

EKI-7700 Series Managed Switch IGMP Configuration SOP

- IGMP Snooping Configuration
- VLC Media Player Setting

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

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

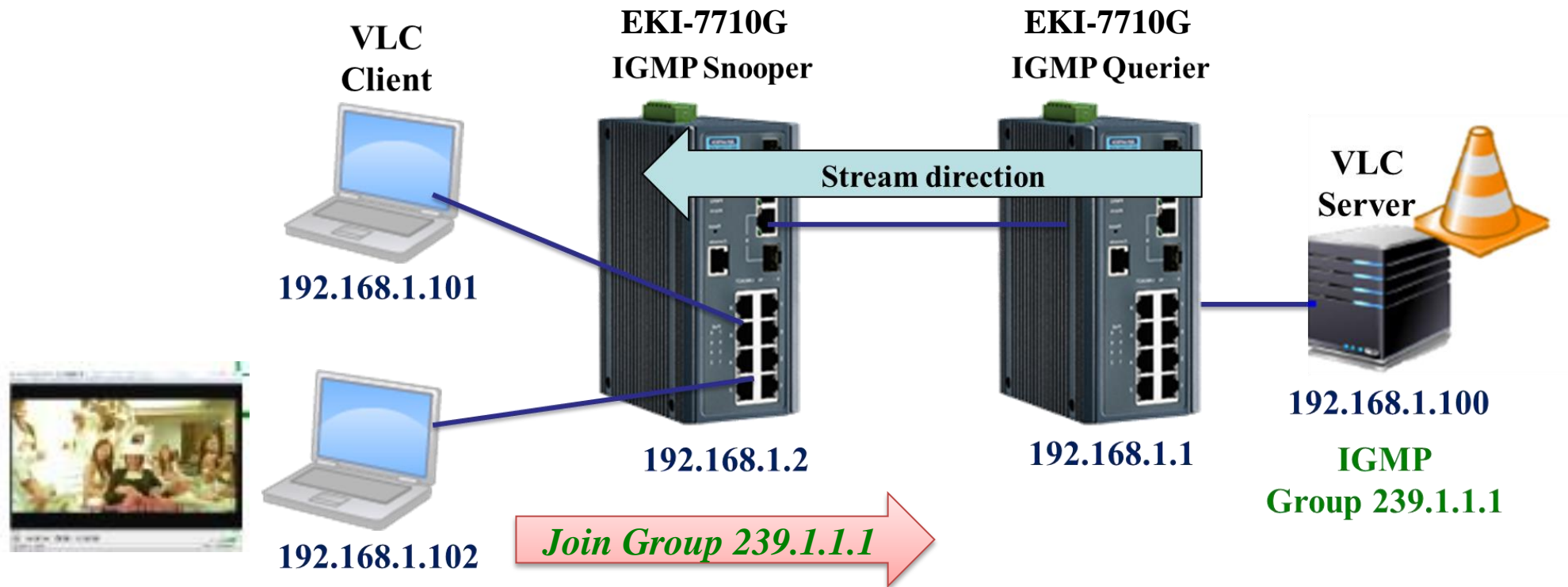


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IGMP Snooping Configuration

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.

The screenshot displays the Advantech web interface for an EKI-7712G-4FI-AE Intelligent Industrial Switch. The left sidebar shows the navigation menu with 'IGMP Snooping' highlighted. The main content area is divided into three sections: 'IGMP Snooping Settings', 'IGMP Snooping Information', and 'IGMP Snooping Table'.

IGMP Snooping Settings: This section contains three configuration items, all set to 'Enable':

- IGMP Snooping State: ☒ Enable, ☐ Disable
- IGMP Snooping Version: ☒ v2, ☐ v3
- IGMP Snooping Report Suppression: ☒ Enable, ☐ Disable

An 'Apply' button is located below these settings.

IGMP Snooping Information: This section displays a table with the following data:

Information Name	Information Value
IGMP Snooping State	Enable
IGMP Snooping Version	v2
IGMP Snooping V2 Report Suppression	Enable

IGMP Snooping Table: This section displays a table with the following data:

Entry No.	VLAN ID	IGMP Snooping Operation State	Router Ports Auto Learn	Query Robustness	Query Interval(sec.)	Query Max Response Interval(sec.)	Last Member Query count	Last Member Query Interval(sec)	Immediate Leave	Modify
1	1	enabled	enabled	2	125	10	2	1	disabled	Edit

Operation edit

Enable IGMP Snooping – (2/2)

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EKI-7712G-4FI-AE
Intelligent Industrial Switch

Port Mirror

Link Aggregation

802.1Q VLAN

Q-in-Q

GARP

802.3az EEE

Multicast

Multicast Filtering

IGMP Snooping

IGMP Settings

IGMP Querier

IGMP Static Groups

Multicast Groups

Router Ports

IGMP Snooping

IGMP Snooping Info

Information Name

IGMP Snooping State

IGMP Snooping Version

IGMP Snooping V2 Repd

IGMP Snooping Tab

Entry No.	VLAN ID	IGMP S Operat
1	1	enabled

Edit IGMP Snooping

VLAN ID100

IGMP Snooping State☐ Disable☒ Enable

Router Ports Auto Learn☐ Disable☒ Enable

Query Robustness2(1 - 7)

Oper Query Robustness2 sec

Query Interval125(30 - 18000)

Oper Query Interval125 sec

Query Max Response Interval10(5 - 20)

Oper Query Max Response Interval10 sec

Last Member Query Counter2(1 - 7)

Oper Last Member Query Counter2

Last Member Query Interval1(1 - 25)

Oper Last Member Query Interval1 sec

Immediate Leave☒ Disable☐ Enable

ApplyCancel

147Welcome, admin

Member y count	Last Member Query Interval(sec)	Immediate Leave	Modify
	1	disabled	Edit

IGMP Querier Configuration

- Only Querier need to enable it.

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EKI-7712G-4FI-AE
Intelligent Industrial Switch

L2 Switching

Port Configuration

Port Mirror

+ Link Aggregation

+ 802.1Q VLAN

+ Q-in-Q

+ GARP

802.3az EEE

+ Multicast

Multicast Filtering

+ IGMP Snooping

IGMP Settings

IGMP Querier

IGMP Querier Settings

VLAN ID

Querier State

☐ Disable

☒ Enable

Querier Version

☒ v2

☐ v3

Apply

IGMP Querier Status

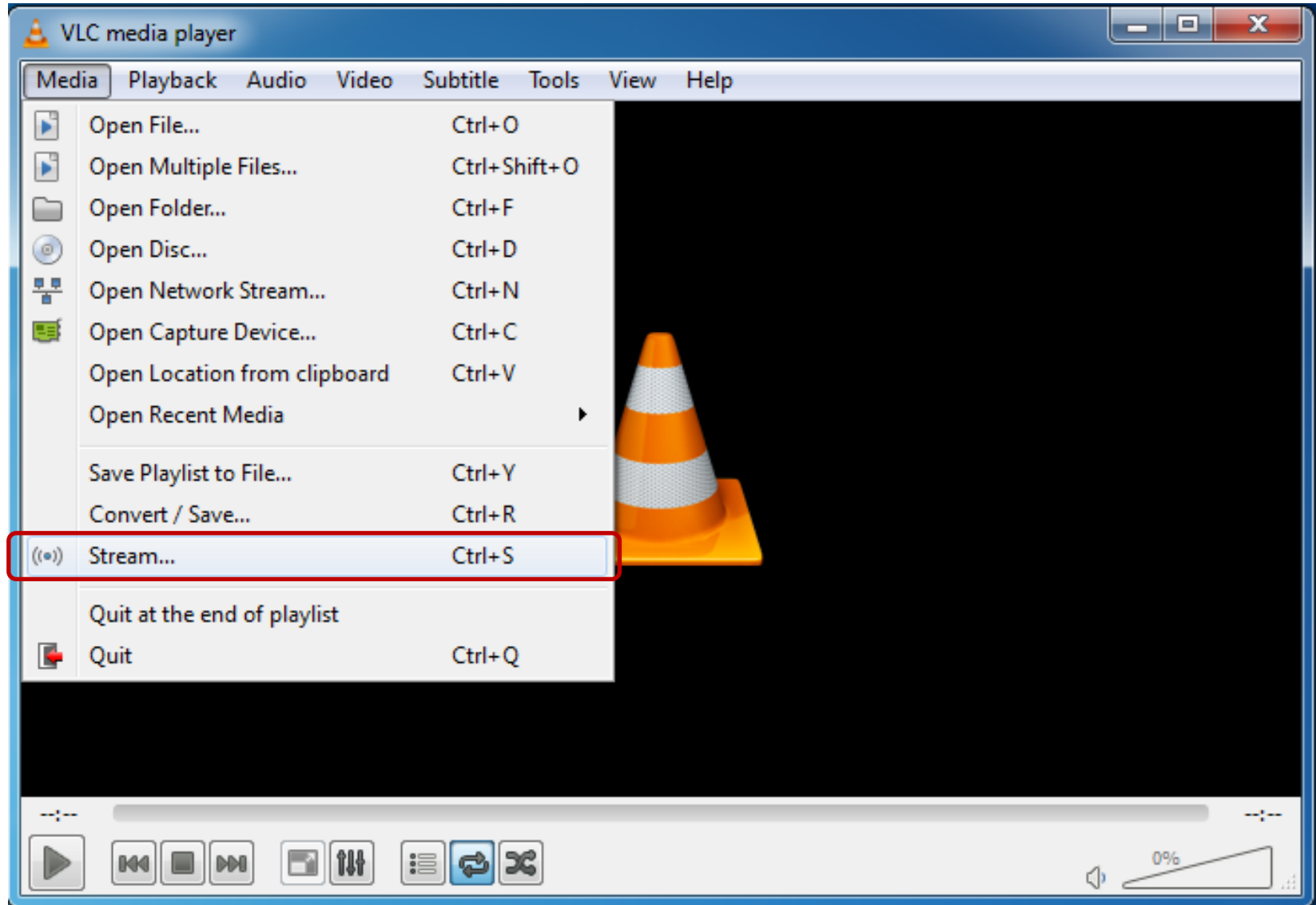
VLAN ID	Querier State	Querier Status	Querier Version	Querier IP
1	enabled	Querier	v2	192.168.1.1



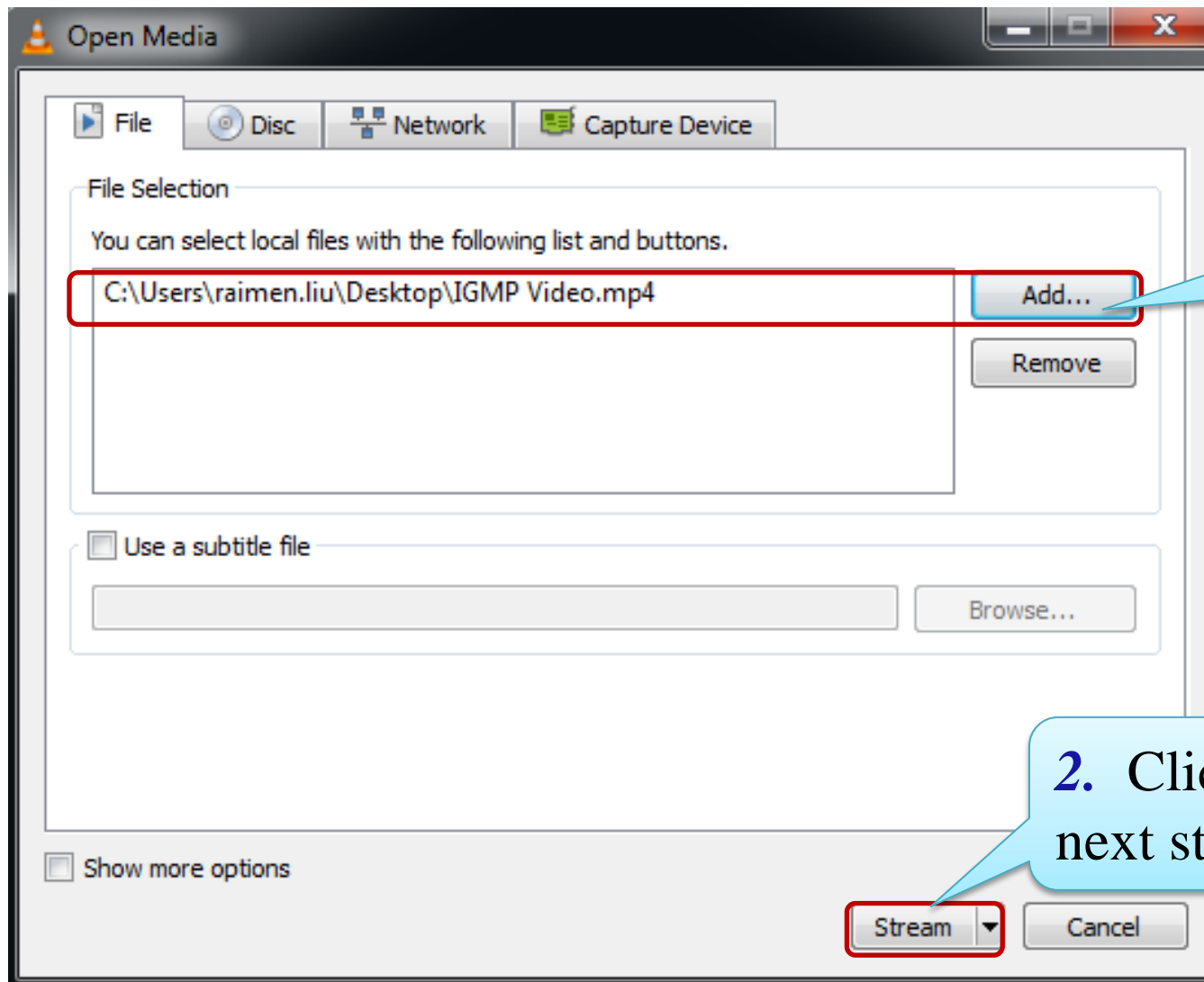
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VLC Media Player Setting

VLC Server Setting (1/7)



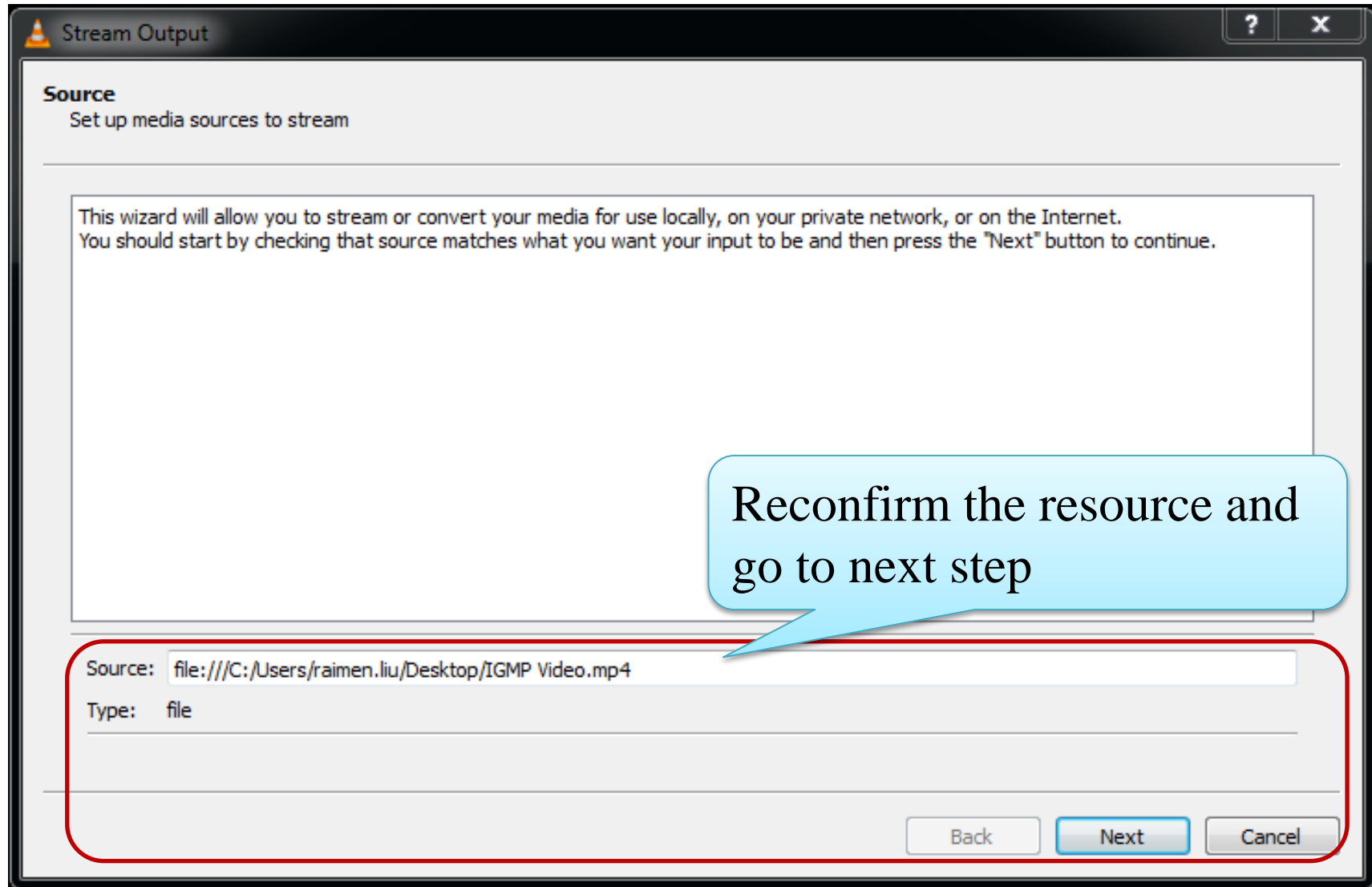
VLC Server Setting (2/7)



1. Resource selection

2. Click Stream for next step

VLC Server Setting (3/7)



Stream Output

Source
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 continue.

Source: file:///C:/Users/raimen.liu/Desktop/IGMP Video.mp4
Type: file

Back Next Cancel

Reconfirm the resource and go to next step

VLC Server Setting (4/7)

Stream Output

Destination Setup
Select destinations to stream to

+

Choose a video type and click “Add”
>>e.g. use RTP in this case

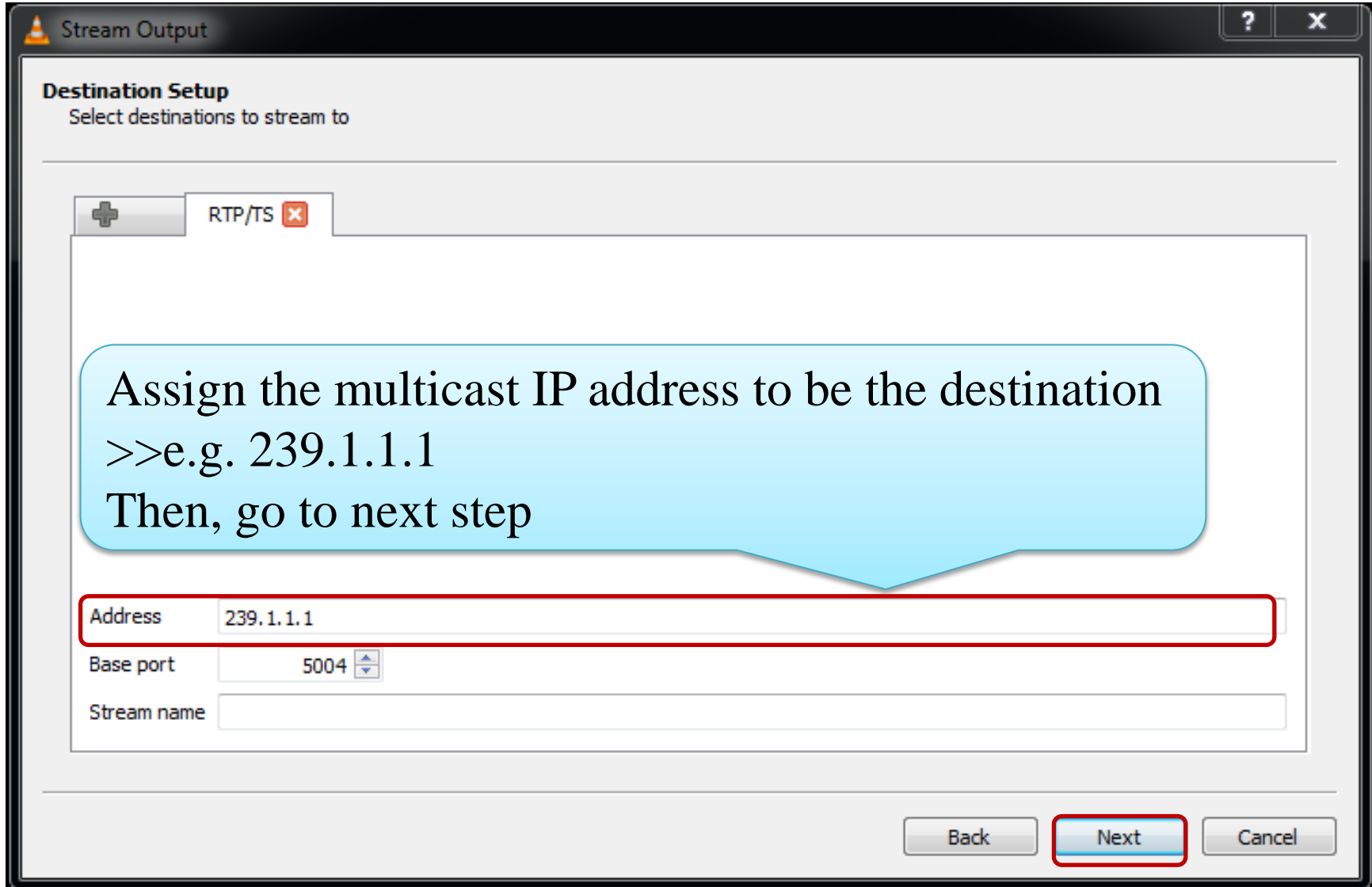
New destination

☐ Display locally

RTP / MPEG Transport Stream Add

Back Next Cancel

VLC Server Setting (5/7)



Stream Output

Destination Setup
Select destinations to stream to

RTP/TS

Assign the multicast IP address to be the destination
>>e.g. 239.1.1.1
Then, go to next step

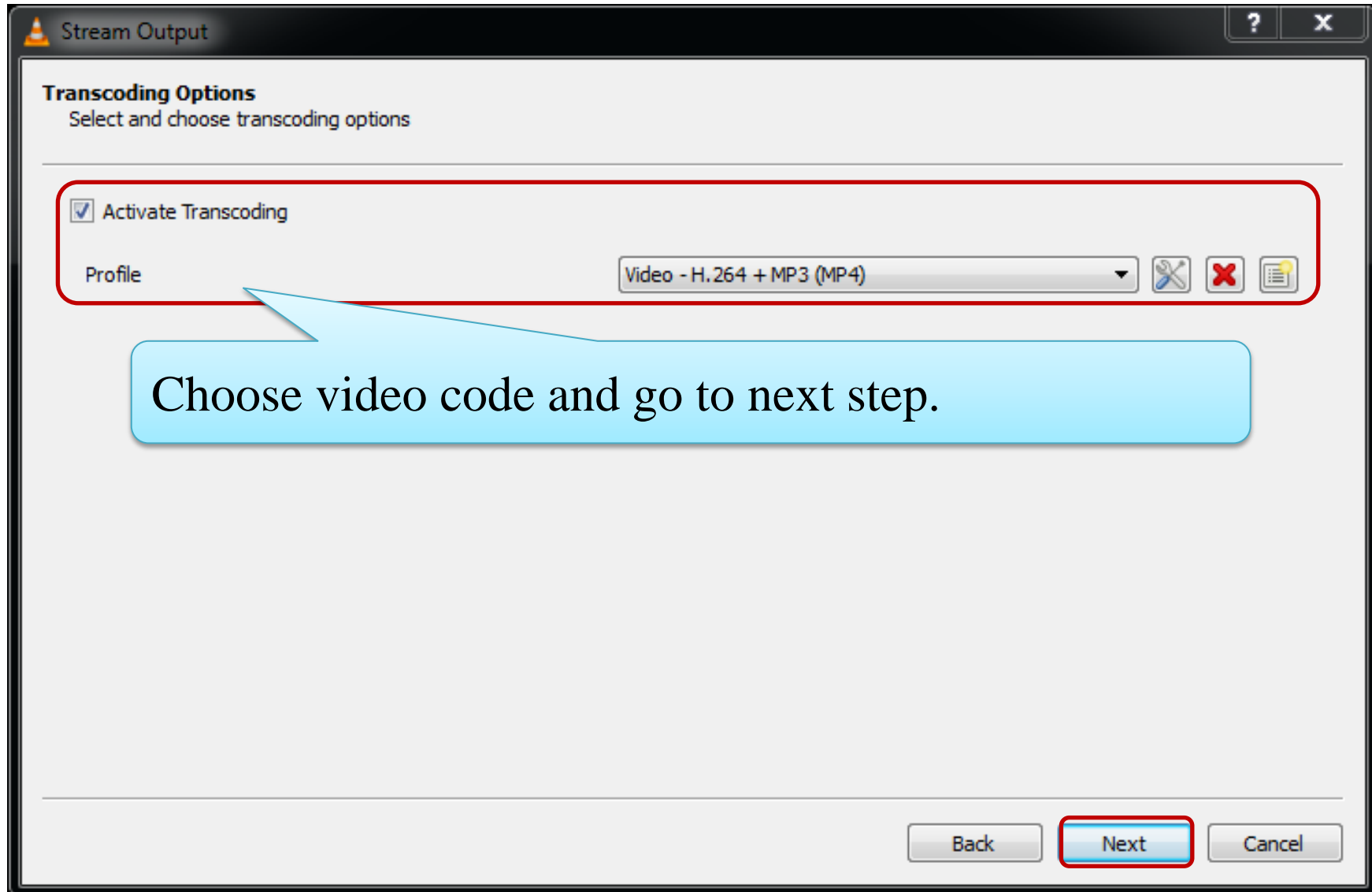
Address: 239.1.1.1

Base port: 5004

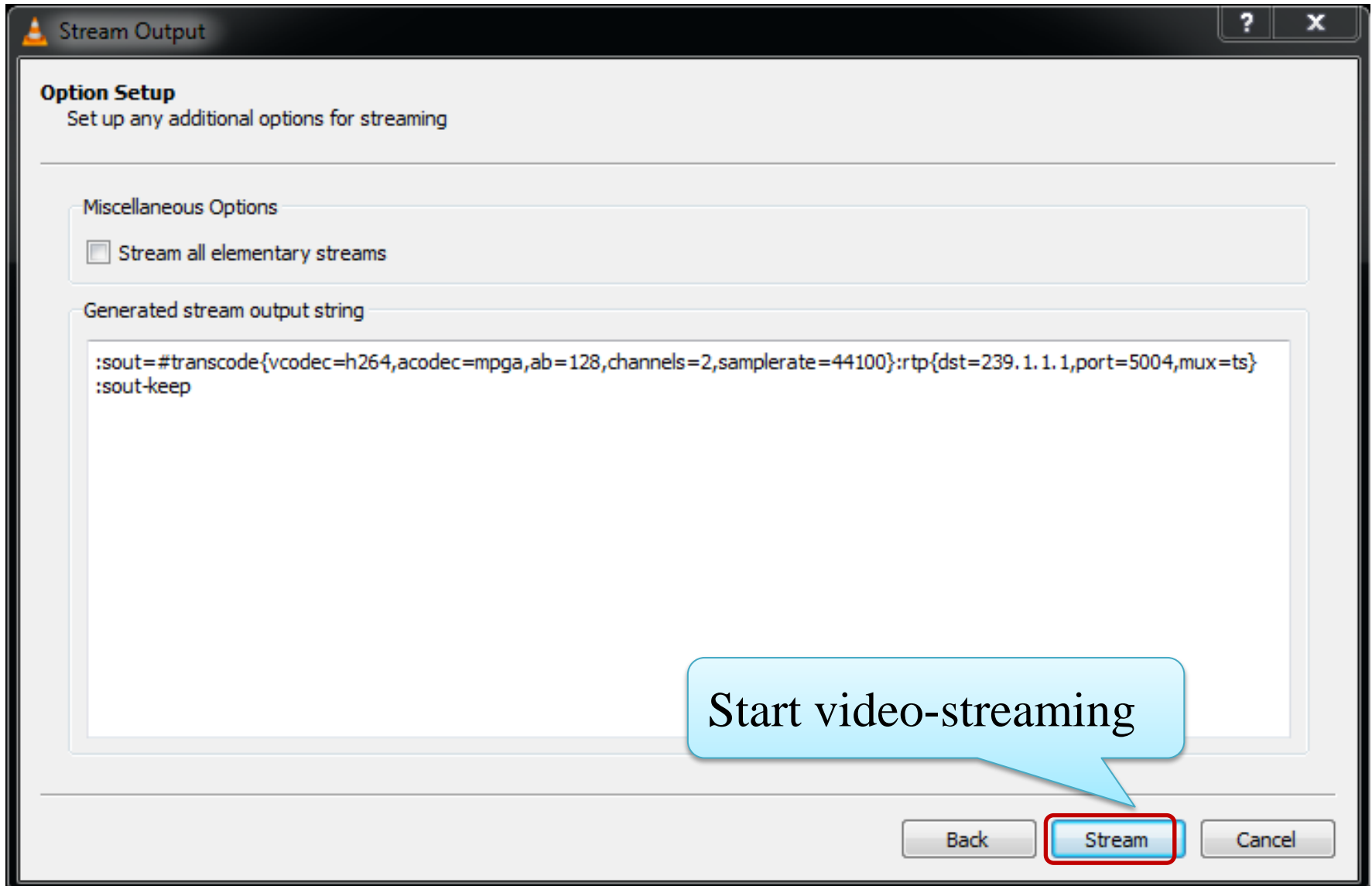
Stream name:

Back Next Cancel

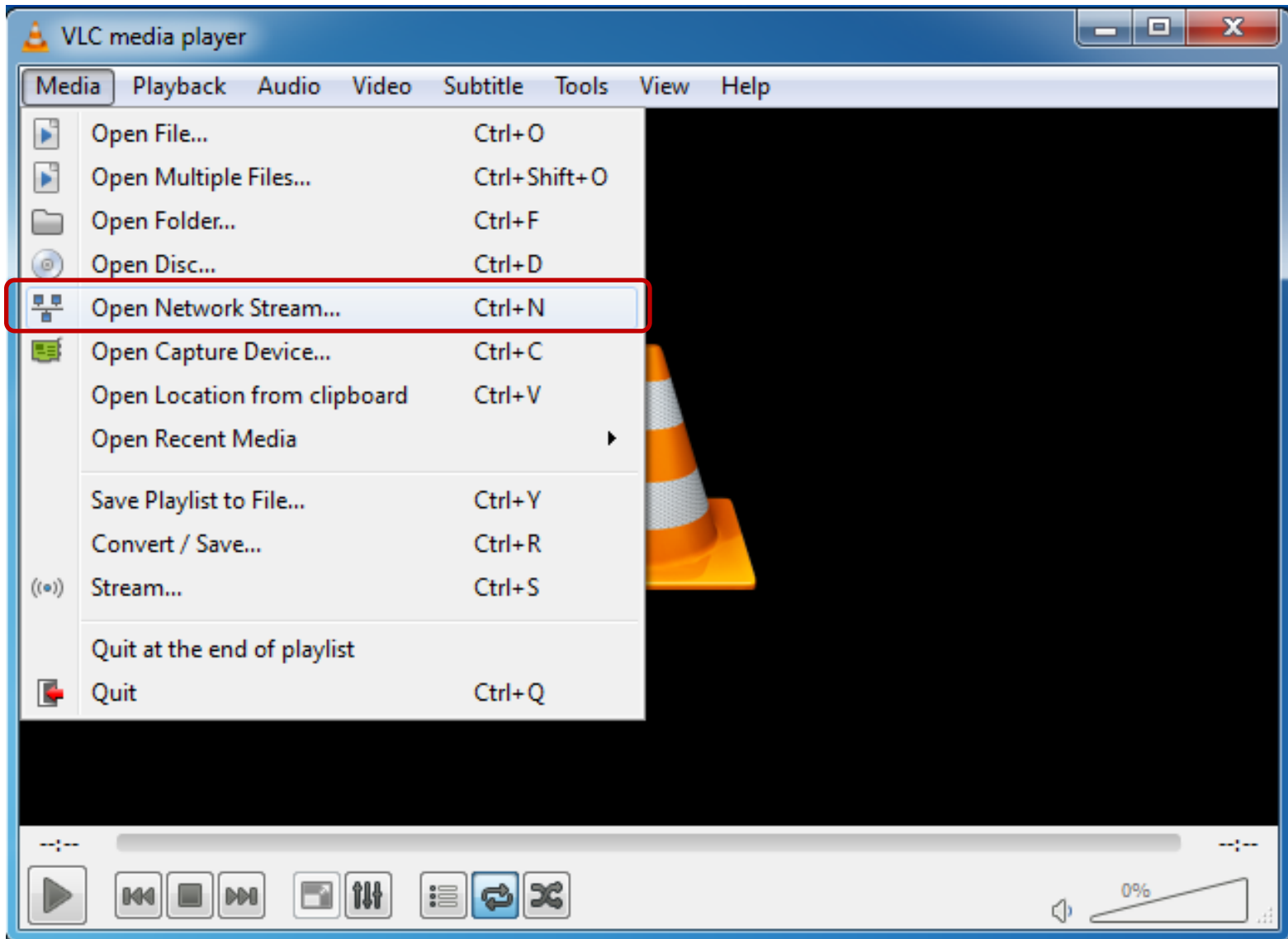
VLC Server Setting (6/7)



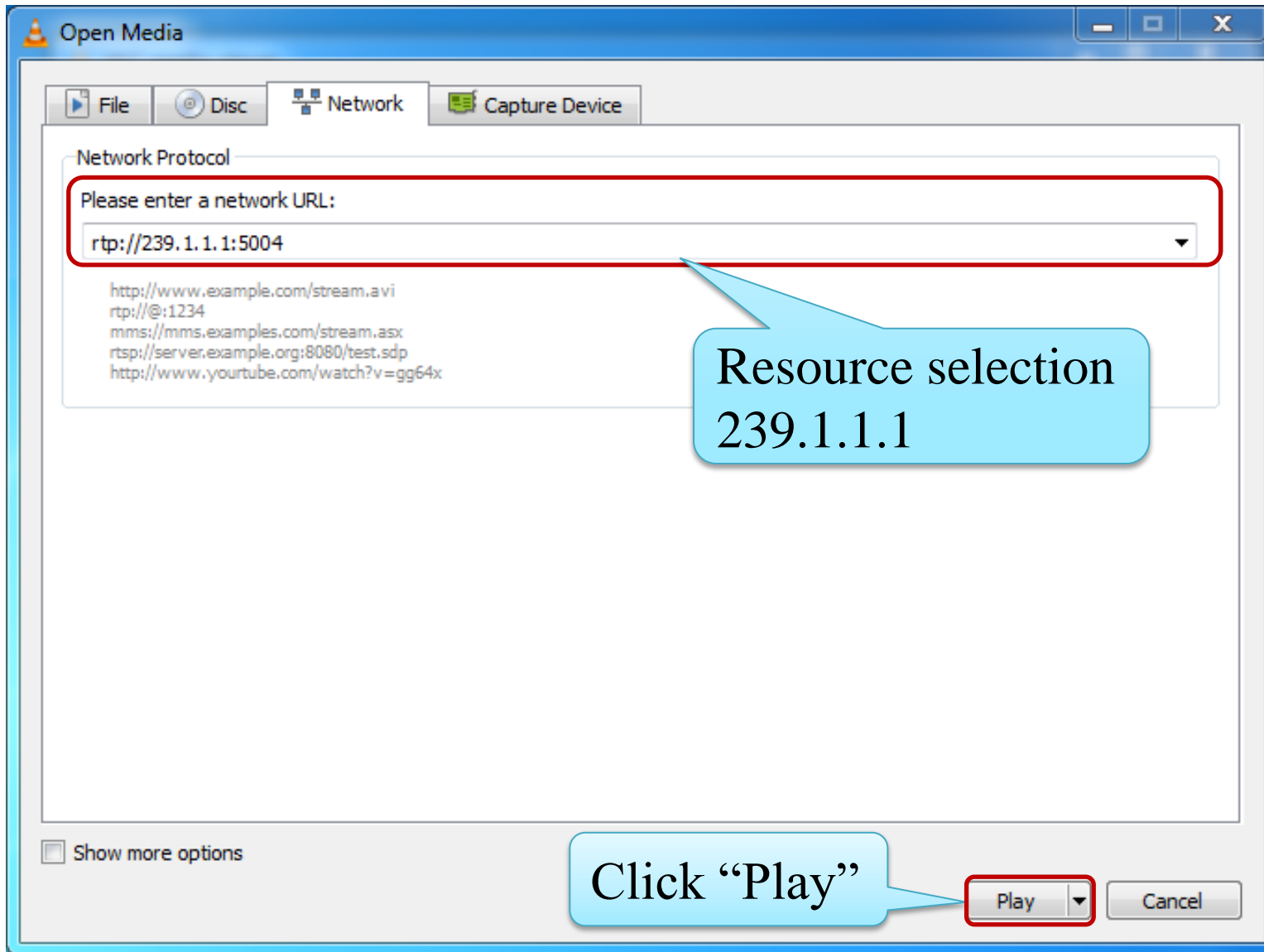
VLC Server Setting (7/7)



VLC Client Setting (1/2)



VLC Client Setting (2/2)





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