p</b> ns to stream to		
<b>.</b>	RTP/TS 🔀		
Assig >>e.g Then	In the multicast IP address to be the destination g. 239.1.1.1 go to next step		
Address	239.1.1.1		
Base port Stream name	5004		
	Back Next	Canc	el

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## VLC Server Setting (6/7)

🛓 Stream Output	? ×
Transcoding Options Select and choose transcoding options	
Activate Transcoding	
Profile	Video - H. 264 + MP3 (MP4) 🔹 🖹
Choose video code an	d go to next step.
	Back Next Cancel

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## VLC Server Setting (7/7)

🛓 Stream Output	?	×
Option Setup Set up any additional options for streaming		
Miscellaneous Options		
Generated stream output string		
:sout=#transcode{vcodec=h264,acodec=mpga,ab=128,channels=2,samplerate=44100}:rtp{dst=239.1.1.1,port=5004, :sout-keep	nux=ts}	
Start video-streaming		
Back Stream	Car	ncel

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## VLC Client Setting (1/2)





## VLC Client Setting (2/2)

🛓 Op	en Media				
	File 💿 Dis	Network	Capture Device		
N	etwork Protocol				
P	lease enter a nei	twork URL:			
	rtp://239.1.1.1:	5004			<b>-</b>
	http://www.exar rtp://@:1234 mms://mms.exar rtsp://server.exan http://www.your	nple.com/stream.avi nples.com/stream.asx nple.org:8080/test.sdp tube.com/watch2v=nn6	4~	Resource selection	
	http://www.you	ubelcony watch: v = ggo	тл		
				239.1.1.1	
Sł	now more options		Cl	ick "Play"	Cancel





